. T FOR the Signification of this Letter in the chy-  
|^k| mical Alphabet, see ALPHABETUM Chymt-  
1 w cum.

N, in Prescription,- imports. Number.

NABIT. Powder’d Sugar-candy, esteemed a good Remedy  
for the Eyes. *Castellus* from *Mottthaus de Gradibus.*

*tstp.CypL.* An Apostemation of the Breasts, particularly  
those of Women. *Rulandus. ,*

N ADUCEM. An uterine Mole. *Castellus* from *Avicerma.*

NAEVUS. A Mole on the Skin, Wen, or Mother’s  
Mark.

All preternatond Tumors upon the Skin, in the Form of a  
Wart or Tubercle, are termed Excreseencies; by the *Greeks,  
Acrothyntia*; and, when they are hern with a Person, *Naevi  
Mat emi,* or Marks from the Mother. A large Tumor sic-  
pending from the Skin is denominated a *Sarcoma.* These ap-  
pear in every Part of the Body; as the Head, Face, Eye-brows,  
Neck, Breast, Abdomen, Anus, Arms, and Legs: But the  
worst, in the Opinion of *Celsas,* are those which arife on the  
Privato Parts. The Size and Figure of them are surprisingly  
various; and, according to the Remarks and Delineations of  
several Authors, feme are of an enormous Bulk. In Colour,  
some resemble the Skin, others are black or red ; in Shepe,  
they reprefent Strawberries, Mulherries, Grapes, Figs, Pears,  
Mice, and various other Figures.

They are to he removed almost .in the fame Manner as  
Warts, by Ligature, the Knife, potential or actiral Cauteries,  
as their Size, Situation, Figure, and other Circumstances, with  
the Habit and Inclination of the Patient, shall require. But  
If they have a very large Root, as thofe Warts have, which  
*the Greeks* call *Myrmecia,* or are near any of the larger Veins  
nt Arteries, or firmly united to any Bones, or have a Tend-  
ency to a Cancer, the Surgeon should remove them with great  
Circumspection; or when the Danger is imminent, leave them  
untouched, that the Patient may not he exposed to worse Sym-  
ptoms, or the Hazard of Life. When these Tumors are large.  
Or seated near the larger Veins or Arteries, the Operator should  
he furnished with Styptics, Bandages, and sometimes actiral  
Cauteries, to stop the Haemorrhage, especially if they are taken  
»away by Abscission. *Heister . Chirurg.*

NAFDA, and NASDA, seem to be Corruptions of  
Ι'Ϊαρητηα\* \* .

NAGAM. H. M. The Name os a filiquiferous Tree,  
which grows plentifully in many of the *East Indian* Iflands.  
The Juice of the Leaves, mined with the Oil of the *Indian*Nut, dispels periodical Inflations of the Belly, used by way of  
Ointment.

NAGEMLUS. The Name of a Fish mentioned by At-  
*drsvandus.*

’ NAKIR. A violent Flatulence, which pastes from one  
Limb to another, attended with Pain. *Blancard* from *Scben-  
kius.*

NALUGN. The Name Of a bacciferous Shrub, which  
grows in *Malabar,* and flowers twice a Year. The Root,  
taken by way of Decoction, eases Pains of the Stomach, the  
Colic, and Gripes of the intelsines. A Decoction of the Wood  
allays Thirst ; the Leaves, bruised and torrefied, remove Vet.  
tigos, and Weakness of the Head, if apply’d thereto; and a  
Vapour of the Decoction of the fame eases Pains of the Gout;  
the expressedJuice of the young Leaves, drank, helps Digestion.  
*Pai! Hist. Plant.*

NANA, or NANAS. The same as ANANAs. . ..

NANDI-ERVATAM. The Name of a small Shrub,  
which grows *in the East-Indies;* the Whole of which is  
hctsscenu The Juice expressed from it, min’d with Oil, eases  
Pains of the Eyes, if the Head is anointed therewith. The  
Root masticated, and held in the Mouth, eases the Tooth-ach;  
and the fame, boiled in Oil, makes a good Ointment for all.  
Indispositions of the Head, especially Pain ; bruised, and taken  
tio Water, it kills Worms; trussed with the Juice of Lemon,  
and put into the Eyes, it removes Films. *Raii Hist. Plant.*

NAPECA. A Species of Jujube. See OENopLIA.  
NAPELLUS. SeeAcoNrTUM.

NAPHA. Orange-flower Water.

' NAPHTHA. Oflic. Charlt. Fossi I3. Worm. 30. Al-  
drov. Mul. Metall. 388. *Naphtha alAea et nigra.* Kempb.  
Atncen. 274. *Pharmacum Medea quibufdam.*

-It is of the Colour of the *Balasanian* Bitumen, of a lisped  
Consistence, very subjecti to take Fine, sometimes white, some-  
times black; it is seldom or never to be met with in our Sheps;

and therefore *Petroleum* cothmonly fupplies its Place, ft is a  
liquor of an oily Substance, like rectify’d Spirit, very thin,  
pellucid, verv penetrating, and fubjeol to kindle into a Flame:  
It agrees in Virtues with *Bitumen.* There are forne, who, as  
*Agricola* assures us, are persuaded, that the *Camphard* of the  
Anrients was prepared of *Naphtha* by Sublimation; others  
there are, who will heve it, that *Naplaha* and *Petroleum* arc one  
and the same Substance; but since we are not as yet certain  
whet *Naphtha* is, we shall not venture to determine in the  
Case. As for *Naphtha,* the\* it has many, and those very con-  
siderable. Virtues in Medicine, which *Diofcarides* insists upon  
at large, yet, ar present, we are told by *Kempsur,* that he never  
knew the *Perstans* apply it to any other Use, than th semper  
their Vernish. *Dale.*

PETROLEUM. Oflic. Worm. Must 3o. Charlt. Fossi  
14. *Petroleum Oleum Petra.* Scbrod. 3. 5t4. *Petroleum  
Oleum de Saxo, Naphtha, Oleum Petra.* Mont. Exot. Ia.  
*Petroleum seise Oleum Terra.* Ind. Med. 9I. *Bitumen liqui-  
dum, Olee frnile, quod innatat lacubus.* Kentm. 20. *Naph-  
tha Jive Petroleum.* Geos Laet. Ed. Angl. I 33. *Oleum Pe-  
tra vulgio.* OIL OF PETER, or ROCK-OIL.

It is a sat liquid Substance, of a black Colour, and a strong  
Smell. There are two Kinds of it; one native, which flows  
out of Rocks and Stones; and the other artificial, which is  
distilled from Charcoal and Fossiis. Of the native, they reckon  
at *Paris* two Sorts:

I. *Petroleum rubrum Jive Gabianum.* Ind. Med. 9o. *AnPe:  
troleurn rusum Schrnderi ?*

2. *Petroleum flavum seu Italicum.* Ind. Med. ibid.

The *Bitumen,* or *Petroleum Gabianum,* is esteemed an Anti-  
hysteric ; and, alfo, good *for* the Tooth-ach: It heats anil  
dries, consists of sine Parts, is a Digestive and Resolvent, and  
beneficial to the nervous System. *Schroder. Petr oleum* is of  
different Colours, hut the white is the best. *Dale.*

The *Naphtha* of *Dioseorides,* or Petroleum of the Shops,  
is a subtile, inflammable, mineral Oil, with a fragrant bitumi-  
nous Smell,, of different Colours, either white, yellow, red,  
or black Different Names are given it by Authors.. The  
*Babylonians* gave the Name of *Naphtha* to an Oil either- black  
or white, which flowed from some Fountains near *Babyloni*It was likewise called *The Oil of Medea,* becaofe she is said  
to have burnt *Cremda* Daughter to Death, Sy anointing her  
with this Oil. It had joe Name of *Petreleum,* hecause it  
distils from Rocks. By *JAnrepfus* it is termed *Allicsla,* by  
others, *The Oil of St. Barbarus the Abbot, The Oil of St.  
Catharine,* or *The Holy Oil.* The Word *Naphtha* comes from,  
**a** *Greek* Verb, which signifies, th light, or kindle. .

There are sew Countries in which this Oil is not to he  
found, in the Island of *Samos* a Kind of it is gathered,  
called by the inhabitants 'by a Name which signifies *Oleum  
Terra* and it is in great Esteem among the *Indians. Tn 'Italy,*near *Modena,* the ΟΠ is gathered from Springs and Wells ., and;  
indeed, this whole Duchy abounds with it, especially a Place  
culled *Frumette.*, The Inhabitants dig Wells to the Depth of  
thirty or forty Feet, till the olly Spring is found ; and there it.  
is always mixed with the Water. The Wells dug at the Foot of  
the Hill furnish a large Quantity of very red Oil; those near’  
the Top, a white Oil, but in smaller Quantities. There is  
another Rock in the same Country'near the *Apewtine* Hills,.  
where there is a perpetual Spring of Water, on which this Oil  
swims, of a yellow Colour, and in so great Quantities, that  
twice a Week they rather six Pounds at a time. *Petroleum*is found likewise in *France* ; and particularly in *Britany,* near  
*Borders,* a red Oil, mixed with Water, flows from-the Cran-  
hies of some Rocks, which is colledled with great Care, being.  
no way inferior to the reft in Virtue. There is another such  
Fountain near *Clermont,* in *Auvergne.*

*Petroleum* easily takes Fire ; and it is the Custom in many  
Places, to bum it in Lamps, instead of common Oil, It is  
plentifully stored with sine volatile Parts, which easily evaporate,,  
and are so greedy of Fire, that if a lighted Torch,’ or any  
other flaming Body, he held in the Wells or Fountains of *Pe.  
troleurn,* the exhaling Effluvia very often take Fire. It is dif- ,  
ficoltly mixed with Spirit of Wine. By Distillation, it yields  
an oily Liquor, something more pellucid than before ; but it.  
loses a great deal of its native Smell, and gives a more languid  
and fuliginous Flame. , A small Quantity of a yellowish Magma  
remains at the Bottom of the Alembic; therefore is is evident,  
that *Petroleum* is nut meliorated by Distillation. The heft  
*Petroleum* is reckoned that which is fresh-gathered, of a subtiles

[Α \*j hituminoua

bituminous Small, white, and pellucid; next to that is the  
yellow; then the red ; hut the black is accounted the most im-  
pure of all.

*Diofcoridet* Commends it in Suffusions, and Dimness of the  
Eyes. The *Petroleum* of *Britany* is given, a few Drops at a  
time, with great Success, in what is called a Suffocation of the  
Uterus, and to kill Worms in Children. It is proper in a Sup-  
fression of the Menses, taken in the Quantity of twenty-five  
Irons, or the Region of the Pubes being anointed with it.

Jn a Palsy, accompanied with cold Pains in the nervous Parts,  
.the Pari affected is anointed .with it. *Co Lusitanus* commends  
the Use of it instopp ing the.Progress ofaScirthus, made up  
Yn she following Liniment:

Take Oil os Myrtle, and of Nutmegs, each half an Ounce;  
the Fat of'any Beast of Burden, two Ounces; Petro-  
leum, three Ounces : Mix them together.

**. NAPO-BRASSICA. A Name for *shae Brassica, Radice Na...  
piforrti.***

**NAPTA. The same as NAPHTHA. It is, also, a Name  
far a Sort of Tumor, otherwise called NATA, or NATT A.**

NAPUS. See **BUNIAS.**

NAPX. .Mustard.

NAR. Fire. *'Palandus.*

- NASCAPHTHON, or NASCAPTHON, νοὐρκαφθον, or  
νἀσκαφθον. An aromatic Bark. - See **CASCARILLA-..**

NARCE,*'.vdestes.* A Torpor, Stupor, or Duiness of Sen-  
sation; or a Duinessj or Hebetation, of the Senses. It-, alim  
imports .a Stupesaction Of the Senses by Medicines, .in order to  
render a Person less sensible of Pain,

NARCISSO-COLCHICUM. A Name for a Species of  
*Lilio-narcijsus,* remarkable for nothing but the Beauty of its  
Flower ; called by *Boerhaave, Lilio-narcisseus, luteus, autumna.,  
lis, minor. . ' . ,*. \*' NARCISSO-LEUCOIUM.

The Characters are; . ' -

The .Flower is, for the most pars, composed of six Leaves,  
jin form of a Lily, which are sometimes equal, and sometimes  
unequal and pendulous: The Empalement becomes a roundish  
Fruit, which is\* divided into three Cells, and full of roundish  
Seeds j To which'may be added. It hath a bulbous Root.

*Bcerbaatie* Inedtions six Species of this Plant, none of which  
. have any particular Medicinal Virtues ascribed to them at pre-  
sent, that I know osu  
' NARCISSUS..",

The Characters are ; .

TheFlower is naked and narrow, and tubuinus in its lower  
Part, hut hexspetaloidal above, and expanded into the Form of  
a Star; in its Centre’ it bears a floral Crown, shaped like a Bell,  
or a Tube, and is furnished with six Stamina; It grows either  
on the uppermost Tart of the Ovary, which is divided into three  
Parte, and contained within the Crown in those which bear a  
Tuhe instead of a Crown ; or else it grows on the highest Part  
of a long Tube, in those which have a Bell instead of a Grown.  
The End of the Pedicle bears an Ovary, which, in those that  
bear one Flower on One Stalk, is covered with one long Tube,  
resembling a Inembranaceons vaginal Calyx ; but in those which  
produce several Flowers, in manner os an Umhena, this Va-  
gina .covers the lowest Parts of the Pedicles, leaving the Ova»  
lies naked. The Ovary passes into a triangular oblong Fruit,  
containing roundish Seeds. .

' Botanic Authors mention a great many Species of *Narcissus,*which are only remarkable for the Beauty Of their Flower i  
*Boerhaave* mentions forty-seven.

The officinal *Narcissus* Is thus distinguished ,  
**NARCISSUS.** Ossie. ' *'Narcissism rnndsdurluieus.* Ger. no.  
Emaci I 24. *Naresscsus medeo-luteus vulgaris.* Park. Pared, 74.  
Rail Hist. 2. ιι35ς Synop. 3. 37I. *Narcessees pallidus cor-,  
culo luteo.* C. B. P. 5i. Tourn. Inst. 154. *Narcisses medio...  
iuteus cum aliquot floribus.* Jo B. 2. 604. COMMON PALE.  
DAFFODIL, or PRIMROSE PEERLESS.

" It grows on Banks, and in Meadows, and flowers in *April.*The Root, which is the Part sufed in Medicine, heing taken  
cither in Meat he Drink, is ari Emetic; It in of Service in.  
Ambustions, Conglutinates the divided Nerves, is effectual in  
Lnxarions of the Malleoli, and inveterate Pains os the joints ;  
removes cutaneous Blemishes in the Face, and the Vitiligo;  
cleanses foul Ulcers, breaks Abscesses, and draws out.Splinters  
from the Body. *Dale* from *Diosc or ides,*

NARCOSIS. A Stupefaction, from *vdgrat.* Torpor, Stu-  
por, or Numbness.

r NARCOTICA, *vagrsultna* (φάρμακμ), from *ragnaa,* to affect  
with a stupor, or Torpor, Narcotics, are soporiserousMedi'  
cines, which induce a Stupesaction.

*' Soporifics, in Greek,* are called ὑπνρετικὰ. *Hypnotics,* άνάδυρα»  
*Anodynes,* if they he of a potent Nature, they take. the. Name  
Of *Narcotics,* or *Stupefactives*; and are such Kinds of Remer-  
dies, as. by theirssibtilej nosiinus, and deleterious Exhalations,

diminish, or quite destroy, the Sense and Motion of **the e**solid Parts. Among *Soporifics,* the most eminent are those  
which are usiually prepared for medicinal Uses, of **the**whole Poppy, I especially *Opium,* which by the Antients  
was called *Lacryma Papaveris,* (the Tear of the Poppy) and  
*Meconium,* which is the Extract os the Poppy, made by  
Boiling. In the Class of StupesactiVes, which are os a violent  
Nature, are all such Remedies, as are prepared os the Mandra-  
goras, Hyoscyamus, Stramonium, -and Datura. StupesactiVes  
and Soporifics are, not without good Reason, reckoned, amongst  
Poisons, since they exert their, noxious influence in. a short  
Space os Time; when taken in a small Quantity ; and a Quan-  
tity a little larger than ordinary proves mortal. Besides, their  
principal Operation is onthe most noble Parts .of the Body,  
which are the Origins of Sense and Motion ; and, moreover,  
they act by means of an Element quite opposite to Nature, a  
jtoisome sulphureous Vapour, by winch they diminish to a con-  
siderable Degree, or quite destroy, the Sense and Motion of the  
-motive Fibres. .’

The Operation ofstupesactive Poisons is different from that  
os Caustics I 'These latter, with their highly acrimonious and  
penetrating Salts,.excite preternatural and Violent Motions;  
theother, by their sulphureous Vapour, retard or stop those  
Motions, and Sensations, which principally belong to the ner-  
vous Membranes ; and by .that means render the Circulation of.  
the Blood more languid, .andrthe Excretions, flower, and more  
imperfect.

TheLise.of thethuman Body, and the Integrity of its Fun-  
ctions, consists in the due Tone of the Solids, -and the-freo and  
equable Motion of the Fluids: The first depends on their mo-  
derate and equabte-.Systole and Diastole, Or -their Contraction  
and Dilatation; the other in a proper Temperament, Quantity,  
and Ventilation of the Blond. Whatever, therefore, in a speedy  
.and effectual Manner destroys that due Tone of the Solids,’  
and disturbs the equable Motion of the Fluids, is naturally  
.qualify:d to .subvert all the Functions of the animated Body; '  
and, .if Jit works such an Effect in a Violent Manner, It may be  
Justly called Poison. And when Soporifics arid Narcotics, in  
poo great a measure, diminish the Motions, and inj ure the Tone,  
of the solid Parts, or render the Circulation of the Blood inore  
-languid and imperfect, they are highly destructive to Nature.  
. We are assured by undoubted Experience, that -the Effects  
of Opiates .and Narcotics, especially when taken in an immo-  
derate Quantity» area weak, low, and small Pulse, a Strait-  
ness and Difficulty of Breathing, a soporous Indisposition, and  
Heaviness of the Head, a Dulness of the Senses, and often-  
times a Deliriousness, attended with a Diminution of Appetite,  
CostiVeness, a Badness of Digestinn, and a remarkable Decay  
of Strength. All these Symptoms proceed from no other Cause '  
than a too stow Progress, orStagnation, of the Blood and Fluids ;  
for fince the Motion of the Fluids depends only on rhe Tone,  
Strength, and systolic and diastolic Motions, of the solid Parts,  
it plainly appears, that the animal Spirit, that. Fluid of the  
Brain, which directs and regulates the Motion ofshe Fluids, is  
primarily and preternaturally affected by these Remedies. z

The Elements by which *Narcotics* operate, are of an highly  
volatile and penetrating Nature, since they so deeply infinuate  
themselves like a Vapour .into the Pores of the Membranes and  
Nerves, and, by contaminating that most pure and moveable  
Fluid, deprive, by little and little, the Solids of these Tone and  
Motion, -  
. That the ..Elements by which *Narcotics* exert their Force,  
are extremely Volatile and penetrating, may.be proved by seve-  
**ral** Arguments, : First, their Virulence is almost intirely de-  
stroy'd by long and Vehement Boiling. Secondly, if they are  
apply’d in Ointments or Epithems to the Head, or other ner-  
VouS Parts,'as the Soles of. the Feet, ..the Palms Of the Hands,  
Or only received by way of Smelling, they induce a Sleepiness;  
*Dioscorides* affirms Opium to he foporiferous by Smell alone.  
And *Plutarch,* in his *Syrnpostacs,* relates, that the Vapours pro-  
ceeding from the Poppy have, *sot* want of due Caution,,  
proved satal to thosewho-have gather'd theJuiee-. And, thirdly,.  
it is found by. manifold chymical Experiments,, that there are  
no hetter Correctives, of their- Virulence than *Acide,* such as  
juice of Quinces or Citrons, Wine-Vinegar, or Spirit of **Vi-**triol, which have a mighty Influence in fixing the Volatile Sul-  
phur ; and Opium is well known to lose its Virtue by heing;  
roasted .on.am heated Plate. All Narcotics and Hypnotics ex-  
hale a- strong, and-malignant kinios Vapour, as we are assured  
by the Smell, which is a manifest Indication of an ungratefol  
Sulphur contained in them.

A&rcot/cract on the nervous Membranes of the Stomach and.  
Intestines, principally by. means of a Vaporous and fetid Sul-  
phur. For, as the Stomach and Intestines first and immediately7seal the Force and Efficacy of Remedies, thayare so much the  
more.liabin.to suffer.from the- Influence of Medicines, which  
are of. a stronger - and. more - penetrating Nature than ordinary.  
Opium, or any other Narcotic, aster it is taken; and be-

-1 ... ' gins

.gins to he dissolved by the internal Heat and Moisture,, diffuses  
its noxious-Vapours, which heing received into the Pores of the

: nervous Membranes, the Fluid, on which their Tone and Mo-  
' tion depend, loses its Nature 2. Hence the Sensation, and, also,  
the peristaltic Motion, of the Intestines become more languid:

. For if a strong Smell, as in the Cafe of Hysterics, received up  
the Nostriis, such, sor Instance, aS proceeds from burnt Fea-  
thers, or Asa-foetrda, has *so* sudden an Effect in compofing the  
turbulent and disorderly Motions 'in the nervous and membra-  
nous System ; and if, on the contrary, a sweet-smelling Vapour  
Jias the Force Of immediately disturbing the whole Frame of  
‘the Muscles by violent Spasms; why may not the soul and  
noisome Exhalations Of Narcotics, by Contaminating a Fluid  
'of consummate Activity, aS wellinjure, sor 'put a Stop to, its

' Motion ? But those things which act on the Nerves, are most  
’fpeedy in their Effects, because their Influence is immediately  
'diffused oyer the whole nervous System. An Opiate, aS soon  
'as taken, or. before it is out of the Stomach, very soon causes  
inn Inclination to steep, and Relief from Pain in distant Parts;  
'and Opiates, most of all, exert their Influence on the Nerves,  
by Virtue of which, those racking Pains which are incident to  
'thelntestines, ore remitted in a Moment, heing succeeded by  
in Nausea, Loathing of Food, and, is suere be sufficient Strength,  
'by Vomiting. ' .

*. Narcotics* have, alfo, a mighty Influenceonche Membranes  
’of the Brain, where, by greatly diminishing the Spring and  
Systole' of the Arteries, which are furnish'd with very thin  
‘Membranes, they cause Stagnation'of their Blond therein, with '  
Distentions of the Veffeis os the Head ; by which means they  
induce a Torpor, Drowsiness, Delirioushess, with frightful and  
troublesome Dreams.

There is nothing in the Nature of Things, that will render  
**2** wise and intelligent Person a Fool, and stupid, so soon aS a  
*Narcotic.*, That the Datura has such an Effect, is well known;

- land that the Solan um Furiosum, and Its Berries, will suddenly  
render a Man Of sound Sense a Maniac, is Confirmed by many  
Observations in *Matthiolus, Comment, in Dioscdrid. Wicrus de  
Prcnstigio, Mercurialis de ' Vinenis,* and *Lobelias su 'Adversariis  
Stirpium.* To these we may add the following Observation of  
our own: Α certain Person labouting tinder an Haeinoptoe,  
having, thro' want os Care, taken too lathe a Dose of a Medicine .  
containing a good Quantity of the Seeds of Henbane, was  
deprived of all Sense and Memory, and continued waking for  
some Days. And something like this happened from Pilis of  
Houndstongue,. given in too large a Dose so repress Vomiting.-

' EVen an external Application of Henbane may procure Madness,  
**as** *Platerus* assures us, on the Testimony of *Rondeletius*; and  
the pernicious Effects os these Rinds of Remedies were not  
unknown to the Antients. Hence *Carlins Aur Ananas, Lib.* r.  
*Gap.* 4- fays» " They soon become delirious, who take the  
" Papaver, Mandragoras, or Hyoscyamus, inwardly, ; but their  
" Pulse at such times is Very stow." And *Hilrnont, Lib.* I. de  
*Lithjasi,* says very justly of Opium, " That they are guilty os  
' " a' Very great Error, who endeavour to cure a Mania with

" Opiates, since every Opiate is thad in Itself ; '' and, in  
another Place, " Narcotics will hardly procure Sleep to mad  
" Persons, the\* given in a quadruple Dose, but will increase  
" the Madness. " To this Purpose, also, in*Olis.* 78. *Dec. is.  
M. N. Co* Of a Person labouring under a Dysentery, who was  
made delirious with a Clyster os a Pint of a Decoction of Hy-  
oscyamus, and ccntinned in that State for six Weeks.

Narcotics, or stupefactiVe Remedies, were always Very much  
. suspected, by the wisest Physicians among the Antients, in the  
. Cure of Diseases, on account of their deleterious Quality.

Por a Proof hereof, we shall give a sew Testimonies selected  
from innumerable others. *Galen* was , always Very fearful os  
exhibiting Opium; and. *Lib.* 3. *de Medicain. Cornposct. Cap.*10. he says, that " Living Bodies suffer something like Mor-  
" tification, from the Use Os every Remedy composed os Opt-  
" um, Hyoscyamus, and Mandragoras. ” The next I shall  
quote, is *Celsus,* who. *Lib.* 3. *Cast.* 18. pronounces, that, *Nse*" Sleep must be procured by Medicines, Moderation is necessary  
" in exhibiting them, lest we should never be able to rouse the"  
" Person from the Sleep into which we have cast him." And,  
Lib. 5. *Cap.* 25. he says, "TO use Anodynes, without'urgent

' " Necessity, is a wrong. Step; for they area Violent .kind of  
" Medicines, and hurtful to the Stomach. " But the Effects are  
worse, which *Scribonius Largus, Compos.* 106. Coop. 48. einunie-  
rates: " Opium, says he, taken, induces Heavinesses the Heath,  
" Refrigeration and Lividness of the Limbs, and cold Sweats,  
" hesides a Difficulty Os Respiration, Stupidity, arid Loss of  
" Reason." *Trallian, Lib.* 3. *Cap. 5.* writes, that, a certain  
Person, by the sole Use Of Opium, had lost his Voice and  
Senses in such a manner, that he could never afterwards be reco-  
vered/ Nor must we omit *Artius,* who Very' well describes the  
pernicious Effects of Opiates in the following Manner: " Opi-  
" sites, says he, never cure the Diseases themselves on which

" the Pains attend ; but, by inducing a Stupor and Dulnefs of  
" Sensation on the Parts, procure a kind of Rest to the Pains. \*\*  
And, in another Place, to the same Purpose, he says, that "They  
/" cause indeed an immediate Cessation Of the Pain, but preserve  
" the Cause thereof inwardly, and, in a little time afterwards,  
" induce Paintings and Death, or long and incurable Disor-  
" ders. " And, to speak the Truth, so sudden and pernicious  
have been the Effects which Physicians of all Ages have record-  
ed from the Use of Narcotics,'that they are by ho means to pass  
unregarded, but to he esteemed aS an E’vidchce of some very  
active and latent Principle,.which has Power th hurt; for  
which Reason Physicians ought, to he the more careful and  
circumspect in the Use Of these Kinds of Remedies;

Thed much Mischief and Danger may be the naturasEffects  
of Narcotics, so that they may be esteem'd not sar remov'd front  
the Nature of Poisons, Physicians, heweyer, both antient and  
modern, have at all times experienced great Benefit from hyp-  
notic Anddynes, especially in violent Pains and Fluxes; for  
what greater Benefit can we receive, than to he delivered stout  
'intolerable Pains ? Besides, such is the Nature of Pain, that, is '  
it he Of any long Continuance, it either weakens the Powers  
sis the Mind and Body to such a Degree, as To render a Dis- .  
ease, otherwise favourable, eventually mortal, or else brings  
Death of itself. Whoever therefore shall he *so* happy as to  
know how to remove those Pains, and avert so great Dangers,  
most certainly confers an extraordinary Benefit, and administers  
T had almost said divine Consolation to the miserable Patient.  
And, therefore, is you consult the most imtient Compositions,  
sof which *Scribonius Largus* has principally made his Collection,  
**or** *Celsius,* you will find many Prescriptions against Pains and  
Flukes, of which Opium is Commonly the Basis. For ah  
Example, we may take that celebrated Antidote of *Cassius,*described by *Scrip. Largus, No.* I20. mentioned, also, by  
*Celsius, Lib.B. Cap.* I4.; theTheriaca Andromachi, Mithri-  
date. Aurea Alexandrina, [fee its Composition finder the Article  
**ALEXANDRI ANTIDOTUS** A**UREA]** the Requies Nicolai, the  
Triphera magna Nicolai, and Philonium, with an infinite Num-  
her of modern Preparations, enough to fill a Volume with their  
bare.Tines, are lnce Corrections of Opium, and Compositions  
which have for their Basis Opium, celebrated by some as ate  
universal Remedy; and some endeavour to extract a Panacea  
from it. .It were indeed heartily to be wish'd, that.some emi-  
Deut Physicians had not been so profuse in their Encomiums '  
on this Remedy, fince none has been so freely, and with Im-  
punity, abused, to the Destruction of Mankind, especially in  
our Times; on which Subject, *Etahlius, de Imposturis Opii,* de-  
serves, to he consulted., I cannot avoid taking the Opportunity  
here to remark, that there in a Custom too prevalent in our  
Times, when we would repress an Haemorrhage, or alleviate **a**Pain, of exhibiting Pilis of Houndstongue, which, having a  
Mixture of Opium, and Seed os Henbane, and Often leaving  
hehin'd them an extraordinary Stupor of the Head, ought to be  
used with the greatest Caution ; and never, but when milder  
Remedies will not answer the Intention; nor then, if the Body  
be Very weak.

In Disorders of the Stomach and Intestines, all things which  
induce a Stupor, are Very cautioufly, or never at all, to he ex-  
hibited, because Iio Kind os Medicines is *so* pernicious and  
injurious to the Tone find Motion of the nervous Parts.

To preserve Healths and .prevent Diseases, nothing is he  
effectual, as to maintain the Tone, Strength, and Motion, *os*what they call she *Primes Vide,* or first Pastages, because that  
mostsalutary Excretion which is performed by Stool, and dis-  
charges the Sordes, which are the Recrements remaining afrey  
Digestion, or are'collected .from all Parts Os the: Body, depends  
chiefly thereon. Where this Evacuation is suppressed, or else  
performed alter a flow and remiss Manner, a Deluge of Vicious  
Humours is soon collected, and becomes the Cause, as well as  
Fomenter, of Diseases. Now there is nothing which so effectu-  
ally diminishes the pbristaltic Motion of theTnsestines, and  
shpprelres intestinal Exbretinn, as Sedatives and Anedynes; the  
Truth of which in attestedjby Experience,:... For sa all E0ute-  
dies, so especially those whielr are of A drastic Quality, *^exert*their Efficacy first *and principally* upon the Stomach and In-  
testines. ..... \_ , . .. *. fr*

It is very dangerous to administer Opiates .arid Anodynes, '  
where the Stomach and intestinus.are shelining to an Inflam-  
thdtion and Sphacelus, or where an extraordinary Imparity of  
the Humours disposes them to a Corruption. ...

That a firm Rein andi Stagnation os the Blood in theVesseIs,\_  
which are productive os an Inflammarions, will end in a fpha-  
Celous Putrefaction, unless; seasonably discussed, is not robe,  
questioned. Whenever, therefore, these Paris, I mean, the  
Stomach arid Intestines, labour under Violent Pains or Spasms,  
and the Body in insirm er impure, an Inflammation is justly to  
be apprehended. 'Tis, therefore, the Business of every prudent  
Physician, in a Dysentery, an Iliac Passion, a spasmodic Colie,  
. ' . - and

and a violent Oardialgra, diligently to consider, not only the  
Strength of the Patient, but, also, the various Stages of the  
Distemper, and the Disposition- of the Humours, before he  
exhibits Medicines of a sedative Quality ; otherwise, instead of  
affording seasonable Relief, he procures the Death of the Patient.  
' Thus, some of the best practical Authors inform us, that  
mortal Symptoms have forthwith heen produced by Opiates  
taken internally, or injected by way of Clyster. Instances of  
this Kind occur in *Thonnerus, in Observat. Lib.* 3. *Cap. 5.  
IPdldfchmidius, in Dessert, de Noxa Opii; Tilrtnpius, de Opio;  
Sennentus, Lib.* 6. *Praxeos, P.* 3. *Cap.* I. and *Marcellus  
Donatus,* in *Hist. Med. Mirabil.*

- Since Medicines of a sedative and stupefying Quality so  
effectually destroy and impair the Strength of the Intestines,  
**hence** 'tis obvious, that nothing has a more effectual Tendency  
both to produce and cherish hypochondriac Disorders, than a  
frequent Use of such Medicines. That **the** hypochondriac  
’Disorder arises from continual Inflations and Spasms of the  
Stomach and Intestines, which are of a nervous Nature, and  
that it is the Effect of a Suppression of the Discharge by Stool,  
and the large Congestion of peccant Humours arising from that  
Circumstance, are things To certain, that they cannot he  
doubted of. Since, therefore. Medicines of this Kind, by pro-  
ducing Costiveness, weaken the Strength and Force of the In—  
**'testines,** hence nothing can he more prejudicial in this Disorder;  
and I myself have often observed, that the immoderate Uso  
of Opiates and Astringents in checking Diarrhoeas, Dysente-  
xies, and intermittent Fevers, has produced a Violent hypo-  
chondriac Disorder, in Women called *Hysterics,* which gene-  
rally afflicted the Patient during the remaining Part of his Lise;  
and, if a Physician, by the frequent Use of Anodynes, checks  
the Pain, and other Symptoms, accompanying this Disorder, he  
‘by that means alleviates them for a time, but lays a Founda-  
tion for their recurring with greater Violence.

Sedative Medicines, especially those of the somniferous and  
stupefying Kind, are, also, injurious to the Head, and increase  
the Disorders incident to .it; because, by rendering the Mo-  
tion and Pulsation of the carotid Arteries, which consist of  
stender Coats, more languid, they occasion a flow Circulation  
of the Blood through the Head. Hence the Stagnations of  
Blood there produced generate formidable Disorders. In order  
to keep the Head free from Diseases, 'tis of the last Import-  
ance to preserve the Tone of the Membranes of the Brain,  
land the due Circulation of the Blood through its Vessels. Now  
nothing is more injurious to the nervous Coats of the Brain,  
than all Vaporous, fetid, and strong-smelling Substances, since,  
by their means, their Tone and Strength is diminished, the  
systaltic and. elastic Force of the small Arteries impaired, and  
Consequently the Circulation of the Blood through the Head,  
rendered, flower: And this flow Circulation is succeeded by a  
Secretion of the serous Humour, which lays a Foundation for  
the most considerable Disorders of the Head, such as a Palsy,  
an Abolition of Memory, an Aphony, a Difficulty of Hearing,  
lethargic Disorders, Hemiplegies, and fixed Pains, os, in con-  
sequence of the too great Distention of the Vessels of the Brain,  
by the insarcted Blond, Melancholy, which Is frequently ac-  
companied with a palpable Depravation of Fancy, an imagi-  
nary Appearance of Spectres, terrible Dreams, anda Madness,  
which easily degenerates into Fury. These vaporous and stupe-  
fying Medicines have an uncommon Tendency, not only to  
generate, but, also, to support and cherish, these Disorders ;  
and, by the incautious Use of them, I have frequently observed  
wild Disorders of the Head converted into Misfortunes of a  
more terrible Kind; an Head-ach, for Instance, transformed  
into a Lethargy; an Hemicrania, into Stupidity; a Palsy, into  
an Apoplexy; a Vertigo, into an Epilepsy ; and a Difficulty  
of Hearing, into a confirmed Deafness.

As Anodynes and Opiates are so unfriendly to the Mem-  
branes of the Brain and intestines by diminishing these Tone  
and Strength, so Children, and old Persons, ought in a particular'  
manner to abstain from the Use of them; first, because they  
retard the Discharge by Stool ; and, secondly, because they.  
weaken the nervous System and Membranes, two Circum-  
stances highly prejudicial, because the Disorders principally in-,  
cadent to these Ages arise’either from Costiveness, Or a Weak-  
ness of the Brain and Nerves.

\*Tis certain from Experience, that, by a liberal Use of Ano-  
dynes, Children contract a Dulness of Genius and Memory,  
which lasts for a considerable Time; for a Violent Injury dotted  
to the tender Structure os their Brain is not easily repaired."  
For this Reason, *Stalpart Fander-Wiel, in Cent. i. Obs.* 42.  
justly orders, " ThatWomen and Nurses, should not, when  
**" the** Children committed to their Care are first affected  
" with Pain and Uneasiness, forthwith exhibit Anodynes ;  
" since, tha’ they do not generally, by that means, destroy ‘  
" them, they yet often weaken their Brain and Nerves to such i

" a Degree, aS to induce violent Tremors, Palsies,, and Stu-  
" pidiny. " Of the same Opinion is Dr. *IVillis,* who, in  
*Pharrn. Rat. P.* I. informs us, that, by Medicines of this Kind,  
' he knew some seized with Slowness os Genius, and Stupidity,  
- and others, with Dotage.

Anodynes and Opiates are highly injurious to Persons natu-  
rally weak; to those whose Strength is impaired either by Age \*  
Or Diseases; to those whose Pulse is languid, whose Vital Mo-  
tions are defective, or whose Fluids have a Tendency to Cor-  
' ruption. It ought to be a constant Rule in Practice, never *io*exhibit strong Sedatives, where the Strength is small, and **the**Pulse, which is always lessen'd by Opiates, already weak.  
Opiates and Anodynes are scarcely eVer useful, when the Vii-  
cera are insarcted, and their Tone destroyed, as in chronical  
Disorders. Nor are such Medicines to he exhibited in Cases  
- where the Blood and Humours are highly impure, as in caco-  
chymic and scorbutic Habits, in which the immoderate **Use**- of Opiates, in order to remove Pains or Spasms, proves mortal,  
because it quickly induces a Sphacelus. When Violent Pain has  
greatly diminish'd the Strength, or a profuse Sweat heen excited,  
- these Medicines should be sparingly used, lest a Palfy, or some  
other nervous Disorder, should he induced. For this Reason,  
'tis sar more expedient to use Opiates ano Anodynes in the Be-  
ginnings of Diseases, when the Strength is entire, than when  
it is exhausted by the long-continued Shock of the Disorder.

As the two principal Indications for’stopping Pain are its  
Violence, and the Hardness and Strength of the Pulse, so, when  
these happen, an Hypnotic may he used, especially when the  
Pain proceeds from an external Cause, such as Worms, **the**Stone, the Eruption of a Tooth, the Puncture os a Tendon  
*or* Nerve, a Division of the Nails by some sharp Instrument,  
or the thrusting a Nail deep into the Sole of the Foot; which  
inot only frequently induces a terrible Train of Symptoms, but,  
also, sometimes proves mortal. . .

As, in all Cases, mild and safe Remedies are preferable to  
those of a more dangerous and drastic Nature, so, in mitigating  
Pain, we are never to have recourse to strong Anodynes, pro-  
yided those of a mild and gentle Kind prove sufficient: Among  
these we may justly reckon anodyne Sulphur. prepared from  
Vitriol; Spiritus Nitri DulciS duly prepared; among Vegetable  
Substances, Saffron, and Nutmeg;..of fragrant Substances,  
MuikandAmber; and, of Shop Preparations, the Oils of Cha-  
momile and Yarrow. To this Class, also, belongs Opium de-  
purated with Rain-water, and corrected by a due Addition of  
Analeptics, Purgatives, or Alexipharmics. *F. Hoffinan.*

NARDINUM *Uugusntum,* Ointment of Nard, is pre-  
pared either with an Addition of the Leaf of the Malabathrum,  
or without it: Generally, however, 'it is mixed with *Oleum  
Balaninum,* or *Omphacinum,* inspissated with an Addition of  
Schosnanth ; and, in Order to *ssfoC* it a Fragrancy, there are  
added CostuS, Amomum, Nard, Myrrh, and Balsamum. The  
best is whet is of a thin Substance, without Acrimony, **and**smelling like dry Nard, or Amomum.

It is of an attenuating, acrimonious, and detersive Quality,.  
and has a Virtue of rarefying the Humours; it is liquid, and  
falis short of a strigmentitious Consistence, without a Mixture  
of Rosin. There is a baser Sort of *Nardinum Unguentum,*‘ prepared of Oleum Omphacinum, the Juncus odoratus, Ca-..  
lamus, CostuS, and Nard. *Dios.corides, Lib.* I. *Cap. Tec.*

NARDUS.

**' NARDUS CELTICA.** Offic. J. B. 5. 205. Ger. 9 **I** 9.  
Emac. 1079.. Rail Hist. i. 39I. *Nardus Celtica Dioscoridies*‘ C. B. I65. *Nardus sive Spica Celtica.* Park. II7. CELTIC  
SPIKENARD.

’ This small Plant has a long stender Root, which creeps among  
the Moss upon the Surface of the Earth, divided into several  
Branches, full of Very small Fibres, os a strong aromatic Smell,  
when dry ; from the Heads of these Roots spring a few small  
narrow Leaves, broadest at the End, and round-pointed, of a  
1 yellowish-green Colour, find growing of a yellow Cosour at  
the End of Summer; from among these arise small Stalks,  
scarce a Span high, having two small Leaves set opposite at a.  
Joint ; and, on the Top, a few little white monopetalous.  
Flowers. It grows in the *Alpine* Countries, between *Italy* and.  
*Germany y* and flowers in *August. .* The Root is principally  
used. τ .

Celtic Nard is heating and attenuating, accounted alexiphar-  
mic and sudorific, and good against malignant Distempers, and.  
all Kinds of Poisons. It opens Obstructions of the Liver and  
Spleen ; provokes Urine, and the.Menfes ; 'and is an Ingredient  
in the Theriaca and Mithridate. *Miller's Bat. Osse.*

**The** Plant is a Drier, and has the same Virtues as the *Indian*Spikenard , but is more effectual in provoking Urine, strength-  
ening the Stomach, and discussing Flatulencies ; outwardly, it  
is an Ingredient in the Composition Of Malagmas and Oint-  
mentS, *Schroder.* The *Hungarians* frequently use it in Lo-  
tions

tions of the Head j as it agrees in Genus, and external Appear-  
ance, with *Valerian,* so it seems to us to agree with it in Vir-  
tues. *Raii Ho P.*

**NARDUS INDICA, & SPICA NARDI. Offic.** *Nar-  
dus Indica.* Ger. 92I. Emac. I08O. Raii Hist. g. IoIo.  
*Nardus Indica vulgaris.* J. B. 3l *Nardus Indica sive Topica  
Nardi.* Parle. Theat. I595. *Nardus Indica, qua Spica, Spi-  
ca Narde, et Spica Indica Officinarum.* Co B. P. I 3. Theat.  
194. INDIAN SPIKENARD.

This is the Head of a Roos, consisting of Spikes of a red-  
ish-brown, or iron Colour, from an Inch and an half, to two  
or three Inches long, and about a Finger thick, made up of  
**fine** {lender Fibres, matted close together ; and seem- to he  
nothing but the Remains of the Fibres of the old decayed  
Stalks, having small stringy Roots at the Bottom, about as  
.thick as a Packthread. The whole. Spike has a strong aromatic  
Smell, and a warm bitterish Tafts. It is not known what  
Plant this belongs to; but it is supposed by the best Judges, to  
he the Head of the Root os an *Indian.* Cyperus. It grows in  
fome Parts of the *East- Indies.*

. Spikenard is reckoned to be stronger, and more prevalent, .  
**then** the CeArdNard, heing heating, opening, alexipharmic, and  
good against all contagious Distempers, and Venomous Bites ;  
and is os great Service against Stoppages *of the* Womb. It is  
put in a pretty large Quantity into Mithridate and *Fenice*Treacle. *Millen's Bot. 0s.fi*

The Nardus Indica is the Root os a Plant of the *East-Indics.***Whet** look like the Filaments of the Roos, are not properly  
**inch,** but the Remains Of the decayed Leaves. It is a Very  
good Attenuans, is used in Colics, and promotes Sweat. It  
Is an Ingredient in many Electuaries, and other Compositions,  
Used externally; such as the Oil.and Ointment os Spikenard.  
*Galen* relates, that he cured an Emperor of the Colic in his  
Stomach, by rubbing that Region with this Ointment. This  
Spikenard may he given inwardly, from half a Dram to a  
Dram; and, in Infusion, from half an Ounce to an Ounce  
and half. *Geoffroy. ..*

I am of Opinion, fays, *Ray,* with *Ju Bauhine, Garcias,*arid other skilful Botanists, whatever *Anguillara* and others  
have said to the contrary, that our Spikenard of the Shops is  
the true and genuine *Indian* Nard of the AntientS. *Garcias-*assiireS us, that there are not different Species of Nard ; for he  
knew but one, and that grew near the River *Ganges* on a  
Mountain, one Side Of winch faces the East, and the other  
the West, winch look towards *Syria* ; a Country separated  
from *India* by a Vast Tract of Land : Nor is one Plant better  
than another, or has a Spike considerably longer than another.  
Nor can it be insur'd, from the Vast Price at which *Pliny* telis  
Us, *Lib.* I2. *Cap.* I2. it was sold in antient Times, that our  
Nard is not genuine; for the *Indies* are now more open and  
known, than they were in the Time of *Pliny* ; and Spices are  
Imported among uS in greater Plenty, and less adulterated, then  
they were in his Days, since the Navigation to *India,* round the  
Coasta of *Africa,* has been discovered ; and, consequently, these  
Drugs are sold much cheaper.

It is a great Question among the Learned, what Part of the  
Nard we ought to reckon the στάχυς, or Spike; some will have it  
to be the Root, others deny it ; of the former Opinion was *Galen***1** *Antid.* I4. where he says, ὸ ἈνδρόμαχοςἼνδικὴν νάρδον, *See.  
" Andrornachus* orders for an Ingredient *India* Nard, which we  
\*Q call *Spikenard,* from its Resemblance to Spikes, tho’ it he a  
" Root. " To this the others oppose the Authority of *Diosc  
- cocedes,* who says, that it has several Spikes proceeding from the  
same Root, both leafy ones, and such as consist of a Compli-  
Cation of Fibres. The Truth is, that the little Stalks, heset  
With Multitudes of capillaceous Leaves, are called *Spikes,* which,  
tho' they seem to be Roots, are not really such, but have under  
.them small Roots or Fibres, by which the Plant attracts Nou-  
rishment ; and these *Diofcorides* calls *Roots,* and distinguishes  
them from the Stalks. It is certain, however, that this Plant  
produces Stalks, which have their Tops adorned with Spikes Or  
Panicles,after the Manner of Grasses, Or Plants resemblingthem.

The NardS *Ci-Dioseorides* are heating and drying, and pro-  
voke Urine; for which Reasons, they stop a Looseness, bring  
taken inwardly; and stop uterine Fluxes, being used as a Pessary.  
Taken in Cold Water, they remove a Nausea and Cardiogmus,  
and relieve such as are oppressed with Flatulencies, or labour  
.under the Icterus, Or hepatic or nephritic Disorders. Boiled in  
Water, and an Insefiion prepared thereof, they remove an In-  
flammation of the Uterus. They repress the superfluous Hu-  
mours in the Eyelids, by astringing and condensing their Edges.  
**The** Powder thereof, sprinkled on moist and sweaty Bodies,  
.takes off their rank Smell.. Nard is an ingredient, also, in Anti-  
dotes. Reduced to an impalpable Powder, then made with  
Wine into Troches, to he reposited in a new Vestel not pitch-  
ed, they enter the Composition of ophthalmic Medicines.  
*Raii Hist. Plant.*

**C. VOL. II.**

NAHtiUS MONTANA. Offic. Ger. 92O. Emac. I 079-  
*Nardus montana tuberofa.* Park. II 6. *Nardus montana radice  
olivari.* C. B. I65. Ran Hist. I. 392. *Valeriana Nardus dicta  
radice olivarii* Htst. Oxon. 3. IO3. MOUNTAIN SPIKE-  
NARD.

This is the Root of a Species of Valerian, which grows in  
the Mountains of *Laeon in Spain* ; but we are not certain what  
the AntientS called by this Name. It is not much used in  
Physic ; but its Virtues are like those of the *Nardus Coltica,*and *Nardus Lndica. Geoffroy.*

It has the same Virtues, according to *Diofcorides,* and serves  
for all the same Purposes, as the *Celtic Nard.*

NARDOSTACHYS. Spikenard. *Paulus AEgin. Lib. J.*Cap. 3.

NAREGAM, a common Name for two Spectes of *Indian*Lemon-tree; the first of which,

*Mal-Naregam,* is a Sort of Dwarf Lemon-tree, which grows  
*in Zeilon* and *Malabar.*

The Leaves of this Tree, boiled in Oil, and applied to the  
Head, ease the Pains thereof; and their Juice is reckoned an  
excellent Erthine for purging the Head. The expressed Juice  
Of the Fruit cures that endemial Cachexy, the *Pitao*; and,  
of the Root, are prepared antispasmodic Pilis. This Fruit  
differs from a Lemon,.only jn having but one Seed,

The other Species is the

*Toycron-Katou-Naregam,* which is distinguished by its small  
Fruit; this grows in mountainous Places throughout *Malabar,*especially about *Candenate,* and has always Flowers and, Fruit  
upon it.

The Leaves are accounted a present Remedy for the Epilepsy.  
The Root provokes to Stool, drives out Sweat, and cures the  
Colic and Cardialgia. The dry'd Fruit strengthens the Sto-  
mach, and restores the injured Fermentation of the Stomach;  
it is, also, a potent Preservative against the Contagion of the  
Small-pox, andmalignant Fevers; and is esteemed an excellent  
Antidote against several Sorts of Poison. *Raii Hist. Plant.*

NARES. The Nostrils..

Among the Various Disorders incident to the Nostriis, none  
are of greater Importance than Haemorrhages, which arise  
from a copious Conveyance of Blood to the Head ; in conse-  
quence of which, the small Arteries in the *Tunica Pituitaria  
aett* preternaturally filled, and their Extremities, heing too much  
distended, are at. last opened, and discharge their contained  
Blood.

Such is the Fabric of the Nostrils, that they are easily sub-  
ject to Eruptions of Blood; for, in their internal Parts, the  
Blood-Vessels divided, into highly minute Parceis, are copioufly  
distributed through that Coat which covers the *Earner,* the  
*Osse Spongiose,* and the ethmoidal Bones, and are, at the same  
time, externally covered with a very (lender Membrane. Hence,  
when the Blood is copioufly convey'd to the Nostriis, it is with  
Difficulty returned through their small Veins, but easily stops  
in the minute Arteries, distends their Extremities, bursts them,  
and produces an Haemorrhage. It, also, sometimes happens,  
that this Blond elevates the Extremities of these minute Arteries  
into small Aneurismsa, which afterwards prove the Occasion  
Of a copious Dropping of Blood.

That in Haemorrhages of the Nose there is a copious and  
violent Assiux of the Blood and Humours to the Head and  
Nostriis, is sufficiently obvious from the violent Motion of  
the Heart and Arteries, the strong Pulse, especially in the  
.Neck and Temples, the Sense of Weight, in the Head, .the  
Redness os the Face, the Swelling of the Face and whose Head,  
a Driness and Heat of the internal Nostriis.

The principal Cause of this Congestion is the unequal Pro-  
gress of the Blood, especially through the Ducts os the exter-  
nal Parts, whether conveying Arteries, or returning Veins: By  
which means it happens, that the Blood is too scantily con-  
veyed th some Parts, and too copioufly to others, where it  
breaks the Vessels, and discharges itself.

Whatever, therefore contributes to produce Inch an unequal  
.Motion os the Blood, in a proportionable Degree, excites  
Haemorrhages. Now all Hemorrhages, and more especially that  
from the Nostriis, are generally accompany'd or preceded by a  
Stricture of tho Skin and external Paris, a Detumescence of  
the Vessels, an Horripilation, a Refrigeration, CostiVeness, a  
Retention of the Flatulencies, Rumblings in the Abdomen,  
Lassitude of the Limbs, and Pains of the Belly. Hence 'tis  
obvious, that the Cause : of this unequal Circulation of the  
Blood is a certain Stricture of the Fibres, and most minute  
Vestels, especially in the Extremities; for when, by means of  
this spasmodic Stricture, the Veffeis, especially such as return  
the Blond, Lymph, or any other Humours, aS, also, **the ex-**cretory Ducts of the Skin, through which, according to the  
Laws of Nature, the serouS Part of the Blood ought to bo.  
eliminated, are compressed, the Blood regurgitates to the largo  
internal Veffeis, by which meam a greater and quicker Con-  
**[B \*] traction**

fraction of the Heart and Arteries is produced, and the Blond  
itself more powerfully Convey'd to the weak Parts, especially  
where its Congestion and Deposition lay a Foundation forHae-  
anorrhages, and other Disorders.

From what has been said, we may easily conceive how other  
Causes concur to produce Haemorrhages, or Discharges ofBlood  
from the Nostrils ; for the Reason is obvious, why those who  
abound in Blood and Humours, indulge themselves in Rest, and  
a sedentary Lise, are voracious, and live in a delicate manner,  
and, at the same time, incautioufly expose their Bodies, espe-  
cially their Feet, to the Cold, whilst they are discomposed by  
unusual Commotions, either of Body or Mind, take such things  
as exagitate the Blond, such as Aromatics, spirituous Substances,  
Ales, Wines, hot and Volatile Medicines, or use too hot  
Baths, are subject to Haemorrhages from the Nose ; because,  
in such Patients, the equable Circulation of the Blond is every-  
where intercepted, and cannot he equally distributed to all the  
Parts, through the minute insarcted Vessels; but, by acting too  
forcibly on the Parts thus disposed, makes an Eruption.

Nor is it an hard Talk to assign a Reason, why these Haemor-  
rhages appear in certain Constitutions of the Atmosphere; for  
’tis certain from Experience, that, especially in the Spring and  
Autumn, about the Equinoxes, many Persons, eVen advanced  
in Years, are subject to Haemorrhages of the Nose, which  
afford them great Relief; for then the State of the Air is very  
unequal, and frequently changes from cold to hot, and from  
dry to-moist Now, fince, by this frequent Vicissitude, the  
Tone of the Skin is weakened, and consequentiy Perspiration  
impaired, it is not to he wonder'd at, if the ordinary Course of  
the Blood is disturbed, and a Foundation for Haemorrhages  
laid.

τ The same Reason is to he assigned, why Haemorrhages from  
the Nose are sometimes epidemical, when a moist Constitution  
Of the Air, when the Winds blow from the South and North,  
is suddenly succeeded by a dry and elastic State of the Atmo-  
sphere ; for by this; means the Exhalation of the Moisture  
through, the. Pores of the Skin is disturbed, the serous Part of  
the Blood is increased, and returned in a larger Quantity to the  
Heart and large Veffeis ; by which means their systaltic Mo-  
tion is render'd strong, and. the Impulse of the Fluids more  
brisk, but at the same time more unequal

' Nor is it more difficult to understand, why rheumatic, arthri-  
tic, and nephri tic-Patients, as, also, fuch as are subject to sci-  
atic Pains, are often subject to Haemorrhages from the Nose; for  
these Disorders are produced by spasmodic Motions and Stric-  
tures, by which the Circulation of the-Blond being-rendered  
unequal, preternatural Collections and Eruptions of it happen  
Irr other Parts. Hence *Hippocrates, in Lib. 2. de Pradict. orders*the Physician to alk adult Patients, afflicted with rheumatic or  
fciatic Pains, whether, in their Infancy, or Youth, they have  
been subject to Haemorrhages from the Nose.

A Suppression' of the Menses, especially in young and pre-  
gnant Women, of the Lochia in Women after Labour, and Of  
the haemorrhoidal Discharge in Men, frequentiy produces a Re-  
gurgitation of the Bloods the Consequence os which is an  
Haemorrhage from the Nose; for no other Reason, than that  
by the Spasms, with which Haemorrhages are generally accom-  
panied, the equable Motion of the Blood is destroyed, and the  
.Blood, with an impetus, forced to the Parts destined for Excre'-  
Tion, where, being denied a Passage, it rushes to any. other  
Tarts, and produces an Haemorrhage.

1 It also frequently happens, that, in those especially who are  
of a tender shongious Habit of Body, inclined to Haemor-  
rhages, an Haemorrhage of the Nose, accompanies Fevers,  
especially that Kind called a *Synochapi* succeeds those of the  
'Quartan Kind ;and precedes the Eruption of exanthematous Dis-  
orders, the Meafles, and Small-pox. Tins Phenomenon is  
sowing to nothing but the Violent spasmodic Strictures of the  
nervous Parts; -for that these Disorders are attended with such  
.Strictures, is sufficiently obvious from what generally precedes  
Them, that is, a Discharge of thin Urine, CostiVeness, Horri-  
’ dilation upon expofing the Skin to the flighted Ain, Refrige-  
ration, Inquietudes, and Anxieties, till the Head becoming  
/afflicted with Pain, and the Face red and inflated, the Blood  
\*at last makes am Irruption. ' - - ' : j . s

' 'Tis, also, to be observed, that Haemorrhages from the Nose  
'are Very frequent in those who have any large Member muti-  
'Iated, or amputated-; ser, after fuch Misfortunes, the same  
^Quantity of Blood and Chyle remains in the Body, whilst at  
.The same time the Space, in which the Humours were before  
'diffused, is lessen’d : Hence the Blood stagnates in .the minute  
- Vessels, and produces irregular Motions towards other Parts.

There is another Cause of the inequal Motion of the Blood,  
besides Spasms, that is. Infarctions and Obstructions. of the^  
IanguiferouS Viscera, such as the Liner and. Spleen ; for, when  
'an Obstruction happens here to the Pastage of the Blood thro'  
The Veffeis Communicating with these Viscera, its Motion and

Impetus are convey’d to other Parts, and frequently to the  
superior Parts and Head: Hence it happens, that inveterate  
Scurvies, Dropsies, and Cachexies, sometimes bring on fatal  
Haemorrhages. Thus *Hippocrates,* in his Treatise *de Pradict.*informs ns, that Infarctions of the Spleen are accompany'd  
with Haemorrhages. -

Such Haemorrhages, produced by Various concurring Causes,  
are discharged either from the Right or Left Nostril, rarely from  
both ; and differ in Quantity, according to the greater or  
smaller Affiux and Congestion of the Blood to the Head ; for  
sometimes only a few Drops, and at other times a few  
Ounces, are discharged; and sometimes so copious an Effusion  
Of Blood continues for some Hours, that the Quantity dis-  
charged amounts to five or fix Pints, i

Haemorrhages of the Nose are in some Patients long, and in  
others short, and in ’some more frequent than in others. Thus,  
they are more frequent in Children, and yonng Persons, than in  
Adults, and those fer advanced in Age. Men are likewise  
more subject to Haemorrhages of this Kind, - than Women ;  
smce these latter have the redundant Blond evacuated every  
Month by the Veffeis of the Uterus. Haemorrhages of. the  
Nose are, also, large, and frequent in Persons of a spon-  
gious Habit Of Body, furnished with small and numerous  
Vessels : But'tis otherwise in lean Persons, whose Veffeis are  
large, tho' this Species of Haemorrhage, when happening to such,  
is generally. Very profuse. . - s.

*' Tris,* also, observable, that they who in their Infancy share *2.*copious Discharge of mucid and serous Matter from the-Ears,.  
Nostrils, and Eyes, are, after the Years of Puberty, subject to  
Haemorrhages of the Nose. 'Tis, also, certain from Experience,  
that such Haemorrhages are sometimes hereditary, and convey'd  
from Parents to their Children. 'Tis equally certain, that no  
Haemorrhage more easily returns, than that from the Nostrils,  
which sometimes recurs every Day, or within a few Hours. '

Now, all habitual and frequent Haemorrhages indicate a certain  
Weakness of Nature, that is, such a Structure of the Parts of  
the Body, as favours a flow and unequable Circulation of the  
Blood. These Haemorrhages are, however, highly salutary,  
especially in fpongious Bodies, where Stagnations, and other  
Disorders, are; dreaded : Nor in practical Authors are there  
Instances wanting of Vertigos; Dimness of Sight, Violent  
Head-achs, d Phrenitis, Convulsions, and Epilepsies, termi-  
nated by Haemorrhages Of the Nose: Whereas, on the con-  
trary, *Hippocrates,* almost every-where, and especially in his  
*Pradict.* and *Coaca - Pranotiones,* informs us, that Vertigos,  
Apoplexies,- Epilepsies, - Convulsions, . Ringings of the Ears;  
with Difficulty of Hearing, and a Gutta Serena, are produced  
by a preposterous Suppression of Haemorrhages from the Noses-

Those Haemorrhages from the Nose are generally critical  
and salutary, which, in that Species of Fever called *Synoche,*happen on the femicritical Day, that is, hetween the third  
and the fourth Day, or on rhe critical Day itself, which is the  
seventh, fince they terminate these Fevers, which generally  
arise from a Plethora. - . - ; .. . su

. 'Tis not only observed by *Hippocrates,* but, also, confirmed  
by Experience, shat those who in their Childhood have heen  
subject to frequent Haemorrhages from'the-Nose, -in their ι  
Youth readily sell into Violent Disorders of the Breast, such as  
Spittings of Blood, Pleurisies, Peripneumonies, and a Phthisis-  
and are, when advanced to Men, subject to the haemorrhoidal  
Discharge, rheumatic, arthritic, ischiadic,nephritic, and colid  
Pains.

Violent and enormous Haemorrhages from the Nose;’ when  
arifing from excessive Spasms of .the in ternal Parts, and-fuel,  
ceeded by Refrigerations of the Extremities, .and Deliquiums,  
generally terminate in Death. This I had an Opportunity of  
observing in a Woman, in whom, when dead; the Carotids  
were preternaturally distended,, and as large again as in their  
due State; whilst at the same time theinserior Portion of the  
Colon was. greatly constricted. -si- ' - ~ : ‘ '

Haemorrhages accompanying exanthematous or malignant-  
Fevers, where the Strength is much impaired, thy destroying  
the Strength still more, by diminishing the Course ofthe Blood,  
to the Snrsace of the Body,. and jestening the Expulsion of the  
peccant Matter, are therefore highly dangerous. In chronical  
Disorders, also, where the Viscera are destroy’d, -Eruptions of  
Blond prove mortal; for which Reason Haemorrhages ’froth  
the Nose generally are fatal to dropsical? and' cachectic Pa-  
tients. . \* - - - ..........

**THE CURE.**

When a violent Haemorrhage threatens Danger, and too  
much: impairs the Strength, the Assistance os a Physician be-  
comes necessary. The principal Intentions of Cure are, after  
discovering the genuine Causes, to remove them by proper  
Measures; . -- -- \* :

; -’-.When

When, therefore; a Redundance of the Blond and Humours,  
together with their expansive Force and Turgescence, hinders  
them free and equal Passage through the minute Vessels, and  
produces enormous Haemorrhages, which principally happens  
in young Persons in the Spring, after violent Exercise, orche  
Use of such spirituous things as throw the Blood into preter-  
natural Commotions, besides Venesection, which diverts the  
Course of the Blond from the Head, Preparations of Nitre are,  
above all other things, efficacious for checking the Orgasm of  
the Humours, and relaxing the spasmodic Stricture of the Parts.  
Thus *Paracelsus,* and *Hildanus,* in all Haemorrhages, Used  
purified Nitre with great Success : And *Ratiarius,* in his *Praxis*and *Observationes,* greatly extols this Medicine for stopping  
all Haemorrhages. Of similar, tho' somewhat inferior Efficacy,  
are Acids, whether os the mild Kind, obtain'd from the Vege-  
table Kingdom, such aS the Juices of Lemons' and Barherries,  
the Water and Juice of Wood-sorrel, or of the more strong  
**and** powerful Kind obtain'd from the Mineral Kingdom, such  
as the Phlegm or Spirit of Vitriol diluted, or the Tincture of  
Roses, and Flowers of the Daisy, prepared with Water of  
Wood-sorrel and Spirit of Vitriol, and drank with Spring-  
water ; the Efficacy of which is, also. Very great in .checking  
the intestine and elastic Force of the Blood.

. Bus, hecause in these dangerous Haemorrhages there is gene-  
rally a certain spasmodic Stricture of the nervous Parts, which  
is soon succeeded by an unequal Motion os the Fluids, besides  
the Preparations *of Nitre* already recommended, we must have  
recourse to gentie Anodynes, such as Preparations os Poppies,  
the Water for Instance, the Extract, or the Syrup of wild  
Poppies, the Syrup of. white Poppies, and Emulsions prepared  
of the Four cold Seeds, the Seeds *os* white Poppies, and the  
Waters of the Flowers of the *^Egyptian* Thorn, Elder, the  
Lime-tree, Meadow-sweet, common Chamomile, and Prim-  
roses. Bus, when a Violent impetus of the Solids continues ob-  
stinately, we must have recourse to more efficacious Remedies,  
and exhibit a few Grains os the Pilulae de Cynoglosso; Cam-  
phire, also, on account of the sulphureous Exhalations it dif-  
fuses, produces a sedative Effect, especially when mixed with  
. Nitre, or diaphoretic Antimony, and exhibited in a small Dose,  
such a Powder is of Very singular Efficacy, especially when any  
exanthematous Matter proves the Cause of the Haemorrhage,  
yvhich it frequently does. But, among all the Various Medicines  
proper for stopping Haemorrhages, whether from the Nose, or  
any other Part, none is more safe and efficacious, than the ano-  
dyne mineral Liquor, which is saturated with the anodyne Sul-  
phur of Vitriol; and which either alone, or rather with the  
Powder of Nitre, drank in Spring-water,'forthwith checks the  
violent Orgasm of the Blond. / ./

.Besides, when the Disorder is violent. We must divert the  
Impetus of the Blood from the superior Parts to others: For  
this Purpose, Venesection in the inferior Parts is to be used.  
Then we are to prescribe temperate Baths sor the Feet, and  
putting the Hands In warm Water ; by which the Fibres are \*  
relaxed, the Tone Of the Vascular Parts remitted, and conse-  
quently the excessive Flux of the Blood to the superior Parts  
prevented. .

j 'Besides, as that acrid bilious‘Matter, which is often the  
Cause of Flatulencies and Spasins, is, especially in hypochon-  
driac Patients, the Occasion of immediate Haemorrhages; in  
order to make a Derivation, nothing is more proper than such  
things as .gently purge the Intestines.; These, as they are ex-  
hibited internally, ought not only to be mild, hnt, also, pos-  
seised of a corroborative Quality, such as Preparations of Rhu-  
barb. Powder- of .Rhubarb in Substance mixed with shine  
Grains of Nitre and Sal Polychrestum, or Raisins impregnated  
with Rhubarb. The same Intention is, also, answered by  
emollient, carminative, temperate, and oleous Clysters, which  
sooth the Spasins, .and carry off the Flatulencies" of the In-  
testines. . -

The Afflux os the Blood to the Head may he prevented,  
and the weaken'd Parts corroborated, by applying Refrigerants,  
mixed with Discutients, to the Forehead, Nostrils, and Neck.  
**Of** this Kind, the most efficacious is an Epithem, prepared os  
Vinegar os Roses, Vinegar Of Rue, Nitre, Camphine, and  
the Oil of Rose-wood, which mav he, also, drawn up the  
Nostrils. Ἕμάδ᾽ μά τι ss - : ”  
. They who are subject to frequent and’ Violent HaeriiorrhageS  
from the Nose;-ought, in order to prevent their Return, to be  
very careful in preserving their whole Bodies, and'especially  
their Feet and Heads, from the Cold, lest Perspiration should  
he hinder'd, which as. it greatly contributes to all other *Haer*‘ morrhages, soin a.particular manner to this from'theNose;

since by this means, a Redundance of Blond, and.impure Hu-  
mours, is generated. 'Tis therefore expedient in such a Case,  
.besides great Temperance, to promote this Excretion by Exer- :  
Cife, and .Infusions of Pauls Betony, 'and the Tops Of Yarrow.

They who in thein. Infancy have been subject Io frequent

Haemorrhages, if these afterwards cease, and Venesection in  
neglected, ought carefully to abstain from Violent Exercise, and  
loud'Crying or Speaking. I have, also, observed Haemor-  
rhages, in School-masters, succeeded, by almost incurable Dis-  
orders of the Head, such as a continual Ringing of the EarS,  
a Head-ach, and Palsy. \* - .

But, after Violent Hemorrhages, we are, above all things, to .  
guard against exposing the Body or Head to the Cold, as, also,  
against Frights: For, by a Neglect of this Rind, we frequent-  
ly observe a Violent Torpor, btupor, and Oppressure, Pain of  
the Head, accompany'd with a Pain of the Eyes, a Dimness  
of Sight, a Vertigo, an intolerable Weakness of the whole  
Body, and Danger os an Apoplexy; for the more the Blood  
is exhausted from the Body, the more carefully we **are to**guard against such things aS repel it from the external to **the**internal Parts. . : . v

. For this Reason, through the whole Course Os profuse Hae-  
morrhages, we are to he Very cautious both os snuffing Up  
the Nostrils, and applying externally by way osEpithems, cold  
and astringent Substances ; since by the unskilful Use os' these;  
the Nostrils bring obstructed, the Force os the Blood is de-  
rived either to the Aspera Arteria and Lungs, and endangers a  
-Suffocation; or to the internal Parts os the Brain, and lays a  
Foundation for ah Apoplexy. It is hetter and more ’.expea  
dient not to use those external'Applications till Baths for  
the Feet have heen used, the Body render’d soluble by Clysters,  
and Venesection in the Foot, if necessary, has been performed.

Haemorrhages arising from a Redundance of Blood, an Oinis-  
sion of accustom'd Venesection, a Suppression Of the Menses;  
the Lochia, or hemorrhoidal Discharge, are more salutary than  
dangerous ; sor which Reason they ought not to he forcibly  
stopp'd. But *is* they are immoderate, besides the deriving Re-  
medies already mentioned. Corals mixed with the *Species de  
Hyacintho* and Nitre, may be exhibited in a proper Quantity  
of Citron-juice. . - - -

We must, also, be careful not suddenly to stop these Hae-  
morrhages when returning at certain Periods, either by inter-  
nal Medicines, or external Applications ; for by this means we  
frequently observe Lethargies and Apoplexies produced in old  
Persons.

I have known Haemorrhages of the Nose cured by drinking  
two or three Quarts of Spring-water every Day, provided the  
Surface of the Body is kept duly warm, especially in choleric  
and bilious Patients, and in Cases where there is an intense  
Orgasm of the sulphureous Parts, which is by this means ex.-  
cellentiy alleviated, and a gentie Sweat, sor-the most part, hap-  
pily excited. For which Reason 'tis proper, that those who are  
subject to immoderate and frequent Haemorrhages, should use  
pure Spring-water for their common Drink.

In symptomatic Haemorrhages, and those accompanying ex--  
anthematous Disorders, Meafles, Small-pox, Scorbutic Purple  
Fever, and Petechias, it is not expedient to exhibit any other .  
Medicines, than such aS, by modesatingthe intense Heat, may  
gently promote Perspiration. For this Purpose, . . . ύ  
. Take Of the Water of Chamomile-flowers, four Ounces ;

distil'd Vinegar, one Ounce; of Crabs-eyes, and Diascor-  
dium, each one Dram; of Nitre, one Scruple ; and of  
the Syrup of wild Poppies,, a sufficient Quantity ; make  
infora Mixture: Of which, let the Patient take itwO  
Spoonfuls every two Hours, and keep himself moderately  
warm in Bed ; and, is the Disorder is malignant, a Pow-  
der composed of diaphoretic Antimony, depurated Nitre,  
( . and Camplshe,-is to he exhibited. - . -

They who in their Infancy and Youth have been subject to  
frequent Haemorrhages, which afterwards stop, are Very often  
afflicted with Disorders of the Head, Eyes, and Ears, a Swel-  
ling of/the Parotid Glands; or with an Epilepsy or Phrenitis;  
either of the idiopathic orsymptomatic Kind. - In this Case, if  
the Head, .and- its Vestitis, are turgid with .Blood, the Nostrik  
are by some external Artifice to be stimulated to a Discharge  
Of Blond; and this is most generally done by thrusting a QjIill4.  
a Straw, or a Scarificator, into the Nostrils.: The same Piece  
Of Practice, s, also, highly beneficial, when in synochoits and  
sanguine Fevers there iSra Violent Impetus of the Blood to.tho  
Head, which produces terrible Symptoms, unless it be: dis»  
charged;---:.: ..durCis.dinaL ... if. ,;i

Impetuous-Haemorrhages, arising froth, violent Commotions,  
os Mind, require a peculiar Treatment 4. sor,iif .they are. pro-  
duced by Anger, antispasmodic nitrous Powders, successively  
exhibited in pure cold Water, are highly beneficialbut, if  
theyarisefrom excessive Sorrow, Diaphoretics nim'dvvithAnti-  
spasmodics,: or the anodyne mineral Liquor, mix'd with, a  
fourth Part of the SpisituS Bussii, and used with a moderately  
- diaphoretic Regimen, are sufficient.to produce a Cure.

\*' When Patients1 of cachectic Habits labour under Haemor-  
rheges, Preparations of Rhubarb, Variousty and. frequently ex-  
*“ -J .* 4. . ... .... . .... . \* ; thibited.

V

hibited, whether alone. Or mixed with digestive Salts, are, from  
Experience, sound to be preferable to all other Medicines.  
But., when the Viscera are affected with a scorbutic Taint, the  
Cure is most properly attempted by Whey, interposing, at the  
same time. Preparations of Rhubath. *Predrio Hififman.*

**A POLITUS OE THE NOSE..**

The infernal Parts Os the Nose, as well as Other Parts of  
the Body, are often subject to fleshy Excrescencies, Call'd  
Polypuses, the' they seldom have more Feet or Roots than one.  
This Disorder is, by some, called Sarcoma; and, by others.  
Hypersarcoma. But these Caruncles are Of Various Sixes and  
Consistencies; sometimes soft, and capable of Elongation,  
when drawn ; sometimes, tho' Very seldom, hard, and, as it  
were, rigid; sometimes white, and sometimes of a pale-red  
Colour :. At first, they are, for the most part, small; but, in  
Process of Time, they increase, some flower, some faster ;  
so that! have seen some, in three or four Days, hang out of the  
Nose: Tho' they are generally free from Pain, yet sometimes  
they are attended with Pain and Hardness, hecome livid, and  
incline to a Cancer. Some are confin'd to the Nose, others  
hang down to the Lips; some fill, greatly expand, and enor-  
inoufly dilate the Nose; some appear as One Caruncle, with  
an equal Surface; others like a Cluster. Some, again, grow  
backwards thro' the Aperture, by which the Breath descends  
from the Nose to the Fauces, and are Visible behind the UVula;.  
and then occasion not only a great Difficulty of Speaking and  
Swallowing, but likewise of Breathing, and almost strangle  
the Patient. Sometimes they expand themselves both through  
the Nose, and through the Fauces, though both Nostriis are  
seldom obstructed by them. The Polypus, as we have already  
observed, has generally but one Root, and that flender; some-.,  
times, indeed, it is thick, and furnished with large Veins;  
however, as it appears now-and-then with many Roots, the  
Antients seem, to have derived the Name from thence. This  
Excrescence often proceeds from the inferior or middle Part of  
the Nose, and sometimes from the posterior and upper Part,  
and even from the Sinuses of the Cranium and OS Ethmoides ;  
but it is, in general, formed in and from the pituitary Mem-  
brane, and particularly by an Obstruction of one or more of its  
Glands ; which, being gradually increased by noxious Hu-  
incurs, filis the Nose, or hangs down below it; and, conse-  
quentiy, it seems nothing more, than a morbid Expansion and  
Elongation os the Glands, and that spongy Membrane. But,  
in my Opinion, the Sarcoma Nasi is of a Very different Na-  
. ture; for a Polypus is generally soft, and hangs like a Fig, by  
**a** flender or thick Roos, as by a Stalk; whilst the Sarcoma is  
sometimes soft, sometimes hard, and fixed upon a large, firm,  
and immoveable Basis. ,

*j* From the preceding Account of the Nature and Disposition  
**. os** a Polypus, we cannot he at a Loss for the Diagnostic and  
Causes of it. And first, a white, redish, soft Polypus, with-  
out Pein, is of a mild Nature. On the contrary, that is dan-  
. gerous, which is painful, hard, livid, or black, or discharges a  
rus, or acrid and fetid Humours; for such tend to a Cancer.  
The Causes are often latent and internal, though it is some-  
limes produced by external Violence. By a latent Cause,  
We mean an Inspissation of corrupt and glutinous Blood in the  
Tmall Vessels and Glands of the pituitary Membrane; for that  
foft and spongy Membrane may he easily distended by a Con-  
gestion of noxious Humours. The external Causes may be  
violent Falis Or Blows, too frequent an Introduction of the  
Finger into the Nose, an Irritation of the pituitary Membrane,  
and too strong sternutatory Powders. Lastly, the manifest in-  
? ternal Causes are frequent Catarrhs, a Defluxion, Ulcers of the

Nose, or too profuse Haemorrhages. A Sarcoma proceeds from  
much the same Causes; and both are sometimes attended with..  
a Spina Ventosa, aud Caries of the Bones of the Nose'; In-  
stances of which have sometimes occurred to me. .,

The Cure is easier, and the Danger less, when the Polypus  
IS of a favourable Kind ; as when it is not seated very far in  
the Nose, when it has a flender Root, and hangs loosely, or  
when it is capable of Elongation, and lastly, when the Patient  
is of a good Habit: On the contrary, when it is inaccessible,  
has a thick Roos, and is incapable of Elongation, the Re-  
xnoval is more difficult, especially if the Patient is afflicted with  
a scorbutic or Venereal Disorder at the same time. The Dan-  
ger of the Cure is likewise increased, by the Difficulty of sup-  
pressing the profuse Haemorrhage, which attends the Extirpa-  
tion or Evulsion of a Polypus, especially if it is fixed on a deep  
and large Basis. If *it* tends to a Cancer, that is, if it becomes  
hard, livid, and painful, which is Very common, it is safest to  
palliate the Disorder by Lenitives; for it is as dangerous to ir-  
xitate this, as other Cancers, in like manner, when the Poly-  
**pus is** inaccessible, **or** arises from a Spina Ventosa, as I have  
seen a large one, it is hardly possible, aster a Removal, to pre-  
vent its sprouting again, unless the Spina Ventosa be first cured.

Further, if it extends to the Fauces, Speech, Deglutition; find  
eVen Respiration, are sometimes hinder'd, as *Celsius* observes,"  
and the Cure is extremely difficult. Lastly, when it filis both  
Nostrils, the Cure is Very difficult, because generally, it pro-  
ceeds from some worse Disorder. These Observations are  
equally true, with regard to a Sarcoma, especially if the Bones  
of the Nose are assiected with a Spina Ventolin

The Cure of a Polypus cannot be reasonably expected from  
any thing but a total Removal, which may be accomplished by  
caustic Medicines, or proper Instruments ; and this, either all  
at Once, or at different times. The first may be applied when  
the Excrescence is soft and small, or short and large, with this  
Caution, that the Caustic may not corrode the sound Parts of  
the Nose. Among the mild corrosive Medicines proper for  
this Purpose, the most Celebrated are Powder Os Savin, burnt  
Alum, red Precipitate; white Vitriol, and Hermodactyl-root,  
either alone or miked with Honey, or some digestive Oint-  
ment, laid on the Polypus with a Tent; or; if it is seated ex-  
ternally, without a Tent,’ by which, flight Ones are sometimes  
removed. *Potorius* says, the Powder of Heliotropium, or Scor-  
pionwort, introduced into the Nose with Cotton, twice a  
Day, will remove a Polypus Very readily, and with little Pain ;  
but we are left in the Dark as to the particular Species of Heli-  
otropium, or Scorpionwort, proper for this Use. *Pjulartdus*recommends a Mercurial Water, with which he affirms he has  
cured a Polypus, by. wetting it every Morning and Evening.  
TO this Class, also, belong the Unguentum TEgyptiacum, the.  
*Unguentum fuscum* Of *Wurtscen,* the Oil of Tartar per *Deli-  
quium,* the Essence of Savin, and particularly an Essence pre-  
pared of Sublimate Mercury and Spirit of Wine, with which  
*Wedelius* informs us he cured a certain Polypus»- - According to  
*Nuck,* in *Operat. Chirurg. Cap. de Polypo,* great Service is  
done in Polypuses by Lime-water, especially is, aster mixing **a**Grain or two ofSublimate Mercury with it, it is made into a  
phagedenic Water. The same End is, also, answered by pre-  
cipitate Mercury, upon winch some Spirit of Wine has been  
deflagrated; by Water saturated with Sal Ammoniac; and, if  
we may believe *Musitanus,* by the acid Spirit os Sal Ammo-  
niac If these prove ineffectual, then stronger Remedies must  
be applied ; such as the Lapis Causticus, or Infernalis, Subli-  
mate Mercury, the Arcanum Corallinum, .and others of a like  
Nature ; but these should be mixed with Honey, or Basilicon,  
and laid on with great Care, that they may not Conode the  
sound Parts; and, if the Polypus lies concealed in the Nose, a  
small Portion of the Medicine should be introduced by a Quill,  
or some other Tube. Of equal Virtue in removing a mild  
Polypus, are the Spirit or Oil of Vitriol, Aqua-fortis, **and**Butter of Antimony, when applied with a Feather or Pledget t  
Whatever is eroded must, at every Dressing, be removed by  
SciisarS, or a Pair of Forceps. *Thinaut* followed this Method t  
He laid two Piasters between the Polypus and sound Part, for  
the Preservation os the latter.; then he carefully applied to the  
former Butter os Antimony, with a Tent or Pledget; and  
next, to prevent too deep a Penetration, he washed it off with  
warm Water. By this Method *Garengeot* affirms that he per-  
formed the Operation in a Moment; but tins Author does not.  
tell us, whether he applied, the Caustic more than once, tho' I  
am persuaded it must he frequently repeated ; for a fingle Ap-  
plication will ltardly produce the desired Effect.

But, in general, instruments are preferable to'Coustics; and  
this Operation may he performed by Various Methods. Before  
the Operation the Patient should be prepared, and then seated  
opposite to the Light, an Assistant reclining his Head back-  
wards, and securing it with his Hands. When this is done,  
the Surgeon may choose either of the following Methods, which  
seems to him best suited to the Circumstances of the Cose. We  
shall begin first with the Method described by *Celsius :* " The \_

Polypus, says he, should' be separated from the Bone by a  
" sharp Instrument, in the Shape of a *Sphtha,* taking care not  
" to wound the Cartilage beneath it, which would be difficult  
" to cure. Aster the Separation it must he extracted with a Steel  
" Hook; then, to suppress the Haemorrhage, the Cavities Of  
" the Nose should be filled up with a Pledget, or some folded Lint  
" moistened with a proper Medicine: After the Suppression of  
" 'the Haemorrhage, the Ulcer must he deterged with Lint.  
" When it is cleansed, the Cicatrix must be formed by injecting .  
" proper Medicines, till the Cure is completed." The Method  
proposed by *AEgineta* is not Very different from this. He Orders  
the Patient to be placed against the Light; the Surgeon to open  
and dilate his Nose with his Left Hand, whilst, with his Right,  
he extirpates the Polypus circularly, with a sharp Spatula, made  
for that Purpose, in the Shape of a Myrtle-leaf; applying the  
Edge of theTnstmment to that Part where it adheres to the  
Nose, than, turning the Instrument, to extract it with the Han-  
dle. TO induce a Cicatrix, he uses leaden Pipes. We discover  
the whole Polypus to be removed, finst'by the Sight,- then by  
the Voice, and Freedom of Respiration thro’ the Nose,. *Albu-*

*cases*

*easts* advises to extracti the Polypus out of **the** Nose with **a**Steel Hook or Forceps, and then remove as much as can he  
**reached** by Incision ; and this to he repeated till the Whole is  
taken Ossi If the Excrefcence cannot he totally removed,  
*Paulus* and *Albucajis* order a pretty thick Piece of Linen, like  
a Cord, frill of Knots, at a FingePs-breadth, or less, from

. each other, to he tied to the Remains, and transmitted from  
the Nose to the Palate ; then to he drawn out of the Mouth, ,  
which may he done with Forceps. The two Ends of this  
Cord, one hanging from the Nofe, the other from the Mouth,  
should he drawn hackwards and forwards, till the Remains of  
the Polypus are destroyed ; for which Purpose the Cord should  
he dipt in Unguentum AEgyptiacurn. *Fabricius ab Aquapen-  
dente* rejects these Methods, and endeavours to establish one of  
his own, which is performed by a sharp Forceps. These be  
gently introduces into the Nose, to the Root of the Polypus j  
and with them both extirpates and extracts the Whole, or as  
much as be can reach. This he justly prefers to all others,  
and fays, if the Whole cannot he removed at once, it’ may he  
repeated, till nothing remains. If the Wound bleeds plenti-  
fully, which is not very common, he orders the Haemorrhage  
to be suppressed with red Wine alone, or mixed with Alum.  
*Sennertus* and *Glandorp* followed this Practice, and I myfelf  
have known it fuccced often.

There are many other Methods of curing a Polypus. Thus  
*Jbiarc. Aur el. Severinus* has found from Experience, that a re-  
cent Polypus may be extirpated by repeated Punfturation, or  
Scarification, with a Knife or Lancet. Some recommend **the  
actiial** Cautery; but others reject it, as attended with violent  
Pain, and Hazard of injuring the found Parts. Some prefer  
the falciform Knife of *Glandorp.* represented by *Andreas a  
Cruce,* as the properest Instrument to , cut the Excrescence,  
which is to he duly extracted with - an Hook, or Ligature,  
made upon it before the Incision. *Adefue* removes a Polypus  
hanging out of the Nofe by **a** slender Root, with a Pair of  
Scissars ; but, if it defcends to the Fauces, he draws it for-  
ward with a Pair of Forceps, and amputates it near the Root'  
with red-hot Scissars. Others esteem a Separation by Ligature  
- as the safest Method, .hecause this is not attended with any pro-  
fuse Haemorrhage. For this Reason *Glandorp* passes a strong  
waxed Thread of Silk round the Root, ties it in a Knot, and  
cuts off the Caruncle near the Ligature. This may be more  
commodiousty performed, by first extracting the Polypus fufii-  
ciently out of the Nofe with the Forceps, *Tab. XL. Fig.* 9.  
Dr Io. but this must be done gently, to prevent a Rupture of  
any Part of it, hefore a Ligature is applied. The Thread  
must he left, till it is digested off spontaneously.’ Thus we avoid  
**an** Haemorrhage, which, especially after Evulsion, is often large  
enough to destroy the Patient, The Polypus, after the Liga-  
ture is applied, may remain entire, till it falls oss spontaneoufly  
with the Thiead; which Piece of Practice I heve sometimes  
**used.** But, if it does not decay by the first Ligature, it will be  
proper on the second and third Day to renew it: Thus I cured  
a noble Lady in sour Days, without any Pain, or Profusion of  
Blond.

This Lady was above seventy, in all other respects well,  
and had before been fubjcit to frequent Haemorrhages of the  
Nose ; which bring suppressed by cold Water, she at length  
perceived a fleshy Caruncle growing in.her Left Nostril, which  
not only filled, but distended her Nose to an indecent Siae, so  
that she could hardly breathe thro’ it. After having consulted  
many Surgeons and Physicians, who applied Caustics to no Pur-  
pose, (for what they confurned one Day, grew again the fol-  
lowing) she applied to me. Upon examining her I found a  
Polypus, of a Colour somewhat ruddy, about the Size and  
Shape of a Damson; .Part of which hung out of .the Nose,  
whilst the greater Part was concealed within, and distended the  
Nostrils enormousty. It could not he extracted, on account of  
the Rigidity and Shortness of its Root; but, upon a more ac-  
curate Examination with a Probe; I perceived it grew-from the  
middle and lateral Part of the Nofe. As the Lady and her  
Friends .disapproved of Excision, or Evulsion, and as Caustics  
**had** been applied without Success, I considered whether it was  
**not** possible to relieve the Patient by. Ligature. But here oc-  
curred a Difficulty ; for the Polypus was seated deep in the  
Nofe, and filled up its Cavity, fo that I was at a Loss how to  
convey the Thread round the Basis: However, while the Pa-  
tient was preparing, I contrived the Instrument represented  
*(Tab.* XL. *Fig.* I2.)and used it with Success. I transmitted  
a double strong Thiead of Silk through the Aperture Β, at the  
crooked End; and, seating thePationt opposite to the Lictitj I  
elevated and distended the Pinna Nasi with my Lest Hand ;  
then, taking the Handle A in my Right Hand, I cautiousty con-  
veyed the End upwards between the Pinna and Polypus, till I  
sound it was above the Root, which, by the external Side of  
the Nose, appeared to be about the Middle. After this, turn-  
ing the Handle upwards, I brought the Apex, which is obtuse,  
lest it should hurt the Nose, into View ; then took hold of the

Thread, and extracted the End of iteut of the Nofe: I next  
depressed the Handle-gentry, and at length drew out the whole'  
Instrument, leaving the Thread behind round the Root; then  
tied it in a double Knot. Next Day I repeated it, and again  
the third Day, and drew the String somewhat tighter ; thus  
the Polypus became hard and black. On the fourth -Day,  
when I pulled the Excrescence and String a: little, to fee whe-  
ther it was loosened, the Polypus, to the great Surprise of the  
Patient and Spectators, separated, without any Pain or- Hae-  
morrhage. The Nose afterwards recovered its natural Shape,  
and the Patient breathed freely through is.

But, when the Polypus is seated very deep in the Nose, or  
grows from the Sinuses of the Crmi'um; this Method will prove  
ineffectual, as it is impossible to extirpate it totally. For this  
Purpose the Surgeon, according to *Pigraeus,* should have a  
blunt Forceps, called a *Crow's Bill,* either like thet (*Tab.* XL.  
*Fig.cy.)* from *Palfyn,* or rather that (Ay. Io.) with a per-  
sorated Beak A A, to hold the Polypus firmly, and gently twist  
and extend it, till the Root breaks, and it is extracted. If the  
Polypus hangs down behind the Uvula to the Fauces, andean-  
not be held by the Forceps, and removed with the Scissars, the  
Duly Method is to twist and extract it gently with the curve  
Forceps, (Tkh.XL. *Fog.* II.) or with the Stone Forceps, (Toh.  
XLIX. *Fig.* 6.) heing, at the fame time, very carelul not to  
take hold of, pinch, lacerate, or wound, the Uvula .; though  
*Petit,* for the easier Extraction of a large and dangerous Poly-  
pus, cut rhe Velum Pendulum Palati in two .Places. When a  
Polypus extends into the Nose and Fauces at the same timc, the  
anterior Part must he first removed.

When the Haemorrhage is inconsiderable, it may he per-  
mitted till it ceases voluntarllyjor is suppressed by snuffing up red  
Wine alone, or red Wine impregnated with Alum; but, when  
it is profuse, the Patient should snuff up forne highly rediified  
Spiritof Wine, Vinegar,acid JuiceofPomgranates, fomestyptic  
Liquor, or anv Water or Powder, adapted to suppress the  
Bleeding of Wounds, and fill his Nose with Lint. If this  
‘ miscarries, he should dip the Lint in the Medicines already re-  
commended, and fecure it with a Thread, so that it may-he  
extractsd, if necessary.

*Li Dran* has proposed a peculiar Methed for stopping the  
Flux of Blond. He introduced a crooked Forceps, very plain  
and perforated in the Beaks, through the Nofe to the Fauces,  
wish his Lest sore Finger j to the End of which he joins several  
Threads, in such a manner, thet they may be easily separated **j  
those he** puts into the Mouth, and conveys them behind the  
Uvula, till he can reach the Knot, which is necessary atone'  
End, with the Forceps; be then extracts the Forceps, draw-  
ing one End of the Thread out of the Nofe. while the other  
hangs out of the Mouth. This Seton ought to be long enough, '  
and two thick Bundles of Lint, the first dry, the other dipt in  
styptic Liquor, must be fastened about two Hands-breadth from  
the End. He next draws the Seton thro’ the Nofe, so that

1 che fust Dossil expeis the Blood, lodged in the posterior Part,  
through the fore Part of the Nose, and the other, about a  
Thumb’s-breadth from the former, closes the posterior Part,  
and prevents the Blood from flowing into the Fauces, which is  
very incommodious to the Patient when he coughs ., and, if  
the anterior Part of the Nose is filled with Lint, dipt in any'  
styptic Liquor, upon reaching the Part whence the. Blond  
issues, the Veins will he constricted, and the Haemorrhage  
suppressed.

*Paulus Albucasts,* and others of the Antients, drew a Cord,  
full of Knots, backwards and forwards, through the Nose ;  
nor so much with an intention to suppress the Flux of Blond,  
as to take oss the Remains of the Polypus: This Cord they dipt  
foinetimes in the Unguentum AEgyptiacurn. And though this  
Method is, by many, rejected as cruel, and ineffectual, *Lit  
Dran* renewed it, in a Cafe where the Root of the Polypus  
adheredto the lowest Part of the Nofe above the Palate, and  
the heck Part near the Vomer, and could not he removed by  
any other Means. He therefore passed his Seton, without  
Knots, through the Nose, in the preceding Method, and dipt \*  
it in fuppurating Medicines, which he continued for twenty  
Days, nil the Root was confurned by Suppuration, and the Pa-  
tient restored to a Freedom of Breathing: At last he used De-  
siccatives, and thus cured his Patient within the Space of *R*Month.

*Garengeot,* and others, in cafe of a Polypus whose Root  
cannot well he found, advssc to open the Nostrils with a  
Knife, according to the Practice of *Hippocrates, and Guida de  
Cauliaco,* who afterwards cauterized the Root. *Celsus* like-  
wise recommended this Method for an Ozjena. But, for my  
Part, I would rather dissuade from this Practice, both on ac-  
count of the violent Pain,- and unseemiy Cicatrix attending it -  
besides, the Polypus may sometimes sprout again, as I have  
. seen, and *Hutter* relates. However, when an incision is  
necessary, it should be made in the Sulcus of the Nose, near  
the Cheek, that the Cicatrix mav he lest nnsichrlv.

*- To* heal the Wound, and prevent a Return of the Polypus,  
the Patient should snuff up his Nose, several times in a Day,  
Spirit of Wine, mixed with Honey *of* Roses; or some Dtme-  
water may he snuffed up, or injected by a Syringe; or rather  
the Nostril should be filled with Lint, dipt in it ; and this is to  
he continued for several Days. Is we see any Remains of the  
Polypus, they must he removed with a Forceps, or taken off  
with a little os the Unguentum Aegyptiacum, mixed with the  
preceding Injection, Or sometimes cautioufly touched with the  
Lapis infernalis. If the Nose is exactly filled at every Dressing  
with Lint for some Days or Weeks, there will he Very lit tie  
Danger Of a Return ; though the Patient, during the whole  
Cure, ought not only th observe a proper Regimen, but, also,  
to take proper internal Remedies to correct his Blond, particu-  
Iarly.Purgatives, Mercurial Pilis, a Decoction of the Woods,  
and .the like ; nor must he neglect Bleeding, if he is plethoric.

When the Polypus tends to a Cancer, it must neither be ir- tritated with Caustics, nor Instruments ; but rather mitigated  
by gentle Medicines and Dies, specified under the Article  
Cancer.

Lastly, a Sarcoma in the Nose is to be treated with the Cathe- \_  
retie Remedies above recommended, with the Addition of pro-  
per interala Medicines. Ifthese sail, the Disorder may hedeemed  
incurable, especially ifitproceeds from an obstinate Spina Ventosa.  
For the Observations of Various Authors, fee *Glandorp,* in his  
Treatise on a Polypus, and two Very remarkable Observations  
*in Lae Dr an, Obs.* 6. and 7.

**AN OZ.JENA.**

The Nose is sometimes so exulcerated, as to discharge .a  
fetid Odour with Pieces os corrupted Bones : This is termed  
an Oaaena, or soul malignant Ulcer of the Nose; and may he  
easily distinguished from those Ulcerations which have no Foetor,  
and proceed from Catarrhs, or the inclemency of the Air, and  
are soon cured by Ointment of CerusS, or any other Medi-  
cine os a like Nature. An Ozaena is generally more. Violent  
and soul, when attended with a Caries in the Bones: For, at  
first, the internal Coat of the Nose only is ulcerated, but it  
extends itself insensibly into the Render Bones, and often into  
the Sinuses of the Cranium, and the Offa Maxillaria, and ex-  
cites a malignant Caries.

It generally arises from an obstinate Catarrh, or some other  
Disorder Of the. Nose, especially when the Blond is affected  
with the Scurvy, or Venereal Disease; but sometimes from  
acrid Substances, drawn into the Nose with the Air, and cor-  
roding its Membrane/aS strong sternutatory Powders; and  
sometimes it proceeds from, or is joined with, a Polypus.

The Signs of an O2aena are discoverable from what has been  
already mentioned ; but, for the Event, the Cure is certainly  
difficult, because the Bones, especially the Ossa Spongiosa, are  
surprisingly tender, and not sufficiently exposed to View; in  
consequence of .which, the Part affected cannot he properly  
cleansed. For this Reason the Disorder spreads, and, at length,  
corredes the Septum, and other Bones os the Nose, in such a  
Manner, that the external Part, is deformed, and the Faculty  
of Speech and Respiration injured. Some have thought an  
Oztena a sufficient Plea for a Divorce.

The Cure should he undertaken by external, but more par-  
ticularly by such internal Medicines as correct the Blood, as  
Antiveuereals, of which Mercurials and Decoctions of the  
Woods are the Principal. The Patient, likewise, must he or-  
dered to use a Diet moderate and light, neither strong nor  
high-seasoned. When the Case is Venereal, the best Remedy  
is a Salivation.

Externally must be applied the usual Remedies for deterging  
Ulcers, aS the *Aqua Viriolis* of *Hartman* snuffed up the Nose,  
or rubbed on with a Pencil, or injected or introduced with Tents,  
or Linen Rags rolled up. I have sometimes used a Mixture  
of Lime-water and Mercurius dulcis with Success. *Mayern*and *Fallopius* recommend, in this Case, temperate Alum-  
water, a Decoction of Savin, and Scordium; in which, when  
the Disorder is Violent, about an Ounce os the *Unguentum  
Fuscum lViurtzii* is to be dissolved. In Cases of this Nature,  
great Benefit is, also, produced by frequent Injections os a  
Liquor prepared of the fame *Unguentum fViertxii,* or the *Un-  
guentum Acgyptiacum,* mixed with Honey of Roses, and Spirit  
of Wine. Tents, also, prepared of the *Unguentum Fusium  
Wurtxii,* and the Addition of a small Quantity of white Vitriol,  
may he put up the Nostrils, till the Ulcer is cleansed, and the sor-  
did Matter,and the fetid Smell, removed. The Steam of Cinnabar  
thrown upon live Coals, and cautioufly admitted into the No-  
strils, is, by some, said to contribute greatiy to the Cure osan  
Ozaena. But, at the same time, these Medicines are to he  
persisted in, till the Flux of the corrupt Matter, and the fetid  
Smell, he entirely removed.

. If a Caries accompanies an Oaaena, the only remaining  
**Hope** of **Cure is** from a preceding Separation of the Carious

5

Bone. But we know not how to extirpate a Caries or the  
Ofla Spongiosa, since neither the Cautery, nor Euphorbium,  
nor any other Remedy; het what have been directed, can he  
safely applied. However; the Surgeon may securely use the  
above-mentioned deterging Medicines, for some Weeks or  
Months, till the Bone is exfoliated. If, in the mean time,  
any Pieces are loose, he may extract them with the Forceps, to  
ease the Patient, and prevent an Increase of the Caries ; but if;  
in consequence of their Bulk, they cannot he extracted entire,  
he may divide them with Scissars, aS I have done; and they .  
will fall off spontaneoufly, or he easily drawn out. After this;  
the Remedies must he continued, till the whole corrupt Mat\*  
ter and Stench is removed.

*Drake* has mentioned a new Kind os Oaaena, and a peculiar  
Method of treating it: He says, it is sometimes seated in **the**Sinus Maxillaris, and there discovers itself by a Discharge of  
corrupted Matter, attended with a disagreeable Smell from the  
Nose, upon inclining the Head to the sound Side ; for in that  
Posture ’the Matter, latent in the maxillary Sinus, is propelled  
through the Foramen of the Maxilla. But as this, or any  
other known Method, is insufficient to evacuate the corrupted  
Matter from this Sinus, this Species is frequentiy incurable, and  
destroys the Patient. *Drake,* therefore, has given us a true  
Description os the Disorder, and a proper Method os treating  
it. He orders one of the Dentes Molares, on the affected Side,  
next to the Sinus, to be drawn ; and then to break through the  
Socket into the Sinus, with aProhe, or some otherpointed Instru-  
ment *(Tab.* XXVIII. Fry. 2.): This, he says, may he done with-  
out any Difficulty, as the Bone is eroded, or, at least, decayed  
by the corrupted Matter. Thus the Matter will not only dis-  
charge itself spontaneoufly through this Passage, but the Sinus  
may he cleansed by proper Injections, and not only cleansed,  
but healed likewise, by frequent Applications of balsamic Me-  
dicines ; fitch as the Elixir Proprietatis, and the Tincture of  
Myrrh and Aloes, either alone, or mixed with Honey os Roses,  
or the Decoctions of Scordium or Savin. When the Medioine  
is injected, it must be retained there by a Tent introduc'd into  
the Aperture : Upon discharging the Injection, another Tent,  
fastened to a Tbread, must be introduc'd, to prevent the Passage  
from closing, before the Ulcer is cleansed. The 'Excellency of  
this Practice is confirmed by Experience; and it is observable,  
that the Jaw-bone is sometimes so much eroded, that it comes  
away with the Tooth; so that an Aperture to the Sinus is  
formed without any Instrument, and nothing more is required,  
than to apply Purgatives and Balsamics, till the Parts are eon-  
glutinated.

**. OF ARTIFICIAL NOSES.**

The Method of curing Noses Violently wounded, **either**with Instruments or Bites, so that some Part of them still ad-  
heres to the Face, is already specified under the Article CAPUT.  
But, with respect to the Method *of* cutting a Nose from some  
fleshy Part of the Body, and with that supplying the Defect of  
an entire Nose, we have yet said nothing ; for though *Talico-.  
tins* has written professedly on this Subject, in a Treatise in-  
tituled *Chirurgia curatorum pcr Insitionem,* and illustrated it with  
many Figures; yet our modern Surgeons, smce what he pro-  
posed has not heen confirmed by later Experiments, think it  
impracticable. When the Nose, therefore, is entirely lost, **we**supply the Defect by an artificial Nose of Wood or Silver,,  
(unless the real Nose can he replaced by Suture or Plaisters)  
which may he painted of the natural Colour, and furnished  
with proper Springs and Screws, so as to unite it with **the re-**maining Part of the Nose. *Roonhuysien,* in his *Obsero.  
Chirurg.* 24. mentions a Nose flit longitudinally, and cured  
by Suture.

**OF OPENING THE NOSTRILS PRETERNATURALLY  
-CLOSED.**

I have never yet, in any chirurgical Writings, met with an  
Instance of a Nose preternaturally concreted, and cured by **a**Surgeon; but Experience assures me, that such Accidents  
happen, and are curable. A poor infant, of about three Years  
old, was brought to me, who, for want of Care in the Small-  
pox, had been Violently ulcerated all over his Face, especially  
his Nose and Dps, fo that his Nostrils were closed, his upper  
Lip reflected hack, and united to them, as in *T.ab.* XL. *Fig.*I 4. *Litt.* A A. The Right Nostril was entirely stops, and  
the Left so far contracted, as to deny Admission to the Head  
of a small Pin: Whence he was frequentiy troubled with **so**difficult a Respiration in Sleep, that his Parents were in perpe-  
tual Fear of Suffocation.

I treated him in the following Manner: I placed his Head  
opposite to the Light, and ordered some Assistants to secure his  
Hands and Legs; then separated the upper Lip from the Nose  
with a Knife; aster this, with a smaller Knife, I opened both No-  
strils to their natural Size ; then introduced a Probe *(Tab.* XXII.

*Lett:*

*Lett.* K.) to examine the Openings of the superior Part; and,  
finding one not sufficiently divided, I enlarged the Aperture.  
After permitting them to bleed a little, I introduc'd a thick Li-  
nen Tent into each Nostril, both to suppress the Haemorrhage,  
and prevent the Uniting of the Aperture. To replace the up-  
per Lip, I applied some Lint, with a Plaister, and an oblong  
narrow Compress, under the Nose, to keep down the Lip;  
then bound it with the four-headed Bandage, aS for an Hare-lip.  
This I continued for several Days; only afterwards the Tents  
were dipt in Spirits of Wine. Thus, for eight Days, the  
Apertures of the Nose remained sufficientiy large and open.

Bur the Mother, imagining the Child to be perfectly Cured,  
removed the Tents, and neglected bringing him to me. The  
Consequence was, his Nostrils were again concreted, and, aster  
some time, would hardly admit a small Prohe. Upon her Re-  
turn I opened them, as before ; and, after the Use of Tents  
for eight Days, kept them open, by inserting marginated leaden  
Pipes *isirab.* XL. *Fig.* 15- and I6.) till they were os a proper  
Dimension, and the Wound was healed.

. I performed another Cure of this Kind upon a Girl; and, as  
her Disorder proceeded from the Small-pox, I treated her in the  
same Manner. Since that I have met with a third, when,  
instead of leaden Pipes, which are easily compressed, and  
changed from their elliptic Form, I used some made of Brass.  
It is necessary to observe, that the Nostriis ought to be kept  
open for a considerable time, otherwise they will soon contract,  
though they appear to be very large. *Heister Chirurg.*

NARIFUSORIA. Medicines which are instil’d in the  
Nostriis.

NARTHEX, νἀρθρξ. The FERULA; which see.

NARWAL. ANamefor the Unicorn Fish See UNicoRNU.

NASA. The same as **NATA.**

NASALE. An Errhine.

NASCALE. A Sort of Pessary, made of Wool, or Cot-  
ton, like a Pledget, to be introduced into the Vagina, when  
impregnated with proper Oil, Unguents, or Juices.

NASCAPHTHON. See **NARCAPHTHoN.**ὅ ‘ NASITAS. A Speaking thro' the Nose,  
' NASTURTIUM.

The Characters are ;

It resembles, in all respects, the *Thlafpi,* or Mithridate  
Mustard, with a less foliaceous Margin, and multifid Leaves,  
to distinguish it.

*Boerhaave* mentions eleven Spectes of this Plant ; which are,

I. Nasturtium; sylvestre; Dalechampii. *Lugd.* 655. *Thlapsi  
umbellatum. Nasturtii folio, Monfpeliaeum.* C. B. P. I06.

2. Nasturtium ; hortense; Vulgatum. *C. B. P.* IO3. *Toum.  
inflo* 2I3. *Boerh. Indo A. 1.* 8. *Nasturtium hortenso.* Offic.  
Get. I94. Emac. 25O. Park. Parad. 5oo. Rail Hist. I. 825.  
*Nasturtium vulgare.* J. B. 2. 9I2. GARDEN-CRESSES.

This Cress has a small white stringy Root, from which  
spring many finely laciniated winged Leaves, three or four  
. inches long, os a pleasant, hot, biting Taste; the Stalks  
shout a Foot high, smooth, and round ; the Leaves which grow  
on them are less cut in, and have larger and broader Laciniae.  
The Flowers are small, of four white Leaves, set together in  
Tufts on the Top of the Stalk, and are succeeded by little  
round Seed-Vessels, flat on one Side, containing red, round  
Seed. It is sown every Year in Gardens, and flowers in *May.*The Leaves and Seed are used.

The Leaves are much ufed in the Spring as a Sallad-herb,  
their warming Quality bring useful to correct the Coldness of  
others mixed with them ; they are good for the Scurvy and  
Dropsy, as also for the Palsy and Lethargy. A Cataplasm os  
the Leaves, with Hogs-lard, cures Scald-heads. The Seed,  
likewise, helps the Scurvy and Dropsy, and Swelling of the  
Spleen, and opens Obstructions in the Female Sex. *Mellen's  
Bet. Off.*

The Herb, but especially the Seeds, are het and acrimonious;  
whence they are attenuating;, abstersive, and aperitive. They  
are os principal Service in Tumors of the Spleen, Obstructions  
of the Menses, and expefling the dead Foetus; they cut the  
tartarous Mucilage of the Lungs, and are good for the Scurvy ;  
the Seed is commonly used to expel the Meafles. Externally  
it is used in Apophlegmatisms, Errhines, and Phoenigms [a  
kind of drawing Plaisters, exciting a Redness of the Skin,  
whence they have their Name ; *for csatrt/.ar, Phoenicus,* signifies  
redj. Bruised, or parched, and mixed with the Fat of an Hog,  
it cures the Scurf, and scabby Sores of the Head, and other Parts,  
heing anointed therewith. *Schroder.*

It is os general Use in Seasonings and Sauces, and is com-  
shortly eaten in Spring and Summer, with Lettuce and other  
Herbs, season'd with Oil, Salt, and Vinegar; it tempers the  
Coldness of Lettuce, warms the Stomach with its Heat, and  
promotes Concoction. The *Dutch* frequently eat Cresses,  
with Bread and Butter, in *May* ; they find it good for that

trouhlesorne Disorder the Scurvy, nor is it less effectual in that  
Disease, *than Cochlearia,* (Scurvy-grass) *git Nasturtium aquaticum*(Water-cresses.) In comatous or lethargic Affections nothing  
has beenihtmd more effectual than Nasturtium, either boiled,  
or in SalladS, as *Forestus* observes, *Observ. Med. Lib.* 10.' *Obs.*39. S. *Paulus* observes *faomPa rarus,* that nothing is so pre-  
sent and effectual a Remedy for the foul .and crusty Scabs and  
Sores of Children, aS Garden-cresses, bruised or fried in Hog'S  
Fat5 for in four and twerrty’Hours they, make the Crusts sail  
off; and, if the Use of them be continued for any considerable  
time, make a perfect Cure, as he found by Experience. *Rail  
HoP.p.^TS. . .-'si'*

**3ἄκNasturtium; hortense; crispum; *'CHIP.* 104.**

*4.* Nasturtium ; hortense ; latifolium. \* *C. B. P.* Ioam  
*Prod.* 43. \*

5. Nasturtium ; sylvestre ; folio OsyridiS. *C. B. P.* 105.  
*Thlafpi angnstis.olium, Fuchsiiqui Nasturtium fylvestre.* J. Β. **2«**9ΪἝ

6. Nasturtium; sylvestre; capsulis cristatis. See **AMBROSIA  
CAMPESTRIS.**

*J.* Nasturtium ; sylvestre ; tenuissime incisum ; fructu mi-  
nore. *T.* 214. *Iberis, . Nasturtii folio.* C. Β. P. 97.

8. Nasturtium ; pumilum ; vernum.' *C. B. P. I05. Me Hi.*2. 30I. *Cardamine, pusilla, saxatilis, montana,* δισκοβδής,  
*Col.* I. 273.

9. Nasturtium ; sylvestre. *Cluse Hist.* 423.

**IO. Nasturtium; pumilum; incanum, foliis tantum cima  
radicem.** *Bot. Monsip.*

II. Nasturtium; pumilum; verpum; supinum. *Bot. Monsip.  
Boerh. Ind. alt. Plant. . .*

It is called *Nasturtium, quasi Nasi Tormentum,* **the** Torment  
of the Nose, because it has such an Acrimony, that the Smell  
of the Seed bruised provokes Sneezing. - . ....

It has an antiscorbutic, oleous, and saline Quality: With  
this Plant have I cured a radicated Dropsy, proceeding from **a**cold Cause; but, in this Case, the Viscera were not affected.  
An Ounce os the expressed Juice, together with a dry Dies, are  
Very proper in this Disease; in the Winter Season I use the  
Seeds. This Herb liquefies the Blond, and renders it acrimo-  
nious ; whence it is proper, where there is a Coldness and Visci-  
dity ; but in hot Distempers it is Poison. It quite eradicates  
pituitouS Diseases, is a good Pectoral for old Persons, where  
Phlegm hinders Respiration, and is good. in hysteric, hypo-  
chondriac, and scorbutic Cases. The Leaves newly bruised,  
and mixed with Ferment, heat, and excite a Redness of the  
Skin, and eVen a Blister, if their Application be continued for  
a considerable time, where it meets with a sweet Viscid Phlegm,  
and none but cold Humours, with an extreme Laxness of **the**Acid, in all which Cases it is highly serviceable. The Seeds,  
by a singular Property, are effectual in Hernias, whether in-  
ternally or externally used. *Hist. Plant, adscript. Bocrh.*

**NASTURTIUM is, also, a Name for several Sorts ofSISYM-  
BRIUM ; winch see.**

**NASTURTIUM INDICUM.**

We have already taken notice of **the NASTURTIUM INDI-  
CUM** under the Article ACRI**VIOLA.**

The *Acriviola.* Boerh. Ind. 244. *Viola Indica scandens, Naso  
turtii sapore et odore, flore stavo.* Herm. Hort. Lugd. Bas,  
628? *Viola acris Americana five Acriviola folio peltato minor et  
vulgaris.* Pluk. Almag. 388. *Cardamindum minus et vulgare.*Toum. Inst. 430. *Pelon Mexixquiliti feu Pelon Chili, side  
Nasturtium Peruuianum.* Hern. I6I. INDIAN CRESS, is  
a Native os *Peru,* but frequently cultivated with us in Gar-  
dens, and flowers during the whole Summer. The Flower is  
serviceable in a Weakness, or Pain, of the Stomach, proceed-  
ing from Cold and Flatulences; it is an Ingredient in SalladS,  
and mixed with other Greens. *Dale.* A Person worthy of  
Credit, and just returned from *America,* communicated to me,  
as an extraordinary Secret, a Remedy against a stubhern and  
malignant Itch, and for recent Wounds ; which was an excel-  
lent Oil, prepared of *Nasturtium Indicum,* by simple Infusion.  
*Rail Hi P. p.* 487.

The *Acriviola maxima odorata.* Boeth. Ind. A. 244. *Car.,  
damindum ampliori folio et majori store.* Tourn. Inst. 430.  
*Cardamindum majus.* Rupp. Flor. Jen. 23o. *Viola Indica  
scandens. Nasturtii maxima odorata.* Herm. Hort. Lugd. Bar.  
629. *Viola acris Americana five Acriviola folio peltato maxima,  
store odorato eleganti.* Pluk. Almag. 388. THE GREAT, or  
SWEET INDIAN CRESS. -

It is cultivated with us in Gardens, and flowers in Summer ;  
**the** Virtues and Uses are the same aS those os the former, or  
common *Nasturtium Indicum.*

*Nasturtium Orientale.* A Name for the *Thlasipi; spicatum  
Persicum ; pensoliatum, marinum ; foliis inferioribus tenuitcr in-~  
cists ; supcrioribus a caule Peofoliata mada penetratis.*

*Nasturtium pratensi.* **See CARDAMINE. ’ ’**

***Nasturtium,***- t

*.Nasturtium., silvestre, Eruca -affine.* **A Name for the***Sinapi; Hifpantcum; folio Glaucii violacei.*

NASUS. The Nose.

The Parts of which the Nose consist, may be divided two  
different Ways; from their Situation, into internal and exter-  
nal Parts; and, from their Structure, into hard and soft Parts.

The external Parts are the Root of the Noss, the Arch, the  
Back, or Spine os the Nose, the Sides os the Nose, or os the  
Arch, the Tip of the Nose, the Abe, the external Nares, and  
the Part under the Septum.

The internal Parts are the internal Nares, the Septum Na-  
rium, the Circumvolutions, the Conchee superiores, the Con-  
ch ae inferiores, the posterior Openings os the internal Nares,  
the Sinus Frontales, Sinus MaxfllareS, Sinus Sphenoidales,, **the**Ductus Lachrymales, and Ductus Palatini.

. The firm or hard Parts are mostly bony, and the rest earn la-  
spinous, as the Os Frontis, Osethmoidcs, Os Sphenoides, Olla  
Maxillaria, Offa Nasi, Ofla Unguis, Ossa Palati, Vomer,  
Conchae Inferiores, and the Cartilages. To these we may add  
the Periosteum and Perichondrium, as Parts belonging to the  
Bones and Cartilages. .

The soft Parts are the Integuments, Muscles, Sacculus La-  
chrymalis. Membrana Pituitaria, Vesicis, Nerves, and Hairs  
os the Nares. The bony Parts have been all explained under  
the Article CAPUT ; theresore I need only set down here their  
Distribution and Disposition, for the Formation os some of  
the principal Parts. The Septum is formed by the descend-  
ing Laminae of the Os Ethmoides, and by the Vomer; and it  
is placed in the Groove framed by the Crissie *os* the Offa  
Maxillaria, and rising Edges os the Ossa Palati. The Back of  
.the Nose is formed by the Ossa Nasi, and the Sides by the su-  
perior Apophyses os the Offa Maxillaria.

The internal Nares, or the two Cavities of the Nose, com-  
prehend the whole Space between the external Nares, and poste-  
rior Openings, immediately above the Arch os the Palate,  
from whence these Cavities reach upward aS sar as the Lamina  
Cribrosa os the Os Ethmoides ; where they communicate for-  
ward with the Sinus Frontales, and backward with the Sinus  
Sphenoidales. Laterally these Cavities are bounded on the In-  
side by the Septum Narium ; and on the Outside, or that next  
the Cheeks, by the Conchae, hetween which they communicate  
with the Sinus Maxillaris.

The particular Situation of these Cavities deserves our At-  
tention. The Bottom of them runs directly hack ward, so that  
a streight and pretty large Stilet may easily be passed from the  
external *Nares,* under the great Apophysis os the Occipital  
Bone. The Openings os the Maxillary Sinuses are nearly  
opposite to the upper Edge os the *Osta Malarum* ; the Open-  
ing of the Frontal Sinuses are more or less opposite to, and  
hetween the Pulleys or Rings os the *Musculi Trochleares*; and  
by these Marks the Situation os all the other Parts may be de-  
termined.

The inferior Portion of the external Nose is composed of  
several Cartilages, which are commonly five in Numher, and  
of a pretty regular Figure. The rest are only additional,  
smaller, more irregular, and the Number os them more uncer-  
tain. Os the five ordinary Cartilages, one is situated in the  
Middle; the other four laterally. The middle Cartilaoe is the  
most considerable, and supports the rest, bring connected im-  
mediately to the bony Parts ; but the other sour are connected  
to the middle Cartilage, and to each other, by means of Liga-  
ments.

The principal Cartilage os the Nose consists of three Parts,  
one middle, and two lateral. The middle Portion is a broad  
cartilaginous Lamina, joined by a kind of Symphysis to the  
anterior edge of the middle Lamina of the *Os Ethmoides,* to  
the anterior Edge of the *Vimer,* and to the anterior Part of the  
Groove farmed by the *Osta Maxillaria,* aS sar aS the Nasal  
Spines of these Bones. This Lamina completes the *Septum  
Narium,* and indeed forms the principal Part of it.

The lateral Portions are oblique and narrow, suited to the  
Corresponding Parts os the bony Arch. Where they join the  
middle Lamina, a superficial Groove is observable, which  
makes them sometimes appear like two distinct Pieces, separated  
from the Lamina, the' they are really continuous. This shal-  
low Groove terminates below by a small Crista.

The lateral Cartilages are two, on each Side of the inferior  
Part os the Lamina, one anterior, the other posterior. The  
two anterior Cartilages are very much hent forward, and  
form whet is called *The Top as. the Nose* ; the Space hetween  
their incurvated Extremities bring commonly filled with a kind  
of satty Substance. The two posterior Cartilages form the  
Alae os the Nares, being pretty broad, and of an irregular  
Figure.

The Spaces lest between some Portions of the anterior and  
posterior Cartilages, those hetween the posterior Cartilages,  
and the neighbouring Parts of the *Ojsu Maxillaria,* and,  
lastly, those hetween these four lateral Cartilages and the prin-

oipal Lamina, vary in different Subjects, and are silled by small  
additional Cartilages, the Number, Size and Figure of which,  
are aS variable as the Interstices in which they lie.

**The** *Siobfepturn,* or Portion under the *Septum Narium, is***a** Pillar os Fat, applied to the inferior Edge os the cartilagi-  
nous Partition, in form *of* **a** soft moveable Appendix. The  
Thickness os the *Ala Narium,* and especially that of the lower  
Edges, is not to he ascribed to the Cartilages, winch **are very**thin, but to the same Kind os solid Fat, with which these  
Cartilages are covered. The great Cartilage is immoveable by  
reason of its firm Connection to the bony Parts of the Nose ;  
but the lateral Cartilages are moveable, because of their liga\*  
mentary Connections ; and they are moved in different Mans,  
nets by the Muscles helonging to them.

The external Nose is cover’d by the common Integuments,  
the Skin, Epidermis, and Fat. These which cover the Tip  
of the Nose, and Alae Narium, area great Number of glan-  
dular Bodies, called *Glandula Sebacea* by *Morgagni,* the Con-  
tents os which may easily he squeezed out by the Fingers.  
All these bony and cartilaginous Parts have likewise the com-  
mon *Periosteum,* or *Perichondrium.*

Six Muscles are commonly reckon'd to belong to the Nose ;  
two *Recti,* called, also. *Pyramidales,* or *Triangulares;* two  
*Obliqui,* or *Laterales* ; and two *Tranfversi,* or *Myrtis.ormes.*In very muscular Bodies there are likewise some supernume-  
rary Muscles, or small *Accesserii.* The Nose may, also, he  
moved in some measure by the Muscles of the Lips, which,  
in many Coses, hecome Assistants to the proper Muscles of this  
Organ.

The *Musculus Pyramidalis,* or Anterior on each Side, is *in-  
serted* by one extremity in the *Synarthrosis os* the *Os Frontis,*and *Ossea Nasi,* where its fleshy Fibres mix with these os the  
*Musculi Frontales,* and *Superciliares.* It is very flat, and runs  
down on the Side os the Nose, increasing gradually in Breadth,  
and terminating by an Aponeurosis, winch represents the Basis  
of a Pyramid, and is inserted in the moveable Cartilage, which  
forms the Ala of the Nares.

The oblique or lateral Muscle is a thin fleshy Plain, lying  
on the Side of the former, and in some Subjects appearing to  
form one broad Muscle with it. This is probably the Reason  
why the anterior Muscle has been termed *Triangularis.* The  
lateral Muscle is fixed by its upper Extremity to the *Apophysis  
Nasulis* of the *Os Maxillare,* below its Articulation with the  
*0s Frontis,* and sometimes a little lower than the Middle of  
the inner edge os the Orbit. From thence it runs toward the  
*Ala Narium,* and is inserted in the moveable Cartilage, near  
the *Os Maxillare,* heing covered laterally by a Portion of the  
neighbouring Muscle of the upper Lip, with which, in some  
Subjects, it appears to he confounded.

The transi'erse or inferior Muscle, called, also, *Myrtiformis,*is inserted by one End in the *Os Maxillare,* near the sower  
Edge os the Orbit, much about the Place which answers to the  
Extremity os the Socket os the *Dens Caninus* on the fame Side.  
Thence it runs almost transverfly upward, and is fixed in the  
lateral Cartilages os the Nose, over which, in some Subjects,  
it seems to run to the Aise of the great Cartilage, and to he  
inserted there.

The first two Pairs os these Muscles raise and dilate the  
Alae of the *Nares,* when they act ; and at the fame time raise  
the upper Lip, by reason os their Connection with the Muscles  
of that Part. They likewise wrinkle the Skin on the Sides of  
the Nose.

The *Membrana Pituitaria* is that which lines the whole in-  
ternal *Nares,* the Cellular Convolutions, the *Conchae,* the Sides  
os the *Septum Narium,* and, by an uninterrupted Continuation,  
the inner Surface of the *Sinus Frontales* and *Maxillares,* and  
of the *Ductus Lachrymales, Palatini,* and *Sphenoidales.* It is  
likewise continued down from the *Nares* to the *Pharynx,  
Septum Palati,* &c.

It is termed *Pituitaria,* because, through the greatest Part of  
its large Extent, it serves to separate from the arterial Blood **a**mucila^uous Lymph, called *Pituita* by the Antients; which in  
the nateral State is pretty liquid ; but it is subject to very great  
Changes, becoming sometimes glutinous, or snotty, and some-  
times limpid ; neither is it separated in equal Quantities thro\*  
the whole Membrane.

When we carefully examine this Membrane, it appears to he  
of a different Structure in different Parts. Near the Edge of  
the external Nares it is very thin, appearing to he the Skin and  
*Epidermis* in a degenerated State. All the other Parts of it, m  
general, are spongy, and of different Thicknesses. The thick-  
est Parts are those on the *Septum Narium,* on the whole sower  
Portion of the internal Nares, and on the Conchae ; and, if we  
make a small Hole in it at any of these Places, and then blow  
through a Pipe, we discover a Very large cellular Substance.  
In the Sinuses it appears to he of a more flender Texture.

On the Side next the Periosteum and Perichondrium it is  
plentifully stored with small Glands, the excretory Ducts of  
which

which are very long near the Septum Narium, and their Ori-  
fices Very visible ; and, by applying a Pipe to any of those Ori-  
fices, the Ducts may he blown up almost through their whole  
Extent ; but, in order to this, the Parts must first he Very well  
cleaned, and washed in luke-warm Water.

In these Places especially, we likewise discover a Very fine  
villous Substance, when the Parts are examin'd in clear water.  
*Rjolanus* made use of this Method in examining small Foetuses.

The frontal, maxillary, and sphenoidal Sinuses open into the  
internal Nares, but in different Manners. The frontal Sinuses  
open from above downward, answering to the Infundibula of  
the Os Ethmoides, described under the Article CAPUT. The  
Sphenoidales open forwards, opposite to the posterior Ori-  
fices of the Nares; and the Maxillares open a littie higher,  
hetween the two Conchae.. Therefore the Sinus Frontales dis-  
charge themselves most readily when we stand or fit; and the  
Sphenoidales when the Head is inclined forward.

The Sinus Maxillares cannot be emptied wholly, or both at  
the same time, in any one Situation. Their Opening, which in  
some Subjects is single, in others double, lies exactly between  
the two Conchae, about the middle of their Depth; so that  
when the Head is held strait, or inclined forward or backward,  
they can only be half emptied ; but, when we lie on one Side,  
the Sinus of the opposite Side may he wholly emptied, the other  
remaining full.

It is proper to observe here the whole Extent of the maxil-  
lary Sinus. Below, there is but a Very thin Partition between  
it and the Dentes Molares, the Roots of which, in some Sub-  
jects, perforate that Septum. Above, there is only a Very  
thin, transparent Lamina, hetween the Orbit and the Sinus.  
Backward, above the Tuberosity of the OS Maxillare, the  
Sides of the Sinus are very thin, especially at the Place which  
lies before the Root of the Apophysis Pterygoides; through  
winch the inferior maxillary Nerve sends down a Ramus to  
the Foramen Palatinum Posterius, commonly called *Gustato-,  
'rium.* Inward, or toward the Conchae Narium, the bony Part  
of the Sinus is also Very thin.

The lachrymal Sacculus is an oblong membranous Bag, into  
which the serous Fluid is discharged from the Eye, through the  
Puncta Lachrymalia, and from which the same Fluid passes to  
the lower Part of the internal Nares. It is situated in a bony  
Groove and Canal; formed partly by the Apophysis Nasalis of  
the OS Maxillare and Os Unguis, partly by the’same Os Maxil-  
lare and lower Part of the OS Unguis, and partiy by this  
lower Portion of the Os Unguis, and a small superior Portion  
of the Concha Narium inferior. This Groove and Canal  
- are the bony lachrymal Duct, *of* which see what is said under  
the Article CAPUT.

I have an Observation or two to add concerning the Situation  
‘of this bony Duct. It runs down a little Way obliquely back-  
ward, toward the lower and lateral Part os the internal Nares  
on each Side, where its lower Extremity opens on one Side of  
the Sinus Maxillares, under the inferior Concha, nearly at the  
Place from which a perpendicular Line would sail in the Inter-  
Rice between the second and third Dentes Molares. The  
upper Part of this Duct is only an ,Hals-canal or Groove ; the.  
lower is a complete Canal, narrower than the former.

- The Sacculus LachrymaliS may be divided into a superior or  
orbitary Portion, and an inferior or nasal Portion. The orbi-  
tary Portion fills the whole bony Groove, being situated im-  
mediately behind the middle Tendon *of* the Musculus Orbicu-  
laris. About One-fourth of its Length is above this Tendon,  
And the rest below. The nasal Portion lies in the bony Canal  
of the Nose, being narrower and shorter than the former.

The orbitary Portion is disposed at its upper Extremity,  
much.in the manner of an Intestinum Caecum; and, at the  
lower Extremity, is continued with the Portio nasalis. To-  
wards the internal Angle of the Eye, behind the Tendon of  
rhe orbicular Muscle, it is perforated by a small short Canal,  
formed by the Union of the lachrymal Ducts.

The nasal Portion, having reached the lower Part of the bony  
Duct, under the inferior Conche, terminates in a small, flat,  
membranous Bag, the Bottom of which is perforated by a  
round Opening, aS I have always found it upon.a careful Ex-  
amination, but which, at first Sight, appears oblong.

I used to attribute this Difference to the Force, which I was  
obliged to use in separating the Concha inferior, in order to see  
this Opening, which I have often sound more backward than  
the Middle os the Bag, at the Extremity of this Portion ; and,  
therefore, when I would either see or shew this Opening in its  
natural State, I do not separate the inferior Concha, but cut  
it gently with a sharp Knife, or with SciflarS. If a transverse  
Line he drawn hetween the lower Part of the Nose, and OS  
Mate, and another Line be drawn directly upward, opposite  
to the third Dens Molaris, or opposite to the second and third,  
these two Lines will intersect each other nearly, at the lower  
Extremity of this Sacculus.

I have sometimes found the upper Extremity of thin Raed  
divided into an anterior and posterior Pars, by a kind or  
Valvula connivens lying in the anterior Portion; a little lower  
than the Tendon of the Musculus orbicularis. The small  
common Canal of the two lachrymal Ducts opens in the poste-  
rior Portion, and consequentiy hehind the Valve.

The Substance of this Sacculus is something spongy or cellu-  
lous, and pretty thick, being strongly united, by its convex  
Side, to the Periosteum os the bony Canal, which may he very  
distinctly shewn. This Substance seems to he made up of two  
Laminae, joined together by a spongy Membrane, the outer-  
most of which is that which I have mentioned ; the other ap-  
pears to be glandulous, and is, in some Subj ects, loose and pli-  
able, which I look upon as a Disease.

The Ductus Incisorii or Naso-palatini, of *Steno, are two*Canals, which go from the Bottom os the internal Nares cross  
the Arch of the Palate, and open behind the first or largest  
Dentes Incisorii. Their two OrifrceS may be distinctly seen in  
the Skeleton, at the lower Part of the nasal Fossae, on tbo  
anterior and lateral Sides os the Cristae maxillares ; and we may  
likewise perceive their oblique Passage through the maxillary  
Bones ; and, lastly, their inferior Orifices, in a small Cavity,  
or Fossida, called *Foramen Palatinum anterius.* In fresh Suh-  
jects they are not so apparent, especially in human Subjects ;  
for in Sheep and Oxen they are easily discoverable.

*Santorini,'* in his anatomical Observations, has described  
those in the human Body in a very pretty Manner; and has  
given us his Method of discovering them, which is nearly the  
same with mine. Instead of dividing the Head into two equal  
lateral Parts, I always direct the Saw a little towards one Side,  
to preserve the Septum Narium entire, as well as that of the  
Sinus Frontales, Sinus Sphenoidales, and Ductus Incisorii ;  
and, on the other Side, to preserve the Conchae, and Cells of  
the Os Ethmoides. For this Purpose I use a fine Saw, made  
Of the Spring os a Watch; ’ '

By this Method I shew, on that Side from which all the  
Septa have been faw'd off, the intire Conchae, their convex  
Sides, the particular Thickness *os the* Membrana Pituitaria on  
their lower Edges, the Orifice or Orifices of the Sinus Maxil-  
laris, the Situation of the Orifice of the Sinus Sphenoidales, the  
communicating Ducts that go between the Sinus Frontales and  
the Ethmoidal Celis and Interstices between the two Conchae; '  
and the Structure of the posterior Openings of the Nares. I -  
can; also, shew, at the fame time, the Orifice of the eusta-  
chian Tube, behind the posterior Opening of the Nares, and  
the Communication of the Nose with the Mouth:

On the fame Side I afterwards separate gradually, with a very  
sharp Knire, or with narrow sharp, pointed Scissars, the Supe-  
rior or Ethmoidal Concha, without doing any Violence to the  
neighbouring Parts ; and then I can shew, on the Parts covered  
by that Conche, a littie oblong or oval Fossula, which runs  
down obliquely from before backward; at the posterior and  
lower Extremity of which, there is an Orifice of about a  
Quarter of an Inch Diameter, which opens into the Maxillary  
Sinus; and another at the anterior or superior Extremity,  
which opens into the Frontal Sinus. ‘

Immediately behind this Foffula there are two Openings, one  
into the Sinus Frontales, the other into the Ethmoidal Cellulae  
' Of the OS Frontis. I shew, likewise, in the posterior Part of  
the OS Ethmoides, at least two Openings, by which the Celis  
of that Bone communicate with each other. - All this is very  
different from whet we see in the Skeleton, or even when these  
Parts are deprived os their Membranes ; neither is the Structure,  
always the same in fresh Subjects ; for in some I have observed,  
a littie before and above the Opening of the Maxillary Sinus, '  
two small Grooves, which united in their Passage to the Frontal  
Sinuses, the uppermost Groove being a littie contorted.

In the next Place I remove the Concha Inferior, or Maxil-  
laris, in the same Mannes, and with the same Precautions  
and then I observe, at the Distance of about a Quarter of an  
Inch from the anterior Extremity of this Concha, a small  
Opening, the Diameter of which is not' above the twelfth  
Part of an inch, and it is turned obliquely backward. It  
seems to be the extremity of a Duct of the same Diameter ;  
but, when it is flit with sharp-pointed Scissars, we discover a  
flat oval Cavity, theDiameter os which isa’Quarteros an Inch in  
Length, and lies in the same Direction with the Septum Na-  
rium.

This oval Cavity is the lower Extremity of the Sacculus  
Lachrymals, which, consequently, is only contracted between  
inis inferior Cavity and the orbitary Portion. Within this  
narrow or contracted Portion we see, likewise, the Opening  
of a blind Duct, which runs obliquely backward and upward,  
about a Quarter os an Inch ; but I do not know precisely  
where it terminates, nor sor what it is designed.

The Arteries of all these Parts come from the external Ca-  
rotid. Those os the external Parts of the Nose are. in oeneraL

Branches and Ramifications of the Arteria Maxillaris externa,  
or Angularis, and of **the** Temporalis; and the Arteries of **.the**internal Parts are Branches and Ramifications of the Maxillaris  
Interna. The Veins are, almost in the same manner. Branches  
and Ramifications of the external Jugular; and they commu-  
nicate with the orbitary Sinus, and, by that means, with the  
Sinuses of the Dura Mater, and with the internal Jugulars.

The principal Nerves belonging to the Nose are Filaments  
os the Nervi Olfactorii, which run down through the Holes of  
the transverse Lamina os the Os Ethmoides, and are distributed  
to the common Membrane of the internal Nares, especially to  
the villous Portions thereof. The inner Branch of the orbitary  
or ophthalmic Nerve sends a Filament through the internal an-  
terior orbitary Hole into the Cranium, which comes out again  
in Company with one of the Filaments of the olfactory Nerve  
through the ethmoidal Lamina-

Tins internal Branch advances afterwards toward the OS Un-  
guis, and is distributed partly to the Sacculus Lachrymalis,  
partiy to the upper Portion of the Musculus Pyramidalis, and  
of the Integuments of the Nose. The suborbitary Nerve,  
which is a Branch of the Maxillaris superior, having passed  
through the Inferior orbitary Hole, sends Filaments to the la-  
teral external Parts of the Nose. Another Branch of the su-  
perior Maxillary Nerve goes to the posterior Opening of the  
Nares, heing spent on the Conchae, and other internal Parts  
os the Nose.

. The Nose is the Organ os Smelling, by means of the Villous  
Portion of the internal Membranes, to which the olfactory  
Nerves are principally distributed. It is likewise os Use in Re-  
spiration ; and the mucilaginous Fluid, spread over the whole  
pituitary Membrane, prevents the Air from drying that Mem-  
- brane, and so rendering it incapable of heing affected. The  
Nose serves, likewise, to regulate and modify the Voice ; and to  
this the Sinuses, also, contribute. The Sacculus Lachry-  
maps receives the Serum from the Eyes, and discharges it upon  
the Palate, whence the greatest Part of It runs to the Pharynx.  
*Winflow, Sect.* Io. N° 3I5.

NATA, NATTA, NASA, NASDA, or NAPTA.  
All these import a Species of Tumor, or Wen, which grows  
on many Parts of the Body, arising from a narrow Base, and  
spreading like a Fig.

N ATA RON. The same as **NATRON.**

NATATIO. There are a few chronical Disorders, in  
which Swimming is proper ; for which Reason it is rarely pre-  
scribed. It is only used in the Summer, and renders Persons  
leaner, promotes Perspiration, heats, attenuates, and renders  
those who use it less obnoxious to Injuries. Swimming in **the**Sea is heneficial to those who labour under Dropsies, Itches,  
exanthematous Disorders, an Elephantiasis,' or Defluxions of  
the Legs, or any other Parts of the Body. It is, also, hene-  
finial to those who reap no Benefit from their Aliments. Swim-  
ming, not only in the Sea, but, also, any-where else, is in-  
jurious to the Head; and Swimming in fresh Waters produces  
the above-mentioned Effects, in a Very saint and languid Man-  
ner ; for which Reason it is, for the most part, to be avoided :  
For, if .one continues long in fresh Water, the Nerves are in-  
jured, not only by its Cold, but, also, by its Moisture. Swim-  
ming in Water naturally hot is incommodious, because it  
filis the Veffeis of the Body ; and Swimming in Water artifi-  
cially heated, is stdl more prejudicial: Besides, a Person ought  
never to swim, cither in the Sea, or any other Water, till he  
has moderately anointed the Body, and warmed it by Friction.  
He, also, ought to throw himself from an Eminence into **the**

. Water. *Oribas. Lib.* 6. *Cap. 2.I.*

NATES. The Buttocks. Two Protuberantes of **the**Brain are, also, called by this Name.

NATRIX. The Name of a Serpent. See **HYDRUS.**

NATRON. The Nitre of the AntientS is Very different  
from ours. Our Nitre is inflammable, and shoots into Cry-  
stals. Strias, and Spears; such a Nitre was wholly unknown  
to the AntientS r Nor is it certain when this artificial Nitre of  
ours was invented. It is not to be doubted, but the Invention  
of it Very much conduced, and gave occasion, to that os Gun-  
powder. The Difference between our Nitre, and that of **the**- Antients, consists in the following Particulars.

I. The Nitre of the Antients was a native Foffile, dug out  
of the Earth, not pure indeed, but got by Lixiviation from  
the Earth; ours is artificial, and owes its Generation to the  
Air. Hence appears the Mistake os those who affirm, that  
some Sorts of Beer are brew'd of nitrous Waters, which is  
commonly said of the Beer of *Serves.s* and *Numburgh.'*

2. The Nitre of the Antients was of an alcaline and abster-  
five Nature, so that it might well serve instead of Pot-ashes,  
for the making of Glass, or Soap. It was produced in *Egypt,*and called *Natron.* And now, at present, they dig, at *Smyrna,*' an Earth, that is purely alcaline, which comes to *Paris in*great Quantities, and is used instead of Pot asm *Clusius de*

*Exrtic. Lib.* 2.. writes, that the Nitre of the Antients is so  
common at *Cairo,* that ten Pounds of it will hardly yield a  
Meyden (three Half-pence). They use it fur several Purposes ;  
for they incrust Vessels with it ; and, mixed with the Pods os '  
Acacia, it serves to dry Leather. *Bellenius, Lib. 2.* writes,  
that the Nitre of the Antients is Very rarely found amongst us ; \*  
and confidently asserts, that there is not a Grain os that Nitre  
*in Europe* ; but that in *Egypt* there is nothing more cheap and '  
common. Our Nitre is a savoury Salt, neither acid nor alca-  
line, but of a middle Kind; serin cannot be brought to an  
Effervescence, neither with an Acid nor Alcali.

3. The Nitre of the Antients was not combustible and in-  
flammable, like ours, and, consequently, of no Use in making  
Gunpowder. This Difference bring supposed, it plainly fol-  
lows, that what we find in antient Writings, as those of *Hip-  
pocrates, Pliny, Diofcorides, Galen,* and others, of Nitre, and  
its Virtues, is not to be understood of our common Nitre, but  
of a native alcaline Salt.

But though *Bellenius* denies, that there is a Grain of this  
alcaline Salt, or Nitre of the Antients, to be found in *Europe,*I am of Opinion, that though we have not so great Quantities  
of nitrous alcaline Salt.in the Earth of *Eurepean* Countries, as  
in that of *Egypt,* yet, that a purely alcaline fixed Salt may he  
produced from the Bowels of the Earth, with all the Properties  
*of* Pot-ashes, or Salt os Tartar, or Nitre of the Antients ;  
which is sufficiently proved by medicinal Springs, Baths, and  
Waters. For a Very pure alcaline Salt is extracted out of many .  
of them ; for Instance, the *Selteran* and *Antonian* Waters, and  
*in Bohemia* those os *Bucifouerling* and *iVildangen,* winch yield  
a Very pure Sal Alcali, as do the *Caroline* and *Emfen* Baths ,  
as the Springs of *Schwalback* and *Egra* produce an Alcali,  
and with it a Salt of a middle Kind. So that I think it can  
no longer he doubted, but that our Earth contains a fixed al-  
caline Salt, which is imbibed and carried off by the Waters.  
This Consideration will, also, serve to confute the Vulgar No-  
tion of our modern ChymistS, that fixed Sal Alcali was the  
mere Product of Art, and obtained by Fire; nor could he ex-  
tracted otherwise than from the Vegetable Kingdom, by way  
of reducing Vegetables to Ashes. *Hoffman. Off. Phys. Chyrn.  
Lib.* 2. *Obs.* I.

NATTA. See NATA.

NATURALIA. The Pudenda.

. NAVICULARE*Os,* orNAVIFORME. The Name of  
a Bone in the Foot, called, also, *Cymbiforme.* See CRUs.

' NAVIGATIO. Sailing. This is considered al an Exer-  
else, under the Article **FIBRA ;** which see.

NAUSEA, ναυνἵα, from ναῦς, a Ship. ’ This is properly the  
Sickness which People perceive upon Sailing. But it is used to  
express all Sorts of Sickness, and Propensities to vomit. See  
**PYRETOS.**

NAUSIOSIS, ναυσίωσις. The same as NAUSEA.

-NAUTEA, says *Nonius Marcellus,* is Water contained in  
Skins or Leather, or rather Water taken from the Ship's Hold,  
so call'd *a Nantis,* " from Seamen." But *Mercurialis* rather ap-  
proves the Defnution of it given by *Paulus* in *Festus,* who says,  
that *Nautea* is an Herb with black Grains, used by Leather-  
dressers, and taking its Name, *a Nave,* " from a\*ship,” be-  
cause it excites a Nausea, the T heing changed into an S.  
Again, *Labeo Com. furis Pontisic.* quoted by *Festus,* says, that  
*Nautea* was a red Substance, with which they dy'd some of the  
sacerdotal Vestments. What was the *Nautea* (supposing it an  
Herb, which is the general Opinion) used by the Leather-  
dressers, or Tanners, and qualified to excite a Nausea, does  
not appear; for they use nothing os that Kind, except the  
*Bryonia alba,* whose Fruit, as *Diofcorides* says, is used in take-  
ing off the Hair from Skins: .This indeed is proper to excite  
Vomiting, and the *Bryonia nigra* has the Very same Effects,  
only in a lower Degree; and this is supposed by *Hadrianus  
funius* to he the *Nautea* of *Festus.* Some of the Lexicogra-  
phers take the *Anagyris* to he the *Nautea* and probably  
enough, is we regard only its emetic Quality. *Rhndius* thinks .  
it most likely to be the *Vitis nigra,* or *Uva Taminia, as Pliny*says, it is commonly called. *Lib.* 23. *Cap.* I. which was, also,  
the Opinion, he says, os two Very learned Men, *Auantius*and *Schipanus* ; and is further confirm’d b^what *Oribasius* says  
os the *Uva Taminia, Med. Coll. Lib. J. Cap.* 26. that it purges  
by Vomit. *Rhodius, Not. ad Scrip. Largum,* Ν° ISO.

NAUTIA. The same as **NAUSEA.**

NAUTICUS *Musculus.* A Name for the *Tibialis Per.  
sticus.*

NAUTILUS. The Name os a Shell-fish, said to he ape-'  
ritive. *Lottery des Drogues.*

NAXIA COS. The Name of a sort of Whetstone,  
mentioned by *Galen,* in his Treatise *de Simp. Facultat.*

NEAPOLITA, νεαπολίτης. The Name os a Topical Me-  
dicine, describ'd by *Actuarius, L.* 6. *C.* 8. *de Meth. Medendi,*where it is recommended for the Gout and Sciatica.

NEAPOLITANUM UNGUENTUM is an Ointment  
thus prepar'd: . r

Take of Lards wash'd with the Juice os Sage, one Pound ;  
Quicksilver, passed through Leather, four Ounces; Oil  
of Bays, Chamomile, and Worms, of each two Ounces ;  
Oil os Spike, one Ounce and an half; Spirits of Wine,  
one Ounce; Wax, two Ounces; Turpentine, washed  
with the Juice of Elecampane, three Ounces; the Pow-  
der of Groundpine and Sage, of each two Drams: Mix,  
and make into an Ointment.

NEAPOLITANUS MORBUS is the Venereal Disease.

NEASTRUM. An obscure Word, coin'd by *Paracelsus,*but not very intelligible.

This, however, is his own Explication. *Neastrum* eft Com-  
motio Elementorum et Elementatorum ; & est Agitatio facta  
in illis omnibus, quae ab Elementis descendunt. Divisio fit in  
Locustas.. Quo cadit ibi sese exeret.

Pars nonnulla in Corpore adhaeret Neastro Ignis, quaedam  
aeris, nonnulla Aquae, aliqua Tenae. Secundum hoc scire  
- dehet Medicus, quando Vel paroxysment. Vel minus. Nam in  
fuis Elementis cognoscuntur illae.

Est enim Natura congenita, quae .ita in Yliado consistit.  
Et qua Ratione *Neastra* alia erumpunt, ac se produnt: eadem  
hoc quoque, nec a corporeo desistit, quamdiu Elementum ip-  
frus illud tenet; & est contrarius Morbis in Elementis & in  
Corpore.

‘ NEBULA. A Disorder-of the Eye. See **OCULUS.**

NEBULGEN. A Salt generated by the Moisture of the  
Clouds falling upon Stones in the Fields, and indurated by the  
, Heat os the Sun. *Rulandusi*

*A* NECESSARIsel RES are the Non-naturalS;

NECHIASECH. An obscure Term of *Paracelsus.* It is  
said he means by it, saline, corrosive, and corroding Particles..  
.. NECRO COMICA. Prodigies portending some great Event.  
*Rulandus. sta .- 1*

NECROLIUM. A Remedy capable of averting Death,  
**and** preserving Life.

NECROSIS, νἐκρωσις. A Mortification.

NECTAR, νέκταρ. The Antients sabled this to be the  
Drink of the Gods. Hence many Sorts of Liquors have been  
called by this Name; one of which was prepar'd of Must,  
boil'd away to one half, with an Addition of one Sextary of  
' Honey to six of the Must: This was directed to be stopt close  
. up, and set in the Shade. *Dioseorides, L. esc C.* 66. describes  
a Wine, which he calis νεκταριτης εἴνος, which is only Wine  
impregnated with the Root of *Helenium,* which, he says, some  
*east! .Nectarion. Galen* mentions several Compositions, to which  
- he gives the Epithet *Nectarius ,* as an Antidote described in his  
Treatise *de Comp. M. S. L. Cap. J. L.* 8. an *Ec'egrna, L.* g,  
*C.* 4. and a *Collyrium, L. An C.T.* of the same Work.

NEDEON. An obscure Word in *Paracelsus,* which is  
said to import a specific or essential Property, or Virtue, of  
every natural Body. . . ' '

NEDUM-SCHETTL H.M. The Name of a bacciferous.  
Shrub, which grows in the *East-Indies,* of which, boiled in  
Oil, an Ointment is made, said to be of Service in pruriginous  
1 Disorders; .. Ἀ . -

NEDYIA, νηδύια. .. The' Intestines, or the abdominal  
Viscera.

NeDYS, νπδής. The Belly, or Abdomen, or the Sto-  
mach. .

NEDYUSA, νεδυῆσα. An Epithet for Thirst, importing  
its bring violent, or intense. *Hippocrates in Coac. ’*

NEFRENDES. This properly signifies sucking Pigs ; hut  
it is applied to young Children, or old People, who have no  
Teeth.

NEGUNDO MAS. A Name **for the** *Vitex y trifolia;  
minor \ Indica ; serrata.*

**NEGUNDO FoEMiNA. A Name for the** *Vitex’, trifolia;  
minor; Indica ; rotundifolia.*

NEIAERA, νιάαιρδ, or νειαίρη. The lower Part of the  
Belly. .

. NEIEM-ElamSAUB. Alpini, J. B. Bontih *Gramen dactylen  
AEgyptiacurn.* C. B. Park. EGYPTIAN COCKS-FOOT-  
GRASS. It is a (lender Sort of Grass, with white, genicui  
lated, and creeping Roots. The Branches are geniculated, and  
adorned with four Spikes, which represent the perfect Figures  
of a Cross ; whence the *Egyptians* call it *Naiern-el-Salih,* that  
*is. Gramen Crucis,* the *Gra/s of the Cros.s,* or *grofoeGras.s.*

The Seeds, which are Very minute, and like those of corn-  
mon Grass, are Very much used by all those who are afflicted  
with the Stone in the Kidneys,, or Bladder, being esteemed **a**good Lithontriptic for dissolving stony Concretions in the Blad-  
der, which is a Distemper Very familiar, and, in **a** manner.

endemial in *Egyati* The Women make Very great *Use* of  
the Root in Decoctions for their Children, when seined with  
the Small-pox; or Meafles, and; alsio, for themselves, when  
labouring under a Suppression of the Menses. Some regard a  
Decoction os the Seeds, moderately bruised, as a great Secret,  
and a choice Remedy for promoting the exanthematous Erupi,  
tions, which we call *Peticulae,* Or *Petechice,* in pestilential Fe-  
vers. The whole Herb, but especially the Root, are much  
employM, also, in the Cure of Wounds and Ulcere. The Root  
is said to be cold and dry, and os Very fine Parts, the' the  
Decoctinn thereof is Very commonly used to provoke Sweat.  
*Rail Hi Ps*

NEILION, νεἴλιον. The Name osua *Malagma,* describ'd  
by *Paulus AEgineta, Lib.* 7. *Cap.* I8.

NELI-POULL See BILIMEI.

NENEMIA, νηνεμίη. Serenity or Calmness of the Airs  
*Hippocrates. - \**

NENUFAR, or NENUPHAR. See LEUCQ - NYM-  
**PHAEA.**

NENUFARENI. imaginary Spirits, which, according to  
the Adepts, inhabit the Air.

NEPA. A Crab; or, according to *Aldrovandus,* a Scor-  
pion.

NEpA, in Botany, is a Name for the *Genistaofpartiumy  
majus ; brevioribusaculeis.*

NEPENTHES, νηπενθης, from νῆ, importing Negation;  
and πένθος. Morning, is a Medicine highly celebrated by  
*Hamer, Cdysse. Ac. Vers.* 220. *et Seq.* and expounded in .Din-  
*dorus Siculus, Lib.* I. *ad Finem, οξγηί* καὶ λύπης φάρμακον; " a Re.. \*  
" rnedy for Anger and Sorrow.'' The Poet attributes so great  
Virtues to the *Nepenthes,* that whoever should take it mixed  
with Wine, could not he sensible of Grief for that whole Day,  
the' his Father or Mother were to die, or his Brother, or  
dearest Friend, were to have their Throats cut hesore his Faces  
*Homer* says, that *Helena sClumwnds* the *Nepenthes* in *Egypls.*from *Polydarnna,* the Wife of *Tbenis. '.Diodorus* illustrates this  
Place of the Poet, and assures us, that the Women of the  
*Egyptian Thebes,* called; also, *Diosipolis,* had still the Use of  
this efficacious Remedy in his Time; and that, it was reported  
it could he found tio-where but in Possession of the Inhabitants  
of *Diosipolis. Schultz. Hist. Med.*

NEPETA. A Name for the *Cataria ; angusiifolia ;  
major*; and for the *Cataria; angustis.olia mayor, flore caerulee- .  
purpurasience. - ' ’ .*

NEPETELLA. A Name for the *Cataria; minor; vulr  
garis. . '*

NEPHeLOIDES, νεφ«λο«δής. An' Epithet, in *Hippo.,  
crates,* for Urine, importing cloudy.

NEPHRIDION, νεφρίδιον. The Fat of the Kidneys.  
*Hippocrates, Lib.* 2. *de Mulicrum Morns.*

‘ NEPHRITICUM LIGNUM. See **BALANUS MYRE- ,  
PsICA. . . . ‘ ’**

NEPHRITICUS, from νεφρδς, a Kidney. Belonging to  
he Kidneys. It is used with respect to Disorders of these; or  
to Medicines adapted to-their Cure. .

NEPHRITICUS LAPIS. Offic. Charlt. Foff. 33. Schrod.  
329. Worm. 95. Boet. 259. De Laet. 8I. *Lapis Indicus  
Nephriticus*. AldroV. Mus. Metall. 7O6. *Lapis Nephriticus.*Cale. Musi 333. Mont. Exot. I4. THE NEPHRITIC,  
STONE. *Dale. \**

It is a Stone Very much Variegated with green and other  
Colours, as white, yellow, blue, and black, but still with a  
greenish Cast: It is imported from *America,* but is, also, sound  
in some Parts of *Spain* and *Bohemia.*

It is worn as an Amulet against Pains in the Stomach and  
Kidneys.

NEPHRITIS. An inflammation of the Kidneys.

That the Kidneys labour under a true Inflammation, may be  
known from the burning, pungent, intense, and inflammatory  
Pain of the Part, where the Kidneys are situated ; from the  
acute continual Fever, with which such an Inflammation is ac-  
companied; from the small Quantity of Urine, which is highly  
red and deep-colour'd, or, in the Height of the Disorder, aque-  
ous ; the Stupor of the adjacent Leg ; the - Pain of the Groin  
and contiguous Testicle ; the Pain of the Ilium ; the Vomit-  
ing of Bile, and the continual Eructations.

Such an Inflammation may he produced, by all the general  
Causes of an Inflammation applied to the Kidneys, such aS,  
first, whatever hinders the Extremities of the Arteries from  
transmitting their Fluids; a Wound, for instance, a Contusion,  
an Abscess, a Tumor, a long-continued Destuxion; a strong  
Effort of the Body, or a small Stone. Secondly, whatever  
hinders the Conveyance of the Urine into the Pelvis, Ureters,  
«nd Bladder, such as Causes similar to those already enume.  
rated, applied to these Parts. Thirdly, such Causes aS forcibly  
Convey the thicker Parts of the Bleed into the urinary Ducts ;

Running, for Instance; long and Violent Riding, excessive Heat;  
an Effort, os the Body, a Plethora, acrid Diuretics, and Poisons.  
And,, fourthly, a long-continued spasmodic Contraction of all  
those VesielS.

When these Veffeis are seized wsth a violent Inflammation,  
they are often so constricted, thet no Urine can he discharged ;  
or, if a small Quantity is evacuated, it is pellucid, thin, and  
aqueous, which is a Very bad Sign; and the Nerves cohering  
to these Veffeis, and lying contiguous to them, bring often ir-  
rhaled. Pains and Convulsions are produced in the Stomach,  
Mesentery, Intestines, and Uterus. Hence arise Eructations,  
Nauseas, Vomitings, Fluxes, Iliac Passions, Retentions of  
the Urine, Stupor and immobility of the Legs» and a preter-  
natural Heat of the Loins.

Such an Inflammation is cur'd when Nature is benign, and  
the Disease favourable. First, by Resolution. Secondly, by  
a copious, red, and thick Urine, continually discharged hesore  
the seventh, or, at most, the fourteenth Day of the Disease.  
And, thirdly, by a copious Discharge from the bremorrhoidal  
Veins, in the Beginning of the Disorder.

The Disorder, when the Inflammation is known to he pre-  
sent, by its peculiar Signs hesore enumerated, is to he cured,  
first, by the general Remedies appropriated to the Cure of all  
Inflammations ; such as Venesection, Revulsion, and Dilution.  
Secondly, by mild, emollient, and antiphlogistic Decoctions,  
drank in large Quantities. Thus:

Take of the recent Leaves of Chervil, Brook - bine,  
and Pellitcry of the Wall, each two Handfuis ; of the  
Roots of Wood-sorrel, Succory, and Burdock, each two  
.. Ounces; os red Chiches, an Ounce and an half; of the  
bruised Seeds of white Poppy, and Ladies-thistle, each  
four Drams. Boil in three Pints of Water for half an  
Hour, and let the Patient take two Ounces of the De.  
coction every Quarter of an Hour.

or,

. Take of the Roots of Grass, six Ounces; os bruised Melon-  
feeds, an Ounce and an half; and. of Liquorice, one

\* ... \_ Ounce. Boil in three Pints of-Water, and let the Pa-  
tient use the Decoction in the same Manner, and for the

. . same Purposes, with the former,-

Thirdly, this Species of the Disorder is cured by Clysters,  
Fomentations, and Baths, prepared of the above-mentioned  
Ingredients. And, fourthly, by mild and moist Aliments,  
by Rest, by avoiding lying too warm in Bed, and especially  
lying on the Back.

If the Painsand Convulsions are excessively Violent, Opiates  
are beneficial.

..The excessive Vomiting, with which this Disorder is accom-  
paused, is to be relieved by a frequent Exhibition of tepid Wa-  
ter, edulcorated with Honey.

. And, by this Method alone, a Nephritis, arifing from **a**Stone impacted in the Ureters or Kidneys, may he safely  
Cured.

The Remedies, most conducive to the Cure of this Species  
of a Nephritis, are Agrimony, Vervain-mallow, Ladies-man-  
tle, Marsh-mallows, Brook-lime, the Jester Daisy, middle Con-  
found, Chervil, wild Carrol, Dandelion, Fennel, Liquorice,  
Strawherries, Grafs, Rupturewort, Lettice, Harts - tongue,  
*English* Mercury, Moneywort, white Lilly, Rest-harrow,  
Pellitory of the Wall, Arse-smart, Scabious, Golden-rod, and  
Nettles, *Femeliurs* Syrup of Marsh-mallows, Syrup of Maiden-  
hair, Syrup of Succory with Rhubarb, Syrup of white Poppies,  
Syrup of wild Poppies, and Syrup of Violets, Sal Ammoniac,  
Sal Gemmse, and Sea Salt.

. If the Causes of the Nephritis are so strong-and powerful,  
that the Disorder can neither be removed by Resolution, nor  
any other Method, but is protracted beyond the seventh Day, '  
an Abscess is to be dreaded, the Formation of which may.be  
known from a Remission os the Pain, which is succeeded by  
a Pulsation, a frequently returning Horror, a Weight and  
Stupor os the Part. That an Abscess is already form'd, is ob-  
vious, from the former Signs having preceded, from the Pulsa-  
tion, Heat, and Tension in the Part, and from the purulent,  
fetid, and apparently saline and putrefied Urine. AS soon .as  
we are certain, that the Abscess is form'd, we are first to use  
powerfully maturating and emollient Medicines; then, when  
the Urine appears purulent, we must exhibit Diuretics, con-  
fisting of pure medicated Waters, Whey, and other Liquors of  
a like Nature, ufing at the same time BalsamicS. \* - τ

But, is this Suppuration should continue for a loner time, the  
whole Kidney, heing consumed, forms a kind of Bag, of no  
Use; and, in this Case, a *Tabes Renalis* is frequently pre;  
sent, \_

*Is* a Scirrhns is form'd here, there arises an incurable Palsy,  
or Lameness of the shin ace nt Leg. Hence, also, **are lie-**quenily produced a flow Consumption, and a Dropsy.

But if a small Quantity of the inflammatory Matter remains  
coagulated in the minute Follicule of the Urine, it forms a  
kind of Basis, or Ground-work, to which the sabulous Matter  
of the Urine gradually adhering forms a Stone in the Kidneys,  
which is by degrees augmented.

A Nephritis, also, sometimes degenerates into a Gangrene,  
as is obvious from the Violence of the Cause and Symptoms; .  
the Want of Relief by Remedies; and the sodden Remission of  
the Pain, without any apparent Cause, accompanied with a  
cold Sweat, a weak and Intermitting Pulse, a Hiccup, either  
no Discharge of Urine at all, or an Evacuation of such as is  
livid, black, full of Hairs, fetid, and rendered unseemly by  
brown or black Canmcles ; and a sudden and considerable Loss  
of Strength. In this Case no Measures are of any Service,  
either for the Relief or Safety of the Patient.

From what has heen said 'tis obvious, that there are almost  
an infinite Number of Various Species of a Phrenitis; that their  
different Causes are as numerous; that one of these Causes is  
the Stone ; and that, at the same time, all these different Spe-  
cies are to he cured almost in the fame Manner. Hence **we**understand the Crisis of a.Nephritis, and why this Disorder so  
often happens in Fevers. Hence, also, we are enabled **to**know and cure an Ischury, arifing from a Fault of the Kidneys  
or Ureters. *Boerhaave Aphor.*

NePHROMETRJE, νεφρομήτραι. The Muscles of the  
Loins, call'd PSOAE» *Russeus Ephesius, de Appellat. Corp.  
Human. L. i. C.* 30.

NEPHROS, νεφρός. A Kidney.

NEPHROTOMIA. See **LITH0T0MIA.**

NePONES. The same as BARONES.

NEPTA. A Name for the **ASPHALT Us,** *Oribasius, in  
Collect. Medicinal,* **L. II.**

NERe. The Name of a Pastil in *Paulus AEpineta, L. y:  
Co 12.*

NERITA» A Sea Shell-fish, of which there are many  
Sorts, which are esteem'd a good Food to increase the seminal  
Juices. The Shell is said to he aperitive. *Lemery det '  
Drogues.*

NERIUM.

**The** Characters are j

The greater and lesser Branches are divided and subdivided  
by threes, and the Leaves, also, grow three together. The  
Calyx is small, tubulous, and quinquefid ; the Flower mono-  
petalous, and, as it were, Funnel-Ihep'd, with a wide Margin,,  
which is deeply cut into five wide and large Segments ; at the  
Centre of the. Division grow five Lobes, as in the *Lychnis,  
Caryophyllus,* and *Apocynum* ; the Stamina are five in Number-  
The Ovary in the Centre of the Calyx becomes a polish'd-  
Fruit, almost cylindrical, consisting of two Capsules, winch,  
when ripe, part asunder, and containing downy Seeds.

*Boerhaave* mentions five Species of this Plant ; which are,

I. Nerium ; floribus ruheseentibus. *Co B. P.* 464. *To urn.,  
Inst.* 605. *Boerh. Ind. A.* 3I6. *Nocium.* Ossie. Ger. I22O.  
*Ncrium five Oleander.* Ger. Emac. I 046. *Ncrium five Rho-  
dodendron, store rubro.* J. B. 2. I40. *Oleander sieve Laurus  
Rosea.* Park. Theat. I469. OLEANDER *vulgo.* Herm„  
Cat. ROSE-BAY.

It grows in Maritime Places, and by Rivers, as *Dioseorides*says, which is confirmed by Experience., The same Author  
and *Pliny* tell us, that the Flowers and Leaves are Poison to  
Males, Asses, Dogs, and many other Quadrupeds; but that,,  
on the contrary, they are alexipharmic to Man, and are good  
against the Bites of Serpents, being taken in Wine, and espe-  
cially with an Addition of Rue ; that weak Animals, as Sheep  
and Goats, is they drink Water in which the Leaves have been  
macerated, die. *But Galen,* who deserves more to be credited,,  
says, that the *Nerion,* used outwardly, has a digestive Virtue;  
but, taken inwardly, is pernicious and poisonous,, not only to  
Men, but most Brutes.

*J. Bodaeus a Stapel* says, that this Shrub is called *Nation,*from the privative Particle νὴ, and ἔραμαι, to love, as much as to  
say, a Plant which deserves not to be loved: Others write,  
that it has its Name from the Nymphs *Nereides -,* others again  
derive it ἀπό τῆ νῆ ῥεἴν, from not flowing, because, being drank,  
it suddenly deprives the Fluids of their Motion, and causes an  
intolerable Oppression; for there is an Intumescence of the  
Belly, which is succeeded by an Inflammation of the whole  
Body, and a total Consumption of the Humidities. It is, also,  
called *Rhododaphne,* from its Flower heing like a Rose, and its .  
Leaves line those of the Bay-tree ; and *Rhododendron,* because  
sometimes it grows to the Bigness of a little Tree, and has a.  
Flower like a Rose.

It is carefully cultivated in our Gardens, sor the Beauty os  
Its Flowers, and its perpetual Verdure. *Rail Hist. Plans,*pi Vilen’ .

2. Nenum, floribus; albis. *C. B. P.* 464. *Nerium five  
Rhododendron, store albo.* J. B. 2. I4I.

This agrees in Virtues with the former.

3. Nerium, Indicum, angustisolium, floribus odoratis, sim-  
plicibus. *Hi L.* 447.

- An Nerium, Indicum, latifolium, floribus plenis, odoratis,  
*E. L.* 447. 449. ' '

5. Nerium, Indicum, latifolium, flore variegato, odorato,  
pleno. Hi. A. I. 45. *Bocrh. Ina. alt. Plant. Pol.* i. se. 3I6.

It is called *Nerium,* from νηρὶς *sacros},* humid , hecause it  
grows in humid Places. The Plant itself has a Force which is  
insuperable; for itSJuice excites so great and violent an Inflam-  
mation, as immediately to put a Stop to Deglutition ; and, is**it**he received into the Stomach, that Part is rendered incapable  
of retaining any thing, the pernicious Drug exerting its Force,  
**and** purging both upwards and downwards. *Nerium,* in Qua-  
lities, resembles the *Apocynum.* The third, fourth, and filth  
Species have a very sweet Smell; but when I handled and  
examined them one Morning, upon an empty Stomach, in a  
close Chamher, I felt a Numbness coming upon me by de-  
grees, with a Pain in the Head ; which makes me helieve, that  
something poisonous belongs to the Smell, though there is no  
Danger, if it he received in the open Air, as you may find  
Upon Trial. Antidotes against its Poison are Vinegar, and  
all Acids. *Hist. Plant, adscript. Bocrhaau.*

NERONIANA. An Epithet for Venesection, when more  
Veins than one are opened on the same Day.

NERVALIA Ossa. The same as ARcUALIA OSSA.

NERVI. The Nerves,

All the Nerves of the human Body come, originally, from  
the Cerebrum, or Cerebellum, by means of the Medulla Oblon-  
gats. Or Medulla Spinalis: They go out in Bundles regularly dis-  
posed in Pairs, like so many distinct Trunks; which are  
afterwards divided into Branches, Ramifications, and Fila-  
meets.

The Nerves of the Medulla Oblongata go out, sor the most  
part, thro' the Basis of the Cranium, at Holes situated accord-  
ing to their Difpositinn; those of the Medulla Spinalis pass'  
thro’ the lateral Foramina of all the Vertebras, and through the  
great anterior Foramina of the OS Sacrum.

. We commonly reckon ten Pairs of these Fasciculi, or ner-  
vous Trunks, to the Medulla Oblongata ; nine of which go-  
out separately, through particular Holes of the Basis Cranii ;  
and the tenth,which arises from the Extremity of that Medulla,  
passes through the great occipital Foramen.

The Trunks from the spinal Marrow are twenty-four Pairs,  
and may, in general,be termed *Nervi vertebrales,* or *Intervorte-  
brales:* Seven os them are called *Cervical Nerves, twifaeDors.al*or *Costal,* bring true Intercostal Nerves, and five *Lumbar-,  
to* which must he added, five or fix Pairs, that pass Out through  
the OS Sacrum.

Before I enter upon the particular Distribution of all these  
Nerves, and the Course of their Branches, Ramifications, and  
Filaments, *I* think it proper to give a general Idea of them in  
**the** following Table.

The Nerves of the Medulla Oblongata are these: -

First Pair ; Nervi Olsactorli.

.Second Pair; Nervi OpticL

Third Pair ; Nervi Motores Oculorum, Oculares‘Comma-  
nes. Musculares Communes, Oculo-musculares Com-  
munes. . .. .

Fourth Pais; Nervi Trochleares. Musculares Obliqui Sa-  
fe periores. Vulgo Pathetici.

Fifth Pair; Nervi Innominati Trigemini. The subordinate  
.. ... Trunks of thisPairare, three on each Side; the Nervus

OrbitariuS, Maxillaris Superior, and Maxillaris Inferior,  
r Sixth Pair ; Nervi Motores Externi, Oculares Externi,

Musculares Externi, Oculo-musculareS Externi.

Seventh Pair; Nervi Auditorii, which are two on each  
Side; One called Portio Mollis Nervi Auditorii; the  
other. Portio Dura, to which 1 give the Name *oi Nervus  
Sympatheticus Minor.*

- Eighth Pain; Par Vagum Minus, which I call *Nervi Syrnpa-  
. . theiici Medic. .*

. Ninth Pair; Nervi Hypoglossi, Vulgo Gustatorii, Vel Linguales,  
Tenth Pain; Nervi Suboccipitales. .

. The Nerves of the Medulla Spinalis are **these:**

One Pair, called Nervi Accessorii of the eighth Pain, from  
. the Medulla Oblongata.

One Pair, commonly called Nenti Intercostales, which I  
name *Nerui Sympathetici Majores.*

. Seven Pairs of Nervi Cervicales, or Intervertebrales Colli.  
Twelve Pairs of Nervi Dorsales, Costales, Intercostales Veri,  
or Intervertebrales Dorso

Five Pairs hf Nervi Lumbares, oi Intervertebrales Lnth-  
herum. \_

Five or Six Pairs Of Nervi Sacri.

Two Nervi Diaphragmatici, each formed by a Trunk of the  
second, third, and fourth Pairs of the Cervical Nerves.

Nervi Brachiales of each Side, formed by the fifth, sixth, and  
seventh Pairs of Cervical Nerves, and by the first Pair of  
the Dorsales.

From these Nerves, Six Branches arise oh each Side:

Nervus MufculosoutaheuS.

Nervus Medianus.

Nervus Cubitalis.

Nervus Cutaneus Internus,

Nervus Radialis. χ :

Nerviis Axillaris, sive Articularis. .

Nervi Crurales of each Side, formed by the first, second,  
and third Pairs of the Nervi LumbareS ; and partly  
by the fourth and fifth;

Each of these Nerves is divided into three Portions ; which  
are.

Nervus Femoris Cruralis, sive. Cruralis Superior.

Nervus Tibiae Cruralis, sive Cruralis Tibialis.

Nervus Cruralis Pedis, sive Cruralis PedialiS...

Nervi SCiatici, each formed by the Trunks of the last two  
Pairs of the Nervi Lumbares, and by the three or four  
following Pairs of the Nervi Sacri. ' ’

The principal Division of each of these Nerves produces  
the following :

NerVns Sciatico-cniralis.

Nervus Sciatico-popliteus.

Nervus Sciatico-tibialis.

Nervus Sciatico-peroneus.

Nervus Plantaris Internus.

Nervus Plantaris Externus.

**I** refer the Subdivisions of the Nervi Innominati, or of **the**fifth Pain, and those os the three NerVi Sympathetici, to **the .**particular Description ; in which I shall trace the Branches,  
Ramifications, and even the most remarkable Filaments, all  
the Way, to where they enter the Muscles, Viscera, Organs,  
*etc.*

**NERVI OLFACTORII.**

The first Pair of Nerves os the Medulla Oblongata, or Nervi  
Olsactorii, formerly named Processus Mammillares, arise by  
medullary Fibres, anteriorly and exteriorly from the Emi-  
nence *of* the Cerebrum, called *Corpora Striata,* between the ’  
anterior and middle Lobes.

They run sorward toward the OS Ethmoides, on each Side  
of the Crista Galli, in form of medullary Ropes, having a Very  
slender Consistence.; and in this Course they receive some  
medullary Fibres from the anterior Lobes of the Cerebrum.

They are at first Very thin ; but, as they advance, they grow  
gradually larger and softer; and, having reached the Sides of **the**Crista, without any Communication between them, they send  
off a great Number of Filaments, which run through the  
Holesof the Lamina Cribrosa.

In their Passage through these Foramina, they are accom-  
panied and invested by the same Number of small Productions  
from the two Laminae of the Dura Mater as by particular Va-  
ginae ; and they are afterwards distributed by an Infinity of. πχ  
small Filaments, to the Membrane which fines all the internal  
Parts of the Nose. ?

Each Olfactory Nerve communicates, by particular Fila-  
ments, with some Branches of the Nervi Ophthalmici, **and**Maxillaris Superior.

**NERVI QpTIcL**

The Optic Nerves arise from the Eminences of the Cere-  
brum, called *Thalami Nervorum Opticorum*; and, being first of  
all incurvated outward, they afterwards approach each other, as  
they run Over the Sella Sphenoidalis of the Basts Cranii; at  
which Place they unite a little, and afterwards separate again  
in their Passage to the Foramina Optica, to the Orbits and  
Gloheof theEyeS. '

This Union of the Optic Nerves is on the anterior Part of  
the Glandula Pituitaria, and is of a very singular Kind.  
**See CAPUT.**

**NERvI MOTORES OCULORUM COMMUNES.**

The third Pair of Nerves, commonly called *Motores Ocu.'  
lorum,* arise immediately before the Border of the anterior Edge  
**of the** great transverse Protuherance, ordinarily termed **the** *Pro.,  
cefsus Annularis* of the Medulla Oblongata.

Each Nerve perforates the Dura Mater, behind the lateral  
Parts of the posterior Apophyses of the Sella Sphenoidalis ; and  
afterwards runs along the upper Part Of the Sinus Cavernosus of

the Dura Mater, on one Side the Curvature of the Carotid  
Artery, to the superior Orbitary, or sphenoidal Fissure from  
thence it pastes into the Orbis, and divides into four Branches,  
one superior, one internal, and two inferior, one of which is  
long, the other short.

The superior Branch goes off as soon as the Trunk enters  
the sphenoidal Fissure, and runs disectiy to the lower Side of  
the Mufculus Rectus superior of the Glohe of the Eye.

Having reached the Middle of that Mufcle, or thereabout,  
it sends up a Branch to the Levator Palpebra: Superioris, and,  
when this Branch goes off nearer the sphenoidal Fissute, it  
may he looted upon as the second superior principal Branch of  
the Motor Oculi. \_. .

The other three Branches go ost at some Distance from the  
superior Branch: The internal Branch is distributed to the  
MofcolusRectiis Internus of the Eye, the short inferior Branch  
to the Reolas Inferior ; and the long inferior Branch, to  
the Obliquus inferior, into the Substance of which it pene-  
trates, after having run along the Rectus Inferior.

Besides these four or five Branches, there' is a final! short  
Branch, which arises most commonly from that which goes to  
the Musculus Obliquus Inferior ; and it forms a small lenticu-  
lar Ganglion, that detaches several very sine Filaments roand  
theOptioNerve.

.. The Filaments of the Ganglion perforate the Tunica Sole-  
rotica of the Eye, and then run between this Coat and the  
Cboroides, all the Way to the Iris, where they are distributed  
by very sine Ramifications.

The small lenticular Ganglion produces likewise other nervous  
Filaments, which communicate with the Ramus Internus, or  
Nasalis of the Orbitary Nerve.

**NERVI TROCHLEARES.**

The fourth Pair of Nerves of the Medulla Oblongata, or  
Nervi Trochleares, are long and small, arising behind the  
Eminences called *Nates,* from the lateral Part of the medullary  
Expansion, which Hes above the Passage between the third and  
fourth Ventricles of the Brain.

, From thence they go on each Side to the Edge of the Fold,  
formed by the Dura Mater, on the Extremity of the Apophy-  
sis Petrosa, behind the Sella Sphenoidalis, that is, by the an-  
terior Portions of the Septum Transverfirm.

: There each Nerve perforates the Edge of the Fold above  
the Passage of the Nerve of the third Pais, and more back-  
ward and outward ; afterwards it runs in the Duplicature of  
that Fold, on one Side of the Nerve of the third Pair, along the  
upper Part of the Sinus Cavernosus, and passes into the Orbit  
thro’the Sphenoidal Fissure, and into the Musculus Trochle-  
aris. Its Course is oblique over the other Nerves, and neigh-  
bouring Muscles; and it sends off small Filaments on each  
side, appearing to communicate with the first Branch os the  
fifth Pais, or Nervus Ophthalmicus.

7 **s’ NERVI TRIGEMINI.**

The fifrhiPair of Nerves is very large, and they rise anteri-  
orly from the lateral Parts of the transverse Protuberance of  
the Medulia Oblongata, by a great Number of Filaments  
closely united .together, which afterwards form two large flat  
Trunks, one on each Side., Each Trunk runs toward the  
Apex of the neighbouring Os Petrosum, where it perforates  
the Dura. Mater,: A little helow the Edge of the Extremity or  
anterior Portion of the Septum Transversum of the Brain.

- Having detached some Filaments to the Apex os the Apo-  
physis Petrosa,.jor to a kind ofsesarnoide Bone, which is often  
found near, this Apex, it enters the Sinus Cavernosus ; and,  
having fent some other Filaments to the Dura Mater, it ex-'  
pands in the Sinus, and forms a hind of Plexus, or flat irregular  
Ganglion.

Afterwards the Trunk is divided into three large Branches,  
more or less stated, which run through the Sinus Cavernosus,  
being closely connected to the spongy Filaments thereof, and  
bathed in the venous Blood which it contains. These three  
Branches are disposed laterally on one vertical Plain, and sepa-  
rate after the manner os a Goose's Foot.

. The first Branch, commonly called Nervus Ophthalmicus  
Willisii, is the smallest and longest of the three, and enters  
the’Orbit through the Sphenoidal Fissute , for which Reason  
I name it Nervus Orbitarius. -

The second, or middle Branch, called also Nervus Maxilla-  
ris superior, passes through the superior maxillary Foramen of  
the Os Sphenoides. .

: The third, or inferior Branch, called likewise Nervus  
Maxillaris inferior goes down through the Foramen Ovale or  
Maxillare inferius of, the Sphenoidal Bone. The two maxillary  
Nerves are united at theis Origin ; for which Reason, some  
Anatomistshave divided the large Trunk.. into two principal  
Branches ; and the second of these Branches into two others.

**NERrbs ORErTARIUs,** *vulgo* **OFisTtiAtiucnS.**

The Orbitary or Ophthalmic Nerve, which is the first Branch  
of the fifth Pair, as soon as it enters the Orbit through the  
Sphenoidal Fissure, is divided into three Branches, O-.e superior  
or frontal, one internal or nasal, and one external or lachrymal;  
and hesore its Entry it sometimes gives, and sometimes receives,  
communicating Branches: It communicates by a Filament or  
two, with the Nerve of the sixth Fair, and with the **Nerve**commonly called Intercostalis. .

. The Ramus Superior or Frontalis, which might he termed  
Nervus Superciliaris, is the tnost considerable *of the* three, and  
runs along the superior Part of the Orbit, close to the Mem-  
brane which lines it, sending Filaments to the Fat which fur-  
rounds the Globe of the Eye, to the neighbouring Membranes,  
and to the Musculus Levator Palpebrae.

Afterwards it passes through the Foramen Superciliare, and,  
being divided toward each Side, it is spent in the neighbouring  
Portions of the Musculus Frontalis, Orbicularis, and Integu-  
ments, communicating with a neighbouring Branch of the  
Portio Dura of the Auditory Nerve. : .

The Ramus Internus, or Nasalis, of the Orbitary Nerve,  
runs toward the Nose; and near its Origin sends off a Frla-  
ment, which communicates with the small lenticular Ganglion;  
already mentioned.

This Filament comes sometimes from the Trunk of **the**Orbitary Nerve hesore the Division, and adheres to the internal  
Branch all the Way, to where the Mater Communis is divided.

This Nasal Branch runs fust of all obliquely over the Optic  
Nerve, and under the two muscular Levatores, giving off forne  
Filaments to the nearest Parts of thefe Muscles ; Afterwards **it**runs between the Musculus Rectis internus, and Obliquus  
Major, along the Inside of the Orbit; and, in its Passage, fends  
a finali Filament through the Internal orbitary Hole; of which  
hereafter.

From thence it passes over the Musculus ReSus Internus,  
to the great or internal Angle of the Eye, where it is distributed  
to the neighbouring Parts ; that is, to the Caruncula and  
Sacculus Lachrymalis, to the nearest Portions Of the Mufculus  
Orbicularis, Superciliaris Pyramidalis Nasi, and to the In-  
ieguments. ί

The small lateral Filament which it sendSthrough the Orbi.  
tary Hole, returns into the Cranium, running up from before,  
backward, on one Side of the Os Cribrosum , and, heving  
reached the sore Part of the Duplicature of the Dura Mater, it  
joins the Filaments of the Olfactory Nerve, or the Lamina  
Cribrosa, together with which it pastes through the anterior  
Holes of that Lamina, and is distributed to the Nose.

The Ramus Externus, or Lachrymalis, goes chiefly to **the**Glandula Lachrymalis, upon which it is distributed, and from  
whence it has its Name. It seems sometimes to he a Branch  
from the Ramus Frontalis, and it often arises from the Orbi-  
tary Nerve more posteriorly than **the** other Branches-. It ad-  
heres closely to the Dura Mater, and runs obliquely along **the**Iofide of the Orbit, on the Mufculus Rectus Externus, to  
the Glandule Lachrymalis.

{ Before it reaches the Gland, it sends a small Branch to the  
external lateral Part of the Orbit, which is sometimes lost in  
the Diploe of the Cranium, and sometimes perforates this  
neighbouring Parr, either of the Os Frontis, or the Os Malae,  
*etc.* sending Filaments to the nearest Portions of the Musculus  
Temporalis, Orbicularis Palpebrarum, Masseter, *etc.* and of  
the Integuments ; and it likewise gives Filaments to the Fat,  
and Membrana Conjunctiva of the Eye.

**NERvUs MAxILLARIs SUPERIOR.**

The Superior Maxillary Nerve, the second Branch of **the**fifth Pais, goes out of the Cranium hetween the Foramen  
O vale, and Fissure of, the 0s Sphenoidale; passing through the  
Foramen Rotundum, or Maxillare Superius of the fame Bone.  
Immediately after its Passage, it fends a Filament to the  
Outside of the Orbit, which, heving perforated the Os Make,  
isdistributed to the Parts which cover that Bone, communicates  
with a neighbouring Branch of the Portio Dura of the Auditory  
Nerve ; and sends small Filaments to the Fat in the lower  
Parr of the Orbit. - .

Soon' afterwards it is divided into three Branches, the first of  
which I name Suborbitarius ; the second, Palatinus , and the  
third, Spheno-palatinus; which last is sometimes only a Branch  
of the first 5 but still the common Division may he obtained.

The suborbitary Branch is the most considerable of the three;  
It runs in the Canal of the inferior Portion of the Orbit, and  
goes out by the exterior orbitary Hole, which is sometimes  
double. ‘

In this Passage it fends downward, through **the** Holes of **the**Canal, final! Filaments, which enter the Sinus Maxillaris,  
and are distributed to the Membrar» Pituitaria in that

Sinus, to the Substance of the Bone, to the Alveoli, to  
the anterior Dentes Molares, and to the Dentes Canini and  
Incifores.

As it enters the Canal, it sometimes gives off a Fiinrnent to  
**the** Posterior Molares ; and among all these Filaments there isat least one, which runs along the upper Side of the Arch of  
**the** Palate, to the Union of the Offa Maxillares.

This Branch, having pasted out of the bony Canal through  
the Foramen Suborbitarium Anterius, is distributed to the Muss  
CUluS Orbicularis Palpchrarum, to the neighbouring Muscles of  
the Nose and Lips, and to the Integuments ; communicating  
with a Branch of the Portio Dura of the Auditory Nerve.

The Ramus Palatinus of the Superior Maxillary Nerve runs  
**down** before the Pterygoide Apophyses of the Os Sphenoides, in  
**the** Canal formed by the OS Maxillare, and the Os Palati; and,  
having passed out of that Canal, through the Foramen Pala-  
tinum Posterius, it is distributed by several Filaments to rhe  
tlandular Coat of the Palate, to the Septum Palati, and  
lufcles belonging to that Part. Some of these Filaments go  
as far as the Foramen Palatinum Anterius or Incisorium.

AS it runs down in the Canal, it is, at first, a little hent, and  
then sends Filaments to the Musculus PterygokheuS Externus,  
to the Peristaphylini, and to the Arch of the Pharynx: It  
likewise sends other Filaments through the small Holes in the  
posterior Part or Tuhercle of the OS Maxillare, to the Sinus  
Maxillaris, and posterior Dentes Molares.

The Ramus Spheno-palatinus passes through the bony Hole  
of the same Name, and is distributed to the Musculus Ptery-  
goidaeus Internus, to the posterior Parts of the Nares, to the  
neighbouring Sinus Sphenoidales, and to the Tuba Eustachiana.

It likewise sends a Filament thro’ the Foramen Pterygoides,  
which perforates the Root of the Apophysis Pterygoides from  
hehind lorwards, and joins the Nervus Maxillaris Inferior.

**NERVUS MAXILLARIS INFERIOR;,**

The inferior Maxillary Nerve, the third Branch of the fifth  
Pair, is larger at its Origin than the other two : It goes out of  
the Cranium by the Foramen Ovale of the Sphenoidal Bone,  
and runs hetween the two Musculi Pterygoidaei, below the  
great Sinns of the lower Jaw, where it enters the bony Canal of  
that Jaw.

AS soon as it leaves the Cranium, it sends off four principal  
Branches; and, before it enters the Canal .of the lower Jaw, it  
gives off another to the Tongue: The four first Branches **arise**very near each other, so that the Size of this Nerve decreases  
very much between the Musculi Pterygoidaei.

The first Branch of this Trunk runs up to the Temporal  
-Muscle, on the Inside of winch it is distributed, and also  
between its Fibres.

The second Branch runs behind the Condyle Of the lower  
Jaw, where it divides into two Filaments, which run from  
within, outward ; and communicate with the neighbouring  
Branch of the Portio Dura of the Auditory Nerve, behind the  
Outside of the Condyle. .

- At the Origin of these two Filaments, it sends off a final!  
Branch, which runs up before the external Ear toward" the  
Temples, giving Filaments to the Concha *of* the Ear in its  
Passage.

. The Branch os this Trunk pastes between the two Apo -  
physes os the lower Jaw, perforates the lower Part os the  
temporal Muscle, and gives it several Filaments.

. Afterwards it bends downwards upon the Musculus Masseter,  
to which it is chiefly distributed, giving Filaments to the  
neighbouring Integuments, and communicating with the  
Portio Dura os the Auditory Nerve, on the Side of the OS  
Malae, lt terminates by Filaments which go to the Muscu-  
lus Buccinator, to the Muscles of. the Under. Lip, and to the  
Integuments os these Parts. ..

The fourth Branch of the Trunk of the Inferior Maxillary  
Nerve is often no more than a Ramification of the third Branch,  
winch goes off near its Origin It passes over the Musculus  
Pterygoidaeus Externus, to which it gives Filaments, and is  
distributed to the Pterygoidaeus Internus, and to the nearest  
Portion of the Temporalis.

It is likewise distributed to the Musculus Buccinator, to the  
Glands of the Mouth, and Muscles of the Lips; sometimes it  
fends off a Filament, winch Tuns up upon the Concha of the  
external Ear. ... .

Besides, these four Branches, several small Filaments go off  
on each fide,- one os which runs to the Foramen Pterygoidaeum,  
where It joins a Filament of the Nervus Maxillaris Superior,  
and then continues its Course to the Membrane, which covers  
the Vomer and neighbouring Parts of the Internal Nares.

\* The Branch that goes to the Tongue, which may be  
termed Nervus Lingualis, or Hypogloflns minor, to distin-  
guish it-from the Hypoglossus major, which belongs to **the**ninth Pair, is detached from the Maxillaris Inferior, as it pastes  
hetween the Musculi Pteryooidxi, and sometimes a littie sooner.

It is a very Considerable Branch, and sometimes neatly ha  
large as the Trunk, which it accompanies hetween the two  
Muscles already mentioned ; and, leaving it a littie above **the**Canal os the lower Jaw, it runs over the Pterygoidieus Inter-  
nuS, and gives it some Filaments.

This Ramus Lingualis, a little after its Origin, comma.  
nicates with the Trunk by a short collateral Branch; which is  
sometimes plexiform. . At this Place it sustains a particular  
Filament, which, according to the common Opinion, arises  
from it, and goes to the internal Ear.

This particular Filament of the Nervus Lingualis is supposed  
by Anatomists to he a Recurrent, which runs up backward  
through the Tympanum, and joins the Portio Dura of the  
Auditory Nerve; bur as the Angle which it makes with the  
small Nervus Lingualis, is very acute, and turned forward,  
there is inore Reason to think, “ that it Comes from the internal  
Ear to that Nerve.

Afterwards this Lingual Branch pastes under the lateral Part  
of the Tongue, and over the Glandula Sublingualis, giving  
Filaments to the neighbourhood Portions of the Muscles of the  
Tongue, and to those of the Os HyoIdes, and Pharynx.

Having communicated, by several Filaments, with the Ex-  
tremitieS *os* the Nerve of the ninth Pair, or Lingualis major,  
it enters the Substance of the Tongue, and terminates near its  
Apex or Point.

Lastly, the inferior maxillary Nerve, before it enters the  
Canal of the lower Jaw, sends Filaments to the neighbouring  
Portions of the Musculus Pterygoidaeus Internus, Digastricus,  
*etc. It* likewise detaches a Filament or two along the Peri-  
osteum, to be distributed to the Musculus Mylo-hyoidaeuS, **and**Glandula Sublingualis. The Marks of these Filaments often  
appear upon the Bone, all the Way from their Origin ; **and**sometimes they pass through a small entire bony Canal, lying  
on the Surface os the Inside os the Bone.

After the inferior maxillary Nerve enters the Canal of **the**lower Jaw, it runs under the Alveoli, and distributes Filaments  
to each Tooth, all the Way to the Hole near the Chin, where -  
it sends another Branch forward into the Diploe, which is dis-  
tributed to the other Teeth, that he between that Hole and **the**Symphysis of the Chin.

**‘ NERVI MOTORES EXTERNI.-**

The Motores Extenti, which make up the sixth Pair of  
Nerves from the Head, are smaller, but yet a little larger than  
those of the fourth Pair. They arise from the Union of the  
Medulla Oblongata between the great transverse Protuberance,  
and the Corpora Olivaria ; whence they advance to the Dura  
Mater, and enter it on the Extremity os the Production of the  
OS Occipitis behind, and a littie on one Side of. the Symphysis  
os that Bone, with the OS Sphenoides.

Each of these Nerves runs afterwards in the cavernous Du-  
plicature of the Dura Mater, on one Side of the Bottom of  
the Sella Sphenoidalis, and of the Carotid Artery, to which **it**adheres very closely; and it there communicates with a Branch  
of the fifth Pair, by one or two short Filaments, as has been  
already said in the Description of **the** Orbitary **Nerve.**

Immediately aster and behind this Communication, the Mo-  
tor Externus sends down a Filament, which at first appears **to**run from before, backward, like a Recurrent; and presently  
enters the large hony Canal of the Apophysis Petrosa, **on one**Side of the internal carotid Artery.

This nervous Filament, which is sometimes double, is com-'  
monly taken for the Root or Origin of the celebrated intercostal  
Nerve, which I term *Sympatheticus major',* bus, aS it makes an  
acute Angle in an opposite Direction, with the Nerve of the  
sixth Pair, it seems rather to run up with the Carotid Artery,  
and to join that Nerve, than to arise from it.

The Nerve of the sixth Pair, which I have sometimes seen  
double, or split in two Parts, before it enters the Dura Mater,  
passes afterwards thro' the Sphenoidal or superior Orbitary Fis-  
sure, to the MusculuS Rectus Externus of the Glohe of **the**Eye. ' ' '

**... - NERVI AUDITORII.**

The Nerves of the’seventh Pair, termed Auditorii, arise  
from the. lateral and posterior Part of the great transverse Pro-  
tuberances of the Medulla oblongata. Each of these Nerves is  
double, or consists of two Ropes, which accompany each other  
Very closely to the Foramen Auditorium Internum of the Apo-  
phy sis Petrosa. ' . . ‘

One of these Ropes is small, solid, and anterior, being cal-  
led the *Portio Dura*; the other less solid and posterior, called  
*Portia Mollis.* Both these Portions are particularly described  
under'the Article AURIS.

**. -r... .... NERVI SYMPATHETICI .MEDII.**

The Nerves of- the eighth Pair, called by the AntientS *Par  
Fagum,* and which I ‘have named *Nervi Sympathetici Mean,*arise from the posterior Part of the Medulla Oblongata, from

**the** great 'transverse Protuberance, and from the anterior Part  
of the Corpora Olivaria, by several separate Filaments, which  
are afterwards collected in a Fasciculus, that runs toward the  
antetior Part of the Foramen Lacerum of the Basis Cranii,  
where it perforates the Dura Mater, immediately before the  
Extremity of the great lateral Sinus.

The Passage of this Nerve is di viced from that of the Sinus,  
by **a** fmall membranous Septum of **the Dura** Mater, and by  
the little bony Prominences of the Foramen Lacerum, men-  
tioned **in the** Description of the Skeleton.

This great Fasciculus does not penetrate the Dura Mater  
through a single Opening, and as one Rope ; for several of **the**anterior Filaments form a particular Portion, divided from **the**main Body by a very thin membranous Septum.

The Filaments, which compose the large Portion, when  
carefully examined, seem to perforate the Dura Mater sepa.  
ratcly, by small Holes pr Pores, which he very near each  
**ether.**

The’ these two Portions go out separately, they are looked  
upon as a common Trunk , and the small Portion is looked  
upon as a Branch of the great one, which lies hehind the other,  
and is esteemed rhe true Trunk of this eighth Nerve.

As this Trunk goes out, it receives backward a small ner-  
vous Rope, which runs up laterally from the spinal Canal; and,  
passing thio’ the great occipital Hole, on the Dura Mater,  
joins this Trunk. This sinall Rope is termed *Narvus Accejsc.  
rius Octavi Paris,* or *Narvus Spinalis.*

As **the** two Portions pass through the Dura Mater and Fo-  
ramen Lacerum, they are closely united together, and commu-  
nicate by Filaments, which increase the sine of the small Por-  
tion. The large Portion communicates likewise with the Ner-  
vus Accessorius, to which it is strongly connectsd during this  
Passage.

The sinall or anterior Portion, having passed out of the Cra-  
nium, separates from the large one, **as a** Branch from a Trunk;  
and from thence it has been called *the first Branch of the eighth  
Pair.* It is bent in form of an Arch; and, passing interiorly  
on the Side of the Digastric Muscle, it supplies the Musculi  
Genio-Hyoidsei, those near **the** Basis of the Tongue, and  
these of the Pharynx.

About two Fingers-breadth segni where it leaves the Cra-  
nium, this Portion fends heckward one Branch, which is bent  
**in the seme** Direction, like an inverted Arch, and detaches  
from its convex Side' at least three Filaments. Tine first,  
which is sometimes double, communicates with **the Trunk of**this eighth Pair, on one Side of the Ganglion of the inter-  
costal or great sympathetic Nerve. The second joins the Ner-  
**vus** Accessorius, and the third goes to the Pherynx.

Afterwards this sinall Portion goes to the Tongue, **where it**communicates with the Extremities of the sinall Nervus Hypo-  
.glossus, or Ramus Lingualis of the ioferior Maxillary Nerve,  
and with those of the great Hypoglossus, or Nerve of the ninth

Tine large Portion os the eighth Pair, or middle Sympathetic  
Nerve, adhering by one Side to the first Ganglion of the Sym-  
patheticus Maximus, and by the other to the Hypoglossus  
. major, to both which it gives communicating Filaments, fends  
. off, a little below the fmall Portion, another smaller Branch,  
which goes by several Filaments to the Pharynx.

A little helow, on one Side of the Uninn of the eighth Pais  
with the ninth, this portion, or Trunk, forms a Ganglion,  
**and** gives off a third Branch, which runs hesore the internal  
Carotid Artery to the Larynx, Musculi Laryngis, Glanduhe  
Thyroides, and Muscles of the Os Hyoides.

- ' This third Branch-passes between the Cornu of **the** OS  
Hyoides, and the Ala of the Cartilago Thyroidea; and, running  
in hetween that Cartilage and the Cartilago Cticoides, it com-  
municates with the Extremioes of the Nervus Recurrens.

Afterwards the large Trunk runs down on the fore Side of  
the first Ganglion of the Nervus Sympatheticus Maximus,  
along the anterior vertebral Muscles of the Neck, by the Side  
Of the Carotid Artery, and hehind the internal Jugular Vein;  
being accompanied hy the intercostal Nerve, as far as the last  
Vertebra of the Neck.

Through all this Course, this Trunk is invested by a kind of  
cellular, filamentous, or membranous Vagina, common to it  
with the internal Carotid Artery, the internal Jugular Vein,  
and the great Sympathetic Nerve. In its Passage it gives small  
Branches to the neighbouring Parts, to **the** Pharynx, Oesophagus,  
and to the Carotid Artery and Jugular Vein. One of these  
**sinall** Branches, in its Course downward, joins a fmall Branch  
**of the** second Cervical Pair, and is distributed to the Glandula  
Thyroides.

The Trunk having reached as low as the Larynx, and  
Glandula Thyroides, sends out a Branch; which, running  
down on the sore Side of the internal Carotid Artery, joins a

Filament from the second Ganglion of the Intercostal NerVe,  
with which it runs to the Plexus Pulmonaris.

Afterwards, herb Trunks of the Nerves of the eighth Pair  
enter the Thorax, hefore the Origin of the Subclavian Arteries,  
which they cross, and run hehind the Lungs to rhe (Esophagus.  
At this Place there is some Difference in the Distribution of the  
two Trunks, which, -in every other respeol, is pretty much .  
the same.

As the Right Trunk passes before the Subclavian Artery, is  
sends off a considerable Branch, which hends heckward under  
the Artery, and runs up on one Side of the Aspera Arteria; to  
which, and to the Oesophagus, it fends Filaments as high ak  
the Larynx. This Branch is called Nervus Recurrens.

This recurrent Nerve, having reached the Larynx, sends  
Branches to the Muscles thereof, to the Pharynx and Glandule  
Thyroides. Then it runs in behind the Cornua of the Carti-  
Iago Thyroides, where it joins the Extremity of the third  
Branch of the Trunk of this eighth Pair.

The RrghtTrunk, having given off the Recurrent of the same  
Side, runs down on one Side of the Aspera Arteria, and be-  
hind the Origin of the Rigsit Lung, where it adheres to the  
Oesophagus, and in this Course it send, out several Branches.

The uppermost Branches run on the fore Side of the lower  
Extremity of the Afpera Arteria and Bronchia, and are all  
united to Filaments of the great Sympathetio *Nerve, hefore*the Bifurcation of the Trachea, and llkewise to the Ramifica-  
tions of the same Nerve from the other Side. The other  
Branches which the Trunk fends off, as it runs down hehind'  
the Bronchia and Lungs, unite with the Filaments of the great  
Sympathetic Nerve.

The Left Trunk of the Eighth Pair is ramified in theThorax,  
much in the same manner with that of the Right Side, with  
this Difference only, that the Left Recurrent Nerve goes out  
lower than the Right; for it passes below the great Curvature  
of the Aorta, and behind the Ductis or Ligamentum Arteri-  
osum, and afterwards runs up on one Side of the Trachea Ar-  
teria to the Larynx, much in the fame manner with the other.

This Difference in the going off of the two Recurrents is  
the Reason why the Left Trunk does not run down so strait  
as the Right, and the Left Recurrent gives off forne of the  
Branches, which answer to those which come from the Trunk  
itself on the Right Side.

Immediately inter' the Origin of the Left Recurrent, the  
Loft Trunk sends down a Branch, which goes partly to the  
Plexus Pulmonaris, and partly to the Oesophagus and Aorta.

Thefe reciprocal Ramifications of both Trunks of the Eighth  
Pair, and their mutual Communications with the Filaments of  
the Intercostal or great Sympathetic Nerve, form particular In-  
tertextures called *Plexus*; the most considerable of which **are**those called *Plexus Cardiacus,* and *Plexus Pulmonaris.*

The Plexus Cardiacus is formed above the Lungs, on **the**fore Side Of the Bronchia, and produces a great Number of  
Filaments ; some of which go to the Pericardium, and the rest  
go through it, round the great Vessels to he distributed to **the**Heart.

The Plexus Pulmonaris is composed of the following Rami-  
fications, which the two Trunks send off, as they run down  
behind the Lungs. Some of the Filaments detached front .\*  
thence run above the Bronchis at their Origin; but the greatest  
Part run helow, heing distributed along with them through the  
whole Lungs.

Besides these Plexus, the two Trunks give off Ramifications  
to the Parts near which they pass; such as the posterior  
Part of the Mediastinum, Oesophagus, and Aorta ; and by  
all these Ramifications the Trunks are gradually diminished.

After heving sent off the two Plexus, these Trunks change  
in a very remarkable manner. , The Trunk on the Right Side  
runs insensibly heckward, as it descends, and that on the Lest  
Side forward, in the same manner.

In their Passage they send several Filaments forward and  
hackward to the Oesophagus, which unite at different Distances,  
both with the Filaments from the fame Trunk, and with the  
like Filaments from the Trunk on the other Side, and the  
posterior Filaments from the.Lefr Trunk are in some Subjects  
more considerable than the anterior ones from the Right  
Trunk.

**These** repeated Divisions and Re-unions, which represent a  
kind of Plexus, cause the original Trunks to degenerate, in  
some measure, into two particular Ropes, one anterior, the  
other posterior, which are called *Nervi Stomachici.*

The posterior Stomachic Nerve arises principally from the  
Right Trunk, and the anterior from rhe Left Trunk; and,  
accordingly, the posterior Rope is oftentimes much stronger  
than the anterior, because of the Difference hetween the Fi-  
lamenta of which each of them consist.

These two stomachic Ropes pass along with the Extremity  
**of** the Oesophagus, through the Opening in the small Muscle  
**of** the Diaphragm, and are distributed on the Stomach. The  
anterior Rope is spread on the upper, or, as it is commonly  
call'd. *The fore Side,* and the posterior On the lower, or bach  
Side.

. The Ramifications of both Ropes communicate with each  
ether, and form particular IntertextureS principally near the  
upper Orifice of the Stomach, and along the small Curvature,  
all the Way to the Pylorus ; by all which a kind of Plexus is  
formed, call'd *Coronarius Stomachicus.*

This Coronary Plexus, thus formed, fends off near its Ori-  
gin two small Ropes;, one of which seems to come princi-  
pally from the great anterior stomachic Rope, the other from  
the posterior Rope. These two small Ropes unite near the  
Trunk of the Hepatic Artery, winch having accompanied for  
**a** little Way, they are divided into two Very short Branches.  
. These two Branches run presently afterwards to the Right  
and Left Hands, immediately above the transverse Rope, which  
forms the Communication hetween the Semilunar Ganglions  
**of the** two great sympathetic Nerves ; and **they** terminate by  
uniting this Rope in a triangular Form.

. In this manner end the Nerves of the eighth Pair, or the  
Sympatheticus Medius of each Side, by contributing, together  
with **the** Sympatheticus Maximus, to the Formation of several  
Plexus in the Abdomen, which are ascribed principally to **the**last-named Nene. Among these are the Plexus Hepaticus,  
Splenicus, Mesenterici, .and eVen the Renales.

We see likewise, that **these** two great Pairs of Nerves have  
a perpetual Correspondence through all the Viscera of the Ab-  
domen, as well as in the Thorax.

**NERVI ACCESSORII OcTAVI PARIS;**

The Nervi Accessorii of the eighth Pair arise by several Pi-  
laments from both Sides of the Medulla Spinalis os the Neck,  
sometimes higher, and sometimes lower. Each of them runs  
up hetween the two nervous Planes, which come out from the  
fpinal Marrow, to form the Vertebral Nerves ; and they gra-  
dually increase in their Course upwards by means of several Fi-  
laments, which they receive .from the posterior nervous Planes.

Having reached above the first Vertebra, each Nerve is fix'd  
to the back Side of the Ganglion of the Nervus Suboccipita-  
**Iis,** or that of the tenth Pair ; and, having, at the upper Part  
of this Adhesion, received two Filaments from the posterior  
.Portion of the Medulla, they part from the Ganglion, and  
continue their Course upward. I have sometimes found these  
two Filaments without any Communication with the Ganglion,  
or with the anterior Plane; so that they seem rather to belong  
To the Nervus' Accessorius, than to the Suboccipitalis.

They enter the Cranium by the great Occipital Foramen;  
and, having communicated with the Origin os the Suboccipi-  
talis, or Nerves of the tenth Pain, and with the great Hypo-  
glossi or ninth Pair, they return out of the Cranium with the  
Nerves of the eighth Pair, or Sympathetici Medii, with which  
they communicate in their Common Passage through the Cra-  
nium.

*.-Ns* soon aS they get without the Cranium, each of them  
gives off a Considerable Branch, which divides into two. One  
is Very short, and immediately joins the Trunk of the eighth  
Pair; the other, which is longer, joins the small Portion, or  
first Branch, which goes to the Tongue. They likewise com-  
municate with the great Hypogloflhs and Sympatheticus on each  
Side. Afterwards the NerVuS Accessorius runs backward, and,  
perforating the Mufculus Sterno-mastoidaeus, runs to the Tra-  
pezius, on which it is distributed, and terminates after having  
supplied the Rhomboides. In this Courso it communicates  
. with the first three Pairs of the Cervical Nerves, and gives  
Branches to the Glands of the Neck, to the Musculus Angu-  
jlaris of the Scapula, the Complexus, the Occipitalis, and to  
the Integuments.

**NERvI HyPOGLOSsI EXTERNI SIVE MAJORES.**

The ninth Pair of Nerves, as they are commonly call'd, or  
the Par Linguale, arises on each Side, between the Corpora  
Pyramidalia and Olivaria by several small Filaments, which,  
muting together, form ordinarily two small Ropes on each  
Side. These two Ropes perforate the Dura Mater by two  
small separate Holes, and afterwards soon unite in one Trunk  
**on** each Side, which goes out of the Cranium, by the anterior  
Condyloide Hole of the OS Occipitis.

' AS soon as they leave the Cranium, each Trunk adheres Very  
closely to the Outside of the Trunk os the eighth Pair, and  
to that of the tenth.- Thence each Nerve pastes on the sore  
Side of the large Ganglion of the bympatheticus Maximus,  
and runs between the internal Jugular vein, and the neighbour-  
ing Carotid Artery, and then to the Tongue on one Side os the  
Digastric Muscle.

. In its Passage between the jugular and Carotid, it serais  
down a Branch to the Jugular Glands, Musculus Cutaneus, *etc:*and oehind the first Ganglion of the Intercostalis it detaches  
another, which runs down, fill it joins the Nerve of the Eighth  
Pain, or'Sympatheticus Medius. A little afterwards it gives off  
a third to the Musculus Omo-hyoidxus, Sterno-hyoidaeus, and  
to the small Muscles of the Larynx.

Afterwards this Trunk of the ninth Pair bends near the  
Angle os the lower Jaw, and runs forward between the Mus-  
culus Cerato-basio-gloffus, and Mylo.hyoidaeus, under the  
Genio-gloflhs, to all which Muscles it gives Filaments;. and it  
is afterwards lost in the Tongue, communicating with the Fi-  
lament of the Ramus Lingualis os the Inferior Maxillary Nerve,  
and with the Branch of the same Name, belonging to the eighth  
Pair. .

Before it bends near - the Angle of the lower Jaw,-a little  
below the Apophysis Styloides of the OS Temporis, it com-  
municates with the first Cervical Pair, and then sends a small  
Branch to the Larynx, and another more considerable one,  
which runs down behind the Musculus Sterno-mastokheus, on  
the anterior Muscles of the Neck, and communicates with  
the first and second Vertebral Pairs. . .

This last Branch communicates likewise with rhe Portio’  
**Dura** os the Auditory Nerve; and with rhe following Vertebral  
Pairs; aster which it terminates principally in the Musculus  
Sterno-hyoidaeus, and Sterno-thyroidaeus.

**NERVI SUBoCClyITALES.**

" The Suboccipital Nerves, or those of the Tenth Pair; arife-  
a little lower, and more laterally, than the former, at the Ex-  
' tremity of the Medulla Oblongata, opposite to the posterior  
Part of the Condyloide Apophyses of the OS Occipitis..

They come on each Side from the anterior Part of the Me-. -  
dulla, by a single Plane os small Filaments; and communicate  
by some collateral Filaments, with the first Cervical Pair, be-  
fore they pierce the Dura Mater.

They pierce the Dura Mater directly outward, opposite to\*  
their Origin, at the same Place where the Vertebral Arteries per-  
forate it inwards; both going, in a manner, through the same  
Holes, and the Nerves lying below the Arteries.

Afterwards they .run down in the Duplicature of the Dura  
Mater, and emerge again under the Edge os the great Ocei-,  
pita! Foramen, crossing the Elongation or Occipital Funnel, of  
that Membrane..

Having passed out os the Cranium, each os them runs to  
the posterior Notch of the superior oblique Apophysis of the.  
first Vertebra of the Neck, in which it runs from behind for-  
ward, in Company with the Vertebral Artery, which lies above  
it in the same Notch.

Where it leaves this Notch, it, forms a Ganglion, and gives  
Filaments to the Musculi Recti and Obliqui os the Head, be-  
sides one winch runs down in the transverse Foramina os the  
Vertebrae of the Neck, along the Blood-vessels which lie  
there. ' " \*

Having formed this Ganglion, and sent off these Filaments, -  
it turns forward and downward over the transverse Apophysis  
Of the first Vertebra, forming, a sort of Arch with an ascend-  
ing Branch of the first Cervical Pair.

This Arch surrounds the sore Part of the transverse Apo-  
physis,'and has several Communications with the first Ganglion  
of the great sympathetic Nerve, and by its convex Side adheres  
Very closely to those os the eighth and ninth Pairs.

The superior Part os this Arch or Ganglion sends up a eon-  
fiderable Nerve, which is increased by the Addition os a short  
Branch belonging to the first Cervical Pair, and, running up-  
ward and backward on the convex Sine of the Os Occipitis, is  
distributed to the superior and lateral Parts os the Head, by several  
Ramifications. This Branch is termed Nervus Occipitalis.

These Suboccipital Nerves have this in common with the  
other Nerves of the Medulla Oblongata, that each arises only  
by one anterior Fasciculus os Filaments, without any posterior  
Fasciculus, as in the Vertebral Nerves. We sometimes ob-  
**serve,** indeed, a small posterior smgle Filament on each Side,  
but this seems rather to belong to the NerVuS Accessorius os **the**eighth Pair, than to the tenth.

The particular Description os the Course, Division, and great  
Extent os the Nervi Sympathetici Maximi, commonly called In-  
tercostales, will come in most properly after that of all the Ver-  
tebral Nerves. -

**THE VERTEBRAL NERVES IN GENERAL. .**

The Vertebral Nerves are all those which arise from the Me-  
dulla Spinalis, and go out from the great Canal os the Spine, tbro’  
the lateral Foramina, formed by the corresponding Notches in  
**the** Vertebrae..

The originalTrunk os each Vettebral Nerve arises commonly  
by two flat Fasciculi of medullary or nervous Filaments, one

anterior, the other posterior. These two Fasciculi, on 'each  
Side, run towards each other, and perforate laterally the Pro-  
duction of the Dura Mater; aster which they presently unite  
in a kind of Ganglion, from which the Trunk is produced.

I reckon the Vertebral Nerves by Pairs, in the common man-  
ner, heginning with those which pass between the first and  
second Vertebra. This Enumeration agrees with thet of the  
V ertebrae themselves; there bring seven Pahs of Vertebral N erves  
belonging to the Neck, termed Cervicales ; twelve to the Back,  
called Dorsales ; five *to* the Loins, named Lurnbares ; and five  
or fix to the Os Sacrum, called Sacri.

This Distribution is fixed chiefly by the Dorsel Nerves,  
called Costales for there is exactiy the same Number of these  
Nerves as of Rihs, and the first Pain of costal Nerves passes,  
between the first and second Vertebrae of the Back.

**FIRST PAIR oF-CERvrcAL NERYEs.**

The first Pain of Cervical Nerves pastes between the first and  
- second Vertebra of the Neck ; lying more backward than the  
subsequent Pairs, and having larger Ganglions.

The Trunk of each of thefe Nerves sends out anteriorly a  
small Branch, which runs up on the sore Side of the transverse  
Apophysis of the first Vertebra, and forms a communicating  
Arch with the final! descending Branch of the Nervus Sub-  
occipitalis of the same Side, already mentioned; and conse-  
quently communicates likewisewiththe great sympatheticNerve.

Posteriorly it sends out a considerable Branch, which is soon  
increased by a communicating Branch from the second Cer-  
vical Pain . This Branch communicates, also, with the sub-  
occipitalis, and afterwards passes between the Musculus Com-  
plexus, and Rectus minor posticus of the Head ; and handing  
backward, is distributed to the other sinall posterior Muscles  
of the Head, and to the Splenius, Complexus, and Trapenins,  
It passes next over these Muscles to the Occiput, where it is  
ramified backward, upward and forward, to the Musculus Qc-  
dpi nd is and Temporalis of the same Side.

It likewise gives oss a Filament, which, dividing into two,  
sends up one Portion to the Museulus Sterno-mastoidseus, round  
the Ncrvus Accessorius Octsvi Paris, or Sympatheticus Medius.  
and, running afterwards behind thet Mufcle, it is distributed to  
the Splenius.

The other Portion of this Filament runs downward, and,  
heading in a particular manner, communicates with the second  
Cervical Pair, and with the Sympatheticus maior. It likewise  
sends fmaller Filaments to the anterior Muscles of the Head  
and Neck, and to the Stemo-mastoidaeus and Splenius.

One of thefe small Filaments communicates with the great  
Nervus Lingualis, or ninth Pair from the Brain, and goes to  
the Musaulus Sterno-hyoidjeus, Thyro-hyoidaus, and Tbyroide

**SECOND PAIR OF CERvrcAL NERvEs.**

The second Cervical Pair passes between the second and  
third Vertebra of the Neck ., and, as it goes out, communi-  
cates, forward, with the great Ganglion of the Sympatheticus  
maximus, upward with the fust Cervical Pais, and downward  
with the third.

Afterwards the Trunk on each Side is divided into several  
Branches ; but, from the Place of its Union with the first Pain,..  
it fends off, first of all, one Filament, and then another from  
where it loins the third Pais.

Lower down, these two Filaments unite into one, which  
runs down along the internal Jugular Vein; and then, forming  
a considerable Arch, runs up along the Carotid Artery, as high  
as the Parotid Glans, wbere.it joins and communicates with  
the Trunk of the ninth Pais of the Medulla Oblongata. A Fila-  
ment is detached from the Curvature or Arch, which is spent  
on rhe Musculus Coraco-hyoidasus, Sterno-hyoitheus, and Sterno-  
thyroidaeus.

Opposite to the Stemo-mastoidaeus, the Trunk sends oss a  
Branch, which, behind thet Mufcle, communicates with the  
Nervus Accessorius of the eighth Pain, after the manner of a  
Plexus.

This Branch runs afterwards behind the Musculus Splenius;  
perforates the upper Portion of the Trapezius between the  
great Occipital Nerve, and the Ear; and ascends to the lateral  
Part of the Occiput, where it communicates with its Fellow  
from the other Side. It is distributed on each Side to the  
Muscles just mentioned, and to the Angularis Scapuhe.

The Trunk of this second Cervical Pain sends down other  
Branches to the middle Part of the MusculusTrapezius, Stemo-  
mastoidaeus, and neighbouring Vertebral Muscles; and some-  
times we observe a Communication backward, between this  
Trunk, and the third Cervical Pain.

Having given off these Branches, this Trunk advances to-  
ward the posterior Edge of the middle Portion of the Stemo-  
mastoid.eus, upon which it hands from behind forward, sending

**out several** Branches. The first Branch runs downward and  
backward, and is distributed by several Branches to the Musoulus  
Scalenus, Tranfverialis Colli, *etc.*

The second Branch communicates with the third Cervical  
Pair, at the Place where this Pair produces the Diaphragmatic  
Nerve, to the Formation of which it contributes. The third  
Branch is only a Filament, which, running upward, commu-  
nicates with one or two Filaments of the mierior Branch of the  
Portio Dura Nervi Auditorii.

The Extremity of this Curvature on the sore Side of the  
Sterno-maftoidseus, is divided into two Branches, one of which  
runs upward, the other downward. The superior Branch  
ascends on this Muscle, to the lower Part of the Ear, send.:'  
ing one Branch behind the Ear, and another to the Parotid  
Gland, where it joins the Trunk of the Porno Dura of **the**auditory Nerve, and runs up on the sore Side of the Ear.

The inferior Branch runs from behind forward to he rami-  
fied on the Musculus Cutaneus, and distributed to the into-  
guments of the Throat, in which it is lost neat the Larynx,  
having first given Branches to the Musouli Sternothyoidaei. It  
likewise communicates with a descending Branch of the Portio  
Dura, and with another of the ninth Pair from the Brain.

Near itsOrigin this inferior Branch sends down a Ramification  
on the back Side of the Sterno-mastoitheus, gives otherBranches  
to the Jugular Glands, to the Fat and integuments of the late-  
ral and lower Parr of the Neck, and passes before the middle  
Portion of the Ciavicula, below which it is lost in the lateral  
Integuments of the Thorax.

**THIRD PAIR op CERvICAL NERvEs.**

**The** third Cervical Pair passes between the third and fourth  
Vertebra: of **the** Neck, and communicates upward with **the**second Pain, downward with the fourth, and forward with **the**Seat sympathetic Nerve, and with a Filament from the ninth  
sir of the Medulla Oblongata. It communicates, likewise,  
with the Nervus Accessorius of the Sympatheticus Medius, by **a**Filament, which goes to the Musculus Trapezius.

Each Trunk of this third Pair sends several Branches to the  
anterior, posterior, and lateral Parts of the Neck, that is, to **the**Musdes, Glands, Membranes, Fat, and Skin, all the Way to  
**the** neighbouring upper Parts of the Thorax and Shoulder.

Among the posterior Branches, there is one which goes to  
the Musculus Supra-fpinatus, and, passing Over the Notch in the  
superior Costa of the Scapula, gives Filaments to the Extremity  
of the Omo-hyoidseus ; and another small one, in its Passage to  
the Musculus Trapezius, communicates with a Filament of **the**Nervus Accessorius of the eighth Pain.

Of the middle Branches, some go to the Jugular Glands, to  
the Musculi Suhelavii, to the neighbouring Portions of the  
Peftoralis, Deltoides, and Trapezius, and to **the** integuments  
of those Parts.

Among the anterior Branches, there is one, which, heing  
strengthened by a Branch from the second Cervical Pair,  
unites lower down with another Branch of the fourth Pain,  
and thus forms the Nervus Diaphragmaticus,

This Diaphragmauc Nerve runs on the sore Side of the Must.  
culus Scalenus, and enters the Thorax behind the anterior Ex-  
tremity of the Clavicula, receiving, immediately afterwards, **a**Filament from the first Dorsal Pain, and communicating with  
the great Syrnpathetious. It runs down obliquely forward, he-  
fore the Subclavian Artery, and on one Side of the Nervus  
Sympatheticus medius, near the Origin of the Recurrent.

in the Thorax this Diaphragmatic Nerve runs down imme-  
diately before the Origin or Root of the Lung, along one Side'  
of the Pericardium, to which it adheres very closely, and then  
running a little backward, it soon enters the Diaphragm.

It is distributed by numerous Ramifications on the great  
Muscle of thet Organ, fending likewise some Filaments of the  
lower Portion, by which it communicates with the great Sym-  
pathetio Nerve, and with the neighbouring Plexus of the Ab-  
domen.

The Right Diaphragmatic Nerve runs along the Vena Cava  
superior, and on that Account appears to he situated more an- ‘  
teriorly then the Left.

This Left Diaphragmaole Nerve lies, first of all, **a** little back-  
ward, toward the Trunk of the Aorta, and afterwards runs in  
a longer Course than the Right, being bent in order to pass by  
thet Portion of the Pericardium which answers to the Apex of  
**the Heart** i for which Reason it is longer than the Right.-  
Thence it is hent backward, and distributed to **the** Diaphragm  
in the same manner as the other.

**THE LAST FOUR PAIRS OF CERvICAt NERvEs rs  
GENERAL.**

The last sour Pairs of Cervical Nerves pass between the Popo  
irons of the Musculus Scalenus, heing, in general, large; than

the three former. They are united by their Trunks, and, to-  
?ther with the communicating Branch of the third Pain, and  
runk of the first Dorsal Pair, they form a very large Plexus,  
which is, in a manner, inclosed in a membranous Vagins, and  
produces six considerable Ropes, like so many particular Trunks,  
winch are distributed to the upper Extremity, and go by the  
general Name of φε Nervi Brachiales.

**THE BRACHIAL NERVES IN GENERAL.**

The Brachial Nerves consist Of six Ropes on each Side ; and  
in 1697. *Du Ferney* gave to five of them the following Names:  
Nervus Musculo-cutaneus, sive Cutaneus externus. Medianus,.  
Cubitalis, Cutaneus Internus, and Radialis, taking for a Branch  
of the Radialis that Nerve which I look upon as the sixth prin-  
cipal Rope, and which I name Axillaris or Articularis.

These fix Ropes do not rise separately ; and their Origin is  
so complicated, that it is not easy to determine it ; bus, in gene-  
ral, it seems, that each *of* the five Vertebral Pairs,, winch form  
the great Plexus, Contributes to the Formation of each Brachial  
Rope-

Four of these Nerves arise anteriorly from the great Plexus,  
and these are the Mufculo-cutaneus, Medianus, Cubitalis, and  
Cutaneus internus; and the other two, the Radialis, and Ax-  
illariS, arise posteriorly.

The five Vertebral Pairs form the large Plexus in the follow-  
ing manner: The fourth. and fifth Cervical Pairs, about an  
Inch or more after they go out, unite into one common Trunk.  
The seventh Cervical and first Dorsal Pair unite likewise into  
one Trunk, very near their Origin. The sixth Cervical Pair  
runs singly, for a considerable Space, between the two other  
Trunks; and afterwards is increased by a communicating Por-.  
tion, winch it receives from each of them.

These five largeVertebral Nerves, on each Side, thus mingled,  
interwoven, and complicated, divide again, and are disposed in  
a quite different manner from what is ordinary, forming the  
fix Brachial Ropes, as follows:

The Nervus Musculo-cutaneuS is formed by the Union of the-  
fourth and fifth Cervical Pains, and by their collateral Commu-  
nication with the third and sixth Pairs.

The Medianus comes on one Side, from the Union of the'  
sixth Cervical Pair with the fourth and fifth, and on the other  
from the Union of the seventh Pain with the first Dorsalis. These

\* two Unions form an acute Angle, the Apex Of which produces  
the Median Nerve.

The Cubitales goes out from the Union of the seventh Cer-  
vical with the first Dorsal Pair, a little nearer the lower SideOf  
the Angle of the Medianus.

The Cutaneus internus arises in the same manner. .

The Radialis is the largest of the six, and goes out from the

. Apex os another nervous Angle, the upper Side of which is  
formed by the Union of the Trunks of the fourth, fifth, and

' sixth Pairs; and the lower Side by the Union of the seventh  
Cervicalis, and first Dorsalis.

The Axillaris goes out close to the Radialis, chiefly from  
the upper Side Of the nervous Angle, and it communicates with  
all the rest.

Besides the great Brachial Nerves, several small Branches go  
out from each of the last four Pairs, which may most properly  
he now described.

**FOURTH PAIR 0y CERVICAL NERVES.**

The fourth Cervical Pair pastes between the fourth and fifth  
Vertebrae of the Neck, and communicates above with the third  
Pair, helow with the fifth, and forward with the great Sympathetic.

It fends several Branches to the Musculus Scalenus, Angu-  
laris Scapulae, Rhomboides, Trapezius, and Pectoralis major;  
and likewise gives off a Filament, which contributes to the  
Formation of the Nervus Diaphragmaticus. Afterwards it ad-  
Vances a Fingerfs-breadth without any Ramification, and joins  
the Trunk Of the fifth Cervical Pain

At the Place of this Union, or a little hefore, it gives out a  
pretty considerable Branch, which, having sent a Filament to  
the Musculus Subscapularis, passes through the small Notch in  
the superior Costa of the Scapula, and gives other Filaments to  
the Supra-spinatus. Tins Branch runs asterwards under the last  
named Muscles, and under the Acromium, to the Infra-spina-  
tus, and TereS minor.

**FIFTH PAIR OF CERVICAL NERvEs,**

The fifth Cervical Pain passes between the fifth and sixth  
Vertebrae of the Neck, communicating with the fourth and  
sixth Pairs, and with the great Sympatheticus.

Afterwards each Trunk lends forward a Branch, which, uni-  
ting with a like Branch from the sixth Pair, is distributed to  
the Musculus Scalenus, to the Surface of the Pectoralis major,  
and to the neighbouring Integuments. This Trunk sends off,  
likewise, near itS Origin, another Branch, which runs down he-  
hind the Origin of the sixth Pair, from which it receives **a**

small communicating Filament. Being thus strengthened,'It  
runs down on the Outside of the Thorax, and is distributed  
to the Muscles there ; passing first under the two Pectorales, and  
then between the Serratus major, and Subscapularis.

Afterwards continuing its Course downwards, it reaches the  
anterior, middle, and almost the lower Parr os the Latissimus  
Dorsi, at the third salse Rib ; and terminates in this Muscle,  
and in the Integuments.

**THE LAST TWO PAIRS OF CERVICAL NERVES.**

The sixth and seventh Cervical Pairs, having pasted in the,  
common manner, under the sixth and seventh Vertebrae os the  
Neck, and having communicated with the other Nerves near  
them, send several Filaments tothe neighbouring Parts.

The Branch of the sixth Pair, which unites anteriorly with **a .**like Branch of the fifth Pair, to he distributed on the Thorax,  
sends down a Filament, which,together with another common to.  
the seventh Cervical, and first Dorsal Pair, forms a kind of  
Arch, under which the axilla-y Artery passes.

All these Nerves give Filaments to the neighbouring Inti-  
guments ; and some go likewise to the Axillary Glands.

1

**- NERvus MuScULO-cUTANEUs,**

The Musculo-cutaneous Nerve, which naturalsy lies on one  
Side os the Cutaneus Internus, arises from the Union os the  
fourth and fifth Cervical Pairs, and partakes of their lateral  
Communication with the third and sixth Pairs.

Having reached the upper Extremity of the Musculus Coraco-  
brachialis, it perforates it obliquely from above downward, and  
gives it several Filaments. Afterwards it runs down on the  
Arm behind, and under the Biceps, to both Portions of winch  
it gives Branches.

Having got from hehind the Biceps, it runs from within,  
outward, between the lower Extremity of that Muscle, and  
of the Brachialis, which it likewise supplies. In the Fold os the  
Arm it reaches the Skin immediately behind the Vena Me- .  
diana, and there it becomes a true Nervus Cutaneus. Thence,  
it runs along between the Supinator Longus, and the Integu-  
ments, on the Inside of the Cephalic Vein, all the Way to  
the Thumb.

It is distributed to the Integuments on the fore Side of the  
Carpus, to those of the Thumb, and of the convex Part of  
the Hand. Before it reaches the Wrist, it passes over the  
Cephalic Vein, and communicates, at the Thumb, with a  
Branch of the Radial Nerve.

**NERvUS MEDIANUS.**

The Nervus Medianus lies hetween the Musculo-cutaneus  
and Cubitalis. It arises from the Union os three Branches, one .  
helonging to the sixth Cervical Pair, one to the seventh, and  
one to the first Dorsalis. In some Subjects it is formed by the  
Union of two principal Branches, one of which comes from  
the Union of the first Dorsalis with the last Cervicalis, the other.  
from the Union of the fourth, fifth, and sixth Cervicales.

It runs down on the Arm, along with the Brachial Artery,  
under the inner Edge of the Biceps, having first past behind the  
inferior Insertion of the Coraco-brachialis, and reaches the Fold  
os the Arm hetween the lower Extremity of the Musculus Bra-  
chialis and Pronator Teres ; giving Filaments in its Passage to  
all these Muscles on both Sides.

It passes hehind the Ramus Medianus of the Basilic Vein, as  
it approaches the inner Condyle; and then runs backward cross  
the Pronator Teres, and downward hetween the Perforatus and  
Perforans, to which it gives Ramifications.

Below the Pronator Teres, it sends off a particular Branch,  
which runs along the Interosseous Ligament, behind the Pro-  
nator Quadratus, all the Way to the Wrist, giving Filaments  
to that Muscle.

Afterwards, having detached some cutaneous Ramifications,  
the Trunk passes under the internal transverse Ligament of the  
Carpus, to the Palm of the Hand, where it sends off numerous  
Branches to the Mufculus Thenar, and Anti-thenar, two to  
the lateral concave Parts of the Thumb, two to those of the  
Index, two to those of the middle Finger, and one to the  
nearest Side of the Ring-finger, after having communicated  
with a Branch of the Cubital Nerve. These Branches go all .  
theWay to the ends of the Fingers, supplying the integuments.  
Ligaments, and Tendons.

**. NERvUS CUBITALIs.**

The Cubital Nerve arises from the Union of the seventh  
Cervical with the first Dorsal Pair; and communicates with  
the lower Root of the Median Vein.

It runs down on the Inside os the Arm, along the Musculus  
Anconxus Maximus, hetween the Brachial Artery, and the  
Basilic Vein, sending off only small-Filaments to. the neighbour-  
**ing** Muscles and Integuments.

It runs in between the inner Condyle of the OS Humeri and  
the Olecranum, where it is covered only by a kind os Liga-  
ment, and by the common Integuments; and this is what  
makes Strokes upon the Elbow so painful, even all the Way to  
the littie Finger, where this Nerve ends.

Afterwards it runs down on the Musculus Ulnaris Internus,  
giving Filaments to the neighbouring Muscles, to the Pro-  
nator Quadratus, and Integuments; and, at the lower Extre-  
mity os the Uina it is divided into two Branches, one large,  
the other small.

The large Branch, which may be reckoned the Continuation  
of the Trunk, passes on one Side of the Os Pisiforme, under  
the great tranverse Ligament of the Carpus, to that Part of the  
Palm Os the Hand winch answers to the last two Fingers, where  
it gives someFilaments to the Integuments and Ligaments of the  
Carpus. - .

Afterwards it divides into three particular Branches, one of  
which forms a kind of Arch, being distributed to- the neigh-  
bouring small Muscles of the Thumb, and to the Interossei;  
the second is. bifurcated, and goes to the corresponding lateral'  
concave Parts of the ring and littie Fingers; and the third  
goes to the opposite lateral Part Of the littie Finger, and to the  
neighbouring Muscles.

The small Branch is turned outward behind the Tendon of  
the Uinaris Externus, and goes to that Part of the Back os the  
Hand, which answers to the last two Fingers. It is distributed  
to the lateral convex Parts of these two Fingers, much in the  
same manner as the other Branch to the lateral concave Pasts.  
It likewise supplies the Musculus Hypothenar, MetacarpiuS,  
and the integuments, and communicates with a Branch of the  
Nervus Medianus.

**NERvUS CUTANEUS llNTRRNUs.**

The internal Cutaneous Nerve is very small, and arises  
from the Union of the seventh Cervical, and first Dorsal Pairs,  
but chiefly from the Utter. It runs over the other Brachial  
Nerves, and passes down on the Inside of the Arm, between  
the Muscles and Integuments.

It divides first into two Branches, which accompany each  
other Very closely, as far aS the inner Condyle, on one Side of  
the Vena Basilica, being covered by the RamuS Medianus os  
that Vein.

One os these Branches runs down under the Integuments  
which cover the Musculus Radialis Internus, and Ulnaris Gra-  
cilis ; and is afterwards ramified on the Skin which covers the  
Wrist, and Beginning of the Palm of the Hand.

The other Branch runs a littie more backward along the in-  
teguments which cover the Musculus Uinaris internus and Ulna,  
upon which it is ramified all the Way to the littie Finger.

**NERVUS RADIALIS.**

' The Radial Nerve, so called, hecause it accompanies the Ra-  
dius, and the Radial Artery, arises from the Union of three com-  
pound Branches, one os which comes from the unitedTrunks of  
the fourth and fifth Cervical Pairs ; the second from the smgle  
Trunk of the sixth Pair; and the third from the united Trunks  
of the seventh Cervical, and first Dorsal Pairs.

The Trunk of this Nerve lies deeper than the rest: First, it  
runs from before backward, hending round the Os Humeri,  
hetween the Musculi Anconaei, and that Bone.

This Curvature is oblique and contorted, anlwering to the  
Impression observable On the Bone; and above it the Radial  
Nerve gives Branches to the three Anconaei, especially to the  
Longus and Externus. Afterwards it turns from hehind for-  
ward, between the AnconaeuS externus and the Brachialis.

It sends off, from' the Curvature or Arch, some cutaneous  
Branches, the most considerable of which goes to the external  
Condyle of the OS Humeri, and is distributed to all the inte-  
guments which cover the Radius on the fore and outer Sides,  
and to those which cover the exterior Parts of the Carpus, and  
Back of the Hand, all the Way to the Thumb.

At the Fold os the Arm, the Radial Nerve turns outward,  
and runs down between the lower Extremity of the Musculus  
Brachialis, and upper Extremity of the Supinator Longus, giv-  
ing Branches to these and the neighbouring Muscles.

Having reached the Extremity of the Radius, it divides into  
two, or rather sends off a large Branch, winch passes hetween  
the Radius and Supinator Longus, helow the middle of the  
Bone, where it runs in hetween the Supinator Longus and  
Radialis.

This Branch accompanies the external Radial Artery, near  
the Integuments; and, having got to the lower Part of theRa-  
dins, it is distributed into three Branches, to the convex lateral  
Parts of three Fingers and an half.

One Branch goes to the internal lateral Part of the Thumb,  
and to the integuments. The second is divided into two for

the external lateral Part of the Thumb, and anterior lateral  
Part of the index ; giving Filaments in its Passage to the Inte-  
guments of the Metacarpal Bones. The third Branch is  
divided into several lesser Ramifications, which go to the poste-  
rior lateral Parts of the Index, to both Sides of the middle  
Finger, and to \_ the anterior lateral Part of the Ring-finger.  
Through all this Course this Branch fupplies^he Integuments,  
and interosseous Muscles. ’

The Trunk, or largest Branch, of the Radial Nerve passes  
between the upper Extremity of the Radius and Musculus Su-  
pinator Brevis ; and in its Passage supplies this Muscle, the mi-  
conaeuS minimus. Supinator longus, and Radialis externus.

. Afterwards it is lost in the Extensor Digitorum communis,  
and in the Muscles of the Carpus and Thumb, having first  
communicated with a Branch of the Musculo-cutaneous Nerve.

**NERVUS AXILLARIS.**

‘ The Axillary or Articular Nerve arises from the last two  
Cervical Pairs, and sometimes seems to be no more than a  
laiDe Branch of the Nervus RadialiS. It runs in the Hollow  
of the Axilla, behind the Head of the Os Humeri, between  
**the** Musculus Teres major & minor ; and turns from within  
Outward and hackward, round the Neck of that Bone, run-,  
ing between the Articulation and the upper Extremity of the'  
Anconaeus Longus, to the Deltoides. ... '

It is divided into several Branches, which go mostly to **the**upper and lower Parts of the DeltoideS, upon which they aro  
ramified, supplying in their Passage the Subscapularis, the  
upper Extremity os **the** AnconaeuS longuS, TereS major and  
minor, and Supra-fpinatus. It likewise gives fume Nerves to  
**the** Latissimus Dorsi, and AnconaeuS Externus.

**NERVI D0RSA1E5, SIVE COSTALES. \***

. The Dorsal or Costal Nerves, consist of twelve Pairs, and-  
they deserve more justly, to he .called Intercostales, than the  
great Sympathetic Nerve, to which that Name has been Com-,  
monly given.

They have this in common with each other, that as soon as-.  
they leave the Vertebrae of the Back, before they begin to accom-  
pany the Ribs, they send out two Filaments anteriorly, winch  
communicate with the great Sympathetic Nerve, and several  
Filaments backward to the Vertebral, and Other Muscles.

Each of these twelve Pairs is numbered from the Vertebra,.-  
under which it goes out; thus the first Pair is that which passes  
under the first Vertebra of the Back, and so of the rest.

The first Pain enters the Composition of the Nervi Brachiales,,  
and together with the second Pair sends off the Rami Thoracici.

The seven superior Pairs run along **the** under Sides of **the**true Ribs, all the Way to the Sternum ; being distributed to the.  
Intercostal Muscles, which they perforate likewise from within  
outward, to go to the Senatus major. Pectorales, and exter-  
nal Integuments.

The seventh Pain, having reached **the** cartilaginous Portion  
of the seventh true Rib, runs down to the broad Muscle of  
the Abdomen, to which it is distributed.

The lowest five Pairs leave the ExtremitiesOf the salse Ribs,  
and go to the Muscles of the Abdomen.

The eleventh Pain gives, likewise, some Filaments to **the.**Diaphragm; and then runs in between the Musculi TransVersales  
and the Peritonaeum.

The twelfth is distributed to the Transversales and ObhquI  
Interni. ‘ . .

All these Nerves send numerous Ramifications through **the**Muscles to the integuments which form the cutaneous  
Nerves of the Thorax, of the upper two Regions of the Ab-  
domen, and Of the superior Portion of the Loins. -

**NERVI LUMBARES.**

All the five Pairs os Lumbar Nerves send Filaments.back-  
ward to the Vertebral Muscles; communicate with each other,  
and with the great Sympatheticus, on each Side; and are covered  
by the Psoas Muscle.' .

The Branches which communicate with the great Sympathe-  
tic Nerve are long, because they advance forward a consider-  
able Way on the Bodies of the Vertebrae Lumbares.

The Lumbar Nerves are denominated from the Vertebras  
under which they pass.

**FIRST PAIR OF LUMBAR NERVES. .  
/ . -**

The first Pair passes hetween the first and second Vertebrae of  
the Loins, and each receives a communicating Branch from  
the last Dorfal Pais, and gives out another to the second Lum-  
bar Pair, or to a Branch of it.

Each Trunk communicates with the great Sympatheticus, by  
**a** pretty long Branch; and afterwards gives out three Branches,

one posterior, and two anterior. Of which one is eyernal and  
large, the Other internal and small.

The posterior Branch perforates the Musculus Quadratus Lum-  
borum, and runs in between the back Parts of the oblique  
Muscles Of the .Abdomen, pierces the ObliquuS externus, and  
is distributed to the Skm, all the Way to the Clunes. This  
Branch supplies, also, the Vertebral Muscles, and Sacro-lum-  
baris.

The external and anterior Branch perforates the upper Ex-  
tremity Of the Musculus Psoas obliquely Outward, passes ever  
the Quadratus Lumborum, and nrns along the Crista of the OS  
Ilium, to the anterior Spine Of that Bone.

It gives Filaments to the abdominal Muscles, and supplies  
the Fascia Lata, neighbouring Integuments, and those Of the  
anterior Part Of **the** Outside of the Thigh, and the inguinal  
Glands.

The internal anterior. Branch perforates the Psoas almost  
nt the same Place with the former, but a little more forward  
and then passes . Over the Musculus Iliacus, to the Beginning of  
the Linamentum Fallopii, where it unites with the other an-  
terior Branch, and by this Union forms a Nerve, which runs  
along that Ligament, and along the Inside Of the Aponeurosis  
of the ObliquuS Externus, all the Way to the Opening, com-  
monly Called the Ring Of that Muscle. \*

Tins Nerve goes Out by that Opening, apd afterwards di-  
vides into several cutaneous Filaments, which gO to the Pubis  
and integuments Of the Parts Of Generation in both Sexes. It  
likewise supplies the spermatic Ropes, and those vascular Ropes,  
falsely Called the round .Ligaments.

Besides these Branches, the Trunk of this 'first Bair, near its  
Union with the second, sends Out two small Branches, closely  
United together, which run down behind the Psoas Muscle,  
over One tendinous Insertion Of the small Muscle Of the Dia-  
phragm, in the third Vertebra Of the Loins, and Communicate  
with the great sympathetic Nerve.. . .

These two Branches accompany each Other in this mannes,  
all the .Way to the Ligamentum Fallopii, whence one gOes  
to the Testicles along with the spermatic Vessels; the other  
passes under the Ligament to the Skin and Glands Of the In-  
guen.

At the Place Of this Division, the Trunk sends a Branch dc  
rectly downward, which joins the second Lumbar Pair, or ra-  
ther a Branch Of it 2. and afterwards contributes to the Forma-  
eion Os the large Rope, termed Nervus Cruralis.

**SECOND PAIR OF LUMBAR NERVES.**

The Trunks Of the second Pair of Lumbar Nerves gO Out  
between the second and third Vertebra of rhe Loins; and, having  
Communicated with the first Pair, and with the great sympatbe'.-  
tic Nerve, each Trunk gives off several small Filaments to the  
- neighbouring Parts os the Musculus Psoas, and a largo Branch  
backward, to the Quadratus Lumborum, Sacro-lumbaris, Lon-  
gissimus Dorsi, and neighbouring Vertebral Minnies; the Qua-  
dratus having first been perforated by it.

Afterwards the Trunk sends Out a small Branch, which, near  
**its** Origin, Joins **a** descending Branch Of the first Pair already  
mentioned. Being thus strengthened, it perforates the Head of  
the Psoas, runs along that whole Muscle to the Fissure of  
the Obliquus externus, and is distributed to the Inguinal  
Glands, to the Eat and Scrotum in Males, and, in Females, to  
the Labia. *j*

The same Trunk sends Ontywo Other Branches, which ac-  
company each Other, and, likewise, a small Branch hetween **the**Origins of these two, which goes to the upper Part of the Psoas.  
These two Branches perforate the Psoas in different Places, and  
afterwards. Continuing still near each Other, they pais under' the  
. upper Part Of the Ligamentum Fallopii, and so go out of the

Abdomen.

AS they go Out, they unite, and form One Nerve, which is dis-  
tributed by several Branches to the Inguinal Glands, the Aponeu-  
rosis Cruralis, and integuments Of the fore Part Of the Thigh,  
all the Way to the Knee.

Some Os these Branches unite with those Ofthe NervuS Cruralisp  
some are distributed to the Integuments On the Inside Os the  
Thigh, and One accompanies the Crural Artery, Over One Branch  
Os which it runs in Form Of an Arch. . '

This Trunk sends Out Oftentimes another Branch, which unites  
with One from the third, and one from the fourth Pairs, into a  
particular Rope, which, pasting to the Obturator Muscles, is  
named Nervus Obturator.

Afterwards this Trunk runs downward, and, having given a  
Branch to the middle Ponton Of the Pfoas Muscle, joins theTnmk  
of the third Pair, and Contributes to the Formation of the Crural  
Nerve.

**THIRD PAIR OF LUMBAR NERVES.**

The Trunks Of the third Pair Of Lumbar Nerves go out be-  
tween the third and fourth Vertebrae of the Loins. Each Trunk

Communicates, above, with the second Pair , before, with the  
great sympathetic Nerve, and, below, joins **the** Trunk of **the**fourth Pair. . It sends a Considerable Branch backward, between  
the transverse Apophyses, which goes to the Vertebral and  
Other neighbouring Muscles.

Before it unites with the fourth Pain, it sends a considerable  
Branch downward, and, having received a communicating Branch  
from the second Pair, unites with One from the fourth Pair, and  
forms the Obturator Nerve.

It detaches, likewise, another large Branch, which runs down  
between the Musculus lliacus, and Psoas, and joins the Crural  
Rope On the Outside Of the lower Part Of the Muscle last  
named. It may be reckoned a sort Of NervuS Accessorius to  
the Cruralis.

As the Trunk runs along the Pfoas, it gives Off Filaments both  
tO that, and to the Iliac Muscle, and sends down a Branch,  
winch passes under rhe Ligamentum Fallopii to the Musculus  
Pectineus , and, lastly, having joined a Branch of the second  
Pain, it unites with the fourth Pair, to form the NervuS Cru-ι  
ralis.

*a*

**FOURTH PAIR OR LUMBAR NERvEs.**

The Trunks Of the fourth Pair of Lumbar Nerves go Out  
hetween the fourth and fifth Vertebrae of the Leins; and  
each communicates, above, with the third Pair, and, be-  
fore, with the great sympathetic Nerve, of renames by two  
Filaments,

Each Trunk sends Branches backwards, to the Vertebral and  
neighbouring Muscles; and afterwards completes the Formation  
Of the Nervus Cruralis, together with the other Portions os the  
Lumbar Nerves.

From the same Place it sends Off a Considerable Branch, which,  
joining a Branch from the third Pair, and One from the second,  
forms the NerVus Obturator. . .

The remaining Part of the Trunk joins the fifth Pair of Lum-  
bar Nerves.

**NERVUS OBTURATOR.**

The .Obturator Nerve, formed in the Manner already de-  
scribed, runs along the inner lateral Part Of the Pfoas Muscle to  
the Pelvis, and goes out Of the Abdomen, at the upper Part Of  
the Obturator Muscles, and Foramen Ovale of the OS Innomi-  
naturn. . - - . . τ

τε AS it goes Ont, it supplies the Musculi Obtnratores, and Pectin  
neus, and is afterwards distributed by three principal Branches  
to all the Portions Os the Triceps; and sends other Branches be-  
tween these Portions, to the Gracilis Internus.

**. FIFTH PAIR OR LUMBAR NERVES.**

. The fifth Pair of Lumbar Nerves passes- hetween the last Ver-  
tebra Of the Loins, and OS Sacrum ; each Trunk communicating,  
above, with the fourth Pair, and, before, with the great sympathe-  
tic Nerve. It sends Branches backward to the Vertebral and neigh-  
bouring Muscles, and eyen to the Glutsei, and, aS it bends for-  
wards, it sends a small Branches to the Crural Nerve.

Afterwards the Trunk runs down On the Symphysis ofthe Os  
Sacrum with the OS Ilium, enters the Pelvis, and, having re-  
ceived a Communicating Branch from the fourth Lumbar Pair,,  
joins the Nervi Sacri, with which it forms a Plexus, that pro-  
duces the NervuS Sciaticus, the largest Nerve of the human  
Body, which is distributed to the lower Extremity.

**NERVI SACRI. . : -**

The Nervi Sacri are those which Come from the OS Sacnim,  
the principal Of which pass through the anterior Holes Os that  
Bone, the rest through the lateral Notches, at the Extremity Of  
that Bone, and in the OS Coccygis.

These Nerves are reckoned likewise by Pahs, of which there  
**are** Commonly fix; sour passing through the great anterior Holes,  
and two below them. ’ This Number is increased, when there  
**are** five Pairs of great Holes, and some Filaments pass, likewise,,  
through the posterior Holes.

The first Pair is very large, all the rest diminish gradually,  
and the last is very small.

Those which pass through the great Holes, unite together as  
foon aS they enter the Pelvis, and, together with the fifth Lum-  
bar Pair, form the great Plexus sor the Sciatic Nerve. They  
likewise send Branches backward, through the Membranes of **the**posterior Holes, to the neighbouring Integuments.

The Trunks, thus united, and interwoven with each other,  
give Off other small Branches, hesides the great sciatic Trunk;’  
and it will be proper to describe the most considerable’os these  
Branches, together with the inferior Nervi SaCri, before we be-  
gin with the Ramifications os the great Sciaticus. i

This Disposition resembles Very much that of the last four  
Cervical Pairs, and first Dorsalis, which are not Only interwoven

together, to form the Brachial Nerves, but likewise send Off  
many Branches from their Origin.

From this intertexture Of the Nervi Sacri, especially from **the**second Pair, a Branch goes Ont to the Vesiculae Seminales, Pro-  
state Gland, Uterus, Tubae Fallopianas, *etc.* Another Branch  
goes principally from the fourth Pair, partly to Places just named,  
and partiy to the Bladder, and Intestinum Rectum.

The same intertexture, and principally the third Pair, united  
in some Subjects with the second, in others with the fourth,  
**and** sometimes with both, produces a Branch, which goes out  
of the Pelvis Over the Ligamentum Fallopii, pastes on the In-  
fine of the Tuberosity, and inner Part *Of* the Os Ischium - and  
is distributed to the Corpus Cavernosum, to the Muscles there-  
Of in both Sexes, to the neighbouring Parts of Generation, and  
to the Sphincters Of the Anns.

The last two Pairs of Nervi SaCri are very small That  
*e* which goes Out immediately below the great Foramina, runs  
from behind forward, on each Side, between the Extremity os  
the OS Sacrum, and Ligament Of the OS Coccygis , heing dis-  
tributed chiefly to the Muscles Of the Anus, and neighbouring  
Integuments.

The next, or last Pain of Nervi SaCri, runs down almost di-  
rectly from the Extremity Of the Canal of the Os Sacrum, and  
is likewise distributed to the Anns and Integuments.

From the Extremity Of the Plexus of all the Nervi SaCri,  
immediately hefore the Formation Of the great Sciatic Rope, a  
Branch goes Out to the Glutaens Medins and Minimus. Another  
goes Out posteriorly, which is distributed partly to the Muscles  
of the Corpus Cavernosum, and partly tO the Glutaeus Maxi-  
mus, and neighbouring integuments, by several Filaments, which  
reach as far as the Ham.

**NERvUs CRURALIS.**

The crural Nerve, formed by the complicated Union of **the**Trunks Of the first, second, and third Pairs Of Lumbar Nerves,  
and of a Portion Of the fourth, sometimes increased by a Branch  
Of the fifth Pain, passes under the Ligamentum Fallopii; and  
goes , out Of the Abdomen, On the Outside of the Crural Artery,  
which lies between this Nerve and the Crural Veins

As it goes Out, it is divided into several Branches, some of \*  
which are detached from its Union with the Ramus Acceffo-  
tins Of the third Pair, but the greatest Number Roes from the  
Trunk itself.

The Branches which go from its Union with the Nervus  
’Accelsorins, run down On the fore Side Of the Thigh 5 and, having  
reached the Middle Of the Musculus Sartorius, they follow its  
Course, and are spent On the Integuments Of the fore and inner  
Parts Of the Knee.

The most anterior Branch pastes on the Fascia Lata, or Apo-  
. neurosis Cruralis, forming cutaneous Nerves, all the Way to  
the Knee.

.. - The internal Branch tuns along the Tendon of the Sartorius,  
in the same Manner, all the Way to itS Insertion in the Tibia,  
where they are spent on the Integuments; and some of them  
go to the inner Ankle, and Convex Part Os the Foot.'

- Afterwards the Crural Rope divides into a great Number Of  
Branches, which, in their Course downward, are distributed to the  
anterior Muscles, the Rectus,Vasti, and Cruralis; giving Rami-  
fications in their Passage to the Triceps, SaItorins,GraCilismternus,  
and Semi-tendinosnS.

It likewise gives Off a Branch, which runs down interiorly he-  
tween the Sartorius and Triceps, in the same Course with the  
Crural Vessels, aS far as the Middle of the Thigh.

Afterwards it runs near the Integuments, behind the Sartorius,  
to which it gives several Filaments, and Continues this Course  
all the Way to the insertion of that Muscle.

. Having reached the Tibia, it lies near the Vena Saphena, and  
follows the same Course with it, as far as the inner Ankle, where  
it detaches a great Number Of Cutaneous Filaments. -

Lastly, it ends by Ramifications, On the inner and upper  
Part of the Foot ; where one Of the most anterior Ramifica-  
Irons adheres very Closely to the Saphena.

**NERVUS SCIATICUS.**

The great sciatic Nerve, being formed, aS has been already  
said. Or, as it sometimes happens, from the last two Pairs Of  
the Lumhares, and first three Pairs Of the SaCri, runs Obliquely  
backward, under the great Sinus of the OS Ilium, and under  
the Mufculus Pyrisormis.

It goes this Way, Out Of the Pelvis, Pasting between the Py-  
risormis, and superior Gemellus; and then running On the fore  
Side Of the first Of these Muscles, and presently afterwards be-  
hind the two Gemelli, and Quadratus Femoris, It gives Fila-  
ments to each Of them.

It runs down, in the next Place, between the Tuberculum  
Ischii, and the great Trochanter, along the inner and posterior  
Part Of the Thigh, between the Museulus Biceps, and Semi-

nervosus, as far aS the Hollow Of the Poples, a little nearer to  
the internal Condyle, than to the external, giving Ramifications  
in its Passage to all these Muscles, and to the Triceps, and di-  
minishing gradually in Size, aS it descends.

AS It goes Out Of the Pelvis, it gives out a Branch, which  
passes between the Portions Of the Ligamentum Sciaticum, to  
the Anns, Petinaeum, Parts Of Generation, *etc.* And this Branch  
joins a Ramification, from the third Pair of the Nervi SaCri,  
which goes tO **the** same Parti.

AS it pastes between the Tuberosity of the Ischium, and the  
great Trochanter, it produces two Branches, One Of which is  
spent On the Glutaeus Maximus, the Other divides into two,  
for the Other two Glutaei.

Below the great Trochanter, where It may he termed NervnS  
SciaticO-cruralis, it sends back a Branch, which runs down with  
the sciatic Vein, and is distributed to the Integuments, aS low  
aS the Middle Os the Calf Of the. Leg, and sometimes lower to-  
ward the Outer Ankle.

- The sciatic NerVe, having reached the Harn, is Commonly  
called Nervus POplitenS, and begins to' be divided into two  
Branches, which Ion, at first, very close to each Other, hetweeti  
the Extremities Of the Biceps, and Semi-nervosus; and af-  
terwards separate gradually, passing behind the Condyles Os the  
Os Femoris, between **the** Iuperior Extremities Of the Gastro-  
Cnemii.

The innermost of these two Branches is very large, the outer-  
most not so large. They are distributed to the whole Leg, and  
through this Course» they may he termed Nervi SciatiCO-ti-  
biales.

The large Branch of the SCiaticO-Cruralis, or Cruralis Inters  
nns, winch may likewise be termed Popliteus Intemus, Inna  
down hehind the Musculus Popliteus, on One Side of the Ti-  
bialis Gracilis, commonly called Plantaris; and between **the**two GastrOCnemit.

- Afterwards it pierces the upper Extremity of the Soleus, **and**runs down hetween this Muscle, and the great Flexors of **the**Toes, to the lower Extremity of the Tibia, near the inner  
Ankle.

- In its Passage, it sends small Branches to the Joint of the Knee, .  
to the Gastrocnemius internus, to the Other Muscles last-men-  
tioned, and to the Integuments all the Way down.

Besides these small Branches, it sends Off another more consider-  
able Branch towards its upper Part ὁ from which One Filament  
Etes to the Tibialis Posticus; another perforates the Interosseoda  
igament, and is distributed to the upper Part of the Tibialis  
Anticus,

Soon after this, it detaches, externally, a long Branch, which  
runs down On the back Side Of the Leg, hetween the Integu-  
ments, and external Gastrocnemius, on one Side of tha Vena  
Sciatica, Or Saphena externa.

This long Ramification joins a Branch of the Scisticus exteratis  
minor, sends Off Filaments toward each Side, through its whole  
Course; and having supplied the Tendon of *Achilles,* pastes be-  
hind, and under the Outer Ankle

This Branch passes afterwards on the Outside of the Foot,  
where it is distributed to the Integuments, and neighbouring  
Muscles, and terminates on both Sides Of the little Toe; and  
on the Outside Of the next Toe.

The sarge sciatic Branch, Or Sciatico-tibialis, having given  
off these different Ramifications, passes behind the inner Ankle,  
through a particular annular Ligament, and runs downward to  
the great lateral Sinns Of the Os Calcis, passing first between  
that Bone, and the Musculus Thenar, and then hetween it, and  
**the** posterior Insertion Os the Flexor Digitorum Brevis.

At this Place, having first sent small Filaments to the neigh-  
bouring Parts, it divides into two Branches, named Nervi Plan-  
tares, one internal and large, the Other external.

The Nervus Plantaris Intemus is distributed to the Foot,  
much in the same manner as the Radial Nerve to the Hand.  
It runs first along the Inside of the Sole Of the Foot, and sends  
Filaments to the Thenar, Flexor Digitorum Brevis, and to **the**Musculus Lumbricalium Accessorius.

Afterwards it sends Out four Branches co the lateral Concave,  
**or** lower Parts Of the first three Toes; and to the nearest la-  
teral Part Of the fourth Toe. The first Branch goes to the In-  
side of the great Toe. The second divides into two, for the  
Corresponding Sides of the great Toe, and the second. The  
third, heing bifurcated in the same Manner, goes to the second  
and third Toes ὁ and the fourth, to the third and fourth Toes.

These Nerves Communicate on each Side, at the Extremi-  
ties of the Toes, and, in their Passage, give Filaments to **the**Musculi Lumbricales, Interossei, and the neighbouring Ligaments  
and Integuments.

The external Plantaris passes between the Musculus Lum-  
bricalium, Accessorius, and the Flexor Digitorum Brevis, giv-  
ing Filaments to these Muscles, to the interossei, and to the  
Hypothenar Miniim Digiti, and afterwards it divides into two  
Branches,

The first Branch runs in the interstice between the two last  
Toes; and being divided, goes to the corresponding lateral Parts  
of both. The other Branch goes to the inferior, external, late-  
ral Pan of the little Toe.

During this Course, the external Nervus Plantaris supplies  
the Aponeurosis Plantaris and the Ligaments and Integuments,  
in the fame manner as the rest.

The small soiatio Branch, or Scisticus externus, called, like-  
wise, Sciatica-pcronaeus, runs outward over the Head Of the  
Fibula, and is divided into several Branches, of which three or four  
are. considerable, one posterior, 0ne superior and anterior, one  
internal and anterior, and one external and anterior.

- The posterior Branch runs down between the Integuments and  
the Fibula, as low as the cuter Ankle, and terminates in the  
Outside of the Foot, having sictached several cutaneous Fila-  
ments in its Passage.

About the Middle of the Fibula, it sends out a small Branch,  
which joins another Branch, from the large or tibial Branch of  
the fciatic Nerve, and is distributor together with is, as was  
hesore observed:

The posterior Branch of the sinall sciatic Branch, having  
reached the outer Ankle, tubs up a little Way on the Foot, to-  
wards the Root of the fourth Toe, where it divides into two  
smaller Ramifications.

One of these Ramifications divides into two others, for the cor-  
refponding lateral Parts of the third and fourth Toes; the other  
goes to the external, lateral Part of the fourth Toe; where it  
joins a Branch of the external Nervus Plantaris, which is distri-  
buted to the last two Toes.

After heving rent off the posterior Branch, the small sciatic  
Branch runs outward over the Head of the Fibula; add,having  
given fome Filaments to the Gastrocnemii and Soleus, it runs  
across the upper Extremity of the Perornetis Posticus, from he.,  
hind forward.

Afterward it pastes between the Bone and the Mufcle last  
named, and fends several Filaments forward to the neighbouring  
Parts; and then produces three or four Branches already mention-  
ed, which are distributed in the following Manner.

The superior and anterior Branch runs a hide traofverfely be-  
tween the Head Of the Fibula, and the upper Extremity of the  
Extensor Digitorum longus; and, having given Filaments to this  
Muscle, and to the Extensor Pollicis longus, it is distributed  
to the upper Extremity of the Tibialis Anticus, giving Fiiaments  
to the neighbouring Integuments.

The inner anterior Branch runs down on the fore Side of the  
. interosseous Ligament, between the Extensor Pollicis Longus,  
and Tibialis Anticus, giving Filaments to each Of there Must  
des.

It passes afterwards under the annular Ligament of the Ex.  
. tensor Muscles, behind the Extensor Pollicis, to the upper Part  
of the Foor, under the Extensor Digitorum Brevis, in its Pas-  
sage it gives Filaments to that Mufcle, and to the first sirpe,  
rior Interossei.

. Having communicated, by a Filament, with the external an-  
terior Branch, it is spent on the corresponding lateral Parts of  
the first two Toes.

The external anterior Branch of the sinall sciatic Branch  
runs down betwixt the Fibula and the PerorDeus Longus, and  
then between the Peronatus Medius, and Extensor Digitorum  
Longus; to which, and to the neighbouring Ligaments, it gives  
Filaments all the Way to the upper Side of the Foot.

In this Courfe, having run along about two third Parts Of  
the Leg ; and having reached the great, annular Ligament, it  
rains forward, and toward the integuments, being there divided into  
two Portions; one of which goes to the great Toe; the other  
to the last Toes.

The first Portion of this Branch gives *t* Nerve to the in-  
ternal, lateral Part of the great Toe, and is afterwards distri-  
buted to the neighbouring integuments, on the convex Side of  
the Foot; and, lastly, to the corresponding lateral Parts of the  
great and second Toes.

The other Portion, which goes to the last Toes, is, first of  
all, joined to a Filament of the first Portinn; and afterwards  
to another, from the internal anterior Branch.

' After this Union, they are presently divided, and distributed  
to the last two Toes, and to the Integuments. One Filament,  
arising from this Uninn, joins a Branch belonging to the grear  
sciatic Branch.

**NSRVI SvMiATHSTICI MAXIMI, VVLGO ItiTERcosTALES.**

It is rhe common Opinion, that each of the great sympa-  
thetic Nerves begins by a Filament from the sixth Pan, be-  
longing to the Medulla Oblongata, and by two Filaments from  
the fifth Pain; and that there Filaments, at first, compose a  
very small Nerve, which runs backward to go out of the Cra-  
nium, through the bony Canal of the Apophysis Petrosa, and  
increases gradually in its Course downward.

' Ent, having examined attentively the pretended Origin of these

Filament-, they seem to me, rather to aseend from the Easts os  
the Cranium, with the internal Carotid; and to run from be-  
hind forward, ro join the fifth and sixth Pairs; and I find the  
Angle formed by this Union to be rained forward; and, with-  
al, so very acute, that these Nerves cannot be looked upon as  
Recurrents.

. As 1 have ever found this Angle disposed the same Way, in  
all the Subjects which I have dissected; I have always been Of  
Opinion, that whet had heeo taken for the original Root, and  
descending Stem, of the Nerve called Intercostalis, was really  
an ascending Branch thereof; which, as it eaters the Cranium,  
is divided into Filaments, by which it becomes closely united  
with the two Pairs already named.

The Observation, communicated to the Royal. Academy, by  
*Dr. Petit,* concerning the different Size of the Portions of the  
sixth Pair, appears to he indisputable, he having found this  
Nerve larger on the fore Part, between the Filament of the  
fiippofed intercostal, and the Orbit, than on the back Part, her  
tween the fame Filament, and the Origin of the sixth Pair; and  
bis Experiments, concerning the real Co-operation of this Nerve  
in Vision, farther confirm his Observation.

Thesis Nerves, as I hevefaid, are commonly called interco,  
stalos, though this Name does not agree, either with their Si-  
tuition, or with the Extent of their Course. Therefore, I be-  
lieve, the Name of Sympathetici Majores, Or Maximi, will be  
more proper, because of their frequent Communications with  
almost all the other principal Nerves of the Body.

’ The Situation of these two Nerves, in general, is on the Jar  
teral Parts of the whole twenty-four Vertebra, immediately be-  
fore the Roots Of rhe transverse ApophyfeS; and, likewise, on  
the . lateral Parts of the Inside of the Os Sacrum.

Through this large Extent, they appear like two Ropes di-  
vrded, and, in a manner, intersected, at different Distances, by  
a great Number of Gangliform Tubercles; by means os which,  
they communicate backward, with the Ganglions of the Me-  
dulla Spinalis, by short collateral Filaments; and produce, for-  
ward, all their particular Ramifications.

These Ganglions differ in Size, Colour, and Consistence;  
and may be looked upon as fo many Origins, or Germina, di-  
spersed through this great Pair of Nerves; and, coofequently,  
as fo many little Brains.

We shall consider these Ganglions in the same Manner as  
we did the Vertebral Nerves, as divided into Cervicalia, Dor-  
filia, Lumbaria, and Sacra, without pretending to determine  
the Number contained in each Class. -

The first Cervical Ganglion is the most considerable in Size,  
but not in Consistence, representing a soft Oblong Tumor, Of  
the Figure of an Olive, and situated longitudinally before the  
Root of the fransverfe Apophyses Of the first three Vertebrie,  
immediately hebind the - Pharynx.

lt produces, from its superior Extremity, a sinall soft Nerve,  
which runs up with the internal Carotid Artery, of the same  
Side, into the bony Canal of the Apophysis Petrosa.

At its Entry into this Canal, it is divided into several plexi-  
sorm Filaments, which, at that Pisce, surround the Carotid Ar-  
tery, and accompany all the Incurvations thereof, till it enters  
the Craninm. They adhere very closely to the Artery; and  
both they, and their Trunks, are very tender, having oftentimes  
neither the Colour nor Consistence of nervous Filaments; for  
they are redish, and sometimes, in a manner, mucilaginous. We  
must not mistake, for these plexiform Filaments, some lacerated  
Portions Of the Dura Mater, which line this bony Canal.

Among there Filaments, there are two Or three principal  
Ones, which appear to be Only a simple Division Of the Trunk ;  
and which, as they enter the Cranium, unite again into a small  
Trunk, more solid then the former. The small superior Trunk  
is immediately afterwards divided into Filaments, one of which  
is united to the Nerve of the firth Pair; the rest join the fifth  
pair, as has been already said. The Filament, which goes to,  
the sixth Parr, is commonly single; but I have sometimes found  
is double, or divided all the Way to the Union.

Immediately below the inferior Orifice of the bony Canal Of  
the Apophysis Petrosa, and thence all the Way down to the  
occipital Condyle, on the same Side, or to the Top Of the first  
Ganglion, the small ascending Trunk is a little stronger, and not  
altogether so soft, as it is in the Canal.

The first Cervical Ganglion is of a middle Consistence, and  
adheres very closely to the Trunk of the eighth Pair, or Ner-  
vus Sympatheticus Medius, by numerous, small, communicat-  
the Filaments.

It likewise communicates on both Sides, by short Branches,  
with the ninth and tenth Pairs of Nerves, of the Medulia Ob-  
longata; with the first, second, and sometimes the third Cervi.  
cal Pairs; and also with that Branch, which the eighth Pais sends  
Io the Pharynx.

In its Passage, st gives Filaments to the Pharynx, to rhe sinall  
neighbouring Mufoles, and to the Carotid Artery, from which  
it receives Very sine capillary Vesseis, which are plainly visible in

inflammations; and seem to form a Curious Net-woik, with  
the nervous Filaments.-

Lastly, it sends downward a Very long nervous Filament,  
which runs in the Thorax, and joins Other Filaments, of which  
hereafter.

This Ganglion terminates below, in a small Rope Or Trunk,  
winch runs down On the anterior Vertebral Muscles of the Neck,  
in the same Course with the eighth Pair, and the Carotid Ar-  
tery of the same Side ; to both which it is connected by mem-  
branous Expansions, aS by a kind Of Vagina, all the Way to  
the last Vertebra Of the Neck, in this Course, the descending  
Trunk communicates On the Outer, or back Side, with the third,  
fourth, fifth, and Often with the sixth Cervical Pairs, by short  
Branches, more Or less Oblique ὁ by which it seems to he gra-  
dually increased in Size

At the Places Of these Communications we Observe small  
Ganglions in this Trunk, which, howeVer, in some Subjects,  
are scarcely perceptible; and it is Very difficult to determine,  
by which Extremity these Branches arise, and by winch they  
are inserted.

On the inner, hr fore Side, thiSTrnnk gives Off two Or three  
Filaments, which run Obliquely downward, toward the Afpera  
Arteria, into the Thorax. Another Filament goes off, below  
the first Cervical Ganglion, which pastes On the fore Side of the  
Carotid Artery, and joins a Filament Of the eighth Pair, with  
which it forms a small distinct Rope.

This small Rope runs before the Subclavian Vein, and, lower  
down, joins another Filament, which arises behind the Suhcla-  
vian Artery, and runs down in the Manner hereafter to he ex-  
plained, sending Off Filaments in its Passage to the Oesophagus,  
and neighbouring Parts.

The Trunk, having reached aS far as the last Vertebra Of the  
Neck, forms a small Ganglion, Called Ganglion Cervicale infi-  
mum, which is pretty solid, and sometimes double.

Presently afterwards, the Trunk turns from within Outward,  
towards the Root Of the first Rib, behind the Subclavian Ar-  
tery, where it forms a pretry large Ganglion, which is the fust  
Of the Thoracica, Or Dorsalia.

These two last-mentioned Ganglions are very near each Other,  
heing separated Only by a Very short Portion Of the Trunk,  
which is sometimes double, and forms a kind Of small Plexus,  
behind the Subclavian Artery. \*

From the fore Part Os the lowest Cervical Ganglion, a small  
nervous Rope goes Out, which runs before the Subclavian Ar-  
tery, hends immediately downward, and ends in the Top of the  
first Dorsal Ganglion, forming, by this Course, a sort Of ner-  
vous Arch, which incloses the Subclavian Artery.

These two Ganglions Communicate by short Branches, more  
or less oblique, with the neighbouring Vertebral Nerves, that is,  
with the sixth and seventh Cervical Pairs; and sometimes with  
the fourth, by a long descending Filament. The first Dorsal  
Ganglion, Communicates, likewise, with the first Dorsal Pair of.  
Nerves.

The lower Cervical, and sometimes the first Dorsal Ganglion,  
sends down a Communicating Filament, to the recurrent Nerve  
os the eighth Pain; and from this Union a Filament is detach-  
ed, which passes behind the common Trunk Of the Axillary.  
and Carotid Arteries, joins another Filament from the eighth  
Pair, and Contributes IO the Formation Of the Plexus Pulmo-  
naris

From the small plexisorm Portion Of the Trunk, which  
joins the last Cervical, and first Dorsal Ganglions, behind the  
Subclavian Artery, a particular Filament goes Our, which unites  
the small Trunk, Common to the great Sympatheticus, and to  
the eighth Pair, and runs down hefore the Subclavian Artery,  
and, together with this.Filament, Composes the Plexus Cardia-  
cus.

On the Right Side, this Filament runs down to theRioht Ven-  
tricle Of the Heart, and then between the Aorta, and Arteria Pul-  
monaris, where it communicates with some Filaments, from the  
Left Recurrent Of the eighth Pair.

On the Left Side, a Filament goes Out from the last Cervical,  
. and another from the first Dorsal, or Thoracic Ganglion, which  
unite together, to form a kind Os Arch; in which, however,  
nothing is contained.

From this Arch, a Nerve goes Ont, which runs down be-  
tween the Curvature Os the Aorta, and the Lest Branch Of the  
pulmonary Artery, where it Communicates with a Filament Of  
the eighth Pair, and forms a gangliform Plexus, with the like  
communicating and united Filaments from the Right Side.

From this gangliform Plexus, which may be looked upon aS  
the Origin Os the Plexus Cardiacus Superior, a great Number  
Os Filaments run down, over the Trunks Of the great Blood-  
vessels, and over the Adricles and Ventricles Of the Heart.

The chief Of these Filaments run in the cellular Substance,  
behind the Aorta, Or between that and the Trunk Of the pul-  
monary Artery, where they are divided into a great many small  
Nerves,' which run before and behind the Aorts, to the Basis  
- and Auricles Of the Heart.

The Filaments that run down from the Trunk itself, between  
the first and last Cervical Ganglions, are united and interwoven ’  
in the Thorax with the Filaments Common to the last Cervical  
and first Dorsal Ganglions, and thus contribute to the Forma-,  
tion Of the Plexus Cardiacus, and some Part Of the Plexus Pul-  
monaris.

The long Filament of the first Cervical Ganglion Contributes,  
likewise, to these Plexus. It runs along the inline Of the Trunk,  
and then unites with the Filaments of the last Cervical Ganglion,,  
the first Dorsal Ganglion, and the great Recurrent Nerve.

From all these Conjunctions, a particular Nerve is formed in  
some Subjects, winch meets like a Rope from the Other Side he-,  
hind the Aorta, and forms, together with that, a kind Of sub-  
Ordinate Trunk about a Finger’S-breadth in Length, which sends  
Ont, on all Sides, several Filaments, that are distributed to **the**neighbouring Parts. \*

From the first Dorsal Ganglion, the Trunk runs down On the  
fore Side Of the Heads and Necks Of all the Ribs, Over the arti-  
cular Ligaments, by which they are tyd to the Vertebra\*. On  
the last false Rib, it bends a little toward the BodIes-of the Ver-  
tebrae.

In this Course, the Trunk forms a small Ganglion between  
each Rib, and Communicates backward by two short Filaments,  
more or less Oblique, with the Corresponding Dorsal, or Costal  
Nerves.

Of these two Communicating Filaments, one is more oblique,;  
and often smaller than the other ; one tuns backward, towards  
the nearest Ganglion of the Costal Nerve;. the Other runs for-  
ward on the Head Of the Rib, IO the Trunk of the great Sym-  
pathetic Nerve *; and,* for this Reason, One Os these Filaments  
appears to he more anterior, and longer, than the Other.

Having reached about Half-way between its entry into **the**Thorax and the last Vertebra of the Back, this Trunk fends Coin-  
mOnly five Branches Obliquely downward On the lateral, and **a**littie toward the anterior Part Of the Bodies of the Vertebrae.

The first four Branches come commonly from the fifth, sixth,  
seventh, and eighth Thoracic Ganglions, and the fifth arises from  
several Of the following Ganglions. The fnst is the longest, and  
the last the thickest.

All these Branches approach each Other gradually in their De-  
scent, as far aS the last Vertebra of the Back, where they unite  
into one large, short. Collateral Rope, which pierces the upper  
lateral Part of the lower Muscle of the Diaphragm, sending some  
Filaments to the upper Side.

Having got below the Diaphragm, and given Off some Fila-  
ments to the lower Side Of that Muscle, this great Trunk pro-  
duces, behind the Glandulas Renales, a kind Of irregular Ganglion,  
of a Curve Oblong Figure, Called, *Ganglion five Plexus Semilu-  
naris.*

The Convex Side of this semilunar Plexus, Or Ganglion, is  
turned Obliquely backward and downward , the Concave Side  
forward and upward, one Of its Cornua heing tamed upward,  
the Other forward , so that the inferior Cornua Of the two Gan-  
glions on each Side are turned toward each Other.

These Ganglions, On each Side, Communicate together, be-  
hind the Stomach on the Cceliac Artery, and likewise with the  
eighth Pair, Or NerVuS Sympatheticus Medius, principally by  
means of the Nervus Stomachicus posterior, belonging to that  
Pair.

From the reciprocal Communication Of these two Semilunar  
Ganglions, a kind of middle Plexus is formed, which partiy sur-  
rounds the Coeliac Artery, and is Partiy spent on the Mesocolon.

The Semilunar Ganglion, on the Right Side, together with **a**large Portion Of the Plexus Coeliacus, and some Filaments Of the  
Plexus Stomachicus, forms a particular Intertexture, Called Plexus  
Hepaticus. ' .

This hepatic Plexus, having Communicated with some Fila-  
ments of the diaphragmatic Nerve, produces several Filaments,  
which surround the hepatic Artery, and Vena Ponse, in form Of  
a reticular Vagina, and accompany the Branches of these Veffeis  
thro' the whole Substance Of the Liver. The hepatic Plexus sup-  
plies, likewise, the Vesicula Fellis, Ductus Bilarii, Duodenum,  
Pancreas, and Glandulae Renales.

The Left Semilunar Ganglion, formed by theanterior or Collate-  
ral Trunk Os the Left Side, produces several Branches, which form  
the Plexus Splenicus, nearly in the same manner as has been  
already mentioned.

This Plexus Splenicus, having communicated with the Hepati-  
cus, and, by the intervention Of the Plexus Stomachicus, with  
the eighth Pair, surrounds the Splenic Artery, supplies the Pan-  
creas, and is distributed to the Spleen.

This Left Ganglion is sometimes accompany'd by another,,  
which gives Filaments to the Spleen.

each semilunar Ganglion sends Branches from its convex Side,  
which, being joined to the Filaments os the first Lumbar Gau-  
glions, form an intertexture, called Plexus Renalis, which sur-  
rounds the Renal Artery; is distributed to the Kidneys, and  
Glandulae Renales ὁ and sends out a Filament, which accompa-  
nies the spermatic Vessels/

This Renal Plexus concurs, likewise, with the Semilunar Gan-'  
glion in the Formation Of the great mesenteric Plexus ; and com-  
municates, by several Filaments, with the Plerus Coronarius  
Stomachicus.

The Right Renal Plexus Communicates particularly with **the**Plexus Hepaticus, and the Left with the Splenicus; and each of  
them, by two Filaments, with the true Trunk on the Side of the  
first two Vertebrae of the Loins. This Portion Of the principal  
Trunk is Commonly called the inferior Rope Of the intercostal  
Nerve.

The Right and Left Semilunar Ganglions send nervous Fasci-  
culi tO each Other, winch, by a particular Intertexture, form a  
" kind Of flat Ganglion, Or Plexus, immediately under the Dis-  
phragtn, before the Articulation ofime last Vertebra Of the Back  
with the first of the Loins. .

From this plexiform Union, called commonly Plexus Solaris,  
several Filaments are detached in a radiated manner to the Meso-  
Colon, and Mesentery , and some Of them go, likewise, to the  
Diaphragm. A great Number Of Other Filaments go, likewise,  
from it, which, with the Ramifications thereof, form a kind Of  
nervous Capsula, Or Vagina, round the superior mesenterirfAr-  
tery, and round all its Ramifications on the intestines, and supply  
. the mesenteric Glands. This is termed Plexus Mesentericus su-  
perior, which comes principally from the Filaments OfthePlexus  
Hepaticus and Renalis Of the Right Semilunar Ganglion.

The superior mesenteric Plexus sends down from its Origin,  
along the Aorta, and behind the descending Poreion of'the Meso-  
colon between the superior and inferior mesenteric Arteries, **se-**veral Filaments, or nervous Fasciculi, differently interwoven, from  
which a nervous Vagina is, likewise, formed, that shrrounds the  
inferior mesenteric Artery, and its Ramifications on the intestines.  
This has been named Plexus Mesentericos Inserim. - '

The descending nervous Fasciculi, between the two mesenteric  
Arteries, which maybe named Mesenterici Posteriores, receive ;some communicating Filaments from both Plexus Renales, and,  
likewise, communicate with the Trunk osthe great sympathetic  
Nerve,'by Filaments which run down -Obliquely ftomtbe Lum- l  
her Ganglions. Afterwards they detach a Filament On each Side,  
which accompanies the spermatic Vessels?‘ ῖ ί '' 1

The Fasciculi Mesenterici Posteriores, having produced-the  
.. Plexus Mesentericus Inferior, send-Other Filaments downward.  
Over the Extremities Of the Aorta, behind-the inferior Curva- '  
ture Of the Colon: ' . . :.ἄκ..δ : -

These inferior Fasciculi, Or Filaments,: adhere strongly to the  
. neighbouring Parts of the Peritonaeum, and, together with'other  
Filaments from both Sides Of the Trunk, form a third Plexus,  
which may be called Infra-mesenteriCuS,.or Hypogastricus. - q'

This hypogastric Plexus, at the Extremity of the last Curvature  
of the Colon, on the fore Side of the last Vertebra of the Coins,  
is divided into two fiat Ganglions, which surround the Beginning  
. of the intestinum Rectum backward, to which they are after-  
wards distributed, and, also, to the Bladder and to the spermatic  
Vessels; and, having -communicated by lateral Filaments 'with  
each Trunk Of the great sympathetic Nerve, they send Filaments  
**to**-all the Parts contained in the Pelvis. '..se ..’so

The Trunk Of the great sympathetic Nerve, haying detached  
the five Branches, which form the collateral Rope, becomes much  
smaller, and, having reached the eleventh Vertebra of the Back,  
it'approaches the ’collateral Trunk, and 'perforates the inferior.  
: Muscle Of the Diaphragm: ' . ' \ .si ' si)

Afterwards it runs more forward-on the Bodies of theWerte-  
‘ bras, and increases by the Addition os Filaments, from the last  
twoDorsal Pairs os -Nerves: ". 7 *l.*

It runs down hetween- the Psoas, and neighbouring.Tendons  
of-the small Muscle of theDiaphragm, On the lateral Parts of the  
Vertebrae LumbareS, and anterior Side of the Os Sacrum.. *- ’A ;'*

At this Place the Right and Lest sympathetic Trunks approach  
each other, and at the Extremity of the'OS Sacrum they form  
**a** Communication, in the manner Of .an inverted Arch.

In its Passage, each Trunk receives Commonly two Filaments  
from each Ganglion of the-Nervi LumbareS and Sacri and like-  
wise forms small Ganglions hetween each Vertebra, which send  
some Filaments to the neighbouring Parts, and Others whichcoin-  
rnunicate with the Fasciculi of the Plexus Mesenterici.- .

The Pairs Of Filaments which Come froth the first two or three  
Lumbar Ganglions, nin a little downward, but the following run  
- gradually upward, and It\* Ought to he Observed, that capillary  
Blood-VestelS are discernible between and upon the Filaments Of  
each Pain ' τ ' ...

The.inverted Arch, or inferior Union, Of the two Trunks  
gives off? together with the two lowest Nervi Sacri, several Fila-  
mentSto the Rectum, Anus, and Muscles of the Coccyx. ;

Lastly, the great sympathetic Nerve, from the first Vertebra  
of theNeckto the Extremity Of the OS Sacrum, Communicates  
by Filaments with all the Vertebral Nerves, aS has heen already  
said ; but it must be observed, that in-the Thorax these Com-  
municating Filaments are Very small and stender, where the sym-  
pathetic Trunk is largest; and that, below the Diaphragm, they  
. are stronger, because there the Trunk diminishes, especially On

the Os Sacrum, where It is Very small. The same thing is *to  
be* observed Concerning the Ganglions of the Trunk, the «first  
Cervical Ganglion only ercepled. See SPIRITUS.

NERVINUS. Nervine, or nervous,

NESIS, νῆσις. From νέω, to accumulate ; an Accumulation  
of Humours, inducing a Disease. *Hippocrates de JLocis in Homine.*

NESTIS, νῆστις. *TheTnteflsitutn Joyununr. RuffttsEphcs.de'  
Appellat. Part. Capp. Humitn. Lib. 1. Cap. 2.I.. ss .*

NET, Or.NETA. The same as GALIA MOSCHATA. *N.  
Mgrepsus, Sect.* io. *Cap.* 73..

NETOPON, νέτωπον, according to *Hes.ycbios,* is an Oint-  
ment composed of many Ingredients, and is Otherwise called. .  
ν-τα'πιον, *Hetopion. Foesius says* it was a fragrant and costly Oint-  
mens, consisting of a Mixture os many Kinds of Spices; suchi  
were the Ointments in Ufe among the delicate *Boman* Ladies ; for  
instance, the *Unguentum spicatum, foliatum. Corn agentem,* and i  
*Susinum.^* We find frequent Mention made of νέτωπον, in *Hopes .  
pocratests* Books of Womens Diseases, where it is prescribed,  
among Other sweet-scented Things, in Affections Of the Uterus.

' And, in the fifth and seventh Books os the Epidemics, we readsi  
thatNetopon was infused into the Fars, for the Cure of Deafness ; '

; for which Purpose was used, in the same manner, .Amaracinum,  
the best Sort of Nardinum, and Other Sons of eas, which were,  
qualified, by their Tenuity and Heat, for cutting and discussing .  
the gross and viscous Humours, which were the Occasion 6f the  
Disorder. Νέτωπον seems to he the same which *Erotian* calls ’  
*kiaerov, Neopon,* and expounds by Oil Of bitter Almonds, bur';  
νέωπον no-where Occurs in *Hippocrates,* and we ought, 'doubtless,  
to read νέτωπον, or μετώπιον *(Metapionsp* for Metopion is fre-...  
quentiy put for Oil Of Almonds, aS well aS for *Unguentum ASgypo .  
tiumssu .sa c. - -*

NEUR. ., .νευράς. Α Name for the *Poterion,* a Species of  
**TRAGACANTHA.** *JDioscorides, Libsqu Cap.* **I7.'**

NEURO CHONDRO DES, νευροχονδρῶδες, from νεῦραν, a .  
Nerve; and χονδρος, a Cartilage. Ah Epithet for a Ligament,  
partly cartilaginous, and partly membranous. \*

NEORODES. Nervous. \* \*

NEUROLOGIA. A Description Os the Nerves:  
NEUROMETERES. . The same as NEPHRoMETEREs.  
'NEURON, νεῦραν. A Nerve. ' The Signification of the’  
Word *Nerve js* extended, by the antient Physicians, to all those  
Bodies which are exanguions, white, and Void Os Cavities. To ,  
this Purpose are the Words Os *Galen, Corn.* I. *in 6 Epid, reda .  
yigkiaywm,* &c. “ There are in Animals three Sorts Of similar

Bodies, which appear to he exanguious, and Void of Cavity,  
“ One proceeding from the Bones, another from the Brain and  
\* Spinal Marrow, and a thirst from the Muscles: The first is ..  
“ nsuallyscalled by *Hippocrates* ^υνδεσμὰς *(Syndefoeos,* a Liga-ss.  
" ment); the second νεῦρὶν (Neuron) and τονος *(Tortus),* and the i  
dur last *Torsm.serenon,* a Tendon). But some call them all *Herves, so*U On account of that Similitude which, aS I said, there is be- .  
U tween them, giving to the first Sort the Epithet os (2υνδετικὸς,  
u (ligatory), to the second, those of άισθητικός *saisiketicos,* sen-  
sory) and προαιρετικὸς *(proaireticos,* Voluntary, or subservient  
to the Will , in Motion) , and the last they Comprehend tinder  
theWord αθτονευ'ρωσις *(Aponeurosis).” : sso ---- -*

'. NEUROTICA. Nervous Medicines. *Dsancard.*NEUROTOMIA. An anatomical Dissection Of the Nerves? .  
NEUROTOMUS. -A Person who dissects the Nerves.

NEUR0TROTO6. νευραἼρωτος, from νεῦραν,.κ Nerve, and  
γίτρώσχω; to wound. A Person who labours under a Wound . \_  
Or Puncture of a Nerve/ - ' \* . - -

NEUTER. Neutral. As neutral Salts have Of late acquired  
a Considerable Reputation in Medicine, and aS they ate not com-  
rnonly. understood, it will be Of some Importance, in this Place,  
to specify their Nature, andinedicinalWirtneS.

*‘ As* Salts Of various Kinds are the principal Foundations Of Diss

eases, so-there are no Medicines of greater Efficacy, both in pre-  
venting-and-chring Diseases, than Salts*; some of* which Contri-  
bute to produce salutary Effects in One manner, and Others in  
another. But, among ail the Various Salts in Nature, none are  
more safe and efficacious, than neutral Salts, which are, also, pos.  
seised of a cathartic Quality.

Neutral Salts are those Compounded Of an alcaline Salt, or .  
Earth, and an acid Salt, in such a manner aS that the one does not  
predominate over the OtheTssNow aS alcaline and acid Salts,  
when separate, are Of so strong a Taste and Quality, as Often to 'τ  
approach to a corrosive Nature, so, when mixed in a due Pro- 6  
portion with , each Other, they ore, by the mutual Allision and  
Conflict Of their Parts, so corrected, aS, not only with respect '  
to Taste, but, also, all-their Other Qualities, to become a Sait os :ss  
st middle Nature, highly innocent in itself, and friendly to the - 1human Constitution. Perfectly neutral Salts, therefore, are sucfr  
as produce no Degree OfEfferVescence, but are perfectly satu-  
rated, upon'the Affusion of any acid Or alcaline Liquor. The' 'τ  
most considerable and efficacious Salts Of this kind are, among  
the native Salts, common Salt, Nitre, Aphronitrum, and those ,  
Salts which are, by boiling, obtained from some medicinal and  
acidulated SoringS. The most ennsiderahli. oolre *rtf* rhe nvnirral

Kind, prepared by Art, are the Arcanum Duplicatum, antimcol  
niated Nitre, *Glaubers* Salt, and Virriolated Tartar, in all which  
there is no Effervescence produced by the Affusion either of an  
acid Oran alcaline Liquor, unless the Acid is Very strong and pene-  
trating, shCh aS Oil Of vitriol, which, when poured upon com-  
mon Salt, or even uppn Nitre, not Only produces a Violent  
Ebullition, but, also, raises a large Quantity os a subtile white  
Vapour from the common Salt, and One of a redish Colour from  
the Nitre; but such a Phenomenon is hardly eVer produced by a  
gender Acid, such as Spirit of Salt, Spirit Of Vitriol, Vinegar, Or  
Lemon-juice.

From what has been said, we may justly Conclude, that nei-  
ther Tartar, which is Obtained from the Vegetable Kingdom, nor  
Alum Or Vitriol, which are produced in the Mineral Kingdom,  
ate properly to be classed among the neutral Salts, fince the  
latter Of these, upon the Affusion os any alcaline Liquor, whe-  
ther of a mild or more drastic Quality, are forthwith put into a  
violent Commotion, and raffed in Bubbles, a manifest Proof,  
that an acid Salt predominates in them, and that this Salt is not  
intimately mixed with the metallic Or earthy Alcali; flor such  
ought to be the Nature and Qualities of neutral Salts, that their  
Component Parts being intimately united with each Other, they  
may not he easily precipitated, upon the Affusion Of an alcaline  
Liquor, for which Reason, neither Salt of Sflver, nor Sugar of  
Lead, are, strictly and properly, neutral Salts. Neutral Salts,  
also, differ among theinselves, since, in some, the Union Of the  
alcaline and acid Principles is more close .and infimare than in  
Others.

Those, in which this Union is highly Close and intimate, are  
such aS Cannot he easily destroyed, such aS all Salts prepared of.  
an alcaline Principle, and the Acid Of Vitriol, Of which Kind  
are the Neutral Salts Of .mineral Waters, the Arcanum Dupli-  
Catum, vitriolated Tanas, the Salt prepared Of Quick-lime, and.  
the Acid Of Vitriol, or Salt, as,'also, common Salt and Nitre.  
But those Salts in which the Union Of the acid and alcaline  
Principles is less intimate, and their Cohesion less firm, are such  
as are Compounded of a gentle Acid, and an alcaline Earth;  
among the Number of which are the Salt' of Coral, the Salt Of  
Crahs-eyes, TartanisTartarisatiis, and the Terra Foliata Tartars,  
all which, by means of a strong Acid, have their Parts easily rhe  
solved and precipitated. ‘

Having premised these things, we now Come to shew by Con-  
elusive and satisfactory Arguments, that Salts of a temperate and  
neutral Nature are not Only Of all others the most saluiary, but.  
also, the safest, and most efficacious, froth for preventing and  
curing some Of the Disorders incident to the human Body.

First, then, in the Juices Of all Animals, when in a sound and  
natural State, there is neither a pure arid nor alcaline Salt,, either  
Osa fixed Or volatile Nature, but only Salts Of a neutral. Rind :  
Thus there is never a pure ACid to be found, either in the Blood  
or Lymph, which, however, was formerly asserted by. Physicians  
ignorant Of Chymistry. NOr, even in a morbid and preternatural  
State, is there any suchinure Acid to be obtained from the Fluids  
of the Body, by any means whatever : Hence it is ObViouS not  
only how absurd, but, also, how dangerous, the Hypothesis of  
those is, who, some Centuries ago, boldly affirmed, that an Acid  
was the Cause of all Diseases; tor which Reason they not Only  
banished all Acids from Medicine, but, also, asserted, that the  
principal Intentions Of all Remedies were either to destroy the  
Acidity or Viscidity Of the human Fluids. ' " \*

It is not, indeed, to he denied, that partly by means of the AJi-  
ments, and things taken into the Stomach, especially when re-  
maining long there. Crude and acid Juices are generated in the  
Primal Vise,' which, being Of a Quality unfriendly to'Nature,  
for ’various Reasons excite Violent Disorders, and not only pro-  
duce, but, also, increase, the Symptoms 5 for which Realon, in  
Cases Of this Nature, such Medicines as Correct and temperate  
Acids, afford the most speedy and efficacious Relief: Yet it does  
nos follow from this, that these acid Juices are, in an entire and  
unchanged State, as to their Texture, conveyed to the Mass Os  
Blood, or mixed with the animal Fluids: Bur they are rather  
to be looked upon aS foreign and morbid Humours in thePrimx  
Vise, especially when they are not corrected by the digestive  
Powers, and the Admixture Of Other Liquors; for, though the  
Stomach can well enough bear a mild Acid, which, by its gentle  
Stimulus, not only creates an Appetite, but, also, promotes the  
Dissolution Of the Aliments, yet a pure Acid is highly Offensive  
to all the other Parts of the Body, noth of the fluid and solid  
Kind , for an Acid so inspiflates and Coagulates the Fluids, as to  
retard their Circulation, and remarkably injures the solid Parts,  
especially those of the nervous and fibrous Kind, by its stimulat-  
ing, corroding, or even constricting Quality.

For this Reason it is wisely ordered by bountiful Nature, that  
when the Aliments are dissolved io the Stomach, and expelled  
thence, there is forthwith poured upon them a Liquor, which,  
by its mild, sulphureous, and somewhat alcaline Nature, Corrects  
the foreign Acid contained in them, and renders it friendly to the  
Veins, and all the other Pans of the Body: This Purpose is, also,  
greatly promoted by the lymphatic Juices, convey'd from the

Pancreas, and other Glands; Nor is a pure alcaline Salt, either  
os a fixed Or volatile Kind, eVer to he found in the Juices Of  
Animals, especially when in a natural State. The Bile, that ufe-  
ful Liquor, justly accounted the most natural and efficacious  
Medicine of Animals, so nearly approaches to an alcaline Na-  
cure, that it corrects Acidity. But there can he no pure Al-  
cali obtained from the human Fluids, because it produces an  
Effervescence with no Acids, unless highly strong and drastic,  
and even in this Case the Ebullition is not to he ascribed to an  
alcaline, but rather to a sulphureous and OleouS Principle, be-  
cause both expressed and distilled Oils are Observed to excite  
an intense and hot EfferVescence with any strong Spirit, such  
aS Oil Of Vitriol, Or the Spiritus Nitri Fumans, prepared in the  
manner directed by *Hoffenan.*

NOr is there any Alcali, either Of a fixed; or volatile Nature, '  
to he obtained without the Help Of Fire, either from the Blood,  
the Milk, the Chyle, the Lymph, the Excrements, the Sweat  
Or Urine Of Animals, in a sound and natural State : But if a VO-  
latile alcaline Matter is exhaled from theJuiCes, or if a manifest:  
alcaline Quality is Observed, either in the Excrements, the Bile,.  
Or the Urine, it is a Certain Sign of a Corruption or PutrefaC- .  
tion. But, in a sound and natural State, the ercremenritious Salts -  
are rather Of the neutral Kind, and Composed of a fixed Or Vo-  
latile acid and alcaline Salt, as is Obvious from the saline Taste Of.  
the Urine. But the neutral Salts of the. human Body incline  
most to the Nature Of Sal Ammoniac, by reason Of the Com-

. position of the volatile, alcaline, and urinous Salt, with the Acid;  
*.. fop* if Quick-lime, Or any alcaline Salt, is mixed with inspisisaied  
- Urine, it forthwith diffuses the Smell Of a Volatile Salt. Be-.

sides, the Salt Contained in the Urine is of a tartareous Nature, .'  
Compounded Os an acid and an OleouS earthy Principle; as is ?  
sufficiently Obvious, partly from the inspissation Os the Urine,..

s and partly from that Tanar which adheres to the Sides and Bot-  
toms of .the Chamber-pots used by hypochondriac and scorbutic.  
Patients.

Besides, the salutary Quality of neutral Salts is obvious - from .  
this, that they produce no Change nor Commotion in any Of the .  
animal juices, which, we find, is quickly donethy Other acid or :  
alcaline Salts, whether Of a fixed or Volatile Nature, for if, with »  
any Quantity Of human Blood, taken from- a Vein, any acid Li-  
qnpr .iS poured, such aS Spirit of Salt, zOr-Vitriol, a Solution of'  
Salt, which is excessively acid. Or a Solution of Alum Or Vitriol, .  
the Colour and Consistence of the Blood are destroyed, whilst ,  
the redish.purple Colour is changed into one Of a livid and tin-

. seemly Kind, and the Blood, before thin and fluid, is Coagulated ; ...  
and the same Effect is generally produced thy these Liquors, τ

. when mixed with the Lymph, the Serum, the Chyle, Milk, .  
Or. the Whites Of Eggs. It is, also. Certain from the Expe-

. rimentS made in Order to illustrate the Transfusion Of Blood,  
that by injecting acid Liquors into the Vein, by means of **a -**Syringe, the Death os the Animal was very soon produced, and  
the Blood hound Coagulated in the larger Vessels. When, also, .  
we pour into Blood newly taken from the Veins any alcaline Li-  
quor, such aS Oil Os Tartar per Deliquium, Or well saturated -

. .Spirit of Sai Ammoniac, we Observe a no less considerable.  
. Changein the Blond, since its natural purple Colour is heighten-

ed, and "render'd nearer to shat osSCarlehy-and irsConsistence.  
hectiineS more fluid 4

These alcaline Substances, in like marines, when mixed with i  
Milk, Serum, Or the Whites os Eggs, reader- them more fluid; j  
and. though the intensely red Colour, and-preternatural Fluidity,  
induced in the Blood by alcaline Substances, are not destructi **Ve-**os its progressive and circulatory Motion through the number- -  
less small Vesseis os the-human Body, yet a pure Alcali, exhi-  
bited in a pretty large Dose, .effectually destroys and inverts **the"**vital Crisis, and due Mixture, os the Mass of Blood, aS is oh- s  
vious from injecting alcaline Liquors into the. Veins os Animals,

. since, by this means, mortal Convulsions are -brought on,, an-.  
Effect never produced her neutral. Saits, which are Os such a Na- ;  
sure aS to induce no Change .in the Texture and Mixture os  
the.Blood, and Vital Fluids. For if a Solution Os common Salt--  
and Sal Ammoniac, or .of the Arcanum Duplicatum, the-Terra

. Foliata Tartars, or antimoniated Nitre, is mixed with the human-  
Blood, hr Milk, it produces nO Change in them. That Nitre,  
whschis, also, a neutral Salt, .is not prejudicial to the Mixture  
and VitalMofions Of the Blood, is, among Other Circumstances,..  
sufficiently obvious from the Experiments of *Malpighi,* in his -  
Book *de Polypo Cordis,* since, .thy injecting fix Drams of Nitre  
dissolved, into the jugular Vein of a strong Dog, there was no -  
Alteration Or Change observed, except a-preternaturally copious  
Discharge Of Urine.. . . . .

But, among all the Clastes Of neutral Salts, none is better  
.. suited, or more friendly, to the human Body, than common Salt,  
whether obtained from the Sea, Fountains, Or the Earth. Nel-  
ther human.. Creatures, nor many other Animals, can he with-  
out, thss Species Of Salt, because it not only seasons their .Ali-  
ments, but» also, contributes to their hetter Digestion, Or inti-  
mate Resolution. Nor is common Salt, admitted into the Mix--  
. nire.Of the.vital Fluids, but .Ought again to he. totally, expelled

*thro’* proper Emunctories, since, when left In the Body, is proves  
prejudicial to the Texture of the flender Fibres, by VeUicating and  
corroding which. It produces various.Misfortnnes.When used, how-  
**ever,** with Aliments, it produces several happy Effects, besides those  
already mentioned., for, by gently stimulating the moving Fibres,  
arid the excretory Ducts Composed Of them, it not Only accelerates  
the Motion Of **the** Blood and Humours, by which means their grosser  
Parts are excellently triturated, and better mixed with the more fluid  
Parts, bur, also, promotes the salutary Secretion s, and the ne-  
cessary Excretions, Of, other superfluous Substances, by., means  
of which the Salt itself is, also, more happily eliminated from  
theBOdy. ...... t .

\_ Among the neutral Salts highly salutary and friendly, to the  
Human Body, we may justly reckon Sugar, which, when duly  
fifed, is not so Offensive to the Blood as is generally thought,  
though it is not proper' in all Diseases, nor for particular Per-,  
sons at all Seasons. But that it in daily used to a kind Of Ex-  
cess by some, who,, instead Of being injured by It, live in. a  
sound and perfect State Of Health, is certain from daily Expe-..  
Hence; for Sugar is **a** sweet and mild Salt, which is *far from* **be-**ing unfriendly IO the Mixture Of the Fluids, both because it  
Corrects acid and bilious Humours, and, by lubricating the Primae  
Vim, and gently stimulating the intestinal Fibres,, renders the  
Body more soluble. Besides, another Advantage may arise from  
the Use Os Sugar among Aliments, for It is knowns tbat all  
Oils, and piuguious Substances, are incapable Os uniting with Wa-  
ter; but this Union is excellently produced by the Addition of  
Sugar, aS is obvious from this Experiment: Oil Of Cinnamon  
does not mix with Water, but falls to the Bottom., but if a  
few Drops os it are previoufly mixed with Sugar, andsethen put.  
into Water, upon agitating them together, we forthwith perceive ,  
arr intimate (Conjunction Of the Cal and Water, so that by this  
Method an extemporaneous'Cinnamon-water may be. prepared.-  
Since, therefore, human Creatures Often eat .large Quantiles Of  
Fat, which.are..with Difficulty resolved, and converted into a  
lacteal Juice, by,means of. Water; yet that this Effect may be  
produced by. means Of Sugar, and sweetsiubstanccs, is sushcjendy .  
obvious, since there is no more speedy and effectuasemanner of.  
fattening- Geese and Capons, than by mixing Sugar with their  
Aliments. This,'in my Opinion, is, also, proved, by adding .  
Sugar to Cream, by which .means .the Separation Of the buttery  
Part from he.Others in prevented. ..... . ..... , . . :

AS neutral Salts, used among Aliments, are os singular Effi-  
cacy in preserving Health, so, as Medicines, they are highly ef.. .:  
ficacious in the Cure.Of Diseases. YAod, fince .this is the Point  
we principally intend; to prove, we shall, for rhe sake Of Perspi- .  
cutty, distinguish ..neutral Salts into two Classes, that, is, those  
which are produced naturally, and those prepared by Art. .Among  
the Salts, therefore, spontaneoully produced by Nature, besides  
common Sals, we reckon the essential Salts, by a proper Enchei- \_  
refis,’obtained from the Juices Os most Plants; and the. most.,  
considerable Of which ^approach mthe Nature and .Mixture .of  
that Tartar-like Preparationjcomposedosan acid and an alcaline.  
Earth, together with.an Intermixture Of^sulphureous Particles, .  
and it is highly probable, that the medicinal Virtues Of Plants are  
derived from this neutral Salt they Contain; .for it is certain from  
Experience, that such Vegetables as,fry a due Encheiresis, yield  
the largest Quantity of. neutral Saits, are farshperiOr, in virtue  
and efficacy,-to such aS yield a smaller Quantity. -. ..

The most considerable Herha belonging .to this Class are such  
**as** are appropriated to the Cure Of Wounds, aheLthe Purifica-  
tion of the Blood; the most Considerable os which. ate Paul'S  
Betony, Scordiutn', Carduus Benedictus, Dead-nettle, Yarrow,  
Colts-foOt, Plantain, Ground-ivy, Barrage,. Bugloss, .the. lesser  
Cenratiry, Fumitory, Winter-green, Daisies, Chamomile-flowers,  
Worrnwood, Brook-lime, Bears-breech, Water-crestes, German-  
der,Ladies-mantie, Middle Confound, Spleen wort, and Scabious.  
**the** Juices, Decoctions, and Infusions Of which produce the: mosh  
surprising and salutary Effects in the most violent chronical Dis-  
**eases,** arising from Obstructions,infarctions, Or Corruptions of  
the Viscera, Or Obstructions Of the Emunctories, and excretory  
Ducts?; And’these happy Effects are Owing Io nothing .but **the**neutral Salt contained in these Herbs; and which is partly Of  
**a** tartarous, and partly Of a nitrons Quality. Hence, by reason  
**of the** large Quantify of this neutral Salt, the Extracts os these  
Herbs cannot he easily preserved dry, and. without dissolving, in  
**the** open Air ; which is, also, observable in essential Salt,.or the  
Terra Foliata Tartari, and in that Salt which is Obtained from  
**the** Acid of *BJoenisc* Wine, and the Oil Of Tartar mixed, aster  
due Inspissation. By reason, also. Of this large Quantity Of neu-  
rial Salt Of a tartarous Nature,'These Plants, by burning, also,  
yield a Considerable Quantity of an alcaline. fixed Salt; for aS  
the Tartar Of Wine, or Nitre, is, by Calcination, changed in-  
to an alcaline fixed Salt, so we are Of Opinion, that this alca.»  
line fixed Salt, which, by burning, we obtain .from these Plants,  
derives its Origin from the neutral tartarous Salt they contain. .

Among the most salutary neutral Salts spontaneousty produced  
without any artificial Mixture Of an acid nnd alcaline Salt,, .we  
may justly reckon Nitre, which is generated by sulphureous,  
pinguious, and alcaline Earths, by the Faxes and Excrements

of Animals in a State of Putrefaction, as, also, hy Ashes,  
Quick-lime, and putrid Earths, . when long exposed to the Snd  
and Rain, by imbibing, as it were, and attracting the universal  
Acid Of the Atmosphere. And so surprising are the Virtues of  
this Medicine, that the Healing Art would he Very imperfect with-  
Otitis; for Nitre is a Salt of a Quality so friendly to Nature,  
that, except when exhibited in too large Doses, it not Only pro-  
duces no Misfortunes, but is, also. Os all Other the most effica-  
cious and instantaneous Remedy for Preventing and removing  
those violent Disorders, which arise from a Redundance of Bile,  
a Violent Ebullition, Or preternatural Heat, of the Blond and Hu-  
mours. For this Reason Lord *Ferulam,* in his *Historia Vitae et  
Mortis,* affirmed, that a Semple Of Nitre, frequentiy exhibited  
for a Dose, greatly contributed to the Protraction of Life: And,  
if any Medicine deferve the Title of Universal, common Water  
and Nitre Certainly are so, for if the Body is to he rendered  
soluble, and a Discharge of rhe Urine promoted, or if, in a’  
State Of preternatural Heat. Pain, and Spasms, the Tranfpira-'  
Don is to he rendered freer, these Effects arc excellently pro-  
duced by means of Nitre. Besides, if the Intention is to cor-:  
Iect and mitigate that caustic and virulent Acrimony Of  
the bilious. Humours, which lays a Foundation for Choleras,  
Diarrhoeas, Dysenteries, immoderate Vomitings, Nauseas, hili--  
Ous and burning Fevers, and Violent Inflammations Of the Sto-  
mach and intestines, no Medicine in Nature produces either  
more salutary Or more instantaneous Effects than Nitre. If the  
internal Parts are so seized with an Inflammation, aS to be, iff  
some measure, scorched, and if, in Consequence Os this, the most I  
fluid Parts Of the Blood are carried Off, the Patient's Strength is  
impaired, and an in satable Thirst, together with continual Watch-  
ings, brought On, Nitre, mixed with Other proper Medicines,  
is.an Ingredient Of the highest Efficacy, and Contributes in an un-  
common Degree to the Cure; for, among all the safe and genu.i  
ine Refrigerants appropriated to the Extinction of febrile and in-  
fiammatory Heats, we find none in Nature comparable to Nr-’’:  
tre. If a preternatural Spissinude Of the Humours, which lays **a**Foundation for Obstructions Of the Vessels, and polypose COn-δ  
CretiOns, is to he resolved, the Effect is hy no Medicine to be)  
more effectually produced than by Nitre, which is by no means?possessed Of a Power Of coagulating the human Juices, which '  
some Men of Skill and.Learning have asserted, in Opposition to  
the Evidence of Sense fince a Solution Of depurated Nitre with '  
*Vdaesxls,* added to a Portion of Coagulated and blackish-coloured '  
Blood, renders it both more fluid, and Of a finer Colour; for ;the darkish-black Odour is changed into a beautiful red, ap-'  
proaching that of scarlet.- And, aS Nine is possessed Of a pecu- -  
liar Virtue of Colliquating the Serum and Lymph, it moistens  
such Parts as are dry, softens fuch aS are herd, and, by colli-  
quating the tenacious Humours, removes Obstructions. : '

Besides, such is the Efficacy of Nitre as to prevent saline and  
tartarous Concretions, in the Kidneys, Bladder, and Other Parts. :This is not Only Certain from Experience, but, also, confirm’d  
by. the Authorities Of judicious Physicians. Thus *Benatus, de  
Medicamentis Ghymicis,* affirms, that Patients afflicted with the  
Stone Or Dysury, whether adult. Or young, weak, or robust,  
. are greatly relieved by the Use of Nitre; and asserts, that if  
**. a** due Dose of it is taken every fourteen Days, it is impos-  
sible there should ever be any Sand generated in the Kidneys.

*. Timaeus, ,* also, gives an Account Of a Certain Man, who, by  
. the long-continued Use Of prepared Nitre, was perfectly freed  
from the Stone. And *Grulingrus, in Observat, de Calculo,* uses  
these Words: " It is sufficiently well known, that Sal Prunellae  
" is an excellent Remedy, both for preventing and curing the

*. α SraVel.”*

What violent spasmodic and flatulent. Symptoms, productive  
Of uncommon Misfortunes through the whole Body, arise from  
“ a Stagnation Of.the Blond in the Vefleis Of the Stomach and in-  
.. testines, is. sufficiently obvious from the deplorable Condition  
ι Of hypochondriac and hy static Patients. But I frankly Confess, -  
- that among all the Medicines allotted for these Purposes, I know  
. none so effectual .in removing the Spasms, discussing the Platu-  
lences, and allaying the. Severity Of the Pains, aS Nitre. For  
which Reason its Use. in the spasmodic Or convulsive Colic  
Cannot he too highly extolled. If, in Consequence Of Violent  
./ Pain and Spasms, Transpiration, Sweat, or a Discharge Of the

Urine, are obstructed, if the Patient is costive. Or if the salu-  
tary Excretions Of Blond, whether from the hemorrhoidal  
Veins, or the Urerus in Child-bed Women, are defective. Nitre,  
duly.exhibited, allays the Pains and Spasms, and, by this means,  
rendering the small Ducts pervious, restores these salutary Evacn-  
arsons. But fince, by these Violent and spasmodic Strictures  
of the Vefleis and.Viscera, the free Circulation Of the Blood  
is hindered, and the Humours conveyed to Other remote Parrs,  
..with a greater Motion and Impetus, by which means the Vei-

seis, .distended bystoo copious a Congestion, are ruptured, and  
immoderate Effusions Of Blond happen, hence Spittings of Blood,  
immoderate Discharges of .Blood from the Note, Uterus, or

- haemorrhoidal Veins, Or a Discharge of bloody Urine, draw their  
Origins.

**In Cales** Of this Nature the most effectual Medicines are those  
**of the** nitrous Kind, winch, by removing the Spasms, without  
any (obsequent Constriction, restore the free Circulation Of the  
Blood, and stop these immoderate and excessive Evacuations.  
Among all the Physicians Of the preceding Age, none made more  
frequent Ufe Of Nitre than *Eiverius,* who, in stopping Haemor-  
rhages, exhibited it with uncommon Success. Tuns, in an immo-  
derate Flux Of the Lochia, he, in *Cent.* I. *Obs. 26.* highly ex-  
tols the Use Of Nitre, in an immoderate Discharge Of the Menses  
he recommends it, in *Cent.* I. *Obs.* 94. In a Spitting of Blood  
he Orders it, in *cent.* I. *Obs.%2.* And in Haemorrhages, accom-  
Panied with malignant Fevers, he prescribes Nitre, in *Cent.* I.  
*Obs.* I8. Aster *Riverius, Mynsicht* always thought the *medi-  
cinal* Virtues Of Nitre Of the greatest Importance, aS is Obvious  
from his *Armamentarium Chymicum,* in which there are Various  
excellent Compositions, the Basis of which is Nitre.

TO the Class Of neutral Salts, also, belongs Aphronitrum,  
which was not unknown to the AntientS, and especially to *Pliny.*This Substance drops from the Tops of stony Caves, hecomes  
concreted, and is the joint Ossipring Of that acid universal  
Salt which the Air Contains, and of a gypseo-calcareous Earth.  
It is a Salt os a somewhat bitterish Taste, hut fixed, and capable  
Of sustaining the Force Of the Fire, since it is neither fused,  
takes Fire, nor is evaporated by its means. Large Quantities  
Of this Substance are not only produced in the *Devils Cave,* near  
*Jena,* but, also, great abundance os it is Often found in subterra-  
neons Passages,especially those cut thro’ Rocks. It is Certain from  
Experience, that this Salt, which resembles that of *Epsom,* is not  
Only of an inciding and diuretic, but, also, when exhibited in  
large Doses, os a cathartic Quality.

As Common Salt is highly salutary among Aliments, so its  
Use is not to he entirely banished from Medicine. It is suffir  
ciently known of what Efficacy it is in rendering the Body so-  
luble, and procuring a Discharge of the Faeces, when added **to**Clysters, in winch One Dram of it proves more effectual than  
**a** whole Ounce Of any other Aperient. When taken internally,  
also, in a pretty large Quantity, among Aliments, it renders the  
Body soluble: For this Purpose the Eating salt Herrings is  
very proper. Neither are we Very certain, whether common  
Salt is not frequently **the** principal Ingredient in some **mine-**ral and medicinal Springs, celebrated for Cathartic Virtues.  
About forty Years ago, at *Hornhus.en, in* the Principality  
Of *Halberstadt,* some medicinal Waters were discovered, to  
which there was a great Resort Of Sick. . I, being Physician in  
Ordinary at these Springs, upon instituting a chymical Analysis  
os the Waters, found that they Contained nothing hut Common  
- Salt, and another Sal salsum, like the Arcanum Duplicatum.  
The former of these in Crystallization retained a Cubical, and  
**the** latter an hexagonal Figure. But the Weight Os the Common  
Salt far exceeded that of the Other. Three or four Pints Of theft  
Waters, drank, rendered the Body gently soluble, and procured  
**a** considerable Number Of Stools. They, also, increased **a**languid Appetite, and, by inciding the thick and Viscid Humours  
Of the Stomach, excellently contributed to Digestion, and ren-  
dered the Body brisk and agile. They were, also, in a particular  
manner, possessed of an anthelminthic Virtue, since, along with  
the Faeces, they evacuated large Quantities Of Worms of all  
Kinds, and especially those Called Ascarides. The external Use  
of them not only discussed Tumors, but, also. Cured the Itch,  
and. inveterate Ulcers. About thirty Years ago, not far from  
the City Of *Staofarth,* there appeared a medicinal Spring, the  
Waters Of which purged Very briskly, and were possessed Of  
almost the same Virtues with the former, and, upon malting **a**Chymical Analysis Of these Waters, I could Obtain nothing but  
Common Salt. . \* '

But, as these Springs did not continue for any Considerable  
Time, we now come to consider those, which, for many Ages,  
have been celebrated for their medicinal Virtues, and which de-  
rive their Efficacy principally from common Salt. Of this Kind  
are the Springs os *Jgrisbaden,* long ago mentioned by *Tacitus',*and though, till a few Years ago, these were Only used externally,  
yet their medicinal Use is highly proper and efficacious in In-  
sanctions of the Viscera, Loss os Appetite, Flatulences, and Costive-  
ness. They are, also, highly beneficial in the Cure Of those Dis-  
orders, which sometimes succeed Abortions, and hard Labours.  
Having, with great Accuracy, instituted a chymical Analysis Of  
these Waters, which were or themselves highly light and subtile,  
I Could obtain nothing but a genuine Common Salt, mixed with  
a certain alcaline Sale, which not only discovered itself by its  
Taste, and cubic Crystals, bur, also, upon an Admixture Of Oil  
Os Vitriol, sent up a copious Smoke, Of an highly penetrating  
Smell, like that commonly arising from Sal Ammoniac.

Among the neutral Salts of rhe native and salutary Kind, we  
may, also, class those for the most part contained in all the hot  
and cold medicinal Springs of *Germany,* and from which these  
celebrated Waters derive their principal Virtues. The AntientS  
foolishiy derived the Virtues os medicinal Springs from the va-  
rious earths. Minerals, and Metals they fupposed them to con-  
tain, without so much aS making mention Of one or the Prin-

ciples they really Contained. But it is still more furprising,  
that many, even of the Moderns, should still maintain, that cold -  
medicinal Springs are impregnated with a Vitriolic Salt,-and  
Contain a very strong Acid ; whereas it is Obvious, that they con-  
tain an alcaline Salt, since they produce an Effervescence with all  
Acids, and afford a neutral Salt. And eVen many os these Waters  
after Evaporation, leave an highly pure Salt, and, when poured-  
into Milk, are so far from Coagulating It, that they render It’  
more fluid. And though most os the hot and Cold medi-  
cinal Springs have, in some Degree, a vitriolic Taste, yet their  
medicinal Virtues, and Efficacy in the Cure Os Diseases, by  
no means depend upon their Vitriolic Salt; for, when they are  
but a littie warmed, they immediately lose this Taste, and no-  
longer acquire a dark-purple Colour from a Mixture of Galls  
winch is a manifest Proof, that the Chalybeate, Or ViUiolic Parts  
they Contain are not Only small in Quantity, but, also. Of a  
volatile Nature.

It is much more Certain, that, if we except that spirituous  
aereo-ethereal, penetrating, and subtile Principle, which is the  
**Cause** Of the sparkling Bubbles, the principal Elements and In-  
gradients both Of hot and Cold medicinal Springs are either fixed  
alcaline Salts, Or those Os a neutral Kind, approaching nearly to  
the Nature Of *Glauber’s* Salt, Or VitriOlated Tartar s and it is ’  
Owing to these Salts, that these Waters are so efficacious in inCid- .  
ing Viscid Humours, removing Obstructions, correcting Acidi-  
ties in the Primae Vise, and promoting all the Excretions, espe-  
cially those by Stool and Urine. It is, th.refore. Obvious, that  
the Ingredients Of these Springs are Of so innocent a Nature,  
and so divested Of every drastic Quality, that their Waters may  
**he** drank without any Dread Of Danger; so that those Physi-  
cians are not Only deceived themselves, but, alfo, grotly impose  
upon others, who, by specious Arguments, drawn from the Dread  
Of Danger, and the violent Operation, dissuade Patients, Capable  
of having their Lives saved by this very means, from the Use.  
of these salutary Waters. From what has been said, we may  
perceive how efficacious both neutral and alcaline Salts must be  
in the Cure Of obstinate chronical Disorders, if they are diluted .  
with a sufficient Quantity Os Water, used with a due Regimen, ’  
and exhibited at proper Seasons. - . . \*

It is, also, worth our Observation, with respect to the na-  
five Salts Os mineral Waters, that these Springs, which, besides -  
an alcaline Salt, Contain large Quantities os neutral Salts, are '  
far mote Cathartic than those winch only contain a large Quin--  
tity Of alcaline Salt. And this is the Reason why, among ai-  
most all the hot medicinal Springs in *Europe,* there are nonno  
more purgative than the *Caroline* Waters ,\* whereas those Of .  
*Embden,* which Contain a pure alcaline Salt, are but a very '  
weak and languid Purge; for the *Caroline* Waters, besides air a  
alcaline and saline earthy Principle, also. Contain a neutral Salt, ’  
Compounded Of the alcaline Salt, and the Acid Of Sulphur, i  
For from that Salt Of the *Caroline* Waters, left after EVapora- \*  
tion, by the Addition of the Powder Of Charcoal, and Fusion \*  
by Fire, a Liver of Sulphur is Obtained, and from this ’  
Liver Of Sulphur the Tincture: Of Sulphur may he extracted  
with Spirit Of Wine; and, by boiling it with Water, the Milk .  
Of Sulphur is precipitated. This Regeneration Of common' :  
Sulphur from this Salt, sufficiently demonstrates the Presence of. ύ  
a neutral Salt, formed by the. Acid Of Vitriol Or Sulphur; since,  
without this Salt, common and inflammable Sulphur Could. :  
not he regenerated. Besides, this Salt Of the *Caroline* Springs, χ  
though os a considerably alcaline Taste, is not, however, like  
Other alcaline Salts, colliquated in the open Air; which is Ow-ν r  
ing to the mineral Acid with which it is joined. j .S:;

Among all the Cold medicinal- Springs in *Germany,* hardly J  
any are more purgative than those Of *Egra-,* for five Or six Pints' 3  
of them, drank, sometimes procure fix or eight Stools, without”  
any Uneasiness; whereas the same Quantity Os those Of *Pyrmont gi*procure only three or four. But the *Self er an* and *Antonian* Springs, :aS, also, those Of *lgrildunges, Elfieria,* and *Buchen in Bohemia,*- are only faint and languid Purgatives, but rather promote a Dis...;  
Charge of the Urine This Diversity of Effects in these medi- -  
Cinal Springs is only to he accounted sor from the Presence Of  
a larger Quantity Os neutral Salt in some, than is to he found in...  
Others , sor, by a due Boning and Inspissation of the Waters  
Of *Egra,* a large Quantity of neutral Salt is obtained, half an .  
**Ounce** Of which, exhibited in a proper, aqueous Vchicle, purges :  
very briskly; and this Salt is sold very cheap at *Egra.* The.  
Springs Of *Sclumualbac,* hesides their subtile Waters, contain not;  
Only an aereal and subtile Principle, hut, also, an alcaline Salt,  
and One of the neutral Kind, for which Reason, they are, also.  
Of a pretty purgative Quality, Of which, however, the *Anta-  
man, Seller an,* and some Other Springs, are destitute, because,  
by Boding and Inspissation, they only yield a pure alcaline Salt.  
Some time ago I difcovered an extemporaneous Method Of  
rendering these alcaline Waters sufficiently cathartic, and **not**. Only of the fine Taste, hut, also, os the same Virtues with  
those Of *Egra,* by Only adding to them a proper Quantity of  
the Spirit of Vitriol, which, by incorporating with their **alcaline  
Salta** forms a neutral Salt, resembling VitriOlated Tartar.

Not only in *Germany,* but, also, in other Parts of *Europe,***such** aS *France* and *England,* there are cold medicinal Springs  
remarkable for their cathartic Virtue, and from which a neutral  
Salt may he, also, obtained by boiling; Among these the most  
celebrated in *England* are those at *Epsom,* which, by means os  
the bitterish Sal salsum they contain, are an excellent Purgative.  
This Circumstance prompted the celebrated Dr. *Grew* to obtain  
by boiling, from these Waters, a neutral Salt os a bitterish  
Taste, and a purgative Quality. This Gentieman, also, wrote  
a small Treatise on the Nature and Virtues os that Salt. Some  
time ago I procured some os this Salt genuine and unadulterated  
from *England,* and was told, that a Pint of the Water hardly  
yielded half a Dram of the Salt. I, also, mixed this Salt  
with the Powder of Charcoal, and fused it; upon which I ob-  
tain'd a sulphureous Mass os a purple Colour, and which here  
**a** great Resemblance to the Liver of Sulphur.

Dr. *Grew* informs us, that this Salt, when genuine, is never  
destitute of a cathartic Quality. 'Tis said to he an efficacious  
Remedy in many Violent Distempers, without producing any  
other Disorder, if it is duly exhibited. 'Tis the mildest of  
almost all other Purgatives, does not throw the Humours into  
Commotions, and never produces Sickness, Deliquiums, and  
Gripes. The Use of this Salt is recommended in Disorders os  
the Stomach, such as Cardialgias, immoderate Vomitings, and  
hypochondriacal Disorders arifing from an hot Cause. 'Tis,  
also, commended in Diseases of the Intestines and lower Belly,  
in the Colie, the Gravel, Diforders arising from Worms, an  
Heat and Suppression of Urine, the Jaundice, and the hysteric  
Passion. 'Tis, hesides, highly beneficial in Disorders of the Head,  
and successfully exhibited in Cephalalgias, Vertigos, Deliriums,  
and Inflammations of the Eyes. It may he exhibited in Spring-  
water, or any other pure Water; as, also, in Barley-water,  
or Water-gruel, or Whey : It maybe, alfo, boiled a littie in  
Water, and season’d with Mace ; half an Ounce, or a whole  
Ounce, of the Salt may be added to two or three Pints of the  
Water.

Some Years ago, when I resided at **the** *Toplitx* Springs, in  
order to investigate their Natures; upon making an accurate  
chemical Examination of the *Sedlitx* Waters, about two Miles  
distant from *TopHtx,* I obtained a Salt of a bitterish Taste, and  
cathartic Quality, in every respect like that of *Epsom,* only  
with this Difference, that one Pint of **the** Water by evapora-  
tion yielded a Dram and half of the Salt: The Water from  
which this Salt is obtain'd is so bitter, that the Tongue can  
hardly endure it; for it is sar bitterer than the Salt itself. Six  
Drams of the Salt purge briikly, and the fame Effect is pro-  
duced by four Pints of the Water. And, aS I lately had a very  
considerable Quantity oTthe *Caroline* Salt sent me by MI. *Co-  
relli,* I fused some Part of it, with an equal Quantity of the  
Powder of Charcoal, in an ignited Crucible; by which means  
I obtained a Liver of Sulphur, of a disagreeable sulphureous  
Smell, and a purple Colour; from which, by means os highly  
rectified Spirit os Wine, I extracted the true Tincture of Sul-  
phur of a golden Colour.

Some time ago there was, also, inscribed to DI. *Gorelli,*an epistolary Dissertation concerning the lately discover'd ca-  
thartic Salt in the Mines of *Hungary,* by Dr. *Herman,* who,  
in the subterraneous Pastages of *Newhausel,* found a white,  
bitterish, and highly tender Salt, adhering to the Sides of  
the Rocks, in Form and Taste like the cathartic, FJseur Salt,  
and which, when taken in a pretty large Dose, procured several  
Stools. He afterwards, also, found another Salt os the same  
. Nature and Virtues, white like Snow, and ofa bitterish Taste,  
adhering to the Sides of the Passages in the largest os the Mines.  
And since with this Salt, by means of the Salt of Tartar, and  
Powder os Charcoal, he produced a true mineral Sulphur,  
’tis not to be doubted but it is of the same Nature with the  
*Epsom* or *Sedlitx* Salts. The Generation of this cathartic mine-  
ral Salt, which is partiy sound moist in the Springs, and partly  
dry, adhering to the Rocks, seems to agree pretty much with  
that of the Apbronitrum, which is coagulated by the fulphu-  
reous Principle of the Air, in stony, calcarious, and gypseous  
Earth, as its Matrix, and is found in large Quantities in the  
Cavities of the Mountains about *Juna*; and with respect to its  
Form, Taste, and Virtue, both in the Fire, and in the human  
Body, does not differ from the *Epsom, Sedlittc,* and *Hungarian*Salts, but only in this, that, being os the native fossile Kind, it  
is generated of a sulphureous and subterraneous Acid adhering  
to alcaline Earths, which in those Places are sound in great  
abundance. This is, also, obvious, because from the *Epsom,  
Sedlitz,* and *Hungarian SR\ts,* a certain stony Earth is partiy  
precipitated by an Alcali, and may be partly obtained by a  
second Solution and Depuration of this Salt with Water.

From what lias been said, we may he convinced of the Effi-  
cacy of native neutral Salts, which are partly moist, and part-  
ly dry, in the Cure of Diseases; and that, when taken in  
large Doses, they are besides other Virtues, possessed of a

cathartic Quality, by means of which they powerfully, but  
safely and easily, eliminate the Faces. But we now pass.from.  
the native neutral Salts, to those of the pharmaceutic and chy-  
mical Kind, with an Intention to inquire, whether **the same**cathartic and medicinal Qualities are, also, to be found in them.  
That chemical Salt, then, which is prepared of **the** Acid of  
mineral Sulphur mixed with an alcaline Sait, approaches very  
nearly to the Nature of that neutral Salt, which the medicinal  
Springs contain , for which Reason similar Effects may he  
justly expected from it. But aS that specific Acid, which is the  
principal Ingredient in mineral Sulphur, is, also, contain'd in  
other Minerals, such aS Vitriol and Alum, so there are Various  
Methods of preparing this Salt, in each of winch its Virtues  
and Efficacy remain the same; for there is one Salt prepared  
of Nitre and Vitriol, and consequentiy may be obtain'd from  
**the** Residuum of Aqua-fortis, and is call’d, *Vitriolated Nitre,*which *Mynsicht* call’d *The Arcanum Daplicatum,* because it  
was formed of these two Salts, and formerly look’d upon as a  
Secret at the Court of *Gottorp,* fince *Frederic* Prince of *Hol-  
stein* purchased the Method os preparing it at the Price of five  
hundred Imperials. But this Salt Inay be prepared in a far more  
compendious Method, if, after the Nitre is reduced to ah Al-  
cali, or fixed, the Spirit of Vitriol is poured upon it Drop by  
Drop, to the just Point of Saturation, that is, till it is render-  
ed a neutral Salt. And certainly this Method is far safer than  
the former, because the Vitriol, which is an Ingredient in the  
Aqua-fortis, often partakes os Copper, which must be duly  
separated by repeated Calcinations, otherwise the Arcanum  
Duplicatum, if more of it than one Scruple is exhibited, wist  
excite a Vomiting. . \* ‘

But because the Salt of Tartar fix’d, and duly calcin'd, differs '  
Very littie in its Nature and Virtues from fix'd Nitre, some are  
of Opinion, that the same Remedy, which in the Shops is  
call'd *Vitriolated Tartar,* may he prepared of Salt of Tartar,  
and Spirit of Vitriol; and *Tacheofius* thinks, that it may **be**made os Vitriol, and an alcaline Salt. And since the Spirit ex-  
tracted from mineral Sulphur is not in reality different from  
Spirit os Vitriol, and since in Antimony there is a large  
Quantity of pure mineral Sulphur, so the Chymists know how  
to prepare the Arcanum Duplicatum, either of Nitre and Sul-  
phur, or of Nitre and Antimony. The former Preparation  
they call *Sal Polychrostum,* which they make by a previous  
Calcination of equal Portions of Nitre andiSulphur in a Cnt-‘  
cible. But the ' latter Medicine is obtain'd from diaphoretic  
Antimony, made with three Parts os Nitre, and one Part of  
Antimony, by dissolving and crystallizing the Nitre. And this :  
Preparation is in **the** Shops generally call'd *AniimoniatedNitre ;*for, if Nitre is burned with Sulphur, an highly volatile Acid is -  
exhaled srom the Nitre; and the more fixed Acid of the Sul- ς  
phur, by uniting itself more closely with the alcaline Salt of the  
Nitre, constitutes a neutral Salt of a somewhat bitterish Taste,  
and of a detergent and laxative Quality. Besides, as the Acid  
of Alum does not differ from the Acid of Vitriol, and that of  
Sulphur, but is of a like Nature and Quality, hence **the**same Medicine may be commodioufly prepared os Alum with **a**fixed alcaline Salt,, well mixed and united with Salt of Tartar,  
or Pot-ash.

\* From what has been said, we may justly infer, that the *Ar.,  
canum Daplicatum,* prepared of rhe Residuum of Aqua-fortis,  
Vitriolated Nitre, prepared of fixed Nitre, and the Spirit of  
Vitriol, Vitriolated Tartar, antimoniated Nitre, Sal Poly- .  
chrestum, and the purgative Salt of Alum, invented by *Keilirre  
gites,* a Physician of *Isieben,* and described by *Hoffman* in his  
*Clauis Schroederiana,* because their Ingredients are not os dif-  
ferent Natures, are therefore of the same medicinal Virtues;  
and that, in the Cure os Diseases, the one may very properly'  
he used as a Succedaneum to another; for all of these, exhibited  
in a moderate Dose in some proper Vehicle, incide and dissolve  
Viscid Humours, and, by stimulating the excretory Ducts, not  
only preserve the Body soluble, but, also, promote a Discharge  
of the Urine : But when they are exhibited in a larger Dose,  
half an Ounce for Instance, or more, in a due Quantity of  
some aqueous Vehicle, they operate in the same manner with

. cold medicinal Waters, by procuring five or six Stools. For  
\* this Reason, when there is a Necessity for a Purgative, which  
- Operates without producing any Ebullition of the Blood, any  
' spasmodic Contraction os the intestinal Fibres, any Virulence

or Exacerbation os the vital Motions,, these Salts are commo-  
dioufly exhibited in a pretty liberal Dose. But, in a smaller'  
Dose, any one of them mix'd with Nitre, Salt of Tartar, or  
Crabs-eyes, affords an aperient and detergent Salt, os singular  
Efficacy in Medicine, and which may with uncommon Suc--  
cess be exhibited in all intermittent Fevers, hypochondriacal Dis-  
orders, the Stone, the Asthma, the flatulent Colic, Costiveness,  
a Jaundice, and a Cachexy.

The Sal Mirabile of *Glauber,* by him so much commended,  
- not only for its Use in chemical Preparations, but, also, for'

its medicinal Virtues, of a neutral Nature, and oom-  
pounded of a strong Acid os Vitriol, and common Salt, or Sal  
Gemmae, whilst the penetrating Acid os Vitriol attacks the  
alcaltne and earthy Salt, and Principle of which the common  
Salt consists, and, by uniting itself with it, constitutes a neutral  
Salt, whilst the acid Spirit of Salt is evaporated. This Salt,  
which is os a considerably bitterish Taste, and an excellent sto-  
machic and aperient Medicine, is purgative, when exhibited in  
pretty large Doses. This Salt was by *Glauber* call'd *Mirabile,*or *Wonderful,* because, if equal Quantities os it, and the Filings  
of any Metal, are mix'd with half the Quantity of Powder of  
Charcoal, and treated with a fusory Fire, he imagin'd, that, by  
this means. Sulphur might be extracted from any Metal, whilst  
**the** dephlegmated Spirit of Wine, poured upon it, extracts **a**sulphureous Tincture. But that *Glauber* err'd in this, is suffi-  
cientiy obvious, hecause, without the Addition of any Metal,  
a sulphureous Mass like the Liver of Sulphur, from which a  
true mineral Sulphur may he extracted, may be obtain'd from  
this Salt alone, and the Powder of Charcoal, if a small  
Quantity of alcaline Salt is only added, as *Stahl* baa shewn  
by Various Experiments; for by this means the Sulphur,  
which is compounded of the peculiar Acid contain'd in the  
Sulphur, and a phlogistic combustible Principle, is only regene-  
rated; aS Mr. *Boyle* obtained a perfect common Sulphur  
from the Oiis of Vitriol and Turpentine; and I myself  
obtain'd **the** same by Distillation, from Opium, and Oil of  
Vitriol.

But fince *Glauber\*s* Salt consists of the same Ingredients  
with the above-mentioned neutral Salts, such as the Arcanum  
Duplicatum, and others of a like Kind, that is, of the Acid of  
Sulphur and Vitriol, and an alcaline fixed Salt, like that con-  
tained in common Salt, (for by Spirit of Salt, and Salt of  
Tartar, a perfect common Salt is formed) hence we may  
justly conclude, that artificial Sulphur may be produced from  
all these Salts, treated with Salt of Tartar, and an Addition of  
the Powder of Charcoal, for the sake os Fusion ; and aS the  
same Thing happens in the *Epsom* Salt, that of *Egra,* that of  
os *Sedlitz,* the native Salt os *Hungary,* and the Salt obtained  
from the *Caroline* Springs, hence we may justly infer, that all  
. these Salts, both natural and artificial, as they are of the  
same Nature, and consist of the same Ingredients, must nearly  
agree in their Effects, and Medicinal VertueS.

We now come to consider that neutral Salt, which is sold  
at a low Price, for *Epsom* Salt ; and is imported to *Germany*from *England,* in great Quantities. That this Medicine is no  
genuine extract from the *Epsom* Waters, we may readily  
conclude from the small Quantity of Salt these Waters con-  
tain,, and the low Price at which the spurious Salt is fold.  
From repeated Experience, however, I am so far from con-  
demning this Salt, that I extol and commend it for its  
aperient and purgative Qualities. This Salt is artificially  
produced, and not unlike that os *Glauber,* which is, also, some  
times sold for *Epsom* Salt ; but because *Glauber’s* Salt is sold at  
a great Price, in comparison of that of *Epsom* Salt, 'tiS nor  
to he doubted but the latter is prepared of cheaper Ingredients  
than the former, though in the same manner ; for, as *Lmtilius,  
in Mifcell. Nat. Curios. Cent.* 3. and 4. justly observes, some of  
the Chymista in *England* prepare *Epsom* Salt of the Caput  
Mortuum os Vitriol, or Vitriol well calcin'd, and the Lixivium  
remaining in the Boiling of Salt, and which, besides common  
Salt, also, contains an earthy alcaline Salt. This Salt I treated  
with a calcining Fire, and the Addition of Powder of Char-

' coal , by which means it was not fused, but, by means of a \*  
brisher Fire, almost the Whole of it was evaporated, and filled  
**the** Chamher with a fetid Vapour, like that of common Sulphur.  
But, by an Addition of Salt of Tartar, I obtained a Liver of  
Sulphur from it. From winch Circumstance'tis certain, that  
this Salt is generated of the Acid of Sulphur continued in the  
Vitriol joined with the Earth of theAlcaline, or Sea Salt. See SAL.

Having treated of those Salts winch are generated of the  
Acid os Sulphur, and an alcaline Salt, we now come to con-  
fider the Nature of some other Salts used in Medicine : Among  
these are Sal Ammoniac, which is generated os the Volatile  
Salt os Urine, or Soot, and Sea Salt ; and which, by the Addi-  
tion of the Volatile urinous Principle, is of a far more acrimo-  
Hinns and penetrating Nature, and, for that Reason, highly  
efficacious in attenuating and resolving Viscid and tenacious Hu-  
mours in the Primae Vise. And *Muys,* a celebrated *Dutch*Physician, in a particular Treatise, affirms. That Intermittent  
Fevers of all Kinds may he infallibly cured by this Salt, if it  
is exhibited in due Quantities, and at proper Times. But I am  
os Opinion, that this Remedy is far hetter suited to robust  
Patients, such as the *Dutch* generally are, than to Persons os  
delicate and tender Constitutions.

Os the same Nature and Virtues is the digestive Salt os *Sylvius,*which that Phjsician frequently used, in order to destroy viscid  
Crudities, quicken the Appetite, and remove Intermittent Fe-

Vers: And this Salt is prepared os the Residuum of the Spirit of  
Sal Ammoniac prepared with Saltos Tartar, by ElixiViation  
with Water. Tis, also, certain from Experience, that thefc  
Salts, when exhibited in a pretty large Dose, are highly pur-  
gative : But I would advise Practitioners, never to prescrihe  
large Doses os them ; fince, unless their acrid Spicula are, in  
some measure, sheathed up by Viscid and tenacious Particles in  
the Body, and unless they are diluted with a sufficient Quantity  
of Liquor, they may easily destroy the Villous Contexture of  
the Glands and Intestines. There are, also, used in Medicine  
neutral Salts prepared of Tartar, as, also, of Vinegar and Salts,  
or alcaline Substances. Of this Kind is the Tartarus Tartari-  
satus, the *Sal Essentiale,* or the Terra Foliata Tartari, a Solu-  
tion of CrabS-eyes, the Salt os Coral, and of Mother of Pearl ;  
all which Salts were in former Times highly esteemed, especi-  
ally by *Tachenius,* who sold the Terra Foliata Tartari, mixed  
with a Solution of Crabs-eyes, for the fixed Salt of Vipers, by  
which means he acquired immense Riches. The Salts of this  
Kind have this Advantage peculiar to themselves, that, in con-  
sequence of the great Subtilty of their saline Parts, they pene-  
trate more effectually into the Mass os Blond than other Salts,  
and powerfully evacuate the peccant Humours by Urine.

We have already shewn, that almost all the neutral Salts,  
especially those of a bitterish Taste, are possessed of a Very con-  
siderable and powerful purgative Quality ; and we affirm, that  
they produce this Effect by stimulating the nervous and muscu-  
lar Coats *of* the Intestines, and by that means increasing their  
peristaltic Motion. It may by some he objected, that by many  
Medicines not only destitute os a saline and bitterish Taste, but,  
also, entirely insipid, the intestines are, also, powerfully stimu-  
lated to a Discharge of their Contents, as well aS by these Salts, '  
as we observe in the *Magnesia Alba,* an highly fine, insipid,  
and whitish Powder, apparently destitute of every stimulating  
Quality : But the *Magnesia Alba* does not produce this Effect,  
in consequence of the earthy and alcaline Principle of which it  
consists; but he cause this Medicine not only produces **a** Violent  
Effervescence with any Acid, but is dissolved by it, and **in .the**Solution acquires a more saline bitterish Taste than that of any  
other earthy Alcali, whether Crabs-eyes, Shelis, or Egg-shelis.  
From this Circumstance we may conclude, that the *Magnesia  
Alba* only proves purgative, when, heing dissolved by the Acid  
in the Primae Vise, it is Converted into a neutral Salt; and this  
is consumed by Experience, since hypochondriac Patients are  
excellently purged by it; but not those whese Stomachs **are**full of a thick and Viscid Phlegm.

From what has heen said, I think 'tis obvious, that neutral  
Salts are os great Efficacy in the Cure of Diseases, posteffed os  
an aperient and detergent Quality, capable of promoting all  
the Excretions, and, when exhibited in large Doses, of a ca-  
thartic Quality. 'Tis, also, sufficiently obvious, that Salts of  
this Kind are, of all others, the most salutary, and so friendly  
to Nature, that the Physician, can neither practise successfully  
without them, nor easily produce any bad effects by using  
them. But I foresee, that many Objections may be made to  
this Doctrine, since he th experience, and accurate Observation,  
convince us, that those Medicines which are highly acid, as,  
also. Volatile, urinous, and fixed alcaline Remedies, are so sar  
from heing unsalutary and unfriendly to the Constitution, that  
they may be said to he the most safe of any. But to this **I**answer, that neither acid nor alcaline Medicines, whether of  
the fix'd or Volatile Kind, ever produce a salutary effect, un-  
less by the internal Disposition os the Humours, especially those  
lodged in the Primae Vise, they are converted into a neutral  
Salt, and by that means render'd friendly to the solid as well aS  
fluid Parts of the human Body.

For this Reason, when a large Quantity of Bile, especially of  
**an** alcaline and oleous Kind, is collected, and becomes stagnant,  
in the Flexure of the Duodenum, strongly affects the nervous  
System, and by that means often produces bilious Vomitings,  
Nausea, Loss of Appetite, hectic Heats, Cephalalgias, and an  
insatiable Thirst, then acidulated Liquors, such as Ju laps.  
Refrigerants, or other acid mineral Spirits edulcorated, are of  
singular Service. Besides, when an intense febrile Heat, arising  
from a Violent intestine Motion of the sulphureous Parts of the  
Blood, by destroying its temperate and due Texture, exhausta  
the Body, and impairs the Strength, Acids are, in such Cafes,  
more heneficial than neutral Salts, alcaline Substances, or any  
other Remedies, because they are capable of fixing and fubdu-  
ing the sulphureous Particles, by whese Motion the Heat is  
produced. In malignant Disorders arising from a Putre-  
faction of the Humours, more Relief is to he expected from  
Acids than from any other Remedies, hecause a Putrefaction  
not only generates an Alcali, but, also, proceeds from a large  
Quantity of it : And, when this Alcali is corrected and subdued  
by an Acid, the Putrefaction is forthwith stops. In inveterate  
Scurvies, and arthritic Disorders, large Quantities of Salts are  
generated in the Mass of Blood, which approach more nearly

' to an alcaline and likivious, than to a neutral Nature. Hence  
the Blood of such Persons, when taken from the Veins, appears  
thin and florid, and their Urine is, for the most part, hiahly  
red, saline, and liaivrous. And Experience teaches us, that, in  
such Cases, more happy Effects are often produced by temperate  
Acids, than by alcaline, urinous, and volatile Medicines, or  
these of an het and spirituous Nature.

Those Medicines which abound with an alcaline Salt, whe-  
ther os the fix’d or volatile Kind, are by no means to be pro-  
mrfcuousty and indiscriminately used, tho’ they are of singular  
Service, when prudently exhibited ; for when a Redundance of  
acid Humours is lndged in the Prinue Vise, and excites violent  
Symptoms, as we observe in hypochondriac, hysteric, and me-  
lancholic Patients, such as Corrosions of the Stomach and In-  
testines. Anxieties, Inflations of the Stomach attended with a  
Cardialgia, Coughs accompanied with Pain of the Stomach,  
Cephalalgias, excessive Costiveness, or preternatural Looseness,  
accompanied with a Tenestnus, in these Cases, certainly,  
earthy Alcasines, and especially Crabs-eyes, prepared Shells, or  
Oil of Tartar per *Deliquium* alone, will produce more happy  
**Effects,** than any other Medicines, because by absorbing **the**Acid they convert it into a neutral Salt, which is afterwards  
easily carried through the excretory Ducts, without exciting any  
violent Symptom. But if there is rather a Deleft than a Re-  
dundance of Acid in the Primae Viae, and if thefe are full of  
viscid and tenacious Humours, alcaline earthy Substances, taken '  
in large Quantities, are highly prejudicial; for since they are.  
not dissolved, they rather, by uniting with the earthy and stimy  
Particles, augment the Quantity of the Phlegm, and by that  
means destroy the Appetite, load the Stomach, obstruct the  
Mouths of the lacteal Veffeis, and render the Patient costive.  
*Haffman.*

-. NEUTHA. A Pellicle covering the Eyes, or Ears, or the  
whole Face of a Child in the Birth.

NHAM81, *Brastlieustbus,* Marggr. An acrimonious Plant with  
**a** naked Flower, and a ligneous, genicolated Stalk, which creeps  
like Purstane, and takes Root from Place to Place by its Fibres r  
The Leaves, chewed, have a pungentTaste, like Mustard, or Na-  
sturtiom.

The Leaves, or Seeds, rubbed upon theTop of a Bubo, speedily  
remove it. An Ounce and an half .of the Seeds, drank inWine,  
are an excellent Remedy against the Wounds inflifted by any  
venomous Animais whatever; or the Decodiion of the like Quan-  
tity of its Seeds may be drank with ao equal Quantity of Wine.  
The Herb itfelf is generally boiled with Fish, and is very proper  
for that Purpofe. *Raii Hist, celant.*

NHANDU *scu Piper caudatum.* Marcg. Pison.

This is a rmall Shrub, which is produced in some Woods of  
*Brasse,* and bears a Species of Katltios, full ’of round blackish  
Seeds, aS large as those of the Poppy, and of an acrid Taste  
like that of the best Oriental Pepper.

The Leaves of this Plant cure Ulcers of the Legs: Its Roof  
is beneficial in Apostems; and, as both are very strong, they  
are proper for Baths in cold Disorders, even after they are dried,  
and kept for a considerable Time. A Decoction of the Roots  
and Suckers discusses and incides thick and viscid Humours, and  
cures a Dropsy of the Feer. *'Raii Hist. Plant.*

NHUA *Brastlienstbus* Marcgrav. L.3. C.4. Otherwise called  
*Prunisera Brastliensts, siuciu rotunda albescente.*

When rhe Fruit is ripe, it falis off, is gathered and eaten by the  
Inhabitants of thofe Countries in which the Tree is produced;  
but I find no medicinal Virtues ascribed to it. *Raii Hist. Plant.*

N tCARION. The Name of a Collyrium, described *try Aetius,  
Tetrabib-2. Serm. 4. Cap.* It;.

N1CCOLUS. The Name of a Gem, to which some super-  
stitious Virtues are afcribed. *Castellus* from *Chancus*

NICEPHOR1 PASTlLLOS. The Name of a Troche de-  
scribed by *N. Myrepfis,* sesii.4r. *Cap.* ao.

NICODEM1 OLEUM. The Oil of *Nicodemus.*

. Take of the Seeds or Tops of St. Johsss-wort, and old Tur-  
pentine, each one Pound; Litharge, six Drams, Hepatic,  
Aloes, and Tuny, of each three Drams; of Saffron, one  
Ounce, of White-wine, four Pounds; and of old Oil, two  
Pounds: Let them digest together in the Sun for a sufficient  
time; then hell, and strain *off* the Oil. *Old College Dispen.  
sutory.*

NICOLAI EMPLASTRUM. The Name of a Pleister de-  
scribed by *Paulus Acquieta, Lab.-y Cap.tr.*

N1COLAUS MYREPSUS. This Author, fays Dr. *Freind,*was the last of the *Greek* Writers, if we may reckon such au im-  
pure Style, as he uses, *Greek,* who, indced, has taken the Pains  
to collect together, by way of Dispensatory, the several com-  
pound Medicines, which we find dispersed in the *Greek* and  
*.Arabian* Writers. It is very certain, that *Myrepscus* compiled this  
Work hefore I-oo. for not only *Petrus de Abano,* the famous  
’ Conciliator, who died in I3I6. bur Ar. *Sylvaticus* and *P. Pede~  
montanus,* both Physicians to *Robert* King of *Sicily,* and whe

wroth very early in his Reign, which began in I;Io. by **Name**refer to several Receipts, which we find in him.

The Works of ahis Anther, which relate to the Composition  
of Medicines, and are divided into forty-eight Sections, **were**never published in *Greek s* **but were** translated into *Latin, and*illustrated with Notes, by *Lesnordas Fuchstus.* This Translation,  
though none Of the most correcti has, however, undergone se.  
veral Editions; One, for instance, at *Dastl,* in the Year 154.9.  
*Pol.* another at *Lyons,* in I 550. *Octav.* another at *Prankfort,* in  
I6a6. *Octav.* another among the *Medica Artis Principes* Of  
*Stephens,* in ιτὑ7. *Pol.* and another at *Kloremberg,* in 1658.  
*Ctctav.* with a Preface, by *Jshannes Daremamus Beyerus,*which is the heft Edition Of all hitherto extant. *Pair. Bibl.  
Grac.*

N1CON, or NINORR Barbarous Names for Hellebore.  
*Castellus.*

N1COTIANA.

The Characters are; -

: The Root is annual; the Calyx is either long and tubulous,  
and so divided into five long and acute Segments, or else short  
and wide, and then divided rn.o five Segments, which arc obtuse.  
The Flower is monopetalous. Funnel-shaped and cut either into  
five deep and acute Segments, which expand like a Star, or into  
five short and obtuse ones; and is furnished with five Stamina.  
The Fruit is membranaceous, oblong, or roundish, and divided  
by an Interclofute into two Capstrlx, or Celis.

*Boerhaave* mentions four Species of this Plant; **which are,**

I. Nicotians; major; latifolia. *C.B.P.tsta. Tourn. Inst. sty.  
Bocrh. Ind. ali.* 230.. *Nicotiana, Petum, Tabacum.* Offic. Ns-  
*cosiana major, five Tabacum majus.* J. Β. 3. 629. *Tabacco lati-  
folium.* Park. Pared. 363. Raii Hist. I. 7I7. *Tabacum, Nice-  
tiana.* Chab. 726. *Petum five Tabacum.* Pison. 206. *Hyoscya.  
mus PeruvianKs.* Ger. 285. Emac. 357. TOBACCO. *Dales*

Tobacco has very large, broad, softish, and clammy green  
Leaves, two Feet long, and sharp-pointed at the Ends; the Stalk  
is about as thick as one’s Thumb, round, and somewhat hairy,  
beret alternately with the like, but smaller, Leaves, without Foot-  
stalks. The Flowers grow on the Tops of the Stalks, of a pale-  
red Colour, in Shapeot long hollow Tubes, with the Brims spread  
out into five Segments. The Seed-vessels are long and round-  
pointed, divided into two Parts, full of a great Number of very  
fmall brown Seeds. It is sown in the *Spring,* and flowers in  
*July* and *August.* The Leaves are used. "

Much has been said upon this Plant, by several Authors, par-  
ticular Treatises having been wrote about it. The green Leaves  
are used only in Oik and Ointments, and are accounted good for  
Wounds, Ulcers, inflammations. Tumors, Piles, and the King’s  
Evil. The dried Leaves are a strong Emetic, but ought to be  
ofed with the utmost Caution, by reason of their violent Work-  
ing ; chewed in the Month, it evacuates a great deal of Phiegm,  
as well as tmoked in a Pipe, in which vast Quantities are con-  
sumed, the greatest Part by way of Amusement, though forne  
commend it as an Helper of Digestion. Many extol it as a Pre-  
’servative against the Plague; butRsnines fays, that, in the Plague  
*of Leipstc,* several died, who were great Smokers of Tobacco.  
The distilled Oil is of a poisonous Nature; a Drop of rr, taken  
inwardly, will destroy a Cat: It is sometimes put into an hollow  
Tooth, to cure the Tootb-acb. A Decodion of the Leaves  
helps the Itch, and other cutaneous Distempers; the Dust de-  
strays Fleas, Line, and other troublesome Vermin, the Dealers.  
in Tobacco being seldom troubled with them. *MillersPot. Osse.*

Tobacco, beat well with Vinegar or Brandy, into a Mash, and  
apphed in a Linen Rag On the Stomachi occasions strong Vomit-  
ing, and has sometimes very good Effects in removing hard Tu-  
mors of the Hypochondria. I know two instances or its making  
a complete Cure: One is, of an old Man, who, by steeping in  
the open Air, while the Serenadas, or Night-dews, sell, was  
taken, in the *West-Indies,* with **a** Numbness of his whole Body,  
which foon was followed with Purging and Vomiting; and these  
going off, he had all the Symptoms of jaundice, and Hardness,  
and Pain, under the short Ribs of the Left Side. The Pain went  
off in a few Days, but the Tumor increased. After he had used  
Variety of Medicines, for five Years, to remove this Disease, **a**Sea Surgeon applied a Poultice of Tobacco, disguised with Green  
Tea, Sugar, and Cochineal, upon the Epigastrium and Hypo-  
chondria. After this Application had been made four or five  
Hours, he vomited a great deal of purulent Matter. When the  
Poultice was taken away, the Vomiting ceased. He -continued  
to apply this Mash once a Day for a Month, and was perfectly  
cured. The other Example is of a Boy, who was cured, much  
in the fame manner, of an bard indolent Tumor of the Left  
Hypochondrium.

The Man had six Ounces of Tobacco in his Poultice; the  
Boy bad only one; and the Quantity must always he regulated  
by the Age of the Patient. Mr. *John Stedman,* from the *Me-  
dical Esseays, Vol.* 2.

As *Nicolaus Msrsardas,* in bis *Simpl. Med. Histor. Cap.* I4. has  
given a sutler and more ample Account of Tobacco, than any  
other Botanist, we shall, as briefly aS possible, exhibit bis Scnu-  
marts, with resped to this Plant.

Its tnieName, therefore, among the *Indians, isPicelt;* for it  
was called Tobacco, by the *Spaniards,* from a certain Island Of  
that Name, in winch it is produced in great Quantities.

It rises to a great Height, so aS sometimes to equal the Malus  
Assyria, Commonly Called the Lemon-tree; Its Trunk is (freight,  
with many large Ramifications springing out from it: Its Leaf is  
almost like that Of the Malus Assyria, but larger. Of a faint-green  
Colour, like that Of the Leaf of the sharp-pointed Dock and  
somewhat hairy, aS the whole Plant itsclf is: On the Extremities  
Os its Branches it bears a Flower, resembling a small Bell, of a  
whitish Colour, and in the Middle somewhat inclined to that Of  
a Purple. When this Flower salis off; it is succeeded by a Fruit,  
resembling the Heads of the black Poppy, and in which a small  
heed, of a blackish and cineritious Colour, is contained. Its Root  
is divided into many Branches, is of a woody Contexture with-  
in, of the Colour Of Saffron, and of a bitter Taster Its Bark is  
easily taken Off, but we know of no medicinal Virtues ascribed  
to it.

It grows in most Parts Of the *Indies,* hut thrives best in moist  
and shady Places, where the Soil is light and uncultivated -. It  
may he planted at all Seasons of the Year but, when it appears  
above-ground, is to be carefully preserved from Cold: It is a  
great Ornament to Walls, because, like the Citron-tree, it retains  
its Verdure through the whole Year.

: This Plant was formerly used by the *Indians,* especially the  
Inhabitants of *Neva Spain,* for curing Wounds and first, when  
it was imported into *Spain,* it was more used for adorning Gar-  
dens, than admired for its medicinal Virtues; But now the Scene  
is changed, and the Plant become sar more famous on the latter  
than On the former Account, for it is of an bearing, resolvent.  
Cleansing, and somewhat astringent Virtue.

Its Leaves, if applied warm, and frequently renewed, are an  
efficacious Remedy in Cephalaeas, and Hemicranias arising from **a**cold Cause, or Flatulencies, aS, also, in a Stillness of the Neck,  
or Tetanus, and in Pains Of the whole Body, arising from the  
same Causes. Some anoint the Part affected with Ost of Orange-  
fiowers, before the Application Of these Leaves.

. By cleansing the Teeth affected with a Linen Cloth,’ dipt in  
:the Juice Of Tobacco, and wrapping up the Leaf, in form Os a  
-Peel, to be put into their Cavities, Tooth-achS are not only re-  
-moved, but, also, the spreading Of the Corruption prevented.  
? A Decoction of the Leaves with Water, and a Linctus pre-  
pared Os this Decoction, are beneficial in Disorders of the Breast,  
inveterate Coughs, Asthmas, and Other Disorders arising from a  
cold Cause. A Syrup prepared Of Sugar, and a Decoction Of  
the Leaves, promotes the expectoration Of putrid Humours.:  
The Smoke, also, of Tobacco is sometimes beneficial to asth-  
matic Patients, but necessary Evacuations must he previously  
made, if the State Os the Patients will admit of it.

.. - The Leaves, if heated under the Ashes, and frequently applied  
IO the Stomach, hesore the Ashes are wiped Osh are heneficial to  
-those who labour Under Chilness and Flatulences. Others, af-  
**.ter** anointing - their Hands with Oil, rub the Leaves between  
them, and apply them to the Region of the Stomach, for the  
same Purpose, The Leaves triturated with a little Vinegar, and  
applied for a Considerable time, are beneficial in Obstructions  
and ScirrhuseS Os the Stomach and Spleen, but oyer thefe Leaves  
/there is in Linen Cloth dipt in the warm Juice of Tobacco, to  
-he daily applied. If Tobacco Cannot he had. Snuff may he  
**mixed** with , any Common aperient Ointment, with which the  
Part Obstructed, Or swelled, is to be for a. considerable rime  
anointed - : „

. The *Indian* Women, greatly extol Tobacco In Crudities of **the**.Stomach, whether in Children or Adults, for they first anoint  
the Abdomen with Lamp-Oil, and, heating the Leaves under **the**Ashes, apply some Of them to the Region Of the Stomach, and  
mothers to the Back, in that Part most contiguous to the Stomach;  
by which means the Crudities are concocted, and the Body ren-  
.derd soluble, is the Application is repeated, aS often aS is neces-  
sary. A final! Quantity os the Juice of Tobacco, boiled with  
Sugar, expeis fiat and round Worms from the Intestines, But,  
in this Case, the Leaves, when triturated, are to be applied to **the**Navel, and a Clyster is to he injected.

- The Leaves, when heated in the manner already mention’d,  
and applied as hot aS the Patient can possibly bear, afford great  
.Relies in nephritic and flatulent Pains: They are, also, a proper  
Ingredient in Clysters, Fomentations, and PlaisteIs, designed for  
certain Purposes.

When render'd sufficiently hot, and applied to the Navel, and  
Region of the Uterus, these Leaves afford present Relief in  
Suffocations of the Matrix; and, if a Deliquium should ensue, **the**Smoke Of them is to he blown into the Nostrils, by which  
means the Patient will he forthwith recovered. This Piece Of  
Practice is so Common among the *Indian* Women, that, for this  
Purpose, they preserve and highly esteem Leaves Of Tohacco.  
Some Of them, hesore the Application Of these Leaves, apply  
fragrant Substances to the Navel, the most considerable-of which  
are Tacamahac, OU Of liquid Amber, Balm of *Gilead,* Catan-  
na. Or a Plainer made Of all these, and wore constantly on the  
Navel.

In Pains os theJoints, arising from cold Hnmours,Or, **at** least,  
shch as are not Very het, the warm Leaves os Tobacco are essi-,  
.caciousty applied, or a Linen Cloth dipt in the warm Juice; sot  
these resolve and digest the Humours: For which Reason the  
warm Leaves are successfully applied to cedematous Tumors, pre-  
viouily washed with warmTobacco-Joice.

It is Certain from Experience, that Chilblanes are cured by  
rubbing them three or four times with Tobacco-leaves, and then  
'washing the Hands Or Feet with warm Water and Salt.

Some have sound from Experience, that they resist the Poison  
with which theCanibals tinge their Arrows; whereas, hesore, it  
was customary to sprinkle Sublimate in the Wounds inflicted  
by that means. For this Purpose, the expressed Juice is to he  
poured into the Wounds, and the triturated Leaves afterwards  
applied.

' When applied to-poisonous and pestilential Carbuncles, the  
Leaves induce a Crust, and promote a Cure: They are, also, a  
present Remedy for the Stings and Bites Of poisonous Animals.

When applied to recent Wounds, they stop the Effusion of  
Blood, and conglutinate them, but, if the Wounds are consider-  
ably large, their Lios are to be brought into Contact, aster  
which the Juice Of Tobacco is IO be poured upon them, and  
the triturated Leaves applied, and secured upon the Wounds: **On**the remaining Days, the same Methodos Dressing is to be used,  
and a proper Regimen observed.

*Nicolaus Monardus* informs us, that he knew a Man afflicted  
with UlcerS Os the Nose, which discharged a Sanies seemingly  
Of a contagious Quality: By his Advice, the Patient droptTo.  
bacco-juice into his Nostrils, after the second instillation Of this  
Liquor, a large Quantity Of Worms fell Out of ins Nostriis,  
then a smaller Quantity, and, a few Days after, the Ulcer was  
cured, though the corroded Parts were not restored. . Rubbing  
Impetigos, and scald Heads, with the Leaves, also. Proves bene-  
ficia!. *Nicol. Monarchs.*

Smoking Tobacco produces a Discharge of Phlegm, and  
dries Catarrhs: Hence, by evacuating the Glands of the Mouth  
and Fauces, it proves beneficial in a TOOth-ach, and Stuffing of  
the Head, but, aS it is heating and drying, it is fo sar from he-  
ing useful, that it is rather hurtful, to Persons Of hot, bilious, and  
lean Constitutions , which, says Mr. *Bay,* I tnysels have expe-  
rienced, except when afflicted with a TOoth-ach, Or when the  
Fauces were turgid with Humours.

\* Some condemn Smoking: Thus *Caspar Hoffman* informs us,  
that he was told by the Soldiers, who had lived for some time  
in *Holland,* that they saw the internal Parts of the Cranium Of  
Malefactors black, when their Heads were dissected, and that  
he was informed by a certain Soldiery who served in the last War  
against *Bohemia,* that all .the *Ensiifljmen* stain had their Cra-  
niums in a like Condition, because the *Hollanders* and *Enpiiflr*are much addicted to the Smoking Of Tobacco. The same,  
fays Mr. *Bay,* was asserted to me by Mr. *Boacbaret,* an Apo-  
thecary Of *London. ' -*

But if these Facts were true, which, however, I have some  
Reason to doubt, yet it does not hence follow, that Smoking  
is prejudicial, fince there are many Persons, who have smoked  
copiously every Day, for many Years, remain sound and healthy  
to an extreme old Age, without eVer sustaining any injury, but  
rather reaping Advantage, from that Practice, for, in some, it  
strengthens the Stomach, and promotes the Concoction Of the  
Aliments, in Others it renders the Body gently soluble - and others  
use it for the fake of Amusement, without either Injury or Be-  
nefit.

- According to *Hernandez,* taking Snuff renders the Person, who  
uses it, less sensible os Blows, or any hind os Punishment, aug-  
incuts the Courage, and makes Persons more fit for enduring  
Labour and Fatigue: But it is not to be used to Excess.

The green Leaves Os Tobacco, bruised and applied, alleviate  
Gout Pains, and are os a narcotic Quality. The Juice, also, of  
Tobacco, or the green Leaves, applied, remove the Heat, and  
Cure the Pustules, excited by Nettles.

*1 Joan. Torrentius,* in his Notes upon *Fernandez,* gives us a sin.  
Siar Method of purging the Brain, which he received from a  
ipuchin, who asserted, that by its means he had freed many  
from the Gout.

AS much of the dried Leaves of Tobacco are to he taken, as  
may he contained in a Walnut-shell; and, compressing the  
Tobacco with the Fingers, it is to be put into a Piece of  
Clean Linen, Or Silk, wrapt up into a Nodulus, as large aS  
an Hazel-nut, and bound hard with a Thread. This No-  
- . dulus is put into the Mouth, and, by means of the Tongue,  
applied to the Palate for half an Hour: Upon which a te-  
nacious Phlegm is immediately discharged, so tough as to  
hang from the Mouth like a Thread. And though by this  
means a flight Vertigo is produced, yet it is soon removed,  
- and is entirely inoffensive, unless the Brain is of an highly

warm Nature.. - . : -

Some, in consequence of the narcotic Quality of Tohacco,  
affirm that it is Of a cold Quality; but that it is hot, is sufficiently

obvious from its resinous grateful Smell, its Acrimony, by  
which it heats the Fauces, and its vomiting almost aS powerrtilly  
as Hellebore, as is certain from the Experience of many: Be-  
sides, according to *Joan. Torrentius,* there is no Narcotic aS yet  
known, which is not of an hot Quality. -

TheUse of the Water, distilled from the green Leaves of TO-  
haccO, powerfully removes Stones fumly lodged in the Kinneys. -  
*Chesueau ex Zacut. Lib.* 2. *Prax. Mirand. Obsc 66. ex Collectaneis  
D.HUls.e.*

Tobacco sufficiently calcined in a Crucible, and put into the  
Cavities Of the affected Teeth, immediately removes the Tooth-  
ach, as I myself, says Mr. *Chesueau,* have frequently experienced.

A Drop Or two Of the Oil Of Tobacco, put upon the Tongue  
Of a Cat, Or any other Animal, quickly kill it. But *Francis ICandi*Observes, that all Animals are not killed by this Oil, and that all  
the Animals it produces this Effect upon, are not eoually-soon  
destroyed by it because there are great Differences between  
various Tobaccos, and between the several Animals On which this  
Oil acts. Dr. *Tancred Robinsen.*

Surgeons sometimes use this Oil, in Order to induce a Torpor,  
when they amputate Limbs. Dr. *Palmer, e Diaatis JD. Harp,  
manni*

I recommend the Use of Tobacco in **the** Plague; for, by its  
means, I myself was freed from that Misfortune, and almost all  
the Houses, both of *London, vudNimmegen* in *Gelderland,* where  
Tobacco was sold, wee free from the Contagion, though the  
Inhabitants of the adjacent Houses were infected. *Diemerbroek  
dePesse, ex Adversurus I).Tancred Robinson..*

In Order to cure **a** Palsy, infuse the green Leaves of Tobacco  
in Malmsey-wine 5 and, after Sweating, rub the paralytic Parts  
with this Wine, which is preferable to all Other external Medi-  
cines. *Hart mannus.* This was communicated to me by the inn  
genions Dr. *Edward Hulse:*

*Anton. Becchus* informs us, that the Smoke Of Tobacco, blown  
into the Uterus, in a Suffocation Of that Part, in a Difficulty Of  
Breathing, Straitness about the Praecordia, and Syncopes, pro-,  
duces very happy and instantaneous Effects. *Ex Excerptis Di  
Hulse.*

- The Leaves Of Tobacco, rubbed On the Hand, or a Piece of  
Paper, or Linen, produce a beautiful green Colour. ; *D. Meret,  
in Not. ad Anton. Neri.*

‘ An Instance of a Violent Vomiting, Constantly produced by  
sprinkling Snuff upon a contused and lacerated Thigh, is found  
*in Ephein. German. An.* I2. *Obs.* Io8.

”1 Once saw a Gentleman Of Distinction so sat, that he could  
neither move from Place IO Place, nor fit Ou Horseback, wirh-  
Out immediately falling afleep,\* but he soon became able to do  
both, being restored to his natural Sine by chewing Tobacco,  
as he himself assured me , for this Plant is beneficial for Phleg-  
matic and cold Constitutions. *Borelli, Cent.* 2. *Obs.* I I. (

But chewing Tobacco has not always the same Effect on all  
Persons; for I know a Gentleman preternaturally sat, who was  
render'd no leaner by its Use; but he told me, that his Teeth,  
which were formerly loose, were fixed by that means.

I knew three robust young Men freed from Dysenteries, by  
drinking a Decoction Of Tobacco, which by its violent Opera-  
tion totally evacuated the Cause of the Disorder, and produced  
the Effects Of an Anodyne and Narcotic. *Diemerlrroeck, Obs.  
Medic. Obs. IT* Butthough, in these Patients, this Medicine  
produced salutary Effects, yet I think it hardly adviseable, pro-  
iniscuoufly to exhibit a Decoction of Tobacco to all dysenteric  
Patients, because it operates very Violently, both by Vomit and  
Stool, j

*iesillis* recommends the Use of Tobacco in Camps, because  
by its means the Scarcity of Provision may he supplied, and the  
Men render'd less sensible of Fatigue and Danger: It is, likewise,  
effiCacious, not Only in preventing, but, also, in Curing some of  
'rhe Disorders which most generally rage in Camps, such aS Co-  
lies. Diarrhoeas, Ulcers, and Pains of the Head and Joints. *Raii  
Hist. Plant.*

The various Abuses Of Tobacco are so numerous, that it would  
he too tedious to enumerate them all. The Curious, however,  
:may Consult *Simon Pauli de Abusu Tabaci.*

The Cases, also, in which this Plant is proper and improper,  
**are** so various and perplexing, that great Skill and Judgment **are**requisite, to determine when it is to be used, and when not. '

It is, however, universally granted, that an excessive Use of  
this Plant, or any of its Preparations, never faiis to be produc-  
five Os bad Effects. But aS the precise Quantity proper for each  
’ Constitution Cannot he determined, so this Excess can only he  
estimated by the Effects produced by it; so that it seems to he **a**kind of Absurdity, to lay down general Rules, either with **re-**ipect to the Use or Abuse Of Tobacco.

2- Nicotiana, major, angustifoha. *C.B.P.iJo. Nicotiana  
five Tabacum, folio angustiore.* J. B. 3.630. *Hyos.equami Peru..  
' viani altera.* Icon. Doth p. 452.

3. Nicotiana - minor. *C. B.* P.I7o. *Tourn.Infl.* I17. *Boerh.  
Ind. A .* 23O. Petto» *Rivini.* Rupp. Flor. Jen. Ip. *Pet urn An-,  
glicanum.* Pharm.Bat. Id I. *Tobacco Anglictem.* Park. Th eat. 7X1.  
*Priapeia qieibus.dam, Nicotiana minor.* LB. 3. 630. Chain 527

*{Fisura ceansoofiftL. PAii* Hist. 1.7I5. *Hyoscyamus luteus.* Gerrn?  
284. Emac. 256. *Hyoscyamus, flore luteo.* Rivin. III. Mon. 102.  
ENGLISH TOBACCO. .

This is a lower and smaller Plant than the first, the Stalks are  
round and hairy, two Or three Feet high. The lower Leaves  
are pretty large, oval, and round.[sainted, and clammy in han-  
tiling ; they are much less than the first, those which grow on the  
Stalks, are fmailer, set on alternately. The Flowers are hollow,  
and Cup-sashioffd, with the Brim cut into five Parts, os a yei-  
lowish-green Colour, fet in hairy Calyces. The. Seed is rather  
bigger than the first Sort, growing in a Seed-Vessel, which, by  
some Persons, is compared to the Glans of the Penis, whence it  
is sometimes called *Priapeia i* It is sown in Cardens, flowering  
*in July* and *August.*

This Tobacco is riot *so* much used aS the first Sort, aS being  
helieved to have less Strength and Virtue, though it is too fre-  
quently sold by the Herb-women for that, being, as I suppose  
more easily propagated ; the Leaves of this they, also, usually  
sell for those of *Mandragora,* in the *Unguentum Populean. Mil.,  
lapis Bot. Cesse. '*

4. Nicotiana; minor, foliis angustiorihas amplioribus. *Via ill.  
Boerh. Ind. alt. Plant.*

NIDOR. The Smell os burnt animal Substances. Hence  
Eructations, which have a Savour like putresy'd Fleshy are call’d  
*nidorous. -*

. NIENGHALA. A Name for the *Methcmica; Malabaro-.  
rum. - .*

..NIGELLA

The Charactere are 5

The.Root is annual, the Leaves are capillaceious; rhe Calyx  
generally consists *'of five* very thin, and very branched small  
Leaves, which expand in form or a Star. The Flower in rosa-  
ceous,. pentapetalous, or polypetalous, and furnished with nume-  
rout short Stamina, from the joining os the Placenta and Ovary, .  
a Multitude Of Corpuscles interposing, in the Form Os a mono-  
petalous, anomalous, and bilabiated Flofcule. - The Ovary, which  
adheres IO the Placenta, consists of many Pod, furnished with .  
a crooked Tube,- and becomes at lasts membranaceous, roundish.  
Or Oblong Fruit, consisting Of many Capsules, or Cells, horned at  
the Top, and full os numerous Sheds.

*Boerhaave* mentions ten Species Of this Plant; which are,

I. Nigella, arvenfis cornuta. C. *B. P.* I45. *Raii Hist.* 2. Io7o.  
*Tourrt. itfi.* 258. *Boerh. Indurizfr Melanthium.* Ossic. *Melan-  
thium fylvesire five arvenso.* j. B 3.2Q2. *Nigella arvenfis.* Parks  
Theat.1376. WILD FENNEL-FLOWER. ' -

The Seed of this Plant is used to dissolve the viscous Matters,  
which, gathering in the Sinuses of the Head, produce Catarrhs.  
For this Purpose, infuse **a** Pugil Of Marjoram-leaves in a Glass  
Of White-wine , .and add a Dram of *Nigella* Seeds strain the  
Whole thro’ **a** Linen Cloth, and'shuff the Wine strongly up **the**Nosei For the Colic, a Ptisan is made os the Tops os Chamo-  
mile, Melilot, and *Nigella* Seeds. The essential Oil has the  
same Virtues; It is Very incisive and expectorating. The Info-  
fion of the same Seeds, in Wine, am diuretic, and provokes **the**Menses. *- Martyris Tournefort. δ᾽'-*

2. Nigella, latifolia ’, store majore; simplici; Coeruleo. *C. B.  
P.* I45. *Prodr.* 75.' *Melanthium, Hispanicum, majus.* H..Eyst;  
.zest. o. 2. F. I2. Fig. I. ...... . ~

3. Nigella; angustisolia; flore majore, simplici, coeruleo. C.  
B. Ρ. I45. *Melanthium, capite et folia majore,* j. B. a. 2o7.  
. 4. Melanthium, flore maiore, pleno, coeruleo. C. B. P. I45.  
*Melanthium, capite vel calice, et flore majore, pleno.* J. 8.3.2O8.

5. Ninella; flore minore, simplici, candido. C. B. Ρ. I45.  
*Raii Hist.* IQ7I. *Tourn. last.* 258. *Bocrh. Indy A.* 283. *Nigella, '  
Gith.* Ossic. *Nigella Romana sive s.ativa.* Park. Theat. I375.  
*Melanthium.* Ger. 924. emac. I084. *Melantheum calyce et flore  
minore, semine nigro.* J. B. 3.2O8.. FENNEL-FLOWER.

This Plant has a small sticky Root, which perishes every  
Year, after ripening rhe Seed. The Stalk arises to be a Foot  
and an half, or two Feet high, hollow, branch'd, and chanel'd,  
having several finely, laciniated Leaves, pretty much resembling  
those of Lark-spurs, set alternately on them. The Flowers grow  
on the End os the Branches, of five small white, sharp-pointed  
Leaves apiece, with several Stamina in the Middle; and ate suc-  
ceeded by Oblong, round, hom’d Heads, having On their Tops  
five Or fix crooked Horns the Seed is black, and somewhat  
sweet; it is sown in Gardens 5 and flowers in *June* and *July.*The Seed Only IS used.

It is accounted heating and drying, and serviceable, aS an Er-  
rhine, to discharge tough mucous Phlegm from the Head, and  
recover the lost Sense Of Smelling ; it is said, also, to provoke  
Urine, and to help Tertian and Quartan Agnes, hut it is seldom  
used. *Millers Bot. Osse*

The Seed of *Nigella* is principally used in Medicine; aS, sot  
Instance, in resolving and expectorating the Mucilage Os rhe  
Lungs, for increasing Milk, sor provoking Urine, and the Menses,  
and against the Bites os Venomous Animals , it is esteemed in  
Quartan and Quotidian Fevers. Outwardly, It is of frequent  
Use in Cucuphas, Epithems, and the like Applications for easing  
the Head-ach, and drying up of RheumS. *Schroder.*

The Root has **a** peculiar Property of stopping Haemorrhages,  
being chewed in the Mouth, and intruded into the Nostrils.  
The Seeds afford an Oil by Expression, which many ignorant .  
Apothecaries, by a pernicious Error, make use of instead of Ost of  
Nard. The green Seeds abound with an excrementitious Humi-  
dity, and therefore are not taken, inwardly with Safety, aa  
*Tragus* observes. For this Reason, fays C. *Hoffman,* they are to  
be carefully dry’d, aster warring, as well aS rhe Seeds of Caraways .  
**and** *Melanthium :* On the fame account, they are rather used  
parched, than crude, in Catarrhs, and Coins, in which Cafes they  
are of.admirable Service, when parched or burnt, in sindh Pil.  
orders, I recommend the following Nodolus.

Take Seeds of Nigella parched, Tobacco, Styrax Calamita,  
- each one Scruple; Ambergrise, two Grains: Mix them, and  
. tie them up in a fine red Linen Cloth, to he held to the  
. Nostrils at intervals. 5. *Pauls*

For Loss of Smelling, take of Roman Nigella, a sufficient  
Quantity .. Reduce st tO Powder, and work it whir old Oil  
... in a Mortar. Let the Patient, with his Head held back-  
- ward, and his Mouth full of Water, receive this Liquor  
into his Nostrils, drawing up his Breath. *Galen.*

For **a** noble Lady, very subject to a Coryzi, I prescribed **the**. following Nndulus.

'.Take Seeds of Nigella parched, half an Ounce ; Abelmofch,  
Leaves of Caraways and Marjoram, each two Drams; Styrax  
Calamita, Tobacco, each one Dram; Ambergrise, seven  
Grains-. Mix them, and tle them up into a Nndulus.

By the Use Of this Remedy, the Lady preserved herself, sot  
the suture, free from all manner of Catarrhs and Coryzas, to  
which sue was before very subjecti s. *Pauls*

. The Howers of *Nigella,* thol of a Sky-blue, yet ruled with  
the Hands on Paper, or Linen, dye them of a beautiful green  
Colour. *Raii Hist. Plant.*

*6.* Nigeiia; Orientalis, flore flavo ; femine alato, plano, *y.  
Cer,* Ip.

7..N igella; Cretica. *C. B P.* red. *Prodr.* 75. *M. H.* 3.5I5.

st Nigella; Cretica ; latifolia; odorata. *Park. Theas* 1376.

Af.HI..5I5.. . -

# Nigeiia; peregrina; flore multiplici. Η. *Byst. Acst.* 0.2.

*Έ. IS. Pig* I. .. . ‘

I0- Nigella; fiore minore. *Bherb. last, alt. Plant. 'Val. I.*

**' ίΔο-**

It is called *Nigella, quest Nigrellat* from she brack Colour of  
its Seeds-; it is, alfo, named *Melanthium,* that is to say. Black-  
flower, thol its Flowers are not black ; and*' Melasperrnurn,* that  
is. Black-feed « . - ,

\_ The Virtues Of this Plant are aperitive, incisive, refolventrynd  
heating, st is recommended for rhe Stone in the Kidneys, and  
is of excellent Ute in intermitting Fevers, and for destroying  
worms, the Quantity of two Ounces thereof being toiled in  
Wine. Trie Plant is antioepbritic and carminative, whence,  
boiled in Wine, it cures the Colic; the Seeds increase Milk,  
and. promote Excretion by Stool, are of an acrimonious Qua-  
lity, and are said to stimulate to Venery. *Hist. Plant, adscript.  
Boeihaav. ” " ..........*

. NIGELLA CRETICA. A Name for the *Cesridella; folds  
sesuiserne divistss* . -τ )

N1GELLASTRUM. A Name for the *Lychnis sscgetum,  
maser,* and for the *Caridella ;foliis tenuisseme devises.*

\_ NIGER MORBUS.’ See **MoRBUs NIGER.**

NIHIL ALBUM, & GRtsEUM. See CAD.MtA.

NilR NOTSJIL *Malabareascs.H.* Mi Otherwise call’d. Bar-  
*cisere Malabarica fruclu ahlengo, tetracocco, calyculata..*

It is a little low Tree, or rather a Shrub, about six Feet in  
Height, growing in watry Places, and by the Banks of Rivers.  
The Leaves dry’d and pulveriz’d, and then exhibited every Day  
with Sugar, in an Infusion of Rice, arc st id to cure rhe Lues  
Venerea. Of the Leaves, boiled and baked in the Yolk of an  
Egg, is prepared a Cataplasm, which they believe to be of great  
Service, when apply’d to the Venereal Buboes of the Groin; of  
- the Leaves and Roots belled in Water, is prepared a Sath, which  
is supposed to have an extraordinary Effest in the Phrensy, Ma-  
nii, and other cephalic Affections; and of the Root boiled in  
Oil, they prepare a Liniment against the Gout. *Jiaii H. Ρ.*

NHR-PONGEL1ON. H. M. Otherwise call’d. *Arbor fils  
f qsofa Jndica stbquis longis contortis, in quatuor Cellulas per loss-  
gum divisas.*

It grows to the Height Of about ten Feer, and is not nnllke a  
Peartree ; it delights in a moist and muddy Soin

**Tine** Fruits are delicious Food totbe Parrots, of the Branches  
and Root,., they make Fishing-nets, which are preserved in the  
redisb Decoction of the Bsrk; of rhe Seeds of the Fruit bruis’d,  
with dry’d Ginger, and the Root or Fruit of *Pavetfa,* and the  
Washings of Rice, is prepared an excellent Liniment for spas-  
modic Affections, Which **the** *Malabariaus'* **call** *Parldavenera.  
Ban Hist. Plant.*

- NlL. See ANIL, and INPIGO;

NIL ARABUM. Α Name for the *Convolvulus’, cceruleuf,  
hederaceus ,seu trifilius. - - -; \_*

NILA HUMMATU. A Name for the second and third  
Species of the *Datura .Malabarica ;* the first, which is the *Nila  
harnmatu. Datura Malabarica secunda Species,* Hort. Mal. differs  
little from rhe *Stramonium majus album*; which see dest-rihed  
under STRAMoNtu.M. . - '

This Species grows in sirndry Places, and flowers all the Year,  
but principally in the rainy Season. - / \_

The Decoction is good for Pains in the Limbs, or for an In-  
duration thereof, contracted in washing the Body. The Plant,  
or the Root, polled in Oil, are good ro anoint the Body, under  
**a** cold Fever; rhe Leaves, bruifed with Lime, are of Service for  
anointing the Body, when affected with aa Itching. The De-  
coction of the Leaves and Fruits in Oil mitigates Pains of the  
Body, being anointed therewith;. and the Fruits bruifed, **the**Seeds being taken out, are apply’d with very good Success to  
Irnpostumes and Carbuncles. The Seeds, too freely taken, in-  
duce a Sopor, and endanger Life. This Plant is of greater Vir-  
toe then the *Datura Malabarica Hurnmatu dicta prirna Species* j  
which see under SmAsioNIUM. The other Species, under this  
Name, is the ' ~

*Mudela-nila-hammatuplaatura Malabarica tertia Species.* This  
differs from the former only in the Duplication or Triplication  
of its Flowers growing one within another. *Bait H. Ρ. ’*'N1LAMMON. The Name of a *Collyrium,* described by  
*Aetius, Tetrab. si. Serm.a. Cap.* Io7.

NILEI COLLYRIUM. The Name of a Collyrium in *Cel-  
sas, Lib. 6. Cap. 6. ἐν*

NILEI EPITHEMA. The Name of an Epithem men.  
tioned by *Aetius, Tetrab.* 3. *Serm.* I. *Cap.* I7..

NILI COLLYRIUM. Isic fame as the Nilei CoLLY-  
Rro.Mi *Actins, Tetrab.* 2. *Serm-t. Cap.* Io8.

NILIACUM, νιλιακον. An Epithet for the heft Son of  
Honey; chat is, *Attic* Honey.

NILICA-M ARAM. H. M. Otherwise called, *atcacia foliis  
Malabarica fructu rotunde, semine erianguls.* D.Syen. *Acs Myra-  
balanos Ernblica l* A kind of *Indian* Plum. ‘ '

. The tender Leaves, or the dry’d Fruit, pulverized, and exhi-  
hired in the thick acid Milk, called *Tayr,* is good for the dyfen-  
terse Flux; the Decostion of the fame is given with Success in  
**an** hot Fever; boiled with Sugar, and taken, they cute the Ver-  
rigo; the distilled Water of the Emit is proper to he drank for  
**a** preternatural Heat of the Liver. *Paii H. Ρ.*

NIMBO ACOSTAE, *seu Aria Pepou.* H. M. P.4. T. 52. p.

I07. *Arbor Irtdica Praxsno strnilis, Olea fructu.-* C. B. *Nimbo  
folio gir fnuclu Olea.* J. B. t. 1.1.*6.* C. 8. *Accadorach floribus al-  
bis scempervirerss.* Herman. A till Tree growing in the lfland  
of *Zeylan,* and other CounUies of the *East Indies* ; it resembles  
an Ash, and bears a Fruit like au Olive, from which they express  
an Oil, which the Painters use in staining their Cottons. Of the  
Leaves boiled in Water, they prepare a Bath, which is of Ser-  
vice for driving out the Small-pox, and mitigating Pains of **the**joints; of the fame, dry’d and puiveriz’d, and mix’d with the  
expressed Oil of the Fruit, is prepared an Ointment, which is  
used with Success in anointing fuch Parts as are affeited with  
Pains, Spafrns, or Convulsions; and cures Wounds, Punttures,  
and Contractions of the Nerves. The juice of the Leaves,  
taken either alone, or in Wine, Water, or Cock-broth, or ap-  
plyid to the Navel, either alone, or with a little Ox-gall, or Vine-  
gar of Aloes, is of extraordinary. Service for expelling all Kinds  
of Worms; for which Reason it is a most familiar and salutary  
Remedy to sll the inhabitants of *Malabar,* because they are very  
subjeci to Worms. *Garcias* and *Acosta-*compare this Tree to  
rhe Ash, for Bigoess, and externa! Appearance at a Distance,  
tho’ its Leaves are uniike those of the Ash. *Rail bi. P.*

*Karibepeu seu Vsimbo altera.* H. Μ. P. 4. T. 53- p. too-  
. This is a very.tall and beautiful Tree, always green, and bear-  
ing Howers and Fruit twice in a Year ; it grows in several Parts  
*otMalabors* From the Fruit is expressed an Oil; of the tender  
Leaves, bruifed and boiled in 0,1, is prepared a Cataplasm, which  
heals the Bites of Serpents, and other venomous Animals, being  
apply’d to the injur’d Part; of the same, boiled with the Leaves  
of the *Aria Bepou,.* is prepared an Apoxem, which is very ser-  
viceable in pestilential Fevers, and ocher malignant Diseases; the  
Root, taken any.mafiner of Way, purges by Stool. *Raii Η. P.*

N1NZ1N. A Name for the GiNsENG ; which see.

. NIOPON, νίωπον. This Word occurs in *Eresiau,* **and is**thought to be **a** Mistake for NETopoN, νέτωπον.

NIRUALA. H. M. *Pornifora Indica trifolia, fouctu Pruni-  
formi caudato. Tapia Brastliensern stmilis.* D. Comelin. A Tree  
of a vast Bigness, and shiny Feet in Height, and growing in rocky  
and sandy Pisces, and particularly in the Provinces of *Mangats)*.and *Poigu, in.Malabar,* on the Banks of Rivers. - -

The juice of this Leaves, received in. Linen, and apply’d to  
the Groin, provokes Urine. The Leaves bruised, and with  
Salt, Camphrre, and the Dung of a Cat, reduced into the Form  
of a Cataplasm, and apply’d to the fame Parts, produce the same  
Effecti The Barin' macerated in Water, and, with Ginger and  
Long-pepper, boil’d in Cows-milk, and Ost of SefamumT to the

Consumption Of the Liquor, makes an excellent Liniment for  
the drying up Of cold Humours. The Seed boiled in an lnfu-  
sion of Rice, and then bruised, and with fresh Butter reduced  
to a Cataplasm, effectually mollifies and ripens Abscesses *Raii  
Hist. Plant. . .. ...*

NIRURL H. M. *An Frutex Indicus bacciferr Vitis Idae se-  
cundae Gltssei Poliis,* Breyn. ? An *Indian* bacciferous Shrub, seven  
or eight Feet in Height, growing in sandy Places.

The Root, bruised, and appl/d in the Form of a Cake, is ef-  
fectual for inflations os the Belly, or Tumefactions of any Part.  
The Leaves, bruised, and applyd with sour Milk, serve to ripen  
Abscesses, which Purpose is, also, promoted by washing them  
with warm Water, in which the Leaves and Bark haVe been  
bruised. Under this Head, *Flay* reduces the

*. ILatou* Nftourr, Η. M. which is a low Shrub, much like the  
former, growing in moist and sandy Pisces about *Cochin,* in the  
*Ease Indies,* and having always Leaves, Flowers, and Fruit upon it.

Of the Leaves boiled in common Water, is prepared a Gar-  
garism for the Cure os putrid and corroded Gums, and for fasten-  
ing loose Teeth. Of the Leaves boded with the Fruit, Bark,  
and Root, is prepared a Bath for the Gout. The Bark of the  
Root, boiled with Long-pepper and Ginger, makes a Drink,  
which is said to be highly serviceable for strengthening the StO-  
rnach, and for Cutting and attenuating pituitous Humours. *Bait*

NlSI, Or NINSi, according to *Blancard,* imports GINSING.  
NISSOLlA. Crimson Grass-Vetch. .

The Characters are ;

It resembles the *Lathyrus* in every thing, except that the Leaves  
stand single, and have no Tendrils, but are much like the Leaves  
Of the *Genista Sagittalis.*

*Boerhaave* mentions but One Sort of this Plant, which is,  
Nissoiia Vulgaris. *T.* 656. *Lathyrus, s.ylvastris, minor.* C.B.P.

344. *Catanaence, legurtinosu, quorumdam. f.* B. 2. 3O9. *Ervum  
fylvestre.* Doth p. 529. *Bocrh. Ind. alt. Plant. Fol.* 2. *p.* 25.

NlSUS. The Sparrow-hawk. See AcciPITER.  
NITEDULA. The lame aS CICENDELA ; which fee.  
NITIALIA. The Name Of a Star, in *Paracelsus,* which he  
.whimsically represents, as having the same Influence aS Salt of  
Vitriol.

NITRIALES. All Things capable Of reducing tO a Calx, aS  
Nitre, Sulphur, &c. *Balandus.*

NITRUM. Nitre.

Tis certain, that the Nitre Of the AntientS was different from  
Ours, which being inflammable, and form’d into Crystals, *Striae,*and a kind Of Spears, was absolutely unknown to them. Tho’  
the precise Time in which this artificial Nitre Of Ours was in-  
vented, cannot be positively determined, yet it is not to he  
doubted, but its Invention laid a Foundation for discovering  
Gunpowder. There is a Very considerable Difference between  
the Nine Of the Antients, and that of the Moderns. For,

I. The Nitre of the Antients is a native Fossile dug out Of the  
Earth, though not pure, since it must be afterwards elutriated;  
whereas Outs is an artificial Substance produced by the Ain.  
Hence those are mistaken, who affirm, that some Malt Liquors  
are prepared with nitrous Waters.

2. The Nitre Of the Aotients is Of an alcaline abstersive Qua-  
lity, for which Reason it may Commodiously be used aS a Suc-  
cedaneum for Pot-ash, in making Glass Or Soap. It is produced  
in *Egyps,* where it is called *Natron.* At *Smyrna* there is, also, a  
})ure alcaline Earth found, which, when boiled, affords an alca-  
ine Salt, exported to other Countries in large Quantities. And  
*Carolus Clusius, de Exotic. Lib.* 2. *Observatione Bellon. Cap.* 13.  
informs us, that in *Grand Cairo* the Nitre of the AntientS *is so*common, that large Quantities of it are sold at a very inconsi-  
derable Price. The *Egyptians* apply this Substance to Various  
Uses, since they coat their Vessels with st, and dress their Lea-  
ther with a Mixture of is, and the Pod, of the *Egyptian* Thorn.  
But *Bellonius, - in Lib.* 2. *Observat. Cap.* 2I. informs us, that the  
Nitre Of the AntientS is Very rare among uS;. and confidently  
affirms, that the smallest Quantity Of it is not produced in  
*Europe,* the' 'tis Very common and cheap in *Egypt.* But Our  
Nitre is a *Sal scaleurn.* neither Of the acid, nor os the alcaline,  
but of the neutral Kind, since it neither produces an Effer-  
vescence with acid nor alcaline Substances.

3. The Nitre Of the Antients was not combustible and inSam-  
enable like OuIS; for which Reason it was by no means proper  
for preparing Gunpowder Considering these Differences, 'tis  
sufficiently obvious, that when *Hippocrates* and P/iiny, *Diosco..  
rides* and *Galen,* treat of Nitre and its Virtues, they do not mean  
Our common Nitre, but a native alcaline Salt.

But tho' *Bellonius* affirms, that none Of the Nitreos the An-  
tients is produced in *Europe,* yet lam Of Opinion, that tho’ it  
is not, in this Quarter of the World, produced in such large Quan-  
tities, as in *Egypt,* yet there is eVen here produced, in the Bowels  
Of the Earth, a pure fixed alcaline Salt, in every respect similar  
to Pot.ash, Salt Of Tartar, or the Nitre Of the Antients, as is  
sufficiently obvious from Our medicinal Springs, hot Baths, and  
mineral Waters, from many Of which an highly pure alcaline fix’d  
Salt may be Obtain’d by boiling. Hence appears the Falshood

**Of** the common Opinion Of the modem Chymists, ;who affimd  
that a fixed alcaline Salt is Only the.Product Of Art, or of, **the**Fire, and Cannot be obtained, but from Vegetables burnt to  
Ashes. ‘ :

Our Nitre is artificially prepared. Of two Elements or Princi-  
pies, one Of which is the highly simple, universal, acid, anchpri-  
mogenial Salt Contained in the Air, and the other an alcaline sol-  
phureOus, and pinguious Earth, which like a Matrix, or Load-  
stone, attracts-the universal Acid lodg’d In the Aim Nor are  
Earths of every Kind, when exposed to the free and open Air,  
fit for generating .Nitre, but only inch aS are Of an alcaline Na-  
ture, and contain a pinguious. and sulphureous Substance. Hence  
we find, that the Earths, left after the burning of Houses, are  
Of all others the most proper for generating Nitre. The same  
holds true Of calcarious Substances , when, for Instance, Mud,  
earth, or Clay, is mix’d with Lime, and exposed Io the free  
Air, the Salt Of Nitre easily breaks thro' it like Froth. Quick-  
lime, also, the Ashes of Wood, or of Soap-boilers,. aS yet tur-  
gid with, an alcaline Salt, «ready Contribute to the Production  
Of Nitre, when mix'd with earth. . ’ ' -

- ' The earth proper *for* generating Nitre must not only he al-  
caline, bur, also, pinguious and sulphureous; nay, a Volatile alca-  
line Principle is necessary, for this Purpose. Hence all Putre-'  
faction contributes to the Generation os Nitre in Sands. For'  
this Reason nothing in Nature fo powerfully promotes the Ge-  
Deration of Nitre, aS dunging the Land with the Excrements  
and Urine of Animals Hence those who prepare Nitre, dill-  
gently dig up, and preserve the old and squalid Earth in Sheep-  
folds, Stables, and other Places where Animals are kept. They,  
also, carefully Collect the Earth dug up about Bog-houscs,  
which being impregnated with the Salt and Sulphur of the hu-  
man Excrements, is, for that Reason, highly proper fur . pro-  
ducing Nitre. . .

They, also, chuse pinguious Earths of Church-yards, Ponds,  
Marshes, and Wails, built Of a pinguious Earth, and putrefied  
Straw, especially their Surfaces taken off for about the Depth Of a .  
Fingeris-length, hecause these, being long exposed to the Son and  
Air, have ConceiVed a nitrous Salt, discoverable by the acrid  
and bitterish Taste; Hence it follows, that the more Putrefaction  
and Volatile sulphureous Salt can be convey'd to Earths, the mote  
proper they are for producing Nitre. \_

- Eartbr, in Order to yield a large Quantity of Nitre,must he  
managed in the following mannerThey are to be made up in  
Heaps, which are to be frequently watered or sprinkled with the  
Urine Of Animals , by which means, and the free Passage Of the  
Air thrcs them, they soon ccontract a nitrous Salt. But 'tis to bo  
Observed, that neither a too intense Heat Of the Sun, especially  
such aS burns theTarths, nor too pinching a Cold, nor too moist  
an Atmosphere, and especially rainy Weather, but rather a .tem-  
perate windy Air, accompanyd with serene Weather, especially  
in the Spring or Autumn, and in the Night-time, favour the  
Production Of Nitre. The Heat Of the Sun is, indeed, service-  
able in drying the Earths from which the Nitre has been hefore  
extracted, but does not at all Contribute to its Generation.

Nor is its Generation promoted by intense Cold, Southerly  
Or Westerly Winds;. but Winds blowing from the Easterly or  
Northerly Quarters bring the primogenial ethereal Acid. .The  
Elaboration of Nitre does by no means succeed under excessive  
.Rains, winch wash it Out Of the Earths.. .

Tis, also, to he observed, that from Waters impregnated with **a**nitrous Salt, by ElixiViation, there cannot he obtained any true  
.Nitre, which IS inflammable, and forms itself into Crystals,  
without the Addition of Ashes, in which there is an alcaline Salt, an  
Admixture Of Quick.lime. Or that Lixivium, which in boiling re-.  
mains after the Crystallization, for if the Lixivium, drawn from  
nitrous Earths, is boiled by itself, a saline Magma is only Obtain'd^  
which neither runs into dry, much less inflammable Crystals,  
nor is easily dried, but is easily dissolv'd in the Air, especially  
when moist and humid. Hence we may reasonably conclude,  
that the inflammable Salt of Nitre is compounded Of an acid-  
Salt, a fixed Alcali, and a sulphureous Principle.

And aS neutral Salts are easily formed into Crystals; so. On **the**Contrary, neither acid nOr alcaline Salts, nor sulphureous acid  
.Substances, mix’d with alcaline Earth, of which Kind this Lixi-  
Vinm, extracted from nitrous Earths, seems to he, are disposed  
Io Crystallization.

But that there is in Nitre such a fixed Alcali, is snfficientiy Ob-  
vic-us, not Only from its Generation,: already described, hut, also,  
from this, that Powder ef Charcoal alone, added to Nitre, fus’d  
in a Crucible, Converts it into a pure alcaline Salt, Commonly  
called Fix'd Nitre, tho' it is not, in reality, different from Salt  
of Tartar, Or any other alcaline Salt, as, also, from this Circum-  
stance, that if this alcaline Salt is again combined with acid Spi-  
rit Os Nitre, Or Aqua-sortiS, the Nitreis forthwith regenerated.

Earths impregnated with a nitrous Sals, Of which Nitre is pre-  
pared, are not Only to be found in *Europe,* but 'tis, also, certain,  
that an inflammable Nitre may be prepared every-where, hecause  
the Matter, or Matrix of Nitre, which is Earth, .rendered alca-  
line and sulphureous by Putrefaction, may be had every-where.  
Neither is it to he doubted, hut that, primogenial and universal

Acid, which is formed into a nitrons Salt with the alcaline sul-  
phureous Earth, is Contained in the Atmosphere, where-ever it  
extends.

And, 'tis Certain, that not Only in the *Indies,* which are hot,  
but, also, in *Muscovy,* which is a cold Climate, a large Quantity  
of Nitre is prepared, which is better than the *German* Nitre, and  
far more fit for preparing Gun-powder. The *Indian* Sod fit-  
vours the Generation of Nitre, because, for several Months, no  
Rains sail to wash and Carry Off the nitrous Salt from the Earth.  
Bur, in the Northerly Climates, the Air is not only serene, but its  
elastic and expansive Portion .Compressed and condensed by the  
Cold; for nitrons Salt seems not only to he compounded Of an  
acid, sulphureous, and alcaline Principle, hut, also, the Air, con-  
densed into Water, seems to he a principal Ingredient in it;  
for there is scarce any Salt, such as common Salt, Vitriol, and  
Alum, which has not, for an ingredient, an aqueous Principle,  
Call'd Phlegm, and which, in Distillation, is COpioufly yielded.  
Hence 'tis not to be doubted, but nitrous Salt has, for ingredients,  
hoth an aqueous, and an aereal Principle, which is principally  
Concealed under a sulphureous Substance

This may he Confirmed\* by various Considerable PrOOss, for  
'tis surprising, that fince no Flame can subsist without rhe im-  
mediate Access and Action Of the Air, nitrous Salt should, when  
most closely shut up from this Fluid, send forth a conspicuous  
Flame. Hence the Reason is Obvious, why in Northerly Coun.  
tries, and by means Of Northerly Winds, a larger Quantity of  
Νitre is produced, than where the Air is either too much rare-  
fied, or toe moist. 'Tis well known to the Preparers Of Nitre,  
that more of this Substance is form'd in its Matrixes in the  
’ Night-Time, than during the Day, under the Heat Of the Sun.

Besides, the Inflammability, and highiy-ejmansive Rarefaction,  
observed in kindled Nine, and which increase the Impetus Of the  
Fire and Flame, seem to me to he derived from the aqueous and  
aereal Particles, inclos'd within the Pores of the pinguious, sol-  
phnreouS, and saline Parts, which, by means Of the Fire, snd-  
denly acquire the highest Degree Of Rarefaction and Expansion,  
**and** are discharged, as it were, in WindHnstasin an *Acolipyle, in*which Water, when included and rarefied by Fire, is totally dis-  
charged in the Form ofia dry Wind, with a considerable Noise,  
**thro' a** narrow Hole, and this Cold Wind, arising from the hot  
Water, snrprifingly augments the Force and impetus of Flame.  
.Hence Nitre may he justly Called an aereal Salt, because it is not  
only produced by the Air, but, also, because that Fluid, con-  
densed into Moisture, is intimately mixed with it.

Nitre Contains various heterogeneous, saline, and earthy Parrs,  
from which it Ought to he separated and purified ; for, besides  
its terrestriouS, pinguious, and sulphureous Parts, it contains a pure  
common Sait, or even an Alum, from which, however, the pure  
and inflammable nitrons Salt Ought to he separated , for these fo-  
reign Admixtures not Only hinder its Deflagration, but, also, di-  
minish its Impetus and Expansion. For this Reason all the Nitre  
sold in the Shops is to be duly depurated; hesore it is used for  
pyrotecbnical, chymical, or medicinal Purposes.

Tins Depuration is to he made in the following manner: The  
Nitre is to he dissolved by boiling it in a Nettle, with a Quantity  
"of Water sufficient to render it fluid. Then the Linivium is to  
**be** strain'd, **and, in a** close Vessel, lodged in some cool Place; by  
winch means. On the Surface, and at the Sides of the Vessel, long  
pyramidal Striae, like so many Rays, are formed, from the Cir-  
cumference to the Centre, which are to he taken Out and drylol  
thy the Heat Of the Sun. Then the remaining lixivia! Liquor is  
to he again boiled by a gentie Heat, strained, and again set by for  
**a** second CrystalliLation. Thus **a** Considerable Quantity OsNitre  
will he again Concreted about the Bottom and Sides Os the **Vest'd,**and this Method is to he repeated three times, and, last Of all, the  
Lixivium, which Contains no more Nitre, is IO he inspissated by  
farther Boiling; by which means a common Salt, highly similar to  
Sea-salt in its Taste, Cubical Figure, and Properties, is concreted,  
and subsides to the Bottom , and the Remainder Of the inspis-  
sated Lixivium is coagulated into a Mass of a bitterish Taste, Of  
**a** brownish Colour, and which has many earthy, pinguious, and  
sulphureous Panicles mix'd with it. This is the most proper  
Method of depurating Nitre.

The Goodness, therefore, of Nitre differs much, according  
.to the Quantity of impure, saline, and earthy Matter mix'd with  
it. Some Countries, also, produce purer Nitre than Others. The  
*Indian* and *Muscovy* Nitres are reckoned best, because an hun-  
dred Pounds of them, under a depuratory Crystallization, lose  
only seven Pounds; and that of *Poland,* fifteen Pounds. But  
the Nitre prepared in the Principality os *Halberstadt,* and the  
Duchy Os *Magdeburg,* loses twenty-five Pounds, before it is sit  
for making Gunpowder. Tis, also, to he 'Observ'd; that all  
-Nitres, if duly and throughly depurated and freed from their  
Sordes, are possess'd of the same virtues, and Produce the same  
-Effects. Hence some depurate and crystalline it several times ,  
**and,** that it may he the purer, mix Wine-Vinegar in the Water, in  
which is is to he dissolved , for, aS there is but one common Salt,  
so there is but One Nrtre in Nature; but the Difference of both  
depends upon the different Quant ineS and Qualities Of the SOrdes,  
and impure Substances, with which they are mix'd.

But It is, in **a** particular Manner, worth Our Coosidera'iOn,  
whence. Or by what means, the common Salt, which is generally  
every-where associated with Nitre,is produced. Many Chymista  
**are** of Opinion, that it is produced by the Urine Of such Ani-  
mals **aS eat** Common Salt, because the Preparers of Nitre ofen  
pour the Urine Os such Animals upon the Earths design'd for  
this Purpose. But this Hypothesis, to me, seems incumbered  
with Various Difficulties; for, first, Animals rarely eat Salt, and  
**Urine is,** also, rarely sprinkled on Walls, and rhe Heaps os nitrous  
Earth. Secondly, from the Urine Of human Creatures, who  
use large Quantities os Salt, **a** Salt in every respect like common  
Salt, can by no means be Obtained ; for common Salt, taken  
with the Aliments, and mut'd with the Various Particles of the  
Juices in the Stomach and Intestines, and with the Blood and Se-  
rum in the Vessels, is so chang’d, and its Crash so dissolv'd, that  
it can hardly be again obtained genuine and unadulterated froth  
the Excrements Os Animals.

For this Reason it seems highly probable, that the Common Salt,  
Contained in Nitre, is, also, produced by the universal Acid os**the**Air, and a certain specific Earth such aS is Contain’d in common  
Salt; for, as Alum, Vitriol, Nitre, and a neutral sulphureous Salt,  
such as that extracted from Pot-ash, long exposed to the Air, re-  
quire **a** peculiar earthy Matrix, in which the highly simple **and**universal Acid Of the Air, which is determined to no particular  
Form, may insinuate itself, by the Presence Os which, and the  
insipid Part *of* the Air, they revive, and **are** regenerated; so,  
also, is in nitrous earth such a specific Earth of common Salt is '  
Contained, it is no Wonder, is, being impregnated by the uni-  
Versa! Acid Of the Air, it should he transform'd into Common  
Salt. But eVen this Salt differs from the Common Salt we eat:  
First, with respect to its greater Acrimony. . Secondly, with re-  
spect to its Solidity: And, thirdly, in this, that by an Affusion of  
Oil of Vitriol, after an Effervescence, it not only sends forth **a**Smoke, penetrating like that Of common Salt, bur, also, un-  
grateful and dissgreeable, like that of Aqua-fortis: So that, hy  
this Method, an Aqua Regia, compounded os the Spirit Of Nitre,  
and Capable of dissolving Gold, may he Obtained by Distil-  
latiOn.

Tis, also, observable, that Common Salt, which, in Cry-  
stallization, retains a cubical Figure, in the Beginning of the Pre-  
paration os Nitre, subsides and sails to the Ooitom of the Lixi-  
vium extracted from nitrons Earths, Ashes, and Quick lime, when  
inspissated ; but, in its Depuration by Water, it remains in the  
**last** Lixivium, by boilingoi which it is, **at** last, form'd into Cry-  
stain But a large Quantity of Water must not be used in the  
Depuration, OtherwiIe the common Salt, which is heavier than  
the Nitre, will he first precipitated, and cany’d to the Bottom.  
For we must observe, that Salts of different Natures, when dff-  
solVed in an aqueous Menstruum, are easily separated from each  
Other, and mutually united by Crystallization: Thus, the Particles  
of common Salt run together, and form a Body Osa cubical Fi-  
gure, whereas the Panicles of Nitre, when united, constitute **a**Body Of **a** pyramidal Form.

The essential Characters and Properties, by which Nitre is  
distinguish'd from Other Salts, are these following.

I. Nirre is, by the Force Of Fire, easily fus'd in a Crucible  
without flaming; but, aS soon aS an OleouS sulphureous Sub-  
stance, capable of flaming, is added to it, it takes Flame, and pro-  
duces an Explosion which effect happens not only by the Addin  
tiOn of common Sulphur, Os Antimony, which abounds with  
Sulphur, of Charcoal; of Tartar, which abounds with Oil; of  
some Parts Of Animals, the Blood Or Bones, for Instance; but,  
also, by the Addition Of Mentis impregnated with Sulphur, such  
aS Tin, Iron, and Zink, as also, by an Addition of Sal Ammo-  
niac, which from the **Chine** receives a certain OleouS and sol-  
phnreouS Principle.

2. Nitre, mix'd and distil'd with a vitriolic Salt,or the Acid of  
Vitriol, yields an highly volatile acid Spirit, of an ungrateful Smell,  
and yellowish Colour, aS appears in the Preparation Os *Horse  
marts Spiritus Fumans,* or *Aquafortis,* and, because all Clay  
contains some Quantity of **a** Vitriolic Salt, hence, if three  
Parrs of Nitre are mix'd with One Part of Clay, form'd into  
small Balls, and dried, the Nitre by Distillation yields its Acid  
Spirit in **the** Form Of **a** red Vapour; and, because the acid **Of**Alum is Of the same Nature with that contain'd in Vitriol,  
hence, in Conjunction with Alum, aS well aS with Vitriol, an  
acid Spirit, Or Aqua-fortis, may he distil'd from Nitre, sc  
must, also, he Observ'd, that no other Acid, except one of **the**vitriolic Kind, can by any means extract the Acid of Nitre,  
fince a very fix'd and strong Acid, fuch aS that contain'd in Vitriol  
and Alum, is requir'd for that Purpose.

3. Nitre, fus'd in a Crucible, is almost totally converted into  
an alcaline Salt; and this Effect is first produc’d by mining equal  
Quantities of Tartar **and** Nitre, and putting them into **an** ignited  
Crucible ; by which means the *black Tlsex.po-veder,* commonly  
us'd by Workers OfMetals, in separating their Metals from ad-  
Venritious Mixtures, is produc’d. Nitre is, also, convened into **an**highly pure Alcali, when it is mix'd and detonated with Powder of  
Charcoal; and by **a** strongCalcination it becomes an highly caustic  
Salt, of a Sky-colour, and inis is call'd Fix'd Nitre. Tis, also.

worth Our Observation, that the Whole Of Nitre may he con-  
verted into a Caustic Alcali, of an highly acfid Taste, and  
which, by pouring Water upon is, becomes intensely hot, when  
mix’d with an equal Quantity of Regulus Of Annmony, and  
melted together to a Mass, in a redthot Crucible. The seme  
Phenomenon is said to he produc'd with Zink and Tin.

4- Nitre is a Salt of so singular a Quality, rnat there is none  
like it in Nature, for it not only cools the Tongue, when ap-  
plied to it ; but, also, the whole Body, when taken internally , and,  
when put into Water, augments its Coldness.

5. A Solution of Nitre, put into Blood coagulated, and be-  
Come black aster it is taken from the Veins, not Only renders  
**it** more fluid, but, also, procures it a florid and beautiful red Co-  
lour , an Effect not to be expected from any Other neutral Salt.  
By this Experiment, we may, in some measure, account  
for its Operations, and refrigerating Effect, On the human  
Body; for Nitre is a Salt, which, by means os its aereal Prin-  
cipher os an elastic and, expansive Quality, allays and stops the  
tumultuous and exorbitant-Motion Of the ./Ether in the Blond  
and Humours, which, when confin'd, becomes more Violent:  
And to this aereal Principle we are to ascribe the Fluidity, and  
florid Colour, which Nitro Communicates to the Blood. Nitre,  
also, by procuring a greater Fluidity to the Humours, removes  
Stagnations and Obstructions, and Opens the Pores of the Skin,  
thro’ which the hot and fiery Particles are exhal’d; And aS Nitre  
stimulates the Ducts and Glands to a more copious Secretion os  
Lymph, hence it moistens the Body, and relaxes and softens  
Parts spasmodically constricted.

*6.* Nitre, when detonated with Sulphur, Or any other inflam-  
mable Substance, is totally Carried off in Smoke; by which  
means, the whole CrafiS, and, as it were, the Substance Os Nitre,  
which consists Of an acid - and alcaline Salt, together with a  
pinguious and sulphureous Substance, is totally destroy’d; for  
Gunpowder, kindled in a tubulated Retort, is neither trans-  
form'd into an acid Spirit, nor an alcaline Salt, hut yields a  
somewhat acid Phlegm.

7. - Tis, also, a Property peculiar IO Nitre, that, when put into a  
Crucible, exposed to a Calcining Fire, with Regulus of Anti-  
mony, Zink, Bismuth, Arsenic, Regulus Of Cobalt, Tin, and  
Lead, it converts them to a Calx; by which means the purer  
Metals, such as Gold and Silver, are separated from them. For  
this Reason, the most expeditious way Of separating Gold  
dispers'd in Antimony, is to calcine and fuse it with Nitre,  
whereas 'tis a tedious and laborious Task to separate its regn-  
line and antimonial. Parts by the Force Of intense Fire; and  
as these Minerals are, in a great measure. Virulent,so, when cal-  
cined with Nitre, they not only lose their deleterious Qualities,  
but partly become salutary Medicines.

8. Tis sufficiently known to Chymists, that. Aqua.fortis dis-  
salves Silver, but not Gold, but it has not aS yet heen adverted  
**to,** that Aqua.fortis, distil'd by Abstraction from common Nitre,  
does not dissolve Silver, but converts it to R Calx; whereas it  
quickly attacks and dissolves Gold. This will perhaps seem  
strange to him, who considers that Aqua-fortis is the Offspring  
of Nitre, and, in every respect, agrees with the acid Spirit of  
Nitreὁ but his Surprize will cease, when he reflects, thar in un-  
depurated Nitre there is a large Quantity Of common Salt,  
which must be separated by Art; and considers that Aqua-fortis,  
drawn off common Salt, becomes an Aqua-regia, capable of  
dissolving Gold , for, if Aqua-fortis is eVen ten times drawn off  
depurated Nitre, its Virtues will not be alter'd by common  
Salt; but, if common Salt is mixed with the Nitre, the Aqua-  
fortis attacks and disentangles it, by which means an highly subtile  
Spirit of Salt ascends, and this Spirit, in consequence Of its  
highly penetrating Subtilty, enters the most minute Pores Ol  
Gold, and, by means of the elastic Sulphur\* Of the Nitre, de-  
stroys the Cohesion of its constituent Parts.

9. Tis, also, to he observed, that if Spirit Of Nitre, Or Aqua-  
fortis, are in a due Proportion drawn off common Salt,-there  
remains in the Bottom a Salt, which deflagrates like Nitre, for  
the Acid of Nitre intimately associates itself with the alcaline  
Earth of Common Salt, and with it is converted into Nitre, from  
which it expels the Spirit Of Salt.

Tho’iSubstances highly Volatile enter the Composition Os Nitre,  
**it is** nevertheless of a very fix'd Nature. The Volatility of its  
Principles is sufficiently Obvious from the Account before given  
os its Generation, whilst. On the other hand, its fix'd Nature is  
evinc'd from this, that it remains fus’d Over a Fire for some Hours,  
without any Diminution Of either Weight Or Bulk; neither is its  
Texture alter'd by Fiame, tho' a Change is soon produc'd in it by  
the Addition of a small Quantity Of ignited sulphureous Earth.

The’ an highly Volatile and corrosive acid Spirit, aS also a  
very caustic fix’d alcaline Sals, may be prepared from Nitre;  
yet it is possess'd Of a singular Power Os removing the. septic,  
and consequently the virulent and corrosive Qualities os almost  
. .all Substances, and rendering them propitious, temperate, and  
salutary. The Violent and emetic Virtues of Regulus and Sul-  
phur Of Antimony are sufficiently known and his certain, that  
by the Addition osa due Quantity os Nitre, and the Assistance  
of Fire, both these may the Converted into mild, temperate.

and gently diaphoretic Medicines. That most of the Insects,  
which, by means Os their highly acrid Sals, excite Blisters, are  
excellently corrected by Powder of Nitre, intimately mix'd  
with them, is certain from Experience: Thus Cantharides,and  
Other Substances Of a like Nature, may be safely exhibited even  
in delicate Constitutions, in Order to remove a Difficulty Of  
Urine, provided due regard he bad to the Causes os the Dis-  
order, and a small Quantity Of Camphire, which powerfully  
resista Inflammation, is added. Some Purgatives are so’ highly  
drastic, that, when imprudently exhibited, they raise violent  
Commotions in the nervouS System, and Often excite an In-  
flammation in the Coats os the Stomach: Of this kind are  
Gamboge, SCammony, Resin of Jalap, Coloquintida, Elate-  
Tium, and Spurge; which two last excite Blisters,, when applied  
externally. Now the caustic Quality Os all these is greatly im-  
paifd, by heing mixed with any nitrous Salt, and, if there is  
any genuine and efficacious Corrector Os Purgatives, which  
guards the tender Membranes against Heat,. Spasms, and In-  
flammations, 'tis certainly Nitre. AloeS, which is otherwise of a  
laxative and balsamic (Quality, has by its subtile acrid Salt been  
frequently-observ'd to excite Haemorrhages; hut it is ren-  
der’d more benign and propitious, by a proper Admixture  
Of Nitre. The. Bile, inconsequence of its detersive and bitter  
Quality, is a balssmieand natural Medicine, without which no  
Animal ran long remain sound, and in a due State: Now, if the  
Bile is vitiated by a Congestion os acrid Sordes retain’d in the  
Humours, it acts like Poison by irritating the nervouS System,  
and producing preternatural Hear, Anxiety, Inquietudes, enor-  
mous Evacuations, and intense Pain : Now, in order to correct  
this peccant State of the Bile, no Medicine is more efficacious  
than Nitre. .

. AS Nitre is a powerful Cooler, when internally exhibited; so  
there is no more effectual Antifebrile, no Medicine which either .  
so soon, or so sasely, corrects the febrile Heat, and removes the .  
woeful Train Os Symptoms produc'd by it. Accordingly *Ange-  
las Sala, in Myrotech. Sect.* 5. informs us that in Quotidian and.  
chronical Tertian Fevers, as also, in that Species Of Fever  
call’d the *putrid Hemitritaeus,* Nitre is us'd with wonderful Suc-  
cess; for when the Patients are properly purg’d before, and kept  
in a moderately warm Place, the Exhibition Of Nitre twice or  
.thrice two Or three Hours before the Paroxysm, gives such n  
Change to the State Os the Disorder, that Health soon succeeds *s*And, aS all other Refrigerants, the most considerable Of which  
are acid, inspissate and coagulate the human Juices, so, on the  
contrary. Nitre rather attenuates and rende S the whole Mass of  
Humours more fluid: Hence we understand why it is highly  
efficacious in extinguishing the Heat of the Body, and why no  
Salt is more friendly to the Constitution than Nitre Upon in-  
jecting various Liquors into the Veins of Animals, it has been  
found, that several os them have been kill'd both by acid and  
alcaline Injections, only with this Difference, that the Acids  
produced too great a Coagulation, and the Alcalis too great a  
Fluidity, Of the Humours: But *Malpighi, its Tract, de Polypo  
Cordis, Tom. 2.* informs us, that he injected a Solution of\_ six  
‘ Ounces of Nitre into the jugular Veins of a strong Dog, with-  
out producing any other Change, than a preternaturally CopiOus  
Discharge Of Urine. Hence we may justly Conclude, that Nitre  
is excellently suited, and highly friendly, to the CrafiS Of the  
Blood : For this Reason Ld. *Bacon,* in his *Histor, Vitae et Mortis,*affirms, that a Scruple of Nitre frequently exhibited for a Dose  
Contributes greatly to the Prolongation Of Life Besides, Nitre  
seems to have a kind Os formal Existence in the human Blood,.  
which, when dried, reduc'd to a Powder, and thrown upon live  
Coals, produces a kind Os Ebullition like that Of Nitre.

Nitre, also, prevents Putrefaction in .Substances subject to  
Corruption j and thO' common Salt is highly efficacious for this  
Purpose, yet 'tis doubted, whether Nitre is not preferable IO it  
in preserving Bodies. Thus Blood, taken from the human Veins,  
may, by an Admixiureof a Solution Of Nitre, he for a long  
time preserv'd fluid and beautiful, without any Putrefaction.  
Besides, 'tis sufficiently known, that FleshS either by means of  
Nitre alone, or Nitre mix'd with common Salt, sot a long  
Time, retains a beautiful red Colour, even after boiling, the  
Reason os which seems to he, that this Salt exalts the red and  
beautiful Colour Of the Remainder Of Blood contained in the  
minute Vessels of such Flesh. Hence 'tis obvious, that Nitre resists  
the Putrefaction, which is often form'd in the Primae Vias, and  
diffuses itself thro\* the whole Body and may for this Reason be  
exhibited with Success in putrid Fevers,and Disorders of Chil-  
dren arising from Worms. :

Nitre, taken internals, powerfully promotes the Excretions  
by Stool, Urine, and Sweat: One Ounce of depurated Nitre,  
dissolv'd in Water, renders the Body soluble, and procures  
some Stools, tho' it answers these Intentions better, when  
mix’d with a proper Quantify os the laxative Decoctions of .  
Tamarinds, Sena-leaves, and Manna. When the Fluids are  
to be deriv'd to the inferior Parts os the Body, especially in  
Fevers, Nitre in. highly efficacious. Among all the Class of  
Diuretics, nene is better calculated for quickly removing On-  
structions of the urinary Ducts, rendering the Discharge of

the Urine free, and dissolving calCulouS Concretions, than  
Nitre. *Penotus,* in his Treatise *de Medicament. Chym.* affirms,  
that, if a proper Dose os Nitre is takenonce every Fortnight, it  
never suffers the Generation Of Sand in the Kidneys, either in  
Patients subject to CalCulouS Concretions, or DysurieS, whether  
adult or young, robust or delicate. *Timaeus, in Consil. Consult.* 3-  
informs us, that he heard Of a Certain Manis heing perfectly  
Cur'd of the Gravel, by a long-protracted Use Os prepar'd Nitre,  
and *Grulingius, in Obs.erv. de Calculo,* informs us, that Sal  
Prunellae is not only. an excellent Preservative against, bur,  
also, an efficaCious Cure for a Nephritis; and I have found  
from Experience, that an Emulsion or Various Seeds, invigorated,  
with Nitre, is with great Success exhibited for alleviating Ne-  
phritic Pains: A proper Exhibition of Nitre renders Perspira-  
tion more free and liberal, in Patients afflicted with immode-  
rate Watchings, Thirst, and intolerable Heat, because it Cor-  
rects the Heat Of the Blood, and cheeks the hot intestine Com-  
motion os the Hinds, by which means every thing in the Con-  
stitution is rendered ealm, the preternaturally constricted Pans  
are relaxed, and consequentiy the Blond is freely convey'd to the  
Emunctorics os the Skim In Practice we daily Observe, that  
the precipitating nitrons Powders exCellentiy promote Sweat,  
in all Inflammations; but in languid, cold, and Cachectic Con-  
stitutions, the moving Force Of whose Muscles is impair'd, a  
Diaphoresis must be excited by more hot and active Me-  
dicines. \_ \*

Nitre, is also, an excellent Carminative: The Disorders  
arising from Flatulencies, stagnating, and pent up, in the in-  
testines, sometimes spasmodically Constricted, are sufficiently  
obvious to Practitioners; for which Reason they Ought to he  
dissipated and oxpel’d with all Expedition: For this Purpose  
I have found no Medicine more effectual and successful than  
Nitre, either alone. Or min’d with Carminatives; since, by its  
means, a Discharge Of Wind by the Anns is procur'd, the Fla-  
tulencies discover themselves by their Fluctuation and Noise,  
and are happily eliminated with a Noise, which IS in my Opi-  
nion, principally Owing to a Solution and Relaxation of the  
Constricted intestinal Fibres: For which Reason it is justly  
Commended in spasmodic Colics, especially that Of the bilions  
Kind, on which the AntientS bestow’d the Epithet *hot so* But,  
above all Other Medicines, Nitre affords the most Considerable  
Relief to hypochondriac and hysteric Patients, finceit is excel-  
lently Calculated for removing the Spasms and Flatulencies,  
which are the Cause Of all the Symptoms incident to such  
Patients.

But one Of the most considerable and important Virtues Of  
Nitre is, that by which it resists Inflammations; for no Disor-  
der is more injurious to the animal Oeconorny than Inflamma-  
tions, which in Very acute Diseases generally destroy the  
Patient ὁ fince, when they seize the Stomach, they produce  
Anxieties and Inquietudes, when they affect the Meninges, a  
Pain Of the Head, a Phrenitis,or Convulsions, and when the  
Lungs, a Danger ofSuffocation r When an Inflammation happens  
in other Parts, a .preternatural Heat os the internal, and an  
excessive Coldness Os the external Parts is produc'd,. whilst, in  
the mean time. Inflammations of the sanguiferous Viscera easily  
degenerate into Abscesses or Gangrenes, in order, therefore, to  
Cure the inflam’d Part, Nitre, either alone. Or mix'd with a little  
Camphire, and other' bezoardic Substances, is. Of all Other  
things, the most efficacious; so that, if salutary Effects are  
not produc'd by it, the Cure may be justly despair'd Of.  
In Practice I have long us'd such a Powder with uncommon  
-Success, and found that in Pleurisies, a Phrenitis, a Peri-  
pneumony/an Angina, an Inflammation Of the OEfophaguS  
and Stomach, and an Erysipelas, a frequent Exhibition of  
it has, in a great measure, remov'd the Heat, the Pain, the  
Thirst, and Watching, by exciting a gentle Moisture all Over  
the Body,, which was hesore dry and parched: When mix'd  
with Other proper ingredients,, and applied externally, it also  
affords Relies to inflam'd Parts: Thus Camphorated Spirit Of  
Wine so dexterousty prepar'd, as not to be precipitated by an  
Affusion Of Water, when mix'd with a Solution of Nitre, and  
*a* due Quantity of distil'd Vinegar, discusses an Erysipelas, and  
removes an intense Head-ach.

Besides, Nitre is one Of the most Considerable Of those Medi-  
CineS calculated for the Cure of Spasms and Constrictions,  
the Misfortunes excited by which, in the nervous Parts Of the  
human Body, are sufficiently apparent to those who are bless'd  
with a Knowledge of Diseases, and their Various Causes: At least,  
’tis certain, that enormous Haemorrhages sometimes arise  
from no other Cause, than an inequality Of the Circulation  
OF the Blood; fince the Vessels, which in some Parts are  
smaller than in others, heing spasmodically Constricted, the  
Blood is impetuously convey'd to the adjacent Vessels, and their  
Ramifications, by too much distending which, and Opening  
their Orifices, Violent Haemorrhages ate often produc'd: By this  
means. Spittings of Blood, Haemorrhages Of the Nose, exces-  
sive Evacuations from the haemonhoidal . Veins, Bloody  
Urine, and immoderate Discharges of Blond from the Utertis,  
are produc'd, in the Cure Of these Disorders, the most ra-

rational Method Of proceeding IS, to relax the spasmodically  
constricted Parts, and restore a free and easy Circulation Os the  
Humours thro’ the Vesiseis. This intention, aS we learn from  
Experience, is excellently answer'd by Nitre, which in theso  
Disorders is highly extol'd by the most judicious practical  
Physicians. Thus *Riverius,* in *Cant.* I. *Obs.* 94. exiols it in an  
immoderate Discharge Of the *Latina . in Cent.* I. *obs. 96. te*an excessive Evacuation Of the Menses; in *Cent.* I. *Obs.* 94  
in a Spiting of Blood, in *Cent. i. obs.* 83. in Haemorrhages  
attended with a malignant Fever; and, in *Cent. a.. Obs.* SI.  
he recommends it for these and similar Purposes. And aS  
Spasms are frequently the Causes of a Suppression of the usual  
Evacuations Of Blood from the Uterus in Women; fince  
its Constricted Parts resist the impulse of the Blood to the  
uterine Vessels, hence 'tis Obvious, that Nitre in such a Case  
affords singular Relief; for which Reason *Riverius,* in *Cent.* I.  
*Obs. So.* recommends it in a Suppression of the *Lochia*; and *Gru.  
lingius, in Obs.* yo. in a Diminution of the menstrual Discharge  
AS Pains are Often the Off-ipring Of Spasms, so those terrible  
Pains, which generally accompany the Excretion of S:Ones  
which affect the Intestines, and are taken for in colical Indispo-  
sition, or which seiie the Pericranium, are happily remov'd by  
the Use of Nitre: And *Hrelsehius, in Cent.* 2. *Curat, self.* informs ~.  
ns, that by Nitre alone, a large Number Of Soldiers ln the  
*Hungarian* Camp were freed from an Epidemical Cephalalgia. -

Though these Things are Obvious in Practice, and Confirmed  
by Experience, it is, nevertheless, an additional Satisfaction to  
the Mind, to know rhe Reason why, and the Manner in which.  
Nitre produces these Effects in the human Body.

. Though it is. Certainly, a difficult Task to know and demon-  
strate the Virtues Of Medicines, yet this Difficuhy ought not to  
make ns despair in out Pursuit, hut rather animate our Courage  
in the painful and glorious Research, for Experience, supported  
by Reason and Judgment, in the Exhibition and Application Of  
Medicines, are the two things on which the Truth and Certainty  
Of Physic depend. We shall, therefore, endeavour tO deduce -  
the various Effects of Nitre from One Common Principle or  
Source. The principal Virtue, then. Of Nitre is, to refrige-  
rate and extinguish the preternatural Heat Of the Blood. Now  
it is not Only certain, but agreed upon by Physicians, that all  
Heat in the Body is produced by a turbulent intestine Motion  
Of the Particles Of the Blood, especially its sulphureous Parts,  
round their Axis, so that the brisker and greater this Motion  
is, the greater is the Attrition Produced by the Pressure Of the  
Blond, by means Of the Heart, Arteries, and fibrous Parts of  
the Body', and the greater the Attrition, the greater the Heat  
must, of (course, be Whoever, therefore, knows how to stop  
this intestine Motion, must. Of course, know how to remove  
the preternatural Heat. This Motion is stops, when the Par-  
tides of the Blood cease to move around their Axes, and pro-  
ceed in streight Lines, which, according to the modern Philo-  
sophy, is the Cause Of Cold. This is sufficiently proved from  
Contracting the Mouth very narrow, and blowing quickly; which  
produces a Sensation Of Cold, whereas, when the Breath is gently  
emitted, a Sense Of Heat is excited: And I am Of Opinion,  
that this artificis! Cold is not so much Owing to any material  
Principle, aS to a particular Direction of Motion in the' Par-  
ticles, and this seems tO he demonstrated by the curious Con-  
version of Water into Ice, in the middle of Summer, by means  
Of Nitre, Common Salt, and Sal Ammoniac.

But that there is such a Motion in Nitre, Or that the Motion  
of its Parts, when disengaged by Heat, is rectilineal, may be  
proved from various Circumstances. Thar Nitre is elastic and  
expansive, is sufficiently Certain from Gunpowder, whose Virtues  
Can Only he deduced from this Quality, for this Powder is Of  
so elastic and expansive a Nature, aS to force Objects from itself  
to a Certain unlimited Circumference. Besides, that Nitre is  
Possessed of such a Quality, is sufficiently obvious from its Mix-  
tnre with Coagulated Blood, which, by its means, is forthwith  
resolved, hecomes Suid, and assumes a red and florid Colour.  
TO this elastic Expansion Of Nitre it is, also. Owing, that, when  
mixed with Spring-water, it sensibly augments its Coldness.  
Hence it is agreeable to Reason, and our Conceptions of Things,  
that Nitre, taken internally, by producing such an Expansion in  
the Fluids, diminishes the hot and intestine Commotion of the  
Parts of the Blond and Humours. And this Effect it produces  
not Only by diminishing the Agitation and Effervescence of the  
acrid Bile with other Juices in the Primae Vise, but, also, , by  
Correcting the exorbitant Heat and Commotion of the Parts of  
the Blood in the Heart and Lungs. When this hot and intestine  
Motion is allayed, the Fibres, before Constricted by the Hear,  
are relaxed, the Mouths Os the Cutaneous Emunctories Opened,  
and Perspiration rendered freer: So that the active and sulphu-  
reous Parts, retained in the Body, exhale by which means the  
Heat and Thirst are allayed, the Spasms removed, the Pain al-  
levia.ed, and both the Excrements and Flatulencies freely eva-  
cuated from the Intestines. Besides, when the Heat, which  
consumes the Moisture of the Body, is mitigated, this Moisture  
is afterwards retained, and softens and relaxes the Parts before.  
Constricted ; so that Nitre not only refrigerates, but moistens.

We have, also, observed, thet Nitre preserves Bodies from Pu-  
treiadtion, winch k powerfully resists. This Effect is, also,  
producced by the expansive Quality of Nitre, which extinguishes  
the intestine Monon, Which dissolves the Union os the Parts of  
which the Body is composed, and in which the Force arid Cause  
Of Putrefaction -consist : SO thet in the Preservation of Bodies  
Nitre produces an Effect analogous to that of Cold.

We now come to inquire into the Cause of that singular Vir-  
tue, by which Nitre corrects and subdues the caustic and drastic  
Qualities Of some Medicines, aS we have already Observed with  
refpest to drastic Purgatives, insects abounding with ari acrid  
Salt, and Minerals of a deleterious Quality, the drastic Force of  
all which is *so corrected* by Nitre, that the Physician needs no  
longer dread their dangerous Consequences. The Reason of  
this teems to be, that all virulent Substances, by an highly pene-  
trating and active Motion of their minute and fubrile Pans, ir-  
ritate, lancinate, and corrode, the tense Nerves, and delicate ten-  
der Fibres. Now the more numerous, and the more closely  
united, such Particles are, the more. forcibly they exert their  
Power; and, on the contrary, the more they are divided, the  
inore of their Force they lofe. It is confirmed by Experience,  
that nor only all Caustics, whether acid or alcaline, but, also.  
Sublimate itself, then which there is no stronger Poifon, lose  
their deleterious Quality, when only exhibited in a sufficient  
Quaniiry of Wa.er. In like manner, when Nitre, calcined  
with Regulus of Antimony, does, by its refolvent and expan-  
sive Quality- separate the antimonial Panicles from each other  
in toe Fire, dissolve their close Union, and, by dividing them,  
render them more siibtile, an innocent, mild, and diaphoretic  
Quality is conveyed to them: But, this Division os the Parts  
must be sufficient; for which Reason two or three Pans of the  
Nitre are requisite to one of the Antimony; for, if the Quan-  
tity of Nitre is too small, the Calx of the Amimony will, in  
some measure, excite a Nausea and Vomiting. This diaphoretic  
Calx, when duly prepared, and fused with an equal Quantity Of  
Nitre, and Powder of Charcoal, immediately resumes its virulent  
Quality, because its Parts, which were formerly divided, are  
now colledied, and closely united. Nor is.it improbable, that  
Nitre, when mixed with drastic Purgatives, and Veficatories, acts .'  
by dividing and separating their Particles. /

From what has been said, it is sufficiently obvious, that Nitre\*  
is an excellent Corrector of all drastic Substances, and, conse- -  
quenlly, of singular Service in the Practice Of Physic. Thus, it  
is cornmodiouily mixed with Emetics, Purgatives, Diuretics,  
and Sudorisics of the drastic Kind: For which Reason an highly  
safe Vomit may be prepared by mixing two Grains of emetic  
Tartar with twelve Grains of the Powder of Crabs-eyes, and  
three Grains of the Powder of Niue. . Very safe purging Pills,  
proper in various Cases, may be prepared by adding six Grains of  
Nitre to the *Pilula .Avicenna,* and *sue Extractum Panchymagoguris  
Crelliif of* each :enGrains. A valuable Diuretic may be, also, pre-  
pared, by adding forne Grains of purified Nitre to Millepedes,  
and Crabs-eyes, of each ten Grains, If twelve Grains of Be-  
zoardic Mineral are mixed with one Grain of Camphire, and  
with volatile Salt of Hartshorn, and Nitre, each four Grains,  
we have a very safe and efficacious Sudorific. If we desue a  
safeMercurial Medicine for removing Coagulations of the Lymph,  
and infarctions of the Glands, take prepared Cinnabar Of any  
Kind, whether native, or Cinnabar of Antimony, and min with  
a one Quantity of Nitre, and other precipitating Substances.  
Ana this is a valuable and safe Remedy in chronical Dis-  
orders. We, also, use, with singular Benefit, Nine and Cinna-  
bar \*vith those Sedatives, the principal Ingredient os which is  
Opium, fuch as the Thenaca Coelestis, Laudanum Opiatum, and  
the Piluhe Cynogloflle; since, by this means, their narcotic Qua-  
lity is much corredled. *F. Hostmass.*

**THE EXAMINATION OF NITRE.**

I. Put Nitre into a clean Crucible, and fuse it with a gentle  
Fire, without Folminanon: It remains melted like pure water,  
without changing its Nature, and scarce losing any thing by Ex.  
haheion. It pastes through the Crucible, bur does not grow  
alcaline, or become sharper; and, when poured our, it presently  
becomes solid ; anst never, when thus Inched, takes Flame, nor  
ignites; whence it is falsely called an inflammable Sain . And yet,  
while it remains thus frssed, if any combustible Matter be thrown  
into it, ir immediately takes Flame, whence it came to he called  
Inflammable; but, when taken internally, it cools the Body more  
than any other Salt.

a. Pur a Solution of the purest Nitre, in Water, into separate  
Gisss Veffeis, and pour successively to them different Acids;  
and the Liquors will be found to make no Ebullition, nor to grow  
warm, opaque, or turbid. To another Parcel of the fame  
pour pure Oil of Tartar *per Deliquium,* whereupon the Liquor  
will grow opaque and muddy, and foon deposite a large Sedi-  
ment at the Schtom; from whence the Liquor being decanted,  
it will no longer grow troubled by the Addition of fresh Alcali.  
Nearly the fame Thing happens upon the Addition of a volatile  
Aicaii. And this is the true Nature of Nitre.

REMARKS.'

Hence it appears, that Nitre is neither alcaline. nor acid, nor  
of itself infiarnmable; but of all Salts the most easily fused in  
the Fire.

**THE REFINEMENT AND CRYSTALLIZATION OF NITRE.**

Dissolve common Nitre in six times its Quantity Of boiling  
Water; strain the hot Lisiviumstuick; Put it into a deancylin-  
drical Vessel; and exhale it over a clear Fire, to a Pellicle: Set  
it in a cool Place with dean Sticks a-cross the Vestel ;. there  
will prefchdy be formed long, prismatic, hexagonal, uansparent  
Crystals. Collect there, and pot them into an earthen Colan-  
der, that the Liquor may drain from them; afterwards dry the  
Nitre in the open Ain

a. Dissolve Nitre in eight times its Quantity Of polling Water;  
filtre the Lixivium; then drop therein some pare Oil of Tartar;  
mix them west ; then drop in more, and contione to do thus, till  
rhe Liquor appears no more disturbed. Boil the Lixivium for a  
single Minute; strain it hot to make it perfectiy clear; exhale  
to a Peilicule; pour it out into a clean cylindrical Vessel, with  
hide Sucks laid across, and let it stand in a quiet Place; prisma,  
tic Crystals, like the former, will thus be formed. No Experi-  
ment thews, that any Alcall here adheres to the Crystals of Ni-  
tre, which is thus made pure; nor does it appear, that any Me-  
thod can afford it purer.

’ 3. Let the Lixivium that remains aster this first Crystallixation,  
be diluted with an equal Quantity of fair Water; then boil for  
a Moment, filtre hot, inspiflate to a Pellicle, and fet in a cold  
Place, as before: It will thus shoot into Crystals Of pure Nitre,  
which are ro be dried as above. The remaining Lixivium, be-  
ing again treated in.the fame manner, and again set to crystalline,  
yields more of them. And now the remaining Liquor, which’  
is fat .and sharp, will afford no more Crystais, and dries with  
great Difficulty; and this happens not only when Alcali has been  
used in the refining, but, alfo, when nothing but pure Nitre  
was added. This last Remainder is a peculiar and very feline  
Fluid,, thet long remains fixed in the Fire.

R EM ARKS.

I. By this .means an excellent Nitre is procured for Medicinal  
Uses, being very light, of a particular bitterish Taste, and,  
when taken into the Body, it easily dissolves therein; wonder-  
fully cools and thins the Blood, giving a florid Colour thereto,  
and checking the Inclinations tovenery. It is changed in the  
Body, no: being unalterable therein, like Sea-salt, but turning-  
into the human Salt, if the moist or solid Parrs Of Anirnais '  
be salted with this Nitre, they are thereby kept extremely red,  
and free from Putrefaction: Whence, in all inflammatory Dis-  
tempers, attended with an inflammatory Condensation of the  
Blood, this Salt proves excellently attenuating, and, at the  
same tithe, no way offends by any violent Acrimony, nor proves  
prejudicial by its Weight. It does not occasion Thirst, and  
prevents the Salt of the Body from turning alcaline, and the  
Oil from putrelring; and, on this account, it may properly  
be called an Antiphlogistic Salt.

a. Here we see an Example Of that Operation usually called the  
Crystallisation of Salts, which is a Collection of saline Prin-  
ciples, of the fame Species, into particular Glebes, Or Shoots,  
always of the fame Figure, and peculiar to each particular Salt.  
This Depuration depends upon the Law of Nature; whereby  
the Parts Of different Salts, being diluted in Water, and brought  
to a certain Proportion in refpedt of the Water, begin to ac-  
quire a Faculty of uniting their own particular Parts together,  
more than of uniting with the Water, Or any other Salts.  
Whence they repel both the Water, and other Salts. And  
thus those Salts always begin to come first together, when  
several Kinds ate mixed, which require most Water to keep  
them dissolved., for thus these associate first, and‘repel from  
them the other saline Parts, that remain fluid in less Water;  
so that, if any Sales could he resolved in ohe and the same Pro-  
portion Of Water, is would he extremely difficult to separate  
and distinguish them, which is now easily and certainly per-

- formed. And thus Nitre is perfettly separated from Sea-salt,  
and Sea-falt from Salt of Tartan For, when Nitre is thoroughly  
purified from Sea-fait by Crystallisation, it affords an acid  
Spirit by Distillation, which dissolves Silver, bur will not  
touch Gold ; whereas, if a little Sea-salt remained with the  
Nine, it would afford an Aqua-regia, nor an Aqua.fortrS.  
The fame Nitre, being dissolved in Water, and purified with  
the Addition of fixed Alcali, by the bare Crystallization,  
throws off all the Aicaii; for in Distillation it is converted  
into an acid Spirit, which would nor he Inch, if any fixed  
Alcali adhered to the Niue. Whence we may observe a  
wonderful attractive and repelling Power, in this Action of  
Crystallization.

3. If there Crystals are well prepared, they always appear trans-  
parent, and'of rheir own exact particular Figure; and *so* long  
as they appear thus, they always consist of the Salt and Water,

united in a Certain Method and Proportion. This appears  
from hence, that if these Crystals be put into a clean Glass,  
covered with an Alembic-head, and heated by the Fire, they-  
yield a pure Water, but, at the same time, presently grow  
white, opaque, and, losing their Figure, fall into a Powder  
Of no particular Figure. But if this Powder he again dissolv’d  
in Water, inspissated, and crystallized, the same Form and  
Transparency return. Whence this ought to be considered  
by those who write about the Figure of the saline Principle.  
Nitre, thus purified, remains dry in the Air, and does not  
easily run by the Moisture thereof. \*

**NITRE CHANGED To ALCALI,. WITH TARTAR AND FIRE.**

Take six Ounces Of pure dry Nitre, reduced to Powder; and  
the same Quantity of pure, dry, and pulverized Cream Of  
Tartar-. Mix them Together in a Mortar, and again dry  
the Powder thoroughly. Put an Ounce Of this Powder into  
a Clean and dry Bell-metal Mortar, first well heated; and  
apply thereto a little Bit Os burning Coal: The whole Mixture  
will then instantly deflagrate, with a Violent Noise, scatter-  
ing many Sparlts abroad, dispersing a strong-smelling Fume,  
- and leaving behind a white Mass, somewhat greenish in  
several Parts. As soon as the Deflagration is Over, throw  
., half an Ounce Of the same Powder upon the burning Mass;  
and this, also, will deflagrate as the former, but quicker,  
because Of the greater Heat. Continue thus, till the whole  
Mass is deflagrated, and leaves behind a white, greenish,  
uniform Mass, except a few small Parts up-and-down, which  
have not shsticientiy felt the Fire. These, therefore, should  
be Carefully separated from the Mass: And hence it would  
he better, if only a small Quantity were deflagrated at Once,  
because the Fire would be thus more equably applied thereto.

' ' - REMARKS.

Hence st appears, that Nitre, which. Of itself, is not inflammable,  
according to the first Process, yet, being mixed with Tartar,  
which is Oily, it immediately takes Fire, with a Violent Agi-  
tation, like Gunpowder, upon rhe Application Of a .live  
Coal, and chat the manifestly acid Salt, made by a Mixture  
Of Nitre and Tartar, is, at once, by a sudden, single, inflarn-  
ing Action Of the Fire, tumed into Alcali, of which, a little  
before, there appeared no Sign, either in the Nitre, or the  
Tartar. Nor is there hitherto known any Method so sudden  
of producing a strong fixed Alcali, from a Mixture Of Salts  
that are not alcaline ; hut. On the contrary, giving manifest  
Signs of a predominating Acid. For the Salt, thus produced,  
is a sharp, fixed, and strong Alcali in all its Effects, and ai-  
most in every chymical, medicinal, and physical Operation.  
It, however, differs somewhat from Other fixed Alcalies, aS  
yielding, when Oil Of Vitriol is poured upon it, a certain acid  
Spirit, that plainly appears by its Scent to be Spirit Of Nitre,  
which shews, that some true Nitre still remains in this Alcali,  
but the Quantity os this Acid is small. We have here,  
therefore, an excellent Method Of expeditiously preparing a  
fixed Alcali, whenever it is wanted. And this sudden Change  
Of Nitre into Alcali will not appear strange to him who knows,  
that no Nitre is Obtained in *Europe* without the Assistance Of  
fixed Salt, which is found in the Ashes Os burnt Wood. Lastly,  
the Salt, thus prepared, readfly runs in the Air.

**NITRE TURNED TO AN ALCALI, WITH LIVE COALS.**

Fill a strong and large Crucible with very dry powdered Nitre,  
laid in light, fet the Crucible firm, in the Furnace, and sur-  
round it with burning Coals, at a Distance ; then gradually  
bring them' nearer, that the Crucible, with the Nitre it  
contains, may be thus heated equably, to prevent bursting.  
When all is now thoroughly hot, apply as strong a Fire aS  
is necessary so make the Nitre run like Water: Then take  
a little Piece Of Wood-coal, thoroughly ignited, and put it  
gently into the melted Nitre, now at Rest; the Coal (not the  
Nitre) will thus instantly take Flame with an hissing Noise,  
and move over the whole Surface os the melted Nitre,  
with a brisk Motion, till it is Consumed, and the Flame ex-  
tinguished, so ω to leave the Nitre melted, aS before it was  
thrown in. Now, throw in another Bit os liVe Coal, as  
before, and the fame Phenomena ensue. Continue repeat-  
ing the Operation, till, at length, the Nitre remains fixed  
with the same Degree of Fire, so as to flow no longer, nor  
give Flame to the Coal thrown in, which, at length, will  
always prove the Case. .This State may be known to ap-  
proach, when the Nitre begins to lose its Fluidity, and the  
Coal leaps briskly about, and sometimes flies out of the  
Crucible. At this Time, therefore, the Fire should be  
a little increased. When the Coal ceases to flame any longer,  
. let all cool, and there will remain in the Crucible a Mass  
with an hollow Part on its Top, where the last burning  
Coal had rested: This Mass is solid, ponderous. Of a Colour

between white and green, fiery, alcaline, and presently nins  
in the Air: Therefore, while yet Very hot, let it be presently  
taken out, by breaking the Crucible, and put into a Clean  
.Glass, to be carefully stopped.

REMARKS.

I. Here the Eye perceives, that Nitre will not take Flame with  
a burning Coal, and that, between the inflammable Matter  
Of the Coal, and the melred Coal, there arises a great Motion  
Os Impulse, and Repulse; for, when the live Coal, that flew  
about in the Crucible, is consumed, the Nitre immediately  
remains without any Visible Motion, and does not appear on  
Flame, till, by the Addition of a fresh Coal, the same Motion  
is renewed, and, therefore, the Consumption of the Coal is  
. hastened by the melted Nitre, which it would Otherwise con-  
fume much flower. And this accelerating Action of the Fire  
upon the combustible Matter seems to increase the Deflagra-  
tion; and, therefore, that the Effect os Nitre upon Combusts-

. ble Bodies, by means of Fire, is no more then this violent  
repulsive Motion, whereby the Coal, if somewhat large, is dri-  
ven from the Nitre with an explosive Force, aster which,  
the whole Nitre remains Calm, and at Rest.

2. The Ashes of the fixed Vegetable Coal, aster the Deflagra-  
tion, here turn into a fixed.Alcali, which Very easily relents

. in the Air, but thisAlcali here produced is much larger than  
would he afforded by the burnt Vegetable Matter, and must,

. also, proceed from the Changed Nitre. This is another Method  
Of converting Nitre inro an Alcali: The Alcali thus produced  
is Very difficult to keep dry, but presently relents in the Aur,  
and runs into a strong, fiery, alcaline Liquor, leaving a large  
Quantity of Ashes behind. But if the Salt, aS soon aS pre-  
paresi be dissolved in Rain-water, and directly strained, and  
the Faeces, remaining in the Strainer, he washed so long, in  
Changes Of Water, till they retain no Salt, they become in-  
sipid, when dried. ' And, if the several Solutions be evaporated  
to the Consistence Os the Oil Of Tartar *per Deliquium,* a  
Liquor like that will he Obtained. And these pure Ashes, be-  
ing weighed, will shew how much of each remained after  
the Deflagration, and. Consequently, how much Salt of the.  
burnt Vegetable Coal might contribute to the making of this  
Alcali. Hence, also, may he known, how much the Nitre  
contributed to its Production. This Preparation is commonly  
Called Alcalized, or Fixed Nitre. ώ

**SAL PRUNELLAE, FROM NITRE.**

I. Take Nitre, purified according to the second Process, melt  
it at the Fire, in a clean Crucible; and, as soon aS melted, \_  
pour it out in Cakes upon a clean Marble; and keep them,  
under the Tide Of *Sal Prunellae, sot* Medicinal Use.

2. Dissolve this Nitre in clear Rain- water, wherein red Poppy-  
flowers have first been infused warm, so aS to give a beauti-  
ful Tincture, which is to be filtred, inspissate the Soln-  
.tion, and’let it shoot into Crystals, in the common Me-  
shod. These, being dried, are another Kind Of Sal Pru-  
nellae. Or crystal Mineral , formerly held a Secret, aS an in-  
fallible Antiphlogistic.

*as.* Melt four Ounces os pure Nitre in a Clean Crucible, and  
thrown Scruple Os the Flowers Of Sulphur thereon ; there  
will instantly arise a great Flame, like Lightning, which,  
when the Sulphur is entirely consumed, directly goes our  
Of itself. This being three Or four times repeated, and the

. Nitre poured out into Molds, so as to form little Cakes, is  
another medicated Sal Prunellae.

REMARKS.

The Nitre, thus prepared, entirely agrees, in Virtue and Use, with  
that of the second Process, which I rather prefer, aS the,  
Trouble of the present Process seems unnecessary, and refined  
Nitre every way answers the Purpose. Hence we fee, that  
melted Nitre, though perfectly at Rest in the Fire, has the same  
Effect upon inflammable Sulphur, as it before had On the ignited  
Coal; that is, to make it deflagrate quicker and .stronger; and

- hence the Discovery of Gunpowder, which is prepared from  
Nitre, Sulphur, and Coal. This present Preparation has ob-  
tained the Name of Sal Prunellae from the *Gormans,* who  
observing that a certain kind Of epidemical Camp Fever, at-  
tended with a dangerous black Qoinsey, which they call *Die  
braune,* was happily cured by the Use of this Powder, they,  
thence, called it by that Name. For the same Reason they  
gave the same Appellation to rhe Plant Self heal, or Prunella,  
because this cures the same Distemper. The Salt, thus pre-  
pared, is never alcaline.

**SAL POLYCHRESTUS.**

i. Melt pure Nitre in a Crucible, and throw a little pure Sul-  
phur thereon, not exceeding a Scruple at a time, it will

deflagrate, aS in the preceding Process: Continue throwing  
On the same Quantity after each Deflagration, till at length  
as much Sulphur is used aS there was Nitre ; towards the  
End Of the Operation, the Sulphur thrown in does not flame  
so Violently, nor so brightly, as before. Keep the Crucible  
still in the Fire, in the State of lgnition, for an Hour, the  
Salt will appear redish up-and-down, but Otherwise of a  
grey Colour.. If immediately after the Deflagration, with an  
equal Quantity Of Sulphur, the Salt be taken Ont, without  
-any farther Application Os Firs, it has always appeared to  
. me, upon examination, to have perfectly the same efficacy  
as the former.

2. Or take equal Parts Of pure dry Nitre, and Flowers of  
Sulphur 5 grind them to fine Powder, and heat it carefully ,  
then throw two Scruples thereof at once into an ignited  
Crucible, while it remains in the Fire, a Violent Deflagra-  
tion will immediately arise, which being Over, throw the  
like Quantity to the Remainder, and this will deflagrate as  
the former. Continue thus, till all the Powder be thrown  
in, there will now remain at the Bottom Of the Crucible,  
a Salt extremely like the former.

3. Dissolve the Salt, thus prepared, in five .times its Quantity  
Of hot Water, in a Glass Vessel, strain it while it is hot;  
inspissate it to Driness ; it will be of a white Colour, Of a  
bitterish, sulphureous, warm Taste, and of the same Na-  
tnre with the Salt sometimes found in hot mineral Waters:  
It is neither Acid, nor Alcali, but consisting Of Nitre, and  
some Proponion Of Sulphur, Changed by the Fire.

**♦ REMARKS.**

Sulphur, therefore, which Consists of the Acid of Vitriol, and  
Oil, united together, has here the greatest Part of its Oil con-  
sumed in the Flame with the Nitre, and its acid Parr, now,  
perhaps, somewhat changed by the Fire, along with some Part  
Of its Oil, intimately mixed among the Nitre, now, also. Changed  
by the same, so aS to produce a neutral fossil Salt in the Fire.

. Whence we see, that Nitre, which, when fired with a Vegetable .  
**Coal,** was. Converted into a fixed Alcali, is here, with Sulphur,

. changed into a fixed Salt, that is notalcaline, tho' it had so long,  
and so strongly, been deflagrated with Sulphur. Physicians,  
especially those os *Paris,* having thoroughly experienced the  
Virtues Of this Sait, called it *Polychreflus,* because Of its various  
Effects, and proving successfill in many different Diseases. It'  
taken upon an empty Stomach, by a Person in Health, in the  
Quantity Of two Drams, diluted with twenty times its Quan-  
tity Of Water, the Person walking gently after it, and drinking  
four Or six Ounces Os new Whey, for three or four times, it  
sometimes proves gently vomiting, Oftener' purgative, hut al-  
ways diuretic and sudorific, so often aS it is determined to ope-  
rate that Way, by Heat, Motion, and Sudorifics. It cuts cold .  
Viscous Phlegm, resolves in dense Inflammations of the Blood,  
opens the Passages, corrects the Bile, when tending to Putre- \_  
faction, excites it, when languid, and stimulates it with Gentle-  
ness and Safety. Hence, being prudentiy given in Chronical  
and acute Distempers, it proves curative : It almost certainly  
cures inveterate Tertians, without any Danger Os Relapse, or  
without Obstructing the Viscera: It securely cures Quartans,  
lby gradually resolving the sluggish Matter thereof; and, there-  
sore, has deservedly Obtained the Name Of the Salt of many  
Virtues. If a littie Sal Ammoniac be thrown into melted  
Liquor, it takes Fire; and,is saturated by repeated Addition, it  
affords a wonderful Salt, that deserves to he examined, on ac-  
count Os its particular Nature,

*- GLAUBEBIS* **SPIRIT OF NITRE.**

' Put eighteen Ounces of pure dry Nitre, reduced to an impal-  
pable Powder, into a- clean Glass Retort, and pour thereon  
fix Ounces Os pure, and highly rectified. Oil of Vitriol:  
Immediately place the Retort in a Sand-fnraace, and apply  
a large Glass Receiver; luting the Juncture with a Mixture  
os Lime-clay, and a little Sand. There will presently arise  
an Heat, and a red Fume; apply a moderate Fire, and the  
Receiver will soon he full of red Fumes, and a Liquor be-  
gin to drop gradually. Increase the Fire to the utmost that  
Sand will give, and then let all spontaneously cool. As soon  
as the Retort is a little cold, separate the Receiver, and have  
at band a strong dry Glass, with a narrow Neck, fitted with  
a stender Funnel, pour the Liquor into a Bottie, through  
. the Funnel, under a Chimney, to prevent the red Fume  
from any way coming to the Lungs , for it is sharp, fiery,  
incredibly volatile, and diffusive: As soon as the Spirit is in,  
exactly stop the Mouth of the containing Glass, with a Glass  
Stopper, in like manner, stop the Receiver, and set it by  
for the same Use; it will remain sor many Weeks filled with  
a red Vapour, in continual Motion. The Liquor in the  
Glass will appear Of a Gold-colons, with a red Vapour  
always appearing in the empty Part above, even sorYears,

as I have sound by Experience and, if at any time Open’da  
a Volatile, copious, red Vapour immediately flies our. The  
Operation is best performed in the cold Winter-season.

**REMARKS.**

Oil Of Vitriol Can scarce touch Nitre, but there immediately  
arises a Violently acid, sharp, fiery. Volatile Spirit, that is per-  
fectly ninons, and has all the same Effects aS common Aqua-  
fortis, and, with fixed Alcali, returns to true Nitre again. It  
is impossible to obtain more Spirit from this Nitre, by the Ad-  
dition of less or more Oil of Vitriol, whatever Dogree of  
a Sand-heat he used. All the Nitre, therefore, is not changed  
from fixed to Volatile, from solid to fluid, from mild to sharp,  
from white to red, from neutral to acid, and from unactive to  
a moveable or restless Liquor. This Liquor is the true Spirit  
Of Nine, aS appears by he Smell, Taste, Colour, red Fumes,  
Effects, and its Power os regenerating Nitre again. It con-  
tains nothing of the Oil of Vitriol employed, aS appears froth  
Certain Experiments t The other Part of the Nitre, therefore,  
which is not render'd Volatile by this Operation, unites with  
the Oil of Vitriol, fixes therewith, and becomes a white dense  
Salt, .neither acid, nor alcaline, but neutral and of a new Kind,  
somewhat resembling the Tartarum Vitrioimum. Upon con-  
sidering this, some eminent Chymists have supposed, that  
Nitre, in its Origin, was made Of a fixed alcaline Sal, and  
the proper Spirit Of Nitre, such aS is here produced; and  
mixed together to a perfect Saturation.. But as Oil os Vitriol  
is a much stronger Acid, than Spirit of Nitre, when that comes  
to be mixed with the Nitre, they imagine, that the fixed aica-  
line Part Os the Nitre attracts the acid Oil of Vitriol, so that  
the two here unite into a Salt, consisting os the Alcali of Nitre,  
and the Oil Os Vitriol, while the pure Acid of thin Nitro, now  
set free, by the Oil of Vitriol, from the Alcali that detained it  
before, remains a pure, red. Volatile Acid, of its Own pecu-  
liar Nature. Hence they attribute this whole Action to the  
bare Separation of the Parts pre-existing in this Form before,  
and not Produced afresh by the Action of the Fire. This  
Explanation seems Very plausible, and countenanced by other  
Experiments, particularly in the two next Processes but cue.  
But if we Consider the Origin Of Nitre from Animals, and  
fixed Alcali, it seems difficult to find a Principle in them, any  
way resembling such an acid Spirit, aS is here prepared; espe-  
Cially since the most diligent Inquirers into Nature cannot find  
any perfect Nitre spontaneoufly generated. Certainly there  
is nb instance of any natural Acid like that here Obtained; wo  
must, therefore, abide by our Experiments, and beware of  
hasty Conclusions. There is no known Method, either Os Art  
or Nature, for Obtaining a stronger, ora purer. Spirit of Nitre  
than this; whence we shall always use this Spirit for the fu-  
ture, in those Operations that require it. *Glauber* was rhe first  
who discovered this Art, which he held as a Secret, and fold  
the Production at an extraordinary Price, but at length di-  
vulged the Method; to him are we therefore obliged for so  
excellent an Invention. And hence we have an intimation,  
what Numbers Of new, useful, and excellent Discoveries might  
be made, by applying one Body to another, and afterwards  
working upon them with Fire. The present Experiment is one  
of the noblest that Chymistry has produced.

*GLAUBER’S* **DULCIFIED SPIRIT OF NITRE.**

I. Put into a tall Bolt-head eight Pans Os pure Alcohol, pre-  
pared without Alcali; let fall into it Only a sew Drops, at  
Once, os *Glaubers* strong Spirit of Nitre; then leave ofis,  
and shake the two Liquors well together, that they may  
perfectly mix , afterwards drop in more; shake aS before:  
And thus proceed carefully, till an eighth Part of the Spirit  
Of Nitre be added, in proportion to rhe Alcohol; observing,  
after each time, to shake the Glass thoroughly. Afterwards  
digest the Liquors for some time, and then distil twice or  
thrice over in st Retort: Thus a true dulcified Spirit Of  
Nitre will he obtained.

2. If Common Spirit Of Nitre,'and common Spirit os Wine,  
were here used, they would not thus afford so noble and  
balsamic a Spirit, On account of the Water they each of  
them Contain.

j. I have Often experienced, and shewn, the dangerous effects  
that may arise upon mixing large Quantities Of Alcohol, and  
strong Spirit Ot Nitre, together: For, if to two Drains of  
*Glaubers* Spirit of Nitre, contained in a Bolt-head, there  
be at Once added six or seven Drams of Alcohol, there  
will arise a Violent Heat, Ebullition, and Vapour - and all  
the Liquor suddenly escape Out os the Glass, though it were  
eVer so high, and this with great Danger of Suffocation, if  
it should touch the Lungs, and in this manner I have lost  
both the Liquors. The excellent Doctor *glare* has more  
Observations to the same Purpose, in the *PEilofophical Transo  
actions.*

REMARKS.

- Upon thus mixing together Alcohol, and Spirit Of Nitre, there  
immediately arises a fragrant Smell, like that Of Sour hern wood 5  
there is, also. Observed an high Degree Of Effervescence be-  
twixt this Volatile Acid, and pure subtile Oil, without the least  
Interposition Of an Alcali: And yet the Effervescence is almost  
fiery; SO that, if a lighted Candle were applied to the Vapour,  
the Inside Of the Glass would appear Of Flame, and the whole  
instantly burst in a dangerous manner. The Oftener these two  
- Liquors are digested and distilled together, -the more exactly  
they unite, and thus afford a perfectly acid and'Oily Sain which

' has an actual preservative, balsamic, detergent, dissolving Vit-  
me, and prevents the Putrefaction of the Bile. Being proper-  
\_ ly diluteo, and prudently used, it presently gives a beautiful

Whiteness to the Teeth , hut, if imprudently used, destroys  
them: It restores the Appetite» if depraved by a mucous  
Phlegm, Or Corrupt Bile, Or if tho Cause proceeds from a  
Weakness Of the Stomach: It is a great Carminative; it is re-  
Commended aS a Preservative against the Stone, and even as  
**a** Solvent for it: It was formerly the famous LithontriptiC Of  
*Sylvius,* held at so dear a Price. It promotes Sweat, pro-  
vokes Urine, allays Thirst, Corrects a fetid Breath, and haS  
particular Virtues in the Scurvy. It is Conveniently taken upon  
an empty Stomach to twenty or thirty Drops in Wine, Mead,  
or Beer.

**THE REGENERATION OF NITRE.**

X. Take an Ounce Of dry fixed Nine, made according to the  
third, or fourth Process, dissolve it in eight times its Quan-  
tity of Water, and filtre the Solution. Pour the Liquor  
hot into a clean, heated, large Glass, with a narrow Neck ;  
.drop thereto, successively, a few Drops Of *Glaubers* strong  
Spirit Of Nitre. The falling in of each Drop suddenly oc-  
casions a great Effervescence; shake the Glass so longas this  
Continues then drop in more, aS before -, and continue thus,  
till the Effervescence begins to abate ; alter which add only  
a single Drop at a time, and strongly shake the hot Liquor.  
Proceed thus, carefully, till no more Effervescence appears:  
The Liquor will be transparent, and certain long and cry-  
stalline Shoots will begin to be form'd therein. It has noscent,  
the Taste is somewhat bitterish, and perfectly nitrous. Di-  
lute the Liquor a little more,'boil it for a Moment, strain  
it hot, evaporate to a Pellicle, and actual Crystals of Nitre  
will shoot. Strain the remaining Liquor; inspissate, and  
Crystallize, aS before, thus more true Nitre will be Ob-  
tamed.

**2-** If any other pure fixed Alcali, prepared from Tartar, Or  
Pot-alls, be used in this Experiment, instead Of fixed Nitre,  
the Success will he in every respect the same, and no Dif-  
ference be found in the Nitre produced. .

REMARKS.

The illustrious Mr. *Boyle* Conceived so highly of this Experiment,  
that he thought proper to write a Treatise upon it: And truly  
it is One of the most Capital Discoveries in Cbymistry, aS  
shewing how, from the strongest and most corrosive Acid and  
Alcali, immediately to produce, by a bare proportional Mix-  
ture, a neutral, mild,- Cooling Salt, in no respect corrosive.  
Here an highly odorous and volatile Acid is, in an Instant, at-  
\* tracted into a fixed Alcali, with the Loss of all its Odour and  
Volatility, so as to bear a Fire Os Fusion, without any remain-  
ing Volatility: Whence we may easily understand the great  
attractive Force there is betwixt Acid and Alcali. At the  
Instant of this Conflict, a Quantity Of elastic and highly ex-  
pansive Air arises, which is only generated in the Action of the  
- Attraction, and ceases when that is Over: Whence Air seems  
to he struck Out Of the Bodies of the Acid and Alcali in the  
Collision: Hence this Action seems to be an Attraction, not  
a Repulsion; and, perhaps, the Violent and sudden Motion  
arises from the Expulsion and Breaking-ont of {he Air, while  
the Alcali and the Acid are Closely uniting. Here we sce, like-  
wise, a- subtile liquid Acid again forms a firm, solid, saline

- Body with an Alcali., and that the Alcali, which would he-  
fore run spontaneoufly in the Ain, and the Acid .of the Nitre,  
scarcely by any Other means to he render'd solid, afford a Salt,  
upon uniting, which, when dry, will remain firm in the Air,  
and even acquire a solid Form, or shoot into Crystals in Water.  
Here again we see, that an Alcali may he determined by an  
Acid, into that kind of Salt which afforded the Acid. Hence  
- Alcali appears a kind of unimpregnated Or Female Body, tO  
be impregnated by an Acid, which acts aS the Male, with re-  
- spect thereto, and generates its own Kind, Or preserves its  
Species; and, therefore, the indifferent Nature of Alcali is  
derermined by the Acid. And hence, again, it appears, that  
the last Principles of Nitre may consist Of any fixed Alcali,  
\* saturated with the acid Spirit of Nitre; and, therefore, that  
the Nature-thereof, the Figure, and other Properties, may he

Owing to a Conjunction of them both. But whether all Nitre  
originally proceeded from this Acid, before pre-existing Or *it-  
self,* and united with a fixed Alcali, in like manner pre-exist-  
ing by itself, I cannot say; and Very much question. But that  
Nitre may be made in this manner, and, also, that it may he  
procured from Earth, impregnated with the distolved Parts Of  
Animals, and the saline Parts Of Vegetables, aS, also, with  
Quick-lime, I Certainly know, and this is sufficient for me.

**NITRE REGENERATED IN AN UNFIXED STATE.**

i. Into a capacious Glass, with a narrow Neck, put three  
Ounces os pure Volatile alcaline Salt; dilute it with fin times  
its Quantity Of fair Water; and, when dissolved, drop in a  
Quantity of pure Spirit Of Nitre; an Effervescence will  
arise like that Of the preceding Process. Continue in the  
same manner aS there directed, till the Point of Saturation  
he exactly hit, soon after which. Oblong, saline, prismatic,  
eight-sided Crystals wifl shoot, exactly like Nine.

2. Again, dilute this Compound Liquor, with twice its Quan-  
tity Of Water, filtre ; exhale tO a Pellicle, Over a gentie Fire  
and set the Whole in a cold Place; and. nitrous Crystals  
will he formed. Prosecute the Operation, till all the Sal t be  
shot, which will appear in the Form of scentless Crystals  
Of Nitre. These Crystals easily melt in the Fire, bur at the  
same time fly off, not remaining fixed like Nine: They  
make a Flame with all inflammable Matters, like true Ni-  
tre, and, with Oil Of Vitriol, afford a Spirit like true Nitre.  
Hence they are true Nitre, hut semivolatile.

' REMARKS.

This is an excellent Experiment, and teaches the several Par-  
ticulars explained under the last Process; to which we thay  
add, that here, from two of the most Odorous Bodies, there  
arises a perfectlyinodorous Salt j from two Violent Caustics, an  
exceeding Cool and mild Salt; from two very Volatile Bodies,  
a Salt that is not Volatile, except with a considerable Heat.  
Here the Volatile Alcali, of itself indifferent, is, by a saturat-  
ing Acid, turned into a particular Salt, Of the Nature Of the  
Acid employed, which thus regenerates the BOdy that pro-'  
duced it: Hence we see, that the Volatility os a halt depends -  
upon the Alcali contributing to its Composition j which Ai-  
Cali if fixed, the Salt is fixed . if volatile, the Salt is volatile:  
And that the Nature Of the Salt produced depends upon the

. Acid mixed therein.. Hence we have the Method of pro-  
curing a Volatile Nitre, the.DiscoVery of which has exercised  
-the Labour and Industry Of the Chymista of all Ages. The  
.Virtues of the semivolatile Liquor, thus prepared, as far as I  
Could observe, are Of the same Kind with thOte of Common  
Nitre, Or the fixed regenerated Kind, though more gentie;  
and differ Only, as the Virtues Of Sea-salt differ from thoso of  
Sal Ammoniac.

*.. GLAVBEBlsALcheBzsT.*

. Put the alcaline Salt, prepared according to the fourth Process,  
in a glazed Dish, and expose it tO the Open Air, in a cold  
quiet Place, free from Dust; it will soon begin tO run:  
Pour Off what is dissolved into a clean Glass. Again, ex-  
pose the Remainder to the Open Air, and repeat the Opera-  
tion, till the whole Salt is run into a Liquor. Much Ashes  
will remain behind; but the Liquor, when strained, be-  
comes Clear, alcaline, and thick, hke Oil of Tartar per De-  
liquium.

REMARKS.

This is that famiOus Liquor Of the Chymista, boasted as so great  
a Secret by its inventor *Glauber,* who put it off for the true  
Alcahest, but Secrets Once revealed are flighted, and this seems  
to be the Case here. By all the Experiments I have made, I  
Could never discover any thing particular, and which I did  
nos, also, find in Oil Of Tartar per Deliquium, in whatever  
Case I applied it, but *Glauber’s* Alcahest is prepared with  
. more Difficulty, Obtained in less Quantity, and comes dearer;

and hence, perhaps, pleases better.

**NITRUM NITRATUM.**

TO eight Ounces of the Lixivium Of pure Nitre, put thirty  
Drops of the strongest Spirit Of Nitre; evaporate to **a**Pellicle, and crystallize after the common manner: Perfect \_  
nitrous Crystals will be thus obtained, but Of an acid Taste.

REMARKS.

This Process serves to shew hew certam.Salts may he united,  
which the Acids themselves afford, into the Form of a com-  
pound Salt; and, by adding more Or less of the Spirit, the  
Salt may be made more or less acid; but the more acid it is  
made, with the more Difficulty it afterwards dries, and keeps  
dry ; heing thus always subject to run in the Air. . The Nitre,

thsis prepared, is advantageously tiled in burning Fevers, at-  
tended with a dry, foul Tongue, and Thirst.

A

**VEGETATING NITRE.**

**If, in the** Preparation of *Glaubers* Spirit of Nitre, there are  
taken four Parts of Nitre, and one of Oil of Vitfiol, and,  
after all the Spirit is entirely driven Osh the white Salt, re-  
maining perfectly dry in the Retort, he lest in the Open Air,  
its Surface will soon begin to he Covered with a thick long  
Down, as if it grew, which Phenomenon I do not remem-  
ber to have Observed in Other Salts. But is the Salt he dis-  
solved in Water, strained and evaporated to Driness, in a  
Cylindrical Glass, then kept exposed to the Open Air, its up-  
per Surface will often appear thick-set with a kind Of actual  
little branching Plants, all which dissolve away, upon the  
Application pf Heat, so as to leave the Surface even, hut  
upon exposing theVeisel to the Open Air, in a quiet Place,  
they have grown up, as before; thus several times exhi-  
biting the Resuscitation of Plants, aS it were, from their  
Own Ashes, Of which some Of the Chymista have formed so  
many Fables, and I have sometimes suspected the thing  
might, perhaps, he done by these means.

REMARKS.

This curious Experiment shews, that the great Disposition which  
Nitre has to crystallize, affords an Opportunity of imagining a  
kind Of artificial Vegetation, such aS some Over-credulous Ar-  
fists have feigned, hut never, I conceive, exhibited under the  
Tide Os vegetable Resuscitation.

**SPIRIT OR NITRE WITH BOLE.**

**1.** Take a Pound and an half Of purified Nitre, reduced to  
Powder; and sour Pounds and an half Of common red  
Bole: Mix them well together; put the Mixture into an

- earthen long Neck, so aS not to rise into the Neck thereof,  
as the long Neck lies’ horizontal in the Furnace: Let two  
of these long Necks be used at Once, and lute on their Re-  
CeiVers, apply a gentle Fire, at first, to warmime Matters,,  
and increase a little every Quarter Of an Hour, till, by de-  
**grees,** the Furnace and Vessels become thoroughly hot. A  
moist Vapour will now begin to come into the Receiver;  
increase the Fire so far, by degrees, in the Space of half an  
Hour, till the Vapour comes Over redish; and gradually  
raise the Heat, till theVapour comes over perfectly red. Con-  
tinue thus for three Hours, at length raise the Fire so high,  
till the long Necks grow red-hot, so that the ignited Matter  
may, in the long Necks, be perceived through the Glass  
Receivers, and keep the Fire up to this Height for two  
HoursThen let all cool; and, as soon aS the Necks Of rhe  
long Necks are Cooled, take Off the Receivers, with Care  
to avoid the Fume: Pour the distilled Liquor through a  
Funnel into a Glass Vessel, which, being exactly fitted with  
**a** Glass Stopper, is to be set in a cold Place. This will he  
a Very strong, acid, sharp, and Caustic Spirit of Nitre, ex-  
haling very red Fumes, like *Glaubers* Spirit Of .Nitre, but  
is never so strong. When the Distillation has heen well  
performed, I have had Of this Spirit, nine Sixteenths, in  
respect Of the Nine employed.

**2.** The Bole, remaining behind, still retains a Taste Of the  
Nine. I have boiled the Whole Of it in a large Propor-  
tion of Water, strained the hot Liquor, and repeated the  
Boiling with fresh Water, till it would fetch out nothing  
more: Then, boiling all the strained Lixiviums, which were  
now clear, and os a nitrous Taste, I evaporated them to  
**a** small Quantity, of the Thickness'of Milk; it had a Taste  
not very sharp, but lixrvious, as if somewhat alcaline, and,  
examining it by putting Acids thereto, I found it, in some  
measure, alcaline, a littie changed from the former Nature  
of Nitre, and yet not true Alcali.

3. Great Care is to be taken in this Operation, that the Coals  
thrown into the Furnace, during the Distillation, are first  
thoroughly heated; otherwise they would break the long  
Necks by the Coldness suddenly driven Out Of them by  
the Fire. Hence, Care, also, should be taken upon open-  
ing the Door Of the Furnace, to feed the Fire, lest the  
cold Air, entering in too suddenly, should crack the *Ves-  
sels,* and he cautions, likewise, lest, upon Opening the Door  
of the Furnace, the Flame should Violently burst Out into  
the Face of the Operator, or he received with the Air  
into the Lungs.

**4** Pure Nitre, by itself, in a Glass Retort, and a Sand-heat,-  
melts long before the Glass ; and, when heated so as to melt,  
**it** receives no more Heat by increasing the Fire , and, tho'  
long kept in this State, it affords no acid Spirit, but re-  
mains fixed, without considerably exhaling. And if long  
detained thus in an *Hessian* Retort, and the Fire he violent.

the Sals, at length, passes through the Pores Of rhe earthen  
Vessel, without fending any acid Spirit into rhe Receiver;  
but is at length almost lost, by transuding through the  
Vessel.

**5.** Nitre, mixed with thrice its Quantity of Bole, Brick, or  
Tobacco-pipe-clay, reduced to Powder, then put into aCrucible, and set in the Fire, does not thelt, but fume ,  
affords an acid Vapour; and thus, in **a** short **time, eva-**POrates its greatest Part into the Air.

REM A R K S.

I. Hence it is plain, that the Fire, acting upon Nitre, while  
it is prevented from melting, by the Interposition of thrice  
its Quantity of a Matter that will not flow in the Fire, has  
a Very different Effect, and heats much more strongly, than  
when the Salt stows in the Fire, and, therefore, cannot he .  
further changed Thereby. The Change is effected, by render-  
ing a fixed Substance Volatile, a mild one sharp. Changing a  
Solid into a Fluid, and a neutral Body into a violent Acid,  
all which can only he Obtained, by preventing the Fusion Of  
the Salt, aS, in the seventh Process, we did, by means of  
Oil Of Vitriol, in a Sand-heat. But whether:, in the Spirit  
thus prepared, there is not,'also, some Liquor\* proceeding from  
the Bole, has been much questioned principally, because the

- Bole, Once employed in this Operation, is said to he inca-  
pable Of serving again; for that the Spirit Of Nitre Cannot  
hence be Obtained. But, Certainly, the Spirit of Nitre pre-  
pared with the Oil Of Vitriol, and that with the Calx of Vi.,  
triol, under the Name of Aqua-fortiS, and that with calcined  
Alum, are alike to this, almost without the least Difference;  
and yet no Bole was employed in their Production. Let  
the Experiments, therefore. Of each Side Of the Question,  
be .collected , a longer Time will shew what a short one  
cannot. S

2. Again, some discerning Chymista among the Moderns sup-  
pose Nitre .to be made up os Alcali, and a particular nitrons.  
Acid, aS we explained in the seventh, ninth, and tenth Pro-  
cesses. The incomparable M. *Homberg* has, by a laborious -  
Experiment, and a subtile Calculation, here determined the  
Proportion Of the Alcali to the Acid, to he aS soar hundred  
and eighty to an hundred and eighty-three. But here, by Di-  
stillation, nine Sixteenths of Acid are obtained, in respect of  
the Nitre, and yet scarce any Alcali is obtained from the Re-  
mainder , whence it certainly appears, that this Acid proceeds  
from the Nitre, aS changed by the Fire, and not by a Se-  
paration Of the Acid, and the Alcali, pre-existing in the Com-  
pound before, the Operation, so that the wonderful Action of  
- the Fire here performs what is Otherwise effected by the Oil  
of Vitriol. Since, therefore, true Nitre is never found spon-  
taneous in Nature, and its Spirit never without the Assistance  
Os Oil Of Vitriol Or Fire, while the Salt is prevented from  
melting, we conceive that the acid Spirit Of Nitre no-where  
existed in Nature, hesore the Discovery of the Method os  
procuring'Nitre, and drawing a Spirit from it; so far,..we

- mean, as Can he known from chymical Experiments. ThuS  
it was impossible both for Art and Nature to make Gun-  
Powder before the Discovery Os Nitre, though even all other  
natural Things were known, except Nitre alone.

3. But when the red Colcothar Of Vitriol, Or calcined Alum, is  
mixed with Nitre in a certain Proportion, so aS to hinder  
from melting in the Fire, and, consequently, fit it to sustain  
a greater Heat; it thus, also, affords an acid Spirit in red Fumes,  
**in** every respect resembling the true Spirit of Nitre, os **the**present Process, and in a large Quantity. Wc are here to  
consider, that the Colcothar, and burnt Alum, conceal a large  
Quantity Of a Very strong Acid, called Oil Of Vitriol, or  
Spirit Os Alum ; and these Acids, being actuated by the Fire,  
enter the Nitre, separate its Spirit, substitute themselves in  
its Place, and thus leave, for a Remainder, a *Caput mortuiem,*containing that called the *Panacea duplicata,* which is con-  
siderably like the Salt produced in the making os *Glaubers*Spirit Of Nitre - and this is the Origin Os all the Aqua-sortis,  
whose Production entirely depends upon the Reason above  
assigned, in the seventh Process. This Transmigration of sa-  
line acid Spirits is a wonderful Operation, while one of them  
possessing the Place of another, drives the former out, and  
thus appears to produce unexpected Transmutations By whet  
we can hitherto learn. Oil Os Sulphur made by the Bell, and  
Oil os Alum, are perfectly the same Acid ὁ having all Of them  
this Property, that they separate all the other known AoidS  
from the Bodies that bold them, render them perfectly vola-  
tile, possess the Places thereof, and, driving our the former  
acid Spirits, form, with the Remainder, a new Body, of its  
Own particular Nature, according to that of rhis .stronger  
Acid. Atjua-fortis is a mere Spirit of- Nitre; Colcothar can,  
by no Violence Of Fire, though ever so long continued, be  
deprived of all its Acid: Hence the *Caput Mortuum* of Vjtriol  
and Alum abound with a strong Acid, which the Fire cannot  
drive Over this Acid is attracted by the other Part of the

. Nitre, which cannot he Converted into Acid and, uniting with  
this Pan by the Force Of the Fire, makes a new kind Of  
Salt, and sends Over all the volatile acid Spirit, in the Form  
Of Aqua-fortis. But they who promise, by the Art os Chy- .  
Inistry, to convert the whole Body of Nine by Distillation,  
into the Spirit of Nitre, by a true Change Os the Whole, so  
as from a Pound Of Nitre to procure a Pound of Spirit, as-  
sert a Thing, which to me, seems perfectly impossible, and  
contrary to the Nature Of the Art. I have made Various Ex-  
periments to assure me of this Truth.

The Spirit of Nitre, Of the present Process, *Glauber's* Spirit Of  
Nitre, and the common Aqua-fortis, well prepared, afford a  
nitrous Acid, distinguished by its red Fumes from all Other  
Acids and always discovers itsialf by means of these Fumes,  
and its particular Odour. When mixed with fixed Alcali,  
they regenerate a true Nitre.

**FREDERIC HOFFMAN'S FUMING SPIRIT OF NITRE.**

in Chymical Authors, there is frequent Mention made of  
Flame, produced by a Mixture Of certain Liquors. Thus Be-  
*eher,* in his *Physica Subterranea,* tells us, that Oil os Vitriol,  
mixed with Oil of Turpentine, excites an intense Heat, attend-  
ed with Flame , but any One will, upon trying the Experiment,  
find that it is not so, even though the strongest Oil of Vitriol  
should be used. An Experiment Of the like Kind is mention-  
ed by *Olaus Borrichius, in Act. Haffuien. An.* ItiyI. *obs. yi.***in** which two Liquors, Cold to the Touch, when mixed toge-  
ther, produce a Flame. The Experiment is this:

Take Of recent-drawn Spirit Of Venice Turpentine, after it  
is Cold, four Ounces , put these in a large Glass, and pour  
to them six Ounces of recent and generous, but cold Aqua-  
fortis. Then, agitating the Vessel, leave the Liquor exposed  
to the Open Air; and, in half an Hour's time, thick Clouds  
Os Smoke, and a Conspicuous Flame, breaking Out at **the**Mouth Of the Glass, will he perceived.

Though I frequentiy tried this Experiment, by mixing strong  
Aqna-sOrtis with Spirit or-Oil of Turpentine, I only Observed  
an ebullition, which was, indeed, intensely hot, and accompa-  
nied with a large Quantity OsSmoke, but would never flame. But  
that the Authority Os *Borrichius* is not, even in this Assertion,  
**to** be doubted Of, is sufficiently Obvious, from the following  
Considerations.

Some more than twenty Years ago, having mixed and di-  
stilled the best Oil Of Vitriol with common Salt, according to  
*Glauber’s* Method. and, instead Of common Salt, distilling rhe  
same Oil with pure and dry Nine, by means .Of a gentle Fire  
from a Glass Retort, placed in Sand, I Obtained a Spirit of a.  
yellowish-red Colour, which smoked strongly, and, by means  
Of its Subtilty, could hardly he confined within the Vestel.

With this Spirit I made Various Experiments, mixing it with  
highly rectified Spirit Of Wine, and distilled Oils; upon which  
there happened a Violent Ebullition, accompanied with an in-  
tense Heat, and a large Quantity Of red and fetid Smoke break-  
ing from the Vestel. Afterwards, pouring it upon a Very small  
Quantity of common Oil os Cloves, casually lest in a Glass,  
. there was first an Effervescence produced, and then a small  
Flame,’ which Only lasted for a Moment. Some Days aster, **I**endeavoured to shew the same Experiment to some Lovers os  
Chymical Discoveries, but the Effect did not answer my ex-  
pectation, without Doubt, because the Glass was not sufficient-  
ly Covered, but Only closed with Wax, which was almost to-  
tally consumed by the Spirit. I, therefore, took care that the  
Spirit should be again distilled, and put into a Glass, which I stop-  
ped with a smooth Glass Stopper, that the smoking and pene-  
trating Volatility might be the more effectually preserved. By  
this means, the Experiment succeeded happily, since a clear and  
transparent Flame, hardly attended .with any Smoke, arose every  
. time this Spirit was poured upon Oil os Cloves.

The Account os this Experiment happening to reach *Leipsic \_*and *Berlin,* the same Year, two Celebrated Men, *Leibnitz* and  
*Tfcbionhaus.en,* paid me a Visit, and were struck with Surprize,  
upon seeing the’ Experiment performed. But, in the *Acta  
Eruditorum,* I afterwards read, that Dr. *Slore,* Os the Royal  
Society in *England,* sent Word from Paris, that Mr. *Hamberg*prepared a Spirit, which, when mixed with aromatic and *Asiatic*Oils, produced a transparent and conspicuous Flame. This Ex-  
periment was, also, afterwards mentioned by Dr, *Slare,* in the  
Royal Society, and described in their Transactions. Notwith-  
standing this, I can safely affirm, that, without any instruction,  
**I** was casually the Inventor of this Experiment. For this Rea-  
son the illustrious *Leibnitz,* io his *Thendicaea,* calls this Spirit,  
*Spiritus Hopsutanni,* and thinks that some os my Disciples had re-  
vealed it at *Parti.* Perhaps, also, at one and the same time,  
this Discovery waS made in different Countries; but I am far  
from aspiring after any Praise on this Account, since the Diss  
covery is rather Curious than useful, and only tends to illustrate  
the Generation Of Flame.

It is prepared in the following Manner ;

Take of well-depurated Nitre, such as that of *Russia,* which  
is free from common Salt, half a Pound; this we render  
fussicientiy dry, in a gentle Heat. Afterwards, we pour  
upon it, in a Glass Retort, an equal Quantity of highly-rec-  
tified Oil Of Vitriol, and, distilling by a gentle Sand-heat,  
we, in a few Hours, Obtain this highly’ Volatile and ful-  
phureous Spirit.

If the Nitre is not sufficiently dried. Or if it is impure, and  
Contaminated by saline or earthy Parts, a Very strong Spirit is  
at first yielded, which is tO he separated, for that which Comes  
Over with the Phlegm, is less fit for this Purpose, though, at  
the same time, it is Very useful for making the *Spiritus Nitri  
Dulcis,* Tis, also, to be observed, that this Spijit is always more  
penetrating and strong, when it is Conveyed into the Receiver,  
not Os a redish, but os a yellowish Colour, because the for-  
mer indicates, that the Nitre is mixed with many, heterogene-  
ous Parts.

In the Retort, there subsides a Salt, Compacted into an highly'  
solid Form, Os a Very white Colour, and Of a convex Figure,  
which it receives from the concave Part Of the Retort. This  
Salt is os an highly aqueous Taste, and not without the greatest  
Difficulty to be dissolved by an aqueous Menstruum. But 'tis -  
furprifing, that, by so gentle a Sand-heat, these two Salts, Vi-  
triol and Nine, which cannot be, without Difficulty, fused by  
a strong Fire, should he colliquated into One highly' solid Mass,  
which, without Doubt, is IO be ascribed to these igneous Spi-  
rits, excited by the mutual Union Os these two Bodies, by  
means of which, the intimate Union, Mixture, and COlliquation,  
Of all the Parts was produced.

With thin Spirit I have made various Experiments, by mix-  
ing it with distilled Oils, and his Observable, that this Spirit, \*  
when mixed with the heaviest Oils, such aS those Of Cloves,  
Cinnamon, and Sassafras.wood, quickly, and in a Moment,  
produced a transparent Flame, almost without any visible Smoke.  
When a small Quantity of this Spirit was mixed with Spirit Os.  
Turpentine, in a narrow-bottomed Glass, I observed, that a  
strong and Very hot Smoke, but no Flame, was produced. But  
if an Ounce Of each Liquor is put into a wide-mouthed Glass,  
and the Mixture shaken, a Violent Flame will he produced.

From this Experiment, therefore, duly made, I was convinced  
that we ought to judge more favourably of the Experiment Of  
*Borrichius-,* and that we were not to.doubt os its Truth, if the  
Cautions he lays down are Observed, that is, if the Aqua-fortis  
is recent and generous; and is some Ounces Os both Liquors  
are mixed in a large Vessel. And aS this smoking and inflam-  
mable Spirit is nothing' but a generous, and easily distilled  
Aqua-fortis, aS is obvious from its Colour, Smell, and Virtues,  
'tis not to be doubted, but Aqua-fortis, prepared in the common  
Manner from Nitre and Vitriol, provided the first and strongest  
Of it is set apart, and kept in close Vessels, may produce a si-  
milar effect. *Hossrnan. Obs. Phys. Chyrn. Lib.* 2. *Obs.* 3.

If there is any highly penetrating and corrosive Liquor, which  
insinuating itself into all Bodies, Conodes, dissolves, destroys,  
and changes their CrafiS and Mixture, it is certainly the highly  
acid and concentrated Spirit Of Nitre, deprived Os all its Phlegm,  
rendered inflammable, and totally Volatile, and by the Applica-  
tion Of which, Excrescences, Warts, and preternatural Tumors  
of the human Body, may he CommodiOuily destroyed and era-  
dicated. Notwithstanding these Circumstances, this Spirit, by  
the Addition Os the volatile Salt of Sal Ammoniac, Or Salt of  
Tartar, is, after its Effervescence, totally deprived of its Corro-  
sive equality, since the Mixture degenerates into *a* nitrous Salt,  
which, when dissolved in Water, affords a powerfully diuretic  
Liquor, excellent for provoking Urine, in serous and cachectic .  
Disorders: Besides, the Corrosive Quality Of this Spirit is ex-  
cellently corrected by mixing eight Parts Of highly rectified  
Spirit Of Wine with One Part of it; -and distilling from an  
Alembic, by means of a Sand-heat: By which means, there  
is yielded a Spirit of a fragrant Smell, an acrid penetrating Taste,  
entirely free from a corrosive Quality, excellently adapted’ for  
discussing and resolving Viscid Humours, and, consequently, car-  
minative. This dulcified Spirit, in consequence of the Vapo-  
Ions Sulphur it Contains, is, also, possessed of an anodyne and  
sedative' Virtue, highly efficacious in Pains and Spasms; for  
which Reason it is Of sat more Use in Practice, than **the**common Spiritus Nitri Dulcis.

The Reason of the Process is this, that highly rectified Spirit  
Of Wine is nothing but a Very subtle Oil, intimately mixed  
. with Phiegm, for which Reason, it is united, and intimately  
mixed with this corrosive Spirit, and both Of them, when united,  
form a Mixture of a third Nature, which, when dissolved'in  
the inflammable Spirit, comes Over the Helm, and constitutes  
the dulcified Spirit of Nitre. But 'tis Io be observed, that at  
least five, six. Or eight Parts Of the rectified Spirit of Wine,  
Ought to he added to One Part of this Spirit; for if only two  
or three Parts of the former were used, a violent Conflict would  
he produced, and the corroding acid Quality of the lattes, not

totally destroy’d: But, in **the** Preparation of this Spirit, it is to  
be observ’d, that the Spirit of Wine is not to he pouted into  
the corrosive Spirit; otherwise a violent Conflict is produc’d,'  
accornpamed whh a thick red Smoke, which is prejudicial to  
the Health of the By-standers, and sometimes succeeded by the  
breaking of the Glass. Bu: when the corrosive Spirit is m frnall  
Quantities, and gradually min’d with the Spirit of Wine, **all**these Disadvantages are prevented.

This dulcified Spirit, when pouted into a Silver Spoon, and  
set on Fiame, leaves behind is a greenish Spot on the Spoon,  
which is a Proof of an acidulated fubtile nitrous Salt: In such  
**a.** Case, Sis, therefore, expedient io dulcify this Spirit more, and .  
augment its Virtue, by pouring into it a proper Quantity of **the**vinous Spiris os Sal Ammoniac : When rhe Acid of this Spirit  
is thus corredted, is no longer leaves any Spot upon the Spoon,  
and its anodyrie and sedative Virtues arc at the same time ra-  
th er augmented.

This dulcified Spirit of Nitre differs from the common Sort  
sold in the Shops, since the former is of a far more penetrating  
Taste and Smell, and consequently more efficacious. They also  
.. differ with rcspedt to the Preparation, since that of the Shops  
is prepared with Aqua-fortis; and mine with a duly dephlegma-  
**ted** Spirit, impregnated with a vitriolic and highly concentrated  
Sulphur: My Spirit produces a violent Conflid and Efferve- ‘  
soence with highly retticed Spirit of Wine; but the common  
dulcified Spirit of Nitre none at all: Hence it alfo happens, that  
there is not an intimate Union of the Acid of Nitre with the  
oleous Parts contained in the reitified Spirit of Wine, which  
happens in my highly concentrated Spirin In the Preparation  
of my Spirit, nothing remains in the Cucurbit, bur all the  
Fluid aseends; whereas, in the Preparation of the common *Spi-  
tus Nitri dalcis,* the acid and corrosive Liquor of **the** Niue  
remains after Distillation.

My dulcified Spirit of Nitre, by the Addition of a proper  
Quantity of the Salt of Tartar, lores almost all its acid Acrimo-  
ny, and may for this Reason he commodiousiy mix’d wish com-  
-mon Water, for Drink in burning Fevers: Thus, in two Drams  
of it are mix’d with about two Pints, of Spring-water, they  
make a Dtiok which powerfully allays Thirst, provokes Urine,  
and procures Sleep. In Inflammations of the Fauces, especially  
such as attend Quinseys. nothing affords morel immediate Relief,  
than this Spirit min’d with Sugar, and a fmall Quantity of the  
Spirit of Camphirc, diluted in common Water, and us’d as a  
Gargarisra. Sugar itself; also, swallowed in astriall Quantity,  
affords Rellef in Inflammations of the Fauces.

This dulcified Spirit of Nitre, when mix’d io **a** sindl Qusn-  
tity with rectified volatlle Spirit of Hartshorn, acquires **a**' bcLoardic and diaphoretic Virtue; for which Reason it is highly  
beneficial in all malignant Fevers, where Sweating is necessary,  
*Hoffman, Obsc. Physc Chyrn. Lib.* **2.** *Obsc 4. -*

NIX. Snow. -

The higher Water rites in the Air, the farther its Parts **re-**cede, and the coIder it grows; for, in all the habitable Parts os  
the Globe, the Heat is the greatest, *lateris paribus,* on the Sur-  
face of the Earth; and a freezing Cold is constantly found on  
the Tops of the highest Mountains, which are covered with  
Snow, even in the torrid Zone, and the Increase of the Cold is  
in proportion to the Altitude- Hence the Water, rising to the  
freezing Height, must necestarily be turned to Ice, unless all  
its Particles should separate, so as not to touch each other; but,  
if the Panicles should come into Contacts they must begin ro  
freeze into small icy Flakes, floating in the Ain If they should  
happen to dash against the Surface of any Bodies in their Way,  
they would constitute a sine Hoar-frost, that would otherwise  
scarce be perceivable: Whence, therefore, there is a Space in  
the Atmosphere, concentrical with the Earth, where the Water  
of the Air, when it arrives and unites, is constantly turned to  
. Ice. It is, however, probable, that this Water, being st first little'  
united, can seldom freeze, but remains floating about in its se-  
parate Particles, till some Cause happening to unite them,' it is  
then turned into Ice.

The Water of the Air, in Space assigned growing heavier by  
a large Quantity coming under less Surface, and being now  
frozen, it immediately begins to fall downwards into Spaces  
fuller of Water; where, joining with other aqueous Particles,  
it gradually forms larger Masses of Snow or Hall; and as there  
are many different Causes, that may make these Particles of  
Water, which were dispersed in the upper Ait, suddenly unite  
in large Quantities, it is eaiy to understand how thefe Collecti.  
ons, coming into the freezing Height of the Atmosphere, may  
presently form considerable Masses of Snow or Hall.

Snow-water is found to he the lightest of all Rain-waters;  
and therefore Snow-water, received at a great Height from  
the Earth, is the purer and freer of gross ponderous Parts; and  
if a long-continued sharp Frost shall, at a great Height, con-  
vert Water to Snow, after a long-continued clear and dry Season,  
the Snow, thus formed, will be of the purest Kind, especially  
if no. Wind has disturbed the Air, or intermixed any foreign vola-  
tile Particles with it. Thus, if, in thefe Circumstances, Snow  
should fall upon **a** barren sandy Mountain, in **a** Desert far

remote from any inhabited Place, and the Snow siicu’d lie  
deep; if the upper Part he now carefully collected it wist  
thus he obtained, as pure as possible; for there oan scarcely  
he contain’d in it either Salt, Oil, or other foreign Substance ,  
so that the Water procured by melting this Snow will greedy  
differ from all other Water, and he extremely pure, unchangea-  
ble, or capable Of being kept for Years, as an excedent Remedy  
against Inflammations of the Eyes.

The annent Alchymists have said, that from such pure  
Snow there may, by a secret Art, be obtain’d a very red Sub-  
stance, that by the Force of Fire may he intimately buried and  
concealed therein. *Boerhaave Chymistry.*

Nrx FUMANs. Quickl-ime.

The white Flowers of Regolus of Antimony are; also, call’d  
Anrimonial Snow. .

Ν1ΧΙΑ. A Word coin’d from *Nixus,* a Labour-pain, and  
importing much the fame as *the Lucina* of the Antients.

NO AS. Brass, or Copper, Bniheain.

NOCAS1T. A Sieve, or perforated Vessel. *Plumandus.*

NOCHAT. Copper. *Pulandus.*

NOCTAMBULO. A Person who walks in his Sleep.

NOCTILUCA. The Glow-worm. See CtcENDULA. Phos-  
phorus is, allo, call’d by this Name, hecauso it shines in the  
dark. Or by Night.

.NOCT1SURGIUM. Walking in the Sleep.

NOCTUA. *The Barn or vihite Ones.* **The same as ALUco ;**which fee. .

The Flesh, Fat, and Gull, are used. The Flesh cures the  
Palfy, *Plum* and melancholy Persons, and the like, *Pabbi  
Moyf.* The Ashes of the Bird, burnt entire with the Feathers,  
being introduced into the Throat, have an admirable Effect in  
opening and breaking the Impostume of the Quinsey. The  
Gall absterges Specks in the Eye, and the Fat. sharpens the  
Sight. *Schroder.*

NOCTTJ1NI OCULI. Grey Eyes.

NODOSA, knotted, in Surgery, is an Epithet for a sort of .  
Suture; see SUTURA: And for various Bandages; fee Fascia.  
The Gout, asso, when ir forms Knots at the Articulations, is  
call’d *knotted. ;*

NODULUS, in Pharmacy, is a Knot tied on a Rag, in-  
cluding some medicinal ingredient, or Ingredients, with wh ch  
**the** Liquor this *tJodulus* is sirspended in, is intended to’ he rm-  
. pregoated. It, also, imports a Beg, in which ingredients are in-  
cluded, in order to be suspended in a Diet-drink, or medicated  
Wine. . . . i

NODUS. A Node. A Disease Of the Sones. See Os:

NOELA-TAL1, *H. M.* or *Indian* Barberry-tree with an  
Orange-leaf. It is a Tree of a moderate Sine, grows every-  
where in *Malabar,* is always green, and hears a Finit like our  
Barberries. Of the Bark of this Tree they make Ropes, as we  
do of Hemp. The Fruit is esteemed delicious and refrigerating  
in an high Degree, as are Barberries. The Leaves are accounted \_  
ah Antidote against the Bi:e of the Snake, which the *Malabo.  
rians* call *kieretimandel,* whose Potion does not cause immediate  
Death, but an universal Corruption of the Flesh, which putre-  
fies, and falls off; and the Patient, after suffering much Misery,  
at last yields to Death, unless prevented by the Use of a Drink  
prepared of a Decodion of those Leaves with the fasted Fruit  
*of Mango* in Water. *Pati H. p.*

NOERA. The Cover of an Alembic, or Vessel for Distilla-  
tiop: *Bulandus.*

NOLA-1LY. A Species of *Bambis* Cane, growing in *Ma-  
labar.*

NOLI ME TANGERE. In *Engiise,* Touch me not. A  
fort of corrosive Ulcer, thus call’d, because it is exasperated  
by Medicines.

In Botany, *Noli me tangere* is a Species of *Balsamina.*

NOME, *ecqui, from restes, to* eat away.. A phagedenic  
Ulcer.

. NONUS HUMERI MUSCULUS PLACENTINI, is  
the *Tseres Minor. .*

NORA. Lime, or any Salt, Or Nine. *Bulandus.*

NOSl. See NEOUNDo.

NOSOCOM1UM, νοσοκομοῦον, from νόσος, **a** Disease,’ and  
κομέω, to take care of. Ao Hospital.

NOSOCOMOS, Os the same Derivation as the preceding  
Word. One who takes care of the Sick.

NOSODOCH1UM. νοσοδοχοῦον, from νόσος, a Disease, and  
δέχομαι, to take. An Hospital.

NOSOLOGIA. Nosology; that is, an Explication os Dss.  
eases.

NOSOS, νόσος, **a** Disease.

NOSTER. This is frequently mid by fpagirical W risers, as an  
Epithet for their Gold, their Silver, or any other Substance., by  
which they would insinuate, that it is not the fame as what  
they mean by the Word, but something peculiar to themselves,  
which is freed from the Elements, and of an Astral Nature.

**NOSTOCH. A Name for.the COELIrOLIUM; which  
fee.**

NOTHOS, νίδοῆς Spurious; thus the spurions Ribs **are** Call'd  
- COSTAE NOTHAE.

NOT I YE US, νωτιάῖος. An Epithet for the spinal Marrow,  
from νῶτος, the Back.

NOVACULA, in Surgery, is a Knife.

NOVALE, in *Paracelsus,* is a Prodigy, or Ponent.

NUBA, signifies a Species of Manns, or Celestial Dew, of a  
rosy Colour: Or it imports Brass. *Rulandus.*

NUBES, Or NUBECULA. A Cloud in the Urine. A Disorder  
Of the Eye is, also, thus call'd, which is the same aS ALBUGO.  
- NUCAMENTA. Catkins.

NUCES e NARBADOKS, a Name for the *Palma, Arne-  
Tie an a, Gesseypii folio.*

NUCHA. The Back os the Neck, properly the Region  
upon the first Vertebra Os the Back.

NUClOSITAS. The same aS MyopIA. *Blancard.*

NUCiPthRSJCA. The Nectarine.  
NUCI.STA. The Nutmeg.

NUCLEUS. A Kernel.

NUCULA TERRESTRIS. See **BULBOCASTANUM.**

NUHAR. Copper. *Sulandus.*

NUMENiUS. The Name Of a Bird, the same aS AR\_  
oUATA. ' . .

N U M M U L ARl A.

The Characters arei

The Leaves are Orbicular and conjugated; the Calyx is  
qninquehe, inclosing a seminal Vessel, and consisting Of five  
. long stender Segments, which expand themselves in form of **a**Star. The Flower is monopetaiouS, rotaled, quinquefid, be-  
ing cut even to the Nail, or Unguis, and furnished with five  
Stamina, which, arising from the Circumference of the Base  
Of the Flower, grow together into one, in proceeding from  
the Wings el the Leaves. The Placenta is seated in the Bot-  
tom Of the Calyx, and On it grows the Ovary, which becomes a  
round Vessel closely lodged within the Calyx, and shooting forth  
**a** long Tube

*Boerhaave* mentions two SpccieS of this; which are,  
.i. Nummularia, Lutea; major. C.B. p.309. *Bocrh. Ind. a.*205. *Nummularia.* Ossie. Ger- 505. Emac. 630. Rail Hist. 2.  
-1099. Synop 3. 238. *Nummularia vulgaris.* Park. Theat. 555.  
*Nummularia supina five Nummularia Officinarum.* Rupp. Flor.  
Jen. 14. *Nummularia five Centirnorbia.* J.R *Lysimachia  
. humisus.a, folio rotundiore, Flore luteo.* Tourn. fnst. I4I. MO-  
..NEYWORT.

*Pyechsiusts* Figure os this, under the Name Of *Centirnorbia,*' represents the *Anagallis lutea nemorum.* Pin. much better than  
the Money-wort; for *Pena* and *label* Observ'd these two  
Plants differed principally in their Leaves, which, in rhe yellow  
*’ Anagallis,* are a little longer, and more pointed. J. *Pauhsne*took the Flowers os the Money-wort to be pentapetalous, hut  
they are plainly monopetalous. - -

its Leaves are sourish, styptic, and give a deep-red Tincture  
-to blue Paper; The Acid abounds in the Money-wort,  
and produces with the Earth an aluminous Salt, involved in a  
little Oil, so that ’tis Very astringent and Vulnerary. *Camerarius*affirms, that, heing boiled with Milk, iris good for the Scurvy.  
*.Tragus* advises to boil it with Wine and Honey, and to give  
.the Decoction to drink to those that have an Uloer in ChCLungs: The same Author commends it.in rhe Dysentery, Loss  
-Of Blood, and the Whites. *Fuchsias* prescribes the Heth, applied  
aS a Cataplasm, to dry up Ulcers. *Matthiolus* says it is very  
good for Ruptures in Children. *Martyris Tournofort.*

It is one of the principal Vulneraries- the Flowers and Leaves,  
housed and apply'd, are effectual in conglutinating all kinds of  
Wounds and Ulcers, -the same, taken in Wins, curo Dytenre-  
ries, and Weaknesses, Fluxes, and Humidities os the Belly,.  
they are also good for vomiting Of Blond, uterine Fluxes, and  
all Wounds er Ulcers oL the inward Parts, and especially Of the  
Lungs. *Raii H. Ρ.*

2. Nummularia; rubrat.7. B.sp. 371. *Lysimachia, hurntsus.a,  
solio rotundiore, flore purpurascente.* T, I4I. *Boerh. Ind. alt.  
Plant. Vol.* I.

It is Called *Nummularia,* from *Nummus,* Money, because its  
Leaves are Orbicular, like Pieces of Money , it is also named  
*Centirnorbia,* from *centum,* an hundred, and *Morbus,* a Disease;  
that is to say, a Plant which cures a hundred Diseases.

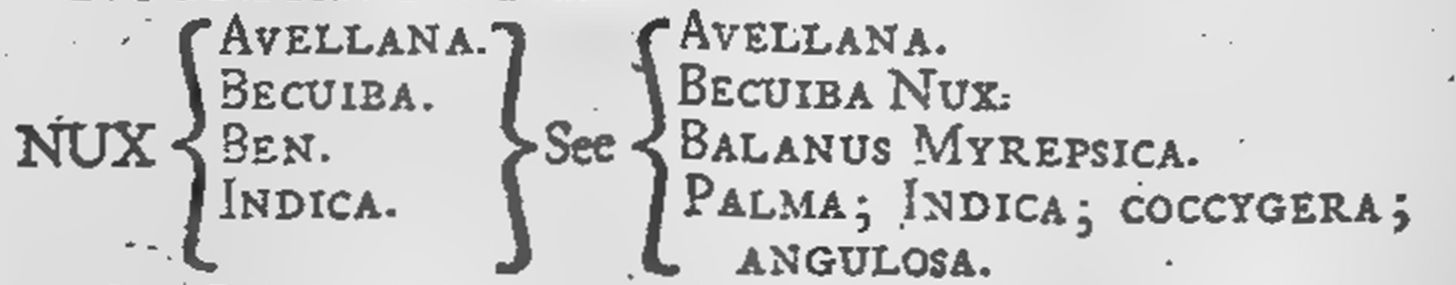
The Juice Of the Herb is like that of *Beccabunga*; for it has  
**a** saponaceous, aromatic, and balsamic Taste.. Hence it has the  
same Virtues. It has an Acrimony, which is not ungrateful,  
tnixid with somewhat, aromatic, and os an astringent acid Taste.  
Hence, it works the same Effect as *Cochlearia,* mixed with  
*Acetofa,* which we use when we are apprehensive Os spitting of  
Blond. For this Reason it is proper in all sorts of Scurvy,  
where the Humours are to be render’d more fluid without  
danger Of too great a Resolution, or Tension; for Instance, in  
an excessive Flux of the MenscS, where a total Stop would he  
succeeded by an inflammation, and yet the immoderate Eva-  
cuation requires to he restrained, for which Purpose this Herb  
is very proper. A Decoction Of the Leaves, in Wine sweeten'd

with Honey, is good for Ulcers Of the Lungs, the Fluor Albus,  
Diarrhoea, Dysentery, Asthma, spitting Of Blood, Haemorrhoids,  
and the dry Coughs of infants: The Powder Of the Leaves is  
good for an *Hernia* in infants, and the Leaves, bruised, and ap-  
plied in the Form of a Cataplasm, cleanse and dry up fetid  
Ulcers. This Plant resists Putrescction, generates Pus, is corro-  
borative, and Cures many Diseases. For the Arthritis, Podagra,  
Scurvy, Dropsy, and Jaundice, take an Ounce Or two os the  
Juice in the Morning fasting; it is Opening, and purges by Stool  
and Urine. *Hist. Plant, adscript. Boerhaav.*

NUSIADAT. Ammoniac. *Rulandus.* I suppose he means *Sal  
Ammoniac.*

NUSTUM, in *Paracelsuss is* the Cream Os’ Milk; or the  
Cream-like Substance, which swims on theTOpof Urine.

**ΜΓΙΤΡΤΓΑὝΓΟ Nutrition.**



NUx **JUGLANS.**

The Characters are, ‘ἐν

The Leaves are pinnated, and grow to One Common Rib,  
which terminates in an Odd Leaf. The Flowers are male, and  
all amentaceous, consisting Of six thick, green, small Leaves,  
growing to One Pedicle, in form os a Calyx. From the spa- *e*cions Bottom Of these Leaves arise numerous Stamina, which  
are collected, aS it were, into a Cluster, a Multitude os which  
Clusters, growing IO one long Axis, form the floriferous Tail,  
Or Catkin, in a separate Part Of the Plant. The Ovary, in  
another Part Of the same Plant, is roundish, furnished with **a -**bifid Tube, and divided into wide, rough, fimbriated. and reflexed  
Segments ; and becomes a Fruit, which, under a pulpous Cortex,  
contains an osseous and bivalve Shell, inclosing a fat pulpons  
Kernel, divided into font. Parts by coriaceous interclosures. \*

*Boerhaave* mentions five Species of this; which are,

I. Nux Juglans, five Regia, vulgaris. *C. B.* P. 4X7. *Tourn.  
Inst.* 5OI. *Boer he India.* 2. I 75. *Nux Juglans.* Ossic. Get. I 252. .  
Ernie. I440. Rail Hist. 2. I376. Synop. 3. 438. j. B. I. 2AI.  
*Nux Juglans vulgaris.* Park. Theat. I4I3. *Juglans five Nux  
Regia.* Merc. BOt. I. 44. Phys. Brit. 62. THE WALNUT-  
TREE

This is usually a large-spreading Tree, with a strait smooth  
Body, a whitish Bark, and a firm solid Wood; it hears large-  
winged Leaves, Of a yellow-green Colour, Of a pretty strong  
aromatic Smell; they Consist usually Of seven Oval Pinnae,'. .  
whereof the two next the Stalk are the least, and the Odd one  
at the End the largest; the Catkins come Out early in the  
Spring, being loose and yellow. The Nuts grow two, three Or  
four together, upon short Foot-stalks, being each covered with  
a green juicy thick Peel, having under it an hard wrinkled  
Shell, which - parts in two, inclosing a Kernel, consisting Of  
several white Lobes, Of a pleasant sweet Taste, included in a  
thin bitter Skin. ' .

The Walnut-tree is planted in Walks, Parks, and Fields,  
the Nuts are ripe in *September.* The Bark Os the Tree, the  
green Peel, the Nuts, and the Shells, are used.

The Bark .is a strong Emetic, either green. Or dried and  
powder'd : 'The green Nuts are cordial, alexipharmed. Of great  
Use in all contagious malignant Distempers, and the Plague  
itself; They are One Of the principal Ingredients in Treacher  
water. The Nurs preserv'd are stomachic, and good to he  
eaten in a Morning, to preVent Infection in thestime of pesti-  
lential Distempers; Two Or three Ounces of the Oil, express’d  
from the ripe Kernels, is a Very good Medicine for the Stone  
and Gravel.- The'Shells, powder’d and burnt, are accounted  
restringent, though but seldom used. *Miller's Bot. Ossi.*

Of the Virtues Of this Plant *Pioseorides* and *Pliny* speak aS  
follows: Walnuts, eaten aS Food, are difficult of Digestion,  
hurtful to the Stomach, generate Bile, cause Head.achs, are bad :  
fora Cough, sPimy writes thus of dry Walnuts, which are of  
a more unctuous Nature for the fresh, he says, are more plea-  
santj and of Use, eaten fasting, tO provoke Vomiting'silnstead  
Of this, *Pliny* says, they are prejudicial to those who Vomit on  
an empty Stomach, and are Only proper in a Tenesinus by  
attracting Phlegm]. Eaten beforehand with Figs and Rue, they  
resist Poison , and subdue it, if taken afterwards. *Pliny* adds,  
that they are effectual in the Qpinsey, being used with .Rue and  
Oil. The free and plentiful eating of them expels the broad  
Worm: Mixed with a little Honey and Rue, they are apply'd  
to .Inflammations Of the Breasts, Abscesses, and Luxations - and  
with Honey, Salt, and an Onion, they cure the Bitings of Men  
Or Dogs. Burnt with their Calyx, Or outer Peel, and apply'd;  
to the Navel, they ease the Gripes. The Shell, burnt and trim-  
rated in Wine and Oil, procures a Comely Head of Hair to  
Children, the Part being anointed therewith, and cures an *Alo-  
pecia :* The Kernel within it, being bruised, and applied in Wine,  
stops the Menses. The Kernels or Very Old Nuts, being chewed,  
and applied to Gangrenes, Carbuncles, an 7Egilops,or Alopecia,

are a prefent Remedy. They are mired with Garlick, and, as  
*Puny* fays, with Onions, to correct their Acrimony.

Ths Outer Peei of Walnuts is good for the Lichen and Dys-  
entery; and the Leaves, bruised in Vinegar, ease Pains in the  
Ears. The Antidote of *Mithridates,* which was found wri.ten  
with his own Hand, consisted of two dry’d Walnuts, as many  
Figs,, and twenty Leaves of Rue bruised together, with a Grain  
of Salt. Ho who take, this Remedy fasting, can be hurt by no  
Poison during that Day *Pliny.*

The Walnut, fays *Galen,* is easier Of Digestion than the Fil-.  
herd, and more grateful to the Stomach; and especially when  
It is eaten With dryin Figs. This must be understood of the fresh  
Nut; for, when it isdry.it passes into a pinguious Juice quire  
unfit to be eaten. The expressed Juice of the outer Pee1., either  
crude, or boiled in Honey to give.it a Consistence, being used  
as a Gargaristn, was experienced by *Galen* to be very effectual  
\* in a Relaxation of the Uvula, or an Inflammation of the Throat  
and Tonsils, by virtue of its astringent Quality, tn Conjunction  
. with its Fineness of Parts.

Green or fresu Walnuts provoke to Stool. *Galen, Aecius.*-Old and dry ones are rather binding; they are well concocted  
in a coid Stomach, but io an hot one are converted into Bile.  
The inner Birk of the Tree, being dry’d, is a strong Emetic;  
the Iuli, or Carkins, are a more genile one.

Walnuts have a singular Quality of provoking the Menses,  
when suppressed, and all other Medicines fail. They are mace-  
raced in Water, till the Kernel may be stripped Of their Mem-  
branes ; aster which they are macerated in Aqua-vain for two  
Days; and then two or three cf them are exhibited in the  
Morning fasting, for ten Days together, before the time of **the**: menstrual Flux. The Juice of the Root is said robe a violent  
Purge, and not fit to be given to any but those of robust Habits.

The distilled Water of immature or green Walnuts is re-  
commended for many Purpose.', particularly for dissolving con-  
creted Blood, for Wounds, and hot Ulcers, and for a pestilen-  
tial Carbuncle, being spplyd outwardly; the Water of Wainut-  
leaves is effectual tor the fame Dilorders: But *J- Bauhins*' justly doubts whether the Water of Walnuts be refrigerating,  
and consequently proper for a Carbuncle.

Walnuts eaten aster Fish are supposed to promote their Di-  
gestion, according to that Verse of the *Schola Salernitana.*

*' Post pister rsux stt, post carnes caseus esto. '*

u After Fish eat Walnuts, after Flesh Cheese.” It is certain,  
that they resist poifonous Infections, being eaten in Food; for  
which Reason, in pestilential Times, all sorts Of People from  
the highest to the lowest, both in Town and Country, roast  
them, and eat them in the Morning fasting.

Green Walnuts gather’d in *May* or *Juris,* before their Shells  
harden, and preserved in Sugar, are good for the Stomach, and  
we have observed, that green and immature Walnuts, taken entire  
with their outer Coat and Shell, and candy’d with.Sugar, or, as  
the Fashion is, boiled in sugared Water, till they become tender,  
and afterwards put into the fame Water, first boiled to the  
Consistence of a Syrup, that they might be preserved, being  
taken to the Number of two or three in the Evening after  
Fond, gently provoke to Stool. The Decoction of outer Peek  
of Walnuts, being poured on the Ground, attracts Worms  
" from their Holes to the Surface. *Tragus* writes, that forne dry the  
Outer Peel, and, reducing it to Powder, ufe it instead Of Pepper  
for seasoning of Meats, to which feme, for the better Relish,  
add Powder of Sage-leaves.

Wainuts bruised, heated, and pressed, yield an Oil, which  
some use for Gangrenes, Carbuncles, AEgilops, and Ulcers of  
the Nerves. The lame, infus’d into the Ears, cures Deafness, and  
is good for hot Pains, rhe affected Part being anointed there-  
with. But *Matthiolus* says, it is of no Use in Medicine, but  
in great Request for burning in Lamps, because it is more du-,  
table than Oil of Olives. It is preferred, allo, by Painters, before  
Linseed-oil, because this latter, when mixed with Cerust, in  
Length of Time, changes Colour, whereas the other preserves it  
immutable. But the fame Author in another Place fays, that  
it is a potent Discusser of Flatulencies, and is very serviceable  
in Affections of the Colon proceeding from Wind. *Aetius*ascribes the same Virtues to it, as to Ost of Almonds; and  
adds, that it is particularly serviceable to Gilders and Enamel-  
ers; for it dries and preserves the Work for a long rime.

- The *Isca, cantet, in Pavlas,* are spongy Bodies, (I fuppofe be  
means *Fungi)* growing on Oaks and Wainut-trees, and most in  
**- Ufe** among the Barbarians. The same Author fays, that the  
Antients made ufe of them among other .Cauteries, in invete-  
rate Deflations on the Stomach, and hydropical Cafes.. The  
Manner of employing these *Isca* in cauterizing is thus describ'd  
**by** *Ccelius Aurelianus:* Having made the ligneous Fungi narrow  
- or flender, as well in the upper, as in the lower Part, [it would  
be more convenient to have them wide in the lower Part,,  
that they might mind the better on the Skin] they set them  
upon the affected Place; and, kindling them at the Top, suffer  
them to burn, till they are reduced to Assies, and sell off Of them\*,  
selves. The *Turks,* in Imitation or this Method, at this Day

take a well-dryd Branch’ of Vine, and, applying it to the dressed  
Pan, ret Fire to its Top.. The Walnut-tree, wounded in  
the Beginning of the Spring, before it pus forth Leaves, dis-  
charges a Liquor, which Sows in great Plenty, but is not so  
sweet as that of the Birch-tree.

*Juglans* is thought by some, as *Macrobius* fays, to be derived  
*a istvando,* from helping or benefiting, and *Glaus,* a Nut;  
importing, that it is a beneficial Nut; but it was douinlefs so  
called, as implying the fame as *Jovis Glans,* the Nut Of  
*Japitcr:* Thus is *juglans* derived from *Joiorgians,* in the fame  
manner as *Jupiter* from *Javipater. Pat,* as we fay, *Marspiter,*and *Diespiter*; so, alfo, we *iapifovipater,* or *Jovispater',* where.  
*Jovis* is rhe antient nominative Case. - .

The *juglans* however is not the Διὸς βἀλανος, *Glans Jovis,*of *Theophrastus,* which is rather the Cheinur-rree, but, as  
some will have ir, the N«,r *Pcrfica,* or, as Gibers, the Nke  
*Buioica* of the same Author. The *Juglans* is called *sclux Έ of lie a  
Regia* by *Diofcorides* and *Galen,* and *Perstca* and *Basilica* by  
*Pliny.* The Walnut, it is agreed, fays *Pliny, Lib-* If-  
*Cap.* 22. was called *Carpen* [κἀρυον from κάρα, the Head}  
from an Heaviness or Oppression of rhe Head, which it occasions  
by its strong Smell. *Paii H. P.*

a. Nux ju.lans; fruistu maximo. *C.* B. *P.* 4I7.

3. Nux juglans; fructu tenero, & fragili puramine. C. B.P.  
4t7.

4. Nux Juglans; fructu serotino. *C. B. P. asty.*

5. Nux juglans; Virginians, nigra. *Η.* X..453. *Beeris. Ind.  
alt. Plant. Vol. 2.*

NUx MoscHATA. Ossie. Ger. I353. Patio Theat. I6oo.  
Rari Hist. 2. I522. *Nux Moschata rotunda, five Fcemina.* GeI.  
Emac. I536. *Nux Moschata lructu rotundo. Q.* B. P. 407. *Nine  
Moschata, Nux Myristica, biucifia.* Moot. EXot. Nux *Aroma-  
tica.* J. B. 1.265. *Pala.* Pis Mane A. I73. THE NUTMEG-  
TREE.

This is the Fruit of a Tree, which grows principally io *Banda,*an Ifland in the *East indies',* it is about as big as a Pear-trec, with  
fragrant Leaves, like those of the Peach-tree, but broader, and  
nor serrated about the Edges 5 it bears yellowish five-leaved  
Flowers, which are sircceeced by Fruit, in Bigners and Shape,  
like stnall Peaches, whore outside Covering is soft and juicy, like  
that of a Wainut; under which lies rhe Msec, firmly sticking to  
the hard woody Shell, that includes what we call the Nutmeg,  
which is of an oval Shape, brown, and somewhat rough; on the  
Outside, and wrinkled, andwhhisu, and marbled with red Veins  
within, of a most pIeafant aromatic Smell and Taste: The best  
are firm and weighty, and,being pierced by a Needle or Pin,,  
emir an oleous Substance. *Miller's Bat. Osse*

It is the Opinion of some, among whom is C. *Bauhine,* that  
what the Moderns call *Nux Maschata,* or *Myristica,* was unknown  
to the Antients. *J. Bauhine, tiod Gallandinus,* fancy it to be the -  
*Csmacum* of *Theophrastus,* and the *Cinnamum* and *Caryppos* of  
*Pliny -,* and *J. Bauhine* conjeftures it to be the *Chrysebalanos* of  
*Galen.*

*C. Bauhine* makes three Species of this Tree: The first is the.

Nux *Maschata fructu rotundo.* C. B. *Mascata rotunda five,  
Pcemina.* Ger. *Nux aromatica Paemina.* j. B. The Female Nut-  
rneg-tree. . . - . . *es.*

This Tree grows fpontaneouily, and in vast Plenty, in the  
Island *Eandat* and ncwbere elfe, if we may believe *Pise.*. Some  
make *Banda* to be one of the *Molucca* inlands ; but most make  
it a distinst Island. It is situated near the Equator, and extended  
from North to South in a curve Direction;being almost of the.  
Figure of an Horfeshoe, three Leagues in Length, and one .in.  
Breadth. The Tree is long-liced, always green, ano flowering,  
and loaded with Nuts, some riper than others; and .yields its Fruit  
twice, and sometimes thrice in a Year. . The first Harvest is in  
*August* and *September,* the; second, about. *Marsh,* and the third  
happens .in this, or that Mouth, as the Weather proves more **or**less favourable. The Nuts must not. be gathered before they  
are throughly ripe, otherwise they arelefs durable : When .(po -  
thered, they are stripped Of their Outer Shell, and dry’ll first in:rhe Sun ; after which the Mace is taken off, and then the Kernels,  
which we call the Nuts, are washed wish Lime, which is their  
only Preservative against Corruption, and all . external Injuries,:  
and fit to be transported by long Voyages into all Tarts of the  
World. .The best are of aSad-red, inclining to an Ash-colour,

. and intermixed with whitish Striae. . -

The Fruit, is devoured by several sorts-of Birds, but espe-  
cially by a sinall and white Kind of Pigeon, which, when the  
outer Shell gapes, being allured by the Sweetness of the Msce,  
feiae upon it together wirhtheNut, and swallow it whole,never  
desisting till they are throughly glutted: These Nurs are aster-  
wards voided by the Birds entire, and being premacerared with  
the Heat Of the Craw, focn bud forth. Bur the Trees thence  
arising, as being Of too hasty Growth, are easily subsecti to Cor-  
ruption, and bear a Fruit which is much lest, esteemed, than that  
of the others, and therefore, neglested hy the inhabitants, except  
the Mace which they ofe in adulterating rhe better Sort. *Classes* fays,'  
that the Mace is, at first, of so beautiful a Red, as to strike the Eye ..  
with Admiration; bu, being exoosed to the Air loses its Beamy

hy degrees, and at length Contracts a yellowish Colour. The  
second Species is the

*Nux Mojchata fructu oblongo.* C.B. *Myriflica oblonga five Mas.*Ger. *Nux Aromatica.* J. B. *Bala Messuri Moluccensibus.* The  
**Male** Nutmeg-tree.

It is not called *Male* on account Of its superior Excellency '  
find Virtues, as thrf Nature had made it bigger and longer, on  
purpose to shew its Eminence in Worth, for, aS *Pise* says, the  
Case is quite Otherwise, fince the Nms Of this Tree do not so  
much exceed those Of the Other in Bulk, aS they are surpassed  
by them in their aromatic Virtue, and all the Qualities which  
belong to the genuine and more noble Kind Of Nutmeg- But the  
common People give it the Title Of *Male,* not for any Reason,  
but from a superstitions Opinion, that the oblong Nut, eaten by  
Men, is a potent Stimulus and Strengthener to venery. AS for  
the Mace, tho\* it he, also. Os a Very beautiful Colour, it is Of  
so weak Virtues, that it is of no Value where it grows, and the  
Tree itself is neglected, aS wild and degenerate.

This Tree is described to have longer, thicken and more  
fibrous Leaves, than the other : The Nuts are larger, and not  
only Oblong, but almost square, and grow not from the Interstices  
of the Branches, as the Others, but Ont os the Tops, three or  
four together, like Walnuts, the Mace, also, when dryd, is os a  
more beautiful Colour.

. Nutmegs are somewhat astringent, sttomachic. Cephalic, and  
uterine they discuss Flatulencies, promote Concoction; Correct  
a stinking Breath, enliven the Foetus, and relieve under a LipO-  
thymy, and Palpitation of the Heart, alleviate Disorders of the  
Spleen; stop a Looseness and Vomiting; provoke Urine ; and  
sharpen the Sight. *Aetius* writes, that they are bad for the Lungs.  
They may justly he recommended in a Dysentery, and other  
Kinds os Fluxes, fince they possess all those Qualities, which are  
necessary for subduing those Disorders. Their oily Substance  
defends the intestines from Abrasions by acrid Humours, and  
mitigates Pains ; their aromatic Quality, consisting in an aereal  
Spirit, penetrates the noble Parts, and highly Corroborates them  
and their terrestrial Part astringes and dries up Ulcers, and in-  
duces a Cicatrix. *Hildan. de Dysent.*

The *Brachmans.use* Candy’d Nutmegs for all Cold Diseases of  
the Brain, the Palsy, and other nervous and uterine Affections,  
they are, also, esteemed Cordial. Nutmegs Candy’d, or preserv'd  
in Sugar, have now, for a long tithe, been imported among us,  
and served up at rich and plentiful Tables among other Sweet-  
meats, and some of a more delicate Palate are pleased only with  
the exterior green Coat,or Peel; and prefer it, while quite jm-  
mature, to the Nut itself, both On account of its Fragrancy,  
and. its grateful Taste, which is accompan/d with an Astrin-  
gency, that is very agreeable to the Stomach. Experience, how-  
ever, has taught us, that such Delicacies are not without their  
Inconvenience, whether the Peel he eaten alone, or together  
with its inclosed Nut. For they are endued with a narcotic  
Quality, and that to.a considerable Degree, by Virtue of winch,  
if too freely or frequently used, they may induce soporous or co-  
mate us Disorders, Hence we are told, by *Tavernier,* with an Air  
of Probability, that, when the Nutmegs begin to ripen, the Birds  
of Paradise, io called, who are Very greedy of those Fruits, fly  
in great Flocks to the *Moluccas,* as the Thrushes, in the time  
of Vintage, into *Prance.* But they frequently pay dear for their  
delicious Fare 5 soy, being seined with a Vertigo, they fall to the  
Ground, aS in a drunken Fit, and have their Legs-eaten, in a  
short time, by the Ants.

That the Nuts themselves, when dr/d and used immoderately,  
are Possess'd of the same Quality, is obvious from a Case told  
*byLobelius,* who informs us, that he was called to *England,* in  
' order to attend a pregnant Lady os Distinction, who, by greedily  
eating twelve Nutmegs, as if they had been aS much Bread, was  
seized with a kind of Delirium, or rather Intoxication; but, after  
sufficient Rest and Sleep, she recovered by means of Repellents  
apphed to her Head.

*Tachenius,* in his Book *de Morborum Principe,* informs ns, that  
the Wound of a certain Soldier was soon Consolidated by the  
. internal Use of Nutmeg. *Le Fevre* and *Wedelius,* also, commend  
this Fruit for the Consolidation of Wounds. *John Bauhine,* when  
travelling on the *Apennine* Mountains, having greedfly drank a  
Draught of cold Water, was suddenly seized with violent Pains  
in his Bladder, accompan/d with Flatulencies, and a Tumor of  
the Scrotum, tho' without any previous or subsequent Hernia.  
When his Pain was so intense, that he imagined he should have  
dysd on the Mountain, his Fellow-traVeller, *Osmald Gabelkover,*gave him some Nutmegs, by eating four of which, he was in-  
ftantaneoufly freed from his Pains.

Accordingto *Ettmullen,* Nutmegs Chew’d and swallowed **are**an excellent Remedy for a Palsy of the Parts subservient to De-  
glutition.

From recent Nutmegs, bruised and heated in a Pan, an Ost  
is expressed, which is highly beneficial in marry Diseases. Thus,  
for Instance, when exhibited in some warm Liquor, it removes  
Gripes, and nephritic Pains. When apply'd by way of Oint-  
ment to the umbilical Region of Children, it removes Gripes.  
Long-Continued Pains of the Nerves and Joints are remov'd by

anointing the Parts affected with ir ὁ and, if the Temples are anoint.»  
cd with it, it gently induces Sleep.

A great many os the modem Botanists, probably induced by  
the Resemblance of the Names, confound the *Macis,* which is  
the second Covering os the Nutmeg, with the Macer Of rhe  
*Greeks,* whereas these are widely different from each other; sor  
the Macer is the Bark of a Root produced *inMalabar,* Of a cold  
and earthy Nature, and for that Reason appropriated to the stop-  
ping of Fluxes. The *Macis,* or Mace, on the contrary, is the  
Covering Os the *Indian* Nut, of an highly aromatic Nature, and  
possess'd os a great Degree Of spirituous Heat; for which Reason  
it is generally used against cold Disorders, and those produc'd by  
Poison. Before the Macc is perfectly ripe, and aS yet of a beau-  
tiful scarlet Colour, it is Commonly preserved with Salt and  
Vinegar by the *Indians,* and presented aS the first Dish, in Order  
to excite an Appetite for the subsequent Repast. But, aster the  
Mace is ripe, it is taken off the Nutmeg, drykl in the Sun, and  
Carefully preserv'd. Its Smell is always grateful, but, when 'tis  
recent, 'tis in a particular manner agreeable. Its Taste is a kind  
Of Mixture hetween Bitter and Sweet, and leaves a sort Of Dri- .  
ness in the Mouth 'behind it. The same Virtues with those Of  
the Nutmeg are ascribed to it, but, because its Parts are more  
small and minute, it is thought to Operate more effectually, and  
to be possess’d Of a more penetrating Quality.

Thff Mace yields a smaller Quantity Os Oil than Nutmeg*; yet*that Of the former is preferable to that Of the latter, and is more  
Commended in Disorders Of the Nerves, and other Cold Distem-  
pers , and, which is still more surprising, *Cronemburgius* informs  
**us,** that it cures the Gout, if the Part affected is anointed with it.

Inorder to expel Wind, shut up in the Uterus, take a sound  
Nutmeg, Cut it into sour Parts, throw one Of them upon live  
Coals, and let the Patient receive the Smoke through a Funnel,  
into the Uterus. Let this Method be repeated three times.  
*Hartman* Cured a young Woman at *Bonn,* upon the *Rhine,* by  
this Method. Dr. *Huls.e.*

*Nux Myriflica mayor spatia Malabarica. Panem palia.* H. M.  
*Avellanae Indicat genus oblongum.* Clus. *Nux Indica oblonga in-  
trinsecus similis Nuci Mos.chatae.* J. B. *Palma cujus Fructus oblon-  
gus Paused similis.* C. Β. *Male Palmam vocat. Arecae sive Avel-  
lanae Indicae versicoloris genus oblongum.* Park.

This Tree grows eVery-where in the Woods of *Malabar,* and  
hears ripe Print once or twice every Year, that is, in the Months  
Of *June,* Or in *December,* and *January.* It, also, bears Fruit sor  
**a** long time.

Tho' these Nuts are Of no Use in Medicine, yet the *Turkish*and Jouriso Merchants mix them with Nutmegs, and their  
Mace with genuine Mace, in Order to impose upon those who  
purchase those Commodities: From these Nuts, and their Mace,  
they, also, express the Oil, and mix it with the true Oil Of Nutmeg.

NUx PISTACIA. The Pistachio. See TEREBINTHUS 5 *In-  
dica, Theophrasti.*

NUX VIROINIANA. Offic. *Prttnifera vel Nucifera sets Nuci-  
prunifera Arbor Americana pracelsu, angustis Lauri foliis lati  
virentibus. Mastichen odoratum fundens.* Pluk. Almag. 3O7-  
Phytog. 2I7. Fig. f. 5. Cat. Jam. I8O. Sloan. Hist. I. 4o. Rail  
Dendr.44 THE VIRGINIA NUT. MASTICH OF LI-  
GON. *Dale.*

It has smooth and shining I.eaVes, like those Of the Bay-tree; .  
and differs from Other pruniferouS Trees in its Fruit, which is  
small, turbinated, and contains but a little Pulp. It grows every-  
where in the Island os *Barbadoes.*

The Part in Use is the Emit, which is nearly Of the Shape and  
. Size os the Kernel of a Filberd, smooth. Of a brown Colour,  
with an Eye near One End, and containing an hard Stone, which  
incloses a white, globular Kernel, Of **a** bitterish Taste, and aro-  
matic Smell.

It potently opens Obstructions, depurates the whole Mass Of  
Blood, and corrects a scorbutic and bad Habit Os Body, by im-  
pregnating the Vied Liquor, the Blood, with those Volatile Salts,  
which exalt it from i:a low and vapid State to a more pure and  
spirituous one, and, by that means, preserve it from Stagnation : It,  
also, clears the Skin of Spots, and all Other DefedationS. *Marl.Obs.*

. NUx VOMICA. Ossie. Ger. 1362. Emac. *griofs.* Park.Theat.  
Idol. Ran Hist. 2. 1814. *Nax Vinnica, Nux Metella.* Mont.  
Exot. Io. *Nux Vomica in Officinis.* C. B. P. 5 I I. *Nax  
Vomica vulso Officinarum, compressa, hirsuta.* J. B. I. 339. *Ca-  
niram.* Hort. Mal. 1.67. Tab. 37. *Malus Malabaricafructu cor.,  
ticos.o, amaricante semine piano compresse.* D. Syen. Rad Hist. 2.

*Solanum arboreum Indicum maximum foliis Oenoplia, sive  
Napeca majoribus, fructu rotundo, rubro, surnrne orbiculari com-  
presse maximis; Naces Vomicas et Lignum Colubrinum Officinarum  
ferens.* Breyn. Prodr. 2. 92. COmmel. Flor. Mal. 240. *Malus  
Indica venenata amara nucleis argenteis compressis orbiculatis\*  
Ghodhakadara, Nux Vomica Qssicinar.* Herm. Mus. Zeylan.  
4I. VOMIC-NUTS. *Dale.*

These are stat round Seeds, about the Bigness Of a Silver Groat in  
Circumference,somewhat thick,and a little concave on the oneSide,  
and Convex a little On the Other, Of a greyish Colour, and a littie  
downy On the Outside, but hard and horny within t They are the  
Seeds of a large round Fruit, growing in *Malabar,* upon an arbo-

restent Solanum, having Leaves like the white Jujuhe, xarirh  
Flowers in small Umbels, which is the *Lignum Colubrinum ter-  
than Acofiae* Of *Parkinson. Millers Bot. Os.fi.*

It is improperly Called *Nux Vomica,* since it does not excite  
Vomiting. Some have erroneoufly thought it a Root, Others a  
Fungus; but, by rhe Description, it appears to he a Fruit, though  
whether of a Tree, or an Herb, is uncertain.. \_ Some will have  
the *Metel* of the *Arabians* to he the same with the Nux Vomica -  
but their Descriptions do not agree.

The Nux Vomica is narcotic, virulent, and eVen worse than  
Opium. Reduced to Powder, and given in Food, it kills Dogs  
find Cats: Instances of which you have in *Gesuer* and 7. *Pau-*

*. Pine,* to which we shall add what Dr. *Hulse* communicated to  
Ps, taken from the Observations os *Antonius de Hude.* I gave  
two os these Nuts, says he. Cut small, and mixed with Bread and  
Putter, to a Dog, who greedily eat them: Hals an Hour after-

-wards he filled himself with boiled Bones and Cartilages, but in '  
half an Hour more he was seined with an universal Trembling,  
and ran about from Place to Place, could not stand without  
Support, and his Legs were stiff, and affected with Convulsions.  
At the End Of the third Half-hour he fell down aS dead, and  
soon aster began to fetch his Breath very short; and, with Assist-

- hnce, got upon his Legs: He seemed to shiver at the least Noise,  
- and to fetch his Breath the shorter: In this State he lived out the

fourth Half-hour, and at last died suddenly. In dissecting the  
Carcase I made the following .Observations: The Stomach was  
very full of Food, mixed with Bits Os the Nuts, which did not  
seem to have undergone any Alteration, except that [hey were  
softer, which was, also, the State Of a Bit of Nut that had lain,  
during the same time, in hot Water. The Stomach, Oesophagus,  
and ltitestines, were in their natural Constitution; the lacteal  
Veffeis in the Mesentery were turgid with Chyle, the Lungs were  
redder than usual, and the Ventricles and Auricles of the Heart  
were more tumid than they Ought to appear. After dissecting  
the Right Ventricle of the Heart, On straining the *Vena Cava  
Ascendens et descendens,* there flowed out a great Quantity of  
Blood, which immediately coagulated in the Cavity of the Tho-  
rax, about the Brain nothing preternatural could he observed.  
A Car, after taking a Nut, which had been macerated for some  
time in Water, and in part decorticated, was affected with the  
same Symptoms as the Dog before-mentioned, aS was, also, an-  
Other Dog, which had only eat up the Reliques which the Cat  
had left, i had no Opportunity to ascertain the just Quantity Of  
-the Dose required for killing an Animal; but, from what I have  
observed, I am inclined to think, that this Virulent Nut exerts  
.Its Influence, Chiefly, in infecting the Fluid which irrigates the  
Brain and Nerves; for to such a Cause may be easily ascribed  
the Restlessness, Rigor, Convulsions, Horror, Trembling, and  
irregular Respiration. The sore-mentioned Symptoms deter me

. from making Experiments with this Nut On human Creatures,  
‘though some pronounce it noxious to Brutes, and not to Men.:  
But let them fay what they please, I cannot in the least doubt,  
but that it will have the same destructive Effects On Man, aS on  
ether Animals: On Birds, it is certain, it has the same pernicious  
Influence as On Beasts, for the People of our Country are wont  
\o lay Bits of Flesh, sprinkled Over with the Powder Of this  
Nut, aS Baits for Crows, Rooks, and Other mischievous Birds,  
‘and so destroy them. *Adolphus Occo, in Pharm.* telis us, that  
*Julius Alexandrinus* wrote to him, that the Nux Vomica ought  
utterly to be discarded, and not admitted into any Composition,  
thecause it would always he deleterious, and prejudicial to the  
human Nature, under what Shape soever, and Could never be  
render'd beneficial to the same. I am mightfly pleased, says *J.  
'Sauhine,* with that very learned Gentleman’s Opinion; nor did  
I ever find any Person who could assure ns from his Own Expe-  
rience, that any laudable Effects were produced by the Use os  
these Nuts. Upon these Considerations, our later Physicians, in  
their Dispensatories, have justly Omitted it in their Descriptions  
.Of the *Electuariurn de Quo.* The Nux Vomica is reduced to  
Powder by rasping, and not by pounding in a Mortar, because

“ os its horby Substance. *Rail Hist. Plant.*

NYALEL. H. M. *Acn Sambucus Indica Bontiil Arbor bac-  
eisera racemosa. Fructu corticoso, dipyreno.* It rises to the Height  
Of forty Feet, and grows in *Malabar.* The Fruit is esteemed a  
Delicacy ; the Kernels, bntised with freshGinger, and Sugar added  
Thereto, provoke to Stool. Of the Juice of the unripe Print  
with. Sugar is prepared a Syrap, which is Very serviceable in the  
'Cough, Asthma, and other Affections Of the Thorax. *Fait Hist.  
Plant.-*

-NYCTALOPS, νυάτἀλωψ, from νὑξ. Night, and ἄψ, an  
Eye, or so Called, aS being τῆς νυκτός ἀλαός ωπῖ, *captus Oculis  
Nocte,* (blind by Night) according tO *Paulus* and *Aetius,* is one  
who sees not at all by Night, and hut Obscurely at Sun-fetting.  
Such an One, they say, in *Latin* is Called *Luscitiosus, Dt Nus.citio-.  
sous,* but *Luscitiosus* is one who sees but littie through some De-  
sect Of the Eye, and fees better in the Evening than at Noon.  
*Varro* Calis these *Lnsotosi,* who see not in the Evening, and No-  
*onus,* by the same Name, those who see not by Candle-light, and  
*Pliny,* LI6. 28. *Cap.it.* Calls those *Lusciosi,* which-the *Greeks*.call νυκτάλωπες *(Nyctalopes)*; and these. Lib, 8. *Cap.* 5o. be de-

scribes as seeing in the Day-time, but not by Night, orhy Twi-  
light: The same Signification in given to the Word *Nyctalops*by  
*Galen,* in his *Exegesis,* and *\sjActuarius, Meth. Mesl. Lib.* 2. *Gap.*7. where he says, also, that this Disorder is . generated by a Col-  
lection of thin Humours, which in the Day-time is prevented by  
the copious Appulse Of the Light, but at Night Casta a Mist be-  
fore the Sight. ... . . ...

. In a contrary Sense to the foregoing, *Hippocrates* Calls those  
νυάτάλωπες, *Nyctalopes, ynho* fee best Dy Night, and worst by  
Day; and this Sense Of the Word is, also, raken. notice of by  
*Matius,* when he fays they are, also, called *Nyctalopes,* .who see  
pretsp west by Night, but worse by Day, and by Moon-light  
nothing at all. but this Disorder, he assures ns, is Very rare, but  
theother common enough. The Author of the *Definitiones Me-*dicae says, that *ci. A Nyctalops* is an Affection of the Eyes, with-  
U out a manifest Causo, in which the Patient fees nothing in the  
u Day-time, but sees in rhe Night." And the Author of the  
*XfagtsSe* comprehends both Significations, where he telis tis, iC They  
“ are called *Nyctalopes* who see hut obscurely in the Day-firne;  
" hut more clearly at Sun-setting, and at Night best os all; or,  
" on the contrary, they are inch aS see but little by Day, and in

- \* the Evening, and at Night, nothing at alls" *Foesius.*NYCTER1S, νυκτερίς. The Bat.

- NYGMA, νήζμα, a Puncture, from ίήσσω, to nriCin -

. NYMPH3E. - -ss.

*. Galen,* and other antient anatomical Writers,-sometimes .Cail  
the Clitoris, and sometimes rhe Hymen, by the Name os *Nym-  
phase* but what the Moderns Call *Nymphae, Crifiae clitoridis.* Or,  
aS they may, also, be termed. *Alae Minores five Interna,* are two  
prominent Folds Of the inner Skin Of the greater external Ahe,  
reaching from the Praeputium.Of the Clitoris, to the .two Sides of  
the great Orifice of the Uterus: They begin very narrow, and,  
having increased in Breadth, in their Co.urle downward, they are  
again contracted at their lower Extremity.

They are Of a spongy Substance, intermixed with Glands,  
several of which .may be perceived by the naked Eye. Their  
-Situation is Oblique, their upper Extremities lying near each other,  
and the lower at a much greater Distance. In married Women  
they are more or less flaccid and decayed. *Winstondt 'Anatomy,*sect. 8. -’s'

**THE METHOD OF TREATING THE NYMPHAE, WHEN Tod  
. . . fr . LARGE.. - .**

The Nymphae are sometimes so large, aS not Only so hang  
without the Labia Piidendi, but, likewise, to prove troublesome  
in Walking, Sitting, and even in Coition. In this Case, let the  
Patient be said On her Back, with her Legs distended, and the  
Labia Pudendorum Open'd: Then let the Operator, with his Left  
Hand, take hold of. the Nymphae One after another, and with a  
Pair Of Scissars, cut off as much aS may be necessary, taking  
Care to be provided with Styptics for preventing an Haemor-  
rhage,. and Medicines for relieving the Patient from fainting:  
The Wound may be afterwards dressed with some Vulnerary Bal-  
sam, and easily healed in the common Method. *Solingen,* in his  
*Obs.* So. *de Morb. Mulicr.* gives us a Cafe, in which the Nymphae  
were extirpated, after they had begun to be affected with a Mor-  
tification. - ’

NYMPHALA.

- The Characters are; . . . .

. It has a great perennial Root, which grows in the Bottoth Os  
Rivers, the Leaves are thick, fungous, and mostly orbiculat.  
The Calyx Consists of five florCnlar Leaves, disposed in form of  
a Rose. The Flower is rosaceous, consisting Of many fmall, yeh.  
low, stiff Petals, expanded like a Rose; within these are situated  
a Vast Number Of Stamina, which arise from the Circular and  
Outwardly Curve Joining os the Ovary and Placenta. The Fruit  
is globular, urceolated, InulriCapsular, like that Os the Poppy, and  
contains many small Oblong Seeds.

*Boerhaave* mentions two Species Os this Plant - which are,  
. I.^Nymphaea; lutea; major. *C.B.P.* I93. *Tourn. Inst, atiti  
Boerh. Ind. alt.* 2.8 γ. *Parle. Theat.* I252. *Nymphaea lutea.* Ossics  
Ger. 672. ernac. 8Io. J. B. a. 77I. Rail Hist. 2.13Id. Synom  
3. 368. YELLOW WATER-LILY. *Dale.*

. The yellow Water-lily pretty much resembles the white, in  
Its manner os Growth ; Only the Leaves are somewhat longer,  
lying, also, on the Top os the Water: The principal Difference

. is in the Flower, which in this is yellow, and less than the white,  
shade os five round Leaves, with several Chives in the Middle,  
Os the same Colour. The Seed-Vessel is large, resembling a  
Bottle, with a Crown like the Head os a Poppy, growing oh  
the Top, full Os Seed, which is larger than the white: This  
grows in the same Places with the white, and is much more  
frequent.

. It is much os the Nature Os the white, but is accounted the  
weaker Os the two: It is, also, cooling and anodyne, and good  
in delirious Fevers, and tor the Huat and Sharpness of Urines  
*Miler’s Dor. sisesi*

2. Nymphaea; lutea, minor; magno store. C.B. P. I 04.  
*Boer he Ind alt. Plant. ’*

*Nymphaea alba.* & Name for the *Leuconymphaea. :*

*primphaea,alba, minor.* AName *sotrcsREeuionymschaa, minor.*

*Nymphaea, minar, lutea.* Α Name for the *Mocrrnymphaa,  
qua Nymphaea lutea, minor, parvo stere.*

*Nymphaea stare minima.* A Name for the *Aiicroleuccnjmphaa,  
quae lstymphaa ; alba., minima.*

*Nymphaea, lutea, minor, store fimbriate.* A Name for the  
*Nyrnphsides ; aguls innatans.*

It is called *Nymphaea,* becaufi- it lives in Waters, where the  
Nymphs are feigned by the Poets to inhabit.

The Plant is of a nitrous, paregoric, aperitive, moistening,  
refrigerating, and somewhat narcotic Quality. The Juice is  
drank in Inflammations of the Kidneys and Bladder. Of the  
Flowers is prepared an Oil, which has the fame Virtues aS Oil  
of Olives, or Oil of Roses. The Leaves bruised make an ex-  
cellent Catapiasin for inflamed Parts; and a Decoction of the  
Roots and Flowers is beneficial in burning Fevers, by refrige-  
ratiog; and the more, if the same Remedy he applied to the  
Soals of the Feet, and the Groins. Of the expressed Juice of  
the Stalks, Leaves, and Fruit, boiled, is prepared a Syrup,  
which is a most efficacious Remedy for a Gonorrhoea, and not  
the less proper when the Disorder is attended with an immode-  
rate Heat; for it was always a celebrated Medicine for Heat of  
Urine. This Syrup partakes somewhat of a narcotic Quality,  
and is, therefore, extolled as a Specific in want of Sleep; it,  
also, prevents noctirmal Pollutions, and extinguishes Thirst.  
*Hist. Plant, adscript. Boerhaave*

**NYMPH** je *A,* also, imports a preternatural Excrescence of  
the *Nympha.*

NYMPHODOTI PASTILLUS. The Name of a Pastil,  
described by *Paulus Asgrneta, Li* 7. *C.* I 2.'

NYMPHOIDES.

The Characters are;

. It is in all respects like the *Nymphaea,* except that its Flower  
is monopetalous and robated, and its Fruit oblong, compressed,  
soft and unicapfular.

*Boerhaave* mentions one sort of this, which is,

Nympheides; aquis innatans. T\*. I53. *Nymphaea, lutea, miner,  
store fimbriato.* C.B.P. I94. J. B. 3.772. *Nymphaea, alba,,  
miner.* Lugd. IO09. *Boerh. Ind. alt. Plant.*

It is railed *Nymph aides* from its near Resemblance to the  
*Nymphaea,* both in Form and Virtues; it is of singular Effi-  
cacy in Haemorrhages. *Hist. Plant, adscript. Beerhouse.*

NYMPHOMANIA. The fame-as **FUROR UTERINUS.**

NYMPHOTOMIA, νυμφοτομία. A Section of the *Cli-  
toris* when too large; for by the Antients the *Clitoris* was called  
*Nympha.*

.NYSADIR. Sal Ammoniac.

NYSTAGMOS, νυσταγμος. A Winking, or Twinkling  
with the Eyes; such as happens **when** People **are excessively**sleepy.

NYXIS, νὑξις. Α Punciure.

OFor the Signification of O in **the** chemical Al-  
phabet, see **ALPHABETUM** Chymicum. Ois

\* the Character for Alum; mid **three -° is the**Character for Oil. -

OBELAEA, ὀβελαία, from ὀβελὸς, a Dart. An Epithet  
for the Sagittal Suture of the Skull.

OBELCHERA. A Cucurbit. *Rulanduss*OBELISCOTHECA. Dwarf *American* Sun-flower.

The Characters are;

It hath radiated Flowers, having many Florets, which are  
fertile, but the Half-florets arc barren. The Placenta is com-  
monly conical, and filled with chaffy Empalements, which  
appear folded up, in each of which is an Ovary, which is  
shaped like an Obelisk reversed, having an hollow Base. These  
Parts are contained in one common Flower-cup, which is  
deeply cut into several Segments, and expands in form of a  
star. The Leaves are placed alternately.

The Species are;

I. Obeliseotheca integrifolia, radio aureo, umbone afro-  
rubente. *Hart. Elik.*

*ϊ.* Oheliseotheca. dorohici solio, radio purpureo, umbone  
atro-rubente.

These are *American* Plants, the first being brought from *Vir-  
ginia,* and the other from *Carolina*; but they are of no Use in  
Medicine that I know. *Miller’s Dict.*

OBESITAS. Fatness, or Corpulence. The Causes of Obe-  
sity are already consider'd under the Article FIBRA, whence  
the- proper Methods of Cure may, likewise, he collected.  
It is remarkable, that for one corpulent Person in *France, Hal-  
land,* or *Spain,* there is a hundred in *England* and *Holland.* This  
I apprehend arises more from the habitual Use of new and fecu-  
lent Malt-liquors, in which the oleous Part is not sufficiently  
attenuated, -than to any Difference in the Climate, or Degrees  
of Perfpiration. Corpulence is said to be reduc’d by a frequent  
Use of Camphire. Cyder is esteemed a proper Liquor to pre-  
vent exorbitant Fatness.

OBLATAE *Purgantes* are figur’d cathartic Cakes, made  
of sine Flowers, Sugar, and purging ingredients. They are  
much the fame as HoLrppjE.

OBLIQUUS. A Name for several Muscles, two Pain of  
which, the *Obliqui Ascendentes,* and *Descendentes,* belong to  
the *Abdomen,* and are defcribed under that Article.

**OBLIQUUS SUFERIoR SIVE MINOR.**

This Muscle is situated laterally hetween the Occiput and

' first Vertebra, being nearly of the same Figure with the two  
Recti. It is fixed to the End of the transverse Apophysis of  
**the** first Vertebra ; whence it runs upward, and very obliquely  
backward ; and is inserted in the transverse Line of the Os Oc-  
cipitis, almost at an equal Distance from the Crista and Ma-  
stoide Apophysis, hetween the Rectus major, and Complexus,  
minor, which covers it a little.

The Obliqui Superiores, and the two Recti Postici, turn  
the Heed a little backward on the first Vertebra of the Neck.;  
and they can neither aft Otherwise, nor separately.

**OBLIQtiUs INFERIOR SIVE MAJOR.**

It is situated in a contrary Direction to **the** Obliquus Supe-  
riot, between the first and second Vertebra of the Neck,  
Iesemhllng that Muscle in every thing but the Size. It is fix’d  
below to one Branch of the bifurcated Spinal Apophysis of **the**second Vertebra, near the insertion of the Restus major;  
whence it runs Obliquely upward and outward, and is inserted  
in the End of the transverse Apophysis of the first Vertebra  
under the lower Infertion of the Obliquus superior.

The Obliqui inferiores, or majores, are true Rotators of the  
Head, by turning the first Vertebra upon the Odontoide Apo-  
physis of the second; all which alternate Motions the Head  
follows, without being hindered in the Motions forward and  
heckward, in any Degree of Rotation. These oblique Muscles  
cannot perform any other Motions, being only Assistants to  
the Splenii and SternO-mastoidjei. The Obliqui minores can  
have no Share therein, they heing limited to the Inflexion back-  
ward. The Obliquity or their Direction which may have  
deceived some Anatomists, seems only to he contrived to make  
way for the insertions of the Compleki minores. *Wonft. Anae.*

OBOLUS, οβολος. A Weight, sot of which make a Dram ;  
it is equal to about nine Grains.

OBRIZUM, or OBRYZUM. Pure Gold, persectiy re:.  
sin’d and purg’d from all heterogeneous Mixture.

OBSIDIANA, as *Pliny* expresses it, *in Genere Vitri nume-  
rantur, “ use* reckon’d a Species of Glass.” So called, it seems,  
from their Refemblance to a Stone, which one *Olfidius* dis-  
cover'd in *Ethiopia,* of a very black Colour, and sometimes  
pellucid, of a muddy Water, and reflecting from the Walls, .  
where it is placed on a Shade instead of an Image.

*Pliny,* also, informs us, that *Obfsdianum* was a fort of Colour  
with which Vessels were incrusted, or glaz’d ; probably a kind  
os Smalt. Hence the Name is apply’d by *Libatnus,* to Glass  
of Antimony.

OBSTETRICATIO. Midwifry.

A Labour is said to be difficult, when the Infant is not  
brought into the World in the usual Time, that is, in an Hour  
or two; but for certain Causes is retain'd lunger than ordinary,  
and cannot he brought away without Difficulty, and the greatest  
Care and Diligence. The most direct and immediate Causes  
of Accidents *os* this Kind are, first, a bad Conformation of  
the Body, as in deformed Women ; and especially when **the**Bones of the Pelvis, the *Os Coccygis,* and **the** *Os Sacrum in*particular, are preternaturally form'd ; by which means the  
Pelvis is frequentiy render'd so narrow, as not to admit the  
Hands. Secondly, the Age Of the Patient; when sor Instance,  
Women are either too young and tender, or too old, especially  
in then first Labour. Thirdly, when timorous, they are too deli-  
cate, or abound too much in Blood. Fourthly, when their  
labour is too much hasten'd, hesore Nature concurs, and offers  
her Assistance ; or when the Waters are either too soon dis-  
charged, or too long retained. Fifthly, when the Patients,  
not before accustom'd to such Circumstances, refuse to assist  
their genuine and legitimate Pains by their own efforts. Or,  
lastly, when the Situation and Posture of the Foetus is preter-  
natural. The more of these Couses concur, the more difficult  
the Labour generally is But when a Physician is call'd to a  
Woman in Labour, or at least under Pains resembling those of  
Labour, he ought, above all things, to inquire, whether she  
has gone her full Time, which is nine Months;' and whether  
the Mouth of her Womb is as yet open or shut; for if the true  
and legitimate. Time of Labour is not as yet arriv'd, if no  
Member of the Infant presents itself, if the Patient is not  
seized with her genuine Pains, and if the Mouth of **the**Womb is not aS yet open, we ought not only to abstain from  
attempting her Relies by the Hand, but, also, from the Exhi\*  
bition of such Medicines as provoke Labour. We lure rather  
to endeavour, that the Patient be kept in a State of Rest, or  
be laid in a Bed. The skilful Physician ought, also, to prescrihe  
proper internal Medicines, accommodated to **the** Variety of her  
Spmptoms, and calculated for the Removal, of the spurious  
Pains, which are often in due time succeeded by a genuine  
and legitimate Labour , for it often happens, that Women pro-  
cure not only their own, but, also, the Death os the Foetus,  
whilst either by their own Imprudence, the Instigations of un-  
skilful Midwives and Nurses, or the Uneasiness of spurious  
Pains, they attempt the Expulsion of the Foetus hesore the due  
' time. But when the due Time of Gestation is elaps'd, and  
consequentiy the proper Time for Labour arriv'd, when **the**genuine Pains, or such as are propagated from the Loins down  
to the Pubes, are perceived, when the Limbs tremble in con-  
sequence os the Violence of the Pain; when the Patient is  
seized with a perpetual Tenesmus; when the Mouth of **the**Womb is sufficiently dilated, the Method of discovering which  
is represented in *Tab.* LIV. *Fig.* **i.** the Midwife is carefully and  
Skilfully to perform the several Functions helonging to her  
Office, either in a Bed, or a particular Chair contrived for that  
Purpose. When notwithstanding all these Circumstances, **and.the**due Increase of the Pains, the Labour does not succeed hap-  
pily, we are to have recourse to inore efficacious Methods: But  
before we.specify these, we must observe that the Women of  
*France,* and several other Nations, are deliver'd in Bed, whereas  
those of *Germany* are deliver'd in a peculiar Chair, represented -  
in *Tab.* LIV. *Fig.* I4. winch Method *Horsier* thinks preferable  
to the other, for several Reasons ; especially because their Feet  
being on the Ground, their Back at the posterior Part of **the**Chair A ; their Buttocks on the transverse Seat C, so exca-  
vated that the Os Coccygis may commodioufly yield, and their  
Hands holding the Handles D, D, they can make far stronger  
Efforts, and the Midwife and Assistants have far better Access,  
and Opportunity of doing their respective Duties. In some  
Places, where these particular Chairs are not to he had, 'tis  
customary to fix two Common Seats of an equal Height so  
together, that there may remain fix . or eight Inches between  
them. One Buttock of the Woman in Labour is to he placed  
**on** each of these Stools, whilst her Anus and Pudenda cor-  
respond to **the** interstice hetween them, by which means **the**Os Coccygis, and the OS Sacrum, are free from Compression,  
and easily yield to the Passage of the Foetus. 'Tis become  
customary in *Germany,* among the common People, to place **.the**Patient on the Knee os some robust Woman, who, helding  
her firm in their Arms, supplies the Place of a Chair contriv'd  
for that Purpose.

The Postures of parturient Women are different in different  
Countries, and in different Parts of the same Country, but there  
is no general Rule to he laid down, because some Postures suit  
some Women, and others do hetter in another Situation : Be-  
sides, one Posture is more commodious than another, as **the**Child happens to he situated, or as the Uterus happens to he  
placed obliquely towards the Spina Dorfi, too much forwards,  
or too much inclining to the Right or Left Side.

The usual way amongst common Midwives is to place **the**Woman upon another's Lap, with her Feet upon two Chairs,  
placed one on each Side, whilst the Person that delivers her, sits  
before the Woman upon a low Chair.

Others, again, especially in the Country, place the Woman  
upon her Knees and Hands, or Elbows, or else bending for-  
wards against a Table, or something solid, and deliver her  
backwards.

The hest Practitioners seem to think it most commodious to-  
deliver a Woman in, or rather upon, a Bed, lying on one Side  
with the Thighs and Legs bent towards the Belly, with a large  
hard Pillow hetwixt the Thighs, to keep them asunder.

In *France* it is the Custom to deliver, a Woman in *a* Pallet-  
bed ; *but La Matte finds fault with* them sor heing too low:  
His Method is, to lay **the** Woman upon a common Bed, **either**across or otherwise, taking care to have it. made in such **a**manner, that it shall lie upon a Slope from the Woman's Head,  
downwards, and making a Depressure, or kind of Trench, under  
the Anus, that nothing there may hinder the Birth of the Child:  
Mean time he places a Cloth four-double, just under the Region  
Of the Kidneys; divides the Knees to a Distance from each  
other; places two Women, one on each Side, to hold the Knees  
with One Hand, and to sustain the above-mentioned Cloth,  
when necessary ; the Woman's Heeis are to be placed near the  
Buttocks, and must rest against something solid, the Bedstead,  
for Instance, or something else, set there on Purpose; the Wo-  
man must hold something fixed in both her Hands to hinder  
her from raising herself, and retiring during the time of **the**Pains, or when the Child is in the Passage; or else the Woman  
must be kept from Motion, by another Person’s Hands said  
upon each Shoulder.

*La Matte* orders a Cloth to he thrown over the Woman's  
Knees for Decency, and to prevent Cold.

A double Cloth must, also, be placed under the Woman to  
receive whatever is discharged from the Uterus ; and a woolen  
Cloth must he in Readiness to receive the Child.

*La Matte* is of Opinion, that the surest Way to succour a  
Woman in a long and difficult Labour, is to Confine her to no  
constrain'd Situation, but to let her walk, sit, or lie in Bed,  
just as she finds it easy to her, till such times as the Waters are \*  
flow'd off, the Pains begin to be strong, and the Child advances.

It is often a great Relies to a Woman to have the lower Parts  
a littie elevated by means of the doubled Napkin placed under  
the Region os the Kidneys, during the Pains.

*La Matte* telis us, that some Women will have no Pains in  
.Bed,, or lying, or even sitting, but will haVe.them Very strong  
as soon aS they get up : Tins is true, as also *vice versa.*

. The same Author gives an Instance of a Woman heing deli-  
Ver'd in the following Posture, which he seems Very much to  
approve, when the Child is pretty far advanc'd in the Passage.

Another Woman was placed in an easyChair, with the Back  
CIofe to the Wall, and her Legs pretty much asunder ; upon  
this Woman's Lap the parturient Woman was placed, with  
two more Women to support her under the Arms, and two  
more to sustain the Feet, and elevate the Knees, and keep  
them asunder. . .

When a Woman has not sufficient Pains, in One Posture, to  
bring the Child, all others must be tried.

*La Matte* does not approve of laying a Woman in her own  
Bed.

But it is, above all things, necessary, that Midwives or Phy-  
sicians, attending Women in Labour, should be perfectly ac-  
quainted with the Mouth of the Womb, either from Anatomy,  
or from *Tab.* XVII. *Fig.* 3. at 5. or at *Fig. Ί..* Letter L, in  
*Tab.* L. or at *Fig.* I. Letter C, in *Tab.* LIV. It must, also,  
he adverted to, that the Womb, especially in pregnant Wo-  
men, is, except in the Time of Labour, so close shut, that it will  
scarcely admit the Point of one's Tittle Finger, till the genuine  
Pains approach. But when these come on, it gradually dilates  
itself, so as at first to admit one Finger, and afterwards several ;  
and in this Aperture of the Uterus are perceived the Membranes  
including the Foetus, resembling a Bladder distended with Wa-  
ter ; and often some Part of the Foetus, through thefe Mem-  
branes, enters the Mouth of the Uterus, or is so contiguous  
to it, as to be perceived by the Fingers. By these Circumstances  
the Delivery is known to he at Hand, and is so much the nearer,  
in proportion as the Mouth of the Womb; is dilated. But that  
the Midwife or Physician who acts in that Qualitv, mav, with  
Judgment, discover the State Of the Mouth or the Womb,  
they are gently to introduce their fore and middle Fingers, or  
at least the middle Finger, anointed with Oil, up the Vagina of  
the pregnant Woman, as sar as the Mouth of the Womb, **(see***Tab.* LIV. *Fig.* I.) in order to discover whether its Mouth is  
closed or open, much or little dilated ; by which means they  
may, **at** the same time, discover whether the Delivery is near  
or nos, whether the Mouth of the Womb corresponds directly  
to the Vagins, as in *Fig.* I. or inclines to some Side; and con-

Teqnehtly whether the Situation os the UteruS is direct, which  
is the Sign of an happy Delivery., or whether it is more or less  
oblique; aS, also, whether the Head, the Foos, the Arm, cr  
any other Part, attempts its exit; from which Circumstances  
an easy or difficult Labour may, with the greatest Certainty,  
he prognosticated, as we are informed by *Deventcr. Van Hoorn,*and *JVidemannia.* in making our Searches of this Kind, we  
must observe, never to make any Attempts, except in the In-  
terVais of the Pains,which are the most proper Times for diss,  
covering what we want to know.

Before I proceed to difficult and unnatural Births, it will be  
necessary to take notice os some things relative to a natural  
Labour, both for the Instruction of those who intend to be  
Practitioners in this way, and for the general Information of  
' parturient Women, who are frequently greater Sufferers in the  
most easy Labours, by un&ilful Conduct, .than the Circum--  
stances require.

When a pregnant Woman approaches near the Term of her  
Delivery, she is attentive to every Variation of her State anff  
Condition. Nor can she be blamed for this Caution, since  
she is most deeply interested in her own Fate, and is to act the  
most considerable and important Part in the Labour. Upon  
the first Approaches of Pain, a Sense of Danger prompts her to  
implore the Assistance, either of a Physician, or the Midwife.  
These, before they make any Attempts for her Delivery, ought  
carefully to inquire into the Nature os her Pains, hecause these  
may he either false and spurious, ty of the genuine and legi-  
timate Kind.

False Pains are such as neither proceed from the Uterus, nor '  
bear downwards; but they draw their Origin either from Wind  
or Bile lodg'd in the intestines, as is obvious from the Rum-  
bling of the abdominal Vifcera, and the Tenesmus or Inclina-  
tion to go to Stool. Any Violent Commotion, a Fit of Passion,  
or a Coldness of the Body, succeeded by a Paroxysm of a Fever,  
, are Circumstances capable of exciting Pains, which, however  
violent, are not productive of a Delivery ; for which Reason  
they are called false or spurious Pains.

True and genuine Pains, on the contrary, beginning in the  
Region of the Loins, extend themselves to that of the Uterus,  
render the Pulse more full, frequent, and elevated. They, also,  
produce an unusual Redness of the Countenance, because the  
Blood, being, by their means, more agitated and heated, is os  
course more quickly and copiouby conveyed to the Face. These  
pains remit and resume their Force at certain intervals; but  
the succeeding Pain is always more severe than that which pre-  
ceded, till at last they grow so strong as to terminate in the  
Birth of the Child.

Women who have not before born Children, Very readily  
mistake the Nature of these Pains; but such as have, are suf-  
ficiently capable of distinguishing the true from the salse and  
fpimous Pains ; and aWoman, upon the Approach of her first  
Labour, is excusable in taking her Pains for a Paroxysm of the  
Colic.

. With respect to Pains, sometimes Women seel considerable  
Pains in their Bellies, for some Months hefore Labour. In these  
Cases, *La Motte* says. Purges are not necessary; and recom-  
mends Clysters of Whey only, with a Pugil of green Anise,  
*(Anis vent)* boil'd in it.

At the Approach of Labour, a Woman feels generally, for  
Tome Hours, and frequentiy for some Days, Pains in the Loins  
and Belly, which either do not bear downwards at all, or but  
very little. These they usually call *Grinding Pains,* which are  
Very troublesome and fatiguing, but, however, of great Service;  
for they contribute to the gradual Dilatation of the Mouth of the  
Womb, promote by degrees the Formation of the Waters,  
bring the Child to a due Situation for the Birth, lubricate the  
passages by expressing from the Womb an emollient and muci-  
laginous Fluid, and perhaps bear no small Part in loosening the  
Cohesion of the Placenta with the internal Surface of the  
Womb, in such a manner, that its Discharge may immediately  
follow the Birth os the Child.

A Midwife ought to he extremely cautious of putting a  
Woman upon Labour too soon; for every Pain that a pregnant  
Woman feeis in her Belly, or Loins, must not be taken for  
Labour, even tho\* the Head of the Child may he felt; because  
these Pains are not true ones, unless accompany'd with a Dis-  
charge of siimy Matter from the Uterus, and unless the Waters  
are formed.

In cafe of such Pains as these, the Woman must he kept  
-easy and quiet, and the rest must he lest to Nature.

In case these Pains are Very troublesome, they are to he  
taken off by proper Clysters, and made of emollient and carmi-  
native Ingredients. *La Motte* recommends one of half Whey,  
and half Barley-water, wherein Agrimony and Mullein have  
heen heiled, with an Addition of a Spoonful of Honey, and a  
few Aniseeds.

A Woman may have these spurious Pains for many Days,  
before 'tis necessary to give her any Assistance ; and 'tis ex-  
tremcly wrong os a Midwife, to fatigue the Woman, by put-  
ting her upon Labour, and more so, to he perpetually touching  
the Parts.

*La Motte* asserts. That all forts of Pains, in any Part of the  
Body whatever; are to be regarded in the last Days of Gesta-  
tion ; because they are frequently succeeded by, or accompany,  
true Labour-pains : Of this he gives two Instantes ; in one of  
which, an excessive Pain was felt in tlie Side ; in the other,  
the Pain was in the Thigh, and the Woman was delivered in .  
half an Hour, and the Pain entirely ceased.

Women so ill, that they seem deprived of all their Senses,  
whilst in Labour, have often a Motion with their Arms, Lips,  
or of the lower Parts ; from which the Midwife may guess at  
their being in Labour.

Labour-pains often cease for a little time aster the Waters  
stow off, hut soon return again ; however, the Author above  
quoted gives an Instance of their ceasing, and never returning  
at all. He was called in the third Day, and, upon examina-  
tion, found the Orifice os the Womb closed, but Very easy to  
he dilated) Upon introducing his Hand, he found a dead Child  
’ presenting the Back, which he brought away by the Feet.

Labour-pains will sometimes continue for eight or ten Days,  
or more, by Intervals, before they become strong enough to  
bring the Child into the World.

*La Motte, Obf.* 374. gives the Case of a Lady at her full  
Term, who was in the Evening seized with Labour-pains: The  
Mouth of the Womb was disated to the Bigness of a Crown-  
piece, and the Membrane began to be formed ; but in half an  
Hour's time the Pains ceased fill the next evening, when they  
again returned ; and then the Mouth of the Womb was Very  
much dilated, and the Membranes seemed ready to break ; but  
the Pains decreased by littie and little, and again entirely left  
her. The Morning following she was seized with an excessive  
Pain in her Leg, from the Ancle to the Knee ; which the  
Author judged not to be a Symptom of Labour, and therefore  
embrocated the Part with warm Brandy, and wrapt it up in  
a warm Napkin; upon which the Lady went to fleep, and  
waked without Pain. She continued in this manner thirty-five  
Days perfectly easy, and then the Labour-pains returning with  
Violence sufficient to break the Membranes, the Child was  
found to present with the Feet, and one Hand, which the Au-  
thor brought away by the Feet, nor without much Difficulty ;  
for the Child was extremely large, and so strong, that he was  
obliged to make use of both his Hands to bring the Feet, not  
being able to fix the Feet in one Hand, the Child withdrawing-  
one when he seized the other. This Child presented right,  
when the Lady was first of all seized with Labour ; but, the  
last time, it presented wrong.

.. The Signs which happen a sew Days hefore the Delivery,  
are the following : Some uncommon Pains are perceived in the  
Loins; .the Mother observes the Prominence of the superior  
Part of the Abdomen sunk, as it were, and depressed to the  
lower Region; She cannot walk with that Ease and Freedom she  
did before; she is seized with a preternatural Inclination to dis-  
charge her Urine frequently ; and a viscid Matter descends from  
the Uterus, in order to moisten and lubricate the Vagina, or Pas."  
sage through which the Foetus is to come into the World.

These general Signs are, in proportion as the Labour ap-  
proaches, succeeded by others ; such as, an universal Trembling  
os the Body, but more especially of the Thighs and Legs,  
which are seized with Shivering. This, however, does nor,  
like that preceeding Fevers, arise from Cold. The Mother  
also, sometimes Vomits ; a Circumstance which surprises the \*  
By-standerS, who are ignorant, that 'tis highly heneficial in this  
Case, because 'tis a Sign, that the infant, situated in a natural  
Posture, pushes with its Feet against the Bottom of the  
Stomach, in making Efforts to find a Passage into the World.  
When the Viscid Matter, discharged from the Uterus, appears  
tinged with Blood, 'tis a Sign, that the Delivery is not far off,  
tho' we are obliged to wait a longer, or a shorter time hefore it  
happens.

The Operator, who, before this, must not fatigue the Mother,  
with superfluous handling the Parts, as most Midwives generally  
do, must now touch her, in order to discover the State in  
which the Mouth of the Uterus is ; and that he may be able  
to form a judicious Prognostic with respect to the Time of the  
Delivery. If he finds the Mouth of the UteruS dilated, and  
the Membrane thrust into it, like a large Gut full of Water ;.  
’tis a Sign, that the Waters are forming, and thus pushed  
forward thy the Head of the Foetus, which is soon to follow  
them. Lastly, when, during a Violent Shock os Pain, pro-  
duced by the Efforts of the Infant, this Membrane breaks,  
and the Waters are discharged, we may he assured,. that the  
Delivery is at no great Distance.

AS a Physician cannot ascertain, that the Measures he orders  
to he taken with one Woman in Labour, will exactly suit the  
Case and Circumstances os another, who may he in a quite  
- different Condition ; so he cannot, in the Very Nature os the  
Thing, reduce his Precepts and Directions to one general Rule,  
the following of which might indeed prove heneficial to one,  
but hurtful and pernicious to others. He must therefore distin-  
guish himself from the common Herd of Midwives, who often  
treed in a beaten Path, and practise always in one manner,  
without Distinction, and without knowing whet Consequences  
it may produce.

The first Step to he taken by the Operator is, carefully to  
interrogate the Woman with respect to every Circumstance  
which has the least Tendency to make him acquainted with her  
State and Condition. He must carefully advert to every An-  
swer she makes, and guard against discovering the least Degree  
of Astonishment, even tho' she should recount Circumstances  
which give him Reason to suspect a difficult Labour. If from  
the Bulk of the Abdomen he conjectures, that two Children  
are lodged in the Uterus, or that the Posture of the Foetus is  
bad and unnatural, he must not declare his Sentiments, he-  
cause he may do that in due time afterwards. Instead of  
discovering himself to be under the Influence of Dread or  
Terror, he must assume a gay Behaviour, and assure the Mo-  
ther and By-standerS, that the Event will be happy and  
successful.

He must by no means pass too decisive a Sentence with  
respect to the Delivery ; for I have known Women, who have  
been told, that they would be deliver'd at such a particular  
Hour, become intolerably impatient after that Hour was  
pash The Moments, at any rate, seem long and tedious to the  
Patient; first much more so, when her Pain continues heyond  
the Period foretold for its End. 'Tis more prudent to specify  
a longer Time for this Purpose, than in all Probability it really  
requires, fince, in this Case, one or other of these two Cir-  
cumstances must happen ; either the Mother goes to the Time  
prefixed, or she is delivered before it: Is she is not delivered,  
she has no Occasion to he impatient, since the Time fixed for  
her Relief is not yet arrived. If, .on the contrary, she should be  
delivered before it comes, she is inclined to imagine, that the  
Assistance os the Operator has exempted her from some Hours  
of Pain, which she must otherwise have gone through.

*Mauriceau,* for a Patient in this Situation, orders a Clyster,  
Venesection, and Aliments of easy Digestinn ; such as Jelly-  
broths, fresh Eggs, and a Toast and Wine with Sugar. **At**the same time he forbids the Use of all Wines, Ratafia, and  
every thing of an heating Nature : But, as, in some Cafes, we  
ought to abstain from what he orders, and, in others, to do  
what he forbids, we must inquire when we are, and when **we**. are not, to follow his Advice.

He assigns two Reasons for his prescribing a Clyster ; which  
are, first, in order to evacuate the gross Faeces indurated in  
the Rectum, and which might, by means Of their Hardness,  
obstruct the free Passage of the Infant. The second is, that,  
by straining to discharge the Clyster, Efforts capable of bring-  
ing on the Delivery are excited : But he forgets a third,  
. which is, that the Contents of the large Intestines must be  
evacuated, lest, being pressed upon by the Head of the Infant,  
they should be discharged during the Labour; a Circumstance  
which not only sometimes happens, but, also, brings along with  
it Very considerable Disadvantages.

But these Reasons cease, if the Mother has had a Stool  
the same Day ; for, since the Faeces are evacuated, they can  
neither incommode the Infant, be discharged during the La-  
bour, nor produce Efforts necessary to a Delivery ; so that a  
Clyster must, in the Nature os the Thing, be superfluous and  
useless, in Cases where there are no Faeces in the large In-  
testines : Besides, *Mauriceau,* in several Passages, forbids the  
promo ting the Labour too hastily. Now, as Clysters have a  
Tendency to produce that Effect, they ought not to be used,  
except in Cases os absolute Necessity, which cannot possibly  
occur in natural Labours, of which we now speak.

Tho' Venesection is sometimes of singular Advantage in  
particular Labours, yet its Propriety must he indicated by some  
Symptom; but, in a natural Labour, no Circumstance  
points out its absolute Necessity. *Mauriceau,* however, warmly  
recommends it, affirming that we may safely empty the Veins  
os a Woman whose Labour is near ; because, having the In-  
fant no longer to nourish, she bias no Occasion for so large  
**a** Quantity of Bloed as she had before. But this Reason is too  
general and unlimited, to be taken in a literal and unrestrained  
Sense. If the Patient is sanguine, plethoric, or has not heen  
blooded for a considerable time hefore, his Advice may he  
followed, and Venesection may be proper enough: But is the  
Mother is weak, delicate, or has eaten little during her Pregnancy  
her Strength and Blood must be carefully preserved. Neither  
. have we any Reason to dread either those Violent Haemorrhages,

which soon prove mortal, or too copious Purgation incident to-  
Mothers of strong and robust Constitutions, or who during  
their Gestation have eaten liberally. And if those Patients,  
for whom we judge Venesection improper, should happen to  
have a small Redundance of Blood in their Veins, Nature in  
able to rid herself *os* it by the subsequent Purgations.

If a Woman should happen to he seized with Pains soon aster  
Dinner or Supper, we must give her no more Aliments ; on  
the contrary, it were to be wished, that her Stomach was  
empty, because, in consequence of that Circumstance, it  
would he less stimulated to Vomit. Some Women, in this  
Situation, are so much afraid of Hunger, that they imagine  
they should die, if they wanted Aliments for sour Hours. The .  
Operator is reduced -to a Necessity os humouring these, not in  
order to give them any additional Strength, aS they themselves  
idly imagine, but in order to satisfy their inordinate and im-  
portunate Cravings : But it would be far hetter, if the Mother  
was delivered without her taking any Aliments ; I mean, in..a  
natural Labour, which does not exceed seven or eight Hours ;  
bus, if it should happen to he protracted longer, the Patient's  
Strength must he supported by proper Jellies or Jelly-broths. "

Wines, spirituous Liquors, and all kinds os hot Compositions,  
are exprefly forbid by *Mauriceau.* I must indeed agree with  
him, that a Woman in Labour, whofe Pulse is elevated, whose x  
Countenance is inflamed by the Violence of her Pains, or  
whose Throat is overheated by her Groans and Cries, must  
not use such Substances as have a Tendency to render her  
Blond hotter, and consequently augment her Symptoms,  
Ptisan, or simple Water, are frr more proper, in order to re-  
fresh her, and lubricate her Throat.

As different Women are, during their Labours, accustomed  
to different Liquors, such as Hartshorn-water, Rosa Solis,  
Divine Waters, as they are called ; Decoctions of Sugar and  
Cinnamon in Wine, or Wine alone; the Operator, is he  
cannot intirely banish their Use, is, at least, to lesion their  
Qpantity as much as he possibly can.

As differentWomen are, also, accustomed to have themselves  
delivered in different Positions and Situations, some standing,  
others in a Chair, others on their Knees, others on a MatraS  
hefore the Fire, and others in Bed, the Operator is obliged to  
gratify their several Humours, fince, on these Occasions, their  
peevish Obstinacy is generally proof against the Remonstrances  
of Reason, and the Suggestions of good Sense.

. Before the Labour comes on, the Operator must be previoufly  
furnished with whatever will he necessary ; as Cloths, Thread  
to tie the Navel-string, and Sciffars to cut it : When all this  
Apparatus is at hand, he is patiently to wait the Increase of  
the Pains, and, during their intervals, to entertain the By-  
standerS with some agreeable Conversation, carefully avoiding Xthe Mention of difficult Labours, putting a favourable Con-  
struction upon every Circumstance, and affirming that all the  
Symptoms prognosticate an happy Delivery.

When the Pains are augmented to such a Degree, that the  
Mother can neither walk, nor sit, without the greatest Uneasi-  
ness, she Delivery is to be attempted in whet Posture **the**Surgeon thinks most commodious.

*Mauriceau* orders the Patient not to he delivered, till **the**Waters are discharged ; but, in my Opinion, this is delaying  
too long. 'Tis true, some Women have a great many Pains  
**after** the Eruption of the Waters hefore their Delivery ; but  
'tis at the same time equally certain, .that others are delivered  
during the same Pain which evacuates the Waters. For\* this  
Reason, I think, we ought not to delay so long, lest the Waters  
-heing discharged, and the Mother in an erect Posture, the In-  
fans, which is soon to follow these Waters, should fall on the  
Floor; a Circumstance which may he attended with fatal  
Consequences.

Tho' the Operator ought never to *touch* a Woman more  
frequentiy than is absolutely necessary for making a Prognostic,  
and forming a probable Judgment with respect to the Time of  
the Delivery ; yet, as some Women think themfelves ill used,  
when they are not often touched, he is often obliged to comply  
with this absurd Piece of Practice, rather to gratisy the Ima-  
gination of the Mother, than afford her any Relies.

As some Women cry as Violently on the Approach of their  
first Pains, as they might be supposed to do in the Height of  
their last, the Operator must suggest to them, that they render  
their State worse by that means ; and that the giving a proper  
Check to their Cries, till they had real Occasion for them,  
would he a Circumstance of great Advantage.

Every time the Operator thinks it necessary to touch **the**Patient, he must convey a small Portion of Butter into **the**Vagina, in order to anoint **the** Mouth of **the** Uterus ; that,  
by this means, it may dilate itself with the greater Ease and  
Expedition ; for the Length or Shortness of the Labours bear  
a Proportion to the Time it requires to open and dilate itself  
sufficiently? -

**The'** Oils and Buyer may facilitate the Dilatation os the  
.'Mouth os the Uterus, yet the Heed of the Foetus contri-  
butes more powerfully to the Production os this Effect, fince,  
at every Pain, it pushes against is, and at last, so dilates it aS to  
find a free Passage for itself: The stronger the Infant is, the  
more powerful Efforts it makes to come into the World ; and  
this is the Reason why, as some imagine. Women pregnant  
with Male Children are generally more expeditioufly delivered,  
than those whose Off-spring proves of the other Sex- . -

Women who have had frequent Opportunities of attending  
Labours, are so firmly persuaded of this, that,, when they see a  
Labour protracted, they never sail to pronounce, that the  
Tshild will he a Girl. In a word, 'tis established as a kind of  
general Rule, that Boys force their Way into the World much  
sooner than Giris,' tho’ in some Coses it happens otherwise :  
’When, for Instance, the Boy, heving a large Head, and broad  
Shoulders, cannot make its Way through the Mouth of the  
'Womb,' which is not aS yet sufficiently dilated, in this Case  
we must wait, till, by the redoubled Efforts os the Foetus, it  
is opened sufficiently, and yields a free Passage to the struggling  
Infant.

Every Effort of the Infant produces a Pain, which bears a  
direct Proportion to the Strength or Faintnefs of that Effort ;  
for which Reason severe and Violent Pains are often wished for,  
because they contribute more powerfully to the Delivery, than  
fuch as are saint and languid.

Some Women, at every Pain, endeavour to bear downwards,  
with an Intention to forward the Delivery; but as theseAttempts  
fatigue, them, and impair their Strength to no manner of Pur-  
: pose, the Operator is to advise them to reserve their Efforts, till  
the last Pains come on, when they may he employ'd to more  
Advantage.

As 'tis the Mouth of the Womb which retards the Deli-  
very, the principal Intention of the Surgeon ought to be its  
Dilatation, by anointing it now-and-then, and turning one of  
his Fingers in it, taking care, at the same time, not to impair  
it in any manner.

’ In proportion as the Mouth of the Uterus is dilated, 'tis  
silled with a Membrane distended with those Waters in which  
the Infant swims, and which are thus driven forwards by the  
Head of the Foetus. We must not, like some Midwives,  
- break this Membrane with our Naiis, in order to evacuate the  
Waters, which, among other Uses, are destined for the Lubri-  
cation of the Passage; for, if these should be discharged too  
soon, the Delivery would of course be rendered more difficult,  
since the Parts must by that means be drier: We must, there-  
fore, wait the spontaneous Evacuation of the Waters, by **the**Efforts of the Infant, who, generally. Very soon follows  
them.

When the Waters are thus evacuated, the Operator perceives  
the Head of the Infant advancing, and bearing directly on the  
Mouth os the Womb, where it, on some Occasions, remains  
for a short time, in consequence of the Resistance with which  
it meets. Sometimes the Head of a Foetus, whose Sutures  
are not aS yet formed, assumes a more oblong Figure in the  
Mouth of the Womb, in order to facilitate the Delivery. At  
last, the Infant, by its reiterated Efforts, which are now  
more Violent, because it has now more Liberty to extend itself,  
*so* dilates the Mouth os the Uterus, as to enter the Vagina.

The' this be a Circumstance of great Importance, yet the  
Delivery is not, by its means, absolutely accomplished, fince  
there is sometimes a considerable Resistance made by the ex-  
ternal Orifice, the Caruncles, the Nymphae, and Lips of which,  
with Difficulty, yield to the Passage of the Foetus. The  
Head os the Infant, in this Cofe, presents itself, and is seen;  
but cannot be disengaged without the Assistance of the Ope-  
rator, who, with both Hands passed between the Head of the  
Foetus, and the Lips of the Pudenda, is to dilate the latter ;  
then, conveying his Fingers below the Jaws of the Infant, he-is  
to extract it.

But the Extraction of the Head is not enough ; the Shoulders,  
which are sometimes with great Difficulty disengaged, must  
necessarily follow. The Operator must not for this Purpose  
draw the Head with too great Violence, since by that means,  
he might separate it from the Body ; he must, therefore, draw  
- it gently to the Right, in order to disengage one Shoulder ; and  
then to the Left, to free the other. If these Measures should  
not succeed, he must pass two of his Fingers along the Neck  
of the infant, to one of the Arm-pits, and difengage one of  
the Shoulders, and then the other, in the same manner. Thus,  
when the Shoulders are brouahr out, the rest os the Body will  
easily follow.

- The Operator must neither draw the Infant too quickly, nor  
extract it totally, till he has obscjv’d, whether the Navel-string  
.is twisted about its Neck, or any other Part os its Body ; in  
which Case he might, by Precipitation and Rashness, either  
break the Navel-string, or draw down the Secundines, winch.

not being as yet sufficiently disengaged, might bring along with  
them the Bottom os the Uterus,.to which they adhere.

When the Infant is brought alive into the World, it must he  
laid upon its Side, both that it may breathe more freely, and  
have its Face kept out os the Waters, *etc.* discharged during  
the Delivery.

The Birth and Life of the Infant may be known from its  
Cries as soon as it is hern. From the Strength or Faintness os  
these, some Women pretend io decide, whether the Foetus is  
a Boy, or a Girl; but this is an highly fallacious Circumstance,  
fince Girls are frequently capable os crying aS loud aS Boys. -

Aster the Child is born, two Steps remain to be taken,  
which are to tie the Navel-string, and bring away the Secun-  
dines, or Aster-birth. Some order the Navel string to be tied  
immediately after the Delivery, whilst others maintain, that  
the Secundines ought to be brought away first. The Abettors  
of these two Opinions advance peculiar Reasons for their re-  
spective Practices. Bus, in my Opinion, before doing either  
the one, or the other, we ought to examine, whether there is  
not another Child in the Womb; and, if there should, it is to  
be brought into the World before any Attempts are made to  
bring away the Secundines. That another still remains in the  
Uterus, maybe known, if, aster the Birth of the one,»the  
Abdomen continues large, or the Mother is seized with Pains ;  
or, is, upon the Touch, the Operator perceives a Membrane  
distended with Water, presenting itself to the Mouth os the  
Uterus. But when there is no Probability, that there is more  
than one, we are with all Expedition to attempt the bringing  
away of the Secundines.

Some Authors would have this done as soon aS the Infant is  
hem; and this was the Opinion and Practice os *Mauriceau,*who apprehends, that, during the Time employ'd in tying the  
Navel-string, the Mouth of the Womb is contracted, and by  
that means, the Extraction of the Secundines render'd more  
difficult; whereas, when 'tis taken away immediately after the  
Foetus, the Uterus has not Time to contract itself; in conse-.  
quence os which Circumstance, it may he more easily and ex-  
heditioufly brought away afterwards..

. Those, on the other hand, who order the Navel-string to be  
tied first, among whom *Clement* is one, think, that 'tis so  
much better, the sooner the Infant is taken from its Mother,  
and put into the Hands of the Assistants, in order to be cleansed,,  
and have every other thing done, winch its tender and helpless  
State requires.

. They endeavour to give an additional Sanction to this Piece  
of Practice, by alleging, that the longer the Tying of the  
Navel-string is defer'd, the more Blood is convey'd from the Foe-  
tus to the Placenta by means of the Umbilical Arteries ; that by  
tying the Navel .suing the Course os this Blood is obstructed, so  
that it remains with the Foetus; and that allowing the Insant  
to cry near its Mother, is a Circumstance which might move  
her Compassion too strongly, and by that means retard the Eli-  
mination os the Secundines.

As these celebrated Authors furnish us with pretty plausible  
and specious Reasons, to support and authorize their different  
Practices, we shall, without condemning either, endeavour to  
keep a due Medium, and bring them as near to an Accommo-  
dation as we possibly can. When, therefore, the infant is  
brought into the World, and laid upon its Side, the Operator is  
gently to pass his Hand along the Navel-string; and, is he does  
not find the Secundines adhering to tile Womb, he is to at-  
tempt their Extraction before the Navel-string is tied. But if,  
in consequence os their strong Adhesion, he should not be  
able to bring them speedily away, he is to tie the Navel-string,  
cut it, and deliver the Insant to the Assistants ; aster which,  
he is to make the most proper and ikilfuI Attempts he possibly  
can to bring away the Secundines.

When the Insant is disengaged from the Navel-string, which  
now hangs out of the Vagina, it is, in bringing away the After-  
birth, of great Service to the Operator, who must twist it  
about two or three Fingers of his Left Hand ; .then, passing his  
Right Hand up the Vagina, he must, with his Thumb and sore  
Finger, hold the Navel-string aS near the Secundines as he pos-  
sibly can; and, if, on drawing the Navel-string gentiy, he per-  
ceives the Aster-birth advancing gradually, there is fome Hope,  
that he may soon bring it away. It, on .the contrary, he per-  
ceives that it does not in the least yield to his Attempts, 'tis a  
Sign, that it as yet adheres too strongly to the Uterus. In this  
Case he must draw the Navel-string sometimes to the Right,  
and sometimes to the Left, in order gradually to disengage the  
Secundines. But this must he done gently, and without the  
.least Degree of Violence.

The Operator must of Necessity implore the Aid, not only  
of the Nurse, who, after applying one os her Hands to the Re-  
gion of the Uterus, is gentiy to press is, by passing her Hand  
several times from the Navel to the OS Pubis, bus, also, of  
the Mother, who is to blow into one of her Hands shut, aS if

*she was* blowing into a Bottie ; to retain her Breath, that the  
Breast being full of Ain, the Diaphragm, and, consequently the  
Bottom of the Uterus, may by that means he push'd down-  
wards, to make the same Efforts as if she was discharging her  
Excrements, and to put her Finger in her Throat, in order to  
excite a Vomiting. AS all these scemingly trifling Circum-  
stances are often productive of happy Effects, they are by no  
means to be neglected.

If, notwithstanding all these Measures, the After-birth can-  
not he brought away, the Operator must nor lose his Patience,  
since 'tis sometimes half an Hour, and sometimes several Hours,  
before it is discharged. In those Mothers whose Blood is gross  
and thick, who have eaten liberally, and had but littie Exercise,  
the Aster-birth is with most Difficulty, brought away, because  
it adheres strongly to the Womb.

Is through inadvertence, or a Want of due Patience, the  
Navel-string should he too strongly pull'd, three Misfortunes  
might possibly ensue; sor, first, it might be broken, a Cir-  
cumstance, which would render the extraction of the After-  
birth Very difficult. Secondly; by separating the After-birth  
with too much Haste and Precipitation from the Uterus, an  
Haemorrhage might he produced, in consequence os a Rnp-  
ture of the Veffeis of the Womb. Thirdly, if the After-birth,  
which adheres to the Uterus, was pull'd too forcibly, it might  
bring along with it the Bottom of the Womb, a Falling down  
of which often occasions the Death of the Mother.

A fltilsul Operator avoids all these Mistakes, and gains his  
Point by Dexterity and Patience. When the Mother is com-  
pletely delivered, the After-birth must be laid in some Vessel,  
in order to be examined by the By-standers, lest, if any. Misfor-  
tune should afterwards besal the Mother, it should be attributed  
to a Portion of the Aster.birth remaining in the Uterus.

As soon aS the Woman is delivered, the Pudenda are to be  
covered with a moderately warm Cloth consisting *of* several  
Folds: She is to be ordered to bring her Thighs together, and  
stretch out her Legs: She is, also, to he kept Very warm in  
Bed, and left for some time in a State of Repose, which is a  
grateful Alternative sor her former Pain and Fatigue.

Is the Operator suspects, that the Parts have been too much  
distended, or injured, by the Largeness os the Infant, especially  
in a Woman's first Labour, he must apply to them a Cataplasm  
made nt'ith Eggs, and Oil of Nuts, mix'd together, and spread  
upon Lint, over which a large warm Cloth is to be apply'd for  
its more commodious Retention.

**A** great many Women use to take Syrup of Maiden-hair,  
Oil of sweet Almonds, and Orange-juice, of which they  
make a Draught, to be taken soon aster their Delivery, think-  
ing by this means to alleviate their After-pains, and facilitate  
**the** Discharge of the Lochia : Others take Jelly-broths pre-  
pared of a Piece of Beef, Mutton, a Partridge, and Leeks.  
**I** should prefer these Jelly-broths to the former Draught, since  
the Patient requires something to support and strengthen, rather  
**than** to disgust and pall her Appetite.

Some Authors order, that the Mother should not be allow'd  
to steep for a considerable time after her Delivery ; but I he-  
Iieve this Advice is supported on no better Foundation, than  
that which directs a Person not to steep aster Venesection.

The Difficulty started above by the *French* Writers, relative  
to tying theNavehstring, and bringing away the After-birth,  
may be very easily obviated ; for a third Person, the Nurse,  
for Example, may tie the Navel-shing, and separate the Child  
from the Mother, whilst the Operator brings away the Aster-  
birth. But aS this is sometimes attended with great Difficulty,  
and as Authors do not all agree together in the manner of do-  
ing it, the following Directions may possibly he of some Use to  
the Practitioner.

The *Secundines* are those Parts, which, after the Birth of  
the Child, are discharged, as it were, by a second Birth : These  
consist os the Navel-string, the Membranes, or the Chorion  
and Amnion, by which the Foetus was surrounded in the Womb,  
and, lastly, the Placenta ; these are what we call the *After-  
birth.* When the Placenta is excluded, the others generally  
accompany it, tho’ sometimes, alter its Exclusion, a Part of  
the Membranes may continue adhering to the Uterus, and, by  
Putrefaction, produce very terrible Symptoms. The Secun-  
dines, immediately aster the Birth os the Child, generally come  
away spontaneoufly, or by the Assistance of proper Efforts made  
by the Mother. 'Tis, however, in some Cases, highly expe-  
dient to disengage and extract them with the greatest Caution  
and Circumspection : When, for Instance, they do not follow  
the Child, either on account os their uncommon Largeness,  
or their strong Adhesion to the Uterus; or when, in conse-.  
quence os the Breaking os the Navel-string, the *Placenta,* with  
Its annex’d Membranes, remains in the Uterus; sor, unless  
these he extracted with all possible Expedition, 'tis to he  
dreaded, lest the Mouth of the Uterus should close, and render  
their Extraction either highly difficult, or absolutely impossible;  
in which Case they putrefy in the Womb, excite Violent Pains,

malignant Fevers, copious Haemorrhages, and, as a great many  
Authors inform us. Death itself. Some Physiciaiis, I know,  
maintain, that the Extraction of the Secundines by the Hand  
is superfluous, since they either come away spontaneoufly soon  
aster the Foetus, or, when putrefied, ate expelled a sew Days,  
or, sometimes, a sew Weeks aster. But I think the Advice.  
Os those more safe and rational, who, unless the Secundines  
naturally follow the Foetus, *w'idsHippocrates, Celsius,* and many  
of the Moderns, order them to be forthwith extracted by the  
Hand. I am induced to declare in favour *of* this Practice,  
not only by Observations os others, but, also, by Cases which  
have occur’d to myself, where the Mothers, in consequence  
os the Secundines heing lest in the Womb, have been sub-  
jected to Violent Pains, malignant Fevers, copious Haemorrha-  
gcs, and even to Death itself. Unless, therefore, this Practice  
is contra-indicated by some Circumstance of uncommon Import-  
ance, the Mother is not to be suffer’d to quit her Posture, till all  
the Secundines are extracted, because any Part os them, lest  
behind, generally produces the most terrible Consequences.  
This must be done with the greatest Expedition, and iminedi- -  
ately aster the Birth os the Child, lest the Month of the Womb  
closing should prevent the ready Introduction of rhe Hand, .  
and; *by* that means, .render the Work Very difficult, is not  
entirely impracticable. When, therefore, the Secundines do  
not immediately follow rite Child, the Right Hand is forthwith  
to. he passed along the Navel-string into the Womb, where the  
Placenta is to he hid hold of; and extracted. But, is it should  
happen to adhere pretty strongly to the Womb, the Navel-string  
is to he cut, and tied near the Navel of the Foetus. Then the  
Part os the Navel-string adhering to the Placenta ( is to be  
twisted about the Fingers of the Left Hand, whilst the Right  
is to be passed along it, and applied to the Placenta. See *Tab.*LIV. Fry. .I3. which must be gently pulled by the Navel-  
string, till, being separated from the Uterus, it may be easily  
extracted. Is by these Measures the End cannot be ob-  
tained, the Abdomen os the Mother is to he gently rubhed  
by the Hand of an Assistant, and she is to he ordered,  
by coughing, and repeated Efforts, as in the Birth of the Foe-  
tus, to attempt the Expulsion of the After-birth; by which  
means they are often happily disengaged from the Womb, and  
excluded. But, in drawing the Navel-string and Placenta, great  
Care and Moderation are necessary, lest, thy doing it with too  
much Force, the Womb, as it sometimes happens by the Im-  
prudence of Midwives, should he drawn along with it, and the  
Life of the Mother exposed to the most imminent Danger.  
When the Placenta is extracted, the Hand is again to be pasted  
into the Womb, in order to remove Concretions of Blood, or  
the Remains of the Secundines, if there should be any, be-  
cause, by leaving these, violent Pains, and dangerous Hiemor-  
rhages, are excited. The Hand, also, is to he kept shut sor  
some rime in theDterus, till it gradually contracts itself in an  
equable manner about it, since by these Precautions Various  
Misfortunes, winch would otherwise besal the Patient, are often  
prevented.

*. These are the Rules laid down by late practical Authors ; but  
I must remark, that the second Introduction of the Hand is ut-  
terly superfluous, provided the After-birth is brought away entire  
by the first : Nor is it in the least necessary to keep the Hand  
soul in the Womb, till it contracts.*

When by these means the Adhesion os the Placenta to the  
Womb cannot he surmounted, 'tis necessary, by gently passing  
the Fingers hetween them, to disengage the one from the other ;  
which, as Experience teaches, may be done with no great Diffi-  
culty, especially if any Part of it is already freed from the  
Womb, whilst the Thumb is fixed at the Root of the Navel-  
shing, or Centre os the Placenta, and the other Fingers passed  
between the disengaged Part of it and the Womb; by which  
means it maybe gradually more and more disengaged, till at last  
a total Separation renders its Extraction easy. But, when all  
the Parts of the Placenta adhere firmly to the Womb, the Case  
is far more difficult : We are, however, to endeavour by the  
Fingers, especially the fore and middle Fingers, first gradually  
to disengage some Part os its Edges from the Womb; and,  
when the Whole is disengaged, to extract it in the manner  
already directed. But'is, in consequence os a strong Adhesion,  
this cannot be done, the Placenta is to be perforated in the  
Middle, and gradually disengaged by that means. But all  
these Measures must he taken with the greatest Caution, lest,  
by the Nails of the Fingers, or the Violence of the Pulling,  
the Womb should he injured, or forcibly extracted along with  
the Secundines ; for we know from experience, that Cases  
sometimes occur, in which the Extraction cannot , be perform-  
ed without the Application of considerable Strength ; and *Pare*mentions a Case, in which the Secundines could not possibly be  
. extracted by any Art. Misfortunes of this Kind, especially  
when the Placenta is forcibly torn from the Uterus, gene-  
rally prove mortal to the Mother. Unless, therefore, they  
can, without great Force and Violence, he disengaged; it seems.

more expedient, for some time, to abstain from manual Ope-  
ration, and rather to seek Relief from forcing Medicines, the  
most powerful of which are, the Powder of the dried Liver  
and Bile of an Eel, or Myrrh and Borax reduced to a Powder,  
and frequently exhibited to the Patient in Peny-royal, or  
Cinnamon-water, or aloetic Pilis, or some other Medicines os  
a like Nature; to which we may add a strong Clyster, or Sup-  
pository, to stimulate the Anus, or a sternutatory Powder,  
which was song ago recommended by *Hippocrates.* When  
these Steps are taken, it is more prudent to commit the rest of  
\* the Work to Nature, than forcibsy to tear away the Placenta,  
Perhaps, strongly adhering to the Womb; by which means the  
Uterus may he Violently dilacerated, and the Mother exposed  
to terrible Calamities, and, perhaps, to Death, as many Au-  
thors have observed. The like Care and Caution are to be ob-  
served, when, by the Ignorance of the Midwife, the Mouth of  
the Womb is suffered to close so far, that the Hand cannot have  
'Access to extract the Secundines.

When the Navel-string, either by the Rashness of the Mid-  
wife, its own Weakness, or its Putrefaction, especially when  
the Foetus has remain’d dead for a considerable time in the  
Womb, happens to be broken, especially near the Placenta, so  
that it can no longer he a Guide and Direction to the Aster-  
birth, it is, especially when strongly adhering, with great Diffi-  
culty found, because by theTouch alone it cannot easily he  
distinguished from the Womb, which by an unskilful Hand may  
he laid hold of, and injured, instead of the Placenta. The  
Aster-birth is, therefore, by theTouch to be carefully distin-  
guished from the Womb. When some Part of the Navel-  
string as yet remains of the Placenta, the former is to he laid  
held of, and the latter gently extracted by it; but, when it is  
wholly broken off, the Plac^pta is to be distinguish'd from the  
Womb by its Vascular and uneven Substance, in which are per-  
ceived Blood-Vessels, like those presented in *Tab.* LIV. *Fig.* I 3.  
When-the Placenta is thus sound, it is, by moving the Hand  
sometimes oneWay, and sometimes another, to he gently sepa-  
rated from the Womb, and extracted; which may be more  
. commodioufly done, if the Operator, with his other Hand,  
gently compresses that Side of the Abdomen which is hard,  
prominent, and contains the Placenta; or he may order this to  
he done by an Assistant. We must here observe, that tho' *De.  
venter,* and some others, affirm, that the Placenta is always  
lodged in the Bottom of the Womb; yet *de Graas, Slevogtius,  
Hoorn, Brunner,* and *Hatstep.,* have sound the contrary : For  
which Reason, if it is not found in the Bottom, it is to he  
sought for in the Sides, the posterior or anterior Parts, and,  
when found, disengaged and extracted. When 'tis taken away, \*  
we are carefully to examine, whether 'tis entire, or whether  
any Part of it is left : If this latter Circumstance should happen,  
. the Part left is to he sought for, and carefully extracted, toge-  
ther with the concreted Blond.'

*Ruyseh,* a celebrated Physician at *Amsterdam,* in a small  
Book wrote for that Purpose, maintain'd, that an artificial  
Separation os the Placente, when it did not follow the Hand,  
drawing gentiy, '.Yas by no means to he attempted, but lest to  
the efforts os Nature, and the Assistance of a certain orbicular  
Muscle in the Bottom of the Uterus, destined for this Pur-  
pose. This Author affirms, chat by a long Course of Experi-  
ence he had been taught, that unlucky Consequences were al-  
ways produced by introducing the Hand into the Womb, in  
- order to separate the Placenta from it; and that many Wo-  
, men, on whom this Operation had been perform'd, were de-  
stroy'd by it; whereas almost all those Women, in whom the  
Secundines adhering firmly, had been lest to the Efforts of  
Nature, happily recovered, and had the Placenta, together with  
. its Appendages, expelled. He, therefore, advises the Practi-  
tioner never to make a rash Attempt of this Kind. But aS-  
I myself, says *Heister,* and other skilful Operators and Mid-  
wives, have known many Patients destroy'd by leaving the  
Secundines in the Uterus, so I am, fays he, persuaded, that  
*Ruyseh* does not, as some.imagine, forbid every Extraction of  
the Secundines, but only a forcible andviolent one, aS inch-'  
Vious from his *Adverse Anatinn. Dec.* 2. Those Secundines,'  
therefore, which require the Assistance of Art to disengage and  
extract them, are not to be lest in the Uterus : But when they  
cannot he extracted without uncommon Violence, which is  
rarely the Cafe, or when the Mother is seized with ConVul-'  
sions, they are to be left to Nature, and the Patient is to be -  
treated with proper Medicines; for the Operator, when he can  
do no Service, is carefully to avoid doing any Injury ; and in  
Process of Time the Secundines may be spontaneoufly and hap-,  
pily expend. Instances of which have occurred to a great many  
Practitioners. *Leporinus* wrote a Treatise in *High Dutch* on  
purpose to contradict the above-quoted Doctrine of *Ruyseh:  
Cohaufen,* also, opposes the Sentiments of *Ruyseh,* with respect  
to deterring the Extraction of the Secundines. . -

’ Is, aster the Birth os one Child, there should remain another.

or more, in the Womb, the Secundines of' the first are by no  
means to he extracted, till all the Infants are brought into the  
World ; for I and others, says *Horsier,* have been experiment-  
ally taught; that by a Neglect of this Caution-violent Hae-  
morrhages have heen brought on, not only mortal to the re-  
maining Infants, bus, to the Mother.

When from the Neglect of a seasonable Extraction the Se-  
cundines are become putrefied, we must take proper Measures  
to prevent the Corruption os the Womb at the same time. If,  
therefore, the Secundines cannot he extracted with the Hand, -  
the Womb is to he preserved from Putrefaction, by frequently  
injecting every Day, by means of such a Syringe, aS those re-  
presented in ToLXXVILFry.Ia. I3. and some Vulnerary De-  
coction, such as that, for Instance, which is prepared os Agri-  
mony, Germander, or Wormwood, with the Addition os a  
certain Quantity of the Honey of Roses, and elixir Proprietatis;  
acrid Clysters must, also, he injected ; and these Measures must  
be persisted in, till no corrupted and heterogeneous Matter is  
perceived to remain in the Womb. Such Medicines must at  
at the same time he used, as have a Tendency to prevent Putre-  
section, and expel the Secundines.

. When the Placenta, in consequence of a spasmodic Con-  
strictinn of the Uterus, is retained, as it were, in a kind of  
Bag; Instances of which are recorded by some modern Au-  
thors ; this Case is sound Very difficult, especially to Practi-  
tioners ignorant os this Circumstance, who may possibly con-  
clude, that the Secundines are entirely wanting. But such  
Operators as are acquainted with Cases os this Nature, take  
the Navel-string for their Guide; pass their Hand along it; and  
when they have reached the Mouth of .this Bag, which shuts  
line the Mouth of the Womb immediately heiore the Birth,  
they introduce first one or two Fingers, and then the others,  
formed in the Figure of a Cone, into the Mouth os is, which,  
by expanding their Fingers, they dilate, till the whole Hand  
can have Access ; and then laying held of the. Placenta, they  
extract it with due Care and Circumspection. The Reader  
who defines a Variety os Observations, with respect to the. Re-  
tention of the Secundines, may consult *Mauriceau, La Motte,*and *Cohausius. Heister. Chirurg.*

When ’tis not possible to introduce the Hand into the Womb,  
in order to Ling away, the Placenta, by reason of the ^Con-  
formation of the Bones, which form the Pelvis, *LaMotte*advises to draw gently at the Umbilical Cord, and at the same  
time to make the Woman bear down strongly, to shut her Hand,  
and blow in it, and to put her Finger down her Throat, and  
make herself reach.

The same Author affirms, that the Mouth of the Womb  
never obstructs the Introduction of an Hand, provided the Bones  
of the Pelvis will admit of it.

He, also, gives an Instance where the Hand could not he  
introduced, because the Bones which form the Pelvis, lay too  
near each other; and the Umbilical Cord breaking, he was obliged  
to leave the expulsion thereof to Nature; and it came away  
three Days after, and the Woman did well.

This Author seems to have a Very bad Opinion of forcing  
Medicines, when the Placenta stays hehind, or a dead Child ;  
and advises to trust to Nature.

After the Placenta has remain'd a Day, or longer, in the  
Womb, it may frequentiy be separated and brought away by  
introducing four Fingers only. *La Motte.*

*La Motte* affirms, contrary to the common Opinion, that  
the longer the Placenta has remain'd in the Womb, the more  
easily is the Mouth of the Womb dilated, the Parts heing re-  
laxed by the continual Humidity of what is discharged.

When a redish Serosity, inclining to black, is discharged  
from the Womb, accompanied with Violent After-pains, 'tis  
a certain Sign, that a Portion of the Placenta, or Membranes,  
remain in the Womb, and then a Finger, or two, or more  
must be introduced, as it seems necessary, and the remaining  
Parts must he brought away.

*- La Motte* once met with a Placenta, that was not one third  
so thick aS usual, but membranous like an empty Bladder, and  
attached to all-the internal Circumference os the Womb, as  
others are to the Bottom.

**MISCELLANEOUS OBSERVATIONS.**

When thellneasiness about the Loins, and the other Circum-  
stances mention'd above, change into true Labour-pains, they  
press strongly on the lower Part os the Belly, and terminate at the  
Uterus and Vagina; mean timrfthe Pains grow stronger, , and  
all the other Accidents aboVe-inention'd increase, as the Head  
os the Child finks lower into the Pelvis, and advances in the  
Passage ; and then the Woman perceives frequent Motions for  
a Stool, and to make Water, without being able to do either.

Whilst the Woman is in Labour, she must, from time to  
time, he admonish'd to draw in her Breath leisurely, and not  
on. a sudden, for fear of the Child's receding when she inspires.

If the Woman is weary of a constrain'd Posture, she may,  
hetwixt the Pains, he at Isiherty to ease herself, by laying her  
. Legs strait, or somewhat altering her Posture.

. Nobody must be suffered to whisper in the Room, on any  
account whatever.

*La Motte* gives several Instances of Delivery being retarded  
by Accidents seemingly inconsiderable: As, by somebody  
whispering in the Room, winch, gyving the Woman Apprehen-  
fions of great Danger, has thrown off the Pains for many  
Hours. He, also, gives an History of a Lady, whese Pains  
ceased, upon some Apprehensions she had, lest any thing  
should be indecently exposed to his View, whilst he was laying  
her. And, he tells us of another,. whose Pains entirely ceas'd,  
upon a Person's heing in the Room, whom she did not care to  
have there; and which did not return, till she left the Room.

Nothing retards the Birth of a Child more, then Violent  
Screaming, during the Pain; and, hesides, it causes an Hoarse-  
ness, great Heat os the Lungs, and Pain in the Head. The  
.Woman must, therefore, keep her Mouth shut, and force  
downwards, as much as she can.

In a Labour, it is seldom of any Service, to be frequently  
touching the Parts, and endeavouring to dilate the Mouth of  
the Womb, by rounding the Child's Head, with the Fingers.  
On the contrary, it may, and often does, do Mischief, by in-  
flaming the Parts, and making them swell, especially in a long  
Labour. *La Motte.*

The last quoted Author will not allow, that the first Labour  
is more difficult than any of the rest.

He, also, says, that the Potion so much boasted of *len Mau-  
riceau* for promoting Delivery, made of an Infusion of Sena,  
and the Juice os a *Seville* Orange, is so far from doing good,  
that it does a great deal of Harm.

He recommends Broth, as the Very best thing that can he  
given to a Woman in Labour, provided she can drink it with-  
out Vomiting it up again. The best thing, next to this, he says,  
is a Toast and Wine.

He gives an Instance of a Woman in Labour, whose Child  
was well situated, and far advanced in the Passage ; but her  
Pains were flow and weak. The Midwife, tbrough Haste, had  
imprudently broke the Membranes. He gave her some Nourish-  
ment, and put her to Bed, where she lay from Ten at Night,  
till Five in the Morning; and then, her Pains augmenting  
with Violence, she was soon delivered.

He gives several Instances of the Waters stowing off several  
Weeks, and even Months, before Delivery; notwithstanding  
which the Wonsan has gone out herTime, and heen delivered  
of a living Child. Hence he takes Occasion to caution against  
. delivering a Woman too soon, before Nature declares the La-  
bour, and is ready sortthe Expulsion of the Child.

Tho' in the Beginning of a Labour all Circumstances seem  
favourable, and to promise a speedy and safe Delivery, yet it  
is not always certain, that the End will be answerable to so  
happy a Beginning, many Circumstances intervening, which  
may cause a long and difficult Labour, and which cannot at  
first be foreseen.

*La Motte* says, that at certain Seasons a great Numher of  
Women will die after being well delivered, and without any  
Accident ensuing, tho' os a good Constitution, and that with-  
out any apparent Cause; and this he attributes to the epidemical  
Influence of the Air.

This Author is Very much against Swathing a Woman during  
her Lying-in; for, he fays, if it is done never so littie too  
tight, it may cause a Suppression of the Lochia, insupportable  
Pains, Restlefness, Want of Sleep, Nauseas, Cough, Belchings,  
Vapours, and Oppression, which soon go off after the Bandage  
is relax'd, or taken away.

The Moment die Head of the Child is hem, the Midwife  
should apply herb- Hands flat, one on each Side upon the ears,  
and take the Advantage of the Pain that brings it so far, to  
bring the rest into the World. *La Motte.*

*La Motte* tells us, that he **was** never in any Pain about **the**Length of a Labour, provided the Membranes were not broke,  
nor the Waters run off; and says, he scarcely ever broke them,  
unless he was obliged to do it by some dangerous Accident  
happening in the Beginning, or unless there were some strong  
Reasons to apprehend it. And he adVises all Midwives to  
follow his Advice, and wait with Patience, till the Membranes  
\* break, by the Force of the Pains.

When the Waters run off at the first Pains, and leave the  
Parts dry, it causes the Woman a great deal os Trouble, espe-  
cially if the Pains happen to he flight, and so distant, that they  
serve more to weaken the Woman, than to promote the Birth.  
‘ In such a difficult Case, *La Motte* advises Patience, and by  
no means to fatigue the Woman, but to give her now-and-then  
some Nourishment easy of Digestion, as Broths, or a Toast  
and Wine, that, by keeping up her Strength and Spirits, **she**may he enabled to wait for, and support Pains, sufficient to bring

the Child into the World ; and, when such come on, the De\*  
sect os the Waters is to he supplied by Unctions. If the **Wa-**ters continue dribbling, 'tis a certain Sign of a tedious Labour.

A Woman’s Pains are never strong, so long as the Waters  
continue dribbling; but always grow stronger, when that stops;  
and then the Labour generally comes forwards. *Giffand.*

The Method of letting off the Waters, when the Mein-  
branes are too strong to be broke by Pains, is to perforate them  
with a pointed Probe, introduced carefully along the Hand, or  
hetwixt the Fingers.

*La Motte* is of Opinion, that the Waters should seldom **or**never he let off; by breaking the Membranes, Unless when **the**Child is born coifed (as 'tis Called); and then, if the Membranes  
are not broke, the Child will he suffocated. When the Mem-  
branes precede the Head of the Child, in the manner above\*  
mentioned, they make an Appearance, as if a Bladder, with **a**littie Water in it, hung out of the Vagina.

It often happens, that, immediately aster the Waters are rnri  
off, the Pains cease for some time; which is an Happiness  
the Midwife, when the Child presents wrong, or the Hand is  
to he introduced into the Uterus upon any Occasion ; because,  
during a Pain, 'tis neither proper not convenient to do it.

When black and thick Waters are discharged from the Ute-  
rus, 'tis caused by the Meconium diluted in a Portion of **the**Waters; and is a certain Sign, that the Child presents in some  
unnatural and constrained Posture. *La Motte,*

Sometimes the Waters will he discharged in great Quantities, '  
in the eighth, seventh, sixth, and eVen fifth Months of Pregnan-  
cy ;' os which *La Motte* gives many Instances, arid takes Oocaa  
fton from hence to caution against attempting the Delivery too  
soon, before Nature declares itself ready; for, notwithstanding’  
this Discharge of Waters, a Woman may go out her full Time.

*La Motte, Obs.* 334. gives the History of a Case, where a  
great Quantity of Waters were discharged suddenly from **the**Womb, without any Pain, about the end of the seventh Month,  
the Woman heing extremely big. Upon touching; he found  
the Os Internum dilated enough to admit of the Introduction  
of one Finger with Ease ; and found the Child in its Mem-  
branes entire, and no Deficiency of Waters. He advised a littie  
Rest, and the Woman in a Day's time was Very well, and  
about her Bufiness, and went out her full Time. This was **a**true Hydrops Uteri. Hence the Author takes Occasion to can-  
tion against delivering a Woman too soon, without Necessity.

He farther remarks, that, when there are great Quantities of  
Waters, the Children, tho’ moderately large, are hern either  
very weak, or dead, that the Umbilical Cord is Very large'  
but weak, and subject to break or .separate from the Placenta'  
at its Root. The Placenta, also, is Very large, and easy to  
separate from the Uterus. \*. -

If the Umbilical Cord is tied too near the Child's Belly, an  
Inflammation may ensue; if too far off, anOmphacele. If **the**Ligature is too flack, the Blond may escape through it; if too.  
tignit, it may cut tbrough the NaVel-string, and cause a fatal  
Haemorrhage.

"If, by any Accident, the Umbilical Cord is broke off pretty  
near the Belly, so as not to admit of a Ligature, *La Motte* ad-  
vises to lay a littie Button, or Pledgit, of Lint upon it, upon  
that a Plaister of Diapalma, then a Compress, and proper Band-  
age to retain it, till the Place is cicatrized, winch sometimes -  
does not happen in seven or eight Months.

The Umbilical Cord should he tied about two Inches from  
the true Navel.

**OF THE TOUCH.**

With respect to the Touch, *La Motte* is Of Opinion, that  
it is in Vain to touch a Woman in the extreme Violence os her  
Pain, because at that time the Waters are pushed downwards  
with so great Violence, and such (Quantities, that it is imposti-  
ble to know any thing certain with regard to the Situation of  
the Child; We are, therefore, to wait till the Pain is entirely  
**ever,** or at least, considerably abated.

*Deventer* is of Opinion, that the Woman should be touched  
hefore the Pain begins; for then the Membranes, which con-  
tain the Waters, are lax, and therefore the Situation of the  
Child may he easily discovered ; but then the Hand is not im-  
mediately to he withdrawn; but to he kept in the Vagina during  
the whole Pain, and eVen after it is over; for, during the Vi-  
olence of the Pain, we may perceive, whether the Child keeps  
constantly presenting towards the Orifice, in what Form the  
Waters are disposed, whether long and flender, or fiat and  
broed, whether the Pains are violent, or less sharp; and, when  
the Pains are over, we may easily perceive, whether the Pains  
have profited, or not, that is, whether they have made **the**Child sink lower. But, during the Touch, Care is to he taken,  
lest the Membranes, which contain the Waters, should he-  
broke by too rough handling, especially when they **are** much  
distended by the Vehemence of the Pains.

. A modern Author lays it down as a Rule, that the Situation  
of the Child is to he examined into during the Violence os the  
Pains. If he means before the Membranes are broke, the  
aheve-mention'd Writers seem to have more Reason on their  
Side. -

The Uses of the Touch are many; for by this are known,  
I. Whether a Woman is with Child or not; for some affirm,  
that, in the first two Months aster Impregnation, the Womb is  
closely shut, and hence appears in the Vagina to the Touch  
more acuminated, hard, and more solid; but this Hardness  
.does not appear like that of a Scinhus, from winch it is easily  
.distinguished. *Mauriceau* compares the Mouth of an impreg-  
Dated Womb to the Mouth of a Puppy just whelped, and says,  
tltat it is exactly shut, and a littie longer than hesore.

*Dev enter* is of Opinion, that it requires a great deal of  
practice to judge of Impregnation by the Touch; and eVen  
then a Man may he mistaken.

However, as. the Time os Gestation proceeds, the Orifice of  
.the Womb grows shorter, more flat, and thin ; and it is ob-  
.serVable, that, in Women who have had frequent easy Labours,  
the Mouth of the Womb is so flat, soft, and attenuated, that  
often in. the sixth, or seventh Month it opens, and the Child  
may be perceived to move within the Membranes.

The Mouth of the Womb, as the Woman advances in her  
Pregnancy, through the Extension of the Womb, diminishes  
To in all its Proportions, that, when the Woman comes near  
her Reckoning, it is perfectly flat, and almost equal with the  
Globe of the Womb; so that if becomes like a small Circle, a  
little thick at sits Entry, where the Garland is made at the  
Time of Labour. *Mauriceau.*

*Dionis* is of Opinion, that one may know the Very Time,  
and even the Very Day, that a Woman will fall in Labour, by  
*the Touch.* This Author fays, that the internal Orifice, which  
has preserved its Thickness and Solidity duing the first Months  
of Gestation, begins in the sater Months to extend itself, and  
grow flat; and, in proportion as the Time of Delivery ap-  
proaches, its Bigness diminishes, insomuch that, at last, it is  
only to be distinguished from the Body of the Womb by a  
small Protuherance, which makes the Garland in the Time of  
Labour. He gives us an Instance of a Midwife at the *Hotel  
‘Died,* who touched thirty-five Women one Afternoon, and  
foretold exactly which would Come first, which next, and so of  
the rest in. Order.

.. 2. The next thing tohe learned from theTouch, is, whether .  
. the Time of Delivery is near at hand, or at a Distance; and.

In order to judge of this, if we consider what has been said  
hesore, it will appear, that the more thin, soft, and stat, the  
Mouth of the Womb is, the nearer is the Time of Delivery.

The Mouth of the Womb is, in some Women, so dilated  
before Labour comes on, that two or three Pains at most are  
sufficient to bring the Child into the World. In others, again,  
whose Child is ill situated, and especially in those who are  
robust, advanced in Years, and with Child for the first time,  
the Mouth is so strongly closed, that it requires Very strong  
Pains in order to open it: And hence we take a Prognostic of  
- an hard and difficult Labour.

This Mouth is Very different in Women of an advanced Age,  
big of the first Child, robust, and used to labour, from what it  
. is in a tender young Woman, that has never suffered any Fa-  
tigue, and that has been tenderly brought up.

It is farther to be observed, that the Orifice of a Womb,  
which lies obliquely, has a very different Appearance from one  
that lies strait. The Orifice of a Womb, in a direct Situation,  
‘finks lower into the Pelvis, and may easily he felt all round  
with the-Fingers ; on the contrary, the Orifice of an oblique  
Womb lies so high, that it sometimes can be scarcely touched  
at all ; or, if it lies within Reach, only one halfof it can he  
. touched.

3. Again, we know by the Touch, whether the" Pains with  
which a Woman is seized are genuine or not; and the Know-  
ledge os this is of a good deal of Consequence to the Woman j  
because, on the one hand, it is Very imprudent to retard genuine  
Pains; on the other, when the Colic, or Gripes, or spurious  
Pains, are mistaken for genuine Labour, it may endanger the  
Life both of the-Woman and the Child, to endeavour to pro-  
mote them by propelling Medicines, or otherwise.

If the Woman is seized with Pains about the seventh Month,  
or at any time before the ninth complete, they are rather to  
he suspected aS not genuine, and of consequence not to he  
promoted.; but if, even before the seventh Month, true La-  
bour declares itself, it is not to be retarded, but assisted.

Genuine Pains, therefore, are easily to be distinguished by  
the Touch ; sor, if the Pains are spurious, the Mouth of the  
Womb will he closer shut, as soon as the Pain is over ; and,  
on the contrary, if the Pains are genuine, the Mouth will be  
more dilated and relaxed, when the Pain is gone; and there-  
fore the Mouth must he felt before, during, and after the  
Pain.

4 We discover by theTouch, whether aWoman in Labour  
will have an easy or difficult Time; for if the lower Part of  
the Womb, together with’ the Head of the Child, is funk into  
the Pelvis, in such a manner as to he easily felt, aS if entering  
into the Vagina, without heing obliged to introduce the Fingers  
a great Way into the Body, then an easy Labour is to he ex-  
pected.

Again, if the Mouth of the Womb is perceived to he thin,  
soft, and Very much dilated, and by its Opening the Head of  
**the** Child is felt to present first to **the** Birth, without either **the**Arm, or Umbilical Cord appearing, it is a certain Sign of an  
eafy Labour, which nothing can hinder, but the Want of suf-  
ficient Pains.

Lastly, is the Waters are formed Very broad and flat, an  
happy Delivery is soon to be expected.

On the contrary, if the Mouth of the Womb is **at a**Distance Very little, if at all, dilated, pointed, thick, and  
hard, and the Waters contracted lengthways, a difficult La-  
bour is to he expected.

5. We learn, again, bytheTouch, whether theChild is well  
or ill situated. The Situation of the Child is to be examined  
into, by the two first Fingers well anointed with Butter, Oil, -  
or Lard : The Right or Left-hand is to be made use of accord-  
ing to the Convenience of the Midwife ; for the Position of the  
Woman, and Situation of the Child, sometimes render the  
Right, and sometimes the Left-hand, most commodious.

... With two Fingers we are hetter able to take Measure of the  
Bulk and Condition of any Part we have a mind to examine,  
than with one; and hence, by introducing two Fingers, we are '  
hetter enabled to judge of the Mouth of the Womb when  
shut; and, when open, how much it is dilated; aS, also, hew,  
and in what manner, the Head, or other Parts, present.

Care must he - taken, that the Nails are pared short and  
smooth, without any Angles. '

The Fingers must be passed directly through **the** Vagina,  
rather tending downwards than upwards, till they are passed  
the Bones; and then they are to be turned upwards towards  
the Navel, where they will meet with the Womb.

It is to he observed, that the Chin of a Child, that is rightly  
situated, is inclined towards its own Breast, and the Vertex  
is placed in the Middle of the Mouth of the Womb, or else  
comes further into the Vagina; but, in order to perceive this  
distinctly, it is necessary, that the Mouth should, he open '  
enough to admit of at least one or two Fingers.

When the Mouth os the Womb is Very much dilated, **the**Head of the Child comes a good deal more forwards than **the**Margin of the Mouth ; and then the Fingers cannot be intro-  
duced farther than betwixt the Margin of the Mouth, and the  
Head os the Chihli -

.TheButtocks, Knees, or Elbow, alio, appear round, when  
they present to the Orifice, bur may he easily distinguished  
from the Head ; for the Glohe of the Head is much more  
broad and stat than either the Knee or Elbow, and is much  
harder than the Buttocks: Besides, the Head may be distin-  
guished by that soft Membrane which lies hetwixt the Bones,  
and is called the *Fontanella.*

It is of a good deal of Consequence to distinguish the Head .  
from the Buttocks, Knee, Elbow, Hands, Feet, Umbilical  
Cord, and Placenta, before the Membranes are broke, or the  
Waters stow'd off; and a Neglect or Error of this Kind is  
sometimes attended with Very ill Consequences.

Some Women are easy to be touched, others Very difficult. .  
The first have generally Very easy Labours; because, in them,  
**the** Head of the Child is sunk into the Pelvis, and points di-  
rectly to the Birth; in the others, an ill Position of the Womb,  
or bad Situation Of **the** Child, or both, generally render **the**Labour difficult.

In order to distinguish well the Position of the Womb, it  
must be observed, that, when the Womb is in a direct Situa-  
tion, the Vertex of the Child salis down of its own Accord  
into the Cavity of the Pelvis, and the Mouth of the Womb  
is easily felt at the Extremity os the Vagina; but is the Child  
is well-situated, and, at the same time, the Mouth of the  
Womb, with the Head of the Child, is placed very much  
backwards towards the OS Sacrum and Vertebrae, it is a cer-  
tain Sign, that the Body of the Womb is not in a direct Situ-  
ation, but hangs too forwards, as it frequently happens in Wo-  
men whose Bellies are large, and hang very much down : And  
hence it comes to pass, that the Mouth is touched with Diffi-  
culty, bring thrown towards the Intestinum Rectum, and Os  
Coccygis.

On the other hand, if the Mouth os the Womb is thrown  
forwards against the Os Pubis and Bladder, and for that Reason  
cannot Aide down into the Pelvis, we may be certain, -thatshe  
Body of the Womb lies too far back wards towards the Verte-  
brz of the Loins ; and for that Reason is not in .a direct Po-  
**sition,**

But if the Mouth of the Womb, and Head of the Child,  
are felt very much on the Left-side towards the OS Ilium, we  
may he sure, that the Body os the Womb has an oblique Post-  
tion, that is^lies too much on ths. Right Side. In the same  
manner, if the Mouth of the Womb, and Head ofthe Child,  
are perceived incfining to the Right Os Ilium, the Body of the  
Womb has certainly an oblique Position, and lies too much on  
the Left-side.

In the sour last-named Positions of the Womb, the Woman  
is touched with some Difficulty: The Mouth of the Womb lying  
Out os the Way, and at a Distance, a difficult Labour is to he  
expected.

6. By the Touch we, also, learn whet is to he done, in .  
order to assist theMother and Infant, during a difficult Labour.

7. We are taught by the Touch, whether a Woman should  
he delivered before the Time of Gestation is complete, or not.

It frequently happens, that before the common Period a  
Woman is seized with violent Floodings, attended with Faint-  
.. ings and Convulsions. This is caused by a Fall, a Blow, Con-  
cussion, or some Injury, or else by Violent Passions of the Mind,,  
as Fear, or Sorrow. In this Case, the whole *Placenta,* or a  
Part os it, is detached from the Womb, and the Woman must  
continue to flood, so long as the Womb is kept distended with  
its Contents: The only Remedy, therefore, is to deliver the  
Woman immediately, no Medicines heing *os* the least Efficacy  
in this Cose.

However, this Haemorrhage must be distinguished from the  
menstrual Flux, which some Women suffer for the five or six  
first Months os their Pregnancy, and sometimes longer; and  
it must, also, be distinguished from another Evacuation of  
Blood, to which some Women, especially those who are pletho-  
ric, are subject ; which sometimes happens suddenly, and in  
considerable Quantities, without any ill Consequences attend-  
ing. . '

The menstrual Flux proceeds leisurely, without any other  
Pains than such as are common upon the like Occasion, when  
a Woman is not with Child.

The other extraordinary Flux, tho' more sudden and abun-  
dant ; yet, by proper Care and Remedies, ceases in a few Days,  
sometimes Hours.

But those Floodings which destroy the Woman without, an  
immediate Delivery, break out suddenly, and in abundance,  
and flow without Intermission; except that sometimes they  
seem to abate, when the clotted Blood forms an Obstruction,  
which is only temporary : Upon this Occasion, the Mouth of  
the Womb will be found by the Touch to be somewhat opens,  
and the Secundines, is entirely detached from the Womb, will  
be felt lying upon the Orifice, and then the Delivery is aS much  
as possible to be hastened.; and, tho'the Secundines cannot he  
felt, yet it is possible they may be detached from the Womb :  
Therefore, if Medicines have no Effect, if the Flux is con-  
tinned, and if. Faintings and Convulsions increase, *it* is abso-  
lutely necessary to deliver the Woman immediately, without  
any regard to the Age of the Foetus, or the Time of Gesta-  
tion; nor are we to wait for Labour-pains, because few Wo-  
men in this Condition have any, or at least, any that are suffi-  
cient to expel the Foetus. Therefore one Finger is first to be  
‘ introduced into the Uterus, then two, and so by degrees the  
whole Hand. The Fingers are sometimes to be extended  
lengthways, and joined ; sometimes to he hentand expanded,  
in order to dilate the Orifice. Then, if the Membranes pre-  
' fent fust, they must he perforated with the Fingers; aster which,  
the Child is to he brought away by the Feet, and the Aster-  
birth to he fetched away as soon as possible. In case the Placenta  
should present first at the Orifice, that must be perforated in  
the same manner as the Membranes. See ABORT US.

At the time of Labour, when the Mouth of the Womb  
lies Very high, or Very far backwards, so as not to he felt by \_  
the Fingers, the whole Hand should be passed to make a proper  
Examination by the Touch; There is no great Difficulty in  
doing this, especially when the Woman has had Children he-  
fore. *Giffard.*

*La Motte* says, that, when the Waters are in a small Quan-  
tity, the Situation os the Child may he discovered by the  
Touch during the Pain ; but, when they are in great Quantities,  
the best Time to touch the Woman is, when the Pain is Just  
gone off

*Hippocrates,* in his Treatise *de Natura Muliebri,* Informs us,  
that, if the Mouth os the Womb is grown hard, 1 suppose  
he means scirrhous, it may be perceived by the Touch; and,  
in another Passage, he says, it seels rough.

In another Part os the same Work, he takes notice, that,  
in a Dropsy of the Womb, the Mouth thereof feels thin, and  
is scarcely perceptible.

♦ When a Physician is call'd to a Woman in Labour, he ought,

above all things, carefully to inquire of the Midwife, whet the  
particular. Posture of the Foetus in L whether natural, or unna-

rural. .The most natural Posture of the Infant is generally  
thought to he that, in which it presents with its Head turned  
downwards in such a manner, that.its Face lies towards the In-  
testinum Rectum, its Occiput towards the Bladder, its Feet  
towards the Bottom *os* the Womb, and its Vertex, or Bregma;  
directly opposite to the Mouth os the Womb, as in *Tap.* LIVs.  
*Fig.* 2. All other Postures and Attitudes are accounted unna-  
tural. There are two os theses however, which, tho', strictly  
speaking, they are not natural, yet approach Very near to it; ’  
and may, without any great Impropriety, come under that  
Denomination, fince in them the infant is hem alive sponta-  
neousiy, and with far less Assistance than is requisite in other  
difficult Labours. One os these is, when the Foetus presents 1with its Feet first ; and the Infants brought into the World  
in this manner, are call’d *Agrippa,* because a celebrated *Roman*os that Name was hern in this Posture, as is represented in  
*Fig.* 3. The other Posture, which approaches pretty nearly to  
that which is natural, is when the Nates, or Buttocks, present  
themselves to the Mouth os the Uterus, and the Infant en-  
deaVours to force its Passage from the Womb, with its Body  
almost doubled, as in *Fig. An* But these two Postures are not  
always attended with equally happy and successful Labours; for  
if the Delivery should not he carefully promoted by some fled-  
ful Hand, but the Infant should he retain’d in the narrow Pas\*  
sage for a considerable time, it must in Process of Time din,  
in consequence of the strong Compression made bosh upon it-,  
self, and the Navel-suing. However, when the Feet present  
first, the Infant may not only be more easily preserved, but,  
also, if the Work is duly gone about, more commodioufly and  
speedily extracted, especially with the Help of a fltilsuI  
Assistant. And, to speak, my Mind freely, I am of Opinion,  
that, when other Circumstances are favourable, this Posture is  
highly commodious for the Operator, hecause in it he has  
an excellent Opportunity os relieving the Mother, as will apr.  
pear from what follows. But, if the Infant should present in  
another, and a less favourable Posture, a great Variety of which  
daily occurs, such as those exhibited in *Fig.* 5. 6. 7. 8. 9. Io.  
II. I2. the Delivery may not only he difficult, and sometimes  
Impracticable, thus, also,-she Lives of the Mother and Foetus  
exposed to palpable Danger, without the .fitilsul Attempts of  
a judicious Assistant. See AGRIPPAE.

With respect to the Situation and Posture of the-Infant in  
the Uterus, unless 'tis indicated by the Prominence of the Hand,  
the Foot, or some other .Part, we must get Information from  
the Midwife ; and, lest she, in consequence os her Ignorance,  
which in sometimes surprisingly great, should give an unjust  
and fallacious Representation, we are, in the manner already  
directed, to introduce a few os our Fingers, or, if the Mouth  
of the Womb is sufficiently .dilated,, the whole Hand, in order  
to make this Discovery. But this is to he done when the Pains  
remit. *Is* the Head is contiguous to the Mouth *of* the Womb,  
which is to be carefully distinguished from other Parts, and if  
the Infant is, by the Hand or Fingers, found to he In a due  
and natural Situation, and the Labour, at the same time, does  
not succeed'happily, we are from these Circumstances to con-  
clude, that there is some Fault in theMother; such as a Re-  
. dundancesus Blood, Weakness, or Narrowness, an Obstruction,  
or a Swelling os the Parts, an oblique Situation of the Uterus,  
or some other Imperfection; or, if neither of these should be  
the Case with. the Mother, we are to conclude, that the diffi-  
cult Labour proceeds from something preternatural in the  
Foetus, such as an excessively large Head, or an incommo-  
dious Situation of it, when, for Instance, it first presents the  
Chin, the Face, the Ears, the Occiput, the Shoulder, the  
Arm, the Breast, the Back, or other Parts, which ought not  
to present themselves. If the Patient has neither sufficient  
Strength, por due Pains, whilst, at the same time, the Situa-  
tion of the Infant is natural, or if the Delivery cannot sue-  
ceed on account of the Narrowness of the Parts, as in Wo-  
men under their first Labour, or by reason of the Largeness os  
the Infant's Head, 'tis, in this Cafe, necessary the Patient  
should he. relieved by corroborating Medicines, and such as  
promote Delivery ; and, anointing the Hand with Oil, it is to  
he introduced into the Vagina towards the OS Sacrum, and the  
OS Coccygis is carefully to be repressed, especially during the  
Pains: Thus the Passage must be gradually dilated. When these  
Measures are carefully taken, the Strength os the Patiens, and  
the genuine Pains, generally return, and the Labour succeeds  
happily, provided no other Circumstances concur to render it  
difficult: Thus, if a Redundance os Blood retards the Delivery,  
a Vein is to he open'd. But when the Parts are either too  
narrow, as in Women in their first Labour, especially when  
pretty old, or preternaturally dry, 'tis expedient often to anoint  
them with Butter, Fat, Lard, Oil, or other emollient Substances  
of a like Nature ; and gradually to dilate them with the Fingers,  
and, at last, with the whole Hand. If any preternatural Mem-  
brane jhould obstruct, or blockup the Vagina, in is Ikilfully to

he cut, and removed with proper Instruments. If the Parts  
should he so preternaturally fwell'd, aS to prevent the Exit of  
the Foetus, digerent Fomentations, or Cataplasms prepared of  
the Howers of Chamomile, Elder, and Mullein, Marsh-mal-  
lows, Mallows, and other Substances of a like Nature, boil'd in  
Milk, are to he applied warm. If any Tumor, large Fungus,  
or fleshy Excrescence, Of the Vagin a should happen to render **the**Delivery difficult, these are to he extirpated in **a** proper man-  
nes, and by a shilful Hand. When the Parts are too narrow  
in consequence os a Callus of the Vagina, or Mouth of **the**Womb, when any other Cause concurs to hinder the Delivery,  
or when the Uterus, is lacerated, and the Foetus fallen into **the**Cavity of the Abdomen, then there remains a deplorable, and  
sometimes an absolutely necessary Method of Relies, which is  
to perform the Caesarean Section. If the Mother is entirely  
free from any Defect of this Kind, the Child found in a due  
and natural Posture, the genuine Tains are strong and suffi-  
cient, and yet the Birth does not succeed on account of the  
Narrowness of the Parts, the Patient, aster having discharged  
her Urine, IS to he placed in a proper Posture, or, aster **the**manner of the *French,* laid across a Bed, with her Buttocks on  
its Edge, somewhat higher than her Head. Or she may he  
placed in a Chain contrived for that Purpose, and represented in  
*Tab.* LIV. *Fig.* I 5. in such a manner, that the Foetus may flip  
**a** littie backwards; by which Tn cans the Hand of the Operator  
may have a more easy Access. She is, also, to have her Knees  
and Legs held firm, and secured by the Women about her.  
Then both the external and internal Mouth of the Womb is  
to he relaxed with Oils, Fats, or Ointments, and gradually  
dilated by the Fingers, and, if possible, by the whole Hand of  
the Operator, sitting hefore her, on a low Seat. The whole  
Pelvis is, also, to he gradually enlarg'd by repressing **the** Os  
Coccygis with the Back of the Hand, especially during **the**Pains; by which means the Head generally descends gradually,  
and, upon retracting the Hand, follows it; in winch Case, if  
it can be said hold of, it is to he gentiy drawn forwards. If  
the Foetus should happen to present itself in an oblique and pre-  
ternatural Posture, such as that exhibited in *Tab.* LIV. *Fig.* 8.  
and 9. we are, by the Hand, to attempt its Reduction to a due  
and natural Posture, not neglecting, at the same time, the Use  
.of proper Corroboratives internally exhibited, and, if the due  
Pains are wanting, of such Medicines as promote them, till  
the Delivery is happily accomplished. - If the Infant cannot  
easily he reduced to a natural Posture, its Feet are to he sought  
for, by which 'tis to he extracted as a Foetus presenting in an  
unnatural Situation. If the Membranes of the Foetus should  
happen to he so strong and firm, as not to break spontaneoufly,  
though the Mouth of the Womb should he dilated, and the  
Head perceived, and by this means the Delivery is retarded,  
and the Mother, perhaps, too much weakened, they are to he  
broken with the Naiis of the Fingers, or a small Hook con-  
trived for that Purpose. But we are by no means to attempt **the**Breaking of the Membranes, so long as the Mouth os the  
Womb is not sufficiently dilated, because by this means the  
Delivery would he rendered still more difficult.. Besides, in.  
assisting Women in hard Labours, we are carefully to abstain  
from the Use of instruments, and only employ our Hands, so  
long as the Mother has a competent Degree os Strength, and  
'the Child is perceiv'd to he alive; otherwise we run a Risque  
of severely injuring, is not of killing, the Infant with the In-  
struments. But if the Mother's Strength is exhausted, and her  
Death to he apprehended from a longer Delay, we are to take  
other Measures, and extract the Foetus by the Feet, and, if  
that cannot be done, by proper instruments; for it is hetter in  
this Case, by the Attempts os Art, to preserve, if possible, both  
the Mother and the Foetus, than by trussing too much to Na-  
ture, as the Timorous and Unskilful generally do, to neglect and  
destroy both the Foetus and the Mother.

I must here remark, that the best Authors and Practitioners  
agree, that is a Child presents in any Posture but that which  
is natural, the belt Method os Relief is to bring the Child away  
by the Feet, without attempting to reduce it to a natural Situa-  
tion ; sor thus the Birth is accelerated with less Danger and  
Difficulty, both with respect to the Mother and the Child.

We must here observe, that though this Posture, in which  
the Head of the Foetus is adapted to the Mouth of the Womb,  
and the Vagina, is looked upon as natural, yet upon account os  
the Causes above-mentioned, but especially when the Situation  
of the Uterus is oblique, a Circumstance first remarked by *Si-  
gifmunda,* and afterwards by *Deventcr* and *Hoorn,* a *Swede,* or  
when for some other Reason the Crown os the Insantin Head  
does not correspond to the Axis of the Vagina, but presents the  
Side of the Head, or the Face, as in *Fig.* 8. and 9. *Tab.* LIV.  
or the Ears, or the Occiput, it frequency occasions a Labour  
so difficult, that the Child cannot he brought into the World  
alive, either by the Force of Nature, or the Assistance of Art.  
Vnfcilful Practitioners generally, though falfly, lay the Blame

on the Bulk of the Head, when 'tis no larger than it naturally  
ought to he, and has eyen already passed the Mouth of the  
Womb. But this difficult Birth, especially if the Side os the  
Head, or Ear, present themselves, arises rather from the Sheul-  
ders, which sometimes bear against the Bones of the Pelvis, in  
fuch a manner, that they cannot he remov'd, either by the  
Force of Nature, or the Assistance of Art, especially when the  
round and llippery Head cannot he laid hold on, and commo-  
dioufly drawn out, with the Hands; by which means the Foetus  
is gradually so compressed in the Uterus, as to sail a Sacrifice  
to its Situation. Hence it is, that the most skilful are so much  
afraid of these Situations, which by the promifing Appearance  
deceive the most sagacious, that they are more willing to afford  
their Assistance in any other Cases, because in these their  
Hands can generally have Access to the Uterus, in consequence  
of which the Foetus can be extracted ; whereas in the former  
the Head is so forcibly thrust, and, as it were, wedg'd obliquely  
into the Mouth of the Womb and Vagina, and the Shoulders,  
at the same time, bear against the Bones of the Pelvis, that the  
Access of the Operator's Hand, and consequentiy the only  
Means of relieving heth Mother and Child, is prevented ; whilst  
the alluring Prospect of an happy Delivery at the Beginning, was \*  
the Cause of neglecting the proper Means of Relies, when they  
were practicable. See CAESAREA SECTIO.

. This seems to have heen the Reason, why, when all other  
Arts sail'd, in Cases of this Nature, the celebrated *Palfyn,* a  
fltilful Surgeop os *Ghent,* used neither Hooks, Forceps, or sharp  
Instruments,, for fear of tearing and destroying the Infant whilst  
alive, but a double Instrument excavated like a Spoon, or Hook,  
broad, smooth, and blunt, by the Application os which to both  
Sides os the Head, the Foetus may he extracted without a  
Dilaceration of the Head, or any other more terrible Injury,  
see *Tab.* LIV. *Fig.* I6. The real Size and Bulk of the Instru-  
ment sent me, sayS *Heister,* was only as largo again as the Fi-  
gure here exhibited. The Inventor would principally have  
Instruments of this kind used when the Foetus is still alive, or,  
at least, when its Death is not sufficiently certain. It, also,  
frequently happens, that Infants, and more especially their  
Heads, in difficult Labours os this kind, and their long Con-  
tinuance tn these narrow Parts, are so compressed and weaken'd,  
that no Remains of Lise are perceiv'd in them. Being thus  
taken for dead, sharp Hooks are employed for extracting them;  
by which means they are miserably mangled and torn to Pieces,  
I myself, fays *Hiifler,* have used this Instrument contriv’d by  
Mr. *Palfyn,* butwithout the proposed Success; for, *is* the Head  
is only gently compressed by them, the Foetus cannot be ex-  
tracted ; is, on the contrary, it should be strongly compressed,  
'tis to he dreaded, lest the tender Cranium should he crush'd.  
When Experience had taught me this Disadvantage of Mr. *Pal-  
sun’s* Instrument, I attempted an improvement os it ; for which  
Purpose I join'd them both together, by means of a moving  
Joint or Hinge, that thus the Head might he more commodi-  
oufly laid held of; but neither did this succeed upon Trial.  
This, therefore, is often an highly incommodious and disadvan-  
tageous Posture of the Insant, fince it either requires the Caesa-  
rean Section, or that, for the Preservation of the Mother, the  
Foetus should he extracted dead or alive, by the Hooks repre-  
sented in *Tab.* LIV. *Fig.* I7. 18. or by other proper Instruments.  
But we shall, in the Sequel, point out some other particular  
Means of affording Relief in Cafes of this Nature.

If the Foetus is preternaturally situated, for Example, in the  
different Manners represented in FT. y. 6. 7. 8. 9. IO. II-  
12. as, also, io the Figures exhibited by *Scipio Mcrcurius,  
lgrelfChius, Guillemeau, Mauriceau, Foelterus, Peu, Viardelius,  
Sigismund a, Deventcr, Mellius,* and others, unless these pre-  
ternatural Situations and Postures are altered by the Hand, the  
Delivery cannot, without great Difficulty, succeed; but **the**Lives, both os Infant and Mother, must be exposed to immi-  
nent Danger: For forcing Medicines, and the Efforts of the  
Mother, in such Situations of the Foetus, are so far from  
bring henesicial, that they endanger the Death os the Foetus  
by the strong Compression, of the Uterus, or even the Death  
of the Mother, or at least some formidable Disorder, in con-  
sequence of a Loss of Strength, a Violent Haemorrhage, **a**Rupture, or Gangrene of the Uterus. No Measure is, there-  
fore, more expedient in Cafes of this Nature, than, as soon as  
possible, to introduce the Hand into the Uterus, rectify this un-  
natural Posture, and extract the Foetus. Various Methods of  
obtaining this End are proposed by different Authors ; but  
they are generally so improper and pernicious, that they can  
never be reduced to Practice. But the most commodious and  
Infallible Method of reducing **a** Child to a proper and naturaI-  
Situation, and bringing it into the World, is, aster anointing  
the Hand with Oil, to introduce it into the Womb as cauti-  
oufly aS is possible, see *Tab.* LlV. *Fig. 6.* Io. and II. and  
then searching sor the Feer, -and laying hold of them, to ex-  
tract it by little and little, with all imaginableetircumspection..

This we lay down and recommend to Practitioners as the most  
important and universal Rule to he observed in reducing Chil-  
dren, and extracting them, except in a sew Casta ; when, for  
Instance, the Head deviates very little from its natural Posture,  
and may he easily reduced to it; for not only the surprising  
Constriction and Narrowness of the Ijterus os Wsomen in  
Labour hinder the Turning os the Foetus, as some os the less  
skilful Practitioners formerly directed, bur, also, the Round-  
ness and Slipperiness of **the** Head itself is generally a great  
Obstacle to its being secured in such a manner, thet it can he  
brought to a natural Posture in so little Room: And', even  
when this is attempted, is the Head should be laid hold of so  
firmly as is requisite for its being reduced to its natural Posture,  
there is considerable Danger, lest it should be com prelied, tile  
Brain injur'd, and the Eyes, or any other Part os the Head,  
hurt: So that the Advice os those who order the Foetus in **the**Uterus, however unnatural its Situation is, to be reduced, is  
not only impertinent, but hurtful and preposterous. I my-  
self am no Enemy to the Opinion of *La Motte,* who, tho’  
the Head os the h oetus can be reduced to its natural. Posture,  
-yer orders the Child to be extracted by the Feet; sor the Foetus  
**is** more expeditioufly brought away in this manner, than re-  
duced to a natural Posture; and, by this means, the Mother  
is not only speedily eased, but, also, the Infant generally brought  
Into the World alive. But when, aster a great deal os Labour,  
the Head is reduced to a natural Situation, the Delivery is nei-  
ther accomplished,-nor the Mother eased ; but the Work is  
rather left to Nature, and the Patient is to hegin her Struggles  
.afresh; which, on account os her Weakness, or some other ac-  
cidental Causes, she is frequently notable to do; so that, aster  
all, the Feet are at last to he sought sor, and the Foetus ex-  
tracted in that manner. And in this Case 'tis with the greatest  
Difficulty we-can reach the Feet, because the Head is strongly  
pressed upon by the Uterus. TheToetus, in the mean time,  
is either dead hesore this, or dies in the Extraction, whereas,  
before, it might have been brought into the World alive. The  
Mother is, also, now in a far worse Condition than at first,  
fince she osten dies aster this Usage, or is obliged for her Safety  
to have the Foetus taken away by Instruments; so that Tthink  
it sar more expedient to bring away such a Foetus by the Feet,  
than by long, and .often unsuccessful Attempts, to reduce its  
Head to a natural Situation. ... . - .

But, hesore we proceed in our Directions with respect to **the**Reduction and extraction os Children, it will he expedient  
here to point out in general, in what Cases this Reduction of  
Infants, and their Extraction by the Feet,, are necessary. It  
**Is,** therefore, to he used, first, in all Cases where any other  
Tart os **the** Body than the Heed, and especially its Crown;  
present themselves at the Mouth os the Womb. See *Tab.* LIV.  
*Fig.* 5. 6. 7. 8. 9. IO. II. *12.*

*Secondly,* In all Cases, where any other Parts of the .Body  
than the .Head are protruded thro' the Mouth of the Uterus,  
. and especially the Hand, or the Navel-string, provided the Ope-  
rator cannot so replace it, that it may not he again thrust out  
by the Access of fresh Pains.

Thirdly, When any Side os the Head, as the Ears, the Pace,  
the Chin, or the Occiput, presents in such a manner, that the  
Head may he easily reduced to its natural Situation, as in *Fig.* 8;  
and 9.

Fourthly, When either ishe Bach, or the Belly, as in *Fig.*5. and 7. or any os the Sides, present to the Mouth of the  
Womb.

: Fifthly, In natural Postures os the Foetus, when, for certain  
Caused already mentioned, the Delivery is not promoted, but  
\*tis rather to be dreaded, that the Infant cannot he hern alive,  
and that the Labour threatens Death either to the Foetus, or to  
the Mother, or to heth. Instances os this Kind are, when  
violent Haemorrhages os the Uterus, excessive Weakness, Con-  
vulsions, and Epilepsies, happen in Women during Labour,;  
for, aS; in all these Coses, both thefinetus and the Mother run  
a Risque of heing soon destroy'd, the former is to he extracted  
bythe Feet with all possible Expedition, fince 'tis hotter and safer,  
speedily to extract the Foetus, whilst heth that and the Mother  
have a sufficient Degree of Strength,, than by long and unne-  
cessary Labour to reduce the Child to another Posture, and  
thus extract it; a Circumstance which may prove detrimental  
both to the Mother, and the Child.

Sixthly, When the Navel-string is protruded from the  
Uterus, before the Head of the Foetus: For if, in this Situation,  
the Child is not immediately extracted, it soon dies, because  
the Communication and Circulation of Blood betwixt that and  
the Mother, is intercepted by the Compression of the Navel-  
string.

Seventhly, When the Womb has an oblique Situation, tho'  
.theChild should be duly situated ; for in this Case 'tis generally  
more easy to extract it by the Feet, than to reduce.the Womb  
to a direct and natural Situation, in all these, and other Cases

of a like Nature, it is, for many Reasons, and especially he  
cause Delays are dangerous, expedient to hasten the Extraction,  
rather than delay it, as *Deventcr* and *Hoorn* have sufficiently  
demonstrated.

Among the great Variety os preternatural Postures, one of  
the most dangerous, as well as common, is that, in which **the**Hand, or Arm, presents, or is protruded, as in *Fig.* χιί  
With respect to this, we laydown the following Caution 7  
that is,-in the Beginning of the Labour, the Hand of the  
Foetus is perceived through the Membranes, it often sponta-  
neousty retracts it, if the Midwife presses, and, aS it were,  
pinches its Fingers with hers, after which it often presents **the**Head, instead of the Hand or Elbow ; by which means the  
Labour is frequently rendered easy and natural, as is observed  
by *Sigisenuncla* and *Deventcr:* But, if the Waters arealready  
discharged from their containing Membranes, this Pinching is  
of no Advantage ; hecause the Infant, in consequence of the  
strong Contraction os the Uterus, cannot retract its Amur  
Most Authors, in this Cafe, advise the Midwife to replace it  
in the Uterus, bring the Head to its Mouth, commit the  
Work to Nature, and. to wait sor a natural Delivery: But  
because this requires great Labour, which is frequently unsuc-  
cessfnl, and is also accompanied with Danger, hecause by **the**Reduction we often lose the most favourable Opportunity of  
delivering the Woman ;. 'tis, in my Opinion, far more pru-  
dent forthwith to extract the Child by the Feet ; for, when it  
presents one Aim, it lies in such a transverse Posture, that the  
Head and Neck are reclined on one Side, whilst the Breast;  
Abdomen, and Feet, are turned towards the other; so that the  
Body cannot follow the presenting Arm. If, in this Case, the  
Extraction should he attempted by pulling the Arm Violentiy,  
as unikilful Midwives generally do, the Child would be more  
firmly fixed in the Passage, but could not possibly be extracted;  
unless it was imperfect, or at least Very small : Instances of  
which I have sometimes seen. .

By Attempts os this kind, on a perfect Child, the Arm will  
be torn from the Body before the Birth can be accomplished,  
especially if the Infantas either os a due Size, or. somewhat  
larger than ordinary. Lest, therefore, the Child; in this dan-  
gerous Situation, should perish together with the Mother, which  
frequently happens in a Very short time, it is highly necessary;  
fince Medicines are of no Advantage, and fince the replacing  
of the Arm, and Reduction of the Head to a natural Position,  
are os norUse; to introduce the Hand, anointed with Oil, into  
the Uterus, if Necessity requires it, aS in *Fig.* IO. and I I. Then  
searching sor the Feet, and laying hold of them in the manner  
we shall hereafter more fully direct, the Posture of **the**Child is to he inverted; and the protruded Arm heing thrust  
back by the other Hand os the Operator, the Child is to he  
brought away ; which, however, especially when the Foetus  
has remained long in such a Situation, Cannot he done without  
**a** great deal of Trouble. ...

Full Directions for conducting such a difficult and dangerous  
Delivery aS this, will be of great Service to the Operator, with  
respect to the Treatment os, a great many.others, provided he  
is acquainted with the Structure of the Bones of the Pelvis,  
and duly advects to the Situation os the Foetus.

We must always take care, .when we .intend to introduce  
the Hand into the Uterus, to make that Attempt in the Part  
of the Vagina which is contiguous to.-the *Rectum*; hecause,  
in the superior Part, the Bones of the Pubes render it less easily  
practicable. .... ... si

As Cases in which the Arm presents, or is already protruded,  
are of such Importance, as Io be a kind of Model for Practice  
in other difficult Labours ;. we therefore think it necessary .to  
be aS full and explicit upon this Point as is possible. ThatA  
Labour, therefore, of this kind, may succeed. happily, **the**Operator is, above all things, to take care, that the Patient he  
placed in a proper and commodious Posture ; because in this,  
as well as in all other Operations, 'tis not to be doubted but  
this Circumstance must contribute to the speedy, and succesSfixI  
Relies os the Patient. The Mother, therefore, must he either  
placed in a Chair made for that purpose, and furnished with **a**Back which may he depressed at the Pleasure of the Operator,  
and, as It were, transformed into a Bed, such as that exhibited  
*in Tap. csAn Fig.* I 5, Or she must be laid upon her Back  
across a Bed, or Table, or upon four Stools situated by two  
and two, opposite Io each other, with her. Plead a little **de-**pressed, her Buttocks at the Edge of the Bed, Table, or Stools,  
somewhat.higher than the rest os her. Body; and her Thighs  
carefully separated by:the Assistants, in such a manner, that **the**Operator may have a full Command os her lower Belly, and an  
easy Access to the Uterus, and the ill-situated -Foetus.. When  
these Measures are duly taken,, the next thing to he done is,  
carefully to examine which Hand os the Foetus is protruded  
from the Uterus, that by this means we may the more easily  
discover, to what Part of the Abdomen the Feet are turned.

and. Consequently, where they are to he found: If,' therefore,  
aster such a SenItiny, we should find the Feet turned to the  
Lest Part os the Abdomen, as in *Fig.* I I. anointing the Right-  
hand with Oil, Lard, or Butter, gently introducing it into **the**Uterus along the Arm os the Foetus, and placing it under the  
Armpit, the Operator is gentiy to thrust hack the Arm and  
Head, that by these means he may obtain more room for **the**Ingress and Motion of his Arm; after which, passing hss Arm  
gradually, but without Violence, along the Abdomen, Thighs,  
and Legs os the Child, he is to endeavour to lay hold os it\*  
Peet. Great Dexterity and Caution is requisite in this Attempt,  
since ’tis often Very difficult to lay hold of the FecI. which  
frequently reach a great Waysupwards, and lie at a considerable  
Distance from each other’, in some Cases, however, and espe-  
cially when the Misfortune is recent, the Uterus as yet not  
much contracted, and the Feet not separated, this Attempt  
succeeds pretty readilyr All Attempts, however, are Vain,  
tmless the Feet he laid hold of: And the Difficulty of suc-  
ceeding in this is increased, becanse the Uterus, now remark-  
ably contracted, with great Difficulty admits the Hand; whereas  
'tis, for the most part, necessary it should be introduced as far'  
as the Flexure Os the Elbow, as may he seen.in *Fig.* Io. and  
II. When, by a long Protraction of such a Scrutiny for the  
Feet, **the** Operator's Arm is hecome weary, he may with-  
draw it, and take a proper Interval os Respite, Or begin his  
Work afresh, by forthwith introducing the other Hand. .When  
**the** Feet are thus sound, **the** Child is cautioufly to he drawn  
forwards ; by which means it is turned, and at last extracted.  
But, in this Attempt, we are not to draw the Insant upwards,  
nor strait forwards, but downwards ; because there the Bones  
which form the Pubes, are at the greatest Distance. Is at first  
only one os the Feet should he found, (sor the Operator can  
rarely find both at once) it is cautioudy to he drawn a littie out  
os the Uterus, and a Fillet is to be gentiy wrapped about it,  
in order to prevent its Retraction, or Slipping-back. After  
this, the-Operator's Hand is to be passed along the internal  
Side os the extracted Foos, which is known by the great Toe,  
to the Top of the Infant's Thigh ; and thence, as in *Fig.* I2.  
descending by the other Thigh, till he comes to the Foot, he is  
ro extract it in the manner already directed. Then both Feet,  
on account of their natural Slipperiness, areto be wrapped up  
in a dry and warm Linen Cloth, that they may he the more  
firmly held, and commodioufly drawn forwards ; and thus the  
Child, provided the Belly is turned towards the Os Sacrum of the  
Mother, is to be gradually extracted. Is on account of the Nar-  
rowness of the Uterus, Or any other Cause,' I cannot, says  
*Hessite,* with my Hand reach the Foot, I generally lay hold  
of theThigh, by its means turn the Foetus, bring the Knee  
to the Mouth of the Womb, and, at last, extract the Foot  
as far as the Knee ; then I bring out the other Foot, in **the**same manner, and thus gradually extract the Foetus entire.

If during the Extraction the Child is found lying on its  
Back, as in *Pig.* 3. with its Buttocks towards the OS Sacrum  
of the Mother, then, drawingout the Legs of the Foetus, as  
fer aS the Belly, and laying hold of the Abdomen and Buttocks  
on both Sines, lest otherwise the Legs should he distorted, or  
injured, most Authors order it to be cautioufly turned in such  
**a** manner, that it may lie with the Belly towards the Os  
Sacrum of the Mother J, otherwise ’.tis to he apprehended,  
that the Chin may catch upon the Bones of the Pubes, and the  
Uterus contract itself about the Neck of the Foetus, and  
destroy it, as sometimes happens by the Ignorance of the  
Midwife. On the contrary, such Infants as are seasonably  
and cautioufly turned upon their Bellies, are generally success-  
fully brought away. We must, also, examine, by what Side it  
may he most easily turned upon Its Belly ; for 'tis frequentiy  
observed, that the Bufiness succeeds easily when the Foetus rs  
turned On a certain Side, whereas, when it is turned on the  
other, the Neck in easily distorted. If in this Turning **the**Foetus is extracted not in a streight, but in a spiral Direction,  
the Work generally succeeds the better. If the Legs of the  
Insant are extracted as far as the Abdomen, and if we are  
not inclined to alter the Posture, so as that the Face may he  
turned towards the OS Sacraum, the Hand is to he passed into  
the Uterus, along the Abdomen os the Foetus, and under the  
Arch of the Bones of the Pubes, in such a manner, that, whilst  
**the** Foetus is extracted with one Hand, the Chin and Face may  
Hide along under the other, so as not to be retained by the  
Bones.

Almost all the Moderns order the Foetus, when thus lying  
**on** its Back, to he turn’d upon its Belly ; but *Hoorn,* aikilful  
and judicious Artist in this Way, for Reasons of importance,  
doubts, whether 'tis not more expedient not to turn a Foetus  
in this Position ; but rather by other means to disengage it  
from the Bones of the Pubes, in the manner I shall afterwards  
direct, since by Attempts of this kind the Body of the Insant  
**may indeed he turned, whilst at the same time its Neck is so**

distorted and twisted, as to create more Danger to itself, and  
greater Trouble to the Operator, than a careful disengaging of  
the Head from the Bones of the Pubes would have done.  
*Hoorn. Obs.* 26. See AGRIPPAE.

Attempts to replace a protruded Arm in the Uterus are in  
this Case not only superfluous, but, al^s, frequentiy noxious, and  
sometimes absolutely impossible; for, alter finding one of the  
Feet, whilst the Insant is a turning, it is either spontaneoufly  
retracted, or easily replaced by the other Hand of the Operator,  
and soon after extracted with the Foetus ; so that the Operator, ’  
in this Case, is under no Necessity ofcreating either superfluous  
Trouble to himself, or unnecessary Pain to his Patient. If  
the Feet of the Foetus are turned towards the Right Part of  
the Abdomen, they are most commodioufly discovered, and  
brought out with the Left-hand; but, if the Operator is not  
sufficientiy dexterous with his Left-hand, he may perform this  
Operation with his Right. But, lest any one should be ignorant  
os the Reason, why, when one Foot is extracted, the other  
must he found with so much Caution, by introducing the Hand  
to the Top os the Thigh, it must be observed, that this Advice  
is necessary, lest, is there should he Twins in the Womb, the  
Leg os the wrong Foetus should he laid held of; and thus, by  
Violent Attempts to extract the Legs of two different Chil-  
dren, both should .he considerably injured. *La Matte,* and »  
later Writer, laugh at this Caution, and pronounce it  
entirely superfluous, because Twins are not included in one  
common Membrane, but each has one peculiar to itself, in  
consequence of which the Feet of the different Foetuses cannot  
he confounded and mixed with each other. But I would have  
these Authors reflect, that the Membranes may break at one  
and the same time, and consequently the Feet os the different  
Infants may be confounded and mixed: So that though this  
Caution is not always necessary; yet *Mauriceau* and *Deventer*are of Opinion, that it is nor entirely to he neglected.

The Methods os Procedure already specified and directed are  
of such a Nature, that they ferve as a kind of Medel for  
Practice, in most unnatural Postures of the Foetus ; for, as I  
have already observed, unless the Head presents duly and directly  
to the Mouth os the Womb, without any farther Delay, and  
hesore the Womb is forcibly contracted, the Feet are carefully  
to he fought for, and the Foetus is to he extracted by them ; for  
by these Measures, if taken at first, the Labour is rendered easy  
to the Mother, and the Foetus generally brought away alive.  
But, if the Infant should remain in this Posture for a considerable  
time, the Womb is so Violentiy contracted, that the Hand  
cannot without the greatest Difficulty he introduced, and per-  
form its Office. Hence many Disadvantages may accrue, both  
to the Mother, and the Foetus. A prudent Expedition is, .  
therefore, absolutely necessary in Cases of this Nature, for this  
Reason principally, that the Lise of the Foetus is endangered by  
the Violent Compression from the Womb.

From whet has heen faid, the following Rules may he  
deduced as so many practical Corollaries.

- First, When the Feet os the Child present, as in *Tab.* LIV.  
*Fig.* 3. they ought not to he put back ; much less ought the  
Head, as some direct, to he reduced to a natural Posture,  
fince this Practice scarcely ever succeeds. But the Midwife, or  
Operator, taking hold of the Feet, may hetter; sooner, and  
more effectually, extract the Child thus. Than when its Head  
is directed to the Mouth of the Womb, provided the Child,  
as we have already observed, is extracted not with its Back, but  
with its Face and Belly, towards the Os Sacrum of the Mother:  
But 'tis more convenient to deliver Women in this Cafe, when  
laid on their Backs in a Bed, than when seated in the common  
Chair contrived for this Purpose.

Secondly, If the Hand presents itfelf with one or both of  
the Feet, the Feet are to he laid hold of, and extracted, gently  
repressing the prominent Hand at the same time.

Thirdly, If the Hand presents itself with the Buttocks,  
almost the fame Measures are to he taken, provided the Feet  
can he sound ; but, is the Operator cannot lay hold of these,  
the Buttocks, together with the whole Foetus, are to be ex- '  
tracted in that Posture.

Fourthly, When after the Extraction of one Foot, the other  
cannot he sound, and when we find by the Buttock of that Side,  
that the Foot, as yet retain'd in the Womb, is bent forwards,  
and rests against the Belly of the Child, it may he extracted by  
one Foot.

Fifthly, If by one Foot the Child cannot he turned, and  
at the same time the other cannot he sound, the Foot which is  
found is to be secured by a Fillet, and drawn a little towards **the**Mouth of the Womb; then the other Foot is to he searched  
sor, and joined to the former : Thus the Child may at last he  
turned.

Sixthly, If, in extracting the Child by the Feet, the Navel-  
string should appear hetween its Thighs, we are, for a little,  
to desist from the farther Extraction, and the Navel-string is to

he drawn somewhat farther out os the Womb, so as to form a  
kind os Doubling; then, bending the Knee of one Leg, the  
entire Leg is to be passed through the Doubling ; by which  
means the Foetus may he afterwards extracted freely, and  
without the Danger of any Injury. Is, on the .contrary, the  
Navel-string was left hetween the Legs, till the whole Child  
was extracted, it might.either lacerate the Navel of the Infant,  
or happen to he broken near it, so as nor to admit os being tied ;  
from which Accident *very* terrible Symptoms sometimes arise.

Seventhly, W hen the Child is extracted by the Feet, the  
Operator, has no great Reason to he over-solicitous about the  
Arms , hecause, for the most pars, they follow the Body easily ;  
**and is** we should attempt to extract them separately, and before  
the Head, the Neck, unless assisted by other means, would he  
compressed by the Contraction of the Mouth of the Womb ;  
**and the** Death of the Child, or some other Misfortunes, brought  
on ; all which are prevented by leaving the Arms, or at least  
**one** of them, to he brought away together with the Head.

Eighthly, When only one Foot appears, as in *Fig.* I2. 'tis  
by no means necessary to thrust it heck, in order to reduce the  
Infant, and bring its Head to the Mouth of the Womb ; nor  
Ought the Child to%e extracted by this Foot alone, but 'tis  
hetter when it is extracted as far as the Knee, with the Hand  
, to seek for the other Foot, which is generally at no great  
Distance from it, aS in *Fig. 11.* and, laying hold of both toge-  
ther, to extract the Child in the manner already directed ;  
but, when one of the Legs is situated longitudinally on the  
Abdomen, we may, as has been already observed, make the  
Extraction by one Foot, provided, by laying hold of the But-  
tocks, the Operation be duly assisted.

When the Child presents its Buttocks, which it frequently  
does, as in *Fig. An* it may indeed be brought alive into **the**World, but the Labour is generally Very difficult, especially in  
Women whose Parts are not Very large ; for, as, in this Case,  
the Child must he extracted with its Body, as it were, doubled,  
and its Legs applied Io its Belly, it runs .an Hazard of being  
destroyed by the forcible Compression of the narrow Passage 4  
which frequently happens, especially when Women are de-  
liVered alone, or at least without the Assistance ofaikilful Mid-  
wife ; or, if this Misfortune should not happen, yet 'tis more  
than probable, that the Passage of the Mother must be mise-  
rably lacerated. For this Reason, is a Part of the Buttocks  
already appears, or at least is so far fallen down, that it cannot  
he commodioufly reduced, it is necessary forthwith to lay the  
Woman on her Back, with her Buttocks elevated. Then  
thrusting back the Buttocks os the Infant a h'ttie, and passing  
the Hand along the Thigh to the Knee, we must lay hold of  
**one** of the Feet, which in this Case are not at a great Distance,  
and so extract it; then the other is, if possible, to he found,  
and extracted in the same manner : But, if both Feet cannot  
possibly he sound, let that which is already laid hold of he  
extracted, and, by its means, the whole Body os the Child.  
If the Buttocks are already so far advanced, that the Child can  
neither be thrust back, nor its Foot laid hold of, then, laying  
hold os both Buttocks with both Hands, especially by intro-  
dncing the sore and middle Fingers by way of Hook at the  
Groins, the Foetus is forthwith to he artfully extracted. See  
*Fig.* 4. And this is to he done with all possible Expedition, lest  
by Delays, or the Violent Compression made by the Parts, **the**Child should be destroy'd.

- When a Child presents the Buttocks, a Midwife may easily  
he mistaken, and take them for the Head, hefore the Mem-  
braneS break; but, so soon as ever the Waters are run off, \*tiS  
easy to distinguish them.

If they are sunk low into the Passage, the Child must he  
brought in the Posture it presents in ; but then it frequentiy  
causes a long and difficult Labour. *La Motta* says, he has  
delivered a great many Women in this manner, without losing  
one; but, Is the Breech is not sunk Very low, and the Feet can  
he come at, they are to be brought down.

In case the Child cannot he brought away by the Feet, but **the**Breech comes first, the Fingers are to heintroduced on each Side  
**the** Child, into **the** Groin, aS soon as it is sunk low enough to admit  
**of it;** and by this means **the** Child is **to** he pulled forward.

In this Situation a Child frequently discharges the Meco-  
Isium ; the Buttocks are readily distinguished from the Head,  
by the Separation betwixt them ; and by the Scrotum,' if a  
Boy.

When a Child presents the Breech, and lies very high, and  
**the** Membranes are not broken, the Fingers must he introduced  
into the Vagina; and, is they are not long enough, the whele  
Hand, in order to he perfectly sure, that 'tis the Breech which  
presents, it heing otherwise Very difficult to distinguish it from  
**the** Head. This is a thing of much Consequence; for, when  
the Buttocks are sunk down low, 'tis difficult, and often im-  
possible, to bring the Child by the Feet. If, therefore, the  
Midwife cannot make herself certain, by introducing **the**Fingers, or Hand, *La Matte* advises breaking the Membranes»

in order to he further assured, and to bring the Child away by  
the Feet. .

*La Motte* also advises, to break the Membrane, and bring  
away the Child by the Feet, as soon as ever 'tis known, that it  
presents the Buttocks.

He gives a Case, where he was called in Very late, the Wo-  
man having been in Labour four Days, and the Buttocks heing  
sunk so low, that 'twas impossible to return them, and **the**Passage heing so strait, that he could not get a Nad of bin  
Fingers hetween that and the Child, much less could he pass  
his Fingers to the Groin : However, at last, he introduced,  
first, one Finger, then two, and, by degrees; the **whele**Hand, into that Part os the Vagina which is nearest the Anus,  
acting all the while Very gently ; then he passed his Hand along  
the Thighs and Legs, till he came to the Feet, which he  
Joined; and, pushing the Knees towards the Chfld'S Belly, he at  
last made way for the Feet, brought them out, and so delivered  
the Mother.

If the Shoulders of the Child, aster the Head and Neck are  
brought out, should stick in . the Womb, we are then, aster  
prudently applying our Fingers under both Arin-pits, to extract '  
the Arm which yields most easily ; and the .whele Body, being  
attracted by it, sor the most part, sollowlhyvithout any great  
Difficulty, especially is the Child is pressed towards the Intesti-  
num Rectum, where the Interstice between the Bones of the  
Pubes is largest ; which Caution is alfo to he observed in most  
other Cases. If, on the Contrary, the Child should have its  
Feet and Abdomen protruded, but stick at the Arms or  
Axillae, we are, with our Fingers, Cautioufly to extract one  
os the Arms, leavingshe other within ; then, by the Assistance  
os the extracted Arm, and the rest of the Body, we are to  
bring "away the whole Child. And this'Method generally  
succeeds pretty well, especially when the Child lies with the  
Face turned towards the Mother's Os Sacrum. The Arm left  
within, as we have already observed, hinders the Womb from  
contracting about the Neck os the Child, which it otherwise  
Very readily does, and frequently proves fatal to the Insant.

When the Shoulders are too large sor the Pastage, they cause .  
**a** difficult Labour, by sticking at the Bones *os* the Pelvis.

When the Obstacle is the Shoulder's sticking in this manner,  
the Woman has strong and repeated Throes ; the Waters stow  
off, and the Head sinks well into the Passage, but can advance  
no farther ; mean time there is an ensue Liherty to pass **the**Hand round the Head.

The Method, in this Case, is, to depend pretty muchon the  
Woman's Pains, assisting a little with the Hands placed on each  
Side the Child's Head, near the Ears; but the Head must not  
he pulled too hard, sor sear of separating it from the Body.

Care must be taken to distinguish this Cose from that where  
' the Child, presenting with the Face towards the Os Pubis, is  
hooked there by the inferior Jaw.

*' La Motte, Obs.* 46o. gives a Case of this kind, where **he**was obliged to flide this Pingers under the Arm-pits, inorder to  
bring the Child away aster the Head was protruded ; but, he  
says, the Fingers are not introduced in this manner under **the**Arm-pits, without a great deal of Difficulty.

It, alfo, frequentiy happens, that when an Infant has itj  
Feet either spontaneoufly protruded, or extracted by the Hand,  
the Mouth of the Womb is so contracted about the Neck,  
especially when the Chin and Face lie towards the Mother's  
Belly, and the Hand cannot be soon enough introduced hetween ’.  
the Face, and the Bones of the Pubes, that the-Child at last  
sticks there. In this Situation the Child cannot possibly live  
long, hecause it is retain'd, and, as it were, suffocated, by **the**Mouth of the Womb, which strongly compresses Its Necka  
If, in this Case, we should attempt forcibly to draw the  
Child directly forwards, we should he in Danger of separating  
the Head from the Body, and leaving it hehind, instead of  
bringing it away entire, especially, if the Insant lies with **.the**Face towards the Mother's Belly, and has its Chin retain'd by  
the Bones of the Pubes. For this Reason we are rather to  
endeavour, if the Face lies towards the OS Sacrum of the Mo-  
ther, to pass the Hand under the Neck, heyond the Chin and  
Mouth of the Foetus, and with two Fingers so to lay held of  
the Superior and Inferior Jaws, that the Nose may lie hetween  
them, and, pressing at the same time towards the Intestinum  
Rectum, thus gentiy to extract the Head, and whole Child.  
Most Anthers advise, that, in this Posture, the two sore Fingers  
should he introduced into the Mouth of the Child, and the  
Head, by their means, drawn out; but hecause the tender  
Jaws are easily injured, or perhaps torn off, I think the former  
Method preferable to this; and the celebrated *Hootm* is, also,  
of the fame Opinion. Is the Child should happen to lie with  
the Face towards the Mother's Belly, and its Chin stick ori  
the Bones of the Pubes, as in this Case it generally does, **we**should sooner pull the Head from the Body, than extract it,  
the Bones of the Pubes so strongly resist the Egress os the Chin.  
**Lest,** therefore, the Child should he suffocated, or have its

Head torn from the Body, the Mother is forthwith to he laid  
in a proper Posture; then, passing one Hand into the upper  
.Part os the Vagina, the Chin and upper Jaw are to be laid  
hold of in. the manner already directed, whilst with the  
other Hand, apply'd to the Region of the Pubes, the Head  
is to he carefully pressed towards the *Intestinum Rectum.* The  
Festus, in the mean time, is to be gently drawn forwards  
by an Assistant, till it is totally extracted ; which, on account  
os the strong Resistance os the Bones os the Pubes, is an Ope-  
ration so difficult, that, notwithstanding the greatest Case os the  
Operator, the Infant can Very rarely be extracted alive. But  
*Hoorn* thinks, that this End may he more commodioufly ob-  
tain’d, when an Assistant, laying hold os the Feet, raises them  
upwards, and, at the same time, draws gently, whilst the Ope-  
rator either proceeds in the former Method, or, passing his Left-  
hand under the Occiput, he is to repress the Os Coccygis,  
and with the Right manage the Face in the manner already  
mentioned. By this means the Neck and Occiput, may be  
first brought out, and, at. last, the Face, in such’ a manner,  
that the Chin may be freed and disengaged from the Bones os  
the Pubes. According to *'Hoorn,* it sometimes happens, that  
whilst we endeavour to turn the Child in fuch a manner, that  
the Belly may he turned towards the OS Sacrum of the Mother,  
the Head is not rarned along with it, but the Neck twisted ;  
and the Child being extracted aS far as the Neck, the Chin  
remains behind the Bones of the Pubes, in the same manner as  
if the Infant had not been turned. If this should happen, we  
are either to proceed in the manner already directed, or to re-  
lieve the Patient by a prudent and seasonable Introduction of  
the Hands. If a Child in this Situation is already dead, it may  
be extracted in the same manner, tho' with somewhat more  
Freedom and V iolence.

**MISCELLANEOUS OBSERVATIoNsi**

The Delivery must not be attempted when the Feet present,  
or any other Part, till the Mouth of the Womb is sufficiently di-  
lated by the Force of natural Pains, except in case of great  
Flooding or Convulsions, or a dead Child. *La Motte.*

When the Feet present, accompany'd by the Head, or the  
Head and Hands, the Head must he thrust back with one  
Hand, whilst with the other the Feet must be joined, and  
brought away.

Is both Feet cannot be found without Difficulty, a Woman  
may be delivered by one only. But *La Motie* cautions against  
drawing one Leg with the same Violence as both may be pull’d  
with, sor fear of stretching the Ligaments,’ and laming **the**Child sor ever. - ‘ .

The same Author, *Obs.* 458. reports a Case where the Feet  
presented, with the Toes towards the Mother's Belly, and the  
Heels towards the Anus; when he try'd to bring the Feet for-  
wards, he found them immoveable; upon a farther Examina-  
tion, he found, the .Buttocks os the Child were funk down,  
and kept the Knees bent upwards, in such a‘manner, as to fill  
up entirely the Passage, insomuch that it was impossible to  
move the Legs in this Situation. He delivered the Woman by  
thrusting back the Buttocks, whilst he kept hold of the Feet,  
and then brought away the Child with a great deal of Ease.

That this important Branch os Medicine may be the more  
perfect, and the hetter adapted to the Necessities of young  
Practitioners, I shall subjoin some os those Directions, which  
to me seem of the greatest Importance.

First, then, if, whilst the Membranes areas yet entire, and  
the Mouth of The Uterus sufficiently dilated, .any other Part  
than the Head is perceived by theTouch, such as the Foot,  
the Hand; the Elbow, the Axilla, the Knee, or the Navel-  
string, the Membranes may he then safely broken with the  
Nalls, or some proper Instrument; aster which, the Feet are  
to be sought for, and the Child is to he extracted by them.

Secondly, If the Head is not in its natural Situation, hut  
deviates a littie from it, and is capable of being reduced, this is  
to be attempted with the Hand ; but if jt cannot he easily done,  
the Child, lest a Delay should destroy it, is to he forthwith  
extracted by the Feet.

Thirdly, When the Waters are too soon discharged, and at  
**a** time when the Midwife is not present, we are to search  
whether any Part of the Child is to he perceived ; and, if not,  
we are to wait till some part or other 'can be distinguished by  
the Touch. If, then, we find the Heed in its natural Situation,  
an happy Labour generally ensues ; but, if any other Part pre-  
sents itself, the Feet are forthwith to be searched for.

Fourthly, When, in the Beginning of the Labour, the Child  
presents its Chin and Face, with its Forehead resting on  
the Bones os the Pubes, which is a very disadvantageous’  
Posture, then the Face is, with the Right-hand, to he so  
brought towards the Intestinum Rectum, with the fore  
and middle Fingers apply'd to the Superior Jaw in such a  
manner, that the Nose may he hetween them ; at the same  
time, with the Left-hand apply'd externally to the Pubes, the

Head of the Foetus is to he pressed down from the Os Pubis to  
the Vagina, till it comes to its natural Situation. This may he  
still more easily done, if, after introducing the Left-hand into  
**the** Vagina, the OS Coccygis is carefully depressed, whilst with  
the Right the Face is at the fame time depressed. If the Child  
has remained in this Condition for a considerable time, the  
Mother is to be laid on her Back in the manner already direct-  
ed, and the Reduction of the Head to its natural Posture at-  
tempted in the manner already, also, described. If this End  
cannot he speedfly obtain'd, or if we want to avoid so trouble-  
some a Piece of Labour, we are forthwith to pass the Hand  
under the Abdomen to the Feet, and by them, repressing at  
the same time the Head with the other Hand, to attempt **the**Extraction- of the Child. We are, also, to proceed in **the**same manner in other Cases, where, after the Waters are dis-  
charged, we find the Head reclin'd to one Side; and these  
Measures are to he taken upon the first Approach of the Pains,  
when, with the friendly Concurrence os Nature, the Labour  
generally succeeds Very well. But, if this Method cannot be  
speedily put in Practice, the Child, in order to prevent its  
Dea th, is always forthwith to be brought away by the Feet.

*La Motte* remarks, that in case a Child finks low in **the**Pelvis, with the Forehead towards the Os Pubis, and the Face  
to the Passage, 'tis a Very incommodious Posture ; but may he  
hern so by dint of Very strong Pains; but the Face of the  
Child is always Very livid, by reason of the Blood-Vessels bring  
compressed by the bending of the Neck ; hut. it soon recovers  
the natural Colour. In such a Case, the Woman is always’  
much in Pain, and has a Very difficult Labour. A Linen Cloth,  
dipt in warm Wine or Brandy, is a proper Application to take  
off the Lividness of the Child's Face.

Fifthly, If the Child should present its Neck, or .Shoulder,  
with the Head reclined to one Side, as in Fig.. 8. *Tab.* LIVi  
the Mother is to be laid on her Back, the Shoulder must he  
repressed, and the Head brought to its natural Posture. Bus, if  
this cannot he speedily done, the Feet are to be forthwith  
searched sor.

When a Child presents the lower and back Part of the Neck  
with the superior Part os the Scapulae, the Face bending to-  
wards the Breast, it must soon perish, because the Circulation  
cannot be earry'd on thro' theNeck, whilst hent in this Inanu  
net. AS soon, therefore, as it is perceiv'd, the Woman must he  
delivered ; which is the more difficult to do, in proportion as  
the Child is sunk lower into the Passage, and engaged therein.;  
*La Motte* fays, he never saw more than one Instance, where  
the Child presented in this manner; and then a Quantity of  
black Waters were discharged from the Womb, caused by the  
Meconium, which,being discharged, colour'd the Waters whereu  
with it was diluted. This Lady he Very soon delivered, thy  
passing his Hand along the Spine of the Back : When he had.  
found the Feet, he joined them together, brought them Out\*  
apd fo finished the Delivery.

'Tis not an easy matter to distinguish the Point of the  
Shoulder, when it presents, from the Knee, the Hip, or the  
Head, till the Membranes are broke, and the Waters dis-  
charged. This Situation is not Very common ; the way to he  
sure of it is, to search for the Neck on one Side, and the Arm  
on the other, after the Membranes are broken; and, when  
the thing is certain, the Feet must be found, and the Child  
brought away by them. *La Motte* says, that tho' he seldom  
or never breaks the Membranes, yet in such a Case as this,  
when he cannot be certain whet Part presents, he .breaks the"  
Membranes, and brings away the Child, as fast as he can. **I**suppose he means, after the Mouth of the Womb is sufficient--  
ly dilated. *La Motte.*

Sixthly, If the Child with its Face towards the Os Sacrum  
os the Mother, together with either of the Arms, enters the.  
Vagina, one os the Hands is to be introduced into the Vagina  
in such a manner, as to pass under the Face to the lower Jaw,  
thence to the Humerus or other Arm ; and thus let the whole  
Foetus be drawn downwards by both Arms, a Practice which  
srequentiy succeeds. . . I

Seventhly, If both Hands, together with the Head, present  
at the Mouth of the Womb, the Child is to he extracted *by.*the Feet.

Eighthly, In every transverse Situation, the Child is to he.  
brought away by the Feet. Thus, when the Back presents,  
the Hand must be introduced into the Womb before 'tis possible  
to be certain, that lris the Back, the Fingers not being long  
enough ; and then 'tis easy to lay hold of the Feet, and bring  
the Child away, without withdrawing the Hand.

The Membranes containing the Waters, must break, before  
she Hand is introduced.

*La Motte, Obs..* 328. gives a Very extraordinary History of  
a Woman in Labour, where the Waters stow'd off, the Mem-  
branes being broke by Very Violent Pains, which immediately'  
discontinued, as it often happens ; but then in some little time  
they return again , but in tins Case they never return'd at all ;

**mean time, the Mouth of the Womb contracted so very dose,**that the Midwife, and a Surgeon, that was sent for, both de-  
Clared the Woman was not with Child; which was the more  
readily believed, hecause the Woman was Very sat. The third  
Morning after the Membranes were broken. *La Motte* was  
called in, who, after asking about every Circumstance, in re-  
gard to her Breeding, Gestation, and Labour, both with respect  
to herself, and the Child, and after laying her upon her Back,  
and feeling an herd large Mass through the Integuments in the  
Womb, he pronounced her certainly with Child. He then  
laid her in a proper Situation, and, introducing his Hand, sound  
the Mouth of the Womb closely shut, but Very easy to be di-  
lated : In the Womb, he found a Very large Child presenting  
with the Back, which he brought away by the Feet, and the  
Woman did Very well.

'.This Situation is the Very worst that can happen to a Child,  
It being impossible it should he hern with natural Pains ; but is  
very easy for the Midwife, who may Very readily bring the  
Feet.

Thus, also, when the Belly presents, the Fingers are song  
enough to reach it : As soon, therefore, as the Membranes are  
broken, the whole Hand must he introduced ; and then 'tis easy  
to lay hold of the Feet, and bring the Child away. Without  
introducing the Hand, 'tis impossible to be certain, that 'tis the  
Belly which presents. *La Motte.*

The Belly is distinguished from the Bach by its larger Ex-  
tent, Softness, and by the Umbilical Cord.

The Woman should immediately he delivered, by bringing  
the Child by the Feet, tho' by the Coldness of, and want of  
Pulse in the Navel-string, it appears that the Child is dead.

If the Navel-string is return'd never so often, it will fall  
down again at the first Pain , because it can he return'd no far-  
ther than into the Vagina, the Head of the Child preventing  
its being return'd into the Womb.

It does no Good to wrap the Navel-string in warm Cloths,  
in order to maintain the Circulation.

There is less Danger of the Child, when the Navel-string.  
falls down first, and the Child presents in any unnatural Situa-  
tion, than when it presents right with the Head.. .

When the Navel-string hangs out, 'tis proper to keep **she**Woman in a warm Bed, and not to expose the Navel-string to  
the cool Air. .

*\*. La Motte* lays it down as a general Rule, that, when the-  
Navel-string presents, let whatever Part come first, **the** Wo,  
**man** should be immediately delivered.,

. When the Navel-string is perceiv'd by the Pulse to lie he-  
fore the Head of the Child hefore the Waters are flow'd off.  
*La Motte* advises to break the Membranes, and hasten Deli-  
very ; I suppose he must mean, by bringing away the Child by  
theFeet. But the Falling-down os the Navel-string cannot al\*  
ways be soreseen, before the Membranes break.

. But in such Cases, is the Pains are strong and quick, and the  
.Membranes seem ready to break, more Haste is necessary, than  
when the Pains are stow, and the Membranes not likely to  
break Very soon.

The Instant the Membranes are broke, is the Time to intro-  
dude the Hand into the Womb, in order to bring away the  
Child by the Feet; for then the Woman is without Pains, and  
that facilitates the Operation. *La Motte.*

’ Ninthly, When the Navel-string salis down with the Head,  
the Mother is forthwith to he hid on her Back, and it is to be  
thrust back hehind the Head. But if, either in this, or any  
other Posture, it cannot be retain’d in the Womb, but again  
flips down, which sometimes happens, the Child, in order to  
prevent its Death, is to be extracted by the Fees, which is easily  
done.

This is a very dangerous Case for the Child; for it almost  
always dies, especially if the Head presents first, and exactly  
filis up the Passage; for then the Circulation hetwixt the Mo-  
ther and Child is entirely obstructed. ,

In this Cafe Delivery must be hastened as much as possible,  
if the Child finks Very low immediately upon the breaking of  
the Membranes, and the Waters flowing off. But if, at the  
same time, the Pains are Very strong and redoubled, the Ex-  
pulsion of the Child must he lest to Nature, because it would  
he Very difficult, if not impossible, to turn the Child, and bring  
it by the Feet. But if the Child is not funk Very low, and  
the Intervals betwixt the Pains will admit of it, the Child  
must immediately, and without Delay, be brought away by the  
. Feet.

If the Child seems, to be dead, the best way to revive it, is  
to lay it before the Fire, to wash it with warm Wine, and spurt  
Wine into its Mouth.

Tenthly, is, whilst the Child presents in a natural Posture,  
the Navel-string is . wrapt about the Neck, the Child is not,  
indeed, in such immediate Danger, as in the preceding Cases ;  
but, as soon as this Circumstance is observed by the Midwife,

the Navel-string is forthwith to he remov'd, that the Faeth\*  
may afterwards he extracted with the greater Freedom. Bnt if  
this cannot be commodioufly done *for* sear of its breaking, it is to  
he cautioufly cut near the Neck, and by an Assistant compressed,  
till, after the Deliver}’, it may be duly tied.

In the eleventh Place, when there are Twins, which, among  
Other Signs mayhe known, if, aster one os the Infants is hem, by  
examining the Secundines, we find another Child ; or if, when  
its Waters are notas yet discharged, we perceive by the Touch  
another Membrane distended with Water; in this Case, the  
Navel-string of the Child already born is to be cut, and in the  
usual manner tied, near the NaVeL Afterwards, when the  
Membranes of the other Child are broken, if it presents duly  
with its Head, its Passage in to be forwarded and assisted. But,  
if it should happen to present in an unnatural Posture, it is  
forthwith to he extracted by the Feet, if they can possibly be  
sound. But, is its Waters are not as yet discharg'd, we are not  
to wait their spontaneous Evacuation, because this, as is often  
observed, would protract the Labour, and at once endanger the  
Mother, and'the Child ; for, is the Delivery should be delay'd,  
the Mouth of the Womb would again be so contracted, that  
the Operator could not have a proper Opportunity os affording  
any Relief to the Patient. In this Cose 'tis, therefore, expe-  
dient forthwith to break the Membranes, which at this time  
may he done without any Danger, and, by this means, relieve  
the Mother, who, for the. most part, is sussicientiy weak,  
whilst the Passages remain duly dilated.

*La Motte* blames *Mauriceau* for pretending to give any fure  
Signs of Twins ; for he fays, that a great Quantity of Waters,  
or a Very large Placenta, or both together. Very often make the  
fame Appearances as Twins, tho' the Child itself may happen  
to be Very small.

When there are Twins, immediately after the Birth of the  
first, the Hand must he introduced into the Womb, the Mem-  
branes must be broke; and the second Child must be brought  
away by the. Feet. *Chapman.*

This he seems to have learn'd from *La Mattes*

*. La Motte* affirms, that an extraordinary Largeness of the  
Belly, swell'd Legs, Difficulty in Walking, and equal Motion  
on each Side the Belly, are not certain Signs os Twins ; and  
that it is not true, that a Woman with Child of Twins comes  
some Days sooner than the natural Time; which is contrary to  
the Opinion of *Mauriceau.*

*La Motte* seems to regard more the Shape of the Belly,  
which is pointed forwards, when there is but one Child ; but,  
when there are two, the sore Part of the Belly is more flat  
and broad, and is Very full towards the Sides, and backwards.

When a Woman is with Child of Twins, if the Placenta is  
fmall, and the Quantity of Waters but littie, 'tis not necessary  
the Woman should appear more big, or be more incommoded,  
during her Pregnancy, than if she is only with Child os one.

*La Motte* advises to open the Membranes of the second  
Child, andto bringit away by the Feet always; unless the Pains  
are Very Violent; and the Child well placed, so as to he born  
immediately after the first.

: When the Aster-birth does not readily come away, the Mid-  
wife must not.pull too hard, so as to break the Cord; but must  
introduce her Hand into the Womb, and follow the Cord to its  
Root; and then, if she finds another Child invelop'd in its  
Membranes, two Ligatures must be made upon the Cord, and it  
must be divided betwixt the Ligatures; then, aS soon as the Child  
is separated from the Mother, the Hand must be introduced, **the**Membranes broke, and the Child brought away by the Feet.

Sometimes Twins have each a separate Placenta, and some- .  
times.one serves both; and then it would be of the worst Con-  
sequence to pull at the String.

Our own Country Authors all agree in advising to pass the  
Hand, and examine the Contents of the Womb; and, if there  
is not a second Child, the Placenta, Clots of Blood, and all  
Other Contents, are then readily brought away.

*La Motte* fays, a Labour os two Children is more easy  
than that of one, because the Children are smaller when **there**are two.

**WHEN THE THROAT PRESENTS.**

This in a Very uncommon Situation ; but, when it happens,  
Ft renders a Labour Very difficult. The Method of Delivery’  
mentioned by *La Motte* in this Case is, to endeavour with one  
Hand to thrust heck gently the Breast, and, at the same time,  
with the:other, to bring the Head down to the Passage. This  
must he done betwixt the Pains; and, during the Pains, Care  
must be taken to keep the Breast from sailing down again. **He**gives the History of two Cases, where he endeavour'd to do  
this; but succeeded only so sar, as to bring the Face towards  
the Passage; and in this Posture both the Children were hern,  
**one** dead, **the other alive ;** that alwe waS extremely livid and

swell’d, and was cur'd in twenty-four Honrs by Linen Cloths  
dipt in warm Wine, Or Brandy, and apply'd to the Face.

**THE EAR PRESENTING.**

One of the most inconvenient Situations a Child can present.  
is, when the Side of **the** Head comes first to the Passage, **winch**the Midwife readily distinguishes by seeling the Ear.

Midwives often are the Cause of this bad Situation, by not  
examining exactly the Posture of the Child, hefore 'tis funk  
toe low; for, when they perceive the Child's Head to come,  
they generally imagine all will do well in time, without assuring  
themselves whet Part of the Head presents.

The Method here is, if possible, to turn the Child, and  
bring it away by the Feet.

But if this, cannot he done, the Midwife must endeavour to  
place the Head right, by pushing it backwards with One Hand  
placed under theEar, and drawing down the Vertex with the  
**other.** This must he attempted immediately after the End of  
the Pain ; and ’tis observable, that the ensuing Pain will fre-;  
quently spoil what has been done during the interval.

\*Tis Very easy to bring the Child away by the Feet, irnme-  
diately aster the Waters are nm off

When the Head is so far placed right as to admit Of it, an  
Hand must be introduced stat on each Side the Child's Head,-,  
and with these the Delivery must he promoted.

But, when all these Endeavours prove fruitless, the Head  
must be brought forwards enough to admit of opening it with a  
Knife, OrSciflare; and then twoos the Fingers must he introduced  
into the Incssion, Part of the Brain he taken out, and the  
Cvild brought away by the Fingers hook'd within-fide the Cra-  
Iuum. *La Motte.*

**THE KNEES PRESENTING»**

Before the Membranes break, the Knees may easily he  
mistaken for the Head, by reason of their Hardness, especially  
If they lie at a Distance I but, when the Waters are run off,  
they are easily distinguished from the Head, being much smaller;  
and, besides, one Knee generally comes first, and the other lies  
higher up in the Passage. In this Case, the Midwife must push  
it back a little, that she may come at the Feet more readily,  
which are Very easy to he found, and by them the Child must  
he brought away.

When one Knee presents, the Child generally kneels, as it  
were, upon the Os Pubis, with the other; and this might cause  
some little Difficulty ; the Knee first presenting should not be  
brought out alone,, but should be push'd a little back, that both  
Feet, which are. Very easily found, may he join’d and brought  
out together. *La Motte.*

THE HIP PRESENTING.

There is no Part of a Child that more resembles the Head  
presenting at the Mouth of the Womb, than the Hip, by  
reason of its Roundness and Hardness ; but it cannot sink so  
low as to he engaged in the Passage, unless the Body of **the**Child is pretty much bent, and forced down by Very Violent  
Pains. When there is any Reason to suspect, that this **is the**Case, not only the Fingers, but the whole Hand, if those are  
not long enough, must be introduced high enough to ascertain,  
whether it is the Hip that presents, or not; and, if it proves  
to he so, the Hip must be push’d back sufficiently to admit  
the Hand into the Womb ; which must be introduced with as  
little Violence aS is possible; and then sliding the Hand betwixt  
the Thighs, and afterwards betwixt the Legs, which serve as  
Guides/she Feet must be found and join'd. Then the Knees  
must be push’d towards the Child's Belly, provided the Parts  
are closely contracted about it, the Feet must he brought out,  
and the Woman deliver'd, as if the Feet had presented first.

This Situation exposes the Legs and Thighs of the Infant  
to he broke more than any other. *La Motte.*

**' OBLIQUE SITUATION OF THE WOMB.**

When in the Beginning of the Labour, or at least immedi-  
ately after the Waters are discharged, the Mouth of the Womb,  
and consequently the Crown of the Infant's Head, .does not  
correspond directly to the Vagina, but either reclines to one  
Side, or backwards to the Os Sacrum, or towards the Bones  
os the Pubes, an highly dangerous Labour is to be dreaded ;  
because, aS has heen already observed, this Circumstance pro  
ceeds from an oblique Situation of the Womb in the Abdo-  
men ; which the Operator may at first discover by the Touch,  
hath from the Situation of the Mouth of the Womb turned  
to some Side; and from the Abdomen of the Mother, when  
**the** Womb, with the Child, is found to he highly prominent.  
As in this Case the Labour rarely succeeds without the Assist-  
ance os the Hands, unless the Obliquity of the Womb should  
happen to be Very small, the Mother is immediately to he said  
on her Back, either in a Bed, or on a proper Seat, with her But-

tocks somewhat higher than her Breast. After which we are,  
by introducing one of the Hands into the Vagina, to attempt  
rhe Reduction of the Mouth of the Womb, and consequently  
of the infant’s Head, to a natural Situation. This must he  
attempted in the following Manner: If the Head of the Child  
inclines towards the Right Os Ischium,’ and thus the Womb,  
together with the Buttocks and Feet of the Child, is per-  
ceived in the Left Hypochondrium, with one Hand in tho '  
Vagina, the Mouth of the Womb, together with the Hoad  
of the Child, is, during every Paroxysm os the Pains, to he  
pressed from the Right to the Lest Ischium, whilst the Womb  
itself, with the rest of the Child, is, either by the Operator's  
other Hand, or that of an Assistant, apply'd to the Side of  
**the** Abdomen, gently pressed from the Lest to the Right Hy-  
pochondrium. By these means it frequently happens, that **the**Head, sometimes sooner, and sometimes later, enters the Va-  
gina in a strait Direction, and the Labour succeeds happily.  
If, on the contrary, the Mouth os the Womb, and Head of  
the Child, are inclined to the Left Os Ischium, the Reverse  
of the former Operation is, also, to he perform'd with the  
Hands; and from these we may easily judge what Measures  
are to he taken, when the Mouth os the Womb, and **the**Crown of the Infant's Head, incline to the Os Sacrum, which  
often happens, or are turn'd towards the OS Pubis; for when  
the Mouth of the Womb is with one Hand remov'd from the  
OS Sacrum, and with the other apply'd externally to the Ab-  
domen above the’Bones of the Pubes, pressed, till it corresponds  
directly to the Vagina, the Descent os the Child is afterwards,  
as in other Cases, to be promoted. Bus, with respect to all  
these Cases, 'tis to he observ'd, that if this Reduction of the  
Womb and Child cannot be soon accomplish'd, or if the Foe-  
**tus** has remained long in such a Situation, lest that, or' the  
Mother, should be destroy'd, especially if she is afflicted with  
an Haemorrhage from the Womb, Convulsions, or feinting  
Fits, the Feet are forthwith to he searched for, and the Child  
by them is to .he extracted; which Method is generally pre-  
fet'd to all others, as being at once more easy and expeditious.

But, the most difficult and dangerous - Case, is justly ac-  
knowledged to he that in which the Head of the Child  
is so far fallen down, into the Vagina as to he seen ; and at the  
same time is so firmly fixed there, that it can neither proceed  
farther, nor without the greatest Difficulty he extracted by  
means of the Hands; for this Posture, as well as the precede-  
Iing, often deceives the most Ikilful, by its specious and natu-  
ral Appearance at first ; whilst, as we cannot often know whe-  
ther the Child is dead or alive, both that and the Mother are  
in Danger of being destroy'd, unless it is speedily extracted  
either with the Hands, or with proper Instruments. The pre-  
ternatural Bulk of the Head is commonly blam'd as the Cause of  
this difficult Labour ; but generally without Reason, since it  
has already passed the narrow Mouth of the Womb: But **tho**true Cause is rather to he ascribed to a bad Position of.the.  
.Womb, and Shoulders of the Child, the latter of which touch  
on the Bones of the Pubes, and the former on the Spine of **the**Back, astLsoorn justly observes, whilst at the same time, in such  
a Posture, One of the Ears is generally turned upwards, and  
**the** other downwards. But because, in this Situation, **the**Shoulders are retain’d by the Bones of the Pelvis in such a  
manner, that they can neither come forwards spontaneoufly, -  
nor without the greatest Difficulty be extracted by the Hands of  
the Midwife, there are two Methods of Procedure directed.  
The first is, with the two fore Fingers of each Hand gradu-  
ally to press down the Head from the Bones of the Pubes to-  
wards the intestinum Rectum, particularly at the Approach of  
Pains, in such a manner, .that it may descend as near that and  
the OS Coccygis as is possible. After. Attempts of this kind  
have heen made for several times, the Head is to be drawn  
forwards with **the** four Fingers of both Hands placed round  
about it, whilst **the** Lips os the Pudenda are to be gradually  
dilated below it; by winch means the Head is so disengaged,  
that the Hands may be applied behind the Ears or Occiput,  
and the Head extracted by them; which Practice, according to  
*Hoorn,* frequentiy succeeds Very well. Sometimes, however,  
this Method does not succeed; in which Case the Arm, espe-  
cially the inferior, is to he searched for, extracted, and by its  
means the rest of the Child freed from the Bones of the Pubes,  
and brought away, according to the Directions of *Hoorn,*

The second Method is, aster with the Fingere pressing down  
**the** Head, as much as possible, towards the Intestinum Rectum,  
to anoint the Left Hand, all except the Thumb, with Oil, and  
to introduce it under the Head, so sar into the Vagina, that  
**the** Extremities of the Fingers may he capable of grasping **the**Head like a Glohe. .Then with the Fingers of the Right Hand  
introduced in the superior Parts os the Vagina, under the Bones  
of the .Pubes, the Head is to he said hold os; and, if the Pains  
should he defective, we are to order the Mother to beardown as.

much as is possible, in order to promote the Delivery, whilst the  
Operator, in the mean time, draws both Sides of the Head with  
his Hands, and endeavours to put the Perinaurrn and Lips of  
the Pudenda hehind it, which, according to *Hoorn,* is fre-  
quently attended with Success. When the Head is extracted,  
the Child is to he laid held of about the Neck, and its Head  
drawn obliquely upwards, shaking it, at the same time, back-.  
wards and forwards, whilst with the other Hand introduced into  
the Womb, under the Neck, the Operator is to seek for the  
adjacent Arm, extract it, and, by drawing it obliquely, so to  
turn the Infant, as that it may he flat on its Belly ; after which  
'tis so easily extracted, that it rather seems to come into the  
World spontaneously. But when, by none of these Measures,  
the Head can be extracted, which sometimes happens, as we  
' learn not only from Experience, but, also, from the ObserVa-  
tionsof the most skilful Authors, such as *Mauriceau, Deventcr,  
'Haorn,* and *La Motte ,* and when the Strength of the Mother

is gradually impair'd, or is Convulsions and Flooding should sue-  
ceed, by which means herLise is endanger'd; in this Case there  
remains only one Remedy, which is, by Instruments to extract  
the Foetus, though alive, with as littie Caution as if it was  
dead. This may he done, first, by opening the Cranium, either  
with a Knife, or a Pair of Scissars, and extracting the Brain,  
either with the Fingers, or a Spoon. Thus, when the Cranium  
is collaps'd, it is more easily extracted either by the Hands, or  
by a large Forceps used for extracting the Stone of the Bladder;  
or, as *Deventer* advises, by a broad Fillet, pasted carefully about  
the Neck; which Method, he says, proves successful, even when  
the Brain is not extracted from the Cranium. . But if the Child  
cannot be brought away, when the Brain is taken from the Cra-  
nium, the Shoulders are to be freed from the Bones of the  
Pubes, and the Foetus is to be extracted by them: Or,

*Secondly,* This End may be obtained by means of an Hook,  
like those represented in *Tab.* LIV. *Fig.* I7. and I8. instead of  
which, in Cases of absolute Necessity, *Hoorn* recommends a  
large Natl, bended in form of an Hook, with a Cord tied about  
its Top, that it may be the more forcibly pulled*: Or,*

*Thirdly,* The Head may be brought away by a particular  
Instrument,, invented by *Mauriceau,* and commonly known by  
the Name of *Tore-tele,* to which, however, *Deventer, Hoorn.*and *Hester,* preset. Hooks, as more commodious. The same  
Measures are very: nearly to be taken in other Cases, where  
the Foetus cannot be extracted by the Assistance of the Hands,  
and especially in case os monstrous Children, such as those with  
two Heads, is the Lise of the Mother is expos'd to Danger.

When theWoman has exceedingly Violent and repeated Pains;  
when the Waters are flow'd off, and the Child, though well  
situated, is at a Distance, and advances but flowly ; when the  
Child, being advanced betwixt the Os Sacrum and Pubis, low in  
the Vagina, sticks there, without retiring betwixt the Throes,  
though the Intervals are Very long ; there is then Room to .ap-  
prehend, that the Largeness of the Head retards the Birth. .

When the Case is thus, the Head os the Child, and Face is  
much swelled and livid; this is soon cured by a Linen Cloth dipt  
in warm Wine, and applied to the Parti *La Motte..*

*ssea Motte* Very much blames the Use of Hooks. His Me-  
thod of delivering a Woman, when the Child's Head sticks in  
the Passage, and cannot be protruded hy the Pains, is thus, pro-  
vided he is certain of the Child'S bring dead : He plunges a Pain  
os Scissars into the Head, about half the Length of the Sciflars,  
and opens them ; and by this means makes an Aperture large  
. enough to take out Part of the Braln, and, if necessary, to take  
away some of the Bone ; he then takes held of the BoneS of the  
Cranium, and brings away the Child. ‘

He says, this Method may be practised without either the'  
Woman, or any body present, knowing, that any instrument  
was made use os.

- But the Very best way, in such a Case, is, if possible, to turn  
the Child, and bring it away by the Feet. However, this can-  
not always he done; for the Head is sometimes so lock'd betwixt  
the Bones of the Pelvis, that 'tis impossible to remove in.

\* This Author is of Opinion, that most difficult Labours of  
this kind are caused by the superior Part of the Os Sacrum,  
where it is articulated to the inferior Vertebra of the Loins,  
bring bent too much inwards, and coming too near the Os.  
Pubis, and by this means making the Passage too narrow for  
the Exclusion of the Child : Not but a Child of an extraor-  
dinary Sine must have the same Effect, and cause a difficult  
Labour. But he infers from hence, that all those Fomentations,  
Liniments, and Embrocations, so much recommended by Au-  
thors, can be of no Service in making the Parts give way. And  
in this he seems to be very much in the right, because those  
Parts that are. capable of Distention readily give way without  
, them, except in very old Subjects ; and I know of ac» Applica-  
herns that will soften the Bones, and make them retire: So  
that the only Use os Ointments is, to lubricate the Pastages,-  
where they want it ; and in Subjects pretty sar advanced inYeats.

*La Motte* makes a Distinction betwixt a Head that is too  
large to he forced into the Vagins, and he engaged in the Pas-  
sage ; and one that is small enough to descend into the Passage,  
but too large to he brought away by the Force of the Mother's  
Pains, in the former Case, the Feet are certainly more easily  
come at than in the latter.

The latter Case he calk bring lock'd *(enclaves)* **in the**Passage.

When the Head.is so sar advanced, as to he able to make use  
of a Bistory without Hazard, that is, when it can be guided  
by the Eye, *La Mrtce* fays, he cuts open the Head with one.  
But if not sunk so sar into the Vagina, he advises to plunge a  
Pain of common Scissars into the Head, aS directed hefore. But  
when the Top of the Head lies at the Extremity of the Va-  
gina, and at a Distance, he then makes a Canula with a strong  
Paper, or Leather, and directs it to the Top of the Head, and  
then through it introduces a Knife, sharp only on one Side,  
which he plunges into the Head, and makes an Opening suffi-  
cient to admit of the Fingers, with which he empties the Brain,  
and then takes hold os the Head with the Fingers bent within-  
fide the Skull, and so brings the Child away.

*La Motte* affirms, there is no Fear of injuring the Woman  
by the Bones os the Cranium, when a Part of them is obliged  
to be taken away, or come away by breaking off, during the  
Operation above-mentioned, because the Scalp separates from  
the Bone which comes away,, and, staying hehind, covers **the**Edges of the broken Bones os the Cranium, and defends **the**Parts of the Mother from being hurt.

This he says in Contradiction to what *Mauriceau* has said  
upon this-Subject.

The Bones os the Cranium of some Children are so Very  
hard, that they will not give way in the least,and accommodate  
themselves to the Size of the Passages, let the Pains be never  
so strong and forcing ; and this Circumstance causes a Very diss  
ficult Labour.

in this Case the Head of the Child lies Very high, .at the Ex-  
tremity of the Vagina, and cannot enter it. The way to de-  
liver the Woman, is to put back the Head, if possible, and  
bring away the Child by the Feet.

When the Child's Head has lain long compressed betwixt the  
Bones of the Pelvis, it will sometimes be swell'd prodigiousiy,  
and so deform'd, that one would think it impossible-it should  
eVer come to itself again’. . It. is generally cured pretty easily  
with Compresses dipt in warmWine. But, sometimes, when it is  
very bad, an Abscess will be formed, and an Exfoliation some-  
times ensues. In case of an Exfoliation, *La Motte* recom-  
mends Pledgets dipt in a Lotion made of equal Parts Of Brandy,  
Lime-water, and Honey of Roses. i

*La Motte,* in his Supplement, telis us of a very difficult  
Case, where the Labin Pudendi and Vagina were excessively  
hard and swell'd ; the Child's Head lay very high, and was not  
yet sunk into the Vagina, but was incapable of being brought  
away by natural Pains.

The Child bring certainly dead, aster frying in Vain to bring  
it away by the Feet, he plunged his Scissars into the Cranium,  
and, by opening-the Branches, dilated the Aperture. He then  
introduced a straight Pair os Forceps, such as are used for ex-  
tracting the Stone, one Branch within the Craninm, and the  
other without; and with these laid held of the OS Parietale,  
. and Os Occipitis; .and by this means easily extracted the Child. '

This Author recommends this way os delivering Women  
very strongly, and says, that, if one Pair of Forceps is not suf-  
ficient, two may be made use of, and one fix'd on each Side ;  
and these.Instruments he prefers to all others in parallel Cases.

Not only the Head, but the whole Body, also, is sometimes  
so large to cause a Very great Difficulty in delivering a Woman,  
insomuch that a Man is sometimes obliged, after the Head, and  
Part of the Body, is hern, to pull with all his Force to disengage  
the Hips; a Force which would certainly separate the Head  
from the Body, if Hold was to be taken of it.

In such Cases, the Fingers, aster the Head is born, are to  
he introduced into the Arm-pits, and by that means the Shoul-  
ders are to, he extricated. , Hold must then he taken of **the**. Body, and the Child, must he brought away by main Strength. ’

*La Motte* gives a Caseins a Woman, *Obs.* 3I5. who had been,  
in Labour; and **the** Waters had been Tun off three Days; **the**Child was dead, presented with the Head, but lay Very high,  
and was not ac all engag'd in the BoneS of the Pelvis; he at-  
tempted to bring it away by the Fees, but could not come at  
them**4 then he** open'd rheCraninm with his Scissars, introduc'd  
his Fingers into the Aperture, and, breaking off several Pieces of  
the Osia Parietalia, made it large enough ro take out Part of  
the Brain ; then laying hold of the Cranium, he attempted to  
bring away’the Head, but, as soon as it was enoaofd betwixt the  
Bones, he could make it advance no further, sqle then, several ’  
times, try'd the Crochet, which as often broke out ; at last he  
**took a** Blacksmith's **Forceps, and,** with **them,** laying hold of the

OS Occipitis, brought out the Head, but could not bring away  
the Child, which stuck ar the Shoulders ; he then introduc'd  
his Fingers into the Arm-pis, and pull'd himself, whilst the  
Midwife pull’d at the Head; and by this means he brought  
out the Shoulders, and, disengaging the Anns, brought the Child  
as far aS the Hips, where it stuck, insomuch that he was  
forc'd to make the Midwife help him a second time, in Order  
to bring the Child away. The Child was of an extraordinary  
Size, and the Woman did very well.

**DROPSICAL CHILDREN.**

The Bellies and Heads of Children are sometimes drop-  
steal. *La Matte svys,* that no instruments are necessary in this  
Case, but the Hands. If the Head Comes first, he gets his  
. Fingers under the Arm-pits as soon as he can COme at them, and  
draws away the Child. If the Head by Accident separates, **he**brings away the Child by the Feetὁ as he does, when the Head  
is too large to be engag'd in the Bones of the Pelvis.

Others advise letting out the Waters by perforating **the**Belly.

**EXTRACTION OF A DEAD FOETUS.**

AS the Death *Csi* the Child in the Womb, especially if its  
Posture should happen to be unnatural. Creates a Very difficult  
Labour, the Assistance os the Hand is generalsy absolutely **ne-**cessary for the Relief Of the Mother, in this Case the Labour  
is difficult for many Reasons, however naturally the Child may  
present, for. On account Of **the** Mother's Weakness, and **a**want Of Motion in the Child, very saint and languid Pains are  
excited, besides this, the Efforts Or the infant, which Consider-  
ably promote a natural Labour, are waning, add to these,  
that the infants sometimes retire, and the Womb Closes upon  
them, when they Could not he brought into the World at the  
due time, either On account of their unnatural Posture, an **ex-**cessive Largeness Of the Head, a bad Conformation of any  
other Parts, Or a Narrowness Of the Mouth of the Womb, and  
Pones Of the *Pelects:* But, in a Cafe Of this Nature, we must  
carefully examine, whether the Infant is as yet alive. Or dead,  
lest, if it should be alive, we should, by the rash or preposte-  
Ions Use Of Instruments, destroy, or, at least, greatly injure and  
lacerate it. The Necessity for such an Examination is so much  
the greater» because the Signs, Commonly propos'd for judging Of  
this imponant Circumstance, are generally fallacious and uncer-

. tain, especially, if the Infant presents the Arm-pit, the But-  
tocks, the Back, or One Side of the Head; for these Parts  
exhibit so faint and uncertain Signs of the Life of the Child in  
the Womb, that if may readily .he taken for dead,- whilst it  
is still aliVe, tho' Often Considerably weaken'd by the Tedioushess  
of the Labour. - - ' ’

- The most material and important Signs of **a** Child being  
dead in the Womb, are the following.

- First, If the Mother, for a Considerable time feels, no'MO-  
tion Of the Foetus; but rather perceives a Certain unwieldy  
Mass, which always sells to that Part, which happens to he  
reclin'd by her bending Or turning her. Body.

Secondly, If the Mother is sein’d with frequent Shiverings,  
Paintings, and a’ Tenesmus, or frequent, inclination to going to  
Stool. ) .

- Thirdly, If her Breath smell strong and rank.

Fourthly, When any thing of an highly setid and cadaverous  
Smell is discharg'd from the Womb.

Y Fifthly, If the Abdomen Of the Mother is cold 'tis a Sinn,  
shat the Child is dead.

Sixthly, According so *Viardalius* and *Goueyus,* \*tis an infallible  
Sign, that the Foetus is dead, if the Meconium, or the black  
Faces evacuated by new-born infants, is discharg'd from the  
Pudenda Of the Mother. But that this last-mentioned Circum-  
stance has sometimes happen’d whilst the Infant was still alive,  
**I** myself, says *Heister,* have found from Experience, and Others  
have frequently Observ’d the same in the Course Os their Prac-  
tice. I srankly Confess, fays the above quoted Author, that,  
induced by this and Other Signs, I myself formerly took an In-  
fant sor dead, and extracted it aS such, tho' I afterwards sound  
it alive. The five Circumstances before enumerated, together  
with the following, are therefore; more Certain and infallible  
Signs of a dead Child.

- First, If the Navel-string, Or Secundines protruded ont Of  
the Pudenda, are Cold, and totally depriv'd Of a Pulsation Of  
the Arteries

- Secondly, When in. an Arm or Foot hanging Ont, neither’  
Pulsation, Heat, .nor Motion of the Toes Or Fingers are per-  
Cow'd, but the Member is rather.cold, livid. Or black; : and  
especially when the Cuticle, or Scarf-skin, is separated from the  
Skin, either spOntaneousty, Or upon the Application Of the Fin-  
gers to it. .

. Thirdly, In Infants presenting with the Head, and conse-  
quently in a natural Posture, 'tis a pretty sure Sign,’ that the  
Child is dead, if that Part of the Head, in which the Pone is  
wanting, and which by Physicians is call'd *Bregma, Fonticulus,*and *Pons Puls.atilis,* is so remarkably depressed and flaccid, that

the adjacent Bones of the Cranium are found sharp and movea-  
ble, and no Pulsation Of the Arteries is felt in the Part; for,  
when the Child is still alive, this Part is hard, in some mea-  
sure prominent, and a Pulsation Of the Arteries is frequently  
perceived in iry But we are not to he rash in taking those in-  
fants for dead, in whose Heads we perceive no Pulsation os the  
Arteries,, for in weak Infants this Pulsation is often so saint  
and languid, that it is not perceptible by the Fingers, But'tis **a**surer Sign of the Death Of the Foetus, when the Cuticle is sc-  
Parated from the Skin of the Cranium. When the Child is in--  
sallibly dead, and the Waters discharged from the Womb, the  
Mother is to he reliev'd with all possible Expedition, lest **the**Putrefaction Of the Foetus, which soon happens, should produce  
the worst Of Consequences,, such as Violent Fevers, Or eVen  
Death. But, if without the due Pains, and Consequently hefore  
the legitimate Period of Birth, the Infant should happen to die,  
whilst, at the same time, the Waters are not discharged, we  
know from Experience, that the infant may sometimes remain  
in the Womb for some Weeks, Or even some Months, with-  
out any Danger Of Putrefaction, especially if, in Other respects,  
the State of the Mother's Health is good. Instances Os this  
are given by most practical Authors. In this Case it seems  
more expedient to wait till Nature excites the due Pains, and  
by that means expels the Foetus, than by Medicines, or **the**Assistance os manual Operation, IO bring it away either too soon.  
Or in too violent and forcible a Manner.

If during the Pains the Infant should die, and is at\* **the same**time found in a natural Posture, we are not immediately, and  
before we are Certain of its Death, to use HOokS, Or Other In-  
struments, for its Extraction. And because some Mothers **are**not easily prevail'd upon, immediately to admit the Hand of  
**the** Operator, Corroborating Medicines, and such as excite **the**Pains, are to he exhibited. We are nor in the mean time,  
especially when the Mother is weak, to neglect the Use Of sti-  
mulating Clysters, since these generally contribute very  
powerfully, both to excite the due Pains, and expel the Foetus.  
But we are Carefully to abstain from exhibiting those Corrobo-  
rative Medicines, and such aS excite the Pains, in too large  
Quantities, lest, fey their native Energy and Hear, they should  
produce Fevers, or dangerous and eyen monal Hemorrhages.  
If, therefore, these Medicines should produce littie Or no Effect,  
we are, with all possible Expedition, in order to Prevent the  
Putrefaction Of the Foetus, to attempt its Extraction with the’  
Hand, by which means the Pains are also excited. This Ope-  
ration is One Of **the** Oldest practis'd in Surgery, as may be seen  
*in Hippocraters* Book *de Morb. Mulier,* and in his Treatise  
*de Extractione Fatus:* See also *Fontanurs* Treatise *de Foetus Ἐκ-  
tractione.* That this Operation may succeed the more happily»  
**the** Mother must first of all, as when the Infant is alive, disc  
charge her Urine. If this Cannot be done, as it frequently  
Cannot, On account Of the Compression made on the Neck Of  
the Bladder by the Head of the infant, the Urine is to he  
brought away by a *Catheter,* us'd either for Men or Women,  
filch as those exhibited in *Tab.* XLVIIL by Fry. I. 2.3.4. and 7.  
When the Urine is discharg'd, the Mother is to he plac'd in a  
Chair contrived for that Purpose, and represented in *Tab.* LIV-  
*Fig.* Iy. Or upon a Bed, with her Buttocks somewhat higher than the  
rest Of her Body. Then the Operator is with one. Or, if possible,  
with both Hands, to lay hold Of the Child's Head, in the most  
Commodious manner he Can, and gradually extract it in that  
manner; but» is he Cannot extract it by the Head, he is to  
search for the Feet, and bring it away by them. He may, also,  
if he thinks proper, try *Deventer's* Method Of applying a broad  
Roller about the Neck, Or posterior Part Of the Head. If by  
these means the Delivery should not succeed, it seems necessa-  
ry Io use proper Hooks every way smooth, and well-POlish'd,  
such as those .exhibited in *Tab.* LlV. *Fig. tsp.* and 18. and eVen  
*Fig.* 2I. which has a double Beak. These are with the greatest  
Caution to be fix'd in some commodious Pan Of the Infant's  
Head, such as the Eye, the Ear, the Mouth, and sometimes  
the Forehead and Occiput, after which, by drawing the Instru-  
ment cautiously downwards, the Foetus is to he extracted. If  
these. Or Other proper Hooks cannot be had, the Operatiori,  
may he perform'd in the manner directed by *Hoorn,* with a  
large Nail bended in form Of an Hook. But *Celsus,* **who**seems to have been well acquainted with this Operation, \_ says,  
that it is not to be perform’d at all times , for, if it should be  
attempted when the Mouth of the Womb is so compress'd, as  
not IO afford a due Passage for the Foetus, that Part of the  
Infant in which the Hook is fix'd, breaks, and its Point runs  
into the Mouth Of the Womb, a Circumstance which must  
expose the Mother to imminent Danger of Death. When,  
therefore the Mouth Of the Womb is compress’d, that is, when  
the Pains cease, we are to desist, but when it is dilated. Or  
during the time Of the Pains, we must draw gently, The  
Right Hand must he employ'd in drawing the Instrument,  
whilst the Left directs the Foetus, and that Part of the Hook  
winch is in the Womb. If the Infant'S Head is so large.  
Or. so obliquely situated, that it Cannot, so long aS 'tis entire,  
he brought thro' the Vagina, .winch frequendy happens.

we must either with the Fingers, a Knife, Or sharp Sci stars,  
.open some Part ofthe Cranium near the Bregma, and, extracting  
the Brain with the Fingers, so lessen the Volume of the  
Head, that it may be more expeditiously and Commodioufly  
extracted, either with one, or both Hands, in the manner  
already directed. *Mauriceau,* that Celebrated and skilful Man-  
midwife, invented a particular Instrument, to which he .gave  
the Name *QsTTre-tite,* both for perforating and laying hold  
of the Head. By this Instrument, on which he bestows great  
Encomiums, after making an Incision near the Bregma with a  
douhle-edg’d or common Knife, he says, he has often had great  
Success in extracting the Foetus. But, as I before obserwci, this  
Compound Instrument by no means seems absolutely necessary,  
because, alter the Cranium is Open’d, and the Brain extracted,  
the Instruments already directed, if properly made, the simple  
Hooks, for Instance, represented by *Fig.* 17, and I8. Or a crooked  
Nail, or the Hand alone, are sufficient for extracting the  
Foetus, aS *Heiflcr* informs us, he has Often found by Expe-  
rience. 1

If the dead Foetus is'found in an unnatural Posture, then,  
according to the Direction Of *Celsos, snc* are to lay hold Of  
Its Feet, and by them extract dr, in the same manner as a living  
Child, which may he Often done without any great Difficulty.  
But in this Attempt great Caution is to he us’d, especially if the  
Foetus is already putrefied and Corrupted, left, by using too great  
Force or Haste in the Extraction, the Head should be torn  
from the Body, and left in the Womb; for, when, the Head  
remains after the rest Of the Foetus is taken away, and is not  
forthwith extracted before the Mouth Os the Womb closes, the  
Mother is, by that means, not Only afflicted with the most rerri-  
- hie Symptoms, but., also, expos’d to an immediate and imminent

Danger Of losing her Life. For this Reason the Head, when  
Ieft in the Womb, is to be extracted with all possible Expel.

edition.

But, aS the Head, in consequence Of its round Figure and  
Slipperiness, cannot be cOmmodiousty secur'd by the Hand, it  
feems to be a proper Piece Of Practice to introduce the Finger  
into the Mouth, or into the great Perforation of the OS Occipitis,  
and by that means to extract it. By this Expedient I myself,  
says *Heister,* have sometimes, without the Help Of instruments,  
happily, and without much Trouble, brought away the Heads of  
Infants left in the Womin If the Fingers are not sufficient  
for this Purpose, a Linen Roller an Ell long, and about four  
Fingers broad, is to be introduc'd double into the Womb, so  
. aS to form a kind Of Noose, in which the Head is to be in-  
cluded, and by that means it is Often successfully extracted.  
Any Of the above-mentioned Hooks, accommodated to. this  
Purpose, may, also, be fin’d in the Mouth, the Orbit Of the Eye,  
the Nostrils, the Perforation Of the Occiput, or some Other  
such Part, whilst, according to the Advice Of *Celsos,* the Ope-  
rator has preViouily pass’d his Lest Hand under the Head, in

\* Order both to direct the Hook, and prevent the Injury which  
might Otherwise be done to the Womb. Then the Head is,,  
by the joint Assistance os the Hand and the Hook, to be care-  
fully and cautioufly extracted. But, if the Head should happen  
IO be too large, it is with One Hand to he brought to the  
, Mouth Of the Womb, whilst with the other the Cranium is

to be Open'd, and the Brain extracted 5 after which 'tis Can-  
tiousty to be taken away, either by the Hands alone. Or with1the Assistance of an Hook. The celebrated *Amandus,* an ex-  
pert Practitioner in this way, in Order tn avoid the Injury

' which might possibly be done to the Womb by Hooks, for  
this purpose us’d a kind of Bag wove like a Net. This he pass'd  
over the Head, clos'd its Mouth with Cords, and by that means  
extracted the Head without any Danger. But this Bag is with  
great Difficulty apply'd tO the Head, and the before.mention’d

. Methods succeed more easily, and with less Apparatus.

When a live Child is brought away by the Feet, and sticks at  
the Head, it sometimes also happens, that the Head is pull’d  
from the Body, and left behind in the Womb.

*La Matte* gives two Instances of this, in One of which he  
introduc'd his Left Hand into the Womb, and with it secur'd  
the Head, and with the Right Hand he Aided in a Bistory, co-  
versd with a Sheath Open at both Ends, with which he made an  
Opening in the Head, large enough to introduce his Fingers,  
with which he took away’ Part of the Brain, and then, taking,  
hold, drew Out the Head.,

In the Other Case, the Mouth of the Womb contracting  
gave him a great deal OfTrouble, by Compressing his Hand, so  
that he could not use the Bistory, as in the former Cale- SO  
he was forc'd to open the Cranium with the Fingers, to lay  
hold Of the jaw, the Orbit Of the Eye, Or any other Place he  
' Could hold 3 and fo at last drew it out. *La Moite.*

**WHEN THE HEAD IS SEPARATED, AND THE BODY LEFT  
IN THE WOMB.**

When the Pains dome On very quick, and redouble, aS soon  
ν as ever the Headis hornjthe rest Of the Body soon follows ; inso-  
much that little more is necessary, than Io receive the Child,  
and keep st from falling.

. But when the Pains are flow, with long Intervals betwixt, and  
the Head happens to be bom just ar the End os a Pain, it some-  
times happens, that the rest Ofthe Body stays behind, so that the  
Child sticks in that Situation..

*La Matte* will not allow, that this is caus'd by the Corjo  
traction of the Mouth Of the Womb about the Child’s Neck,  
but says'tis owing either to the Largeness Of the Shoulders, or  
the Shortness Of the Navel-string.

In order to bring away the Child, a flat Hand must be in-  
traduc'd betwixt the Neck of the Child, and Mouth of the  
Womb, on each Side; by which means the latter will readily  
give way, and admit of introducing a Finger, or Fingers, on  
each Side into the Axillae, which may serve by way Of a blunt  
Hook to bring away the Child. But this is not always done.  
without Difficulty, and sometimes the Midwife . is Oblig'd  
to bring down both Arms, before the Child Can be brought  
away.

When the Shortness Of the Navel-string causes the Obstacle,  
it must he cut - and then the Child is readily brought away.

Is the Navel-string is render’d too short, by heing twisted  
about the Child's Neck, it must he cut, by introducing a Pair of  
Probe-scissarS along the Finger first introduc’d.

This is a dangerous Situation for the Child, which certainly  
dies, is it continues long in this constrain’d Posture, because of  
the Compression of the Navel-string. - .

In Order to prevent this Accident, the Midwife should pull  
boldly the Child's Head, the Moment 'tis bom, in order to \*  
bring the Body away at the Very same time, and by the very  
fame Pain ὁ taking care not to pull too hard, for fear os th-  
yiding the Head from the Body.

It does not seem prudent to pull hard at the Head at any  
time, hut just the Instant 'tis born, because the Fingers are  
readily introduco into the Axilla.

. When the Head is divided from the Body, and the Body re-  
mains in the W omb, the Method os bringing away the Body when  
it is sar advanc'd, is to flip the Fingers on each Side under the\*  
Arm-pits, and so to draw the Child away; but if the Body lies at  
a Distance, the Method then is to bring it away by the Peer.  
*La Matte. .*

Sometimes Infants, when dying during the Labour, thrust  
One Os the Arms Out of the Pudenda, in such a manner, that,  
by reason of the Shoulders sticking in the narrow Passage, it  
Cannot again he replac’d in the Womb; nor indeed Ought an  
Attempt Of that kind to he made, especially if it has remain’d  
in that State sor a considerable time. When this happens, and  
when the Signs of the infant's Death are sufficiently manifest,  
that is, when the Arm is livid, black, and cold, when no Puhis  
sation of the Arteries is felt in it, when the Fingers do nor  
move, and when the Cuticle is separated from the Skin, we  
are first to try, whether, by reclining the Mother, and placing  
her in a commodious Posture, the Hand Os the Operator can-^  
not be introduc'd by the Infantis Arm into the Womb Of the  
Mother, in fuch a manner, as to reach the Feet Of the Child.  
If this Can be done, which it often can, especially when the  
Labour has not been long, the Feet are forthwith to he search'd  
for, and the Foetus is by them to be extracted, aS if it was alive.  
But if, in 'consequence Of a tumid State of the Infant’S Arm, or  
a Violent Constriction of the Mouth Of the Womb, the Ope.,  
rater's Hand cannot he pass’d into the Womb, which, however,  
rarely happens, 'tis necessary either to twist the Arm out os its  
Articulation at the Scapula, Or cautioufly to cut It Off. When  
the Surgeon intends to perform this Operation, 'tis highly ex-  
pedient carefully to extend the Arm, to twist it about, and. to ..  
hold it for a Considerable time in that Position, before the Knife  
is apply'd, since, by this means, the Ligaments heing partly-  
distended, and partly broken, the Arm may be more accurately,  
and safely Cut off at the Shoulder-joint. But, lest the Mother  
should be wounded by the Knife, I generally, fays *Heister,* use  
with Success one with a Button at the Point; take those exhi-  
bited in *Tab.* XXVI. by *Pig.* 4. and 5. When the Arm is cut  
Off, 'tis proper to try, whether the Hand cannot lay hold Of  
the Feet; and, if it can, the Child is to he extracted by them.

If, On account of the Humerus sticking firmly in the Neck Of  
the Womb, a transverse Situation of the Child, Or a violent .  
Constriction Of the Womb, by means Of which the Insant is  
so compress’d, aS it were, into a Globe, that it Cannot be di-  
rected by the Hands Of the Operator, Or if, in consequende  
Os the Pains excited by introducing the Hand, winch are some-  
times so great, that the Mother cannot bear them, and a Rupa  
Hire Of the Womb, and the Death of the Patient,- may be  
Produced by the Application of a sufficiently Considerable Force,  
in these Circumstances, it is not proper to pass the Hand fo far  
into the Womb, as is frequently necessary for finding the ‘  
Feet: Tis more prudent, therefore, in the Opinion *Cd Celsos,*cautiously to open the Breast and Abdomen of the infant,  
either with the Fingers, a Pair of sharp Sciffars, Or an Hook,  
such aS those represented in *Tab.* LIV. *Fig.* iry. and I8. Then,  
extracting the Viscera and Intestines, we are m examine whe-  
ther, the Body being lessen’d by this means, and the Buttocks  
corning nearer the Mouth of the WOmb the Peet cannot he

sound; and, if they Can, the Foetus is to be extracted by them 5  
**a-**Practice which never fail’d to succeed with me, says *Heister,  
as often as* I attempted in But if the Feet cannot he found,  
which frequently happens in consequence Of a strong Con.  
striction Os the Uterus, then the Buttocks are, by the Hand  
passo under:them, to belaid hold of; and, fixing an Hook in  
their superior Parrs, they are thus to he extracted; for in this  
Cafe the Breast and Head follow, aS it were, spontaneousty, and  
with Ease; but it must be confess’d, that some Parts Os the  
Body are frequently torn away, hesore the Delivery can be ac

. compiiffi'd. But lest, in performing this Operation, the Womb  
should be wounded by the Hook, great Care is necessary in ma-  
naging it. It, also, seems necessary so to sulcate Or groove  
. . its Handle, that by the Touch only we may be able to judge  
bow it ought to be directed in such a manner, that its Point  
may never he turn'd to the Womb, but always to the Foetus.  
See *Tab.* LlV. *Pig.* Ip. LeT- *a a a a :* Which Caution can-  
\* not he possibly observ’d, in Hooks, whose Handles want such a

Groove. Hence it has Often happen’d, that Practitioners in  
this way have miserably lacerated both the WOmb, and **the**Bladder. By a prudent Use of this Hook, whose Handle is  
groov’d, I myself, says *Η differ,* have frequently brought  
dead Children into the World, with such Success, aS to prevent  
- all ill Consequences to the Mother. With respect to this

Handle, 'tis to be Observ'd, that because the infant, especially  
when pretty large, is so firmly ^inclos'd in the Womb, that the  
Strength Of one Hand is not sufficient to extract it, (sor the  
other is suppos'd in the WOmb, under the Foetus) for this Rea-  
son a strong Fillet .may he ty’d about its Part *b b,* which may  
he call’d its Neck. This Fillet, in order to assist the Extraction,  
is be pnU'd by the Midwife, Or an Assistant, whilst the Ope-  
rator; in the mean time, at Once directs and draws the Handle.

‘ These commodious Circumstances are entirely wanting in the  
Common Cylindrical or angulated Handles.

. Nor for this Purpose is it in some Cases improper, ro **use**pretty large Forceps, such aS those employ'd in extracting the  
Stone, and represented in *Tab.* XLlX. These are by *Rysse* an  
Old *Gorman* Surgeon, and *Slevogtius,* a celebrated Physician of  
*-Jona,* presort'd to Hooks, and all other Instruments, becaufe  
by them the Womb is less subject to be lacerated, and the  
‘ Operator's Hand less subject to be hurt. However, no less

Care and Circumspection is requisite in the Use Of the  
Forceps, than that Of Hooks, lest, by the former, the Month,  
**Or** some other Part, Of the Womb'should be said bold of, drawn  
forwards, or miserably lacerated.

*Hoorn* invented and described a new and more expeditions  
Method Of extracting a dead Child, with' its Arm sticking  
firmly in the Vagina, for, when the Feet could not be reach'd,  
**he,** either by means Of a Knife, or a proper Hook, separated  
the Neck, which in Foetuses is very tender, from the rest of  
the Trunk, for by this means the Foetus is either sponta-  
neoufly discharg'd from the Uterus, or may by the Arms be  
easily extracted. After this the Head is to be extracted by  
itself, either by the Hand, Or by some Of the Expedients before-  
mention'd, if the Hand should be insufficient for that Purpose;  
**I** must here Observe, that *Celsus* long ago directed the same  
Method to he taken, when the Foetus, without a prolaps'd  
Arm, is situated almost transversely with its Neck doubled, and  
its Head reclin'd On the Body, perhaps as in *Tab.* LlV. *Fig.* 8.  
for, says he,.in this Case the Neck must he Cur, and both.  
Parts of the FCetus brought away separately.

Thtf I do not absolutely reject the Use Of Instruments, says  
*Heister,* but employ them where Necessity Calis for it, yet I  
must here apprise all Practitioners, that they are never to he  
us'dfor extracting Foetuses froth the Womb, except in Cases Of  
absolute Necessity when, for instance, there is no Hope left  
. of the Possibility Of performing .the Operation by means of  
the Hands, .Or when Delays would expose the Mother to the  
Danger Of lofing her Life for every One must readily perceive,  
that Operations Of this Kind must he far more safely perform'd  
by the Hands, than by means Of Instruments. Surgeons are, also,  
to be carefully exhorted, not to use Instruments Of anV Kind, till  
they are absolutely Certain of the .Death Of the Child; for that  
Surgeon cannot be acquitted from the Charge Of Imprudence,  
Negligence, and Cruelty, who extracts a Foetus alive, but torn and  
mangled, at the same time, by his Instruments, unless particu-  
lar Cases, and especially a great Weakness Os the Mother, Or **a**Dread Of her Death, if the Foetus remains longer in the WOmb,  
should require the Operation ὁ for, tho', in this Cale, the Popish  
Casuists will not admit the Operation to be lawfill, yet lest two,  
.one of whom may he preserv'd, should he destroydtogether, the  
most learned Divines of the Reformed Churches have declar'd  
it lawful, for the Mother’s Preservation, to extract the Foetus by  
means Of Instruments. The most skilful and sagacious Surgeons  
have, however, been touch'd with the most lively Compassion,  
when they have extracted a Child alive, or at least half-dead,  
winch they themselves, the Mother, and the Assistants, took for  
dead. Tis nor, for this-Reason, to he wondered at, that *Celsus,*in the twenty-ninth Chapter Of his seventh Book, should place  
the Art of. extracting the Foetus from the Womb, among those

which are most dangerous and difficult and consequently Call  
sor the greatest Prudence and Circumspection. On the contrary,  
so long aS the Child is alive, and the Mother at the same time  
robust and Vigorous, Instruments are never to he us’d. The  
*Specula Uteri,* by some us'd to enlarge the Womb, and deli-  
neared by *Albucafis, Scultetus, Mauriceau,* and Others, are not,  
in the Opinion Of many celebrated modem Surgeons and Phy-  
sicians, Of any considerable Use. Besides, aS the Womb is very  
easily injur'd, the Use Of them must in some Cases he attended  
with the worst Of Consequences.

The Signs Of a Chilo'S being dead in the Womb are Very de-  
ceitful,-tor it sometimes happens, that a Woman goes her  
Time, and is deliver’d Os a living Child, after having all the  
usual Signs of a dead Child; sor many Weeks, and even Months.  
*LaMotte* gives an Instance os thin .

The Hardness, Swelling, Blackness, and Coldness Of an Arm  
protruded, is not always a Sion of the Child's heing dead; nor  
is it a Reason, why the Arm should he taken Off *La Motte.*

*La Motte* says, that there is no Dependence to be had upon  
**a** Woman's Breath smelling, aS a Sign Of the Foetus heing  
dead in the Womb, aS some Authors affirm, because the Foetus  
itself may be dead some time without stinking, for instance,  
whilst kept from the external Air by the Membranes,

A Child frequently makes a strong Effort, and moves with  
Violence, just hesore it dies, and aster that the Mother feels it  
stir no more. *La Motte.*

An intolerable Smell and a Discharge Of redish'SerosirieS from  
the Womb, are the most Certain Marks of a Child's being dead  
in the WOmb. *La Motte.*

No great Regard is to he paid to those pretended Motions,  
which a Woman fansies she feels, of the Child about the  
time of Labour, after it has not heen felt for a considerable time  
before, especially when the Cessation Of the Motion in the Child  
has immediately follow'd some considerable Accident, aS **a** Fall -  
attended with a Haemorrhage. *La Motte. -*

**THE METHOD OF DELIVERING Α WO.MAN, wHEN THE  
NECK PF THE WOMB IS PROTRUDED BEFORE THE  
HEAD OF THE CHILD.**

ι *1*

. It is possible that Women labouring under a Descent of **the**Womb, or *Prolapsus Uteri,* may become pregnant, and Instances  
of it have Often occurred. These Patients, during their Preg-  
nancy, are exempted from their Misfortune, because the Bor-  
tom os the Womb becoming larger, in proportion as the Infant  
grows, cannot flip through the external Orifice., as it did before,  
but, if they are no longer troubled with this Descent, they have  
still more Reason than Other Women to apprehend the several  
Accidents generally accompanying both their Pregnancy and La- -  
front.

During their Pregnancy, Women subject to this Misfortune  
Ought to take better Care of themselves than Others, they.must,  
for Instance, neither use any Violent Exercise, nor undertake  
Journeys in Coaches, or Waggons, which might shake them  
too Violently , nor eVen walk too much on Foot; because the  
Womb being disposed to fall down, in Consequence Os its not  
being sufficiently retained by its Ligaments, these kinds Of Exer-  
CiseS must,, in the Very Nature .os the thing. Contribute to aug-  
ment their Disorder; so that these Women are just Exceptions  
from that general Rule, which .enjoins Exercise for pregnant  
Women. Patients os this kind must not lie in Bed with their  
Heads raised high, neither must they use emollient Clysters,  
which would relax the Ligaments' still more ; nor those Of an  
acrid and purgative kind, fince these, by the Effects they pro-  
dues, would Oblige them to bear down. But if their Circum-  
stances indicate, the absolute Necessity Of Clysters, they must  
only consist Of simple Water. '

During the Labour Of Women subject Io this Misfortune,  
the Neck of the WOmb, protruded by the Efforts Occasioned by :the Pains of the Mother,.sails out, and is forced into the **ex-**ternal Orifice.

The Neck Of the Womb, or Vagina, which resembles the  
Palate of an Ox, heing thus fallen down, is full Of large Wrinkles  
Or Corrugations, which become gradually more and more tumid,  
by the Efforts the Infant makes with its Head, to force its Pai- \*  
sage into the World.

In a Labour of this kind, we must neither suffer the Woman  
**to** walk, nor stand, which in natural Labour is frequently prac-  
tised. On the contrary, she must he always kept in Bed, with  
her Body and Head On a Level with her Buttocks: Then the  
Operator, in the Interval between two Pains, is with his Hand  
to restore the Neck Of the WOmb to its natural Situation. Anti  
that it may not fall down again. On the Accession Of the first  
Pain, he is to. keep his Hand in the Vagina, in Order to support  
the Weight Of the Child, and hinder it from again Protruding  
the Neck of the Womb.

In Labours of this kind, the Operator must neither use Butter  
nor Oil, which have a Tendency to relax the Parts still more.  
The Mother, also, must be advised, not to bear downwards during  
her Pains, in Order to Prevent the falling down Of the Part again,  
yhich is Occasioned by the smallest Impulse.

Itis, therefore, absolutely necessary the Operator should keep  
his Hand in the Vagina, nor Only in order gradually to dilate the  
internal Orifice with the Ends of his Fingers, but, also, to retain  
**'the** Mouth of the Womb, and keep it from falling down again. I  
. It must, indeed, he Confessed, that this kind Of Labour is longer,  
. than that in which the Parts are lubricated, and the Mother is at

Liberty to bear down, but at the same time it is equally certain,  
. that, when these Precautions are taken, it is conducted with  
- more Safety, and terminates more happily, than if they were  
**neglected. '. '**

When the Child is brought into the World, great Circum-  
spection must be used in bringing away the Secundines; we must  
not draw the Navel-string, and, conlequently, the Placenta, tO  
which it adheres, with too much Violence, lest the Bottom Of the  
Womb, which is not strongly retained, in Consequence Of the  
Relaxation of its superior Ligaments, should follow the Placenta,  
’and fall out Of **the** external Orifice. If a Misfortune Of this kind  
. should happen, the Operatoris immediately, with his shut Hand,  
to push it as far back aS he possibly can , which will not only re-  
store it to its natural Situation, but, also, by lengthening the '  
Neck Of the Womb, remove those Wrinkles and Corrugations,  
which the Impulses Of the Child had made in in

When, therefore, the WOmb is fallen down, and inverted, it  
must with the greatest Expedition he restored to its natural Situa-  
tion, in Order to prevent the fatal Consequences which might  
be produced by Delay, and suffering the Fibres Of the Womb to  
.Contract themselves, before the Attempt is made. We have no .  
Reason? in such a Case, to he afraid Of creating any uncommon  
Pain tO the Mother, since the Passage of the infant has already  
TO dilated the Parts, that the Hand can find an easy Access; which  
it Cannot possibly do, after a Very inconsiderable Delay.

Aster a Labour Of this kind, attended with so uneasy and per-  
PlexingaTrain of Consequences, rhe Mother must he far more  
‘Careful Of her Situation, than if she shad been delivered in a  
natural Way. For rhe first fifteen Days she is not to get out Of  
Bed, dor to quit .it entirely, till a Month is expired. Before  
she follows her usual Business, she is frequently to apply a

\* Compress immersed in some astringent Wine to the Region of  
her Kidneys; and, for the greater Security, she must use a Pessary  
for some Months, *Dionis.* See PROLAPSUS UTERI.

*Mauriceau* is Of Opinion, that a Prolapsus Uteri is most fre-  
quendy Owing to a difficult Labour j but in this *La Motte* con-.  
tradicts him. For he affirms, that he never saw the Neck of rhe  
Womb thrust before the Head Of the Child, in anyone Labour  
he was Concerned in: But, he says, the entire Descent and Inver-  
fron of the Womb must be caused by a difficult Labour, the  
. hroad Ligaments heing broken by theViolence used by the Mid-  
wife.

*La Motte* says, the too great Humidity Os the Part is the Cause  
of Prolapsus Uteri.

**TSE METHOD OF TREATING A WOMAN LABOURING UK-  
DER A RUPTURE;**

In an umbilical Rupture, aS soon as ever the Intestine sissers a  
Strangulation, the Patient seels a Pain, like the Colic ; and the  
Part grows.hard, and enlarges, more or less, though every um-  
bilical Rupture is not painful, none being so till, it grows hard.

The same holds good with respect to an inguinal Rupture.

If, during Pregnancy, Or at any other time, any of these Rup^  
.tures grow hard and painful, they must by all means be soften'd,  
in order to a Reduction. This is to be done, by applying **a**soft Napkin to the Part, folded in many Doubles, and soaked in  
new Milk, as hot aS the Patient can bear it; and., when it is  
softened, the Part of the Intestine, which descended last, IS to  
be reduced. Care heing taken to act aS gently’as possible, for  
fear of an Inflammation and Gangrene,, which this Part is Very  
subject to, if handled too roughly.

If this will not answer the End proposed. *La Motte* recom-  
. mends a Cataplasm of the Pulp of the Leaves and Roots Of  
Mallows and Marshmallows, Mucilage Of Linfeed and Fenu-  
greek, Flowers Of Chamomile and MelilOt, Bran Of Wheat,  
and Meal Of Rye, Ofl Of Chamomile and Lilies, as much as is  
sufficient.

.. If this is not sufficient to answer the End of tnollisying. Bathe  
are Os great Service; and, if Baths do not succeed, the last Re-  
medy is the Operation. .

*La Motte lens,* that, when a Rupture Of either kind happens  
**to he** attended with these Circumstances Of Hardness, and Pain,  
and Swelling during Labour, it is os Very ill Consequences. But  
a simple Rupture, without Pain or Hardness, Causes more Fear  
than InCOnvenience. '

All Parts os the Belly are subject to Ruptures, hut the Na-  
vel, and Groin, more than the rest. When it happens in .any  
Other Part hut the two last-mentioned, it is Called a ventral  
Rupture.

An umbilical Rupture is generally less in Pregnancy, than at  
. any other time, diminishes aS the Belly enlarges, and seldom  
appears during Childbed, till the Woman rises again

*- La Motte* recommends 2 Plate os Steel to he worn upon the  
- Part» with a kind Os Girdle, made so as To he aS fighs, or aS

loose, aS the Patient pleases. But this is inconvenient, and not  
necessary, in the latter Months Os Gestation.

*La Motte* seems to think these umbilical Ruptures os no man-  
ner Of ill consequence in Labour, and Io esteem them Very li: tie  
worth Notice: He thinks it eVen unnecessary to keep a Per-  
son’s Hand upon them during the Pains, hecause, he says, let them  
he never so large, they will disappear, aS soon aS the Woman is  
laid in Bed, unless they suffer a Strangulation.

Children are Very subject to an Exomphalos, because of the  
Laxity of the Part, but are easily cured by binding a Plate of  
Wax upon the Part, made with a Protuberance towards the  
Navel

*La Motte* will not allow, that an Exomphalos is Caused by ty-.  
ing the Navel-string too long.

When a Woman has a Bubonocele, it is not less during Preg-  
nancy, like an Exomphalos, hut generally grows larger.

*La Motte* endeavours to reduce a Bubonocele, before he dee  
livers the Woman, by laying the Woman on her Back, with the  
Buttocks a little more elevated than the rest Of the Body, and in-  
clined a little to the Side opposite to the Rupture; then, aS soon as  
a Pain is ended, the reduces the Intestine gentiy, and by degrees:  
Then he applies a warm Linen Cloth, made up into sour Folds,  
to the Part, and makes a Woman keep an Hand flat upon it, to  
prevent *a Defeent* during the Pains. And by these means a Wo-  
man is delivered with ease. \*

A Bubonocele is sometimesTO excessively large, aS to occupy  
not the Groin only, bur, also, the Space betwixt the ThighS,\which  
must embarrass a Midwife a good deal, unless the Intestine is re-  
duced hesore Delivery. But sometimes it is so bard and tender,  
that the Woman cannot bear to have it handled enough to reduce  
it, and then the Woman must he delivered without reducing it.

*La Motte* gives a Case, where a Bubonocele was attended with  
these Circumstances, and great Pain after Delivery: He gave rhe  
Patient fresh expressed Oil Of sweet Almonds, with Syrup Of  
Maidenhair, and a little Wine, in order to dissipate theWind con- .  
rained in the intestine, and anointed her Belly with Oil Of sweet  
Almonds, especially the Bubonocele; and by these means, in a littie  
time, the Tumor disappeared. -

He advises, when breeding Women are troubled with these  
' Bubonoceles, to keep the intestine always up, and if, when fallen  
down, it makes a Resistance, and cannot be reduced, he directs  
to soften it by means of a Cloth folded in many Doubles, dipped  
in Milk, and applied upon the Part. Bur, in case it IS not possi-  
ble to keep it always reduced, it must, at least, be kept sosr, and  
in a Condition to be reduced.

« Women with Child, especially when theirDabonr is at no  
great.Distance, discharge sometimes a smaller, and sometimes a  
larger Quantity os Blood from the Pudenda; they are then said  
to labour under an Haemorrhage of the Womb, or Flooding,  
in the common Phrase; which, aS it happens in a State of Preg-  
nancy, must he Very different from the common menstrual  
Flux. , in some Women, especially in the first Months, it pro-  
ceeds from a Redundance of Blood, thy which the Blood-Vestels  
of the Vagina, Or of the Womb Itself, are Opened, and pour  
forth a large Quantity of Blood, which is sometimes preternai.  
rurally hot. But this Disorder happens more generally in the last  
Months, and arises either from a total or partial Separation Of the  
Placenta from the Womb, which may be produced either by an  
external injury, such as a Fall, Violent Exercise, a Blow, a Fright,  
and many Other CausesOr by a Redundance Or fervid State Of \*  
the Blood; Or, aS some Of the Moderns maintain, from an Ad-  
hesion Of the .Placenta to the Mouth Of the Womb, Of which  
*Gifford* gives a remarkable History in *Case* 224. . On this Occa-  
sion, towards the End Of Pregnancy, the Placenta is torn from  
the Month Of the WOmb, in proportion aS it dilates itself. The  
more, therefore, the Month of the Womb is dilated by the  
Pains, the more the. Placenta is separated from it, and confe-  
qnently the greater the Haemorrhage; which is sometimes so vio-  
lent aS quickly to weaken the Mother, and even to endanger the  
Lire of her and the Child, unless the latter is, by the Hands,  
extracted, before the former is too much weaken'd. Of which  
fainting Fits are a certain Sign. *Hoorn, Brunners* and *Stuart,*agree with *Gifferd,* in acknowledging the Possibility of an *Hes.*morrhage from this Cause; and bring instances to support their  
Sentiments. '. t

- An Haemorrhage may he discovered, both by the Relation of  
the Patient, and the large Quantity of Blood discharged: But,  
whether thss Blood comes only from the Vagina, or the Womb,  
is a Circumstance which cannot be known, except froth a dili-  
gent’Examination Of the Mouth Of the Womb by the Fingers j  
for that this Discharge Of Blood proceeds Only from the Vagina, .  
may be known, when, upon passing the Fingers into it, the  
Mouth Of the WOmb. is found to be closed, and the Haemor-'  
rhage is Only small: If, on the contrary, the Haemorrhage is  
large, and the Mouth of the Womb dilated. Or if, in it, not the  
Head of the Child, but a certain fponginus Body, which is ge-  
nerally the Placenta, is perceived by the Fingers, we may con-  
elude, that the Haemorrhage proceeds from the Womb itself, in  
consequence either of a partial, or total Separation Of the Pla-  
centa from it. And this Case is far more dangerous, than whorl

**the** Haemorrhage proceeds from tbe'V agina Only. Besides, the  
Danger is increased in proportion to the Largeness Os the Hae-  
.morrhage; and, when Faintings happen, unless speedy Relief is  
afforded, the Lives both os the Mother and Foetus are exposed  
to the most imminent Danger. When the Hands of a Woman  
in this Situation become Cold, her Eyes dim, her Pulse weak,  
and when she is seized with a cold Sweat and Convulsions,  
which in this Disorder generally happen sooner or later, the Case  
is desperate, and the Death of the Patient at no great Distance.  
In this Case it is not prudent to attempt the Delivery, lest **we**\* should he thought to have killed a Patient, already destroyed by  
the Disorder.

If such an Haemorrhage arises from the Redundance, Corn.  
. motion, or preternatural Heat of the Blood, it may be most pro-  
perly. Checked by Venesection in the Arm, a due Regimen,  
Rest both Of Body and Mind, and the Exhibition Of gentle  
Astringents, together with such Medicines aS correct the exorbi-.  
tant Heat of the Blood. But, if a Very large and copious Hae-  
morrhage from the.Womb itself should not yield to the Force  
Of these Medicines, it generally proceeds from the Placenta be-  
ing separated from the Womb, and, in this Case, it cannot he  
stopped, till the Child and Placenta are extracted by the Hand,  
because the Open Blood-Vessels, distended by the Foetus, cannot  
Constrict themselves, till it is removed. When, therefore, we  
find, that Medicines are of little Advantage, that the Haemor-  
rhage, instead of heing lessen'd, becomes larger, and that the  
Mother is seized with Faintings, no means Of Relief are left, ex-  
cept the Extraction of rhe Child by manual Operation, which ‘  
may he performed in the following manner.

Let the Mother he laid on her Back, either on a Table, Or  
Bed, with her Heels retracted, her Legs separated, and her But-  
tocks raised: After this the Operator is to pass his Hand, well  
anointed with Oil Or Fat, into the Vagins, aS far aS the Mouth  
of the Womb, into which, if it is not already sufficiently dilated,  
as it sometimes is not, be is with great Caution to introduce one,  
then two, then the rest of his Fingers, and thus gradually his  
whole Hand, into the Womb. It is scarce possible to believe  
with what Difficulty this is sometimes done, especially when the  
.Placenta, which frequently happens in Cases of this Nature, is  
situated about the Mouth Of the Womb, and has a great Part of  
it still adhering to it: This, however, is to be attempted with  
the greatest Care and Diligence. And the Placenta, when it ad-  
heres but stightly, is first with the Fingers, and then with the  
Hand, to be gently removed so sat aS is necessary for introducing  
the whole Hand, taking care that, in this Attempt, a greater Se-  
paration Of the Placenta from the Womb may not be made, than  
is absolutely requisite for the introduction Of the Hand, fince by  
these means a greater Haemorrhage, which might possibly prove  
mortal, might be excited. When the Placenta is disengaged,  
and lodged about the Mouth Of the Womb, in such a manner,  
aS to preVent the Operaiot's,haVing Access to the Child, *Hoorn*orders it to be first extracted, and then the Child. When the'  
Placenta adheres so strongly to. the Mouth of the Womb, that  
the Operator Cannot introduce his Hand, it is to he broken with  
the Fingers, till the Hand can have free Access, for, aS in Cases  
os this Nature it is dangerous to wait too long, or commit the  
Business to Nature, such a Practice is by no means to be recom-  
mended. Introducing the Hand, therefore, into the Womb,  
the Feet Of the Infant, though as yet not entirely mature, must  
θ be immediately searched for, by which, for the Preservation Of  
the Mother, it is to be extracted. But if it should happen, aS it  
Often does, that the Membranes are not broken, they are either  
. to be pierced with the Nails Of the Fingers, Or, if they are Very  
strong, with an Hoolt, that the Feet may be more easily found,  
which they generally are without any great Trouble, hecause in  
' this Case they, for the most part, lie pretty near the Mouth Of  
the Womb. But if the Membranes are broken, as they some-  
times are, and which may be known from the bare Or uncover'd  
Parts Os the Infant, there is no Occasion for breaking them, but  
the Foetus is forthwith to he laid hold Of by the Feet, and by  
them extracted. This is generally done with the greater Ease, if  
the. Peet are directly Opposite to the Mouth Of the Womb. But  
this Operation is far more dishcult, -when the Child is tumed On  
: Its Head, and ready, as it were, to be brought into the World ,  
because, in thisGase, the slippery Head Cannot be firmly enough  
laid hold Of, nor can the Feet, because they are turned upwards,  
he so easily sound; they are, however, carefully to be searched  
. for, and the Foetus is by them to be extracted. When the Child

is thus brought into the World, the Secundines generally soon  
follow it spontaneousty; hut, if they should happen aS yet to ad-  
here to the Womb, they are with the Hand to be gentiy disen-  
gaged, and extracted. When the Secundines are thus extracted,  
. and the concreted Blood evacuated by the Hand, in Order to pre-

vent After-pains, the Haemorrhage gradually ceases, till at last  
after due Rest, and a careful Use of proper internal and external  
Medicines, it generally disappears entirely, hecause the Womb  
now contracts itselss and with it the Blood-vesseis, which were  
before open. In order to restore at Once the Blood and Strength  
of the Patient, we are to take all those Measures generally pre-  
scribed aster large and excessive Haemorrhages, Thus, for in-

stance, hot Sorbitions are frequently to he exhibned; such aS .  
Broths, warm Milk, Emulsions Os Almonds, Jellies, Or corro- .  
borating Draughts, prepared Of hot Ale, and proper Waters. I  
must here, allo. Observe, that, unless Patients of this Kind die  
within six Hours, they generally recover, because the Haemor- .  
rhage ceases, and the Patient receives fresh Supplies Of Strength  
from the Exhibition os easily digested Aliments: Whereas those  
who are destroyed by excessive Haemorrhages, and their coose-  
ouent Weakness, may have.their Deaths ascribed to too late an  
Extraction of the Foetus, which, aS we have already Observed,  
Ought not to be delay'd too long, that is, till the Mother is seined  
with Faintings. I myself, says *Horsier,* have known several Wo-  
men, who by refusing to submit to this Operation, or by sub- -.  
mitting to it when it was too late, have been cut off in the Flower  
Of their Age. The Reader who desires Instances Of this Kind,  
may consult *Mauriceau, La Motte, Gissard,* and *Chapman.*

*Heister.* \_ ί

Maids are subject to considerable Haemorrhages, aS well as  
married Women, and sometimes Very youngs aS at nine Years  
old. Or sooner..

In such Cases Bleeding, Purging, and a cooling Regimen, are  
proper. Or, if the Haemorrhage is Violent,, half a Dram of  
ROCh-alum, a Dram Of DragonS-blood, with some Conferve of  
Roses, is an excellent Remedy. *La Motte.*

Melt in a Crucible any Quantity Of Roch-alum: Add to lt  
an equal Quantity Of Dragons-blood: Then let it he pow-' 1  
derid. . ?

The Dose Of this, in violent uterine Haemorrhages of any 5-  
kind, is half a Dram every Half-hour.

Alum was first used in Haemorrhages of the female Sex by  
*Scribonius Largus. Helvetius* added to It Dragons-blood.

The above-mention d Preparation of it was *Pitcairn's,* and-  
what he recommended. '

This is an excellent Remedy in all uterine Haemorrhages, whe-  
ther cf the Menses in too great Abundance; or Floodings Of  
Women with Child. *Edinburgh Medical Essays, . -*

*Mauriceau* thinks a Virgin can scarce have an Haemorrhage,  
attended with a Discharge of Clots Of Blood: But *La Motte is*Of quite another Opinion. It is difficult to determine which is  
right. ' \_

Women are subject to these Haemorrhages at any time Of these  
Pregnancy, during their Labour, Or afterwards. *Lae Motte.*

Haemorrhages, if considerable, are almost always follow'd, with  
the Expulsion of the Foetus.

The. most common Causes of Floodings are. Falls, Blows,  
Frights, false Steps, Efforts in listing any thing heavy, extending '  
too much the Legs or Arms, pressing the Belly against some-  
thing hard. Grief, Anger, and any violent Passions of the Mind.  
*La Motte. ’*

When Floodings happen with any Violence, the only Cure is  
to deliver the Women immediately, in whatever time of Preg-  
nancy it happens.

If the Woman IS gone less than five Months, it is no matter  
what Part Of the Child comes first, but, after that Time, **the »**Membranes must be broke, and the Child fetched by the Feet.

Women are sometimes so weaken’d by Flooding, that they  
are a long time before they recover their Strength, and that not  
without the Help Of a good Regimen, and long Rest.. Some  
are afterwards troubled for a long time with a Violent Head.ach,  
and never after recover a fresh Colour.

However, we are not to be too hasty in delivering a Woman  
aS soon aS any Blood appears5 for some have a small Lois of it,  
without any Disadvantage; but, when it grows excessive, and  
the Woman begins to he weak, then is the time to hasten Deli-  
Very. '

Flooding sometimes proceeds from the Blood-Veiseis at the  
Bottom Os the Vagina, Or external Part of the Mouth Of **the**.Womb. *La Motte.*

*La Motte* gives the History of a Woman, who, being gone  
about fix Weeds with Child, was seized with a Violent Flooding;  
upon which he introduced One Finger into the Mouth Of rhe  
Womb, which was all he could do, and, thrusting it aS far aS he  
could into the Womb, he rounded a littie Body he found there-  
in, which was like an Hen's Egg, without a Shell, and detached it  
from, the Womb, and then brought it whole; which, he says,  
should always be done, if possible, for fear the Membranes, at 1that time so Very little, should not be readily found, in case they  
were broken, and their Contents gone off; and, then, if they  
stayed hehind, the Flooding would not cease.

In case Of a Flooding, when a Woman is far advanced in her  
Pregnancy, if her Pains are strong and redoubled, and the Child  
so far sunk in the Passage, aS to hinder the introduction Of the Hand  
into the Womb, in Order to bring away the Child by the Feer,  
then the Expulsion of the Foetus must be left to Nature.

: It is not always possible to deliver a Woman of an abortive  
Foetus, when she is seized with Flooding. *La Motte.*

Sometimes the Mouth Of the Womb is too rigid and strong  
to he Open'd .sufficiently by the Fingers, And in this Case *La*

*Matte* affirms, that all the emollient Applications TO thnch re-  
commended are Of no manner Of Service, Rest and Panence  
being the heft Remedies for after Rest It will Often he dilated Of  
its Own Accord.

Floodings, which happen to Women in Labour at their full  
Term, are Of no great Consequence, if the Labour is very quick,  
and the Discharge not Very Considerable; hut if the Labour is  
stow, and the Flooding Violent, both the Mother and Child are  
in great Danger, especially if the Child presents right, and is ad-  
vanced far into the Passage. But if the Child presents wrong, and  
is not far advanced, it is less dangerous, provided the Hand can  
he introduced, and the Child brought away by the Feet which  
must, upon these Occasions, always he done. Os, if the Child  
present right; the Head must be put back, and the Child must he  
brought away by the Feet, if possible.

' In case Of Flooding in a Labour of the full Term, the general  
Rule is, to hasten Delivery as much as possible.

The weaker the Labour-pains, the more easy it is to introduce  
the Hand, and bring the Child away by the Feet.

Floodings are not always caused by a Separation Of the Pla-  
centa from the Womb, but sometimes from a Rupture Of some  
of the Vessels, which form the Navel-string. *LaMotte.*

There is a sort Of Haemorrhage which Women Of all Ages are  
.. subject to, whether married or unmarried, which it is Very dissi-  
' Cult to distinguish from that which happens during Pregnancy;  
because it is attended with all those Symptoms that accompany  
Pregnancy, without excepting one, as forcing Pains like those of  
Labour, Vomitings, *etc.* insomuch that La *Motte* says, he has  
Often been Called to deliver Women in this Condition, who  
have thought themselves with Child; and whom he cured by a  
cooling Regimen, forbidding the Use Of any spirituous Liquors,  
and advising Resh

This is caused by a long Suppression Of the Menses.

. Young married Women generally breed soon after an Haemor-.  
Ihageof this kind.

in this Case the Belly grows less for the first two or three  
Months, aS in true Pregnancy ὁ and at the time Of the Haemor-

" thage, when the Woman has the Symptoms of Labour, no Wa-  
ters are discharged, contrary to what happens in a Miscarriage, or  
true Labour at the full Period. *LaMotte.*

An Haemorrhage from the Nose, during Pregnancy, Very Often  
is the Conse Of the Child’s Death, if it proves excessive.

*La Motte* advises, in this Case, Rest, lying upon the Bed, with  
the Head a littie elevated, taking care to excite no extraordinary  
Heat by too much Covering. He, also, gives the Woman cold  
Water to drink, and cautions particularly against giving any thing  
spirituous, and against blowing the Nose.

The following Decoction is much recommended by *Hamilton,*in an immoderate Flux of the Menses, especially when it is not  
caused by a Portion of the Placenta lest behind after a natural  
Birth, Or Miscarriage-

Take seven Orange-rinds, boil them in three Pints of Spring-  
water, till the Water is reduced to two Pints, and let the  
Liquor, when strained Off, he sweeten’d with white Sugat.

\* - The Dose is ten Spoonfuls, three Or four times a Day.

*- Riverius, Lib.* I5. *Cap.* 3. quotes a Medicine much like this,  
' from *Ludovitus Septaliurs Animadvers Medic. Art.* I44. which

the last-mentioffd Author recommends as almost infallible, aS  
follows:

Take-three Orange-rinds, aS yet somewhat green; boil them

-- - in seven Pints of Spring-water to the Consumption of two  
Parts Of the Liquor; of which eight or ten Ounces may be  
drank every Morning.

*Septalius* says farther, that, if you would make the Medicine yet  
more effectual, add, at the End Of the Boiling, One Handful os  
Mouse-ear: Or else make the Decoction in a Gallon of Water,  
and boil to the Consumption Of two Thirds, then quench fre-  
quently in the strained Liquor an Iron heated red-hot. *Bivcrius.*

: Tins seems Very proper to be given with the styptic Powder,  
as above described.

*La Motte* says, that,’aster any great Loss Of Blood, lt is very  
common for Women to be troubled for a long time with a vio-  
lent Head-ach, and a troublesome BuTzing in the ears.

Women generally lose a large Quantity Of Blond, when the  
Child is born, which ought not to he esteem'd a Flooding, and  
is attended with no Danger.

- When the Navel-string is cut, the Part remaining with the  
Placenta should he tied up, as well as that remaining with the  
Child; Otherwise a great Quantity of Blond will he discharged  
from it, which may prove fatal to the Mother.

Care must he taken, that all the Membranes are brought away  
with the Placenta.

. When a redish Serofity, inclining to black, is discharged from  
the Womb, accompanied with violent After-pains, it is a certain  
Sign, that a Portion of the Placenta, or. Membranes, remain in  
the Womb j and then a Finger or two, or more, must he intro-

duced, as it seems necessary, and the remaining Part malt her  
brought away. *La Motte.*

Fatal Haemorrhages will sometimes ensue, after a Woman has  
been safely deliver'd, and no Part Of the Placenta, Or Membrane,  
is left behind. In this Case the Woman's Voice sinks by little .  
and littie; she gapes, grows pale, loses her Pulse, and finds her-  
self weak. - . ...

*La Motifs* Method of Cure is aS fellows: He rubs the Wo-  
man's Hands and Face with Vinegar, and Water, or Oxycrate;  
and applies doubled Linen QOths dipt in the same to the Belly,  
and Region Of the Kidneys. Mean time he keeps her as Cool as .  
is possible, and suffers her to be Covered with very few Cloths:.  
He gives her Broth without any Salt, but in very small Quantities  
at a time, with a littie Water, and someWine, in order to abate:  
the Thirst, and to he of some littie Refreshment. But he Can-  
tions particularly against giving any thing spirituous.

lf the Woman has an Inclination to steep, he keeps her awake,  
till the Haemorrhage in some measure ceases.

In *Obs.* 4O2. be gives the History Of a Woman, who, tmme-  
diately after the Extraction of the Placenta, was suddenly seized  
with so Violent an Haemorrhage, that she remained, in Appear-  
ance, without either Pulfe Or Respiration; But he brought her  
to herfelf, and at last cured her," by throwing great Quantities of  
Water upon her Face, Hands, into her Mouth, and almost all.  
Over her, and by applying Linen dipt in the same. He then took  
away every thing that might keep her warm, and laid her upon.  
Straw Only.

*Chapman* has Probably taken this Method from *La Matte - he*says, aS follows: “ When the Discharge is Very great, it re..\*  
“ quires the most immediate Assistance ;or the unhappyWoman;  
u now Jost deliver'd, freed from her Pains and Tears, and flush'd,  
" aS it were, with new Life, will be infallibly lost. In this Cose  
" I never bleed, but lay the Patient very cool, almost naked, and  
cover her Body with Cloths dipped in Water, Or Vinegar and

K Water mint. This must he done when the Flux is extremely..  
Violent, and without which the Woman’s Life would be lost  
" in a few Minutes: It at once constringes and restores the  
" Tones os the Fibres and Vessels Of the Womb, at the same  
" time that it abates the too Violent Motion Os the Over-heated  
“ Blood. I beg Leave to recommend this Method as.what I am  
" confident has saved the Lives Of great Numbers, in the Course  
" Of my Practice." ’ - i

The same Author, *Case* 12. after having given the History Of  
a Delivery, goes on in this manner. ... ‘το..

" This Lady was of a plethoric Habit, and, having been much  
“ heated by a long Labour, and great Pain, together with several  
" warm and cardiac Medicines, (which, aS the Posture Of rhe  
" Child was right, were given her, in hopes that Nature might  
CC have done the Work herself) in about an Hour after, when  
" we thought all was well, and I just about to take my Leave;  
\* she fell into the most Violent Flooding l ever saw. I was oh-  
" liged immediately to Cover her Body with Cloths dipt inOxy.i  
" crate, changing them as they grew warm; and this for above  
\* half an Hour together; by which means the FluxAt first was  
*Ci a* littie abated, and at length stopped, whilst we gave her several  
" Draughts .Of cool and acid Liquors IO drink. She Was set  
" excessively cold, and her Pulse so low, from the vast Loss Of  
W Blood, that we thought she was dying. But, forcing down some  
" warm SorbitionS, as well aS cordial Medicines, she was quickly  
" able to bear warming, without a Return Of the Haemorrhage *i*u By this Method she soon revived, and is still living." . I

*Hippocrates* recommends an infusion os the Leaves Of Viter,  
or Agnus Castus, in an uterine Haemorrhage, made in Black-wine.  
*De Natura Muliebri. , - A \* ...t

LACERATION OF THE PERINAEUM.

That the Perinaenm, Or fleshy Partition between the Pudenda  
and the Animinay be lacerated, is a Circumstance well known  
to every one who is in the least Conversant in Surgery. But this  
Misfortune is principally incident toWOrnen subjected to a dish?  
cult Labour, in consequence Of the Largeness Of the Child, its  
monstrous and. unnatural Conformation, .Or its being doubled, aS  
it were, and presenting with the Buttocks. . in order, therefore,  
to prevent rhe many terrible Consequeuces. which may possibly  
be produced by a Misfortune of this kind, the following, Mea-'.  
fureS are to be taken with all ExpeditionFirst of all, the Wound  
is to be washed and cleansed with warm Wine, Or BrineThen  
it is to be carefully anointed with some Vulnerary Balsam, or, which  
is still hetter, the Powder of SarcoColls, Or Mastich, may be  
sprinkled upon it. After, this,’ if the Wound .should happen to  
be but small, its Lips are to he brought into Contact, by meant  
of adhesive Plaistere: But if, in consequence of the Largeness Of  
the Wound, these should nor be sufficient for that Purpose, the  
knotted Suture, usual in Other deep Wounds, is: to he made with  
a Crooked Needle, and a double-waxed Thread. After this **the**Wound is to he treated in the same manner with Other Wounds  
in a like Situation. Only, in this Case, it isthighly expedient, that  
the Woman should remain in Bed, with her Thighs close toge-  
ther, and have her Wound cleansed twice Or thrice each Day,  
till it is healed. According Io the eighty-second Observation of

*Solingen,* W onr.ds Of this kind, when neglected at the Beginning,  
often become incurable, and are accompanied with a Very trouble-  
some Ulcer.

Whilst the Patient is Under Cure, she should never he *suffer'd*to have a Costive Stool, because it would he likely to dissolve the  
Union of the Parts, brought into mutual Contact by adhesive  
Plaisters, Or to tear out the Stitches, if a Suture has been mane.

**CONTUSIONS OF THE PUDENDA.**

It Often happens after a very difficult Labour, that the Passages  
are so tom and Contused, that a Mortification, and Loss Of  
Substance, ensue, more or less: And then, is Care is not taken  
to keep the Sides from uniting together, the Passage will be en-  
tirely stopped up. Or in part. If entirely, there will he no room  
for the Discharge Of the menstrual Flux; and then the Woman  
may be seized afterwards with Convulsions, attended with great  
Pain in the lower Parts of the Belly. If in part, the Woman  
may be again with Child; find then this Union may render the  
Labour extremely difficult. Or Delivery impossible.

*La Motte* introduces the middle Finger into **the** Anns, and **a-**Catheter into the Bladder, and cuts an Opening, aS near aS he  
can, hetwixt them.

*La Motte, Obs.* 4I 9. gives the History of a young Girl Of  
Seventeen, who was seized with a Violent Pain In the Loins, and  
lower Part Of the Belly, which the third Day were Communi-  
cased to the Vagina, and would not yield to Baths, Clysters,  
Bleeding in the Arm and FOOL Upon examining the Vagina, he  
sound the Carunculae My'rtisormeS were wanting; and about two  
Fingers-breadth within theVagina he found a Membrane distended  
**and** full, much like that which contains the Waters Of a Very little  
Child.’ AS he could not break it with his Fingers, he was forced  
**to** cut **it with** .a. Lancet; upon which a Quantity of Very black  
Binod was discharged without any Smell, and the Girl was im-  
mediately eased. . She-was afterwards married, and has fince had  
many Children, t'

f *La Motte* says, a Surgeon Of his Acquaintance had Occasion  
to perform the same Operation.

*.;. Cooper* gives us a parallel instance. -

*. La Motte, Obs.* 453. telis us of a Woman, whose Vagina was  
entirely Closed up, as well aS the urinary Passages, by a spongy  
Flesh, which join'd the Sides together, insomuch that she was an  
Hour in making Water, and that with great Pain. This was  
Caused by a Contusion, which the Woman received in a Labour,  
from the too rough and frequent Handling Os the Midwife. Upon  
Inspection he found there was no Passage for the Urine, bur that  
is transuded through the spongy Flesh abOVe-mecticneth. This  
Woman he cured by an incision, and dressing the Wounds with  
Pledgets Of Lint dipt in Brandy;

v When the Parts are so contused, aS to endanger a Mortification,  
Fomentations, and antiseptic Topics, feem necessary.

. In order to prevent an Union Of the Sides, proper. Dossils of  
**Lint,** kept betwixt the Parts seem the best Precaution.

a Sometimes there is so great a Loss Of Substance, On account  
of a Mortification of the Parts Contused, by the Head Of the  
Child stinking a long time in the Passage, that the Woman suf-  
fers an involuntary Discharge of the Urine and Faeces for ever  
after. And sometimes there is a. Mortification, eVen before  
the Woman IS deliver’d; which manifests, itself by an intolerable  
Stench. -

*La Motte* recommends detersive Fomentations, and injec-  
tions, ' " ; . - '

S. Ininatnral Or unnatural Labours, more particularly the latter,  
theVagina and external Parts are subject to Contusions, Dilaces.  
rations. Inflammations, ImpostumeS, and Mortifications; and.  
to these Accidents .Women that shave the Lips of the Pudenda  
thick and hard, are more subject, .than those who have them  
. thin and tender. η . '

' When the Bones wbicli form the Head Of the Child are Very  
hard, the Lips of the Pudenda large and thick, and the Labour  
very ryuick, a Woman is most liable, to these Misfortunes, he-  
cause there is no time for a gradual Dilatation of the Parts, and  
the Bones Of the Head cannot yield seas.to accommodate them-  
salves to the Passages. .

ν When the Child comes with 'the Breech first. Or if the Heed  
hesa long while in The .Passages, these Misfortunes are still more  
to he apprehended.. La. *Motte.* f t . -

r'in Case Of Contusion *La* Asotte recommends only ETnbroca-  
tions with Wine warmed with a little Chervil in in

- This Remedy, '.he lays, is the heft of all Others, and the Only  
one necessary; and finds sank with all those recommended by  
*Peu* and *Mauriceau,* aS useless, and even pernicious.

In case Of a Laceration of the Perineum, and Vagina, the  
same Author advises a Reunion, by a sew Stitches, whilst the  
Wound is recent, for, after the Sides 'thereof are healed, and  
grown herd, they will-not unite without being made raw again.

Contusions, Inflammations, andeVen Mortifications, are Often  
caused by a Midwife’s too rudely handling the Parts, Of which  
*La Motte* gives an Instance, *Obs.* 408. where the Pares were so  
roughly handled, thar-an Inflammation came On, attended with  
violent Pain, which: was succeeded thy a Mortification, insomuch

that he was Obliged to scarify, not Only the external Parts, but  
even high up in the Vagins, and to wash the Part with Sea-water,  
and then to use a Lotion made with Birthworr, Myrrh, Aloes,  
and Sugar, in White-wine, with an Addition of a little Brandy;  
mean time the Lochia never Ceased, and the Patient had but  
very little Fever, and that Only for a Day or two: By these means  
she recovered, and had many Children afterwards, without any  
of the like Accidents.

*La Motte* says. Oil does Prejudice in those Excoriations which .  
happen during Delivery, and are fest immediately after it. His  
Method is, to bathe the Pans with warm Milin Barley-water,  
and a Decoction of Liquorice and Chervil, and afterwards to  
embrocate with Wine and Chervil. '

*La Motte, Case* 452. telis ns of a Woman who had the Lips  
Of her Pudenda and Womb excessively hard, and swelled, occa-  
sion'd by the Midwife’s frequent handling the Parts: Aster the  
Woman was deliver’d, he injected into theVagina an Infusion of  
a very small Quantity of Birthwort, Myrrh, and Aloes, in White-  
wine; and applied «Compress to the Lips, dipped in rhe same:  
By these means a Separation of the contused Parts was procured,  
which sell off, mean time he took Care to keep the Parts asunder,  
for fear of a Reunion.

**LACERATION OF THE WoMR**

If violent and strong Labour-pains Cease all On a sudden, and  
Vomiting succeeds, a Laceration of the Womb is to he appre-  
headed-

*La Matte* gives two Instances of Women, who had the Womb  
burst, and the Child extended lengthways, with the Feet towards  
the Diaphragm Of the Mother, out Of the Womb. Both these  
Children presented with the Head; and there seem'd to he no  
other Cause of this Laceration, but the Violence Of the Pains,  
and Force of the Child. -

. The Symptoms were, extreme Weakness, perpetual Vomiting,  
the Belly hard, distended, and painful, a very small Pulse, and  
**an** entire Cessation of Pains or Throes.

The Placenta was tom through in both these Cases; and, in  
the first Case, the Woman felt a violent Motion of the Child,  
when the Laceration was made.

*La Motte* fayS, that an Hiccough, and cold Sweats, are gene-  
rally Attendants upon such a Laceration.

This Case is- always faIal.

**INFLAMMATION OF THE WOMB.**

. In inflammatory Pains Of the Belly,- La *Motta* directs an ano\*  
dyne Clyster, and emollient Fomentations Of new Milk, applied-  
by means of a fourfold Napkin dipped therein, whilst warm,  
and renewed from time to time, aS it cools.

The usual Causes Of an Inflammation Of theWOmb are, long  
and difficult Labour, the Adhesion or bad Consistence of the  
Placenta, Falls, Blows, and Swathing the Womb too tight:  
These Inflammations usually Cause a total. Or partial. Suppression  
of the Lochia, a Retention Of Urine, frequent Inclinations to  
make. Water, Diarrhoea, Vomiting, Oppression, Fever, Deliri-  
nms. Convulsions, and Death. .

An Inflammation Of the Womb is Very easily known by a great  
Pain in the lower Part Of the Belly, which makes it very dish-  
Cult for the Woman to lie in any Other Situation than upon her  
Back; and,, is she rums never so little On either Side, she feels an  
Painful and heavy Mass fall On that Side, and at the fame time  
an excessive Pain in the Loins, Kidneys, and Groin- of the Op-  
positeSide; and it is for this Reason, that she can lie in no Other  
Situation than upon her Back.

As soon as ever an Inflammation is perceived, there is no room  
for Delay, and, though the Lochia fiow in abundance,.Fomen-  
rations must be applied to the Part in Pain, which is generally  
hard ; solo if this is neglected, the Pain and Hardness quickly in-  
Crease Considerably. Mean time Clysters Of an emollient De-  
COction Only, in half the usual Quantity, must he made use Of ;  
Or, if the Woman is costive, a Clyster Of Whey with two Ounces  
Of Honey Of Violins may he used, first in Order to discharge **the**harden'd Excrements, and after that the half Clysters above-  
mention’d» which will he .the more effectual, the longer they are  
retain'd. ' ’ . . ί '

If these are not sufficient to prevent the Increase Of the Pain  
and Hardness, recourse must immediately be had to Bleeding in  
small Quantities, but Often repeated, so long as the Symptoms  
either increase Or continue.

The Regimen must be of Veal and Chicken-broth, avoiding  
every thing solid. Her Drink should be Water, impregnated  
**a** very little with Cinnamon ; and, if the Fever is but flight, one  
eighth Part Of Wine: All Other spirituous Liquors must he  
avoided. ‘ . . . ’ /

The Pains ahove-mention’d, attending an Inflammation of. the  
Womb, sometimes extend themselveS to the Inside of the Thighs,  
when a Woman rums on One Side.

" Εά *Motte* uses a fourfold Napkin dipped in new Milk  
warmed, as a Fomentation, whilst more powerful Fomenta-  
irons are preparing. He, also, generally bleeds once in twelve  
Hours. .

- He disapproves of uterine Injections, hccanse, he says, if the  
Pipe of the Syringe should oe ainrofnced into the Womb, is  
would irritate the Part, and increaso the Inflammation; and be-  
cause, in this inflamed Sate of the Womb, the Mouth is en-  
tirely closed, and therefore an injection could reach no farther  
than the Vagina.

He, alfo, disapproves of Bleeding in the Foot, because that  
must bring a greater Flux of shone to the Pan already inflam’d;  
he therefore profers Bleeding in the Arm.

**CONvULSIoNs.**

Women are sometimes seined with Convulsions, before, dur-  
ing, and after Labour. The Prognostic to he made upon this  
Occasion, is according to the Violence of rhe Convulsions, and  
their Causes.

A long Suppression of Urine will sometimes Cause Convul-  
llons.

. When Convulsions, during Labour, begin to he violent, and  
the Woman weak, Delivery must by all means he hasten’d; aS  
itmust be at all times of Pregnancy, Convulsions generally ceas.  
ing soon osier Delivery. Bur, when the Cafe will permit,, we  
should wait to see what proper Medicines can do, and how. far  
Nature is able to relieve herself.

Worncn- will frequently be seized with Convulsions, without  
any manrsest Cause, .and very suddenly.

When a Woman is in Convulsions, is may sometimes be per-  
ceived, that .she is in Labour, by a fmall Motion of her Lips, and  
an unearyMOvement Of the lower Parts,, and then Delivery is  
to be hasten’d. *La Matte.*

If a Retention Of Urine is theCause Of Convulsions, the Ca-  
theter must he used; but the Neck of the Bladder is sometimes  
so. compressed betwixt the Os Pubis and Head of the Child, that  
the Catheter will not pafs: In this Cisse, the Head of the Child  
must he thrust back, with one Or more Fingers, the Woman  
being placed in the same Situation as if she wasin Labour; and  
then the Catheter will pans; and perhaps the Woman may make  
Water, without the Catheter.

Convulsions are'sometimes caused by a Plethora; and then  
Biceding judicioufly repeated. Clysters, and Purges, are the pro-  
per Remedies. *La Motte, Oof 22,2,* gives an instance of a  
Woman, whom he was Obliged to bleed fourscore and six or  
seven times, during the five last Months of her Pregnancy, taking  
away but a frnall Quantity at a rime; and notwithstanding this  
prodigious Loss of Blond, shewas ut last delivered of an hearty  
Child, and did very well herself. This Woman had. used herself  
to eat great Quantifies of improper Fond.

: Convulsions which happen aster Delivery, are always dan-  
gerous.

. If they ar? caused by the Suppression of the Lochia, Care must  
he taken to procure their Return, if possible.

If Convulsions proceed from an Hemorrhage, it must he  
stopped or diminished by all proper Methods.

*La Motte* tells us of two women who were seized with vio-  
lent Convulsions after Delivery; and this happen’d every time  
they lay-in. . These he cured by giving them Broths, a little at a  
time, and Often repeated, in order to repair the Loss of Blood,  
and Clysters in very small Quantities.

\ He advised them, aS foon as they perceived themselves with  
Child the next time, to bleed, and repeat it frequently during  
their Pregnancy; and to take once every Month, for the three  
first Months, an emollient Purge, of

‘ One Dram of Rhubarb, infused for ten Or twelve Hours, in  
. a large Glass of Water: Add to this an Ounce andon half  
of Cassia Fistula.. Pout upon this some Broth, and dissolve  
in the strained Liquor one Ounce of Manna: Strain it  
again, and let the Woman take it early in the Morning; and,  
two Hour? after, let hut take a little Broth.

. Is a Woman is attacked with Convulsions, and a Suppression  
of the Lochia, *scae Matte* advsses Bleeding, and anodyne cooling  
Clysters.

**’ . DIARRHOEA. ' ’ .**

*.. .Lit Motte* gives the History of a Case, where a young Lady,  
of her full Term, was seizin with flow Pains, which increaSd  
in a little time, insomuch that they thought she would be soon  
deliver’d; but they went off again, and return’d the next Day;  
and fo continu’d sometimes more, and sometimes less strong,  
by Intervale, till the eighth Day, when they increas’d to much,  
that the Lady, was deliver’d. She continu'd very well for the  
six first Days, without, however, having any Sleep since the  
.time the was first seiz’d with Pains, which was fourteen. Days.  
At this time the was fein’d with a violent Shivering, which  
was follow’d by as vinlent a -Fever, accompanied with a Deli-  
-tintn. Diarrhoea and Vomiting, her Belly being distended, hard,  
and painful, and she herfelf extremely weak. The Lochia,  
however, continued in Plenty, which was the only encouraging  
Circumstance. "et -AT

In Order to appends the Gripings, with which she was mires,  
afflisted, he gave her four times a Day half rhe ofual Quantity  
of a Clyster, made with a Decoction of wash’d Bran, Verbaf-  
cum album (a Species of Mullein), Flowers ofChamomileand  
Melilot, with Linsced, and an equal Quantity of Broth. At  
the seme time, he applied to her Belly a Napkin doubled, and  
soak’d, in new Milk, as hot as she could bear It. Her common  
Drink was a Decodion of the Roots of Marshmallows,  
Shavings *of Hartshorn* and Ivory, with a little Quince Marma-  
lade ; at Night, she took two Spoonfuls of Syrup Of Maiden-  
hair, with an Ounce ofOil of street Almonds, andx sew Spoon-  
sufs of *Sparest),* Or other Wine; her ordinary Fond was Broths,  
or Soups io small Qusntities, and a litde *Bauillie de Proment,* **I**fuppose ‘ he means hasty Pudding; and by these means **the**Symptoms were reliev’d, and the recover’d by degrees.

*La Motte,* remarks upon ibis Occasion, that *Laudanum* **is a**Specific for these Disorders, at any Other rime but in Child-  
bed; but then particular Cam. must he taken, that neither  
Laudanum, nor any other Narcotic, is given, of any son what\*  
ever; for they never fall to stjppreG the Lochia, and for that  
Reason to be fatal: Of which be gave an Instance in a Lady  
who died four Days after taking a Julap of Syrup of whne  
Poppies, and. Oil of sweet Almonds, as a Cure for vinlent  
Gripes, and to stop a Diarrhoea, which it effeistually did, as  
well as the Lochia, which could never afterwards he recall’d  
by any Remedies whatever.

He, also, tells us of another Lady, whose. Lochia were sou.  
press’d by taking a Grain of Laudanum upon the fame Occa-  
sion; which brought on a Dropfy, of which she died f0meMonrhsafteI.

**TUMORS OR THE ARE Airs.** Ἀ

If a Woman takes Cold at her Breast, or anywhere else;  
during het Lying-in, her Breasts are very subjced to Inflammae  
tions, which generally terminate in an Abscess, if not pre-  
vented..

Le *Mcttss* Method of treating these Cases, as appears by  
*Obsc* 434. ,is to endeavour, first, to resolve the Tumor by  
Bleeding, emollient Clysters, and a low Regimen, by Applica,  
tions of warm Milk and Brandyj.and an Ointment of the Oils Of  
Roses, LiliesjSnd Chamomile, - T

Rut if the Resolution is impossible, and. an Absoess must ne.  
cessarily. he produc’d, he makes ufe *of* an anodyne Cataplafm.oi  
the Ctpjns. of wheatenBread, Milk, the Yolks ofEggs, Saffron,  
and Oil of Chamomile;, and. afterwards changes this Form for  
one more ' emollient, and consisting of a Mucilage of Lin-  
seed, Mallows. Maribrnallows, Rye, Metio Bran of Wheat;  
Chamomile-flowers, and Melilot, together with the Osts of  
Lilies, and Chamomile.; and again changes this for one more  
matutatiye, and which consists, of Onions roasted under the  
Ashes, old Leaven, and Ointment of Marshmallows. When Mat.  
ter is .perfectly form’d, be lets it Out with a Lancet, deterges,  
incarns, and cicatrizes.

These Accidents will sometimes he caus’d by Cold taken  
during Labour.

La *Matte* says,, he has.koown several Women have anApo.  
stemation in the Breasts, only for having laid their Handsrand  
Arms .out of Bed. .

**AFTER-PAINS.**

After-pains are very useful to a Woman; for these promote  
the Discharge Of the Lochia, and expel Clots Of Blood, Or  
any thing which, is lest hehind, and ought to come away.

After-pains are easily distinguish’d from Pains of any other  
kind ; dur they corne by Fits, and last but a little while; and  
the Lochia stow abundantly, especially just after the Pain ceases,  
which does not happen after Colic-pains.

Ip Pains which proceed from an Inflammation of .the  
Womb, or Suppression of the Lochia, the Belly is bard, diss  
tended, and painful, which never happens in the Case of After\*  
pains.. . - - . . " '

As most Women are siibjech -to these After-pains, and as  
they are Of real Service, nothing more is necessary thin to ape  
ply aftio and warm Napkin to thenesty, and in keep the Wo.  
man very warm. :

**Sweating often relieves a Woman -from these Pains,: pro-  
vided it he spontaneous.**

Sometimes After-pains are more violent than Labour-pains,  
and become almost insupportable, but ceofe generally in two or  
three Days, but sometimes continue feven or eight *Ea Matte,*boweverj in this Cain leaves the Cute to Nature, unless the  
**Woman is costive, and** then he **advises an emollient Clyster.**

**THE CoLIc. \_ . ’**

The Colic is easily distinguish’d from Aster-pains, because a  
Colic does nor increase the Discharge of the Lochia, which  
After-pains do, especially just aster they cease.

For the Cute of the Colic, *La* Juerrerecommeods emollienl

**Clysters, and Fomentation, wain new Milk.**

This Author recommends an Ounce Of Oil Of sweet Al-  
inonds in half **a** Glass of Wine, and a little Sugar, or Syrup  
Os Maidenhair, to he taken at Once, as very proper in the  
Colic.

**VAPOURS.**

Some Women in Child-bed are so subject to Vapours, that  
the least Surprize give Occasion to them; Or a good Or bad  
Smell Of any thing, particularly Musk. They are attended with  
**' a** sodden Heat and Redness all Over rhe Face and Body, violent  
Agitations, Trembling, Inquietude, Respiration either high and  
frequent. Or weak and flow; Tears, and an Inaction Of all **the**Parts Of the Body, almost aS much aS in a Lethargy.

l *La Matte* says, he has known Women seiz’d with Vapours  
upon being oblig'd to keep their Hands in Bed, which **have**ceas'd immediately aster taking them Out again.

Sometimes Vapours are so Violent, as to make a Woman  
deliriousand sometimes the Pulse is so weak and languishing,  
that the Woman seems expiring, however. *La Matte* says, he  
never knew any One die os them.

- The Remedies recommended by the same Author, jn this  
Case, are Spirit Of Sal Ammoniac, and Oil of Amber, to findi  
to; the Confection of the Hyacinth, in Water of Mugwort:  
Clysters Of Whey, Mugwort, Feverfew, Rue, Camphine and  
Castor, he, also, says, are good Medicines in this Case.

A Sense Of Suffocation and Continual Efforts to swallow, are  
sometimes Symptoms Of the Vapours. *La Matte.*

**? MISCELLANEOUS OBSERVATIONS.**

.... ........ . i

**A** Woman has sometimes all the Signs Of Pregnancy, with-  
**out** being with Child, the Symptoms of Impregnation being  
caused by a great Collection of Water in the Womb. In this  
.Case, the Belly is much bigger than in that Of a Mole; when  
**the** Woman lies On her Back, with her Knees alevattd, her  
Belly is sound soft and equal all Over, without any Difference  
betwixt the inferior and superior Part, which is contrary to what  
happens in Pregnancy ; besides, the Woman does not perceive  
the Child to move at the usual time, **the** Woman’s Face is  
moreover generally pale and emaciated.

In an Ascites, when in Woman lies upon her Back, and .an  
Hand is placed On each Side the Belly, when the Belly is preis’d  
with One Hand, 2. Fluctuation is perceiv'd by the other; hut, in  
the Case before us, no such Fluctuation can be perceiv'd.

. - These Waters are frequently discharg'd, at different Periods of  
Time, without any Considerable Accidents.

These Waters are sometimes contain'd in a Membrane,  
which is attach'd to the Womb by some Blood-Vessels, and in  
this Cafe there will be a Flooding, till the Membranes are ex-  
eluded 5 but if the Membranes haypen to stay long enough to  
putrefy, besides the Accident of Flooding, and Pains like those  
of Labour, the Woman will he seiz’d with Violent Pains in her  
Head, and Shiverings, tho' at the same time extremely hot  
and burning to the Touch, and sometimes a Delirium.

... Sometimes the Womb is so distended with Wind, aS TO give  
all the Appearances of Impregnation, notwithstanding which  
the Menstrual Flux Continues Often. In this Case, at the  
End Of night Or nine Months, Or sooner, the Womb dis-  
charges itself involuntarily Of these Flatulencies with a Noise,  
as if it came from the Anus, and the Woman recovers with-  
out any farther ill Consequence. *La Motte* gives us an Ex-  
ample Of this kind. - ... '

It must he observed, that the Woman. mention'd by *La  
Matte* had a true Conception immediately after the Discharge  
**of’**these Flatulencies. - ς ' ’ . »\_

When a Woman -takes Cold during a Lying-in, \*tiS a good  
Symptom not to have .the Lochia stops, and to have the  
Belly soft and even. . - .2.  
r *Da* /«forte gives ate Instance Of a Woman under these Cir-  
cumstances, who was seiz’d with a Violent Looseness, attended  
with a Shivering, and Pains all over, and want of Rest, whom  
. he Cured, by giving her. an halt Clyster Of Broth, two Hours  
after that, an Ounce of Oil of sweet Almonds; and an Hour  
after that, a DIught Os Broth: And then adding a few more  
.Cloths On the Bed she\*.sweat, plentifully, and recover'd Of all  
these Symptoms by the next Day.

. t Tn order to examine whether the Belly is fwell'd or not,  
the Woman must he put in the same Posture, aS is directed  
-by *La Motte* for ’Dehvery; that is, upon her Back, with her  
Knees elevated, and Heeis placed near the Buttocks. *Lae  
Motte. ' " ἐν ' . . ... .. .*

. When a Woman is in Labour, there shon’d he a Fire in the  
same Room, Or One very near it, let the Season be never fo  
hot. For the Water stowing away Rt every Pain, will make  
her take Cold, if she is nor ‘ constantiy supplied wish warm  
Godin \*'--\*\*. - ..." ; --Ἀ- S’

*Hippocrates* mentions Cold, as condensing the ‘LOChis, and  
directs Patients under these Circumstances to he made warm. -

When a Woman has sweated profusely for the eight or ten  
first Days Of her Lying-in, it Often hardening upon the Skin,  
**causes a’** troublesome Itching. In this Case *La Motte* approves

6s *Mauriceau's* Advice, who directs a Bath Os warm Water.  
Bur, in cold Weather, this must he done with Care and Caul  
tion, sor sear of Opening the Pores too much.

Nothing is more serviceable to Women in Chfld-hed, than  
plentiful Sweats, for they prevent Fevers, and all Other bad  
Consequences; and cure them when they happen, insomuch  
that 'tis Common tO see a Woman seiz’d with Shiverings,  
and Pains in the Breasts, Hips, and Other Parts, attended with  
a Violent Fever, and recover very soon by plentiful Continu'd  
Sweats. *LaMotte.*

*La Mottds* Method Of Regimen for Women in Chfld-hed,  
is to give them, from time to time, a little Broth; and some-  
times a little Toast and Wine, if there is no Reason to appre-  
hend a Fever.

He recommends the following Mixtures, **aS a** proper Drink  
for Lying-in Women.

Two Quarts Of Water, Cinnamon a Dram, Sugar two  
Ounces.

Let these boil **a** quarter of an Hour, and then let it be drank  
always warm. If no Fever is apprehended, a littie Wine may **be**added.

If the Woman Continues Costive till the third Day, he fays,  
he never fails giving an emollient. Or gently purging Clyster. \*

And the fifth Day he allows Fowl, either roasted Or. bon'd.

The Meconium is the Excrement Of the Child, of the Cona  
fistence of Honey, and of a brownish Colour.

If this is discharg'd from the Womb, when the Child is  
wed situated, 'tis a Sign the Child is deal, especially if the  
Labour is long, and particularly if the Navel-string presents  
before the Head. But when the Chil l presents in any con-  
strain'd Situation, especially with the Buttocks, no Notice is  
to he taken Of it, nor any Conclusion to he drawn, from it with  
respect to the Child's Death. *La Motte.*

' Women in Child-bed, upon exposing themselves to the  
Cold,, whilst they sweat especially, are sometimes seined with  
Violent Pains in the Side, attended with a Cough, and Fever,  
and Difficulty of Respiration, the' **at** the same time the Lochia  
proceed well.

*La Motte* seems in this Case to treat a Woman with great  
Judgment, his Intention being to relax by all possible means. He,  
therefore, directs Bleeding in small Quantities, and repeats it at  
short Intervals, if necessary, and gives emollient Clysters Of  
Whey Only, making the Patient drink large Quantities Of di-  
luting Liquors. He bleeds in the Arm, and repeats is, till the  
Pain ceases, and affirms that Bleeding is the only Remedy to he  
depended on in these Cases. 6

Vomiting is generally a Sign of a speedy Delivery but, when  
it Continues long, it becomes a Very pernicious Symptom, be-  
cause it prevents the Woman from taking any proper Nourish-  
ment to keep up her Strength.

- If a Woman in Labour vomits a black Matter, Or Substance  
like HogS-blood boil’d and coagulated, 'tis a fatal Symptom,  
especially is it smells offensively. *La Motte.*

OBSTRUCTIO. An Obstruction. See INFLAMMATIO.

An Obstruction is such an Obturation of the Vessels, aS pre-  
vents the Circulation of the Fluids, whether Os the sound and  
vital, or Of the morbid and peccant Kind, through them ;  
arising from an Excess Of the Bulk of the Fluid to he transmitted  
above the Capacity of the Vessel which Ought to transmit it.

Such an Obstruction proceeds either from the Narrowness os the  
Vessels, Or the excessive Bulk of the Fluids to be transmitted tino'  
them. Or from a Concurrence Of both these Circumstances.

The Narrowness Os the Veffeis is produced, either by external  
Compression, the proper Contraction Of the Veffeis themselves,  
or an increased Thickness in their Membranes. - *e*

The Bulk of the Molecules of the Blood is increased by **the**Viscidity Of the Fluids, Or by means Os an *Error Loci.*

An Obstruction may, also, proceed from in Narrowness Os the  
Vessels, in Conjunction with a preternatural Bulk Os the Mole-  
Cnles Os the Fluids.

The Veffeis may he externally compressed.

First, By an adjacent Tumor, either Os the plethoric, inflam'd,  
purulent, scirrhous, Cancerous, oedematous, encysted, steatoma-  
tons, atheromatous, meliccrous, hydatidic, aneurismacte. Varicose,  
tOphous, pituitous, calculous, or callous Kind.

Secondly, By Fractures, Luxations, Distortions, Or Distractions  
of the harder Parts Of the Body, Compressing the flexible and  
pliant Veffeis.

Thirdly, By every Cause which preternaturally stretches and  
lengthens the Vessels, whether by a Tumor, or the Pressure of **a**Part when Out of its natural Situation, or by an external stretch-  
ing Forde.. ‘

Foutthry, By external compressing Causes, such as too fight  
Cloths, Bandages, the Weight Of an incumbent Body pressing  
upon One particular Part, and Ligatures. This Effect may, also,  
be produced by Motion, Attrition, and embracing Other Bodies;  
for, when any Part of the human Body is moved against an hard  
Obstacle, the flexible Vessels are necessarily Compressed: Those

who *aris not* accustomed to travelling, have their Feet inflamed  
by long Journeys; and these who tog severely at the Oar; have  
their Hands inflamed; and, if that Exercise is long-protractsd,  
'Veficlesof an almost gangrenous Nature are raised.

An increased Contraction, especially of the spiral Fibres, and,  
**also, of the** longitudinal, lessens the Cavities of the Vessels, and  
this Contraction arises, first, from every Cause which increases  
the elastic Force of\*the Fibres, Vessels, and Viscera. Secondly,  
from .the Tumor, and preternatural Distention, of those minure  
Vessels, by a.Contexture of which, the Sides of the larger Vessels  
are formed. And, thirdly, by a Diminution of that Cause which  
dilates’ the Vessels, .whether, for Instance, inanition. Or a languid  
Sure of the Vessels: Hence Vessels, when divided, fooncohiine  
and restrain the Discharge os then contained Fluids; and- the  
Reason of this is sufficiently obvious: Tor whilst the Blond is, by  
the Force of the Heart, propelled into the Arteries, the greater  
Resistance there is about their Extremities, the more theyaredi-  
lated. - Bur, when an Artery is divided, there is scarcely any. Re,  
Essence, and the Blond flows freely from the Wound. In conse-  
quence of mis, the Artery is not distended, but by its own Con-  
- tractility is,gradually more contracted, till at last it totally bin-  
. ders the Effusion'of the Hind, which would otherwise he dis-  
charged. Hence if is,.that so violent Haemorrhages happen from  
half-divided Vessels; which cannot the successfully stopt, till the  
Vessels are totally divided.

The Thickness Of. the Membranes of the Vessels is increased,  
first, by every Tumor happening in those Vessels, by the Union  
**and** Contexture of which the Membranes are formed: - And.,  
secondly, by Calluses either Of a cartilaginous, membranous. Or  
bony Nature, formed: then. Γ - . ’ . . . :

- -The Bulk of the Fluids is so increased) as-to become incapable  
of circulating either, -first, by a Change, of the spherical Figure  
Of their Parrs, into any other; and thus entering the Cavinesof  
the Vessels under .a larger Surface: Or,'secondly, byithe Union  
of several Molecules before separated. ' ss . ..i . st’

. The Figure of these Molecoles is principally changed by a  
Cessation of the equable and uniformi Pressure upon . them; so'  
that. they, are jest .to. their own Elasticity:; and this happens, when  
the Motion of the Blood is languid, the Vessels reseram or the  
Quantity of the Fluids diminished." .. Α-..τ--ινξ'

The Molecules of the Fluids are unised by.Rest, Cold,Trost,  
Exsiccation, Heat, a\* violent Circulation os'the Blood, a strong  
Compression ofthe Vessels, as, allo, byacid, coagulatingThings;  
by austere, spirituous, and abforbam Substjoces; and by the Vis-  
cidity and oleous Quality Of theTluids.'ss' Si

By an *Error Losusuc* Fluids become incapable of circulating,  
*S* -Corpuscles enter the dilated Bases of conical Vessels, and are,  
it the fame time,'incapable of passing through the narrower  
Parts of thefe Vessels ' A Plethora; an increased Motion of the  
Fluids, their Rarefaction, or a Relaxation of the Vessels, ptioci-  
pally produce thiRDilacation; cspecjallyitfthese are immediately  
succeeded by their Contraries, χ tat. ἐν; ιι- - .'-aininf-μα -  
.-Heace-the Causes and **Naturd** OF every Kind of Obstruction  
may be understand..) .. - .“ .[ . gni;’. dur.

JsAn Obstruction, happening in a line Body, binders the Gired-  
letion Of the Fluids/which ought to pass through the Vessels;  
stops the other Particles of the Blood convey’d to it, and receives  
their Action expresses the mote subtile; and unites the grosser  
Parts.of IheFluidS; extends, dilates, attenuates, and resolves the  
Vesieis; condenses.the stagnant Fluids ; destroys the.Functions  
arising from ah uninterrupted Circulation, empties.and dries the  
Vesieis, which ought to have the circolatirig-FluidS convey’d into  
them ; lessens the. Capacities Of the Vessels, which Ought to trans-  
mit the Fluids; augmeats both the Quantity and Velocity ofthe  
FlindSin the unobstrnaed Vessels; and, consequently,- produces  
osi the Ewis which can arise from thence.' .. . . .0 :r

For this Reason, the Effects ofAn Obstruction are? various,  
according to the Diversity of the obstructed Vestel,’and. the oh-  
strudling Matter., τ, i: ς ', 5 . . ’ --...7 -

In rhe fanguiferous.arterial Vessels, an Inflammation of the first  
Kind happens in the dilated; 'lymphatic,' arterial Vessels; an In-  
flammation of the ieoond Kind; in the larger lymphatic Vessels,  
an Oedema; in the smaller. Pains without any apparent Tumor;  
but 'in the pinguiferous, osteosis; medullary, and biliary Vessels,  
ether Disorders arise from an Obstruction: -

The Physician, who knows the Seatiothe-Nature, the Matter,  
the Causes, and the Effects of Obstructions already mentioned,  
her. easily discover the Signs of a future and prefent Obstruction,  
together- with theirEffects. - in ' u ...........

1 When the differed Kinds of Obstructions are distinftly known,  
**'tis** no difficult Matter to find a Cure adapted to each.

2 For that Specles:of Obstruction which arises, from external  
Compression, inchoates, the Removal of the compressing Cause,  
.-That Species of: Obstruction,: which arises fromian increased  
Contraction of the Fibres, may be known by those Signs which  
discover a Contraction of the Viscera, Vessels, and Fibres. That  
Kind of Obstrucno.o.in which the Contraction iarsses from a Tu-  
mor of the minute Vessels, which constitute the hides anil Cavt-  
iics.of the larger Vessels, may he discovered by the manifest Signs

of its Cause; as, also, that Species of Obstruction which arises  
from Inanition, or a Diminution of the Cause which dilated **the**Vesseis. - ' j f

This Species of Obstruction is removed, first, by socti Medi-  
cines aS. correct the too great Contraction Of the Fibres, Vesicis,  
‘and Viscera; secondly, and more especially, if their Virtueshave  
immediate Access to the Part affected, which Advantage is prin-  
cipally obtained by Fomentations, Fumigations, Baths, and Oint-  
ments ;.thrrdly, by inch Remedies as empty the too full Vesieis  
composing the Membranes. This intention is answered by Eva.  
cuants in general, but especially by laxative, diluting, refolveur,  
attenuating, detersive, and evacuant Medicines apply’d ro rhe-Vef.  
seis themselves; and, founhiy, by such Medicines as refoive Cal.  
dosities, when formed. -

i Sut the Species Of Obstruction, which arises from this Cause,  
is rarely or never to be cured : Emollient and relaxing Medicines  
are, however, most efficacious. Hence appears the inevitable  
Necessity of Death, add the great Difficulty of procuring a long  
Life, by means of Medicines.

c That Unfitness-of the Fluids for pasting throueh the Vesieis,  
which depends upon their losing their spherical Figure, may **be**known from, an .investigation of its Causes, which are, for **the**most part, subjeched to the Senses. -

It is cured by such Remedies as restore the spherical Figure  
of rhe Globules of the Blood: OfthisKind areall those Things  
which increase the Motion of the Fluids through the Vessels and  
Viscera, fuch as all stitnuiaung and corroborating Medicines, as,  
also, brisk Morion. ‘ ' ι .... . ' 'ζ

As the Concretion and inspistation of the Fluids arises from fo  
rations-and .different Causes, so it requires different Methods of  
Treatment, and different Medicines, according to rhe different  
Conditions of the Patient;A And this Diversity of Causes, when  
investigated,.will discover the:most: proper Medicines, and the  
best Method Of using them. :ε 'if... -.

"The Concretion of the Humours, in general, is removed- first,  
by-:the;reolprocal Morioinof the Vesseis.; secondly,by Dilution;  
thirdly, by an Attenuating; Fluid convey’d to the Mass of Blood,  
mixed wignit, and . circulating along with it ; and, fourthly, by  
removingthe coagulating Cause. \_ - ./ :

-. The reciprocal. Motion of the Vesieis is procured, first, by  
such Remedies as diminish rhe distending Caufes, fuch as sene.  
section; secondly, by such Medicines as corroborate the Vesseis ς  
thirdly, -by Friction, Sod. inofcular Motion s adds fourthly,, by  
stimulating Medicines, ἐν -V'

Water, especially when warm, is a powerful Diluent; when  
drank, injeisted, received by Exhalations, or apply’d in any other  
manner ; . 'provided ir is propelled from , the Parts io which it-is  
apply’d, to thofe where the Matter, to be resolved, is lodged.  
Tins Intention is infwcied. by deriving, attracting, and propellent,  
Remedies. . - - μου:..

The Fluids are attenuated, first, by Water; secondly, by Sea-  
salt, Sal Gemma, Sal Ammoniac, Nitre, Borax, fixed and vola-  
tile alcaline Salts; thirdly, by native Soaps, consisting of an Alcalri  
and an Oil; by compound Soaps, whether fuliginous, volatile, or  
fixed5 as,also, by Bile. . y 1

- Native Soaps, consisting of an Oil, andon Alcali, are, recent  
and mature- juices, expressed from all Herbs abounding withan  
alcaline Acrimony, Or fuch as are of an highly aromatic Qualiry.  
Artificial Soaps, consisting of an Alcali and: Oil, are blackAoap,  
and *Venice Sov^,* one or two Drams of which may he used;  
and *Starkeys, ot HelmcridaSoip,* sour Grains,Or One Scruple, of  
which rday be used. Fuliginous volatile.Soaps, arc. oleoiisisnd -  
alcaline Spirits prepared of alcalescent Aromatics, fifteen Drops  
of which may he exhibited ;'.oleous alcaline. Spirits prepared of  
Soot, fifteen Drops of which may be given ; the oleous alcaline  
Spirits-prepared from all -the Humours or solid Parts of Animals, , .  
eighteen Drops of which may be exhibited. TO this Clast,Ssso,  
belongs.Soot-itfess. . . . stain .'

'Andj.jourihly, the Attenuation of the Humours is promoted  
by Preparations of Merciitio All these are convey’d to the Parrs  
Obstructiedy by Derivation, Attraction, and Propulsion . Pieper  
Mercurials areMercutins:dolcis, tin Grains of which.they be  
used fora Dore. Corrosive Sublimate, one eighth Part ofaGrain  
may be exhibited, diluted in some proper Liquor; red PreCipi-  
rare, two Grains for a Dose ; white Precipitate, four Grains ;  
Turbith’ Mineral, two Grains ; and AEthiops Mineral, .sixteen  
Grains. - - - - —; -\* A-.ou-- ι

- Attracting Medicines are such as relax the Place to which rhe  
Matter is to be convey’d; and straiten that from which st is **to**he drawn. These are specified under the" Article FrBRA.

. Deriving Medicines are thofe which invite the Fluids into any  
given Part; and fuch are the Remedies which produce an Eva-  
cuation-in the Pan affectied; and artificial Frictions of the adjacent  
Parts. ' - Λ' S-. *r ,:i*

Propellent Medicines are those of rhe strmolatiog Kind, which  
**are** specified underrheArride Gluten. , ... . - I»

The Cause which coagulates the Fluids, is removed by the In-  
fluence of strongly-arrracting Medicines -Thus Acids and: Oils  
are attrafied imo Alcalis, as is obvioiis from ctiymical - Expert-  
ments. -

But when the Fluids, propelled into improper Places, become  
incapable of Circulating, and by that means generate Obstrn-  
ctions, many and violent Disorders are produced; for which Reason  
the Source and Cause from winch they proceed. Ought to he  
Carefully attended to.

We may know, that the Fluids are propelled into improper  
places, first, if we know, that the Causes Of such a Disorder,  
.which are generally sussicientiy Obvious, have preceded , se\*  
COndly, if Contrary Causes have succeeded these , and, thirdly.  
If the Effects are evidently perceived-

From whet has been before said, we may easily foresee what  
the Consequences of such a Disorder must be.

. The Cure is Obtained, fust, her repelling the impacted Matter,  
with a retrograde Motion, into larger Veffeis , secondly, by **re-**solving in ; thirdly, by relaxing the Veffeis ; and, fourthly, by  
Suppuration.

The impacted Matter is repelled with a retrograde Motion,  
first, by evacuating the Fluid which acts upon the impacted Mat-  
ter, by a liberal and fudden Venesection, by winch means the Ob-  
structing Matter is forced hack by the Effort Of the Contracted  
Vessel; and, secondly, by Friction, performed from the Extre-  
mines to the Bases Of the Vessels.

The impacted Matter is resolved, and the Veffeis relaxed, by  
the Medicines already mentioned. *Baerhaavrs Aphorisms.*

*1* have heen the less particular in explaining these ApborssnIs,  
because they will he readily understood, by what is said under **the**Articles **FIBRA, and INFLAMMATIO. .**

OBTUNDENTIA. Medicines which obtund, or correct  
the Acrimony Of the Humours. .

OBTURATIO. Obturation, or Obstruction. **See GR-  
aTRUCTIO.**

OBTURATOR. **A Name** for two Muscles of **the**Thigh ; one Of which is the MARsUPIALIs, and .is called.  
*Obturator Internus.* See MARSUPIALIS. Theotheris the

OBTURATOR EXTERNUS. This is **a** small flat  
Muscle, which filis up the Foramen Ovale of the OS Innomi-  
.natum exteriorly, and reaches from thence to the great Tro-  
chanter Of the Os Femoris, hehind the Neck of that Bone.

It is fixed by fleshy Fibres to the outer or anterior Side of the  
OS Pubis, all the Way to the Foramen Ovale, to the Edge of  
That Hole, next the small Branch of the Ischium, and a litde  
to the neighbouring Parts Of the Obturator Ligament.

From thence its Fibres, Contracting in Breadth, pass on the  
fore Side of the great Branch of theTsehinm, under the  
Scetabulum, where a Tendon is formed, which continues its  
Course behind the Neck of the OS Femoris towards the great  
Trochanter, and is inserted between the Gemelli and. Quadra-  
jtus, into small Fossuhe, between the Apex of the great Tro-  
chanter and the Basis of the Collum Femoris.” . I" .

. , The Obturator Externus Concurs with the Internus in **the**same Uses, the' in a more simple, and in a more uniform  
Direction. It acts chiefly when the Thigh is extended more  
he less; for, when the Thigh is hent, it only seems Io Co-  
operate with the Obturator Internus, in its Action On the  
Orbicular Ligament; hecause, in other respects, it is rather  
an Assistant Io the Triceps, and performs the Motion of  
Rotation **the** other Way. *Winsiovsts Anatomy.*

si: OCCASIO, in Medicine, imports either Opportunity, a  
due Regard to which is of Very great Importance to **a** Physician *i*or sometimes it signifies a Cause.

OCCIDENS. Vinegar. *Rulandus.*

**OcCiDENs STELLA. Sal Ammoniac.** *Rulandus.*

OCCIPITALIS MUSCULUS. The Occipital Muscled  
.See CAPUT.

' OCCIPITO-FRONTALIS, according to *Douglas,* IS **a**Muscle os the Head , -which he thus describes.

. It arises fleshy from the transverse lane of the Occiput, op-  
Posite to Part of the superior Termination Of the *Mastoidaeus,*and Part of the Beginning of the *Trapezius* next it, and then  
tendinous from the rest of that Line backwards, arising after  
the same manner, on the other Side ; from thence it grows  
strait up, and soon becoming all tendinous, it Covers the two  
parietal Bones, and the *Ossea Squamoso,* above the Temporal  
Muscles, its outer Edge heing fastened to the *Os Jugale,* on  
each Side. This broad Tendon near the Coronal Suture grows  
fleshy ,-and descends with strait Fibre as low as the *Musculi  
iOrlaculares. . '*

It is inserted into the Skin at the Eye-brows, having sent  
down, hetween them, a narrow fleshy Slip, or Elongation,  
.which is continued over the Offa Nasi, as far as its cartilagi-  
duous Part, where its Fibres run off on each Side, and terminate  
in the Skin above the *Musculus Nasi Preprius.*

When this digastric Muscle, which covers all the upper Part of  
the Skull, like a Cap, acts, it pulls the Skin of the Head back-  
wards, and at the same time it draws up .and wrinkles that of  
-the Forehead, heing antagonized by the Corrugator. *Dau glus'e  
Myograph. Coyap.*

**OCCULTUS. Occult. Cancers not exulcerated, are**called occult Cancers. . - 7. S '

OCHeMA, οχκμα. The finest and most fluid Part os .the  
Blood and Chyle. *Galen.* It seems to he what the Moderns  
call Lymph. . . .

**OCHETEUMATA, ὑχετευματα. The Foramina osthe  
Nose,**

OCHETOS, όχίτὸν. A Passage, Duct, orCanal, **many**Part of. the Body. It is principally used, by *Hippocrates,* with  
respect to the Passages for Urine, Stoois, and Sweat.

’ OCHEUS, ὸχεὑς. The Scrotum.

OCHRA, Offic. Mer. Pin. 2I8. Charlt. Foil. 2. Sebrod.  
320. *Ochra Anglica.* Worm. I7. *Ochra.* Aldrov. Musi Metall.  
254. *Ochra nativa.* Calet Mus. I 37. *Ochra nativa sive Sil  
Gostariensts.* Kentm. .8. *Ochra fossetis seu nativa .crocei coloris.*Dough Indi 64. *Vitrioluniabortivum.* Lrllar. de Font. *Sil.* Plin\*  
YELLOW OKER. s :

’ It is an argillaceous Substance, of a yellow or lnteons Colour,  
and an astringent Taste. As to itSVirtues; itis drying, astringent,  
discutient, and represses Excrescences. It is Veay seldom used,and  
never but externally, and that principally in Marks by Plows or .  
Stripes, and in Collisions, and for discussing hard Tumors, *Dale,.*

OCHREA The fore Part *of* the *Tibias'* "Ἀ- .

OCHRUS. .- a. . .. .

The Characters *are ; -.*

It has a round, smooth, cylindrical Pod, which is full of  
round Seeds; and the Leaves are articulated, sometimes **simple,**sometimes conjugated, and terminate in Tendrils. . n..\_

*Boerhaave* mentions but one Sort of thin ; which is,, . rod

Ochrns folio integro Capreolos emittente, *Co B.P.* 313. *La-  
ihyrusfolio integra,, producente Etna foliola, .Capreolos emittentia.*M. *H.* 2. 58. *Lathyri Species, qua Ervilia Dodonaei solve\*  
siris. J.* B. 2. 17.-305. *Ervilia silvestris.* Dod. p. 522»  
Boerh. ind. alt. Plant, vol. 2. p. 43. ...το

r The Seeds, which are cylindrical, of the Size of a small Pea,  
and of a dark-yellow Colour, are eatable, -but generate **a**viscid Chyle, subject: to .cause Obstructions. - *Hist. Plane, \*  
adscript. Boorhaav. . . . . 4. .: .*

OCHTHODES, ,οχθεἴδος, from όχθος; Importing the  
tumid Lips of Ulcers. Callous, tumid, Tt Is also an Epithet  
sor Ulcere which are difficultsto heal. ' ' \* '. „ 6

OCIMASTRUM. See OCYKtASTRUM, . ~ so si.

\* 'OCIMUM. SeeOCYMUM. ζ' . "frsusi

OCLASIs, ὸκλασιίον That Posture winch is Called Chut-  
ing ; which is, when a Person, standing, brings his'Knee^  
forwards, towards which the Abdomen approaches, whilst the  
Buttocks descend, and Como near to the Ground, Or the  
Heels. . . ; - squ ...' ς' :su

*. OCOB,* Sal Ammoniac. *Rulandus. "r* :so . . . .j

\* OCOLOXOCHITL, *side Flat Tigris.* Hernandez,' *Thr.*

*gridis Plos. G. B.* Doth-Lchj Ger. *Tigrides Flen Drucudculs  
Species putata.* J.B. - d hern

.. Itisdescribed byC. *Bansiine,* and *F. Hernandez,* as haying,  
a Root like a Leek, Leaves like the *Gladiolus,* a Flower dur'An  
very -beautiful red Colour, .but **white, .in the** -Middle, **and**shotted like a Tygeris Skin; .whence jt took its Name, '. uedj  
- An Ounce Of the Roos, taken in Water, coossthe Body, **and** ι  
extinguishes a Fever, and prevents those oninute- Eruptions'  
*[Punctis adversetur],* - which are .usoaliy Consequent upon  
Bunting Fevers. Some say, the Root, eatenjoausesFecundity **j**sor it is esculent, and a -cold, the\* not altogether unpleasant -  
Food, lubricous, and good sor the Breast. ... ; - ..

Itdelighis in atemperate Climate, like that os the Citywf- ι  
*Mexico*; and thrives best- in Garden?,, and rnoistapd cultivated  
Pisces. *Rail Hi P. p.-Ifrig.su z ' '.sese'* S

OCRIS; όκρὶς, is expounded' by *'Galen, ‘ in this Exe^fis,*an -oblong Prominence,, or Eminence Hence .οκριφόνδιις; and  
δκριοεις. Adjectives which import,, having her oblong Eminence\*  
or Protuberance. *sis. si. so' so file*

OCTIJNX. Eight Oimoess si *‘'J'r.siT - ἐν - \**OCULARIA. A Name for' the *Escphrasisi,* 'Eyebrighet τ",  
OCULI CANCRORUM. Crabs-eyw. 'SeeCANcyybr '  
OCULISTA. An Oculista . ss.’...ssss.ssss  
OCULUS. The Eye, E ; .. ἝἝ

The Eyns-arq commonly hero in -Number,, situated at, eher  
lower Part of the Forehead, one at each Side os .the Root of  
the Nose I and they are made up of hard and soft Parts. The  
hard Partsare the Bones of the Cranium .and Face, whinh sotut  
two pyramidal or conical Cavities, like Funnels, .to which **we**wive the Name of Orbits.. The sostRacts;ate.of several kinds)  
The principal and most essential soft Part in each Organ, is  
the Glohe or Ball of the Eye ; she others are partly external,  
**and** partly internal : The external Parts .ate the Supercilia, **or**Eye-brows, the Palpebrae, or Eye-lidS, the Caruncula lachey-  
malis, and the Puncta lachrymal ia; and the internal Parts, .are  
-the Muscles, Fat, lachrymal Gland, Nerves, and-Blood-vessels.r

**THE ORBITS.**

Seven Bones are concerned in the Composition of each Omit,  
the Os Frontis, Os Sphenoidale, Os Ethmoides, Os Maxil-  
lone. Os Make, Os Unguis, and Os Palath In each Orbit  
we are to consider the Edge, Sides, and Bottoms : The Edge  
is formed by the Os Frontis, Os Maxillare, and Os Mabe ; the  
Bottom by the Os Sphenoides, and Os Palati; and all these  
**.Bones,** except the Os Paiati, contribute to form the Sides.

The Bottom is perforated by the Foramen Opticum of the  
Os Sphenoides . and the external Side near this Foramen, by  
*two* orbitary Fissiires; one sirperior, called *Sphenoidales,* the  
ether inferior, called *Sphena-maxillaris.*

All the Cavity of the Orbit is lined by a Membrane, which is  
**an** Elongation Or Preduction of the Dura Mater ; and it comes  
partly through the Foramen Opocum of the 0s Sphenoides,  
and partly through the sphenoidal or superior Orbit of the  
Fissure. This Membrane, which may he looked upon as the  
Periosteum of the Orbit, communicates with the Periosteum of  
the Basis Cranii, by the inferior Orbitary Fissure, and with the  
Periosteum of the Face at the Edge *of the* Orbit. At theupper  
Part of the Edge of the Orbits, the two Petiostea form a kind  
of broad Ligament, and a narrow one at the lower Part of this  
Edge, which I shall call Ligaments *of* the Palpebrae.

'fine particular Situation of the Orbits represents nearly two  
funnels, placed laterally at a small Distance from each other,  
; in such a manner as that their Apices are almost joined, their  
nearest Sides almost parallel, and the other Sides turned ob-  
liquely heckward ; and, for this Reason, the Middle of the  
great Circumference or Edge of each Orbit is at a much  
greater Distance from the Septum Narium, than the Bottom,  
of Apex; and the Edge, or great Circumference, is vexyohiinue;  
the temporal or external Angle of the Orbit lying more back-  
ward than the nasal or internal Angle.. ' “ \*

**The GLosR ost BALL o? THE EYR.**

The Globe of the Eye, heing the most essential of all the  
first Parts belonging to the Organ of Sight, and being likewise  
**a** Part which we are obliged to mention as often as we speak of  
the other soft Parts, must he first described. It is made up of  
several proper Parts, tome of which, heing more or less solid,  
represent a kind of Shell, formed by the Uninn Of several  
membranous Strata, called the Coats of the Glohe of the  
Eye; and the ’other Parts, heing more or less fluid, and con-  
rained in particular membranous Capsulae, or in the interstices  
between the Coats, are termed the Humours of the Glohe of  
the Eye. These Capsuhe are like wise termed Coats.

The Coats of the Globe of the Eye are of three kinds:  
some form principally the Shell of the Glohe ; some are ad-  
ditional, heing sored only to a Part of the Globe ; and tome are  
eapfular, whichcOntain the Humours. The Coats which form  
the Shell, are three in Number : The external, whence the  
Convekity of the Globe proceeds, is termed TunicaSclerotrca,  
pr Cornea;.the middle Coat is named Choroides ; and the  
third or ninermost. Retina. The additional Coats are two,  
one called Tendinosa, or Albuginea, which forms the White  
of the Eye, and the other Conjunctiva. The capsular Tunic?  
sre, also two, the Vitrea and Crystallina.

The Glohe of the Eye, thus formed, sends out backward a  
pretty large Pedicle, which is the Continuation of the Qutio.  
Nerve : It is situated about the middle of the Orbit, in the  
manner which we shall afterwards see ; and it is tied to it by  
the Optie Nerve, by six Muscles, by the Tunica Conjunctiva,  
and by the Palpebrae. The back Part of the Glohe, the Optic  
Nerve, and Muscles, are surrounded by a soft fatty Substance,  
which fills the rest of the Bottom of the Orbit.

. The Humours are three in Number, the Aqueous, Vitreous,  
and Crystalline : The first may properly he called an Humour,  
and is contained in \* Space formed in the interstices *of the*anterior Portion of the Coats. The second, or Vitreous Hu-  
rnoiir, is contained in a particular membranous Capsula, and  
sills above three Fourths of the Shell, or Cavity of the Glohe  
of the Eye. It has been named Viueous, from its supposed  
Resemblance to melted Glass, het it is really more like the  
White of a new-laid Egg.

The Crystalline Humour is so called, from in Resemblance  
to Crystal; and is often named, simply, the Crystalline. It is  
Esther, a gummy .Mass, than an Humour, ofa lenticular Form,  
more convex on the back than on the sore Side, and contained  
*in a* .sine Membrane, called Membrana, or Capfola Cry-  
**flailing,**

**THE COATS o? THE EYe IN -PARTICULAR.**

The most external, thickest, and strongest Coat of the Eye,  
is the Sclerotica, or Cornea ., and it invests all the other Parts of  
which the Glohe is composed . It in divided intotwp Portions,

**one** called Cornea Opaca, the other Cornea Lucida, which is  
only **a** small Segment of **a** Sphere, situated anteriorly.

The Cornea Opaca is made up of several Strata, closely con.  
nefeed together; and is of an hard compact Texture, resem-ι  
bling Parchment. About the Middle of its postetior convex  
Portion, where it sustains the Optio Nerves, it is in a manner  
perforated, and thicker than any-where else, its Thickness  
diminishing gradually toward the opposite Side; and its Substance  
ispenetrated obliquely in several Places by small Blood-vessels.  
The Course of the nervous Filaments through this Coat is very  
singular ; they enter the convex Side at some Distance from  
the Optio Nerve, and, running thence through its Substance,  
they pierce the concave Side, near the Cornea Lucida.

The Cornea Lucida, called,, llkewife, simply. Cornea, the  
opaque Portion heing named Sclerotica, is made up, in the  
like manner, of fevera] Strata, or Lamins, closely united ;  
and appears to he a Continuation of the opaque Portion, or  
Sclerotica, though of a different Texture. When macerated  
in cold Water, it swells.

This Portion is something more convex then the Cornea  
**Opaca,** so that it represents the Segment of a final! Sphere,  
added to the Segment of **a** greater ; out this Difference is not  
equally great in all Perrons. The Circumference of the convex '  
Side is not circular, as **that** of the concave Side, but trans-  
versely oval; for the superior and iofetior Portions of the Cir-  
cumference terminate obliquely ; but this Obliquity is more  
apparent in Oxen and Sheep, than in Man.

**The** Cornea Lucida is perforated by a great Number of in,-  
perceptible Pores, through which a very fine fluid is conti-  
Dually discharged, which soon afterwards evaporates; but **we**discover it evidently, by pressing the Eye soon after Death,  
having first wiped it very clean; for we then see *R* grained  
Collection of a very subfile Liquor, which forms itself into little  
Drops; and this Experiment may be several tubes repeated on  
the same Subjects It is this Dew that forms a kind of Pellicle  
on the Eyes of dying Pcrforu, which sometimes cracks soon  
after.

The second Coat of the Glohe of the Eye is the Cheroides ;  
which is os a blackish Colour, more or less inclined to red,  
and adheres, by reason of a great Number of small Vessels, 29  
the Cornea Opaca from the Insertion of the Optic Nerve, all  
the Way Io the Union of the two Corner, where it leaves the  
Circumference of the Glohe, and forms a perforated Septum, by  
which the small Segment oftheGlobe is separated from the greater.  
This Portion goes commonly by the particular Name of Uvea,  
which was formerly given to the whele second Coat ; and as *it*is of different Colours in several Subjects, it hes likewise get  
the Name of inis ; which Term, however, agrees more pre,.  
ciscly to the coloured Surface of this Portion, and, would even  
he very improper for this Surface, in Persons where is is uni-  
sormly brown, black, or biackish.

The external Lamina of the Cheroides is stronger than the  
internal, and both appear blackish, hecaufe of their Transpa-  
rency. At a very final! Distance from the Union of the two  
Comae, thisLamina is most closely united to the Cornea Opacar  
Round this Adhesion .it changes Colour, and forms a whitish  
Ring of the seme Breadth with the Adhesion ; arid pear the  
. Edge *of* the Sclerotica, this Ring is stronger, and of different  
Texture from what it is any-where else. It adheres *so* closely  
to the Sclerotica, that if we blow through a small Holo rrtadp  
therein, without touching the Choroides, the Ait will penetrato  
every-where between the two Coats, but cannot destroy thio  
Adhesion, orpass ro the Cornea Lucida. This Adhesion has been  
improperly named Ligamentum Ciliare. On the inner Surface  
Pf thisLamina, we discover a great Number of flat Lines in  
a vortical Disposition, which are the Vessels named by *Steue  
VAs* Vorticofa, or Vortices Vasculosi, of which hereafter.

- The internal Lamina of the Cheroides is thinner than the  
external, and its Surface, together with the corresponding Sur-  
face of the other Lamina, is covered by a blackish Substance with  
some Mixture of Red, which easily separates when touched,  
and immediately ainges the Water in which the Choroides is  
dipt. The Origin of this Substance has not **as** yet been difr  
eovered .brrt, atior^hiee aBatoramedIrjoAion, J have observed  
**a** great Nurphet of vascular Setts on the inner Surface of this  
**Lamina. ha M.** *Putsch’s* Works, it is termed *Aelmajbraua  
Pusuchiaua. .*

the anterior Portion, or perfora ted Septum of the Choroides,  
has the Name of Uveaj Snd the Hole near the Centre of this  
Septum’ in called Ruptile. The anterior Lamina of the same  
Septum is termed Iris, and the radiated Plica, of the posterior  
Lamina, Processus Ciliares. Between the two Lamina, of She  
'Uvea, we find two very thin Planes of Fibres, which appear to  
he fleshy; the Fibres of one Plane heing orbicular, and lying  
round the Circumference of the Pupilia, and there of the other  
bring radiated, one Extremity of which is fixed tothc orbicular  
Plane, theosher to the ^-carctidge of the Uvea.

**The** Plicae, or Processus Ciliares, are small radiated and  
Prominent Duplicatores of the posterior Lamina of the Uvea ;  
and then Circumference answers partly to that os the white  
Ring of the external Lamina. They are oblong thin Plates ;  
their posterior Extremities, orthose next the Cheroides, hemg  
very fine and pointed; the others, or those next the Pupilla,  
broad, prominens, and ending in acute Angles. In the Du-  
plicature of each Ciliary Fold, we find a fine reticular Texture  
of Veffeis ; and some pretend to have feen fleshy Fibres in the  
same Place, lying in small Grooves of the Membrana Vitrea,  
**as we** shall **see** hereafter.

The Spade between the Cornea Lucida and Uvea contains  
**the** greatest Part of the aqueous Humour, and communicates  
by the Pupilla with a very narrow Space hehind the Uvea, or  
between that and the Crystalline. These two Spaces have beep  
termed. *The Two Chambers of the aqueous Humour,* one ante-  
rior, the other posterior, as I shall observe in describing this  
Humour in particular.

The third Coat of the Eye is of a very different Texture  
from that of the other two Coats. It is white, soft, and tender,  
and, in a manner, medullary, or like a kind of Paste spread  
upon a fine reticular Web. It appears to be thicker than the  
Choroides, and reaches from the Insertion of the Optic Nerve  
to the Extremities of the Ciliary Radii, heing equally fixed to  
the Choroides through its whole Extent. At the Place which .  
answers to the insertion of the Optic Nerve, we observe a-  
fmall Depression, in which lies **a** sort of medullary Button  
terminating in a Point; and from this Depression Blood-Vesteis  
go out, which are ramify'd on all Sides through the Substance  
of the Retina.

It is commonly said, that the Retina is a Production, or  
Expansion, of the medullary Substance of the Optio Nerve,  
the ScIerotica of the Dura Mater, and the Choroides of the  
**Pin** Mater, which accompanies this Nerve. But. this Opinion  
is not agreeable to what we observe in examining the Optic  
Nerve, and its Insertion in the Globe of theEye. If we take  
**a** very sharp Instrument, and divide this Nerve through its  
whole Length, between where it enters the Orbit, and where  
it enters the Globe, into two equal lateral Parts, and then  
continue tins Section through the Middle or Centre of its in-  
sertion, the following Phenomena will appear:

That the Nerve contracts a littie at its Insertion into the  
Globe; that its outer Covering is a true Continuation of the  
Dura Mater; that this Vagina is Very different from the Sole-  
- rotica, both in Thickness and Texture, the Sclerotica heing  
thicker than the Vagina, and of another Structure; that the  
Vagina from the Pia Mater forms, through the whole medulla-  
ry Substance of the Nerve, several very fine cellular Septa;  
and that, where it enters the Glohe Of the Eye, the Pia Mater  
’does not directly answer to the Choroides :

. Lastly, that, as the medullary Substance ofthe Nerve enters  
' the Globe, it is very much contracted, and seems to terminate  
onlv in the small Tuhercle, or Button, already mentioned ;  
- and that the Retina is too thick' to be taken for .an Expansion  
of the medullary Substance at this Place.

The Insenion of the Optic Nervein the Globe of the Eye,  
IS most commonly not directly opposite to the Pupilla; so that  
'the Distance hetween these two Parts is not the same, when  
measured, on all Parts of the Glohe. The greatest Distance  
’is often on the Side next the Temples, and the smallest next  
the Nose. I have observed an Inequality of the same Kind in  
the Breadth of the Uvea, which, in many Subjects; is less  
near the Nose than the Temples ;- so that the Centre of **the***s* Pupilla is not the fame with that of the great Circumference'  
of the Iris; and I have seen the same Difference in the  
Breadth of the Corona Ciliaris.

**. THE HUMOURS OF THE EYE, AND THEIR CAPSULAE.**

’ The vitreous Humour is a elear: and Very liquid gelatinous  
Fluid, contained in a fine transparent Capfula,- called *Tunica-  
Vitrea,* together with which it forms a Mass nearly of the Con-  
sistence of the White of an Egg. It filis the greatest Part of  
the Glohe of the Fye, that is, almost all that-Space which  
answers to the Extent of the Retina, except a small Portion  
behind the Uvea, where it forms a Fossula, in which **the**Crystalline is lodged. . This Humour, heing dexterously taken  
out of the Glohe, preserves its Consistence for some time in  
the Capfula, almost like the White of an Egg; and then runs  
**offs** by littie and littie, till it quite disappears. \* - - .

- The Tunica Vitrea is composed exteriorly of two Tamina»  
**very** closely connected, which quite surround the Mass of Hu-  
mour, and are immediately apply'd.to the Retina all the Way  
**to the** great' Circumference of the Corona Ciliaris but from  
thence to the circular Edge of the Foffula of the Crystalline,  
this Coat is full os radiated Sulci, which contain the Processus  
'Ciliares of the Uvea. At the edge of the Foffula, the two  
Laminae separate, and form a particulat.Capsula, which belongs  
**SCO** the Crystalline, as we shall see hereafters

The internal Lamina of the Tunica Vitrea gives Off, through  
**the** whole Substance of this Humour, a great Number of cel-  
lular Elongations, or Septa, so extremely sine, aS not at all to  
he Visible in the natural State, the whole Mass appearing then  
to he uniform, and equally transparent through its whole Sub-  
stance ; but they are discovered by putting the Whole, soon  
after it is taken out Of the Body, into some acescent and  
gently coagulating Liquor.

The radiated Sulci of the Tunica Vitrea, which may he  
termed *Sulci Ciliares,* are perfectly black, when the Coat is  
taken out of the Body: This proceeds from the black Substance  
with winch the Laminae, or Processus Ciliares, are naturally cover-  
ed, as well as all the rest of the Choroides, and which remains in  
the Bottom of the Sulci, aster the Laminae have been taken  
out. We observe very fine Veffels in this Humour, which shall  
he spoken to hereafter. -

The Crystalline is a small lenticular Body, of a pretty firm  
Consistence, and transparent like Crystal. It is contained in’  
**a** transparent membranous Capfula, ’and lodged in the anterior  
Foffula of the Vitreous Humour. It is very improperly called  
*an Hicmour,* because it may be handled and moulded into differ-  
ent Shapes by the Fingers, and sometimes almost dilsolved by  
different reiterated Compressions, especially when taken out of  
the Capfula. ’ s t

The Figure of the Crystalline is lenticular; but its poste-  
rior Side is more convex than the anterior, the Convexity of  
both Sides being very rarely equal. The internal Structure of  
this Mass has not been hitherto sufficiently discovered, to he  
described with Certainty, especially in Man; where I'could  
never find that contortedDispositionof-crystalline Tubes, which  
some pretend to have seen in the Eyes of large Animals,

The Colour and Consistence of the Crystalline Varies in  
different Ages, as .was-discovered by *Ult. Petit,* and demon-  
strated by him, in *scae Academy of Sciences sitorn.* a great Number  
of human Eyes; and his Observations are inserted in the Me-  
moirs for 1726. Till the Age of Thirty it is Very transparent,  
and almost without any Colour. It afterwards becomes. yel-  
lowish, and that Yellowness gradually increases. The Con-  
sistence varies almost in the same Manner, being of an uniform  
Softness till the Age os Twenty, and afterwards growing gra-  
dually more solid tn the Middle of the Mass; hut in this there  
are Varieties explain’d in the Memoirs for'I727.. . -

The Crystalline Capsula, or Coat, is formed by a Duplica-  
ture of the Tunica Vitrea, as I have already said. The extere  
nal Lamina covers the anterior Side os the crystalline Mass ;  
the internal Lamina covers the back Side, and likewise **the**FossalaVitrea, in winch the Crystalline is lodged. The ante-  
rior Portion of the Crystalline Capfula is thicker than the poste-  
rior, and, in a manner, elastic; and both its Thickness and  
Elasticity may he discovered in Dissection, without any other  
Artifice. -' .. ? 1 dur......

The anteriorPortion swells when macerated in Water; and  
**then** appears to be made up of two Pellicles, united by a **fine**spongy Substance. I demonstrated this Duplicature Very plain-  
ly in theEye of an Horse, by the Knife alone; and I even carri-  
ed the Separation of the two Laminae aS far as the Vitreous Coat.  
Having made a small. Hole in the Middle of the Capfula of ad  
Ox's Eye, and blown into it through a Pipe, some Part of **the**.Air remained hetween'the Edge os the Crystalline Mass, **and**that of the Capfula, in the Form of a transparent Circle.

In examining the human.Eye, I have found, that the Retina;  
having reached the great Circumference of the Corona Ciliaris,  
hecomeS Very thin, and is continued between the Laminae; or  
Processus Ciliares of the Uvea, and. the Ciliary Sulci of **the**Tunica Vitrea, all the Way to the Circumference os the Cry-  
stalline. It is, perhaps, this Continuation' which makes rhe  
Processus Ciliares to he covered by a whitish Pellicle, and like-  
wise increases the Thickness os the anterior Portion of the Cap-  
sula Crystallina. ' - - r : καὶ

The aqueous Humour is a Very limpid\* Fluid resembling **a**kind of Lymphor Serum, with a Very small Degree ofVifci-  
dity J and It has no particular Capsula. like the Crystalline and  
‘vitreous Humours.- "It fills the Space between the Cornea Like  
cida and Uvea, that between the Uvea and the Crystalline;and  
the Hole of the Pupilla. These two- Spaces are called *The  
Chambers of the aqueous. Humour,* and they are distinguished  
into the anterior and posterior. . .. s

These two Chambers are not of the same Extent. . The an-  
terior, which is visible-to every body, hetween the Cornea Lu-  
cida and Uvea, is the largest; the other, between the Uyea and  
Crystalline, is very.narrow, especially near the Pupilla,-where  
the Uvea almost touches the Crystalline. This Proportion -bed  
tween the two Chambers,has been sufficiently provedmieontrary  
to the Opinion os many antient Writers, by *Horst er. Mor..  
Aeagni,* and several Members of the *Royal'Academy* ; but none  
has treated these Matters at so great a Length as Mr. *Petit, in***the** Memoirs of that-Society.-5 - ..- -.

**THE TUNICA ALBUGINEA, AND MUSCLES OF THE  
GLOBE OF THE EYE.**

The Tunica Albuginea, Called commonly *The IFhite of the  
Eye,* and which appears on all the anterior convex Side os the.  
Globe, from the Cornea Lucida to the Beginning of the poste-  
rior Side, is formed chiefly by the tendinous Expansion os four  
Muscles, in the manner presently to he described. This Ex- .  
pansion adheres Very close to the Sclerotica, and makes it ap-  
pear Very white and shining, whereas the rest of it is os a dull-  
( whitish Colour. It is very thin near the Edge of the Cornea,  
in which it seems to be lost, terminating Very uniformly.

There are commonly six Muscles inserted, in the Glohe of..  
the Eye, and they are divided, on account of their Direction,  
into four Recti, and two Obliqui. The Recti are again di- .

. vided from their Situation into superior, inferior, internal, and  
τ external ; and, from their Functions, into a Levator, Depressor, .

*Adductor,* and Abductor. The two oblique Muscles are de-  
nominated from their Situation and. Size, one being named  
*- Obliquus Supcrior,* or *Mayor*; the other. *Obliquus Inferior,* or  
*. Minor.* The ObliquuS Major is likewise called *Trochlearius,*- because it passes through a small cartilaginous Ring, as over a

Trochlea, or Pulley.

The Musculi Recti do not altogether answer to that Name;  
for, in their natural Situation, they do not all lie in a strait  
; Direction, as they are commonly represented in an Eye taken .  
. out of the Body. To understand this, we ought to have a  
Just Idea of the Situation of the Glohe in the Orbit, and at  
.. the same time to rememher the Obliquity of the Orbits, as al-  
. ready explain'd. The Glohe is naturally placed in such a man-  
ner, as that, during the Inaction or Equilibrium of all the  
’ Muscles, the Pupilla is turned directly forward ; the inner Edge  
**\_os** the Orbit is opposite to the Middle of the Inside of the  
ί Glohe ; the outer Edge of the Orbit, because of its Obliquity,  
is hehind the Middle of the Outside of the Glohe ; and, lastly,  
: the greatest Circumference of the Convexity of the Glohe, he-  
..tween the Pupilla and the Optic Nerve, runs directly inwards  
and outwards, upwards and downwards.

In this Situation, the internal Rectus alone is in a strait Di-  
- rection, the other three being oblique ; and the external Rectus  
« is the longest; the internal is the shortest; and, hetween these  
\ two, the superior and inferior are of a middle Length, and  
- equal. The external Rectus is likewise bent round the outer  
(convex Side of the Globe; the superior and inferior are, also,  
incurvated, .but in a less Degree, whereas the whole Internus  
is almost strait. Notwithstanding all this, I shall continue to  
. give them all the common Name of *Musculi Oculi Recti.*

These Muscles are fixed by their posterior Extremities at the  
. Bottom of the Orbit near the Foramen Opticum, in the Elon-  
gation of the Dura Mater, by short narrow Tendons, in **the**. same Order in which I have already named them. From thence  
**. they run** wholly fleshy, toward the great Circumference of **the**^Convexity os the Glohe, hetween the Optic Nerve and Cor-  
ricaLucida, where they are expanded into flat broad Tendons,  
1 which touch each other, and afterwards unite. These Ten-  
dons are fixed,:first of all, by a particular Insertion, in the Cis-  
.cumferencejust mentioned, and afterwards continue their Ad-  
.hcsion all the Way to the Cornea, forming the Tunica Ainu-  
. ginea, as has been already said.

The superior oblique Muscle is fixed to the Bottom of **the**, Orbit, by a narrow Tendon, in the same manner as the Recti,  
hetween the Rectus superior and Internus. From thence it  
runs on the Orbit opposite to the interstice between these two  
. Muscles, toward the internal angular Apophysis of the OS  
. Frontis, where it terminates in a thinTendon, which, having  
Passed through a kind of Ring as over a Pulley, runs after-  
wards in a Vagina obliquely backward under the Rectus Supe-  
rior, that is, hetween chat Muscle and the Globe; and, in-  
creasing in Breadth, it is inserted posteriorly and laterally in the  
Glohe, near the Rectus Externus. .

\* The Ring through which this Muscle passes, is partiy. carti-  
laginous, and partiy ligarnentary. The cartilaginous Portion is1stat, of a Considerable Breadth, and like half a Ring. The  
.ligarnentary Portion adheres strongly to the two ends of **the**. Cartilage, and is fixed in the small Foflhla which lies, **in the**Orbis, On the angular Apophysis of the OS Frontis. By means  
of this Ligament, the Rang is in some measure moveable, and  
yields to the Motions of the Muscle. To the anterior Edge of  
**the** Ring a ligarnentary Vagina is fixed, which invests the  
Tendon all the Way to its Insertion in the Globe.

The ObliquuS Inferior is situated obliquely at the lower Side  
of the Orbit, under the Rectus Inferior, which consequentiy  
lies hetween this Muscle and the Globe. It is fixed by one  
Extremity a littie tendinous, to the Root os the nasal Apophy-  
ses of the OS Maxillare near the Edge of the Of bit, hetween  
the Opening of the Ductus Nasalis, and the inferior orbitary  
\* Fissure. ’ \* ’ ’ .

Thence it- pastes obliquely, and a little transversty, back.\*  
.ward, under the Rectus Inferior; and is fixed in the posterior  
sateral Part of the Globe by a flat Tendon, opposite to, and  
at a small Distance from,.theTendon of the ObliquuSSuperior;  
so that these two Muscles, in some measure, surround the  
Outer posterior Part os the Glohe.

The Rectus Superior moves the anterior Portion of the Globe  
upward, when we lift up the Eyes; the Rectus Inferior carries  
this Portion downward,; the Internus toward the Nose; and  
the Externus toward the Temples.

When two neighbouring Recti act at the fame time, they  
carry the anterior Portion of the Globe obliquely toward that  
Side, which answers to the Distance between these two Muse  
cles; and, when all tho four Muscles act successively, - they  
turn the Globe of the Eye round, which is what is called  
*rolling the Eyes.*

It is to .he observed, that all these Motions of the Globe of  
the Eye are made round its Centre, so that, in moving the an-  
terior Portion, all the other Parts are likewise in Motion.  
Thus, when the Pupilla is turned toward the Nose, or upward,  
the Insertion of the Optic Nerve is ar the same time turned to-  
ward the Temple, or downward.

The Use os the oblique Muscles is principally to counter-  
balance the Action of the Recti, and to support the Glohe in  
all the Motions already mentioned. This is evident from their  
Insertions, which are in a contrary Direction to those of the  
Recti, their fixed Points, with relation to the Motions of the  
Globe, bring placed forward, and those of the Recti backward,  
at the Bottom *of the* Orbit. The soft Fat, which lies behind  
the Globe, is altogether insufficient to support is; neither is  
the Optic Nerve more fit sor this Purpose ; for I have shewn,  
that this Nerve follows all the Motions of the Globe, which  
would be impossible, were not the Fat Very pliable, and with-  
out Resistance. And to this we must add, that the Optic  
Nerve, at its Insertion in the Glohe, has a particular Curva-  
ture, which allows it to be elongated, and consequently pre-  
vents it from suffering any Violence in the different Motions  
os the Eyes. ‘ :

‘ The Obliquity of these two Muscles does not hinder them  
from doing the Office of a Fulcrum, hecaufe.this is not Eul-  
crush distinct from the Part moved, or on which the Glohe of  
the Eye slides like the Head of one Bone in the articular Ca-  
vity of another; but, being fixed to the Part, it easrly accom-  
modates itself to all the Degrees of Motion thereof. Had these  
Muscles lain in a strait Direction, they would have incommo-

\_ ded the Recti ; hut their Obliquity may be, in some measure,  
rectified by the inner Surface of the Orbit, and by the Rectus  
Externus. \* ' . . ι ' . - \*

The inner Surface ofine Orbit serves for a kind Of colla-  
teral Fulcrum, which hinders the Glohe from sailing too far  
inward ; as the joint Action of the two Obliqui prevents it in  
part from falling too far outward. The Rectus Externus, by  
heing hent on the Glohe, not only hinders it from being car-  
tied outward, but, also, prevents the indirect Motions of the  
Obliqui from thrusting it out of the Orbit toward the Temples.  
The other Uses attributed to these Muscles seem to me to he  
.without Foundation, from the Consideration of their Insertion,  
and of the Structure os the Parts with which they are concern-  
ed ; both which Reasons are explained in the Memoirs of the  
Academy for I 721.

**THE SUPERCILIA, AND MUSCULI FRONTALES, OeCI-  
PITALES, AND SUPERCILIARES.**

The Supercilia, or Eye-brows, are the two hairy Arches1situated at the lower Part *of* the Forehead, hetween the Top  
of the Nose and Temples, in the same Direction with the bony  
Arches, which form the superior Edges of the Orbits. **The**Skin in which they are fixed, does not seem to be much  
thicker than that of the rest of the Forehead ; but the Mem-  
brana Adiposa is thicker than on the neighbouring Parts. - The  
Extremity Of the Eye-brows next the Nose, is called the *Head,*as heing larger than the other Extremity, which is named their  
*Tail.* The Colour is different in different Persons, and often  
in the same Person different from that Of the Hair of **the**Head; neither is the Size of them always alike. The Hairs  
of which they consist are strong and pretty stiff, and they lie  
obliquely, their Roots heing turned to **the Nose, and their**Points to the Temples.

The Supercilia have Motions common to them with those  
Of the Skin of the Forehead, and of the hairy Scalp. By these  
Motions the Eyethrows are lifted up, the Skin of the Forehead  
is wrinkled more or less regularly and transyersty; and the Hair,  
and almost the whole Scalp, is moved, but not in the same  
Degree in all Persons; for some, by this Motion alone, can  
move the Hat, and even throw it from their Head. The Eye-  
brows have likewise particular Motions, which Contract the Skin

above the Nose; and all these different Motions are performed  
by the following Mufcles. - -

The Frontal Murcles are two thin, broad, fleshy Planes, of  
unequal Lengths, lying immediately hebind the Skin and **the**Membrana Ad pose on theanterior Parts of the Forehead, which  
Parts they cover from the Root of the Nose, and through about  
Two-thirds of the Arch of the Eye-brows on each Side, 'all  
**the** Way to the lateral Parts of the Hair on the Forehead. At  
**the** Root of the Nose they touch each other, as if-they **were**but one Muscle ; and **at** this Place their Fibres are short and  
longitudinal, or vertical. '

The neat Fibres on each Side become gradually longer, and  
more oblique, **the** most anterior heing always the shortest and  
ftraitest ; and the lateral, the longest, and turned most oblique-  
1y towards the Temples at their upper Extremities. By this  
- Disposition an angular Interstice is formed between **the Paine  
where the** two Mufcles join, and the Hair **on the** Middle of  
**the** Forehead ; but this Disposition is not the fame in all Sub-  
jects, no more than the Wrinkles and Bounds of the Hair on  
the Forehead. -

These Muscles are fixed by the inferior Extremities of their  
fleshy Fibres immediately in the Shin, running through the  
Membrana Adiposa. They cover the Mufculi Superciliares,  
-and adhere closely to them by a kind of intertexture: By the  
'. same Fibres they teem to be inferred in the angular Apophyses  
of the Os Frontis, and to he blended a little with the Mufcles

-of the Palpebrae and Nofe. The upper Extremities of their  
- fleshy Fibres are fixed in the external, or convex Surface of the  
.Pericranium. Each of their lateral Portions covers a- Portion  
of the Temporal Mufole on the-fame Side, and adheres very  
closely to it. The superior and inferior Insertions are gra-  
-duated.

The occipital Muscles are two sinall, thin, broad, and very  
short fleshy Planes, situated on the intend Parts of the Occiput  
-at some Distance from each other. They are inserted by **the**'inferior Extremities of their fleshy Fibres in **the** superior trans-  
'versi: Line of the Os Occipitis, and, alfo, a- little above  
is. Thence they run up obliquely from hebind forward,  
and are fixed in the **inner or** concave Surface of the Pericra»  
mium. - ‘ ' '

.\* The Breadth of these Muscles reaches from the posterior  
middle Part of the Occiput, toward rhe Mastoide Apophysis,  
’and they diminish unequally in Length as they approach these  
'Apophyfes. From this Inequality in Length, each of them  
; appears as if it were double in some Subjects; and, in others,  
"they are so thin and pale, that they feem to he wanting. They  
.are sometimes covered by an aponeurotic Expansion of theTra-  
’pezii. ' - ' . ' 1

..The Occipital and Frontal Mufoles appear to he true Di.  
’gastfci, both with regard to their Insertions in the Pericranium,  
and in regard to their Action. Their Insertions in the Pcricra-  
'Drum are opposite, one being on. the Outside, rhe other on **the**'Inside, fo that this Membrane, or Aponeurosis, may he con-  
"sidered as a middle Tendon of four single Muscles, that is,  
’which have their fleshy Fibres fixed ooly to one Side of their  
’Tendons. The fixed insertions of the Occipitales at the lower  
Part of the Occiput, and the moveable Insertions of the Fron-  
'tales in the Skin of the Forehead, and of **the** Supercilia, be-  
ing well considered, together with their reciprocal Insertions in  
the fame Aponeurosis,feem to.he averyconvincing Proof, **that**they are Digastric Muscles. . ’ -

These four Mufcles seem always to act in Concert, the Oc-  
cipitales being only Auxiliaries, or Assistants to the Frontales,  
. the Office of which is to raise the Supercilia, by wrinkling **the**Skin of the Forehead ; **these** Wrinkles follow **the** Direction **of**the Eye-brows pretty regularly in some Subjects, and very itre.  
' guiarly in others.

) Το be convinced of the Co-operation of these four Mufoles,  
**we** need only hold **the** Hand on the Occipitales, while **we** raise  
the Eye-brows, and wrinkle the Forehead several times ; and  
"we shall perceive the Occipitales to move each nine, though  
riot in the fame Degree in all Subjects. - In some Persons the  
' Occipitales feem to he relaxed, while the Frontales, heing in  
'Contractioni move the whole Scalp and Pericranium forward,  
'and then contrait to brins them back to their natural Situa-  
-tion. ----- . . -

The Mufculi Superciliares are fleshy Fasoiculi, situated be-  
hind the Supercilia, and hebind the inferior Portion of the Mus-  
culi Frontales,'from the Root of the Nose to above one bass  
of each superciliary Arch. They are strongly inferred partly  
in the Synarthrosis of the Ossa Nasi with the Os Frontis, where  
they come very near the proper Mufcles of the Nose, and part-  
Iy in a small neighbouring Portion of the Orbit. From thence  
they first run up a - little,- and afterwards more or less in the  
Direction of the Eye-brows. They are made up of several  
-small Fasciculi of oblique Fibres, all fixed by one End in the  
'manner already said, and by the other pardy in the lower

Extremity of the Muscles, by which they are covered, and  
partly in the Skin of the Supercilia. This last Portion is easily  
confounded with a Portion of the Museulus Orbicularis Palpe-  
brarum. . . ...... .^

The Action of these Mufoles is to deprefs the Eye-brows,  
to bring them close together,, and to contrail' the Skin of-;the  
Forehead immediately-above the Nofe, into longitudinal End  
oblique Wrinkles, and the Skin which covers the Root of the  
Nose into irregular transverfe Wrinkles. This Action, as well  
as that of the Frontales, and of the Muscles of the Nose and  
Lips, is not always arbitrary, but somenmes mechanical and  
involuntary. These Muscles may, perhaps, likewise ferve to  
keep the Musculi Frontales in Equilibrio during their Inaction,  
they being moveable by hath Extremities. .r"“

**THE PAtPEBREj AKD MEMBRANA CoNJUNCTIvA.**

The Palpehrw are a kind of Veils or Curtains placed *trans.*verily above and below the anterior Portion of the Glohe of  
the Eye; and accordingly there arctwo Eye-lids-to eaeh-Eye,  
one superior, the other' inferior. The superior is the largest  
and most moveable in Man, the inferior the smallest and-leist

\* moveable. They both unito at each Side of the Glohe, -and  
the Pisces of their Union are termed *Angler,* one large, and .in-  
ternal, which is next the Nose ; the other sinall, or external,  
which is next the Temples. a‘I

The Palpebra, are made up of common and proper Parts.  
The common Tarts are the Skin, Epidermis; and-Membraha  
Adiposa. The proper Parts are the Muscles, the Tarsi,-the  
Puncts or Foramina Lachrymalia; the Membrana Conjunctiva,  
the Glandula Lachrymalis, and the particular Ligaments which  
sustain the Tarsi. The Tarsi, and their Ligaments, arc in some  
measure, the Basis of all these Parts.

Tine Tarsi are thin Cartilages forming the principaTPart os  
the Edge of each Palpebra; and they-are broader at rhe Middle,  
than at the Extremities. These of the superior Palpebne'are  
Tomething less than half an Inch in Breadth j-but in she lower  
Palpebra they are not above the sixth Part of an Inch t and  
their Extremities next theTemples are more flender than thofe  
nexttheNose.. -1 . . .. ι . Lu

These Cartilages are suited to the Borders and Curvatote of  
' the Eye-lids. The lower Edge Of the superior Cartilage, and  
the upper Edge of the inferior, terminate equally, and both  
may he termed rhe *Ciliary Edges.* The opposite Edge of -the  
upper Tarsus is something semicircular hetween its two Ex-  
tremities; but that of the inferior Tarfus is more uniform,  
and both are thinner than the Ciliary Edges! Their inner Sides,  
.-or those near, are grooved by several small transverse Chanels,  
of which hereafter; and the Extremities of both Cartilages arc  
’ connected by a kind of small Ligaments. - - — .. ..»

The broad Ligaments of the Tarsi are membranous Elon-  
gallons formed by the\* Union of the Periosteum of the Orbits,  
-and Pericranium, along both Edges of each Orbit:- The fa-  
perior Ligament is broader than the inferior, and fix'd1 tcr the  
"superiorEdge of the upper Cartilage, as the inferior is to the  
lower Edge of the' lower Cartilage , so that thefc Ligaments,  
'and tbeTarsi, taken stone, orwithout, the other Parts,-re-  
present Palpebrae. ' - ' *c :.ss*

The Membrana "Conjunctiva is generally described among  
the Coats of trie Glohe of the Eye; and L also, mentioned  
it there. It is a thin Membrane, one Portion of which lines  
the inner Surface of the Palpebrae, that is, of the Tarsi, and their  
broad Ligaments. At the Edge ofthe Orbit itctiasa Fold, and is  
continued from hence .on the anterior Half of the Glubeofthe  
Eye, adhering to the Tunica Albuginea; so that the'Paspebhe,  
and the sore Part of the Glohe of the Eye; are covered by one  
and the fame Membrane, which does not appear to he-a Corr-  
' tinuation of the Perrcraninm, but has some Connection with  
' the broad Ligaments of the Tarsi. - ........

The Name of *Conjunctiva* is commonly given only to that  
Part which covers the Globe, the other being called simply. *The  
Internal Membrane of the Palpebrae*; but we mayverywell name  
the one *Membrana Ocull Conjunctivae,* and the'other *‘Mem-  
brana Palpebrarum Conjunctiva.* That of the; Palpebrae 'is a  
wery sine Membrane, adhering very' clofe, and fuil of small  
capillary Blood-vessels. It is perforated by numerous imper-  
ceptible Pores, through which a kind of Serum is continually  
discharged; and it has several very evident Folds, which shall  
he spoken to hereafter. . - -trv

The Conjunctiva of the Eye adheres by the intervention of  
a cellular Substance, and is consequently loose, and, iisin-were,  
. moveable; and it may be taken bold of;and separated,- in seve-  
Tal Places, from the tendinous Coan It is of **a** whitish -Co.  
lour, and, heing transparent, the Albuginea makes it appear -  
perfectiy white; these two Coats together forming what is  
called *The White of the Eye.* The greatest Part of the nume-  
rous Vessels which rim upon it, contain naturally only the so-  
reus Part of the Blond, and consequently are not di coverable, *s*

except by anatomical Injections, Inflammations, Obstructions,  
and the like. With the Point of a good Knife we continue **the**Separation of this Membrane over the Cornea Lucida;

The Lachrymal Gland is white, and of the Number of those  
called Conglomerate Glands. It lies under that Depression  
observable in the Arch of the Orbit, near the Temples, and  
laterally above'the Globe of the Eye.

It is a little flatted, and divided, as it were, into two Lohes,  
one of which lies toward the Insertion of the Musculus Rectus  
superior; the other toward the Rectus extemes. It adheres  
very closely to the Fat which surrounds the Muscles, and poste-  
rior Convexity of the Eye; find it was formerly named Glan- ‘  
\* dulaInnominata. , ... .

From this Gland several small Ducts go out, which run down  
almost parallel to each other, through the Substance os the Tu-  
Ttica Interna, or Conjunctiva of the superior Palpebra, and after-  
wards pierce it inwardly, near the superior Edge of the Tarius.  
TheseDucts are Very difficult to be found ; but the best way to  
discover them is to let the superior Palpebra lie a little while  
' In cold Water, and then, without wiping it, to blow on several  
' Places of the Surface of the Membrane, through a small. Tube  
held Very nears but so as not' to touch it, that the Ain may  
' fill some of the Orifices of the Ducts, and. so discoVer them..  
ἰ TheBordersofeach Palpebra, taken all together, are formed by  
**the** Edge Of **the** Tarsus, and by **the** Uniorrof the internal Mem-  
Trane with the Skin and Epidermis." This Border is flat, , and  
**of** some sensible Breadth from within about a Quarter of an Inch  
*' of the* internal Angle all the Way to the external Angle,, near  
. which the Breadth diminishes. This Breadth is owing onlysto  
"/the Thickness of the Palpebrae, which at this Place *have* .‘their  
^Edges oblique or stanting,' in such a manneras, when the'two  
7 Palpebrae touch each other flighting a triangular Space or'Canal  
in formed between them and the Glohe of the Eye. ' ’ '-

.. The flat Edge of each Palpebra is adorned with a Row of  
Hairs, called Cilia, Or Eye-lashes. Those belonging to the  
Superior Palpebra are hent upward, and longer than those of the  
° lower Palpebra, winch are hent. downwards These Rows are  
’placed'next the Skin, and arenotfingle, but irregularly'double  
~ er triple? The . Hairs are longer near the Middle of the Palpe-  
bra than toward the Extremities, and. for about a Quarter of an

;1nch from tho inner Angle, they are sprite wanting. ' \* Ἀ  
-'’Along the same Border of the Palpebrae'near the internal  
'Membrane, or toward the Eye, weseea Row of small Holes,  
SVhichmay be narned'Foramina, or Pnricta Ciliaria. They are  
"the Orifice of the saine Number of small oblong Glands, which  
' lie in-the Sulci, Chanels, or Grooves, on the inner Surface of  
' the Tarsus; These littie Glands are of a whitish Colour, and,  
‘when examined through a Jingle Microscope, they appear like  
'’Bunches of Grapes, chose of each BunchIoinmunicating toge-  
ther.. When they are squeezed hetween two Naiis, a sebaceous  
"Matter, like soft Wax, is discharged through the Pimcta Ci-  
Tiaria. su' τι' - ’ '' Ἄ’ \*

' Near the great or internal Angle of the Palpebrae, the flat Por-  
lion of them Edges terminates' in another, which is rounder and  
*s* thinner. By 'theDnlon of these two Edges an Angle is formed,  
\* which is not.perfectly pointed likea true Angle,^ but rounded;  
iyet it ought not To he termed an obtuse Angle, because that  
.Expression in the mathematical Style means something different.  
For the ‘same Reason the Name of 'great Angle is improper ;  
and we had hetter call it the internal or nasal Angle. ‘ *: ‘l*

At this Place, the Extremity of the flat Portion is distin-  
guished from the round Portion by a small Protuberance or Pa-  
pilla, which Is obliquely perforated by a small Hole in the Edge  
of each Palpebra.' These two small Holes ire Very Visible,  
and often more so in living than in dead Bodies ; 'and they  
are commonly named Puncta Lachrymalia, bring the Orifices  
of two small Ducts, which open beyond the Angle of the-Eye  
' Into a particulas Reservoir, termed SacchluS Lachryinalis, which  
- Ἄ described under the Article'NASUS. - 5

.The Puncta Lachrymalia are opposite to each other, and so  
.they meet when the -Eye is shut. Round the Orifice of each  
‘ Of these Points, we observe a whitish Circle, which seems to be  
a cartilaginous Appendix os **the** Tarsus, and which keeps **the**^Orifice always open. These two oblique Circles are so dis-  
posed, «that, when the Eye is but flightiy shut, they touch each  
.other only toward the Skin, and not toward the .Glohe of-the  
:Eye. -The fine Membrane which covers these Circles, and  
passes through the Puncta into the Ducts, seems sometimes to  
Tun’ into Gathers, when it is touched with a Stilet. '

The Caruncula Lachryrnalis is a small, redish, granulated.  
Oblong Body, situated precisely between the internal Angle of  
the Palpebrae, and Globe of the Eye; but it is not fleshy, aS its  
Name would insinuate. The Substance os it seems to he wholly  
glandular; and it appears tlIrough a single Microscope, in **the  
' '.same** manner as the other Conglomerate Glands. - We discover  
upon it a great Numher os fine Hairs, covered by an oily yel-  
lowish Matter; and on the Glohe os the Eye, near this glan-

dinar Body, we see a semilunar Fold formed bv **the** Conjunctiva,  
the concave Side of which is turned to the Uvea, andine-Ccin-  
vex Side to the Nose. This Fold appears most when the **Eye**is turned toward the Nofe.- - ’ ' ... t .

The Muscles of the Palpebrae are commonly reckoned to **be**two, one peculiar to the upper Eye-lid, named Levator Palpe-  
brae Superioris; the other common to both, called Musculus  
Orbicularis Palpebrarum, which has been subdivided in different  
manners. ....... \*. . »

The Levator Palpebrae superioris is a Very thin Mnfcle situ-  
ated in the Orbit above and along the Recttis superior OotrlL  
It is fixed to the Bottom os the Orbit, by a small narrow Ten-  
don, near the Foramen opticum, hetween the posterior Infer\*  
tions of the Rectus superior, and Obliquus superior. Thenoe  
sits fleshy Fibres run forward on the Rectus, increasing gradually  
in Breadth; and terminate by a very broad Aponeurosis, 'ins the  
.Tarsus of the .superior Palpebra. -. - - - -' ' . . T

By the Musculus Palpebrarum obliquus, we. understand all -  
that Extent of fleshy Fibres,'which by a thin Stratum surrounds  
the Edge of each Orbit, and from thence, without any Inter-  
ruption, covers the two Palpebrae all the Way to the Cilla.  
The Fibres which run upon the Edge os the Orbit are nearly  
Orbicular ; hut most of those which cover the Palpebrae are  
transversely oval. - Almost all of them have a common Tendon \*  
situated, transversty.between the internal Angle of the Eye,, and  
‘ the nasal Apophysis os the OS Maxillare. This is a flender li-  
gamentary Tendon, strongest where it is fixed in the Bone, and  
diminishing gradually as it approaches the Angle of the Palpe-  
brie, where it terminates' at the Union of the Points, or at the  
Extremities of the two Tarsi. The fleshy . Fibres are fixed to  
it anteriorly, so that at first Sight it appears to be no more than  
a Linea Alba; - .... ~..... 4. . . -a

" J From thence one Portion os the Fibres is turned upward, the  
other downward; and both meet again at the external Angle,  
being united by a particular kind of .Intertexture, Very difficult  
to be explained; when, having inverted this Portion of **the**Muscle, we examine its posterior Surface, we observe a small,  
' thin,'tendinous Rope, which'Ions through the fleshy Fibres,  
and divides them all the Way from the Union of the two Tarsi  
to the Temporal Edge of the Orbit, where it disappears; the  
Fibres which lie beyond it appearing to continue the main Cir-  
cuit ofthe Muscle. ‘ i \* ‘

I divide thin Muscle into four Portions, whereof the first in  
that which surrounds the Orbit, and which does not appear to  
be interrupted towards the Temples, the tipper Part of it lying  
! hetween the Supercilia, and the lower Part os the Musculi Fron-  
tales. The second Portion is that which lies hetween the upper  
Edge of the Orbit, and the Globe of the Eye, and which covers  
. the inferior Edge os theOrbit below, some os Pts Fibres being  
fixed to both Edges Os the Orbit. *Rdolanus* divided this into two  
semicircular portions, one superior, the other inferior; the first  
Tying hetween the MnsculuS Superciliaris and the lower Part of  
the .Musculus Frontalis, to both which it adheres VeT much, ἰ

The third Portion seems to belong more particularly to the  
Palpebrae, and the greatest Part os it 'is spent’ in thefealpebra  
'superior. The Fibres of this Portion meet at the two’AngleS  
Of the Eye, where they appear to make Very acute inflections  
without any Discontinuation ; but when examined on the other  
Side next the Glohe of the Eye, they have, in some Subjects  
appeared to the to be distinguished into superior and inferior.  
'The greatest Part Of these Fibres forth a tranyersely oval Cir-  
cumference, the shortest Diameter of which is longer when **the**c Eyes aresopen, than when shut. - - - τε ί

The fourth Portion is an Appendix to the third, from which  
. It differs principally in this, that its Fibres do not'reach to **the**Angles, and forth only small Arches, the Txtremities ins which  
terminate in'each Palpebra. This Portion is really divided into  
" two, line for the Edge of the upper Eye-lid, the other for that  
of the lower. *Riolanus* names this Portion Musculus Ciliaris,

All-these different Portions of the Orbicular Muscle adhere **to**the Skin, which covers in from the upper Part of the Nose to **the**Temples, and from the Supercilium to'the upper Part of the  
Cheeks When they contract, several Wrinkles are formed in  
the Skin, which Vary according to the different Direction of  
the Fibres; those under the lower Palpebra are Very numerous,  
and run down Very obliquely from before backward.

\* The Skin of the superior Palpebra is folded Arch-wise, al-  
most in a parallel Direction to that of the semi-OVal Fibres, che  
Plicae intersecting the Levator; whereas the other Folds only  
intersect the Orbicularis. The radiated arid oblique Plicae  
seldom appear in young Persons, except when the first and  
second Portions of the Orbicularis are in Action; but in aged  
Persons the Marks thereof are Visible at all times.

In Man, the superior Palpebra has much more Motion than  
the inferior. The small simple Motions called/Twinkling,  
which frequently happen, though not equally-often, in all Sub-  
jects, are performed in the upper Palpebra, by the alternate

. Contraction of the Levator and superior Palpebral Portion oF  
**. the** MusculuS Orbicularis; and in the lower Paloebra, at the  
same time, or alternately, by the inferior palpebral Portion os **the**

.. Orbicularis; but, as there is buta small NurnherofFshres in this  
Portion, these Fibres are but Very inconsiderable in this Eye-lid.

These flight Motions, especially those of the upper Palpebra,  
**. are** not very easy to he explained, according to the true Struc-  
**ture** of **the** Part. The Motions which wrinkle the Palpebrae,  
**. and which** are commonly performed to keep one Eye Very close  
**shut, while we** look findlastly with the other, are explicable by  
**‘ the** simple Contraction of all the Portions of the Orbicularis.  
\_ These Motions, likewise, depress the Supercilia, winch conse- ’  
. "quently may he moved in three different manners, upward by  
. the Muscuh Frontales, downward by the Orbiculares, and for-  
i ward by the Superciliares.

**THE VESSELS OF THE FYE, AND OF ITS APPENDAGES. .**

The external Carotid Artery, by means of the Arteria Maxil-  
laris externa, and the Temporal and Frontal Arteries, give several  
Ramifications to the Integuments, which surround the Eye, and ‘  
i **to all the** Portions of the MusculuS Orbicularis ; and **these**Ramifications communicate with those which are distributed  
to the Membrana Conjunctiva Palpebrarum, and to the Carun-  
cula.

The same external Carotid, by means of the Arteria Maxil-  
laris interna, fends a considerable Branch into the Orbit thro\*  
the inferior Orbitary or Spheno-maxillary Fissure; which is  
distributed to the Periosteum of the Orbit, to the Muscles of  
the Glohe of the Eye, to the Levator Palpebrae superioris, to  
'the Fat, Glandula Lachrymalis, Membrana Conjunctiva, both  
**of the Eye** and Palpebrae, the Caruncle, ***etc.* It** communicates  
. with the internal Carotid, and sends a small Artery to the  
‘ Ethmoidal Celis Of the Nose, through the small internal, poste- .

Iior orbitary Hole. '

The internal Carotid Artery, having entered the Cranium, ’  
' sends off small Branches which accompany the Optic Nerve,  
' and those which pass thro' the Fiifura Spheno-maxillaris. One  
. of these small arterial Branches runs into the Substance of **the**Optic Nerve, and produces, on the ***Rrtina,*** the small Arteries  
which appear Very plainly on the inner Sides of that Mem- ’  
**brane. The rest** join the Ramifications of the. external Carotid  
. already mention’d, and, having penetrated into the Substance  
of the Tunica Sclerotica on the hack Side, and tun for a littie  
’ Way through that Substance, they perforate this Coat inwardly  
In five or fix Places at an equal Distance from the Optic Nerve,  
and the Pupilla.

Afterwards they perforate the external Lamina of the Cho-  
Ioides in the fame Number of Places, and form between that,  
' and the internal Lamina, the Vasa' Vorticosa of Steno, and  
**f** the Vascula Stellae, mentioned in the Description of this internal  
. Lamina. Some small vascular Filaments from these Ramifica-  
tions are, also, observed to adhere very closely to the Tunica  
Vitrea; and, before they form the Vasa Vorticosa, they send  
small Arteries in a direct Course to the Circumference of **the**Uvea, where they form a vascular Circle, which fends out  
"Capillaries as far as the Membrana Crystallina, which are very  
. easily injected in new-born Children.

The Veins of all these Parts anfwer nearly to the Arteries.  
**‘ The** internal Veins unload themselves, partly into the internal  
’Jugular Vein by the Sinns Orbitarii, Cavernosi, and Petrosi,  
'and partly into the external Jugular Vein by the Vena Angula-  
**ris,** or Maxillaris Externa, the Maxillaris Interna, Temporalis,  
***etc. ....***

Besides the Capillary Veffeis, easily distinguishable by the  
**led** Colour of the Blood, there are great Numhers of those  
’ which admit nothing but the serous and lymphatic Parts of the  
Blood, and confequentiy do not appear in the natural State.

. ’ They become Visible in some Pisces by inflammations and In-  
jections, as on the Membrana Conjunctiva of the Eye; but  
**these** Contrivances do not discover them every-where in aged  
Persons. In a Foetus, and in new-born Children, a fine In-  
jection has succeeded so well, aS to discover the Veffeis of the  
Membrana Crystallina and Vitrea; and, in a Foetus of about  
"six Months, the injected Liquor seemed to me to have pene-  
.trated a Part of the Crystalline and Vitreous Humour.

**-THE NERVES OP THE EYE, AND OF ITS APPENDAGES.**

Besides the Optic Nerve, described under the ArticleNERVUS,  
**the** Glohe of the Eye receives several small ones, which ran on  
each Sine, along and about the Optic Nerve, from its Entry  
into the Orbit to its Insertion in the Glohe. These Filaments  
come chiefly from a small lenticular Ganglion, formed by very  
short Branches of the Orbitary or Ophthalmic Branch of the  
Esth Pair, and a Branch of the third Pain, or Motores Oculi.

These nervous Filaments of the Lenticular Ganglion, having  
reached the Glohe of the Eye, are divided into five or see Fasci-  
culi, which, having surrounded the Optic Nerve,- and **pene-**

trated and perforated the Cornea Opaca or Sclerotica, run at  
Distances moreorless equal hetween theScleroticaandChoroides,  
towards the Uvea. There each of them is .divided into seve-  
ral short Filaments, which terminate in the Substance of the  
Uvea. These small Nerves, which run from hehind forward,  
between the Sclerotica and the Choroides, have formerly been  
taken for particular Ligaments, by very «reat Anatomists.-

The Nerves which go to **the** other Parts helonging to **the**Eye, come from the third, fourth, sixth, and first two Branches  
Of the fifth PairofNerves of the Medulla oblongata, and, like-  
wife, from the Portio Dura of the seventh Pair. The third,  
fourth, and sixth Pairs give Nerves to the Muscles of the Glohe  
of the Eye. The two Branches of the fifth Pals, and the Por-  
tio Dura of the seventh, give Nerves, not only to the other  
Parts, which surround the Glohe, but, also, to **the** Musculi  
Frontales, and internal Parts os the Nose.

The Trunk os the third Pair, or Motores Oculi, having  
entered the Orbit through the superior Orbitary, or Sphenoidal  
Fissure, produces sour Branches. The first runs upward, and  
divides into two, one sor the Musculus Rectus superior, and **the**other for the Levator Palpebrae superioris. The Trunk, con-  
tinuing its Course, gives off the second short Branch to **the**Rectus inferior. The third Branch is long, and goes to the  
ObliquuS inferior, contributing likewise to the Formation of  
the lenticular Ganglion already mentioned. The fourth Branch  
is large, and supplies the Rectus internus.

The first Branch of the fifth Pair, commonly termed Nervus  
Ophthalmicus, divides into three Branches as it enters the Orbit;  
and, sometimes, only in two, one of which is afterwards sub-  
divided. Of these three Branches, one is superior, which I  
term Nervus Superciliaris ; one internal, named Nasalis; and  
one external, to which the Name of Temporalis agrees better  
than that of Lachrymalis, which may occasion a Mistake.

The superior or Superciliary Branch runs along the whole Pe-  
riosteum of the Orbit, and, having passed through the superci-  
liary Notch or Foramen of the OS Frontis, is distributed to **the**Museulus Frontalis, Superciliaris, and superior Portion of the  
Orbicularis Palpebrarum; and it communicates with a small  
Branch of the Portio Dura of the seventh Pair..

The internal or Nasal Branch pastes under the Ramification  
of the Nerve of the third Pair, and, running toward the Nose, is  
distributed thereto, and to the neighbouring Parts of the Orbi-  
cularis and Caruncula. This Branch sends off a Filament, which,  
passing through the internal, anterior, orbitary Hole, enters **the**Cranium, and presently returns again through one of the Eth-  
moidal Holes to the internal Parts of the Nose. I have some-  
times observed this Nasal Branch to communicate with **the**sherciliary Branch, by a particular Arch, hesore it enters **the .**Orbitary Hole.

The external or Temporal Branch, which is, sometimes, a  
Subdivision of the Superciliaris, is distributed to the Glandula  
Lachrymalis, and sends off a Filament, which pierces the Orbi-  
tary Apophysis of the Os Male.

The second Branch of the fifth Pair, called Nervus Maxil-  
laris superior, sends off a Branch through **the** bony Canal of  
the lower Part os the Orbit, which, going out at the anterior  
inferior orbitary Hole, is distributed to the neighbouring Portion  
Of the MusculuS Orbicularis, and Communicates with a Branch  
' of the Portio Dura.

The Portio Dura of the seventh Pair, or auditory Nerved  
which I call Nervus Sympatheticus minor, gives Branches to  
the superior, inferior, and external lateral Parts of the Orbicularis  
Palpebrarum, One of which communicates with the Nervus

' Superciliaris, and another with the Suborbitarius.

**THE** Uses **GR THE-EyB, AND ITS APPENDAGES.**

- Every body knows, that the Eye is the Organ of Vision.  
The transparent Parts of the Globe modify the Rays of Light,  
by different Refractions; the Retina and Choroidea receive **the**different Impressions of these Rays, and the Optic Nerve car-  
ries these Impressions to the Brain. When Objects are at a  
greater Distance, or obscure, the Papilla is disated; and it is con-  
tracted, when Objects are near, or placed in a great Light. The  
Muscles os the Glohe of the Eye, and of the Palpebrae, per-  
form the Motions already described.

- The Glandula Lachrymalis continually moistens the fore Part  
of the Gloheofthe Eye; and the lachrymal Serum is equally spread  
over that Glohe by the Motions of the superior Palpebra, the inner  
Surface of which is in a small measure Villous. The Union of  
the two Palpebrae directs this Serum towards the Puncta Lachry-  
malia; and the unctuous Matter discharged through the Fora-  
mina Ciliaria, hinders it from running out hetween the Palpe-  
brae. The large Size and viscid Surface of the Caruncula pre-  
vents it from running beyond the Puncta, and thus forces io  
into them. The Supercilta may hinder Sweat from falling on  
the Eyes. The superior Cilia, winch are longer than the inferior,  
may have the same U se, and they both serve to prevent Dust, In-

**and the l&e, from entering the Eyes, when they are only a  
prrle open.** *iVinflocn.. ' - -*

**TSE METHOD OR EXTRACTING BODIES FALLEN INTO  
. THE EYES. " .**

It is no uncomtnon Accident for the Eyes to he tormented  
by the Admission of a small Particle of Wood, Stone, Sand, of a .

. Cauls, of the Nails of the Hands or Feet, of Quick-lime, acrid  
Salts, and the like: which, if they are not quickly extracted, fre-  
quently. occasion inflammations, and other dangerous Confc-  
quences.

The easiest Remedy, in fuch a Case, is, to stroke the Eye-lid  
gently with the Finger, holding the Head down; by which means  
the increased Flute of Tears, excited by the adhering Particle,  
will often wash it out, without much Difficulty. Is this Method  
sails, convey under the Eye-lid a littie levigated Pearl, or Crabs-  
claws, that, when these are washed out by- the Tears, the extra-  
neous Substance may he brought with them. Is this Remedy  
proves effectual, take the small round Head Os a {lender Probe,  
Ur a little Pair os Pliers, or the End of a Tooth-pick, and, gently  
elevating the Eye-lids from the Eye, Carefully, search for, and ten-  
derly extract, the foreign Panicle , or dip a Pencil-brush os sole  
Feathers, or a Bit of Sponge fastened to a Quill, in warm Water,  
which, being introduced under the Eye-lid, may brush it out.  
Lime, or any acrid Substance, may he washed out with.Water, ’  
or Mtlk warmed, either by Injection, with a Feather, or Sponges  
To remove the Redness and Inflammation, which may Continue  
after the Substance is extracted, let the Patient frequently wash  
his Eye with a cooling and lenient Collyrium made of Rose-  
water, thoroughly mixed with the White, of an Egg, a littie Alutn,  
and'Sugar Of Lead, or Tutty. ' Is the inflammation be Violent,  
. Bleeding must not be neglected, l

**' OF TUBERCLES AND EXCRESCENCES ON THE EIE-LIDs.**

:. These TuhercleS are of different Sorts and Sizes. If the Ex-  
crescence be small, red, hard, immoveable, and seated above  
the Eye-lashes, it is denominated *Crithe, Ct Hordeolum,* from its  
Resemblance Of a Barley-corn. This is an encysted Tumor,  
which, by Inflammation, generates a thick Matter, whence pro-  
ceed intense Pain, and various Disorders Of the Sight: Some-  
times it is seated outwardly next’ the Skin, and sometimes  
on the Inside of the Eye.lid. If the Tuhercle be moveable, it is  
named *Chalavurn.* Some, being like Hail, assume the Appella-  
tion Of *Grandinet,* Others, being Vesicles filled with an aqueous  
Humour, are termed *Hydatides. Ssstut* are Of the Nature Of  
Atheroma, Steatoma, and Meliceris, which are described under  
the Article TUMOR. But almost all these TuhercleS are Of the  
encysted Kind, some hanging from a (lender Root, and Others,  
seated On a broad Basis,- aS.they are represented in *Tab.* XXXVI.  
*Pig. 16, tsp,* I8.

*s* Though Inch Tubercles, in other Parts Of the Body, might be  
safely disregarded, yes, when they affect this Part, the Delicacy  
of the Organ requires particular Caution. If they are not Very  
troublesome, they produce little Or no Danger, though they  
. . somewhat, disfigure the Part. These TuhercleS seldom yield to  
: Medicine, and by emollient Cataplasms,- which are recommend-  
. ed by siome, the Eye itself may he injured ὁ therefore they require

**a** chirurgica! Operation. .

\* -. All these Tubercles, theffe which hang from a small Root ex-  
.cepted, are removed by making an Incision in the Integuments,  
carefully , avoiding wounding the *Cyfiis,* so that the *Cysiis,* with  
the Tubercle, may, if possible, be extracted entire, as is di-  
rected under the Article TUMOR. But if the Coat of the Tn-.  
herein be wounded, or if it firmly adheres to the Flesh,’ so that  
it cannot he wholly separated from it. by the Knife, cut out aS  
much as you safely can, with a small Pair Of SciflarS, and imme-  
diately apply a digestive Ointment mixed with red Precipitate,  
Or Unguentum ./Egyptiacum, Or with Lapis infernalis, for ero.  
ding the Remains, and the Cure may he completed by a vulne-  
rary Balsam. Sometimes, when I judge, that the Tumor cannot  
he entirely extracted, I make the Incision directly through the

- Cystis, and after having expressed the Contained Matter, I apply  
Caustics for destroying the Remainder, aS is directed for encysted  
.Tumors. But here particular Care is required to prevent any Of  
.the Caustic from falling into the Eye,, winch might greatly injure

; .\* the Sight.. Pendent Tubercles may he easily removed either by  
- Cutting them off gradually with a Ligature Of Silk-thread, Or in-

stantly with the Scissars. Bur rhe Hordeola require a different  
- - Method; for they, unlike other encysted Tumors, are attended  
- -with Pain and Inflammations; and, therefore, as in Inflamma-

tions, we must first endeavour, to disperse them, but, if that At-  
\* tempt fans, we must bring them to Suppuration, before we pro-

ceed, to incision. To promote the Discussion, and alleviate the  
. Pain of a recent Hordeolum, frequently foment the Part with

fasting Spittie, or apply Mucilage Of Quince-seeds. Or the warm  
- Pulp Of a roasted Apple, mixed with a little Saffron and Cam-

:Phire. If all these prove ineffoctual, and the Tumor, beginning  
**to** turn yellow, tends IO Suppuration, it may be promoted by **a**

\*. Planter Os Honey and Meal, or of Diachylum with rhe Gums.  
But is we would sooner complete the Cure, we must have re-  
course to the Knife, for which Purpose, after drawing- back

and inverting the Eye-lids, we must, wish a slender Knife,' thalli  
a rectilineal Incision, in such a manner, that, if theTuhercle **if**aS yet hard, the Bag Or Vesicle,- in which it is Contained, may **be**CommOdioustTseparated and extracted. But, if the Tubercle is  
already ripe, it is to be laid Open, the Pus to be-ejected, and  
the Vesicle Consumed by Corrosive Medicines; by which.**means**an unseemly Scar will be prevented, and the Wound oongluti-  
nated without the Assistance of Other Medicines. -

**: OF WAfiTs ON TEfn EIE-LIhs..si στὴ**

The Eye-lids are Often affected with Warts, not unlike ther  
above-mentioned Turners, which not Only disfigure the Parts  
bat Often injure the Sight. :These Warts have either a large **Or.**small Root, and may be extirpated either by the Ligature, the;  
ICnife, Or Corroding Medicines, like other Warts. The actual  
Cautery, which may he used in other Parts,, must never be ap-  
plied in this Case, and even Corrosives must be used with ex-  
treme Caution, lest, by shppingjinto. the Eyexthey might destroy,  
drat least greatly injure, the Sight. If these Warts appear blackish  
Or livid, a Gangrene is to be apprehended, jobich will ensile, is  
they are irritated by the Application Os Instruments or Medicines J  
and for. this. Reason they have been named *Noli me tannery %*and should, .therefore, be let alone. I.happily removed, by Lin  
gature, a large Wart on.the upper Eye-lid,, (see Tw. XXXVI.-  
*Pig.* I 7.) which impeded the Opening Of the Eye, hut had no **Very**broad Root... ” . ..

**OF THE -RELAXATIONS AND TUMORS** *OB* **THE EYE-LIDSf  
’ ° . CALLED PHALANGOSIS AND PTOSIS. .: - .dur**

We often; find the Eye-lids so.much tumefied. Or relaxed, as  
greatly to deform the Part, and impede the sight. *(SceTahe*XXXVI- *Pig.* Ip.) This Disorder always proceeds either froth  
a paralytic Distemper.of the Musculus Elevator Palpebrae, Or frond  
a Relaxation Of the Skin above. Sometimes an oedematout, or  
watery Tumor is formed in the Eye-lidS, so aS to keep the Eye  
almost entirely closed , this Case should he accurately distim  
guished from the Other, and easily yields to Medicine, by admi-  
instring Cathartics, Diuretics, and Sudorifics, and by fomenting  
the Part with a Compress dipt in warm Camphorated Spirit of  
Wine, or in Lim e-water. Bur, when it proceeds from a RdaxaT  
tion of the Skin, strengthening Medicines are proper, as a Plainer  
' 'Of the black Oil Of Tartar, mixed with .Wax, Or *Peruvian* Bal, .  
sam, *Hungary* Water, Spirit of Worms, and the like.. If these  
Medicine: fast, the best Method is. Carefully, to cut Off a sussi-  
cient Quantity of the relayed Skin, whichrenderS .it shorter,and  
reduces it to. its natural State. .. t . ced- \_

The Antients used the following Method Of during this Dilor-  
der. The relaxed Skin being raised, they passed a Needle, with  
a Thread, through it, then, artfully twisting the Thread about the  
raised Skin, they separated it, by making a tight Ligature, and this  
Operation frequently succeeds. /Or with the Scissars Or Knife,  
they amputated the superfluous Part Of the Skin, and, bringing the  
Lisp of the Wound into Contact, they secured them by a few  
' simple Stitches, aS we read in *Hippocrates, (Lib. de Vict. Par  
plane in Acutis) Celsius, {Lib.* 7. *Cap. If* and *Paulus AEgineta (Lihe  
6. Cap.* 8.). Butsin the last Method, the Haemorrhage frequentiy  
. proves, so large, as to Obscure, the Wound, fo that a neat Suture  
Cannot he made, which is consequently followed by an unseemly  
Cicatrix.. To prevent these Inconveniences,. Pikefseher a ce-  
lebrated *Gorman* Oculist, contrived a wooden Instrument, re- '  
presented in *Tab.* XXXVl. Hy.Io. BE, to intercept the redundant  
Skin, *Fig.* I 9. C. and, compressing it. by tinning the Screw DD,  
To as, to obstruct the Circulation, the intercepted Part mortified  
in a sew Days, and Cast itself off. .\_ . ... . .durst

Put as this Method Of.*Partisans* was attended with, gruat  
Pain, Inflammation, and other luconveniences, *Pcrduin,* Of *Am.-  
flordam,* made a Brass instrument almost similar, but perforated  
in Its upper, and lower Parts (as hi. Tam. XXXVI. *Fig.* 2 I.): By  
this" instrument, he compressed the superfluous Skin, and pass'd a  
Needle with a Thread through the Perforations, as Osten as might  
be necessary, leaving four Or five Inches of the Thread hanging .  
down On each Side; them.with the Knife, Or Scissars, he cut off  
the prominent Skin, Close to .the Edge of the Instrument; aster  
which he removed the instrument, taking care not to draw oust  
the Threads, which he immediately ty’d asin a common Suture.  
The Wound must be dress’d, the first time, with some vulnerary  
Balsam, and scrap’d Lint, and, in the. subsequent Dressings, .you  
spread your Lint either with a Vulnerary Balsam, Or some digestive  
Ointment, to be secured with Compress and Bandage. .After  
. three Or four Days, the Bandage being always removed-with the  
greatest Caution, and the LipSoftbe Wound being closed, cut the  
middle Knot, and gently extract the Thread. The rest of **the**Threads may he treated by one at a time, in the fame inanner,doni-  
pleting the Cure with some vulnerary Balsam and Plainer. The  
. Wound may be cauterized before the Removal of-the Instru-  
ment, winch will not Only suppress the Haemorrhage, and render  
: the Disorder less subject to return, but may perhaps make a Suture  
unnecessary. Sometimes this Disorder is of so long Continuance,  
. and the Tumor so large, that the Eye loses its natural Figure; and  
sometimes Relapses happen after repeated Operations 3 which ten-

dets the Case incurable. Lastly, we may observe, that *Pau in-*vented an Instrument for this Purpose, little differing from **the**former in its Shape and Uses, *Pig.* 22. But the Invention of this  
Instrument was highly Controverted between him and *Bteyseh,*who attributed it to *Adrianjonius.*

**GF THE EYES IRRITATED Sv THE eYE-LASHSS.**

The Eye-lids **are** sometimes turn’d inwards, so that **the** Eye be-  
comes extremely irritated by. the Hairscr Eye-lashes. Hence pro-  
ceed intense Pains and Inflammation, which, without timely As-  
sistance, may greatly injure, if not totally destroy, the Sight. This  
.Disorder was, by the *Greeks,* named *Trichiasis, Difiichiasis,* or  
*Diss ricbiases, hairy,* and sometimes *Entropium.* It generally  
arises from an irregular Cicatrix formed aster a Wound, the Small-  
pox, or a Burn; and sometimes it is occasioned by a Relaxation  
of the Eye-lids, and then it is attended with the other Mischiefs  
above-mentioned.

.. TO remedy this Disorder, and'prevent a Relapse, the Hairs  
must- be entirely extirpated, an Operation very difficult to be  
performed., If the Hairs are Cut Close, it will be to no Purpose,  
for the rigid, sharp-pointed Stumps will again shoot up, and irri-  
tate the Eyeworse than the Hairs did before. Some endeavour to  
head the Hairs Outwards, by keeping them agaiutinared on the Out-  
side Of the upper and lower Eye-lias by some sticking Plaister ;  
hut the Continual Motion Of the Eye-lids soon loosens the Hair,  
and they become again inverted. *Celsus,* therefore, directs to  
burn the Roots Of the Hair, one by one, with a (lender, but  
broad, pointed Needle, shaped like a Spatula, heated red-hot. But  
*Acgrytera* advises to pull Out the Hairs, One by One, before the  
Cauterization Of their Roots, an Operation which cannot be per-  
formed without exquisite Pain ; and, therefore, some chuse to fill  
tip the Cavities at the Roots of the Hairs, after their extraction,  
with some COnOfiVe Medicine, such as Lapis infernalis, taking  
Care, that no Part Of it gets into the Eye ; Or it will he better to  
touch the Cavities with a small Pledget dipt in the Spirit Of  
Sal Ammoniac, Or **the** highly-rectified Spirit Of Wine; by which  
means they will Close up, without producing any more Hairs.  
When there are many inverted Hairs to ba thus extracted, let  
them be pulled Out at different times, and not all at Once, which  
would induce violent Pain and inflammation. The *Cornea*should, also, be defended from the Caustic, Or the actual Cautery,  
hy scraped Lint, Or a smooth hollow Plate os Lead, Wax, Or Horn,  
adapted aS in artificial Eyes. Is the Disorder should arise from  
^Relaxation of the Eye-lids, it will he necessary to treat it, like  
**the** Relaxation Only, aS was before directed.

But is all the Hairs Of the Eye-lids are thus inverted, and the  
patient will not permit them to he extracted by the Roots, and  
treated with Caustics, there is but one cruel Remedy left,  
by amputating the Cilia, or Cartilaginous Margins Os the Eye-lids  
themselves , a Remedy, which, tho' it deforms the Eye, had bet-  
ter be suffered, than an entire Privation of Sight. Aster the  
Operation, a Collyrium should be made and apply’d, of the White  
**os** Eggs, Rose-water, and Sugar Of Lead, or with Water, and Spirit  
of Wine, mixed in equal Quantities; and the Wound must be  
treated, in the subsequent Dressings, with some Oil, or Vulnerary  
Balsam, till it be healed. But *Cortumius,* in a Dissertation de  
*Trichiasi,* has proposed to remove the Cilia, rather with Lapis  
Infernalis, than by Amputation, in the following Manner: When  
the Patient is laid on his Back,.defend the Eye with Lint Or  
Leather, and rub the Edges Of the Eye-lids with strong Lapis  
Infernalis, till they and their Hairs are quite consumed. The  
Operation being completed, dress first with dry Lint, and, about  
**an** Hour after, apply upon the Lint the White Of an Egg, soak’d  
in Rose-water, which must be Often renewed. Next Day, Part  
**Of** the Lint should be removed, to prevent an Inflammation  
from it. .If any small Eschar is formed, it may he removed' by  
some digestive Ointment, aster all the Lint is taken away, and  
thus he asserts, that the Wound will generally he Conglutinated  
in six Or eight Days time.

**ForANCYLoBLEPHARoN, Or Concretions of the Eye-lids, see  
ANCYLoBLEPHARON.**

**For EcTRopIUM, and LAGOPHTHALMIA, or Eversion and  
Retraction of the Eye-lids, see ECTROPIUM.**

**For the ENcANTHIS,** Or Tubercle in the Corner **Of** the Eye,  
**see ENCANTHtS.**

Of **THE SARCOMA AND HYPERSARCOSIS, OR EXCRESCENCES  
BETWEEN THE EYE ANU ITS LIUS.**

. Those Tubercles, which grow between the Eye and its Lids,  
aS represented in *Tab.* XXXVI. *Fig. 28.* 29. called by **the***Greeks, Hypcrfarcos.es,* and *Sarcornatasusc* nearly Of the same Na-  
**ture** with those Disorders already mentioned, in the Beginning  
they are very small, but increase by degrees, and sometimes to a  
considerable Magnitude. Some of them are smooth, and even-  
. surfaced, and some are rough and unequal like the Raspberry, Or  
Mulberry ; several Of which Excrescences I **have** Cured, in **the**following Manner.

I carchilly pulled them Ont with a small Hook, and then cut  
down to the Root, with a small Pair of Scissars. After suffering

it to bleed, I ordered the Patient to wash his Eye frequently  
with a Solution Of Tutty, Aloes, and Sugar Of Leath till the  
Wound conglutinated. instead Os an Hook, the Tubercle may  
he drawn Out by passing a Needle and Thread through in Some  
use the Lapis Infernalis, in extirpating these fleshy Excrescences;  
hut I think incision much safer.

**OF BLEEDING IN THE EYES.**

Blood-letting in the Eyes was, a few Years ago, claimed, by  
*Woolhous.e, an English* Oculist, aS an Invention Os his Own. But  
it evidently appears, that the Operation was known, described,  
and practised, *iss Germ any* above an hundred Years before. This  
Operation is, however, extolled by *Woolhous.e.,* as preferable to  
all Other Discoveries in Physic, and even to the celebrated Phi-'  
losopherS Stone.

Blond-letting may be successfully used in the Eyes, I. When  
they are Violently inflamed , that is, when the BlOOd-Veffeisofthe  
White Of the-Eve appear larger and redder than usual. This Ope-  
ration, in this Cose, has often had excellent Effects, when Other  
Remedies, and even Phlebotomy, in Other Parts of the Body,  
have failed, and when the Inflammation increases so as to endan-  
ger the Sight. 2. It may be serviceable, when the Cornea is ,  
affected with Specks, Or Abscesses, for, after dividing the Vefleis,  
which nourish the Disorder, it may be much more easily re-  
moved. 3. When a red Coat, Or Film, grows upon the Eye ;  
for the Oftener the Vessels are cut, which nourish the Film, the  
sooner will it decrease and disappear. 4. When, aster the Extir-  
pation of such Films, a Relapse is threatened, by the Intumescence  
Of the Veins in the White Of the Eye, Or those of **the** Comes, **the**turgid Veins Ought to be opened, and fomented with drying Me-  
dicines. '

AS the Methods Of Operation are numerous, **we** shall Only  
give the principal : I. The Patient must he convenientiy placed  
on the Bed-side, or on a Chair, and his Head must be steadily  
held by. an Assistant; then make a transverse Incision with a Lan-  
cet upon the turgid small Veins in the Corners Of the Eye, so **as  
to** Open them. Or cut them through. **2.** Sometimes a finals Pair  
of Scissars, instead Of a Lancet, may heconVeniently used to di-  
vide the Vessels. In both these Methods, the Operator must reh  
tract the Eye-lidS with the Fingers of One Hand, and make **the**Incssion with the other. 3. Some elevate the small turgid Veins  
with a Crooked Needle before they divide them, the Eye-lidS be-  
ing distended by an Assistant. 4 But it would not be improper  
to haVe these Needles made thin and double-edged, so that they  
may divide the Vefleis Of themselves in the Elevation, without the  
**Use** Of Lancet, Or Scissars. *5.* This Operation may he almost  
as advantageonsty performed by the scarifying Instrument, which  
shall he presently described.

TheVeins being thus Opened Or divided, the Discharge Of Blood  
should be promoted by Fomentations OfwarmWater, Or the Deco-  
ctionsof Eyebright, Hyflop, Male Speedwell, and the like digestive  
Herbs, frequently applied with a Sponge, Or a soft Piece OfLinen,  
for the more Copious the Discharge is, the better will he the Ef-  
fects. But, if One Operation is not sufficient to lessen the Disor-  
der, it may he safely repeated two Or three times, assisting it  
with proper Medicines both externally-and internally. I must,  
indeed. Confess, that aster having tried this Operation On several  
Patients, first at *Aliens.,* and afterwards at *Helmstadt,* I Could  
hardly persuade them to suffer it at all, much less to submit to **a**Repetition of it, some being deterred from it through Fear of  
losing their Sight, and Others on account Of the great Pain which  
must attend it, especially as the Tenderness Of the Eye must he  
increased by the Disorder. This Operation is seldom performed  
upon Infants, because Of the Difficulty Of persuading them **to**keep their Head and Eyes steady ; and the Danger Os applying **a**Lancet, or Other sharp Instrument, when those Parts are in Agi-  
tation, is evident.

That incision proposed in a Dissertation under *Camerarius***at** *Tubingen,* in 1734. sor a Venereal Ophthalmia, is nearly allied  
to this Operation ὁ in the most violent Symptoms Of which  
Disorder, is is advised to make a Circular Incision in the White  
of the Eye round the Cornea, to discharge the stagnating Blond,  
or Other Matter distending that Membrane. But whether this  
he a safe Or efficacious Practice, Or whether it may not be sue-  
sesssully used in Other violent Ophthalmias, aS well aS the **Ve-**nereal, Can he only ascertained by the best Of Teachers, Time,  
and Experience

**.OF THE SCARIFICATION OF THE RIES.**

Scarification and Bleeding of the Eyes agree in many **re?**spects; so that it is no great wonder, that *Woolhouse,* though a  
famous Oculist, should Confound them. But, I think, there is  
a manifest Difference, hecause, I. Bleeding is Confined to the  
White OF the Eye: But Scarification is likewise extended to **the**interior Surface Of the Eye-lids, where it is principally per-  
formed. 2- Each Operation requires different Instruments, as  
will presently appear.

That Scarification Of the Eye is no modern Invention, .is  
apparent from its having been described by *Hippocrates, Celsius  
AEginetAznd* Other eminent Physicians. But it was neglected by  
the Physicians in the succeeding Ages, partly, hecause it was  
difficult to perform, and attended with intense Pain. partly, as  
it was extremely dangerous; and partly, aS they judged it to be  
os little Or no Efficacy, *Vseoolhonso* was the first who revived  
\_ the Practiceamong the Moderns.

The Operation is thus performed : Let the Patient he seated  
On a Bed or Chais, opposite to the Light, and his Head he held  
steady by an Assistant. Let the Operator, with his fore Finger  
and Thumb, gently press back the Lids Of the closed Eye, so  
aS to bring the interior red Surface into View, which may be  
done with most Ease in’the lower Eye-lid. With his scarify-  
ing Instrument in the other Hand, let him diligently and swiftly  
nib backwards and forwards, upon the internal Surface Of the.  
Lid, Or the White Of the Eye, If necessary, and sometimes eyen  
the Cornea, and Caruncle Of the greater *Canthus, so* aS IO  
lacerate the small turgid Veins, and make them bleed plenti-  
fully. But this Operation Cannot easily be explained by Words,  
and none should attempt it hesore they have seen it Per-  
formed.

The Scarification being completed, **the** Discharge Of Blood  
roust be promoted, aS directed in the preceding Operation'.  
The Oftener the affected Eye is for the first Day moisten'd with  
Fomentations, or digerent Injections, it will he the better cleansed,  
and the Inflammation will the sooner abate. But, in Order to  
prevent the scarified Pans from Coalescing,, they should not be  
bound, up, at least in the Day-time; and the Lids should he  
frequentiy moved by the Patient. If they are bound up at  
Night, *Woolhouse* recommends the Interposition os three Or  
four Seeds os ClarI. Or rather a Bit Of Gold-beaters Skin,  
anointed with some Eye-salVe, between the Eye and Lids, to  
prevent **the** Adhesion of the Parts. How Often the Scarification  
should be repeated, and what intervals allowed, must be left  
to the Judgment Of the Physician. Meantime it will be abso-  
lutely necessary tO prescribe a proper Diet, and tO exhibit both  
external and internal Medicines. See *Platneri Niff, de Scarsicat.  
Qculor. . ..*

Different Authors have used different Instruments for this  
Operation. *Hippocrates* seems to have used a sort Of prickly  
Thistle, like the Atractylis. Some antient Physicians used a small  
' Steel Rasp, in the Shape of a Spoon; see *Tab.* XXXVIl. *Fig.*

5. with which they tub'd the internal surface Of the Eye-lid,  
till it bled, aS we see in *Celsus, Lib. 6. Cap. si. Num. ati.* who  
called this instrument Specillum Asperatum; and in *Aogiineta,  
Lib.* 3. *Cap.* 22. who named it BlepharOxyston. Others use the  
rough Herb, termed Equisetum majus nndnm, (a Species Of  
Horfe-tail) which seems well adapted to the intention, Others,  
and among them *Celsus,* used the Fig-leaf, Others recommend  
the Pumice-stone Or Cuttle-bone.

\* But the latest and best instrument for this Operation, is  
found tO be Beards os Barley or Rye, which are furnished with  
Rows Of small Teeth, Or Hooks, represented in *Tab.* XXXVII.  
*Big.* 3. A. Ten, twelve, or fifteen Of these Beards are to he  
Cut, and tied together with a String, so aS to resemble a fort Of  
Brush for Cloths, aS in *Tab.* XXXVIL *Pig.* 4. The Teeth Of  
each Beard, Or Spike, being turned outward all round, their  
slender Ends form a sort Of Handle A, and the brushy Part Β,  
heing quickly drawn Over the Eye Or Eye-lids, draws the  
Blood. This Scarification has been, by the Moderns, named  
*Ophthalmoxysis* Or *Blepharoxyfis.*

The first Contriver Of this Eye-bnish appears to he Mr.  
*' Woolbous.e,* who, though he highly exrol'd the Usefniness Of his  
Instrument to his Students, yet he studioufly endeavoured to  
Conceal it, till in I 726. *Mauchart,* present PIOfeflOr at *Tubingen,*. who had studied under *Woolhouse,* not Only published the in-  
strument, but its UfeS, and Method Of Application, in this  
Treatise *de Ophthalmoxyfi* About two Years after *Blatncrus* Of  
*Leipsic* explained the Subject at large in his Treatise *de Scarifi-  
catione Oculorum. .. ' . su*

This Ophthalmoxystnim Or Eye-brash, is said by Mr. *iorool-  
house* tO he Very serviceable in all Disorders of the Eyes,  
winch require Bleeding: As, i. In a Stagnation Of the Blood,  
or Violent Inflammation in the Eyes, whether it proceeds from  
external Or internal Causes, as a Blow, Wound, Cataract,  
Pterygium, Hypopion., Staphyloma, and the like, in which  
Cases the internal Surface Of the Eye-lid should he first scari-  
fied, in Order to discharge the stagnating Blood. And if we may  
believe *Woolhouse,* and his Followers, this Practice is more  
effectual in removing Inflammations induced by external  
Causes, or a Chiritrgical Operation, than in spontaneous Oph-  
thalmias. But in the *Chemosis,* or most violent Inflammation  
of the Eye, it will he necessary, besides the Eye-lids, to sca-  
rify the Eye itself with this Brush. 2. He likewise recom-  
mends this Method Of Scarification, when the Eye is affected  
with a *Pterygium,* or with Abscesses, and whitish Specks j for  
by scarifying the Albuginea, or, if necessary, the Cornea itself,  
.or rather the *Pterygium* upon the Comea, the Veffeis which

nourish these Maladies are .lacerated, so that, by the Applica-,

tion of proper Medicines, the Disorder may be removed with  
greater Ease and Expedition. 3. This Operation, he says, is of  
great Efficacy in strengthening a decay'd Sight, or eVen to  
remove an Amaurosis and Cataract, which have not reached  
to a Degree of inveteracy; for, by the strong Stimulus of the  
Scarification, the stagnating Humours are put in Motion, the  
Obstructed Nerves, and straitened Blood-Vessels, are again Open-  
ed, and the Eye is by degrees restored to its former Vigour.  
4. He us’d the *Ophthalmoxysis,* when the Eye was attacked with  
an Atrophy or Tabes. For the Extraction of the Blood Occa-  
sions a larger Influx Of the nutritions Juices into the tabid Part,  
by which means its due Nourishment is restored, 5. This Me?  
shod he used in an *Hypohaema,* Or Hypopion, that is, a Collection  
Of Blood, Or Matter under the Cornea, proceeding from a Blow, -  
Or Other external Violence, which must he dispersed, in Order to  
clear the Sight. *6.* This, he says, is no despicable Remedy- iti  
relieving intense Pains of the Eyes, (called by the AntientS  
*OphthaTrnoponia)* when the Light itself is become intolerable.  
For, as these Pains proceed from an extraordinary Distension of  
the Blond-Vessels, or from a Stagnation and Inspissation of acrid  
Humours, Or from an internal Inflammation Of the Eye, upon  
the Discharge Os the superfluous Blood, the Pains must remit.  
7. Lastly, the Ophthalmoxysis will likewise have excellent Ef-  
sects in Palsies, Mortifications, and many other like Diseases,  
both os the Fye, and its Lids. See *Nauchart* and *Platnerus,*already quoted.

But *Platnerus* observes, that this Operation is notsenriceable iti  
every Disorder of the Eyes, for it will be improper, I. In a Xe-  
rophthalmia, or dry Lippitude, that is, where the Eye is dry, itchy,  
hot, rough, the Eye-lidS covered with dry Scales, and the Patient  
Cannot behold the Light without Pain and Trouble. 2. When  
the Disorder proceeds from a Venereal Or scorbutic Cause. For  
unless the vitiated Juices be first Corrected, as. this Operation  
augments their Influx upon the Parts, it may increase, rather  
than relieve, the Disorder. 3. In a Cataract, Gurta Serena, Or  
Hypopion, of an inveterate Nature. 4. Lastly, in an Ectropium,  
Trichiasis, Anchylosis, and other Diseases Of that kind.

With regard to the Eye-brush, it is to be observed, that a  
small Force will blunt it, and therefore it cannot be used more  
than once; so that every Operation requires a new Brush. The  
Beards Os old Barley are not so proper aS those of what is new.  
Or, at least, not above a Year old; hecause rhe first, being very  
brittle, will be subject to break, and leave some of its Teeth  
behind in the Eye and Lids, which might produce very dismal  
Consequences. For the same Reasons, it should not he the Pro-  
duct of a Soil too rich, nor should it be kept in a Place too dry;  
or too moist: nor have undergone Threshing.

Aster all, I must Confrss, that though I have performed this  
Operation in Various Diseases of the Eyes, I never could per-  
ceive any remarkable AdVan rages in Consequence Of it. What  
is more, I have known many afflicted with various Disorders  
Of the Eyes, who have been reported by *Woolhovse,* and his  
Followers, tO be Cured by this Practice, when the Only real  
Benefit they have received by it, was an Abatement of their  
Pairs, which I mention, lest it should he imagined I did not  
succeed, by not rightly performing the Operation. I must  
however own, that I have sometimes known it serviceable, espe-  
cially in Inflammations Of the Eyes : And I am persuaded, that  
it was in inch Cases that *iFoolhous.e,* and his Followers, Observed  
its good Effects, especially when it was assisted with proper Re-  
medies, particularly Phlebotomy and Veficatories. But, aS thd  
like Disorders Of the Eyes have been frequently Cured by the  
Use Os proper Medicines Only, without any Scarification Os the.  
Part-affected, it may in general he questioned, whether those  
Disorders would not have been as eashy removed by Bleeding,  
Purging, Blisters, and Scarification in other Parts, aS by this  
Practice. We know that Diseases Os the Eyes have, been effe-  
ctually Cured, before *Woolhouje* introduced the OphthalmoxysiS ὁ  
and perhaps are better removed at this Day, by some who have -  
never known nor practised his Method. Besides, is the Pains pro-  
dnced by such rigid Treatment and Laceration Os so tender an Or-  
gan, are so intolerable, that sew would ever once undergo the Ope-  
ration, much smaller is theNumher that would ever submit to it a  
second time. Besides, though the greatest Caution is required  
in the Operator, yet, as the excruciating Torment will hardly  
permit the Patient to keep his Eye fixed, great must he the  
Danger, either Of touching and eVen severely wounding the  
Comes, Or Of breaking the Teeth of the Instrument, and  
leaving them in the Eye; whence would arise a more violent  
. Inflammation than that intended to he Cured, and many like  
dreadful Consequences. Hence then, in my Opinion, every  
prudent Physician will acknowledge, that this Scarification Of  
the Eyes is surrounded with Difficulties, even in those Disor-  
ders, for the Remedy Of which it is most peculiarly calculated.  
Nor are the Advantages usually expected from it so «markable,  
nor the Examples Os its good Effects so evident, aS to counter-  
balance the extreme Danger, and exquisite Torment, with which  
it is attended. I would, therefore, advise this Method never to  
he used, but in Cases Of the last Necessity, and when all other  
Means have failed. It is, also, remarkable, that, among the too-

dern *Τι e~ch* Surgeons, *St. Tves* excepted, as they say lin’.e'or  
nothing or most Other Methods os removing th- Dnesses of rhe  
Eyes, so they have taken no notice of this Operation, though  
it at first made so much Noise in the World.

For the EPIPHORA or watery Eye, see EPIPHORA.

**For the FISTULA LACHRYMAL is, see FISTULA.**

For Suffusions or CATARACTS, see CATARACTA.

For the Method Of dilating the Connactions os the Pupil,  
**fee** IRIS.

**OF THE UNGULA, UNGUIS, PANNUS, OR PTERYGIUM OF  
. THE RYES.**

When a small Membrane is formed on the external Part Os  
**the** Eye, extending itself over the Tunica Cornea and Pupil, and  
greatly Obstructing the Sight, it is called Ungula Or Unguis, from  
its Similitude to the Naiis of the Fingers : For the same Reason  
**the** *Greeks* named it Onyx, and, also, *Pterygium,* a Wing, be-  
cause it sometimes resembled the Wing Of a Bat, sometimes st  
appear'd soft and red, when abounding with Blood-Vessels, and  
then it usually assumes the Name of *Pannus.* It frequently  
arises from the Angle of the Eye next the Nose, and sometimes  
it comes from the upper Or lower Side Of the Eye, stretching  
itself gradually over theCornea, as in *Tab.* XXXlX. *Pig.* I. and 2.  
*a a.* Sometimes it is Only stiohtiy connected with the Cornea, -  
by a few stender Fibres; at Other times it Overspreads the whole  
Eye, and firmly adheres to it, and difficult indeed is then- the  
**Cure.**

Whilst the *Unguis,* or *Pannus,* is yet recent, small, and soft, it  
inay he gently discussed by EscharOricS, such aS a Dram of the  
Powder ofdouble-resusd Sugar, mixed with sour Or six Grains Of  
white Vitriol, or burnt Alum, or a small Quantity Os Verde-  
arise, carefully sprinkled at Intervals upon the Excrescence.  
To the same Purpose may a Powder be prepared Os old *Scissilis  
Lapis,* Cuttle.bone, and Sugar. As it will be difficult to apply  
such in Powder to Infants, they may he treated with, *sisuercetards*Eye-water, or the Fat of Wipers, or the Fat Of the Grayhng, or  
the Gall Of. the Eel-pour, Or liquid SpermaCeti, or the Oil Of  
burnt Linen, Os, lastly, with fresh Butter mint with a little  
white Vitriol, with which the Membrane should he Carefully  
anointed: These Remedies may, also, be advantageousty applied  
rO Adul’s, If the Unguis is attended with an inflammation,  
begin with bleeding, blistering, and Cooling Medicines io re-  
move the Inflammation. *St. fives* highly recommends in this  
Disorder, the Lapis Divinus Or Medicamentosus Of *Crolltus,*dissolved in Water, and frequently instilled into the Eye, and  
Of equal Efficacy is half a Scruple Of white Vitriol dissolved in  
two Ounces Of the Water Ol the greater Celandine.

When these Remedies are not effectual for destroying the  
Pellicle, it must be’removed by incision. For this Purpose,  
the Patient .must be placed with his Back towards the Surgeon,  
and his Head reclin'd upon the Surgeon's Lap. The Patient  
must rest upon the Operatoris Left Knee, if the Disorder is in  
the Right Eye, and *vice versu.* Then, the Eye-lids being sussi-  
ciently drawn asunder by an Assistant, let the Operator take **a**small Hook, as in Τσίν. XXXlX. *Fig.* 3. Or *Tab.* XXXVL  
*Pig.* 3O. and endeavour to introduce its Point under the loosest  
Part of the Pellicle, thus attempting to elevate it a little.  
Then, passing a threaded Needle under the Pellicle, *Tab.*XXXlX. *Pig.* I. *b b,* he may tie it with a double Knot, *Fig.* II.  
*da,* and then, fastening the two Ends in a Loop *be,* let him  
raise the Unguis by gently drawing the Thread to him; then  
let him separate the upper and lower Parts of the Membrane,  
that, with a small straight Pair Os Scissars, he may expedi-  
tiousty Cut it near the Lachrymal Caruncle He then draws back  
the Thread with the Membrane towards the Cornea and, if  
It adheres any-where to the Eye, he gradually frees it, by de-  
grees, with the Knife, or Scissars. Two Circumstances are here  
to be principally regarded by the Operator t I. That he neither  
injures the Eye, nor its Cornea- 2. That he leaves none Of the  
Unguis adhering to the Eye, which might Occasion a Return of  
the Disorder. Yet it is better to leave some Pan Of the Unguis  
behind, when it Obstinately adheres to the Cornea, than, by  
endeavouring to separate it, to wound the Cornea, and pro-  
duce irremediable Scats ,\* and this the rather, because any small  
Remains of the Membrane may he removed, by applying to  
the Eye the gentle efcharotics already named, two Or three  
times a Day; though some prefer for this Purpose the following  
Collyrium. - -

Take Of Rose-water, and Plantain-water, each an Ounce;

\_ prepared Mother of Pearl,.a Scruple, Sugar Of Leads **fix**Grains, white Vitriol, . three Grains: Mix them for A  
Collyrium. ...... . - - -

St. Tnce advsses the Patient's Eye to he washed, for four  
Days after the Operation, with Spirit of Wine diluted inWa-  
ter, and then, to complete the Cure, a Solution of *Lapis Divi-  
nus* in Common Water may he exhibited. But, in cutting the  
Pellicle near the Caruncle, particular Care must be Observed,  
that no Part of the Caruncle, much less the Whole **of in be**

’ amputated. For, if this Caruncle should be removed from the  
*Canthus, t.* new Passage sor the Tears would he made, and  
hence would arise the Disorder called *Oculus Lachrymans,* Or **the**weeping Eve.

Some Os those Pellicles, which assume a red Colour, because  
Os the Biood-vesseis communicated to them from the greater  
Angle Of the Eye, may be removed by dividing these Blood-  
veffeis near the Caruncle, for by this means the Pellicle, having  
its Nourishment withdrawn, will of itself gradually wither and  
decay; or will, at least, more easily yield to Medicine. Some-  
times a glutinous Matter, resembling a thin Membrane, or Far,  
Overspreads the Cornea, which may he easily removed by ap-  
plying the Bile os the Eel, Eel-pOut,Or the like, to the Eye, and  
it is not improbable, that this was the Case of *Tobias,* men-  
tioned in the Apocryphal Writings. Sometimes these Mem-  
branes adhere so Obstinately to the Eye, aS to be absolutely in-  
separable from the Cornea, but, aS we cannot he ascertained Of  
this Obstinacy before Trial, it is better to attempt a Cure, though  
it should prove ineffectual, than to neglect it aS irremediable.  
Some Pellicles On the Eye are extremely painful,- inclining to a  
Cancerous Disposition, which Ought to be lest as incurable. ’

If the Unguis he extended Over the whole Eye, it will **be**proper to divide it into sour Pans, aS *St. Tver* directs, each Of  
which may be removed, and the Dressings ordered in the man-  
net already prescribed.

When the Operation is so performed On the Left Eye, after  
the Needle has been passed through the Membrane, the  
Patient should rise from the Ground, and place himfels in a  
Convenient Seat; by which the Operation inay more speedily **be**Completed, unless the Operator he aS expert with his Left Hand  
aS his Right. ‘

**OF THE ALBUGO, LEUCOMA, NEBULA, NUBECULA, AND  
SPOTS IN THE CORNEA. ,**

As in several Other Classes Of Disorders helonging to the  
Eye, fo in this, we meet with much Confusion, by a Misap-  
plication and Multiplicity of Names. Hence proceed Difficui-  
ties. Mistakes, and Differences among Physicians in the Method  
Of Cure, and much Trouble and Perplexity is created to the ’  
Student. - ” ' :

We find, however, that the most eminent Physicians have  
allagreed to ascribe, the above-mentioned Names to whitish  
Spots on the Cornea; though they are not all Of the same«  
Nature : For they may be larger Or smaller, thicker or thinner,  
and more pellucid ; Or they may he more Or less prominenti  
Thus they may more Or less impede the Sight, and sometimes  
entirely extinguish it, aS these Spots sometimes Over-run the  
whole Cornea. Hence this Disorder was named in *Greeh  
Leucoma,* and in *Latin Albugo, Nebula,* and *Nubecula,* from its  
different Appearances. *su : . i- .*

These Blemishes may proceed, -I. From an Obstruction Os  
the pellucid Vessels inthe Tunica Cornea, and an inspissation Of  
their contained Juices, proceeding from a Violent Inflammation  
of the Eye. 2. From an Abscess generated by a Stagnation ofthese  
Juices, after an Inflammation os the Cornea, while the peccant,  
opake Matter, hardens by degrees, and stretches a whitish Cloud  
Over the Cornea. This Disorder has. been by some called the  
*Unguis,* Or *Onyx,* and esteemed a peculiar Species Of Disorders  
3. From an Erosion, or eyternal Abscess, os the Tunica Corneas  
4. From inflammatory Pustules, which, from different Causes  
arise in the Cornea 7 especially, A. From those which are Occa...  
ston'd by the Small-pox. 6. From the Scar aster a Wound with **a**Sword, Knife, Fork, Splinter, Glass, Thorn, Or the like. 7. From  
a Bum. 8. From the accidental Slipping Of acrid or corrosive  
Medicines into the Eye, Or the injudicious Application Of themr  
9. Lastly, from the Agglutination Of a peailiar Coat to **the**Eye. - . . . ...

Though these Spots are, for the most part, very obstinate, yet  
they are not always equally dangerous, nor equally difficult toi  
disperse ὁ aS the Cure depends upon the Habit Or Body, their  
particular Causes, their Duration, and the Age Of the Patient-  
Children are more easily freed from them than Adults; hut  
when it is produced by a Scar from Wounds, Burns, Punctures,  
Or the like, hardly any Remedy can he expected.

σ The Method Of Cure must he adapted to the Cause Of the  
Disorder. Those Spots which proceed from inspissated Hu-  
mours stagnating hetween the Laminae Of the Cornea, and  
have been Of no long Continuance, may he best cured by care-  
fully observing a proper Regimen, by taking internal digestive  
Medicines, and the copions Use Of sudorific Infusions and De-  
coctions : The necessary external Remedies are Bleeding, Scafi.. -  
fications, Veficatories, and frequent washing of the Feet: To  
the Eye itself should he Often applied discutient Bag, made Of  
Hystop, Rosemary,: ChamOmile-flowerS, Fennel-seed, and the  
like, boiled either in Wine Or Water; Or a Collyrium of the  
Water of Fennel, or Valerian, mixed with a small Quantity of  
Camphorated Spirit of Wine. Lastly, it may not.be improper  
for the Patient to fumigate his Eye, after the Dressings are  
taken Ost, with the warm Vapours os Coffee, Or a Decoction of  
the Woods. Cold and astringent Collyriutns, especially those

of Vitriol, however they may have been extolled, are certainly  
very pernicious in this Case, whereas I have found warm Ap-  
plications extremely serviceable. When the Inflammation is  
Carried off, let the Patient every Day instil into his Eye a  
lithe os *ssfoercetaofs* Eye-water, prepared with Tuny, Or some  
Other Digestive, and wanned, till he finds the Dilorder almost  
removed. But if any of the Veins proceeding to the Spot appear  
tnrgid in the White Of the Eye, recourse must he had to cutring  
them with the small double-edged, crooked Needle *{Tab.* XXIl.  
**Eg. I.** or *Tab.* XXXVII. *Pis.* 2-) Or with a Lancet, Or SCistaIS. If  
thefasorder has been Of long Duration,nO Remedy Can he ex-

When Spots are produced by an Abscess between the La-  
minae Of the Cornea, aster an Inflammation, and the Contain'd  
Matter makes the exterior Part Of the Cornea project like a  
Lentil or Pearl, whence this Disorder is Called a Pearl, the  
Matter should he immediately discharged by Incision, lest, by  
its long Continuance There, it should by degrees affect the  
whole Cornea, and induce incurable Blindness. This may he  
most Conveniently effected by a, Lancet, Or Conching.needle.  
*Tab.* XXXVIII. and the Operation must he repeated till the  
whole Matter is evacuated, afterwards exhibiting the digestive  
Medicines al ready proposed. Nor is it improper to instil into the  
Eye Vipers Fat, for cleansing and Conglutinating the Wound  
or Puncture. But when the Matter is lodged deep, and not near  
the Outside of the Cornea, the Sight is generally lost.

When an external Erosion Of the Eye proceeds from an Abscess  
or Inflammation, *St. Tvei* directs, first to remove the Inflamma-  
tion, and then to drop frequently into the Eye *Hart mansis*green Eye-water, which may be made stronger Or weaker, aS the  
Patient Can bear it. The Virtues of this Water in removing  
Spots Of the Cornea are strongly recommended by that Author.

If those inflammatory Pustules, which are called Urirides,  
Project upon the Cornea like a Pearl Or Grain of Millet, the  
inclosed Matter should be immediately discharged by perforating  
them with a small Needle. When the Eye is affected with  
Pustules in the Small-poy, they Ought to be Opened immediately,  
and the remaining Pellicle being taken away, with a smallNeedle,  
Lancet, Or Other Instrument, a smallOpantity, about the Size Of  
**’ a** Lentil. Of a Powder Prepared with Alum, Sugar-Candy and  
Egg-shells, must he every Day put into the Eye; Or it must be  
datly anointed with the Oil Of burnt Linen: By which means  
the Remains Of the Spots will, according to *At. Tves,* gradually  
decay. This Method must he observed in Pustules generated  
upon the Cornea by a Burn. If, at last, after the Pellicle is  
removed, some Spots lhotild still remain, they may he treated  
with the Medicines prescribed in the Case Of an Onyx **Or**Unguis.

Those Spots which arise from Wounds and Scars, Or the  
Abuse Of vitriolic Collyriums, those which, by their long Con-  
tinnance, have rendered the Cornea entirely Opaque, and those  
which have altered the natural Shape Of the Eye, Or Of the  
Cornea, seldom admit of a Cure, ln these Cases, therefore,  
it is better to attempt nothing, than to torment the Patient  
with a tedious, but inefficacious Course Of Remedies and Ope-  
. rations.

**OF THE STAPHYLOMA.**

. The Tetra *Staphyloma* comprehends two Disorders of the  
Eyes: One is when the Tunica Cornea is gradually rendered  
more protuberant than in its natural State, aS in *Tab.* XXXIX.  
*Fig.* 4. 5. *6.* 7. The Other happens, when either from an inter-  
nal Cause, or an external Wound, the Uvea or Pupilla breaks  
forth upon the Tunica Cornea, and deforms the Eye with a  
Tumor, by which the Sight is generally destroy'd. See  
*Pig.* 8. *a a.* .Ὑ

These Tumors, from their different Forms and Sizes assume  
different Names. Thus they are called *Margarita, Myocepholon,  
Clavus, Mylon,* Or *Pornum,* and, lastly. *Staphyloma, Uva,* Or  
*Acinus,* according to the Resemblance they bear to the Things,  
whence they are named. The largest is the Mylon. Γ have not  
Only Observed the Cornea, but sometimes the Sclerotica, preter-  
naturally swelled and distended, and even then the Disorder may  
be denominated *Staphyloma*; because these two Coats properly  
Consist but of One However, for Distinction, One Of these Tu-  
- mors may he Called Staphyloma SClerotiae, the other Staphyloma  
Corneae.

These Staphylomas not only deform the Eye, and destroy  
’ the Sight, but occasion most violent Inflammations, Pains Of  
the Head, Watchings, and Suppurations, and frequentiy induce  
a Cancer. Their Cure, therefore, is undertaken not so much  
- with a Design to restore Or preserve. the Sight, which is by  
them almost always extinguish’d ; but to remove the Deformity  
of the Eye, and those malignant Symptoms already enumerated.

in the Cure Os this Disorder, apply to the Tumor a Com-  
press dipt in Water, impregnated with Alum, together with a  
Plate of Lead and Bandage, or some proper compressing Instni-  
v ment. When the Uvea protrudes through a Wound, it must be  
immediately replaced by a small Probe; in the mean time the  
Patient should -continue to he On his Back, and the Wound

must he Carefully dressed with the White of an Egg, and a Madia  
lage of Quince-feeds; till it Conglutinares: By this Method the  
Sight has been sometimes restored.

If the Disorder is become so inveterate, aS not to yield to  
Remedies, pass a double threaded Needle, through the middle  
Of the Tumor, towards ' its Bottom (see *Tab.* XXXIX.  
Fig. 8.); then, removing the Needle, **tie** together the two Ends.  
Of the Thread On the Right Side; and, next, the two Ends Of  
that on the Left Side: Thus the Tumor will gradually decay,  
and at last fall Off with the Threads.

But as this Ligature frequentiy Occasions violent Pains, In-  
flammations, and Suppurations in the Eye, it may he safer to re-  
move the Tumor by Incision. Thus, I took hold of a Protu-  
berance Of this Kind, which projected from the Eye, about the  
Length Of a Joint of the Finger ,with two Fingers Of my Lest  
Hand, and happily cut it Off wish a Pair of Scistars,

*St. Tues* proposes the following Method: When the Tumor  
has not Overspread the whole Comes, he passes a sharp crooked  
Needle, with a Silk Thread, through the middle of the Staphy-  
loma. Then, having removed the Needle, and twisted the two  
Ends Of the Thread together, he takes them in his Left Hand, and  
with a Knife, Or Lancet, gradually frees the Tumor under **the**Thread, till he Can Conveniently with the Scissars cut it entirely  
off He then applies Spirit Of Wine diluted in Water to the  
Eye, aS is done for **the** Cataract. By this Method the Staphy-  
loma is nor only removed, but the Cornea is almost entirely  
heal'd, or else leaves but a very small Aperture in the middle of  
the Wound, whence indeed the aqueous Humour is continually  
discharged, as fast as it is secreted in the Eye, but without any  
Trouble to the Patient, because it flows gently with the Tears,  
through the Lachrymal Passages, into the Nose.

When the Staphyloma affects the whole Conies, aS in *Fig.* 4.  
7. 6. 7. *St. Tver’s* Method is Certainly the most expeditious, by  
which not Only the Cornea, but, also, the Iris and Uvea, and  
about a Liness-breadth beyond the Ring, where it joins the  
Albuginea, are entirely Cut Out circularly. Then all the Humours  
Of the Eye heing discharged, the remaining Coats are Con-  
tracted into a smaller Compass, and the Wound itself at lash  
closes. An artificial Eye may now be used, nearly resembling  
the other Eye, and nicely adapted to the Part. Thus, the arti-  
ficial Eye may he moved by the Muscles like a natural Eye,  
and the Difference he scarcely perceivable A Cure Of this kind  
I perform'd myself.

**THE** Method of **BtscHARGIHG ExTRAVAsATED BLOOD  
BI AN INCISION IN THE CORNEA.**

When by external Violence a small Quantity Of Blood is  
extravasated within the Eye, it may generally he dissipated by  
applying the Resolvents already prescrib'd. But when the  
Quantity is so Urge, aS not to yield to this Method, it Ought  
to be discharged by opening the Cornea, in the manner di-  
rected under the Article HYPOPION, to prevent the stagnating  
Blood from destroying the Sight. .

We see, in the History Of the Royal Academy of Sciences  
for *An.* I7oT an Operation Of this kindperfortned by *Gandelphus.*He immediately made a transverse incision through the Cornea,  
and discharged the extravasated Blood, not only without Pain to'  
the Patient, or any deforming Cicatrix, but the Sight was entirely  
restored, altho' he was Obliged to Open the Wound three rimes,  
becaufe Of the great Quantity and strong Adhesion Of the Blood.-  
inorder to conglutinate the Wound, he applied Compresses dipt  
in four Ounces Of Plantain-water, mixed with two Ounces Of the  
Aqna Sclopetaria; so that in about eight Days the Cure was  
Completed, nor Could the wounded Eye be distinguished,except  
that its Pupfl appeared a little broader, winch seemed rather the  
Effect Of a Blow, than Of the Operation.

**OF THE DISTENSIONS PROLAPSUS, FIINGUs, AND CANCER  
OF THE EYE.**

Sometimes the Eye is so Violently inflamed and swelled, that  
**the** Lids Cannot contain it, hut it becomes projected from iin  
Oybin This Disorder not only occasions a prodigious Deformi-  
ty. Pain, and Trouble, but is almost always attended with Dan-  
ger Of Blindness, Or a Cancer. The monstrous DeformiryPro-  
duced by it may appear from its Representation in *Tab.* XXXIX»  
*Pig.* I4. 15. *Bard* relates a Case in which the Eye was so ve-  
hemently distended, that it hurst its Coats. This is termed by  
the *Greeks* a *Propiosis,* and sometimes? when the Eye is distended  
with an aqueous Humour, *aei-Hydrophthalrnia.* Some call itOru-  
*las Bubulas,* Or *Bovinus,* Or *Elephantinus,* from its Resem-  
blance to the Eye of an Ox Or Elephant. Various are the Causes  
Of this Disorder. Sometimes it proceeds from a violent Inflam-  
mation, or an Obstruction, of the Vesseis from a Redundancy  
Of peccant Humours, sometimes from external Violence; and  
sometimes from a scirrhous or Cancerous Disposition of the Eye ;  
to which last Causes may he .imputed those Instances given by  
*Hildanus, Cent. i.Gbs.* I. and *Muys, Dec.* I2. *Obs.i.* and, lastly,  
the Case which I have represented in *Tab.* XXXlX. *Fig.* I4. II.’  
Some Physicians have likewise named this Disease *Fungus,* or Ft-  
*cut,* from its Figurea which howevertre really different Diseases.' .

If the Disease is recent, and rhe Eye not altogether deformed,  
theHydrophthalmia may generally be resolved by Bleeding, Putg-  
ing, Sudorifics, Veficatories, and dilcutient Fomentatioηο. But,  
if the Disorder he too stubborn to yield to Resolvents, the Mat-  
ter must he discharged by the Operation os the Paracentesis, or  
Tapping, as in other dropsical Cases, which must he perrortned  
by the Trocar, and repeated every Day, or every other Days so  
long aS may he necessary. At every Dressing a concave Plate of  
Lead should be firmly secured upon the Eye, till it be reduced  
to its natural Figure. By this Method *Ntsch* tells us he com-  
pleted a Cure, though he always made the Wound in the Cornea  
itself But aS that may leave an unseemly Cicatrix, I rather make  
my Perforation with a Lancet in the Sclerotica and, after diss  
Charging the Matter, I dress the Eye with Lint dipt in Rose-  
water, mixed with the White of an Egg, and lay a leaden Plate  
above it, over which I put a thick Compress, thoroughly soak'd  
in warm Spirit of Wine, and secure the Whole with a Bandage,  
not neglecting to continue the internal Medicines, Purges, and  
Sudorifics, till the Eye be reduced to its natural State.

When the Sight and natural Figure of the Eye are destroyed,  
and the Symptoms and Pains increase, there remains but one, and  
that a deplorable Remedy, by making a transverse incision in the  
Coats of rhe Eye, and discharging the contained Matter. The  
Eye must be deterged, aS in other Ulcers, and covered with a  
Compress, and tight Bandage, rhe sooner to reduce its Size, that  
the Eye-lids may cover it. But is the Eye still continues so large  
as not to be contained within the Lids, there will be a Necessity  
os cutting off, with the Knise or Scissars, the superabundant  
Part, by which means the Deformity may be afterwards the better  
Concealed by an artificial Eye. Sometimes the Surgeons may cut  
out the Cornea by a Circular incision, aS was directed in the  
Staphyloma.

*Bartifcheus, Hildanus,* and *Muysius,* have contrived a Crooked  
Knife, hollowed like a Spoon, for extirpating the Eye in this  
Disease. But, besides the Difficulty of sharpening this Instru-  
ment, it will he found sufficient to cut off only that Part of the  
tumefied Eye, which prevents the Lids from closing. More-  
over, there is Danger of severely wounding some of the slender  
Bones of the Orbit of the Eye by this crooked hollow Instru-  
mens. But, when, because of *a* scirrhous or cancerous Affec-  
tion, it is necessary to extirpate the whole Eye, the Operation  
may be performed, with equal Conveniency, with the strait  
Knife, (seeTaAXXXLL *Fig.* I4.) which was all I used in ex-  
tirpating those monstrous Tumors represented in *Tab.* XXXIX.  
*Fig.* I4. 15. There are some who think it the mildest Practice  
to free the Eye so far from its Orbit by a Knife, till a Ligature  
can he made about the protuberant Part, in order to remove it  
by that means, like Other Excrescences. But rhe violent Inflam-  
mations, Pains, and ConvulfionS, which this Method Occasions,  
either kill the Patient, Or put him into extreme Danger. When  
therefore the Eye is affected with a SCirrhus, or Cancer, even  
when it penetrates to the very Root, there is scarcely any other  
Way of relieving the Patient, than by carefully freeing the Eye  
from its Orbit, and entirely extirpating it. The Wound may he  
afterwards deterged, and healed with a Vulnerary Balsam.

Sometimes it happens, after the Operation is performed, that  
a new fleshy Excrescence, growing over the Eye, threatens a fresh  
Tumor: To prevent which, dress with Lint dipt in Aqua Pha-  
gedaenica, Over which put a Leaden Plate, and depress the Eye  
with a Very tight Bandage. It is, also, to be observed, that Can-  
cers in the Eye, like those in Other Parts, will Very Often return  
after they have heen seemingly cured, by the Treatment here  
proposed, and must be again removed by the same Practice ; aS  
may appear from the sore.cited Case, given us by *Muysius.*When these Disorders arise from a Caries or Spina Ventosa Of  
the Bones Os the Orbit of the Eye, is they will not yield to Mer-  
cury, aS is sometimes the Case, the Physician must then he con-  
tent to palliate the Disorder, and relieve the Pains, fince a total  
Removal is frequently altogether impracticable/

**OF ARTIFICIAL EYES.**

Artificial Eyes are Contrived for Concealing the Deformity  
produced by the Loss Os an Eye. They are now made Of Con-  
cave Plates os Gold, Silver, Or Glass, stained so as to resemble  
the natural Eye. The nearer it approaches the sound Eye in  
Size, the more firmly will it stay within the Eye-lids. It will he  
necessary frequently to clean the artificial Eye, lest, by Sordes  
gathering upon it, the Fallacy may he discovered; and, lest One  
should be lost, broken. Or disfigured, several should he provided,  
immediately to supply its Place. When "the Patient goes to  
Bed, let him take Out the Eye, and Clean it» and replace .it in the  
Morning. But, thet it may he taken Out, and put in, with Neat-  
ness and Conveniency, the Surgeon, in the Operation, must take  
care to remove so much Of the disorder'd Eye, as will make room  
for receiving the artificial .

The more exactly the artificial Eye is fitted to the Eye-lids,  
the more perfectly will it perform the Motions Of the natural  
Eye, which it will receive from the remaining Muscles. For  
this Reason we advised no^more Of the diseased Eye to he re-  
moved, bur what was preternaturally projected, except When a

Soirrhn\*, or Cancer, requires a total Extirpation *s* **and then the**artificial Eye can have no other Motion, than what it IeCeiveS  
from the Lids.

Sometimes I have Observed these-artificial Eyes irritate **the**Parrs, and produce Inflammations and DefinxionS, and the like  
Disorders, especially if they are not made tO fit exactly, so that  
they will Often inflame and weaken the sound Eye. In thefe  
Cafes, the Patient should either provide himself with an Eye  
which is better adapted, or else totally lay them aside, rather  
than lose the Use os his sound Eye.

**OF THE STRABISMUS, OR SQUINTING.**

We frequently meet with.Persons whose Eyes, instead Os being  
directed to an Object, are turned towards the Corners Os the Eye-  
lids : This Disorder is Called *Strabismus,* Or *Squinting.* Sometimes  
One Eye, but Oftener both are thus affected. This Misfortune is  
frequently produced in Children, by letting them constantly suck  
one Breast, or by placing them in the Cradle, so that they al-  
ways lbok the same Way to the Light. But this Disorder is more  
frequently caused in Children by Convulsive or epileptic Motions,  
to which the Muscles of their Eyes, aS well aS Of their other  
Limbs, are extremely subject. Lastly, It may proceed from a  
Spasm and Rigor, Or from a Palsy in some Of the Muscles Of  
the Eye, Or from some Defect in the Retina, for, when that  
Part Of the Retina which is opposite to the Pupil, and IeCeiveS  
the Impression of the Object, is from any Cause render’d insen-  
sible, the Patient is then Obliged to rum his Eye Obliquely, till  
the Pupil directs the Rays, from the Object, upon some Other  
sound Part of the Retina.

Squinting is a Disorder which is hardly ever Cured without  
Difficulty, more especially in Adults, and when caused by some  
Defect in the Muscles or Retina Of the Eye. In young infants  
it may he remedied, according to the Directions of *St. Tues,* by  
frequently placing them before a Looking-glass, tha: their Eyes .  
may be directed towards the Image of their Own FaCe. Those  
more advanced in Years may he assisted by reading Very small .  
Writing, or inspecting very minute Objects, provided you ob-  
serve and direct them to turn their Eyes eVen; they should  
likewise bathe their Eyes with *Hungary* Water, or anoint them  
with the Balsam of *Eioravanii.* Some have not unsuccessfully  
attempted to Cure this Disorder by a sort Os Mask Eye-swath,  
aS represented in *Tab.* XXXIX. *Fig.* I 6. taken from *Solin-  
gen.* This Method is, also, recommended by *Partisehius,* in his  
*Ophthalrnoduleia.* But lest Children should look strait through  
the Aperture, Only with One, and squint in the mean time with  
the other, it will he best to bind up One Eye till the Other is  
rectified, and then to remedy the Other in the same manner;  
which is seldom practicable, through the Fretfulness Of. Infants,  
and Other Impediments. *Heister. Chir.*

Authors differ in their Opinions, aS to squint-eyed People:  
Some pretend, this Deformity is a Defect Of the transparent Part  
of the Cornea, which is too convex. Or placed obliquely. Others  
say, the Fault is in the Crystalline. But they are heth mistaken; '  
*for* the Defect is in the Muscles, aS I shall make appear.

When a Person looks at an Object, and does not turn his  
Eye towards it, he is said, to squint. Persons thus affected  
squint sometimes with one Eye, and sometimes with the other,  
sometimes both Eyes seem to squint together: Some squint Very  
little, when the Object is near, and more, when it is at a great  
Distance: Some squint with one Eye, when near the Object; and  
with the other, when farther from the Object. When the Eye,  
that does not (quint, is shut, the Eye, that squinted, looks strait;  
then, is the Eye-lid be Opened, the Eye, that looked strain be-  
fore, is sound IO squint.

This different inspection Of squint Eyes demonstrates a Dis-  
parity Of Movement in One Of the strait Muscles Of the Eye,  
which is produced by the unequal influx Of the animal Spi-  
rits in all these Muscles: This regards Only those who {quint  
from their Childhood. This Disease may happen to Persons Of  
any Age, but, in this Case, it commonly proceeds from a Palsy  
in One Os the strait Muscles Of the Eye. Persons thus affected  
**see** two Or three Objects, and sometimes more, when they look  
but at One; these People are generally said to see double. This  
Accident happens for this Reason, because **the** two Pupils are  
not in a parallel Line, so that the Rays Of Light, reflected from  
an Object, fall, in One Eye, on a Fibre, and, in the other Eye,  
on another Fibre, which does not meet in the same Point, from  
whence the first takes its Rise. AS the Impression made by **the**Light in both Eyes affects different Fibres, which do not stow  
from the fame Point, a double or triple Sensation is transmitted  
to the Common Sensory, for which Reason a Multiplicity of  
Objects is seen.

To explain this more amply: Vision is performed by means Of  
the nervous Fibres, which are distributed to all the Parts of the ’  
inner Cavity Of the two Globes os rhe Eyes; and these Fibres  
Coincide in the same Point of the Brain whence they rise 5 the-  
Fibres on the Side of the great Angle in one Eye Correspond  
with these on the Side Of the groat Angle in the other Eye.  
When they equally receive the Light reflected from an Object, a  
single Sensation Only follows, in the Place of their Origin, for

which Reason there is but one Object seen, but, as the Pupil  
Or the Eye, which fqnints, is not in a parallel Line with the other,  
it happens, aS I Jolt'Observed, that some Fibres in one Eye are  
moved by the Light, whilst in the Other Eye the Light makes  
its Impression on Fibres which do not Correspond with the  
former: Hence follows a Contusion in Vision. TO make an  
Experiment of it, let a Person press, with his Finger, one os hiS  
Eye-lids, and force down the Globe os that Eye somewhat lower  
than the Other; then, the Pupils not lying in a parallel Line, or  
Os an equal Height, the Pei son sees double, for the foregoing  
Reason. All the Difference between Persons who fquint from  
their Childhood, and those who squint in a more advanced Age,  
Consists in this, the first do not see double, aS the latter do. in  
.the first, when the well Eye is shut, the Eye that squints, rurnS  
equally os all Sides But, in the latrer, when the good Eye is shut,  
the Other Eye cannot he brought to the Side Opposite to that,  
towards which the Pupil is turned: This shews that this De-  
fect, in Children, is caused by an unequal Influx Os the animal  
Spirits, either in the adducent Or abducent Muscles of the Eyes,  
Which makes the Globe turn Os one Side: But in grown Persons,.  
when one of the Muscles becomes paralytic, the Eye remains aS  
immoveable towards one Side, by the Contraction Os the anta-  
gonist Muscle, neither can rhe Eye move itself towards the Part  
opposite to that which is relaxed. Having thus distinguished the  
Difference that occurs in this Disease, , when from the infancy,  
and of the same when it happens in a more mature Age, we must  
now propose its proper Remedies: I shall begin by the Cure of  
Children, it consists in settling the regular Course Os the animal  
Spirits in those Muscles: TO which the following Method is highly  
Conducive.

Let the Child sit before a Looking-glass, and, when he is thus  
seated, make him look directly at his Face in the Glass, so that  
. each Of his Eyes may look precisely at the Pupil of that Eye which  
Corresponds with it in the Glass: By making him perform this  
visual Exercise, Morning and Evening, for a Quarter Of an Hour,  
the Sight, at length, becomes strait: Besides this, get him to  
read Very small Writing, Or to work at fine Work, which  
requires a great Application Of the Sight.. Care must be had,  
when Children look at any Object, that they do not lay it side-  
ways, for whilst the Organs are tender, they must he accustomed  
to look strait. Whilst these Exercises are performing, lpirituouS  
Remedies must be applied to the Eye, that they may animate  
the Spirits in the nerVouS Fibres, and invigorate the relaxed Muscle  
to perform its proper Action. The Queen of *Hungary's* Water,  
*Fioraventinis* Balsam, and such Remedies, may be applied with  
Success, the Forehead, the Temples, and upper Part of the eye-  
lids, must he rubbed with them three times a Day.

AS to Barnicles, which have been long in Use ; when they are  
put on Children, it commonly happens, that they Only look thro’

\* the Hole Of One Of these Barnicles, while the Other Eye re-  
mains askew, for which Reason *I have* invented a kind Of Nose,  
like that of a Mask: It covers Part of the Eye that squints. Or Of  
both Eyes, when they both squint, it must reach no farther than  
the Pupils, which must he lest quite uncovered : We are some-  
times obliged to coVer entirely the strait-looking Eye, so that, by  
looking singly, it may be habituated to look strait.

in Persons advanced in Years, this Indisposition may he Causied  
by getting Cold in the eyes. Or in the Head, or by a Distillation  
os Humours, which are discharged On the Muscles of the Eye:  
Sometimes the Rheumatism in these Parts produces, the lame  
Effect.

This Disease is cured by Bleedings, Purges, and sometimes by  
.an Emetic, the Steam Of hot Coffee, and of the Spirit of Wine,  
must be applied to the Eye; a Decoction Of Eye-bright and  
Sassafras must likewise be drunk. All Remedies proper for the  
Palsy are serviceable in this Cafe: Such are the hot mineral Wa-  
ters, *etc.*

This Indisposition is sometimes Owing to an Heat of the Vis.  
Cera, or to Vapours Conveyed to the Head: Then we are obliged  
to bleed in the Foot; to prescribe cooling Drinks, the House-  
baths, and sometimes the cooling mineral Waters. In this Case,  
the Advice Of a Physician is requisite.

**OF WEAK VISION.**

*St. Tvet* divides Vision into three Species, the good Vision,  
that Of the Presbytae, and that Of the Myopes, all which Species  
may he Variousty weaken’d.

I mean, says he, byWeakness of Sight,when Objects are not seen  
as distinctly aS usual, for Instance, when a Person Cannot see to  
read. All the three Sorts Of Sight are liable to this Indisposition:  
The good Sight is impaired, when the Eyes become moist and  
weeping; the SerOsity, which constantly moistens them, injures  
the Sight Very much. Persons afflicted with this Infirmity must  
have recourse to convex Spectacles, which must he fo propor-  
tiOned to their Sight, that they may he able to read Or Work,  
which they Cannot well do, without this Sort Of Spectacles. .

The Presbytae cannot distinguish small Objects, Or minute  
Characters, without straining their Eyes, and discomposing their  
Head; yet they can see distinctly larger Objects, at a Considerable  
Distance. This proceeds from the too great Convexity of the  
Crystalline, which occasions Rays, reflected from Objects near

the Eve, to diverge from the Place where they should unite,  
wher.V isioo is perfect: Tne same does not happen, when the Ob-  
jects are distant, because the Rays, reflected from them. Con-  
verge more; and thus they have a Focus, in just Proportion. In  
order to remedy this Infirmity, let the Patient, at first, use Glasses  
which do not magnify; and *from* them he must pass gradually  
to more convex Spectacles, which shorten the Focus.

The Sight Of the Myopes is so short, that they can neither  
read, nor distinguish Objects, without concave Glasses: This is  
Owing to the too great Convexity of the Crystalline. The Con-  
Cavity of their Spectacles must be proportioned to the Shortness  
Or their Sight.

It Often happens, after the Use Of Spectacles for many Years,  
that the Crystalline re-assumes its proper Form, so that they are .  
no more required. It has been, asso, observed, that several Per-  
sons, neither Myopes nor Presbytae, have been necessitated, on  
account of a Weeping, to wear Spectacles, and, when this Dis.  
ease ceased, they have said them aside.

For the most part. Spectacles are either Convex, or concave;  
they both have different Degrees, or Focuses: There are, alsio,  
some fiat and even in their Surface; they are called ConserVes,  
and are made either of green. Or of white Glass. Convex Spec-  
taeles, of the first Degree, magnify but Very little, and may be  
used aS Conserves, the rest magnify, in proportion to their Con-  
vexity.

That Place in Spectacles is Called the- Focus, where the RayS  
Of Light, which pass through the Spectacles, are united io a  
Body that is placed opposite to the Light, and the Degrees of  
Spectacles are measured by the different Distance of their  
Focus.

It is a Caution Of great Importance, not to use Spectacles too  
soon; and, when a Person has Once begun to use them, not to  
Change'them too Often, for, at length, he cannot get any proper  
for his Sight.

Those Persons Called *Myopes* Ought to use Concave Specta-  
Cles, when they read, aS little aS they can: They must, also, be-  
gin with the least concave.

I think it necessary to say something Os the Means to preserve  
the Sight, and to lay aside the Use of Spectacles: Though, per-  
haps, this Method may not succeed to all Persons, yet several,  
by following it, will be freed from the Trouble Of Spectacles. I  
shall exclude the Myopes, for no Remedy can lengthen their  
Sight, the good Sight, and that Or the Presbytae, can Only receive  
Benefit from this Method.

The good Sight, as we have already Observed, is Often weaken'd  
by a redundant Serostty, which perpetually fills some Peoples  
Eyes, in this Case, I use an Ophthalmic Water, which, applied  
three times a Day, dries up the Moisture, and strengthens the  
Parts. Remedies that will evacuate the Pituita of the Brain, such  
as Purges, and smoking Tobacco, are serviceable in this Disorder  
of the Sight.

The Presbytae may be freed from the Use Of Spectacles, by  
restoring their Crystalline to its natural State; the following  
Tincture will be very serviceable in this Case: ’

It is composed of Sage, Rosemary, Lavender, and Thyme,  
when they are in Flower, Of Wormwood, and Origany,  
Of each an equal Quantity: Let them infuse in Brandy, the  
Space of four Days; then let the Brandy be cleared off,  
and used in the following manner: Let One Part of this  
Brandy be mixed with four Parts Of the distilled Water Of  
Blue-bottle, or *Cyanus segetum,* or with Eyebright-water :  
Then put it into a Spoon, which you must heat warm, to  
the Brandy. Let the inside Of the Eye be bathed with this  
Mixture, twinkling the Eye-lidS, that they may imbibe the  
Water, and Convey it round the Eye: This must be done  
four Or five times fuCCessiVely, Morning and Evening. .

When this Mixture has been used in the foresaid manner, and  
Degrees of Strength, for a Fortnight, then let only three Parts Of  
the fore-named Waters be mixed with One Of the Brandy. When  
the Eye is accustom'd, for some time, to this Degree, then let  
Brandy, and the said Waters, Of each One half, he mixed: Let  
this be the Standard. These Degrees are increased for this Rea-  
son, that the Brandy, by its Pungency, may stimulate and Velli-  
cate the Eye; by which the nutritious Juices Or the Eye will be  
more inspirited and attenuated, and their Quantity, aS well aS  
Fineness, will be increased, so that by the Help os one and the  
Other the Crystalline may be restored to its natural State,

**‘ PRESAGES FROM** the Eyes.

Prognostics from the Eyes are the more Considerable, in that  
thefe, above all other Parts Of the Body, furnish the judicious  
Observer with the surest Marks for predicting the Events Of  
Diseases, according to that Sentence of the divine *Hippocrates,  
. 6 Epid. Sect.* 4. *Aph.* 26. *.According io the State of the Eyes, s.o is  
that of the Body, and so their Colours change together for the better  
ar the‘worse.* If the Eyes he clear and lively, the Body may be  
judged to be in a good Conditions for, *2sGalen* rightly fays, in  
his Comment on the forequoted Place, a good Colour of the Eyes  
shews the Body to be in Rood Health. But we shall treat ot such

Signs aS are afforded by the Fyes for predicting the Death Or  
Recovery Of the Patient, and, fu st, wo (hall insist on those which  
are hopeful and salutary, and, afterwards, on those winch are per-  
nicions and fatal

First, then, the Eyes of the Patient have a promising Appear-  
once, and give no (mall Hopes of Recovery, when in Magni-  
tude, Figure, Situation, Motion, Colons, Vision, and Splendor,  
they resemble the Eyes of Persons in Health; for sound and ro-  
bust Eyes are always a good Indication; and such are those Eyes,  
*as Galen* Observes, in his forecited Comment, which are Of a  
lively Colour, full Bulk, and contain a splendid Humour: Eyes  
fo qualifyd *Galen* Calis sound and robust, because such an Ap-  
pearance must he Owing to the great Plenty of luminous animal  
Spirit, proceeding from the Brain to the Eyes ; but. On the COn-  
trary, in Bodies weaken'd by Diseases, Indications Of this Nature  
are not so much to he regarded, nor much Danger to be appre-  
bended from them. Good Eyes, then, are like those of Persons  
in Health, Of a florid Colour, full, splendid, seeing forward, at  
**a** Distance, through a luminous Air, without Molestation, **free**from Redness, Lividness, or Blackness, and without Tears, Or  
Excrements, Called by *Hippocrates, kSiplau, Lemae,* adhering to  
their Angles: These we may always Call *good.Eyes,* aS indicating  
**a** good State of the Body, and Of the Head in particular.

But for Our more secure Prognostication from the Eyes, **we**are to consult and Consider other Signs appearing at the same time,  
which if they happen, also, to he good, we may with Confidence  
predict the Patient’s Recovery. For the Eyes by themselves are  
incapable Of determining our Judgment; nor have they any thing  
of Certainty, to which we may safely trust in forming a Pro-  
gnostic , fince, in some Continual Fevers, the Eyes, sometimes  
make a good Appearance, when the Fever is taking a fatal Turn,  
though indeed it rarely happens for the Eyes to he in a good  
State, when the Patientis Affairs tend to a fatal issue.; and there-,  
fore good Eyes generally afford no small Hopes Of a Recovery.  
But not Only those Eyes which are supposed to be good, but  
sometimes bad Eyes, may, by Accident, prove salutary Indica-  
tions ; for Instance, Eyes avoiding the Light, aS incapable Of  
bearing it, weeping Eyes, intensely red, shining, dark, dim, dull,  
distorted, tumid, hollow. Closed Eyes, provided they put On  
inch an Appearance against an approaching Crisis: I except from  
those before-mentioned such Eyes as are not render'd so by **the**Disease, but from some extrinsic Cause, these afford nothing  
of Certainty, because they appear thus changed immediately at  
the Beginning, ata time when they are quite incapable Of suffer-  
ing a Critical Alteration, aS is implied in what *Hippocrates* says.  
*Lib. Prognosi.* Q That in the Space of three or four Days the Eyes  
\*\* hecome and appear bad, through the Force of the Disease."  
External Causes are easily understood from the Patients themselves;  
and of these we find *Galen* speaking. *Com.* I. *in Prognosi. Tepet.*ιο. where he says, that “ Sometimes in the Beginning Of aDif.  
" ease, through much Drinking Of Wine, Or violent Vomiting,  
" the Eyes avoid the Light, shed Tears, are distorted, or suss  
" pended, swell. Or appear with red Veins.” But at the Approach  
of a Crisis, when Nature is Contending with **the** Disease, these  
bad Symptoms appear in the Eyes.

Some Eyes, for Instance, flowwith Tears, at the Approach of  
a Critical Haemorrhage from the Nose, according to *Hippocrates,*' I *Epid. Stat.* 3. From those who under acute Fevers, and espe-  
\*\* Cially those Of the burning Kind, are affected with a spontaneous  
" Or involuntary Flux Of Tears, you are to expect an Haemor-  
" rhage from the Nose, if there he no Concomitant destructive  
α Signs, Otherwise weeping prognosticates not an Haemorrhage,  
" but Death.” We are to make a Distinction Of Tears into  
voluntary, and involuntary Or spontaneous : These last with Critical  
Signs indicate a critical Eruption of Blood, but Voluntary Tears  
never afford us any solid Foundation for grounding a Prognostic.  
Agreeable hereto is that Of *Hippocrates,* 4 *Aph.* 52. " In a Fever,  
" Or any other Distemper, Tears flowing voluntary have nO-  
« thing improper Or unusual Εήδέν ἄτρπβν], but involuntaay  
" Tears are more unaccountable, [ἀτυπωτερον]," Or aS *Galen, in*his Comment, reads it in the positive Degree, " ἄτεκνον, unae-  
" countable.” But, in Order tO explain the Sentiments Of *Hip-  
pocrates,* aS deliver'd in this Aphorism, that they who weep vo-  
luntarily do nothing absurd. Or that argues a Diminution of  
Reason, hut Tears sassing involuntarily from the Eyes are more  
Unaccountable, or import a greater Defect, and are more to he  
suspected than the other , atm in the Passage above quoted, that  
involuntary Tears, where they are no Signs Of a Crisis, portend  
Death, and, also, 6 *Epid. Sect.* I. *Aph.* Id. \* That in acute  
€i Diseases, where the Patient is much Oppressed by the Violence  
" Of the Disorder, Voluntary Tears are a good Sign» but invo-  
" luntary, the contrary." We shall endeavour to Obviate all  
Difficulties by Observing, that Tears are said.tO he spontaneous  
on two Accounts: First, When they flow without any Desire Of  
the Patient, being such as *Hippocrates* means by αζόντων, and  
ἀκόσια, in the Passages above render’d, that is, flowing sponta-s  
neonfly. Or Of themselves, without the Concurrence Of the Will  
or Desire Of the Patient, in the second Place, Tears are said,:  
in another sense, to he spontaneous. Or to flow spontaneously,  
when they Sow at the Desire, or with the Will, Of the Patient;  
and thtresose *Galen, Carn. 1. ini Epid,* to avoid all Ambiguity,

and for the better Illustration of the Sentence, and the Truth,  
Chose to express himself by a Word which signified not *siponta-  
neons,* but *involuntary,* for *spontaneous* is spoken with reference  
sometimes to the Patient, sometimes to the Disease. But, tOre-  
move all Possibility Of Mistake, let us distinguish Tears into  
voluntary and involuntary, which latter were sometimes called by  
*Hippocrates, spontaneous,* because, as was said, they flowed spon-  
taneoufly, or without the Concurrence of the Will, and tnose  
*non-s.pontaneovs,* which flowed in some measure at the Desire of  
the Sick. But, to prosecute our Design, we say, that Voluntary  
Tears are of no important Signification towards a future EVent;  
and therefore we are told by *Hippocrates,* in the above cited  
Aphorism, that such Tears portend nothing1 irregular. Or bad ;  
and justly he might lay so, since they proceed not from the Dis-  
ease, but the Wils, Of the Patient; whereas involuntary Tears,  
which stow without the Will os the Sick, are always bad, ex-  
Cept they precede and Portend a Crisis, agreeably to that Passage  
of *Hippocrates, sEpid. Stat. is.* abOVe quoted. Bus, that Tears ‘  
may he judged Critical, it will be necessary, in Order to a good  
Crisis, that Signs Of Concoction should have preceded them; in  
which Case, they portend a Crisis, and very well deserve our  
Regard.

The same Event may Often be predicted, from Light passing  
before the Eyes, Dimness, and Rednesses in the Eyes, which  
Signs, together with Tears, *Galen,* in his third Book Of *Crises,*reckons among Prognostics Of an impending Haemorrhage.  
Sometimes, before inch an Event, there is a Redness Of the  
Eyes, attended now-and-then with a Redness Of the Cheeks  
and Nose: A Duiness Of Sight, also, if attended with a Pain Of  
the Head, is sometimes succeeded by an Haemorrhage from **the**Nose: This is the Sentiment Of *Hippocrates, Lib. Prognosi.*where he says, a Some, in the first Period, [ἐν τῇ πρώτου.  
« πίριόδῳ] are affected with an Haemorrhage from the Nose,  
5 and are much relieved by it hut we are tO examine whether  
" there he any Pain of the Head, Or Dimness Of Sight, for, if  
" there he any thing Of that Nature, It tends to such an Event.’'  
Such an Haemorrhage may, also, he predicted from the Patient's  
being disordered at Flashes Of Light striking the Eye, attended  
with Deafness, Heaviness Of the Head, and a Distention Of **the**Hypochondria, as we read *Coac.* Ip 5.

That a Redness of the Eyes prognosticates the like, we are  
taught by the Author of *thtProrrhet. IAb.s. T.* I 3 y. where he  
says, that a Pains Of the Neck, with intensely red Eyes, fore-  
U shew an Haemorrhage.” And to the same Purpose, *Coac. 166. .*we read, that “ They who are affected with a Cephalalgia, , and a  
" CatOcbuS, attended with Pain, and a great Redness of the  
" Eyes, are relieved by an Haemorrhage from the Nose.” But  
this Symptom must bepresumed Of true Signification Only when  
preceded by Signs Of Concoction, for, in the Beginning Or  
crude State Of a Disease, red Eyes are never a good Prognostic.

Sometimes, at the Approach Of a Crisis, there is a Perversion  
and Distortion Of the Eyes, as it happened to the Patient in the  
Garden of*Dealces,* 3 *Epid. AEgr.* 3. Of whom it is said, that  
“ On the ninth Day he was seized with a Rigor, and had an  
" high Fever sweated, and was cold; fell into a Delirium, bad  
Q his Right Eye distorted, with a Dryness Of the Tongue, Thirst,  
**\* and** Want Of Sleep." *Galen,* Commenting on this Place, says  
thatA Delirium and Distortion of the Right Eye, On the ninth  
" Day, aS there described, are Symptoms which usually happen

In Crises.

Closed, and now-and-then twinkling. Eyes sometimes fore-  
shew an Haemorrhage, according to *Coac.* 77. where we read, that  
\* They, whO, under a Continual Fever, lie speechless, with their  
*α Eyes* shut, and now-and-then twinkling, if seined with Vomit-  
\* ing, and an Haemorrhage from the Nose, succeeded by aRe-  
\*\* CoVery Of their Speech and Senses, escape; Otherwise they  
a fall into a Dyspnoea, and die in a short time.” For Eyes thus  
affected indicate the Head Io he Oppressed with a Redundance Of  
Humours, and if the Patient, in this Case, be favoured with **a**Considerable Evacuation, he escapes by a Crisis; Nature,by a co-  
pious Excretion, freeing itself from that Load of Humours under  
which she lay oppressed.

A Change therefore in the Eyes, or their .Motions, Or some  
remarkable Disorder Or Defect therein. Often proceed from **a**Crisis,, and therefore are no bad Signs, hut Prognostics Of a good  
**Crisis,** and this Judgment will be confirmed, if no bad Sign  
appears in Conjunction with them, and Signs Of Concoction have  
preceded them ; hut if the Case be the reverse, they **ate not**Only bad, but generally mortal Signs. -

Now there are three Things requisite to a good critical Sign:  
First, That it be consequent to Signs of Concoction. Secondly,  
That it he not attended with any bad Sign. And, lastly. That it  
he succeeded by some Evacuation in which the Patient shall find  
Considerable Relief. To this Purpose is that of *Hippocrates,*before quoted, I *Epid. Stat.* 3. that " involuntary Tears, in acute  
" Diseases, signify an Eruption of Blond, if unattended with

Other destructive Signs; but if these, also, appear, they Jointly

." signify not a Crisis, hut Death."

But we have said enough of salutary Signs Observable in- **the**\* Eyes: We shall now treat of such as are of pernicious Or fatal  
Signification, and here, in general, it is bad and perninions, un-

der acute Diseases, for the Eyes to appear bad or disorder'd as  
when they shun the Light; shed Tears; appear red or inflamed,  
er with intensely red Veins in the White; are livid, or black,  
have a fierce, grim. Or fixed Aspect; are dull, heavy, weak, or  
not robust, hollow, tumid, prominent, tabid, dry, squalid, dusty,  
closed, or with the Eye-lid half-shut, half-open; are suspended,  
unstable, concreted, have too much Or too little Splendor, Or  
are cloudy and obscure. Void Of Splendor, and infested with pi-  
tnitous Excrements. Such Eyes aS these, consider'd in themselves,  
are never good, and are Only so by Accident, when. Nature  
struggling with the Disease, they foreshew a Crisis, and are rec-  
kon'd among Critical Signs.

All these Signs just mentioned, which, in acute Diseases, are  
Observable in the Eyes, shew the Condition Of the Patient to be  
at least Very doubtful. But some Signs are plainly fatal, aS when  
the small Veins in the Eye appear livid and black, and the Patient  
has lost his Sight, aS well aS Hearing Twhen the Eyes are destitute  
Os all Splendor, and when all the above-mentioned Signs Concur  
with some fatal One; and most Of all, when they appear Ona Criti-  
cal Day, attended with Critical Signs, winch determine nothing,  
or leave us short Of a Crisis.

But for more Perspicuity we shall treat particularly Os these  
Signs; and we shall begin with those which *Hippocrates* mentions.  
*Lib. Prognosi,* “if the Eyes, *he fays,* avoid the Light, Or shed  
" Tears involuntarily, or are distorted. Or become One less than  
" the Other, if the White of the Eye be red, or a small Vein  
\* thereof appear livid Or black; if pituitonS Sordes ζλῆμαζΙ in-  
" fest the Pupfl, if the Eyes are suspended ζἐναιωρεύμὲνἰοι. See  
" ENAEOREMAJ, protuherant. Or remarkably hollow. Or the  
“ Pupil appears squalid, and Void Of Splendor; or the Colour Of  
\* the Face be quite altered; all these are to be esteemed bad  
" and pernicious Signs.” But to these we may add the Limita-  
tions Of the same Author, in the Case Of the *Faciei Hippocratica .*which are, " Provided these Symptoms proceed not from some  
" external Cause, as Want Of Sleep, Fasting, an immoderate  
\* Looseness, Drunkenness, Or some such Circumstance.'' -  
\* But we shall proceed, as we said, to Consider each Symptom  
more accurately under its Proper Head, beginning with Sight, Or  
Vision. And when it happens in acute Diseases, that the Eyes  
avoid the Light, and Can by no means endure to behold the  
Splendor Of the Air, which was an usual Symptom Of the Pesti-  
lence at *Padua* some time ago, and generally mortal, it is Pro-  
- nonnced by *Hippocrates, as we* just now Observed, a pernicious  
Sign, and very justly for, as *Galen* Observes, Eyes avoid the  
Light, On account Of the Weakness Of the VifiVe Faculty, which  
sometimes labours under an Affection Of the Orifices, aS in a  
Lippitude, and sometimes is itself affected, which is a mortal  
Sign *i,* and this latter Case is distinguished, from the other, in that  
the Orifices Of the Eyes are not at all affected.

For a sick Person under an acute Disease not to **see,** is satal;  
and most of all when the Strength is exhausted, according to that  
of *Hippocrates,* 4 *Aph.* 49. “ In a Continual Fever, if the Pa-  
" cent cannot hear. Or cannot see, the Strength heing, also, ex-  
" hausted. Death is near at hand."

Obscurations Of the .Eyes, Or Dimness Of Sighs, are, also.  
Condemned by *Hippocrates, 6 Epid. Sect.st. Aph.* I6. “ For in  
“ acute Diseases, says *Galen,* an Obscuration Of the Pupil indi-  
\* Cates a Weakness and Decay of the Visive Faculty, unless it  
K happens critically, aS when it is attended with Signs of Com-  
“ Coction, and Other Signs indicating a Crisis. But when it is  
« accompanied with other bad Signs, particularly critical Ones  
which sail short Ol a Crisis, Of which Nature are all Evacna-  
« tions by which the Patient is not relieved. Or if it succeeds  
« such Evacuations, it is a mortal Prognostic.” in this Sense,  
perhaps, we are tO understand the Author of the *Coac.* Ioy. when  
he says, “ In long Diseases, small Tumors about the EarS, at-  
tended with repeated Eruptions of Blood from the Nostrils,  
and a Scotomia, are mortal."

For "the Eyes to look dull. Or the Pupil and interior Parts Of  
the Eye to appear-to w Spectator like those of dead Persons, is  
accounted by *Galen, Com. in Prorrhet.* a most mortal Sign,  
which Perhaps was meant by *Hippocrates,* 2 *Epid. Sect. 6.* in say-  
ing, that " They whose Eyes have lost their Strength are near to  
Q Death.” This was the Case of the Wife Of *Theodorus, J Epid.  
T.pri: - . - .*- It is a pernicious Sign, also, for the Eyes to he destitute Of  
Splendor, aS we are taught *Lib. Prognose.* But for them to ap-  
pear blind in a mortal Disease, shews Death to he very near, aS  
it was in the Cafe Of rhe Son of *Antiphanes,* 7 *Epid. T.* 28.  
*(( Whose Left Eye was* first affected with Blindness, and a Tu-  
" mor, without Pain, and not long after he was taken blind,  
\* also, in his Right Eye, and the Pupiis Of his Eyes became very  
U white and dry, and he died soon after his Blindness.” They  
whO attend on dying Persons, Observe the Decay of Splendor  
in their Eyes, with the utter Loss Of which the Sight is extin-  
guished. ....\*\* L

To Eyes obtuse, or dull, fqualid, and without Splendor, as  
described in *Lib. Pranot.* are Opposed Eyes which have a fierce,  
bokseorgrim Aspect, aS mentioned 6 *Epid. Text.* I. *Aph.* Ip.  
Eyes thus affected are peculiar to Persons in a Phrensy or Deli-

rium ; and generally portend Convulsions, or, with Other bad  
Signs, Death; agreeably to that Aphorism of *Hippocrates* just  
mentioned, which savs, that “ A Fierceness of the Eyes portends  
“ a Delirium; and a distortion ζκατάκλαπὸ] or Sinking felesuhefr  
“ of the Eye-lids are pernicious?' Eyes thus affected in Phren-  
sies signify Convulsions fucceeded by Death; for Convulsions,  
Coming upon a Phrensy, are most pernicious ; and .mortal Phren-  
sies terminate in COnVulsionS. Upon this Consideration the Au-  
thor or the *Prorrhet. Lib. I. T* 7L if we may believe *Galen,*would have such Patients lest to Nature, and neared them not with  
Medicines, when he says, a They who are molested with black  
\*\* Vomitings, have lost their Appetite, are delirious, have a fierce,  
" Cast of the Eyes, or have them Closed, are not tO he purged *qie*“ for it would he destructive." in Conformity to this Precept,  
several Of Our most learned Physicians have made it a Rule to  
themselves, never to prescribe Cathartics for Patients in such  
mortal Circumstances, that the Art Of Medicine might incur no  
Disgrace by such Practice. »

The Fate Of the Patient may, also, he predicted from the  
Magnitude Of the Eyes, . aS when one appears bigger than the  
Other-; for. among Other pernicious Signs mentioned by *Hippo-  
crates, Lib. Prognosi.* One, we find, is for the Eyes to appear one  
greater than the Other.

It is no less fatal, in a dangerous Disorder, for the Eyes to  
appear greater than ordinary, aS indicating the Head to be op-  
pressed with a Redundance Os Humours, and an Extinction of  
the Faculty, so that nothing resists the Flux os the Humours to  
the Eyes. This Sign was Observed by *Hippocrates,* 7 *Epid. T.*Ioo. in the Son Of *Nicolaus,* whose Right Eye, On the sixth Day  
Of his Iliness, appeared bigger than Ordinary, and the next Day  
he died : And the same Sign was Observed by him in the Wife  
Of *Hermoptolemus,* aS she lay dying, 7 *Epid. T.* I3.

- Prominent Or tumid Eyes are, also, enumerated by *Hippocrates,  
Lib. Prognostic,* among those fatal Signs which appear in .those -  
Parts The Eyes are usually thus affected from violent and in-  
flammatory Pains Of the Head, when, becoming replete with a  
Redundance of Heat and Spirits, they swell Out, and appear pro-  
minent.

Hollowness Of the Eyes, also, in acute Disorders, unless it  
proceeds from some external Cause, within the Space Of three  
Or four Days, from the Time when the Patient was seized, is  
accounted. *Lib. Frognofi.* a pernicious Sign. For such a Synt-  
ptom, aS *Galen* teaches, in his Commentary On the Place, pro-  
ceeds from an extreme Imbecillity, by which the Eye is deprived  
Of all manner of Nutrition 5 and this indicates the Violence Of  
the Disease to be so extraordinary, that Nature must Of Necesi-  
fity sink under it. ..

When the Eyes appear shrunk, and quite wither'd, as *if* they  
were destitute Of Aliment, it proceeds from an Imbecillity os  
the natural Heat, the small Remains Of winch reside Only in the  
internal Parts, and are incapable of diffusing themselVes to the  
external Parts, in order to Concoct Aliments for the Nutrition  
of the Eye: To which it may be added, by the same way Of  
Reasoning, that the sew Spirits which remain in the Heart, and  
internal Parts, cease to stow to the Eyes; whence those Parts  
must Of Necessity wither, dry up, and appear hollow; for *Hip-  
pocrates, J Epid. T.asel,.* Observed an Hollowness Of the Eyes im-  
mediately consequent upon a Wound in the Liver, and in many  
dying Persons, sometimes the Right, sometimes the Left Eye,  
have been Observed to fade and wither.

There are, also. Certain Motions Of the Eyes which are of  
fatal Prognostication. Thus, for Instance, first, for the Eyes to  
be erect, or suspended [ὸνςυωρεύμὲνἰοι J, which *Galen* interprets  
*unstable,* or wavering, israccounted by *Hippocrates. Lib. Frognofi.*a pernicious Sign, as portending, according to *Galen,* a Delirium  
or Trembling, either Of which is fatal: But that the Physician  
may safely Venture to pass his Judgment, Other Signs are, also,  
carefully tO he consulted, for, in Order to pronounce an Insta-  
bility of the Eyes a mortal Prognostic, it is necessary, that it  
should he attended with some other deadly Sign. *Galen, Com.*2. *in* I *Prorrhet.* more clearly explains this Property of Instabi-  
lity, by saying that unstable EyeS are like an unstable, unmanage-  
able Horse, always in Motion, whereas. On the contrary, con-  
Crete EyeS are fixed and immoveable. Hence the Author of the  
*Coac.* justly concludes, that quick Motions and Twinklings  
of the Eyes are Of aS bad Signification, aS a Fixedness thereof;,  
whence they are denominated concrete, firm, stable, and im-  
moveable.

That fixed EyeS are always a bad Sign, we are taught by the  
Author of the *Prorrhet. Lib.* r. *T. nst.* where he says, ομμα  
ἀμαυρήμὲνιον, φλαιῦρον, καὶ τὸ τνεπηγὸν καὶ ἀχλυῶδες, κακόν. For  
" the Eye to be dulled. Vitiated, Concrete, Or confused, (as *Ga-  
\* len* explains the Word) is a bad Sign.” He might more justly  
have said, a mortal Sign, because they are almost constantly fa-  
tal in acute Diseases, unless they happen to be so from some  
Critical Cause. *Galen,* in his Commentary, writes, that a Con-  
cretion of the Eyes prOceedS from an Immobility of the Muscles  
which move the EyeS; which Immobility is owing either to a  
Resolution of all the Muscles, or to their equal Tension, where-  
by they are attracted to ali Parts alike; os, lastly, to an extreme

Imbecility of the Muscles, which is Certainly Os most fatal Con-  
sequence, as are, also, the other Cases, as proceeding from a  
Convulsion Of the Muscles, when the Original os the Nerves is  
affected by the Violence of an acute Disease.

*Galen, Com.i. in 6 Epid. T.zJ.* writes, that concrete, or im-  
moveable Eyes, which *Hippocrates* Very much condemns in the  
Text, (6 *Epid. Sect.* I. *T. 16.}* indicate a perfect Extinction Of  
that Faculty by which the Muscles, in their natural State, were  
moved. *Hippocrates,* 5 *Epid. Text.* 5o. in the Case of the sair  
Daughter Of *Hcrios,* who died oi a Stroke on the Crown Of the  
Head, given her by a Wench, her Playfellow, with the Flat of  
the Hand, says, that, before her Death, one Of her Eyes was **af-**sacted with a Cataplexy, or Stupesaction [κάταπσίνξ].

\* With respect to the Posture os the Eyes, Distortions **are of**very fatal Prognostication, unless they happen to he -Critical, aS  
in the Case Of the Patient in the Garden Os *Dealces,* 3 *Find.  
Sect. l AEgr.* 2. who, in the ninth Day Of his Illness, was affected  
with a Distortion Of the Right Eye *Hippocrates, Lib. Proguast.*reckons Distortions among Other pernicious Signs belonging to  
the Eye. But it is necessary to make a Distinction here, for  
sometimes, aS *Galen lens. Com.* I. *in Prognosi,* the Eyes aro  
distoned through a Convulsion of the Muscles which move them,  
aS it often happens in Fevers, On account Of the Multitude Of  
Humours, and, if no more than such Redundance he indicated,  
nothing can with Certainty he predicted from the like Distor- \_  
tions Of the Eyes. Generally, however, in acute Distempers,  
the Eyes are perverted and distorted, not from fuch a Cause, hut  
from the Disease affecting the Original of the Nerves, which is  
the Brain, and therefore highly pernicious. We conclude, then,  
. that Perversions and Distortions Of the Eyes are Constantly had,  
when proceeding from the Multitude or RedundanceOf the Hu-  
mour, which is least to he dreaded. Or from a Driness Of **the**Muscles: But is they happen in burning Fevers, or Phrensies,  
they prognosticate nothing but Death, and that most Of all,  
when they appear with Signs of the Extinction Of the Faculty,  
indicating an extreme Imbecillity, Or a Diminution Or Depriya-  
tion of some Sense. \*

There is a celebrated Aphorism Of *Hippocrates,* tO this Pur-  
pose, 4 *Aph.* 49. *In a continual Fever,* says he, *if the Up, err  
Eyebrov), or Eye, or Nose, be distorted, is. the Patient cannot  
see. Or hear, and is at the same time very vieak; whatever of  
these Signs appears, Death is near at Hand.* And this is expressed  
more Clearly, *Lib. Prognosi,* where it is said, *if theEye-sm. or  
Lip. or Nose, be distorted, or corrugated, or livid, or pale, at.,  
tended ccith some other Sign, you are to knovi, that Death ap~  
proaches.* DistojTionS of the Eyes, therefore, are always a had  
Sign, unless they happen critically, as was said: They are nos,  
however, necessarily mortal, which the diVine *Hippocrates* seems  
to have well understood, 6 *Epid. Sect.* I. *Aph.* Id. where he  
says, *A Circumtension* (Or Tension Of the Circumference) *of the  
Eye.lid is bad.* But a Certain Judgment may be made from pre-  
ceding, concomitant, and much better from succeeding Signs.  
Perversions or Distortions Of the EyeS are, also, bad, when  
they happen while the lower and weaker Parts ate Oppressed by

the Force Of the Disease, because it indicates a Tranflarion of  
the Humours to the Brain, and nobler Parts; which seems to he  
the Sentiment Of the Author Of the I *Prorrhet.* 69. when he says,  
that ‘c A Distortion Of the Eye, which is Owing to a Recourse  
Ci of the Humours from the Loins, is a had Sign.'' But such  
Distortions, accompanied with other had Signs, may he pro-  
nounced mortal : TO which Purpose we read in the same Book,  
*Text.* 8 I. that " ln burning Fevers, accompanied with superfi-  
“ cial and general Refrigerations, and frequent watry and bilious -

Stools, a Distortion Of the Eye is a bad Sign , and the worse,  
if the Patient labours, also, under a Catochus." He might  
more justly have called it **a** mortal Sign, for general Refrigera-  
tions in burning Fevers, accompanied with Evacuations, by which  
the Patient is not at all relieved, but rather injured, are Critical  
Signs, which determine nothing, and consequently mortal, ac-  
Cording to *Hippocrates* and *Galen,* who frequently tell us, that if  
the Patient finds no Relief from such things as might with Rea-  
son he expected to afford it, but is rather injured by them, and  
reduced to a worse State than before, nothing but Death Can he  
the Consequence , for such Symptoms are to he esteemed criti-  
cal Signs, which prove abortive, and answer no End, and are. Os  
Consequence, mortal : Whence, if Distortions Of **the** Eyes **are**accompanied with these bad Symptoms before-mentioned, it is  
not enough to call it a bad, but a fatal and destructive Sign. To  
this Purpose the Author of the *Prorrhet. Lib.* I. *Text.* 89. telis  
us, that U ln a Distortion of the Eyes, accompanied with **a**" Fever and Lassitude, a Rigor is pernicious; and a Coms, at-  
\*c tended with the same Circumstances, is bad?' Distortions of  
the Eyes, therefore, attended with bad Signs, and especially bad  
Critical Signs, are justly esteemed monal; but, if accompanied  
with mortal Signs, they signify the near Approach of Death. Of  
this Nature was the distorted Eye, observed by *Hippocrates, in***a** Woman who died of an Abortion, 3 *Epid. Sect.* I. *AEgr.* II.  
*Qn the fourth Day,* he says, *sue ..^as taken majth a Delirium, at-  
tended majth Fear and Sadness . her Right Eye vias dessorted***; see***. had sotnevihat of a cola Svceat about her Head, and her Extre-*

*mities vaere cold.* These Circumstances, in acute Diseases, are  
mortal Signs.

To examine, next, what are the bad Prognostics winch may he  
drawn from a Closure, Or Shutting Of the EyeS: When the Eyes,  
in acute Disorders, continue closed, and cannot he open'd, either  
from the Redundance of the Humours, pulling together and Con-  
glutinating the Muscles of the EyeS and Eye-lids, or from **a**Dryness and Resolution Of those Muscles, through Imhecilliry,  
in acute Disorders, it is always a mortal Sign: And, if at any time  
it he not so, it is when it is critical, and followed by some good  
and remarkable Evacuations; otherwise it portends nothing but  
Death. To this Purpose the Author Of the *Coac. yy.* very finely .  
expresses himself, where he says, *zhitThey viho liespeeclolesis under  
a continual Fever, vsith their Eyes closed, and natw-andichen  
tccinkling, is. they happen to be seized ninth an Eruption os. Blood  
from the Nasi, ana Vomiting, succeeded by a Restoration of their  
Speech and Senses, recover their Health ; but, if no such thing  
happens, they fall into a Dyspnoea, and die in a score time.* But  
it seldom happens, that aClolureos the EyeS is Critically attended  
with the forementioned Symptoms, and never but in very robust  
Bodies, and therefore it is, for the most parr, **a** mortal Sign. **A**Closure Of the EyeS, accompanied with other bad Signs, is always  
fatal, agreeable to 1 *Prorrhet. Ji.* above-quoted. Here the Phy-  
sician is advised, aS some understand the Passage, to prescribe  
nothing to his Patient, but attend the Event Of the Prognostic,  
for such a Closure Os the Eyes, as *Galen* says, in his Commenss  
On rhe Pisce, proceeds either from a Tension of the Muscles  
which Close the EyeS, Or the Imbecillity Of those which open  
them, both which are pernicious Symptoms.

TO he with the Eye-lids half-closed, in acute Distempers, is **a’**bad and most fatal Prognostic. Of these speaks *Hippocrates,  
Lib. Prognosi,* where he fays *We ought to consider whether the  
Patient lies eaiith his Eyes half-closed in Sleep ‘ for is. any Part '  
of the White appears betvseen the unclosed Eye-lids, aaithout a  
preceding flux of the Belly, ay Cathartic administer'd and the  
Patient is not noont to steep in that manner, it is an highly per-  
nicious and mortal Sign.* This Sign, says *Prosper Alpinus,* I Ob-  
served in my dearest Wife, hefore she died , and it proved fatal,  
though sometimes she used to steep in that manner, but now  
it was attended with a Coma, Coldness os the Extremities, Rest-  
leflhess, with Roughness and Blackness of the Tongue, unat-  
tended with Thirst.: This Symptom therefore, in acute Distem-  
Pers, is always to he dreaded, according to the Author Os *Coac. -*2 I 8. where he says, that *An Incurvation os. the Margin of the  
Eye-lids, with a Fixe dr\*sis, or continual Twinkling, of the Eyes,  
or a Change in their Colour, or the Eye-lids not closed, is ae per-  
nicious Sign.*

The Colour Os the EyeS is, also, to he regarded, in forming  
Prognostics Os a bad Event: Thus, for the White of the Eye to  
appear red, unless it Critically indicates an Haemorrhage, is per-  
nicious, hut, when it is far from heing Critical, such a Sym-  
ptom, in scute Diseases, is Constantly bad. This Circumstance,  
also, is reckoned by *Hippocrates, Lib. Prognost.* among perni- /  
Clous Signs, because, aS *Galen* says in .his Commentary, it pro- .  
Ceeds either from a Redundance Of Blood stagnating in the Brain,  
and its Membranes, or a Considerable Inflammation in those Parts,  
both which, in Continual Fevers, are Constantly pernicious; and  
not the less so, if this Redness appears attended with other bad  
Signs, On Critical Days, Or after what manner soever, but worst  
os all in high Phrensies. Of this Symptom, among others, the  
Author Os the *Coac.* I63. thus speaks: *Concussions, or Shakings, of  
the Head, vsith intense Redness os. the Eyes, and a manifest Dfli-  
rious.nesi, are pernicious.* That this Redness is a had Sign, and  
to he dreaded, we are taught 7 *Aph.* 3. because, says *Galen* On  
the Place, a Redness of the EyeS indicates a considerable Inflam-  
mation of the Brain, or Stomach, both which are destructive,  
as the same Author teaches exprehy, in his Comment on I Pror-  
*rhet.* where he says, that *A Baednes.s of the Eyes, coming on a con-  
tinual Fevcr, scevjs either a Redundance of Blood in the Head,  
rushich is the Cause of this Rednefi, as in Lippitu des, or from an  
Inflammation of the Brain, or Stomach vchich are doflinguijhed,  
in that, under the former, the Feins only in the White os. the  
Eye appear red, vihereas an Inflammation of the Stomach is nt-  
tended, also, with Hiccups, or Vomiting.* Hence *Hippocrates,  
Lib. Prognssi.* did not say simply, that a Redness of the EyeS,  
but of the Veins in the Whites Of the Eyes, was of fatal Signi-  
fication.

But the most pernicious and mortal Sign, according to **the**above-cited Place os *Hippocrates,* is when these Veins appear  
livid. Or black , for, as *Galen* on the Place has it, this Lividness,  
Or Blackness, proceeds from Refrigeration, winch indicates an  
Extinction of the natural Heat.

in the last Place, the bad Fate Of the Parient may be predicted  
from the Excrements which appear in the Eyes. *Hippocrates,  
Lib. Prognose,* and 1 *Epid. Sect.* 2. among other fatal Signs he-  
longing to the Eyes, in acute Diseases, reckons involuntary Tears.  
The Cause of such Tears *Galen* refers either to some Lippirude,  
or to a Defluxion from the Head upon the Eyes, bur, io acute  
Fevers, it must he imputed to the Imbecillity os the retentive  
Faculty, which *is os* most fatal Consequence. Involuntary Tears,

therefore, in acute Diseases, where they are not a Sign of a suture  
Crisis, by an Haemorrhage, especially from the Nose, portend  
inevitable Death, according ro *Hippocrates,* I *Epid. Sect 2.* Pi-  
auirous Excrements in rhe Eyes arc also, reckon’d, *Lila Progaost.*among bad Signs. *Galen,* in his Comment, telis us, that though  
this Humour, or Excrement, proceeds from a Defluxion, as is  
sometimes the Cain in a Lippitude, yet in acute Diseases it indi-  
cates an Imbecilluy of the natural Faculty, which is too weak to  
concocti the Aliment necessary for the Eye. Sometimes there  
appears a fort of hard and dry Excrement, which the Author of  
the I *Prorrhet.* I7. pronounces a Sign of a Pbrensp; and *Galen,*in bis Comments, writes, is sometimes Observed in Persons un-  
der a COnfumption,.when all the fleshy Substance 00th in rhe  
Face, and on the Temples, is coliiquated. by an immoderate  
Heat, which Circumstances are attended with an Hollowness of  
the Eyes; but, in a Phrensy, this dry and dusty Excrement ap-  
pears without this Hollowness. Hence *Hippocrates, 6 Eped. Sect.* I.  
*Text.* I6. among Other bad Signs of the Eyes, reckons a sort of  
Excrement like Chais, or dried Spume, which, as *Galen* fays,  
happens in acute Diseases, from an extraordinary Driness and  
Imbecillity, very sinall Teats falling from the Eyes, which, rhrol  
the Imbecillity of the retentive Faculty, were unable to retain  
them; and these minute Drops, or Tears, being dried by the in-  
tense Heat of an inflamed Brain, are changed into thofe dusty  
Sorts of Excrements, which the *Greeks* call *Lemae,* and are for  
the forementioned Reasons accounted mortal Signs. *Prosper  
Alpinus de Prafai. Vit. dr Mary.*

**TABLE XIX.**

*Pig.* I. A, the Cilia, Or Eye-lashes, of the siiperior Eye-lid.  
Β, the Cartilage of the superior Eye-lid.

C, the Mofculus Attollens, or Aperiens Palpebrae Superioris,  
Or Mufcle that elevates the superior Eye-lid.

D, in *Fir. 2.* exhibits the Mofculus Superbus, or Elevator  
Oculi. .

E, the Tendon Of the preceding Mufcle.

F, in *Fir.* 4. represents the Depressor Ocoli, Or Mufcuhis Hu-  
mills. '

G, in *Pis.* I. a. and 3. represents the Adduftor OCuli, other-  
wise called *Bibitorius.*

-. Ή, in Fa. 3. and 4. reprofents the Abdiedor, or Mofculus  
Indignatorius.

Lin *Pig. t. a.,* and 3. the Obliquus Superior,, or Trochlearis  
K, in *Pic.st.* the Obliquus Inferior.

L, in Fig. i. a. and a. the Tendon of the Obliquus Superior  
passing over the Trochlea.

M, in Erg. I. a. 3. and4. the Optic Nerve.

N, in *Pip.* 3. the Optio Nerve in its Progress to the Glohe Of  
the Eye.

O, in Fed I. the Union of the Optic Nerves.

P, in Fig. a: 3. and 4. the transparent Part ofthe Cornea.

*Vit. 5..* A, the Tunica Sclerotica.

Β, that Parr which is covered by the Tunica Aainata, or Al-  
buginea-

*Q,* the transparent Part Of the Cornea.

*Pig. 6.* represents a posterior View of the Eye, where the Tu-  
nica Sclerotica is removed in four Segments A AAA, in order  
to shew the subjacent Uvea furnished with innumerable Veflels.

Fig. 7. exhibits the fame posterior View of the Eye, in order  
to shew the Retina, heing an Expansion of the Optic Nerve.

*Pig.* 8. exhibits a View of the Eye, wherein all the Tunics ate  
removed, in order to shew the Vitreous Humour, inclosed in  
Its proper Membrane. ' -

*- Pit.* 9- represents the Vitreous Humour A Α A A, in the Midst  
of which is placed the Crystalline Humour B.

This is an anterior View of the Eye.

*Pig.* Io. represents the Pupil of the Eye, with the.Crystalline  
Humour, and Ciliary Ligaments.

*Pig.* II. represents the three Rugae Of rhe Processus Ciliares,  
as viewed through a Microscope: That in the Middle is venous,  
and the Other two arterial. The Other Rugx are negieded, and  
removed as much as possible.

A exhibits the expanded Portion of the Tunica Uvea, and  
Choroidea, viewed in its interior Part through a Microscope, to-  
gether with the three Strhe of the Processus Ciliares.

B Β represent two *Chori,* as *Hevius* calls them, of the Pro-  
cessus Ciliares, consisting of arteris! Veffeis only, together with  
their Vermiculationi; Other Substances being removed, that the  
Order of the Vessels may appear the more crstindtio.

C C, some vermicular small Vessels, afcending from the inferior  
Part to the Processus Ciliares.

D D, the Union of the Vessels ascending from the inferior Part.

EE, the vermicularsinall Vessels, both long and short, toge-  
ther with the nerveo-lymphatic Ducts.

F F, the fame Vessels, but arising from the Circulus Arteriosus,  
together with their Nerveo-lymphatics.

G represents the refluent, small, nerveo-lymphatic Vesicis, to-  
gether with the venous small Veffeis.

Η, the vermicular small Veflels, mark’d as well aS the arterial  
ones.

I, the venous Vessel, formed of the vermicular final! Veffeis,  
which, when it has arrived at the End of the Processus Ciliares,  
is carried almost in a streight Coutfe to the Circulus Venosus.

*Fig. la.* represents to the Life one Stria of the Processus  
Ciliares, consisting of arterial Vessels alone, together with the  
Nerveo-lymphatics, delineated by the Assistance of a good Mi-  
croscope.

A, some of the sinall arterial Vessels, arising from the inferior  
Parts, and laid somewhat to one Side; that the Excursion of the  
vermicular Veffeis may be exposed to the naked View.

B, the Veffeis mined in one, and ascending.

C C represent the short, vermicular, arterial Vessels, sent off  
before the uniting of the Vessels

D, the same Vessels, but somewhat longer.

E, the Ramification Of the vermicular Veffeis arising from the  
Circulus Arteriofus: Some Of these Veffeis are turned hack, as  
may he seen at F.

G G G, represent the short lateral Or nerveo-lymphatic Vessels,  
sent off from the vermicular Veffeis, and divided from the Liga-  
mentum Ciliare.

*Fie.* I;, represents a sinall Ramification, view’d by a Micro-  
scope^ and consisting of the vermicular Vessels, Of which, toge-  
ther with the Nerveo-lymphatics, the Circolus Arteriofus sunfishes  
**a** Urge Number.

A, a Part Of the Branch arising from the Circulus Arteriosus  
cut Ossi

B, the vermicular Veffeis, arising from the said sinall Branch.

C C, the nerveo-lymphatic small Vessels, reaching to the Lga-  
Inenta Ciliaria.

*Pis.* I4. represents the Ciliary Processas of *a* Dog, covered  
with two Coats. The former of there Coats represents, as viewed  
through a Microfcope, the vermicular Veffeis, together with rhe  
Nerveo-lymphatics dispersed through the Second, which is the  
fifth in Order, united, and tom from the Ligamentum Ciliare.

A, a small Part of the Circulus Arteriofus.

- B Β represent two Branches coming from the Circulus Arte-  
riofus. One Of which was cut off, whilst three other Branches,  
in oraer to prevent Confusion, were preserved, together with  
their vermicular Excursion, and a Distribution of the nerveO-  
lyrnphatic Veflels, through the nerveo-lymphatic Coat; as is  
shewed at C C.

D D exhibit the nerveo-lymphatic Veffeis united in this Coat,  
representing as it .were, sinall Papillae, and taken from the Li-  
gatnenturn Ciliare, which they compose.

*Pig.* I4. represents a nerveo-lymphatic Vesselcomposed of se-  
veral others, ascending to the Ligamentum Ciliare, and resolving  
itself into the said Number of Veflels, when it has reached that  
Ligament.

Observe, that, in Order to prevent Confusion, all the small  
Vessels are not marked.

A A A, the Union of the nerveo-lymphatic Veffeis into larger

B B, the larger Veffeis, formed Of fmaller ones.

C, Branches cut Ossi

D, the Vessels united, and ascending to the Ligamentum Ci-  
liare.

E, the Resolution of this Vessel into small Branches.

*Fig. 16.* represents the Tunica Choroidea inverted, in which  
the Veffeis made up of rhe smallest Nerveo-lymphatics, silled  
with a redith Matter, resembling the Vitreous Humour, are  
torn off, and exhibit Papillae twice as large as in the natural State;  
but, for preventing Confusion, far fewer in Number.

A, the nerveo-lymphatic Veffeis fparlding, as it were, through  
the Tunica Papillose, and forming the above-mentioned small  
Papillae, Or, rather, the sinall Vessels for containing the Vitreous  
Humour.

B represents these Vessels, formed Of many others, as broken,  
and resembling fmall Papillae.

C, the Part where the Optic Nerve has been cut offi

D, a Part of the Artery, which was distributed through the  
Optio Nerve.

*Pic.* I7. represents the nerveo-lymphatic Vessels of a Dog, di-  
spersed through the lymphatic Coat, viewed through common  
Spedacies, and larger than in rhe natura] stare, together with  
some small Papillae, or Vessels, going to the Vitreous Humour, and  
left in the smallest-Portion of the Tunica Papillose.

A A are nerveo-lymphatic Vesteis running out through their  
proper Coat.

B, some Papillulae, or small Vessels appropriated to the Vitreotis  
Humour.

C, a small PorTion of the remaining Tunica Papillose.

*Fig.* I 8. is the arterial small Vessel of an Ox, viewed through  
a Microscope, and which is sent to the internal Parts, from those  
between the second and third Coats expanded, that, together  
with the vermicular Progress, the nerveo-lymphatic Vessels, in  
some measure destroy'd, might also he seen, by laying the  
other Parts aside.

A is a small arterial Stanch running off to "the vermicular  
Veffeis from these between the second and third Coat.

B represents the vermicular Veffeis variously subdivided, and  
hy Expansion somewhat removed from their vermicular Course,  
that their nerveo-lymphatic Vessels, represented hyC, might he  
the inore distinctly observ'd.

*. Fig.* I 9. exhibits the two Humours of the Eye. Tn this Fi-  
gure, besides the true Situation Of the Ligamentum Ciliare,  
and some small Mouths of the Vessels Composing the Vitreous  
Humour, is also exhibited the small Vessel, winch serves to non.  
fish the Tonica Arachnoidea.

A A, the Ligamentum Ciliare.

Β B are the nerveo-lymphatic Vessels broken off from the  
vermicular Vessels Of the Processus Ciliares.

C C, a Collection Of these Vessels into Striae wreathed up  
like Cords.

D, the nerveo-lymphatic Veffeis Contorted, and running off  
to the Crystalline Humour.

EE, some Months Of Vessels which Compose the Vitreous  
Humour.

Fisa Ramification Of the Vestel dispers'd thro\* the Tunica  
Vitrea, and a Distribution Of .that which serves for Its Nou-  
rishment.-

OCYMASTRUM. A Name for the Circaea; Lutetiam, and,  
also, for several Speciesof *Lychnis. -*

OCYMOIDES. A Name in *Boerhaave* for several softs of  
*Lychnis.*

OCYMUM.

The Characters are ὁ

The Root is annual in all the Species, except that Of *Coylon.*The Galea, Or Crest, is erect, roundish, Crenated, quadrifid,  
and larger than the Beard, which is simple, hollow, long, hori-  
iontal, and Crisped, Or slightly jagged. The Calyx is tubulous.  
Open, quadrifid, and defective in a fifth Part ; but haS that  
Defect supply'd, instead Of a Segment, with a small Leaf,  
which Covers it like a Buckler, and is eared on the hinder  
Part. ’ γ '

*Boerhaave* mentions twenty-fotir Species Of *Qcymum* which  
are, 5 . .

ϊ.-Odyrnurn; caryophyllatum, monachorum 2. sive Acinos 4  
Columnae. *J. B.* 3- ado. *Acinus pioscoridis.* Col. Phy cob.  
I. 23.: ...... ‘

.. 2. Ocyrnnm; foliorum fimbriis ad Endiviarn accedentibus.  
maximum. '

3. Ocymum,'latifolium f maculatum, vel crispum. *C.B.P.*225. *Basilicum, Indicum, maculatum.* H.Eyst. ./Est. o. 7. Fig. I.

4. Ocyinum, Viride, foliis bullatis. C. *Β. Ρ.* 225.

. 5. Ocymum, - soliis fimbriatis, viridibus. C. *B. P.* 227.

o. ‘Ocymum j Caryophyllatum, maximum. C. *B. Ρ.* .225.

7. Ocymum, Caryophyllatum ‘, majus. *C.B. P.* 226; . ’

8. Ocymum, Citff Odore. C. Β. Ρ. 226.

9. Ocymum Anisi Odore. *C.* Β. Ρ. 226.

Io. Ocymum, Meliflin odore.

II. Ocymum, Styracis liquidae Odore.

I2. Ocymum, Foenicnli odore.

13. Ocymum; nigrum; latifolium; laciniatum; spica nigra,  
flore albo, odore Cinnamomi.

I4. Ocymum, Vulgatius, seeBAsILIcUM.

II. Ocymum, vulgatius, soliis ex nigro Virescentibus; flore  
albo.

Id. Ocymum, Vulgatius; foliis ex nigro Virescentibus, flore  
violaceo. "

I7- Ocymum, medium, Crispum; Conglomerata brevique  
‘spica.

18. Ocymum,. minus; angusti folium; foliis serratis.

I9. Ocymum; minus; angustifolium, foliis bullatis.

20. Ocymum; tricolor.

21- Ocymum, minimum. *C. B. Ρ.* 226. 7. *B.* 3. 24I. Rari  
*Hist.* I. 541. *Town. last.* 2o4. *Boerst. Ind. a.lyo. Ocymum  
Caryophyllatum.* Ossic. *Ocymum vulgare ratitus.* Park. Theat. IS.  
Orywin» *minus Caryophyllatum.* Ger. 547. Emac. 673. BUSH-

’ It is Cultivated in Gardens, flowers, in *June,* and the Seed is  
in Use.

22. Ooymum, minimum, foliis ex purpura nigricantibus.  
*N.H.* 3. 4O7. - ς

23. Ocymum; minus; Chinense; Odoratissimum; store  
albo. *Triurnsost.*

24. Ocymum, Zeylanicum, perenne, frutescens; folio Ca-  
laminthae nonnihil sithili. *M. H.* Io. I53. *Nepeta sese Mentha  
Cat artae assents Indica, candida flare. Boerh. Isid. alt. Plant.  
Vol.* I.

The Name *Ocymum* is from ῶκέως, *Oceos,* swiftly, quickly,  
from its sudden Growth ; for It shoots forth from its Seed within '  
the Space *Os* two Days : It is also Called *Basilicum* from Βασιλεὺς,  
*Bafilus,* a King, hecause Of its incomparable Smell, and emi-  
nent Virtues.

Many say, that, if the Smell he received tip the Nostrils,  
there jaseend Seeds or eggs of insects into the frontal Sinus, -  
which are there cherished by the Mucus, and hatched, and this  
is not so much to be wonder’d at, fince Infects are sometimes  
excreted with the Mucus. -' -

This Herb is endu’d with a balsamic Virtue, and a most sweet  
and penetrating Smell, it is heating, and wonderfully reviving  
to the Spirits. An Addition Of some Leaves Of *Oeymum,* in a  
Preparation Os *Sal Volatile,* gives it a much finer and more re-  
freshing Smell. Whar gave Occasion to say, that much Smell-  
ing to the Leaves Of *Ocymum* generates Scorpions in the  
Brain, might be, perhaps, that Scorpions, heing allured by the  
Smell, lay their Eggs in the Leaves; which, heing attracted  
through the Nostrils into the frontal Sinns, are there easily  
hatched, and afterwards increase. *Oeymum* is good to provoke '  
Urine, and for an Obstruction-of the. Menses, for the Colic,  
Asthma, and venomous Bites: It is a Plant of a balsamic and  
temperate Quality, and not offensive to the Smell, like Sage  
and Clary. *Hist. Plant, adscript. Bocrhaave.*

**OCYMUM SYLVESTRE, see ACINOS..**

ODALLAM. H. M. A Name for the *Mangas fructu ve-  
nenato.*

ODAXISMOSj ἐδαξισμός, from ὸδὴς, a Tooth. A biting.  
Sensation, Pain, Or Itching. It is us'd by *Hippocrates* princi-  
pally with respect to the Gums, when the Teeth are forcing  
a Passage thro' them.

ODIUM. Hatred. This is reckon’d among the ProCatarctic  
Causes Of Diseases 3 and seems to- produce Effects like those of;  
Anger. See IRA.

ODMALEA, ὸδμαλτατ FetidS. *Hippocrates.*

ODONTAG0GOS, ὸδοίιταγωγός. An Instrument for draw-’  
ing Teeth.

ODONTAGRA signifies either the same aS *Qdantogogos, :*or the Gout in rhe Teeth.

ODONTALGIA,, ὸδονταλγία. The TOoth-ach, from οδῆς,  
a Tooth, and ἄλγος, Pam.

ODONTIASISj ὸδοντίασις. Dentition.

ODONTlCA. Remedies for Pains in the Teeth.

ODONTIS, and ODONTITIS, are Names for several  
Species Of *Lychnis.*

ODONTOGLYPHON, δδοντογλυφβν, from οδῦς, a Tooth,  
and γλήφω, to scrape. An Instrument for rubbing. Or scaling the  
Teeth. ....'-

ODONTOIDES, οδοντβεπέΐής: Ἀ Name for the Tooth-like  
Process, Or the second Vertebra Of the Neck.

ODONTOPHYIA, βδοντοφυία, from οἳδάστ, a Tooth, and  
φὑω, to grow. Dentition.

ODONTOTRIMMA, ὸδοντότριμμα, from ὁδὸν, a Tooth,  
and τρίβω, to wear away. A Dentifrice-

' ODORATUS. The Sense Of Smell. See **OLFACTUS.**

OE. *on.* The SOrhus, Service-tree. *Oribasius, Med. Collect.*L. I5. C. I.

OECONOMIΑ, οικονομίη, from ?iz&v, an House, and νόμος, a  
Law,Or Rule Properly, the Management of an Plouse,or Family..  
But *Hippocrates* uses It to express the Management Of a sick  
Person. The Animal OecOnomy is the Conduct Of Nature  
in preserving Animal Bodies. .... ..

OEDEMA, οἰδημα. A Tumor, in general. But it is particu-  
larly us’d to signify a phlegmatic, cold, and soft Tumor, retain-  
ing the Print Of the Finger, but attended with little or no Pain.  
It is not confined to a particular Part Of the Body ; sometimes  
it seizes, the Head, sometimes the Hands, sometimes the Eye-  
lids, Or aby other Pan, and sometimes the whole Body, in  
the last Case, it assumes the Name of a Cachexy, LeucO-  
phlegmatis. Or Dropsy. This Disorder affects the Feet most fre-  
quently, which are then said to be tumefied. Or cedematous.

The immediate Cause os :an Oedema is doubtless to he  
ascribed to the too great Serosity Or Viscidity os the Blond,  
which stagnates in the minute Vesicles Of the Fat, Or Tunica  
Cellulosa, and distends the Skin. ‘This Disorder Of the Blond  
proceeds either from a cold and phlegmatic Habit, or from old  
Age; and it happens most frequently in cold Weather, when the  
inclemency of the Ain increases the Disease, by coagulating the  
stagnating Blood.' It is not, therefore, surprising, that the  
Tumor prodigioufly increases, though it may seem favourable  
and much diminished in the Morning 5 which is certainly to he  
ascribed to the Warmth Os the Bed., This Disorder may, alfo,  
proceed from an Irregularity in Diet, from Excess in Earing and  
Drinking, or from the Use of coin, crude, and hard Meats.

Fevers, particularly those of the intermitting Kindssreqnently  
conduce to this Disease; especially is -the Patient has indulged  
thimselt in intemperate Drinking,- while?the Heat and.Thirst  
are upon him. ' Another Cause may be a tpeosuse Discharge os  
Blood either by Wounds, by Vomiting,: or from.The *.Nose,-*Lungs, Haemorrhoids, or Uterus. IL may, also, arise from-Obr  
stmctions of the menstrual Discharge in Women, or from a  
Compression *of* the Vena Cava by the Foetus, or a Scirrhus in  
the Abdomen, by which means the Reflux of the Blood from  
the lower Extremities is: greatly impeded. It may likewise be  
ascribed to a Lise too sedentary, or to too great ah Indulgence of  
lying in Bed and steeping; or to a Phthisis, and -Difficulty of  
Breathing ; or to any other Disease Or Fangue of the Body,  
. which weakens the natural Vigour Of the Heart in propelling  
.. the Blood. . ' - -

\*\*.. .Hence it may easily appear, by what Symptoms an Oedema.

may be known, but i: is necessary to Observe, that the harder  
the Tumor is, and the longer it retains the Print Of the Finger,’  
**the** stagnating Blood, or Hinnour, is the. thicker, and mOreIena-  
cious. - ' ‘ ‘

Ἀπ Oedema upon the Feet scan scarcely he cured -without

-removing the Distemper whence it sprung. In pregnant Wo-  
men, especially those os. a robust Constitution, - oedematous' ’  
Tumors are attended with little or no Danger; for they gene-  
rally. disappear spontaneoufly. after Delivery, the Vena Cava  
heing then freed from its Compression. - ln weakly. Women  
the Danger is greater, if they continue aster Delivery,' ins they  
are frequently succeeded by a Dropsy, any Asthma, and even  
Suffbcstiotfr. The longer -the Duration-is Of these-phlegmatic  
Tumors, the greater is the Danger, and the Cure more7 tin-  
certain, but when they are recent,- «attended with'ho other

Disease; the Cure thay bo readily effected/ -Those, also,-Which’  
follow an intermitting Fever, are-milder'than those which  
Proceed froth a too oopious Discharge Of Blood, Or any Other  
Weakness. If they proceed from the Obstruction Of as natural  
Evacuation, theysare bestteured by removing that Obstruction.-

τ- This Disorder Of the Feet is easily remedied in young Per-  
sons, but in the-Aged it "is often incurable When the. Feet are  
.violently tumefied," and: Remedies, especially external .Applica\*

' tions, have'little Effect upon them, the Consequence is, gene-  
rally, a Difficulty of. Breathing, Suffocation, and, at last. Death:

. The Cure os. cedemamut. Tumors is differens, according  
**-.to** the different Diseases whence -they proceed, and-therefore it  
- is, in the first;-place, necessaryIO inquire into'theiri’Cause:

When\* they appear ro- arsse from an internal Disorder, recourse  
must, not only be had to outward Applications, bur Principally  
**to** internal Medicines:‘ With regard to external .Applications,  
I.JOse frequent-Frictions, with warm Cloths every'Morning  
and Evening, till the Feet grow red, and glow with Heass'a.  
**Jti** order7 to defend\*-them fromine Inclemency of the'Air, espe-  
cially in .Winter, let the Legs be wrapt in Furs, Or Other thick

; Coverings , aud it Night Ter warin Stones, Or Pieces osOak, the  
laid under the Feet in Bed,sifor attenuating the Blood/ 3: Letai  
proper Bandage he applied, beginning with'the Foot, an'dspro-  
heeding gradually to the Knee, which will greatly strengthen the  
relaxed Limb, preyenti any Collections’ Or Stagnations of the  
Blond, And the Skin from being distended by the inspissated  
Blood.5 4 Digestive and strengthening Medicines should'-- like-’  
wise he applied outwardly T thus let the affected Leg be plac'd  
Over burning rectified/Spirit Of Wine, and To Cover'd with  
Cloths, aS to reoehin and - retain the- Vapour r By this-Method  
the stagnating Blood will either he perspired in Sweatj-OTifft'urn-  
ed to the Circulation, and. the relaxed Leg will be wonderfully  
strengthened. *T:* A Remedy, often-used by the Vulgar, is the  
S'eater Celandine, bruised and applied with Cloths so the Feet:  
thers use in the same manner Water-pepper,- either 'alone, or  
.. mixed with Celandine, and not without Success ; for they are

both powerful ResolVentS. - Others apply the Scrapings Of.  
Horse-radish, or a warm Cataplasm Of Dn tinder, boiled in W ine.  
An excellent Discutient, for this Purpose, is a Cataplasm Os’  
Pigeons'Dung mixed with Salt and\* Vinegar, which must be

- often applied warm. Os equal Efficacy, are the following FO-  
mentations, a Lixivium prepared from the Ashes Of Oak, and -  
rhe'Water in which Blacksmiths cool their hot Iron, -which.  
may likewise be mixed\* with some Ounces Of Spirit of Wine,  
**and** a small Quantity Of Alum, and applied warm with Com-  
presses; or the Peet may he bathed twice a Day in this Li-  
**quur.** Lime-water applied in the fame manner, either alone,  
or mixed .with Spirit os Wine and Alum, is Very beneficial in

. this Case , aS is the following Mixture

‘‘.Take Of Spirit of Wine, and Wine-Vinegar, each a Pound ;  
- Crude Alum, an Ounce and half, Vitriol, a Dram: Mix  
them together; -

It is necessary to Observe, that, after the Use Of the Friction  
and Fomentations, the Leg m ust he carefully wrapped up with  
Bandages, and warm Stockings, or Coverings ; and the Patient  
most not only be Very moderatein earing, and drinking, but  
- mast also use frequent Motion and Exercise, and -never neglect

proper internal Medicines, wiheut'y/hich ail theextern a l Applet  
cations will nothing avail, sometimes the mineral Waters,sis.  
Very efficacious in this Disorder, though^they. do not always  
succeed. .Dr. *Harris* says, that he has frequentiysremoved; this:  
Disease,...by exhibiting the. .aperitive.Crocus Os Iron,’ .mined-  
with the Peruvian BarkT Others assert,, that.they have done.IT  
with the Bark alone, though some Condemn these Remedies,.  
It is, therefore, proper, in. this Point, to take the Advice Qsa.  
Physician. . *Hesfler. Chirurg.; . ..so .so*

OEDEX1OSARCA. A Species of Tumor,.-mention’d by  
*Marcus Aurelius Severtnus,os* a middle Nature betwixt an Once-'  
*ma and Sarcoma.* .. . 3 ..\* ‘ -~

OELN1ZIUM.' A Name, for the *Thysselinum , Plinii, so .*OENANTHARlA 'οιναν.σἀρια. Sweet-seenoed Ointments.;  
*Paulus AEgrneta* describes .two of these, and .informs us, . that,  
they are not called by this Name, because the *Qenanthe* .enters"  
their Composition ; for many *Oenantharia* -are without-im.thut  
because it is sweet-scented, and fragrant;. Or on account Os-the  
Wine and Lilies, which are Ingredients in it. L. y. C. 2I.

OENANTHE ' .. . 1

The Characters are ;

The Root-consists Os great, long, cantons- Tubera, resem-  
bling Spindles, the Petals Os the Hower are unequal, and  
shaped'like an Heart. The. Apex Os the OVaryjS crowned with  
the Plaoenrs,-which ihootSforth long Tubes, find is surrounded  
underneath by the upper Margin OFthe Ovary, - which .is ex-  
panded into five Pinnuhe, Or small Lobes, , supporting the Petals  
of the -Flower like in Periahthidmt These Pinnnlte stick so the  
ripoSeed.likc Prickles, and the-Tubes themselves hardedThtO  
Substance Of the same-Form'.-’7 . z“ - ’ ί ; ‘ i. - C’I

*Bocrhaaeve* mentions ten Species *csisOSadethesp*which are,?‘  
I Oenanthe , Cbaerophylli soliis. C. Β. *Ρ.* I62. JinerA *Ind.  
a. esmTeurn. Inst, suet''--Qenanthe Patirdseliin folios, venenosa.*Ossie. *.Oenanthe Cicutae. faces.LstbelU...* Park/Theat. 894..'Rail  
Hist. I. 44I. SynOp. 3,-21O. *Qenanthe succo- virose,} Cicutae  
facie Lohelti.* J. B. R..I93. *Saipendula Cicutae facie.* Cer-.pQI.  
*eyusadsquoscrypt.* Emac. JO52.:.HEMLOCK.DROPWQRT.

It grows plentifully in Brooks, and in muddy and.)watery  
Places, in the Northern aS well aS Southern Parts of *Enscand.*

It is ..an inexcusable Piece., Os Ignorance, .says *Johnson sues  
Gerard,* in those, who now in Our. Times; fail the Roots. Oft  
this Herb for Peony-roher ; and he is very wed astured, he  
says, that the Herb-women *atisilandon* sell .these Roots .under  
the Name Os *Levisticum Nqiqaticum..*.. .Put whether the .Roots  
Of this Plant he of a temarhahsyjxiifouonS.andYmalignant Casta-  
lity, isdoubted by. fome. .Atewryo/us.ashrms his thirdjSpecieaOf  
*Qenanihe,a.u0 Tabernamontanus* his *Dheantheficscanepsiyllostsusquiis -*which *C.Sauhine* maker Kvhe, synonymous.witin.thss PlanG.ta  
he wholfothe: and. salutary Plants. . For mySartj says *istae,*Γ shall pot determine thefesitthei but leave; it -for farther. Einhe  
Ininafioin *Bait H. P.' su ’^'e'et s.zzrfo-* .. u'Jroini

22.- Oehapthe; ' maxima j folio .APli *o* .CanlihuSiatIOPutpureis,  
flore albo. ' *1* u ' .. ,

„3. Oenanthe; Apii solinr; I cause firmiore, *Mr Ur isiAMTi.*3.283..;?..: s. ...... V ’... .. EL... - *ofil* -.L.-ίμα

am Oenanthe; Staphylini foliis aliquatenus -accedens.. *J..* B,  
3/2. I9I.. - εἴ stl/jses . z-et

5.'Oenanthe; Cretica. *Pan. Mont.Pald^Ipasclzia..-uri -A po*

*6.* Oenanthe,, aquatica. C. Β. P.,I62.: Κμμ/Ἔβμ. .I.. 44I.  
syugni-T. 2Io. *Ttntrn:Tnst.* 313. *Baerh. Jnds. An,* 5I. *Oenanthi  
sualufirisnsive aquatica...* Park. Theat. 895. *Qenanthe. five Piles  
pendula . aquatica,* j. B. 3. τ I o I. *Eilipendulae aquatica.* Ger.  
hernao.Tod. WATER-DROPWORT.I. A.; .... j. / ,.?\* It grows almost eyeryhwhere in watery Meadows,” and by **the**Sid-. Of BIookS. . ~ .... ' ’ii st. T .

. This.has a bitterish Taste, with somewhat of an Astringency ;  
is of ah hot and dry Nature, and has an opening'and astringent  
Virtue. It provokes Grins, and expels Gravel, - used either .in-  
wardly or outwardly;' opens Obstructions, and: cteanses; the  
urinary Passages. *Raii.* HI..P. . ζ.'. *sso: ,*

. 7. Oenanthe; aquatica feminor. *Jnd.* o.i. ; V - -

8. Oenanthe; Lusiranida3 semine - crassiore, globoso.- T.

3ί3. si E

9. Oenanthe, quod Bulhooastanum; folio leviter inciso4  
Lusitanicum. - , . . - . . . ...ς s- *. l:*

lo. Oenanthe;, sohO Apii, rotundiori. *Boerh. Ind. ak. Plant.*

*Vol.i. "* "" V '. ς - \* -. -

- The Plant takes Its Name from *hernflocrie, a.* Vine, and ἄνθος,  
*.Anthos,* a Flower γ so that *Oenanthe,* in *Engliso, is Vine-flower,*for the Antients called some Plant, which was in Flower at **tho**same time as the Vine, or whose Flowers had the same Smell  
aS those of the Vine, *Oenanthe.*

It isos a Very poisonous Quality, and, is tasted, causes im..  
mediate Death with Convulsions, aS it happened at the *Hague,*where two Men went out. an herbing, and,- finding, this Plant,  
tasted it: One Of them was immediately taken with Convulsions,  
and dy’d On the Spot, the Other soon after. Some such Instance  
we have in *Stalpert vander IVieps* Observations, **where Persons**have dy’d within two Honrs, after Only tasting this Plant, which  
affects'the Brain so as to. **cause** Convulsions, **and is .so** quick in

^Operation, *absentee* to gineTimc for a Remedy. The fifth in  
rarely to be met with *i* the third, fourth, shah, and ninth, are  
laid to he Resolvents,. and very friendly to the human Body,  
tho’ they are nor in Use with ths; the sixth and seventh are  
found in the Ditches about the Suburbs of this City ζΐνρίάιῥα].  
The Root has an acrid and’ unpleasant Taste ; it’yieldsat first A  
inilky Juice,- but afterwards a yellow, Virulent, poisonous, and  
fetid- one The Plant, taken inwardly, - immediately excites an  
extreme Pain in the Stomach, with such Violent Convulsions,  
that tho Jaws become immoveable, and a frequent Hiccough  
shCceeds, with fruitless Efforts to vomit, and a Copious Hae-  
morrhage from the Ears, The only Remedy in this Case is  
for the Patient to swallow great Quantities Os Oil, Butter, Or  
Milk, that the acrid Panicles may first have their Points  
sheathed, and afterwards he evacuated by the upper Or lower  
Passages. *Hist. Plant, adscript. Bcerhaav. .*

**OENANTHE MYcoNI** A Name for the *Thalictrum, minus;  
grscmosa radtce, floribus majoribus.*

THE **PREPARATION OF THE OENANTHINUM.**

-Gather the sweet-scented *Oenanthe* Of the wild Vine , and,  
having suffer'd it to dry, put it into Oleum Omphacinum,  
(Oil made of unripe Olives) and Carefully stir the same

. about, then let it rest for two Days, and afterwards strain  
.. it, and set it aside for Use. .

. .The *Oenanthinum* has an astringent Virtue, correspondent th  
spat Of Oil OfRoses , Only wants Its loosening and opening Qua-  
lity. The best Oamoussseurzr ss what smells most Of the *oenanthe.  
Dioseorides, L'iurii. Cap. 56. ' .. ..*

’THF **PREPARATION OF THE.** VrNUM **OENANTHINUMi**

Take Of the dry’d Flowers of the wild Vine, gather'd in ita  
flourishing State, two’ Pounds, and insuse them in ten Gal-  
- Ions Of MiistT let them macerate therein for thirty Days,  
aster which strain Off the Liquor, and set it aside for

*'et Use. A si, - : ’ sse -*

-..It\* is good shr a weak Stomach, restores lost Appetite, and is  
serviceable in the Coeliac Passion and Dysentery. *Dioscorides,  
Lib.stsc sticipiAfifr . . - ' . — νύ..- -*

--OENAKEA,- δέναρθρ. An Epithet of Ashes prepar'd os the  
Twigs, Tetidriis, and Leaves Of Vines. ..

- (SENAS, ,-lende. A Species os Stock-dove. -t-.OSNELAEUM, ὸινέλαιον. A Mixture *cis* Oil and Wine.

. OENEROS, βινκτός. Vinous. y

' OSNODES, ὸινωδής, from heros, Wine. Spirituous, or strong,  
ε .. OENOGALA, «νδγαλα, from *envoi,* and γάλα, MilkYA  
sort-of Polion, made *of Milk and Water. Hippocrates.* Some  
interpret it, Winoas warm as new Milin - t. -

tOENOGARUM. The Name of a Composition for Sauces,  
**mention'd by** *Apicius, L. 1. e.* **3I.**

- OENOMELI SANUM. The Ninae os a Composition,  
wherein Wipe and Honey are ingredients, describ'd by *Nicolaus  
Myrepfus,. Sect. ^J. C.* 3I.

OENOPHLYGlA, όινοφλυγίη, from οινος, Wine, and φλύω,  
to be hot) or bosh Drunkenness. *Hippocrates.*

.- OENOPLIA. Ossie: *Oenoplia spinosa et don suinofae.* Ger.  
Ethan. they. Ran Hist. 2. 1534. C. B. P. 477. *Oenoplia sipsc  
nor aet.nart s.pinoscs,five Napeca, sive Zizyphus alba.* Park.  
Linear. IdurI. *Oenoplia sive Nabca-, Paliurus Africana.* Chain

*vol Jujubes.* j. B. I. 39. THE GREAT

This Fruit, produc’d in *Egypt* and *Crete,* is Of an astringent  
Quality, before it is ripe, for which Reason its Juice, either  
taken by the Mouth, or injected by way Os Clyster, is fre-  
quently us'd in. Order to remove a Relaxation of the Stomach,  
Or intestines: According to *Vrflingius,* they who allow their  
Patients Jujubes in putrid Fevers, indulge their Palate without  
doing them any manner Os Service. According to *Prosper  
Alpinas,* the Juice of perfectly ripe Jujubes is an effectual  
Medicine for evacuating Bile from the Stomach.

Though Jujubes, especially when ripe, are highly grateful to  
the Taste, yet they nourish but little, and, if immoderately  
eaten, are- like Cherries, easily sithjoct. to Corruption in the-Stomach. They am, however, greatly esteem'd, and accounted a  
Delicacy by the *Egyptian* and *Turlstsu* Grandees.

*. Alpinus,* whose Opinion is embraced by *Clusius,* thinks that  
the Tree which hears chin pmss is rhe Cannarus of *Athenaeus.*But the Characters of the One do not agree with the other.  
In the Opinion of *Vesungius,* whet *Theophrastus,* among other  
*Egyptian* Trees, has wrote concerning the Coccymelus, and  
especially, that it hears a Fmit pretty much approaching to  
the Nature of **a** Medlar, seems to agree pretty well with this  
Tree. Bur *Pliny* calls this *Prunus AEgyptia.* Whether it is the  
**Lotus Of** *Polybius,* mention'd by *Ashenaus,* is what I shall  
Sot pretend to determine *Ray Hist. Plant.*

OENOPUS, δινωπός, from οινος, Wine, and ωψις, an  
Aspect, is an Epithet for any thing resembling Wino. Thus,

ὸινωπὸν χρῶμα, *Oenopon Chroma,* is a vinous Colour, or fuch aa  
belongs to ripening Grapes, when, from red they turn blank  
and shining, sor there is a sort Of Propensity, as *‘Aristotle* says,. ,  
in, his Book of Colours, in maturating Prints, to. Blackness;  
and then they have Vinous Juices; and. Chapter the fourth of  
the same Book, he says that the ὸινωπὸν χρωμα results from  
tempering pure Black with the resplendent sught of thd Air,.  
*‘Gasce,* in *Theophrastus, Hist. Plant. Lab.* 3. *cap. E6 &* 17. ten-  
tiers the Word *tysulvus.su* deep Yellow; and *Lib. cy. Cap. sr.  
by Coeruleus,* Sky.colour'd;-and joins it with red. Ὄ.τοπε Bed  
*Cenope Boe, z* Yoke of Wine-colouPd Oxen, in *Homer, Odysse*V. are expounded hy πυῤῥοί, *red,* because, as *Eust at‘Aus lens.*Wine is red; black Ones are also called tiooni,txcaure Winets  
black: And sorthe same Reason we find *Hbaster* often bestowing. ’  
that Epithet On the Sea; and *Hesechius* expounds όινοπα by.  
μέλανα, black. Or as he says, ῥαιώδη τί χροῖῳ. Vinous in  
Colour. *Hippocrates,.* 7 *Epid,* has όςιππὰ χρῶματα, in his De..  
scription of a Dysentery, where he means by i:, that the Stools,  
were extraordinary red, and inclining tO black; for he joins-  
δινωπὰ with ὓφαιμα, *hyphaema,* somewhat bloody.’ But, Lidur  
περἰ γυνίκικ. oon.and Led. 2: περέ γυναικ. by ὸινωπαι,-and «ινωποἰ,  
he means such Women aS are of a Colour between white and  
black. *Curivus* renders the Word *by fuscae,* brown. *Foesas.*

OENUS, οινος. Wine, is the juice Of the Grape,, after it. him ..  
undergone Fermentation: This Liquor is Of an heating and drying:  
Quality, as *Hippocrates* says,- *Crlr. 2.* 0rnce διαίτης, where, he  
gives you the Various Qualities and Differences Of Wine, as.  
he does, also, *Lih. prior* παθἀρ, and *Lib. de Eai.Vict.in diorb.  
atut.* See a Transiation of this last under Our Article- AL-.1**CALL / .. - . I. ' .ss ' '** . r-

OENUS. ANDRIUS, τικος ἀρδρεῖος,Ἔ expounded by *Eratiaorsa*either generous Wine, Or Wine Of Ihe Island Of *Andros. -. .*

OENUs ANTHINOS,- ϊινος ἄνθινος, fiowety Wine, is *esxgi*pounded by *Galen* in his *Exegesisgizo* be either the fame as the  
*AnThofmias,* or a Wine impregnated with Flowers, in which?  
Sense he elsewhere gives the Epithet-Os ὸέν θινος to the Caseo».

OENUS ANTHosMIAS,. *Ztrti* ἀν^-μίας, from, ἄνθος, a Plowed  
and ὸσμἤ, a Smell, is *Vinum, odoratum,* sweet-scented Winei  
finch as has a Very fragrant Smell, or finesse Oi FiOwerS. Thao  
this was a factitious or artificial Wine, appears from *Aihrnaeus-*and *Saidas. Hippocrapes, Lib.* περὶ άφὸρων, prescribes it in Sin-  
fumigations.

OENUS APODAEDUs, οινος *b* ιάπδ δαιδὸῆς Wine, he Which  
the *Dais* Or *Tada* has been: hOiled. See DAIS. μ

OENUs APs.TEsM.ENUs, ίινος ἀπεζἐσμένσς, a Wine heated tO  
**a** great Degree, and prescribed among other Things, as Milka  
Garlick, Salt, and Vinegar, by *Hippocrater, 6 Epid. Sect. si.  
Aph.* I. for the Correction Of malignant Humours. \_ so 1

OENUs GALAcTOUEs, οτνος γίελαάτώδηἐν from γαλα. Milk,  
is Wine of.the Warmth Of Milk just taken from the Cow, Of  
what has Mdk mixed with it. 7 *Epid. . ... '.../*

. OENUs DEUTERUS, ?ινβς. o δεύτἀρβς, secondary **Winer OP  
Wine** of the second Pressing. *Hippoc. Lib.* **2..** *de Morbis. \_ .si.*

OENUS DI ACHEOMEN Us, &c. οινός διαχεόμενος, καὶ ἀποψυχθ-  
μενος, καὶ διηθουμένσς. Wine diffused, or remov'd into larger Vess  
sols, refrigerated, and strained, or racked Off from the Lees,  
*fab.* περἰ παθῶν, in order to render It the thinner and weaker.  
Wines, thus drawn off, are called *Saccata,* from *Saccus,* a Bag  
through which they were strained. Hence *Pliny* COTmlainS,  
*Libs* **Ip.** *Cap.* **4.** *Vina inveterarisuaccisuue lastrari,* that Wines  
are depriv'd of their Strength and Vigour by passing them  
“ through Bags," *mid. Lib. 2.0. Cap. J. he says,* that Aniseeds and  
. bitter Almonds are put in the Bags to add Improvements **to**the W ine. That the thicker sort of Wines, fuch aS the *Nastic,*Or *Matsis,* were strained through a Linen Bag, we learn not  
only from *Lucretius, Horace,* and *Martial,* hut from *Plutarch.*who. *Lib. si. Sympos. sslu. j.* treats exprefiy Of it. *Scribonius  
Largus, Cap.* X22. mentioning *Falernum non saccatum,* means by  
by it *Falernum* of the strongest, best sort, which has not been  
depriv'd Os its Spirits by Saccarios, Or passing through a Rag.

OENUs ISUs Iso PI NOME Nos, ὀινοςῖσος ισῳ πινομενος. Wind  
drank temper'd with .an equal Portion of Water, was an usual.  
Phrase with the Antients, and us’d by *Hippocrates, Ach.* 56.  
*Lib. J.* to fignisy a moderateTemperature Or these two Liquids.  
The same Mixture, *Lib.* 2. *de Morbis,* is expressed by ἰσοκράτὸν  
βινος, *Genus is.ocrates.* Wine of an equal Mixture, which is ex-  
hibited in Fevers.

OENUS cEDRINUs, σινος κέδρινος. Cedar Wine, *Lib. orzsst*γυναικ. φοὐσ, and χμὲν. 2. περέ γυναικ. This seems to he the same  
with CEDRITES; which see.

OENUS MALTHAcUs, sIVE MALACUS, Τινος μάλθακὸς *η*μαλακὸς, soft Wine, in *Hippocrates,* sometimes signifies weak  
and thin Wine, as oppos'd to strong and generous, sometimes  
mild, in Opposition to rough and austere Wines.

OENUS MELIcHRoos. 3ινος μελιχρας, is **sweet Wine, Or**Wine wherein Honey is diffidv'd.

OENOS OENODES, οινος όςνώδης, is strong generous Wine.  
OENos SIRuEOS, οινος σίραιος, is SaPA. See DEcocrio.  
OENoS SYciTEs, ὀινος συχἰτης, is Wine in which Figs have  
been macerated.

**OENOS STAPHIDIOS LEUCOS,** *atros sarisioi teuris.* White  
Wine made from Raisins, or dryd Grapes.

OENos TETHALAssfENos. ὅινοςτε8αλ.ασμένή. Wine where-  
with Sea-warer is mix’d. *Hippocrates.*

OENOSTAGMA. Spirit of Wine.

OENOTHERA. A Name-for **the LrsIMAoHIA.**

OEPATA. H. M. P. 4. T. 5. *.arbor indica frucfu conoid.,  
CarUce pulvinata Nucleum unicum, nulla assecula textum ctau-  
deate.*

This is a tali and large Tree produc’d in sandy Soils on the  
Brinks of fait Waters, especially about *Cochin.* The Kernels of  
the Fruit are by the *Indians* mid among a. particular kind of  
Dish, by them call’d Carst; but their Birterness must he pre.  
vioosiy remov’d by a long Maceration, and Boiling jo Water.  
The Fruit of this Tree, allo, when green, and boil’d with the  
Leaves of *Adamboe,* and a sufficient Quantity of Butter, makes  
**an** excellent Cataplasm, for softening and maturating Tumors,  
**as,** also, for; maturating and disousting the Measles and. Pox.

The Fruit or this Tree beats a. great Resemblance to the  
ABacardium. *uaii Hip. Plant.* - ε .

OESOPHAGUS. The membranous Canal, which conveys  
the Aliment from the Mouth to the Stomach. As the. *Pharynx*is the superior Parr of this Dust, I shall fitst defcribe that

The *Pharynx* is a muscular, and glandular Bag, the outer  
Surface of which is closely join’d to the inner Surface of all  
that Space, which is at the Bottom of the Mouth, behind the  
posterior Nares, Uvula,.and Larynx,, and which reaches from  
the great Or anterior Apophysis Of the Os Occipitis, all the Way  
to the Oefophagus, which is the Continuation of the Pharynx.  
This Space is bounded posteriorly by the Musoles, which  
cover the Bodies of the first Vertebra.of the Neck;, and late-  
rally by the superior Portions of both the internal Jugular  
Veins, and Of both the internal Carotid Arteries; by the Spinal  
Apophyses of the Qs S pheno ides;. by the Extremities ofthe  
Apophyles Petrofae; by the Os Sphenoides, immediately above  
the internal Wings of the Apophyses Prerygoides, and . by the  
neighbouring Portion of both Pterygoide Musoles.

From these Limits and Adhesions of the Pharynx, we may  
pretty nearly determine its Figure. It may he compared to the  
wide Part of a covered Funnel, Of which the Oesophagus is  
the narrowEart or Tube ; Or is may he called the broad End  
of the Oesophagus,that and the Pharynx, taken together, being  
compared to a Trumpet. The Pharyns may he divided into  
three Pans; one superior, which is the Arch of the Pharynx;  
. one middle,, which is the Body, or great Cavity; and one infe-  
rior, which is the Bottom, narrow Portion, or Spnincier. We  
Sre,also», to observe in it.three Openings; that of the Arch,  
toward the Nares; that of the Body, toward the Mouth; and  
that of the Bottom, toward rhe Oesophagus..

. The Arch is the broadest Part of the Pharynx, and ends, on  
. each Side in an Angle Or Point, toward the Jugular Fossillaeof  
. the Basis Cranii. Afterwards the great Cavity contracts a. stale  
. toward the Sides, all its other Dimensions continuing the  
fame; and behind the Larynx it is again enlarged on each  
Side, a very sinall Space being left between it and rhe Cricoide  
Cartilage. The Extremity of the lower Portion is very nar-  
row, and loins the Basis of the Cartilage just mention’d.

The Pharynx is made up partly of several distinct fleshy  
Portions, which arc look’d upon as fo many different Muscles,  
so disposed as to form a large Cavity ; and partly of a Mem-  
brane, which lines the inner Surface of this whole Cavity,  
and is a Continuation of that of the Nares and Palate.

This Membrane is wholly glandular, and it is thicker on  
the superior and middle Portions of the Pharynx, than on the  
bottom or lower Portion. Immediately above the fust Ver-  
tebrae, it forms feveral longitudinal Rugae, very thick, deep, and  
short; and we generally surd therein a Collection of Mucus  
in dead Bodies. In the great Cavity there are no Ruga, the  
Membrane adhering both there, and in. the upper Part, very  
closely to the Muscles. At the lower Parr, where it is, thin-  
nest, it covers likewise the posterior Part of the Larynx, and is  
very loose, and formed into irregular Folds. It runs in a little  
on each Side between the Edges of the Pharynx.

Though almost all the muscular or flesh}’ Portinns, of which  
the Pharynx is cotnpofed, concur in the Formation of one con-  
tinued Big or Receptacle, they are nevertheless very distin-  
guishable from each other, not only by their different insertions,  
from which they have been denominated, hist, also, by the  
different Directions of their Fibres. The greatest Part of them  
may he looked upon as digastric Musoles, the middle Ten-  
dons of which lie backward in one longitudinal Line, which  
in some Subjects appears plainly like a Linea alba.

These Marcies may he reduced to three general Cissies, with  
regard to theis Insertions. The first Class is of there which  
are inserted in the Balis Cranri, as,

*Cephalo-pharpeigai.*

*- Fetra-pharyngaj.*

*Sphendyharyngaei, stve Sphena-sulpengo-pharyugai.***P** *crrygo.pharrngisi.*

*Scyiaquiarynpri.*

The second. Ciass comprehends those **which are inserted to-**ward the Mouth; as,

*Peristaphylo.phuryngiar.*

*Glosse-pbaryngaei.*

*Hypera-phoryngai.*

*Genio-pharyngai. ...*

The third Class includes those instated in the lateral Parts of  
the Larynx; as,  
*. Syndesua-pharfnguli.*

*\* Tkyro-pharyngaei. ~*

*Crico-pharyngaei.*

*Oofophagaus.*

*.Adeno.pharyngaus.*

The Cepbalo-pharyngiei are inserted in the lower Side of the  
Apophysis Basiliaris, or great Apophysis of the Os Occipitis, xabout the Middle of the posterior Parr; From thence they sod  
parate laterally, and sometimes they join the Stylo-pharyngwh  
The Linea Alba of the Pharynx begins by the middle Adhesion  
Of thefe Mufcles.

The Petro-pharyngtei are inserted **in the** lower Part of the Ex-  
tremity of the Apophysis Petrosa ; the Spheno-pharyngad, partly  
in the Os Sphenoidcs, directiy above the internal Ala of the Apo-  
phyiis.Pierygoides, and'partly in the neighbouring cartilaginous  
Portion of the Eustachian Tube-; and the Pterygo-phiryngad,  
in the Edge of the fame Ala of the Apophysis Prerygoides. These  
three Musoles, on each Side, run obliquely backward, covering  
each other by some Fibres, and meet at the Linea Alba. Their  
Ute maybe :O draw the middle Portion, or great Cavity, of the  
Pharynx, upward.

The Stylo-pharyngsei are inserted interiorly by one Extremity  
in the Apophysis, or Epiphysis Styloides. From thence each  
Muscle runs: down obliquely along the lateral Parr of the Pha-  
rynx, covering and crossing the other Mufcles. It extends gra-  
dually in Breadth, as it descends ; and forms two principal Por-  
tions, one superior, which is narrow; and one inferior, which  
is brand. The narrow Portion is spread among the muscular  
Fibres above the Thyroide Cartilage, and the broad Portion is  
inserted in.the Side of that Cartilage; and thus the Stylo-pharyn-  
grnus is partly a true Stylo-thyroidaeus. These Muscles may  
draw the. Pharynx laterally upward, especially by their Thyroide  
Portions ; but theUfe commonly assigned to them, of dilating  
the Pharynx, seems conformable neither to their Situation, nor  
to their Direction. ι

The Peristaphylopharyngtei are two sinall Mufcles, inserted  
between the Uvula and lower EItremity of the internal Ala of  
the Apophysis Pterygoides, and run obliquely backward on the  
Sides of the Pharynx, fr is-difficult to find them in *very* lean or  
young Subjects, and they seem to he the fame which M. *Santo-  
rini* calls *HyperaTpharyngaes,* or *Palato-pharyngiaei.* The Gloflo-  
pbaryngsei are Fibres which run along the lateral Edges of the  
Tongue, from which they are parted backward, and run down  
on the Sides of rhe Pharynx, under the Scylo-pharyngwh

The Hyo-Pharyngsei, in general, are those on each Side, which  
are inserted in the Os Hyoides; and they may he reckoned three  
Pairs, the Basio-pharyngsei, KeratO-phatyngsi minores, and Ke-  
rato-pharyngsei majores; these Denominations being taken from  
their insertions in the Basis, and in the sinall and great Cornua of  
rhe Os Hyoides.

**I** have never been able to see distinctiy the Mylo-Pheryngad  
of pr. *James Douglas i* all that I have hitherto found, is a mus-  
cular Portion really distinit from the Genio-glossius, inserted in  
the Side of the Pharynx; and for that Reason I call it Genin.  
pharyngseus, as being joined to the Genio-giossus, all the Way  
to the Chin. . . . ’

The Syndeiino-pharyngaei of Dr. *Douglas* are Fasciculi of muse  
cular Fibres very distinctiy inserted by one End dong the Liga-  
ments, by which the superior Cornua of the Cartilago Thyroides  
. are connected to the Extremities of the great Cornua of the Os

Hyoides. From thence they run heckward, and meet at the  
Linea Alba. To be able to see them distinct from the other  
Mufcles, the Pharynx must be filled with Cotton, to give it a  
proper Convexity, and to support i:s Sides, which otherwise col-  
lapse, and sink inward, and thus prevent our seeing the Direction  
and Distinction of several of the Mufcles belonging to it.

The Tbyro-pharyngsei are very broad, and each Mufcle is in- .  
-sorted along the Outside of the Ala Of the Cartilago Thyroides,  
between the Edge of that Cartilage, and the oblique Line in  
which the Thyro-hyoidzi are fixed; and they are a little con-  
founded with the Crico-hyoidai. From thence they run up  
obliquely backward, and, meeting under the Linea Alba, they  
sometimes appear to be but one Mufcle, without any middle Ten-  
don. Some-sines they have appeared to me to be distinguished  
into Superior and Infetior, becauie their upper Portion ran up-  
ward and backward, and their lower Portion more transversely.

The Crico-pharyngad are inserted each in the lower Part of the  
Side of rhe Cricoide Cartilage. They seem to be Appendices of  
the Tbyro-phsryngaer, shewing no other Marks of Distinction,  
bur these Insertions, and a final! Difference in Direction, because,  
as thev run backward, they descend a little. For this Reason I

have'sometimes looked upon these two Musoles to he one, and  
*he 'st* called it *Thyro-criso-pharyugaus. :*

The lowest of these muscular Fibres make a complete Circle -  
backward, between the two Sidesof the Basts of the Cartilago  
Cricoides. This Circle is the Beginning of the Oesophagus, and  
has been though: by some to form a. distinct Muscle, called  
*Oescpbagaesis.* I heveisound another Fafciculus of Fibres detach’d  
from the Thyro-phsryngieiis, and inserted laterally in the-Thy.  
roide Gland; for which Reason 1 call is *Masculus Thyro-adenoc-  
dee’s.*

The particular Uses of all these Muscles are. very difficult to  
be determined. It is certain, that thofe of the middle and lower  
Portions of the Pharynx serve chiefly for Deglutition. Those  
of rhe upndc Portion, and some of thofe ofthe middle Portion,  
may, among other Functions, be usefulin modifying the Voice,  
according to the Opinion of M. *Santorini,*

- The Oesophagus is a Canal partly muscular, and partly mem-  
branous, situated behind the Trachea Arteria,.and before rhe Ver-  
tebras of the Back, from near the Middle of the Neck, down  
ro the lower Part'of the Thorax; from whence it passes into the  
Abdomen, thro’ a particular Hole of ths small or.jnferior Muscle  
ofthe Diaphragm, and ends at the upper Orifice of the Stomach.

- ltismadeupof several Costs, almostin the same manner as the  
JStornrch, of which it is the Continuation. The first Coat, while  
in the Thorax, is formed only by the Duplicature of the posterior  
Partofthe Mediastinum, and is waning above the Tnorax, and'  
in the Neck, where the outer Coat of the.Oefophagus is only a  
Continuation of. the cellular Substance belonging to the neigh-  
bouring Parts.

- The second Coat is musoular, being made up of several Strata  
of fleshy Fibres. The outermost, are mostly longitudinal ; but  
they are not all continued from one End ofthe Canal to the other.  
The:'following Strata are obliquely transverse; the next to these,  
more, tranfverfe ;--and the innermost are turned a little obliquely  
.the contrary Way. They cross each other irregularly in many  
Places, but are neither spiral, nor annular. - . . 7

Ἄ rThe third is termed the nervous Coat, and is like that of rhe  
-Stomach and υ intestines. It is disserenlly folded or plaited, ac-  
cording to its Length, being much wider than the muscular Coat ;  
And it is surrounded bya whitish, soft, fine filamentary Substance,  
sikea kind of Cotton,-which; when steeper in Water, swells and  
grows thicker, *s* .. or . ......

The fourth, or innermost Coat resembles, in some measure,  
.that of the/Intestines;- except that,' instead .of the Villi, ft hes  
Trnall and very shortFispilhe. It is folded lengthwise like the third  
Coar,'stythat the Oesophagus, when cut across, represents one  
-Tube within another. . Through the Pores of .this Coat, a viscid  
.Lymph'.is continually discharged - \ γ /-

**- . The** Oesophagus, from its veryctieginningrfurns a little to the  
-theft-Hand; and naturally runs along the Lot Extremities of the  
.Cartilages of the Aspera Arteria. - *Winstosu.*

*crs - . Disorders of the* **OEsoPKAGus.**

../The’ Spasms of the Oesophagus are rarely mentioned in Me-  
dicinal .Writings, yet \*they are sir frequent, and not only the Sym-  
2p:oms of other violent.Disorders,. bur, also, an idiopathic Diss  
eafe, that they deferve a particular Consideration. . Spasinsofthe  
Oesophagus may be defined. An involuntary and preternatural Con-  
'strictiones the Oeiophagus, or of its Beginning, called thePha-  
.rynx, or both, generally produced: by an irritating Mucus.

. Hence appears the Difference of thefe Spasms; tbr as the whole  
-Oesophagus .is,, by Anatomists, divided into. its. Beginning, the  
Pharynx, and the rest of the Canal, fo we find from Expe-  
-rience, that its .Spasms differ with refpedt to Place, since they  
.sometimes seine the Pharynx, and at other times its inferior and  
remaining Parts. To there may be added, a .third Species of  
Disorder, in.which the whole Canal, together with its Beginning,  
and. the adjacent Parts, are violently convulsed.-

- Ail Spains of the Oefophagus, in whatever Couniry they hap-  
pen, have these Signs in common with other Distentions of the  
-superior Parts.. There are Refrigerations of the Extremities, and  
.«specially of the Feet ; Tremors.and Rigors Of the Joints; Sup-  
pressions, of the Excrements by Stool; Regurgitations of Flatu-  
-lendes to the. superior Parts ; Strictures-, of the lower Abdomen,  
.accompanv’d with Pains and Rumblings; Uneasiness ofthe Prse-  
cordis; Efforts to vomit ; Cardialgias; thin, aqueous, and pale  
Urine ; and an hard and large Posse.

c. Spasms osithe Pharynx' alone discover themselves by these  
-Signs: The Degiu-irion becomes difficult, and accompany’^ with  
-such Pain, that the Patient can sometimes neither swallow SoIids,  
nor Fluids. \_ There is a Constriction, Rigidity, rearded Motion  
.and Pain of the Parts adhering to the Pharynx, of the Tongue,  
the Lary nx, and whole Neck ; a suffocative Oocssiness afflicts rhe  
-Patient, and a Senfarion, as it were,- of a Stake fix’d in the Fauces;  
-and as '.f something was creeping out of the Part. The Voice is  
Jost, and thofe Syrnprorns amici .th- Patient by Intervals, and  
'frequently terminate in Convulsions ofthe whole nervous System.

i Toe fsinnS-pecosiamo Spaced of the inferior Parr of the Oefo-  
tphagus are thefe : Α certain Stopping of the Aliments’ freely

swallowed W perceived in the Gullet, especially about the su-  
perior Orifice of the Stomach ; by cold Liquors, there Parrs  
seem to be more.-obstructed and-constf-icted,'whereas warm Li- .  
quors arc osten perceived, freely to past thro’ the. Oesopnagus,  
and to enter the Stomach-; a Pain is rek in the Spine of the Back,  
between the Scapula.-ξ TO theseSympfotns isottenadded agrear  
Inclination- to Vomit, which is; sometimes accompany’^ with an  
actiral Vomiting.' ANaufeayand an uneasy Explosion of Eructi.  
uons, are, also, frequent in this Disorder ; a limpid Mucus is, -  
assoj'frequeniIy discharged'from the Mouth,' and is to be distin-  
guished from Vomiring. If these Symptoms concur with those  
enumerated in rhe preceding Paragraph, they shew- that the  
whole Oesophagus is spasmodically con.racced. . : .. \_/ :;  
- Bur since there Disorders may be easily confounded with other  
Diseases of the Oesophagus, by reafon of the Similitude of Sym-  
ptoms, we must explain their Differences-. First, then. Spasms of  
the Pharynx are to he distinguished from a Palsy, or the Want  
of a due Tone in that Part; for, in the-Want of-a due Tone,  
there is.a perpetual Dissicuby of Deglutition, though Solids are  
more easily swallowed than Fluids. (See *Eorestus, Lib.* I 5. *Observe.*30.) ς for Fluids often flip into the Aipera Arteria, and regurgitate

-through the Mouth and Nostrils, in such a manner, as to err.  
danger, a Suffocation. Io a perfect Pally of-the Pharynx, strch  
as *Tulpins* mentions in Lih. i. *Cap.* 44. Deglutition is totally de-  
stroy’d, so that the Parient is in Danger of dying of Hunger.  
The Face, also, and the adjacent Parrs, are highly pale, soft, and  
flaccid. On the contrary,-in Spasms of rhe Pharynx, the Diffi-  
cuky of swallowing SolidS-and Fluids is'equai, and retnirs at In.,  
tervals; the Veffeis of the Face become tumid; the Countenance  
red;..rhe Para affeded, rigid, and often painful.- ’ ' ‘ 1- Spasms of the Pharynx are easily distinguished from an inflam-  
mation thereof, and of the Fauces in aQuinsey,in which the in-  
ternal Fauces are swelled, red, scorctiin with an intense Heat, the  
Thirst is greater, and, for the most part, accompanied with a via-  
lent Fever. The Physician may, also, be imposed upon by a Tu-  
mor, an Excrescence,-Or a Piece of any thing sticking in the Pha-  
ryror, ora preternatural .Conformation Of the Larynx, so as-to  
ascribe the Impediment of Deglmition, arising from these Cir-  
curnstances, to Spastns: See *Pcrestus, slab.* I5. *Observ.* 28: In this  
Case a Wax-candle, of the instrument described *by'Hildanui,ia  
.Cent. i. observ.*36.thrust into the Fauces;will often disoover  
the Truth. Besides,’ in.Spasms of the Pharynx, all the Signs,  
taken together, will amount tea Certainty. -: \*- c. - *-sy-'re*

Besides, Spastns ofthe inferior Part; of the Gullet agree with  
-other Disorders of. the Oesophagus, and'a. Stopping of the Alt-  
rnents ist Symptom common to each; sucti-as an Obstruction  
of the Gullet by aiPlecer Of solid Aliments- sticking in it ; see  
*Holscuari. Console. Med: Sect.* 2. *Caso-S^c &ndBorestus, Lib. igi  
Observ.* aS. \_ And- Tumors, Excrescences, Funguses; and Warts  
arising in the Canal Of. the Oefophagus ; see 'X. N. *C. Dec.* r. *AneR.  
Obsc* 47. *Decur.* c *An.* 8. *Obsc* nd f as, also, the dorsal:Glands  
about the fisth-Vertctira ofthe Back, adhering to the Oesopha-  
gus, and elevated with .preternatural Pain, as *Verkeyri, in Andy..  
Cap.* Io; and *Heister, su Compend. Anatom,* have observed, in  
these Cases solid Alimentsstop, andareYomired up again, whereas '  
Fluids, whether cold or .her, have a more or less easy Passage to  
the Sromicb. But, ifabere is a spasmodic Constriction of the  
Oesophagus, Sis Observable, that warm Fluids descend more easily  
than inch as are cold," there is a Pain'of the Scapulae, and other  
Signs concur, which by no means happen in an Obstruction of  
.the Oefophagus, produced by any foreign and preternatural Sub-  
stance. . : - .’ T.i. ... ' . ' . ' - ; : .

But that rhe Causes, animechauicaIReasonsjof these Symptoms  
may appear the more distinctly, we shall, take a short View os the  
Structure of the Oesophagus. . The Oesophagus, then, beginning  
at the last Part Of the Fauces, has, at its Beginning, ailarge Ca-  
vity, called by the *Greeks, Pharynx,* and by the *Latins, Inscm-  
dibulam;.* Its. anterior Part is connected wish the Root of the  
Tongue, the OsHyoides,. and rhe Larynx; and its posterior Part  
- closely adheres to the Vertebra of the Back. It is moved by va-  
rious dilating Mufcles, which elevate and dilate the Pharynx, and  
by other constnSory Muscles, which shut it. There is one Pair  
of these Mofcles, which, arising ..by. three Origins from the 0s  
.Hyordes, the Cartilago Cricoides, and the Cartilago Thyroidei,  
-totally sirrrounds the Pharynx, and is called the Sphincter ofthe  
-Oefophagus. .There are principally, three Pairs ofthese Muscles;  
. the first of which is called the Cephain-pharyngaeus, which, arising  
from rhe lowest Part of-the Occiput, and rhe first Vertebra of  
the Neck, is expanded to the Coats of the Larynx. The  
second is called rhe Spheno-pharyngieus, which, arising from the  
.Alary Processes of the Sphenoide Bone, runs to the Sides of the  
Pharynx ; and the third is called the Stylo-Pharyngatus, which,  
.rising from the Styliform Apophysis of the Temporal Bones, is in-  
tested in the Sides, of the Pharynx.

At rhe End of the Pharynx begins the Oesophagus, which first  
of ail runs strait between the Aspera Arreria, and the Vertebras of'  
the Neck and Sack, but turns to the Right about the fifth Verte-  
hrs. of ths Sack, , and to the Left, about the ninth. Then, pro-  
ceedmg thro’ the Middle of the Thorax, and rhe musoular Part  
or ihe Diaphragm, it is united with the. superior Orifice of the

Stomach. The Oesophagus, itself. Consists of four Goats, the  
Outermost of which, being membranaceous, this. Vascular, and cel-  
lular, derives its Origin from the Pleura, and joins the Gullet to  
the adjacent Parts. The Coat next to this is fleshy or muscular,  
furnished with annular. Or Orbicular Fibres, and, above these,  
with longitudinal Fibres. The third Coat is nervous. Common  
to the Mouth and Fauces, and, reaching three Fingers-breadths  
within the Stomach, is thick-set with Glands, to which. On the  
Opposite Side, are distributed some Vessels, from which they re-  
ceive a Certain Liquor more pinguious than the Saliva, and  
which drops into the Cavity Of the Gullet. The fourth and inner-  
most Coat is covered with a shppery Muons, Villous, and every-  
where perforated like a Sieve, with many EmunctorieS. Besides,  
the Oesophagus is furnished with nnmberiess Glands, partly those  
Which, being smaller than the Eggs of Silk-worms, are lodg'd  
in the nervous Coat, and are easily perceived, if, upon taking off  
the nervous Coat, the fieshy Coat is exposed to the Sight, Or the  
Gullet is macerated in Water ὁ and partiy with other Glands plac'd  
without the Oesophagus, among which the most considerable are,  
the Dorsal Glands about the fifth Vertebra Os the Back, adhering to  
the Gullet, and theThyroide Gland, situated between theThyro-  
Criooide Cartilage, and the Oesophagus, see *Fercellanius in Dissert,  
de Glandulis conglomeratis Oesophagi.* Nor is this Canal desti-  
tnte Of Vessels , lor its superior Part receives Arteries from the  
internal Carotids, its middle Part from the Aorta, and Intercostal  
Arteries, and its inferior Part from the gastric Arteries. Its su-  
perior Part receives Veins from the Jugular Veins, its middle  
Part from the *Vena sine Pari,* its inferior Part from the Coro-  
naryVeinsof the Stomach; and it receives nervous Vessels from  
the Par Vagum.

The Function Of the Pharynx is Deglutition, the mechanical  
Account Of which is aS follows: Whilst the Bark Of the Tongue  
is apply’d to the Palate, by means of the Mylo-glossus, the Stylo-  
glossus, and the StylO-hyoidaeuS, the Root Of the Tongue, the  
Os Hyoides, and the Larynx, are pressed forwards by the Mus-  
cles subservient to this Action. The posterior Part Of the Pha-  
rynx is elevated by the Cephalo-pharyngaei Muscles, and its an-  
terior Part dilated by the StylO-pbaryngoens, and the Spheno-  
pharyngaeus.

By these Actions Of these Parts, a larger Space, and a greater  
Cavity, are made before the Membranes surrounding the Verse-  
brae os the Neck and Pharynx under the Veil Of the Palate, Uvula,  
and Tonsils, and above the Larynx and Pharynx. Then the Sub-  
stances to be swallow'd are pressed between the Back of tbq  
Tongue, and Roof Of the Palate; and, being thus pressed upon  
the Chink Of the Larynx, which is shut by a Cartilaginous Co-  
vering, Or the Epiglottis, are propelled into the Cavity of'the \*  
Fauces. Then the antagonist Muscles begin to act; for the  
Tongue heing already elevated, and press'd forwards, the *Larynx*and Or *Hyoides* are restored to their former Figure , and espe-  
.Cially the Cartilages of the Larynx, being extended to. the Pha-  
rynx, press upon it, by which Action, the Substances to he  
swallowed are, when lodg’d in the Oesophagus, farther propel'd.  
These Substances, when the dilatatory Muscles Of the Pharynx  
are relaxed, and the Oesophagus constricted, are more protru-  
ded , and, thus the Pharynx being again constricted, they are lodg'd  
in the Cavity Of the Gullet, under the Pharynx.

Then this Action is succeeded by that os the Oesophagus, by  
means Of the peristaltic Motion Of which, performed by its  
muscular Coat, and rending downwards, the Aliments already  
swallowed, and dodged under the Sphincter Of the Pharynx, are  
convey’d to the Stomach ; for since this Coat, by its alternate  
Dilatation and GonUaction, the former of which is performed  
by means os longitudinal Fibres, and the latter by annular Fibres,  
sometimes Constricts, and sometimes dilates the Oesophagus, and  
since in Men its Situation is perpendicular, the Aliments taken are  
gradually press'd downwards. This Descent is render’d still more  
easy by the Mucus Of the Glands, which continually drops into  
the Gullet, lubricates it, and assists in the Resolution of the Ali-  
ments The Aliments being thus convey’d to the Stomach, the  
Flesh Of the inferior Muscle Of the Diaphragm constricts the  
Gullet, as il passes through it, and in that Pfet Closes the Sto-  
mach.

From what has been said, 'tis easy to account for the Nature  
and Reasons Of Spasms of the Oesophagus, for, first, if we Con-  
sider the Pharynx, it is obvious from the Mechanism of Degluti-  
tion, that, when the Muscles of the Pharynx are constricted, it  
can hardly be performed ; because, when the Organ is injured,  
sue Action must Of course be so too. Besides, when the dila-  
tatory Muscles, situated in the posterior Part Of the Infundibu-  
lum, are seized with Convulsions, and drawn mo.e forwards  
into a conglobate Figure, there is a Sensation as if a Stake was  
fixed in the Fauces. But when the Musculus Oefopnageus is con-  
stricted together with rhe adjacent Muscles os the LarynxTongue,  
and Os Hyoides, a Difficulty of Speech is produced, and a suffo-  
cative Uneasiness. But since all Spasms are sometimes Violent,  
and sometimes mild, the Reason is, also. Obvious, why Spasms  
of the Oesophagus are at certain Intervals augmented.

In like manner, when we suppose the Spasins os the inferior Part  
os the Gullet to arile from a violent Stricture of the longitudinal and

orbicular Fibres of the muscular Coat, which sorrounds it, we *erti*account forall the Symptoms which accompany that’Disorder; (Or  
when therein a Constriction in any Part, either near the Pharynx,  
Or Stomach, all the Aliments sivallowed stop in that Canal, and,  
the peristaltic Motion being inverted, are again Vomited up. If  
cold Liquors are drank, they increafe the Spalin, and, like solid  
Substances are hindered in their Descent, whereas tepid Liquors,  
by soothing the spasmodically-constricted Fibres, pass freely into  
the Stomach. Besides, the OesophagnS is, by Various Ligaments,  
Connected with the Vertebrae of the Neck and Back. Hence,  
when the Oesophagus is constricted, the Pain must necessarily be  
propagated to the Membranes surrounding the Vertebrae of the  
Back. Hence we account for the Pain, which, in this Disorder,  
is perceived hetween the Scapulae, see *Forefius, Lib.* I 5. *Obs. oast.  
Schol,* where he tells us, “That all Pains of the Oesophagus affect  
Q the Spina Dorsi, on which the Gullet reclines, and to which  
α it adheres.'' . .

Whatever Causes, therefore, are capable Of Vellicating Or sti-  
mnlating the Muscles Of the Pharynx, Or the fleshy Coat Of the  
Oesophagus, are called the immediate Causes Os the Spasms. But  
aS these Causes act either Immediately On those Parts which con-  
stitute the Seat of the Disease, Or on other more remote Parts,  
by Consent; so these Spasins are either idiopathic. Or symptoma-  
tic. If, therefore, from the Larynx, the Stomach, Intestines, or  
any other Parts, primarily seized with Convulsions, the Spasms are  
propagated to the Pharynx and Oesophagus, the Disorder is Called  
*Symptomatic.*

Among the Causes inducing idiopathic Spasms of the Oeso-  
phagus, the most Considerable are, the Passions Of the Mind,  
especially Violent Anger, particularly after liberal Drinking. That  
by this means the Pharynx is seined with CouVulsions, and Conse-  
qnentiy Deglutition injured, is Certain from Experience: Nor  
is it less frequently to be observed, that the same Cause, espe-.  
cially aster Eating, Constricts the inferior Part Of the Gullet,  
whilst the swallowed Substances remain in it, and are often  
thrown up again by Vomit. . Y

Spasms, especially Of rhe inferior Part Of the Gullet, are power-  
fully excited by a Loathing, which can by no means happen  
without being attended with such Spasins. But if we Consider rhe  
Effects of a Loathing more attentively. Observation will inform  
us, that, in such a State, first, the Idea Of some Ungrateful Sub-  
stance in the Mind; secondly, an Aversion to this Substance,  
happens; thirdly, this Aversion is succeeded by an Impediment  
Of Deglutition; fourthly, the Aliments stop in the Oesophagus, and  
a Sensation of Stricture is produced; fifthly, to these a Nausea is  
Joined, sixthly, in this Case a Vomiting frequently happens, and,  
seventhly, sometimes a Deliquium: SO that a Loathing may be  
defined. The Idea Of some ungrateful Substance, accompany'd  
with Spasms Of the Oesophagus and Stomach. ’

Imagination alone frequently disposes to obstinate Spasms of  
the Oesophagus, accompany'd with remarkable Aversions. Thus,  
in *A. N. C. Ceniur.* 7. *Obs. 61.* we have an Account of a Woman  
in good Health, and of a robust Make, neither subject to hysteric  
nor spasmodic Disorders, who could eat and drink without Dish-  
Culty, but, when she attempted to take the Host, she had not only  
a great Aversion to it, but, also, threw it up by Vomit, before it  
reach'd her Stomach , tho' she had cram'd it down her Throat,  
and endeavoured as much as she could to. swallow it. In the same  
Work, *Dec.* 3. *An.* I. *Obserar Icy.* we have, also, an Instance Of a  
Man, who, by an excessive Use of Tobacco, brought On an Im-  
pediment Of Deglutition, which was sometimes greater, and  
sometimes less, according to the different Degrees Of Force in  
his Imagination.

Medicines, acrid Substances, Or Poisons taken, are capable of  
producing the same Effects, since, by vellicating the nervous and  
muscular Parts, they induce Strictures thereof. Thus *Hoechffet-  
terus, in Obs. Dec.se.* makes mention of a Constriction of the  
Gullet, by drinking Malmsey-wine, in which .the Roots Of the  
greater Confound were infused. This happens so much the more  
readily, if the Substances taken are Of a caustic Nature , so  
that it is not to be wondered at, if, according to the ObserVa-  
tion *os Forefius, Lab.* I5. *Obs.* jo. a certain Boy, by drinking  
Aqua-soriis, was seined with fuch a Constriction Of the Pharynx,  
aS to endanger a Suffocation. But especially Sublimate Mer-  
cury, when taken, produces a Violent Constriction os the Fauces.  
See *Foresius, Lor. art at.* Insects swallowed, by Vellication, also,  
excite Spasms of the inferior Part Os the Gullet. Thus *Phases,  
Lib.* 9. *ad Almanz. Cap. nst.* and *Phodius, Obs.erv. Cent.* 2.  
*Observ. Jo.,* affirm this concerning Leeches drank in Water.  
*Gesuerus, Lib.* 2. *de Histor. Animal. Cap. de Lacert.* affirms,  
that the same Effect is produced by Lizards creeping into the  
Fauces. *Heurnius de Morb. Cap.* 7. asserts, that the same Miss  
fortune is produced by swallowing Lice. And *Platerus, in Lib.* 2.  
gives an Instance Of the same Effect, produced by swallowing a  
live Eel. ...

Besides, Spasms both Of the Pharynx, and inferior Part Of  
the Gullet, may be produced by rhe Blood stagnating in these  
Parts, and distending rhe Vessels, which Distentions are always  
accompanied with Spasms. For this Reason hypochondriac Per-  
sons are frequently subject to this Disorder, since in them, by

**the Force** ofthe intestinal Spasms and Flatulencies, the Blood is  
forced to the superior Parts, and easily stagnates in the Oeso-  
phagus. This Disorder is, also, very readily produced by an  
universal Dyscrasy of the Humours, especially those os the  
serous Kind; when, for Instance, that lymphatic Liquor,  
secreted from the Glands into the Gullet, is Viscid and acrid ;  
in which Case a liberal Expectoration of the viscid Mucus  
affords great Relies: Of this kind seems to have been the Case  
mentioned by *IPepfcr,* in *Obs.erv. Medic. Pract. Ohserv.* I I 7.  
**of** a Man of seventy Years of Age, whese Aliments stuck, as  
it were, in the middle of his Gullet, where they afflicted him  
till they were again thrown up by Vomit.

Spasms of the Gullet may he produced by Disorders of the  
Stomach and Intestines, in consequence os the Consent he-  
tween it and these Parts. Thus this Disorder is easily pro-  
duced by acrid, acid, *os'* bilious Sordes of the Stomach and  
Intestines. Accordingly *Forestus,* in *Lib.* IS. *Obs.* I3. affirms.  
That it may be produced by Milk concreted in the Stomach;  
*Hercules Saxonius,* in *Pratiect. Pract. Part. Cap. y. Sect. 4,  
Hanricus ab Heer. Obs.* I 6. and *Tbonerus, Lib. 2. Obs.* ob-  
serve, That Worms, lodgedin the Stomach or Intestines, con-  
tribute to the Production of this Disorder. The Explosion of  
Eructations, and Vomiting, are also accompanied with Spasms of  
the Oesophagus ; for, unless the Action and peristaltic Motion  
os the Oesophagus were inverted, and assisted the Ejection of  
. the Humours out of the Stomach, it could by no means hep- .  
pen, that such a Quantity of Humours could, with such an  
Impetus and Quickness, be so often thrown up, not only from  
the Stomach, bus, also, from the Intestines.

- in consequence os the Consent os the Parts, Spasms of the  
Oesophagus are, alsio, frequently observed to accompany various  
spasmodic, and convulsiveDisorders ofthe nervous System.. Thus,  
in hysteric Suffocations, we find from Experience, that there is  
always a Violent Coarctation of the Neck and Fauces, and a  
Sensation resembling that produced by a Ligature stopping and  
compressing the Fauces. *SeecEitmuller. Oper.Pract. P.* 2. *Cap.* **3.***Sect.su* and *Helmont, in Tract, de Asthmate et Tujsi.* A Con-  
striction of the Gullet, also, frequently happens to those who la-  
bour under convulsive Colics. *KudIiosseerus, Hercule Medic,*gives us a memorable Instance of a Colic, which brought on a vio-  
lent Cephalalgia, and Madness accompanied with Blindness, and  
**a** Difficulty of Deglutition. Epileptic and convulsive Paroxysms  
are, also, attended with this Symptom, fince under them the  
Deglutition is either Very difficult, or none at all, as is particu.  
Iarly observable in the Incubus, where, hesideS the Sense os  
Strangulation,, there is an Inability of the Tongue, and an  
Impediment *os* Deglutition. The same Misfortune, also, fre-  
quently accompanies the Opisthotonos, as may he seen in the  
Cases related by *Forostus, Lip.* Io. *Obs.* ia. and i3. Nor are  
we to omit acute Disorders, especially malignant Fevers, in  
which there is not only a Difficulty os Deglutition, but, also,  
sometimes a Constriction of the inferior Part of the Gullet.

A Nausea is nothing but a gentie Convulsion of the Oea  
Tophagus, accompanied with an Inversion of its peristaltic Mo-  
tion, and producing an Inclination to Vomit, or Vomiting,  
or, at least, a Discharge of a more or less Viscid Mucus from the  
Glands, of the Gullet. It may be occasionally Caused by every  
thing capable of Vellicating either the Oesophagus itself, or its  
nervous Coat propagated to the Stomach, by which means this  
Constriction is, by Consent, propagated to the Gullet. **We**.find in general, first, that a Nausea is the Forerunner of a  
- subsequent Vomiting ; secondly, that it accompanies all Inch-  
nations to Vomits, and Cardialgias; thirdly, that without these  
it often happens with a frequent Discharge of a limpid  
Mucus, which is nothing het the Lymph of the Glands, ex-  
pressed by the Force of the Spasms ; this Disorder, also, fre-  
quently indicates, that Worms are lodged in the Primae Vise ;  
fourthly, that it generally succeeds Crudities of the Stomach,  
which, as they are acrid when the Stomach is empty, they then.  
Particularly excite a Nausea, which is to he alleviated by taking  
Aliments ; fifthly, that it precedes violent Disorders of the  
Head, such as Vertigos, Apoplexies, and Deliquiums, especially  
when, by Consent, they derive their Origin from the Orifice  
**of** the Stomach, whence a certain Aura, or Vapour, seems  
**to** ascend from the Stomach to the Head ; in which Case they  
are rendered, as it were, apoplectic, and deprived of theExercise  
of their Senses ; sixthly, for the same Reason, a Nausea  
afflicts those who labour under hypochondriac, or other Dis-  
orders, the Fomes of which is lodged in the Primae Viae ; and,  
seventhly, in the Beginning of malignant Fevers a Nausea  
generally happens.

As for the Prognostic: Idiopathic Spafins of the Pharynx are  
never of good Presage, because, especially when preposte-  
roufiy treated, they prove Very obstinate. These Spasms of the  
Pharynx, which proceed from taking acrid Substances, are never  
free from Danger, and lay a Foundation for dreading an In-  
.stammatiom Those Spasms os the Oesophagus, which frequently  
**seize hysteric Women, . presage an Apoplexy. In Wounds, If**

an Impediment of Deglutition happens from Convulsions, ’tis  
a bad Sign, according to *Ettmuller, Oper. Pract. Part.* **I.** And  
*Hippocrates,* in *Sect.* 4. *Aph.* 35. tells US, That " if the Neck  
" of a Patient labouring under a Fever is suddenly distorted,  
" so that he can hardly swallow any thing, and without any  
" Tumor, it is a mortal Sign." Spasms of the inferior Part  
Of the Giillet, produced by Anger excited when at Meals,  
readily say a Foundation for the Cholera Morbus, and bilious  
Fevers. And those Spasms of the Oesophagus, which depend  
upon an universal Dyscrasy of the Humours, and a Weakness  
os the nervous System, Constitute a chronical Disease, sue-  
ceeded by a Consumption. A Nausea, happening in the Be-  
ginning of malignant Disorders, is a Proof of the Strength of  
Nature; but is an highly pernicious Sign in a Plague, according  
**to** *Forestus, in Lib.* **I 8»'** *Qbsi.* **I4.** *Schol.*

**THE CURE.**

Since Spasms of the Oesophagus, whether in the Pharynx,  
or Middle of the Gullet, when neglected, not only become  
chronical, but, also, by hindering the Deglutition of the Aliy  
ments, readily bring on a Consumption, they, therefore, deserve  
to be expeditioufly treated by proper and suitable Remedies:  
And these Remedies are os two kinds ; the one calculated sor  
allaying the Spasms, and the other, sor removing the Causes  
contributing to their Production. ~ '

*The* former os these Intentions is obtained by Antispasmodics  
and Anodynes, joined with DiscutientS, and used herb inter-  
nally and externally ; but the more Violent the Constriction is,  
the more expedient it is to begin the Cure with external Appli-  
cations, because internal Medicines can hardly be swallowed  
without the greatest Difficulty. Some of these external Medr-  
cines, by drawing the Afflux of the Humours to the inferior  
Parts, and rendering the Circulation of the Blood equal,  
breaks the Force os the Spafins: Of this kind are Clysters, and  
Bathing the Feet. The Clysters ought to be prepared of  
emollient Substances, with an Addition os Corroboratives, and  
repeated twice or thrice. The Baths for the Feet are to he  
pretty warm, and the Legs are to be immersed pretty deeply  
in them. The Topics to be applied to the Part affected are  
generally paregoric and nervous Liniments, which may be pre-  
pared of the Aqua Anhaltina, Spirit of Sal Ammoniac, the  
Essences of Saffron and Nutmeg, Castor, and Camphire, and  
the Balsam of Life ; which, if mixed with the Anodyne mi-  
neral Liquor, is an excellent Medicine, when the Disease is at  
its greatest Height. It also proves beneficial, when a sew  
Drops of it are poured upon Sugar, kept in the Mouth, and  
flowly swallowed. This intention is, also, answered by a few  
Grains of Theriaca, kept under the Tongue, and again spit Ous,  
An Ox's Bladder full of some warm emollient Decoction, and  
applied to the Part affected, is, also, of considerable Service in  
relaxing the Spasms.

Among internal Antispasmodics the most valuable are the  
Oils of sweet Almonds, and of Olives, mixed with Sperma Ceti;  
antispasmodic Powders, prepared of Cinnabar ; the Pulvis  
MarchioniS, prepared Amber, and the Extracts of Saffron and  
Castor, or the nitrous Powders, with one or -two Grains of  
Camphine; as, also, the anodyne Liquor, either alone, or  
mixed with Essence of Castor ; the Spiritus Bezoardicus Bussii,  
or the fuccinated Spirit of Hartshorn, or the Spiritus Nitri Dul-  
cis, mixed with a sew Drops of the genuine Oils of Chamomile  
Or Mace: But, when the Disorder becomes chronical, we may  
use alternately, every other Day, with these, the antispasmodic.  
Pilis, which I generally prepare of the Extracts of Yarrow,  
Chamomile, and St. Johnis-wort, Mithridate, the Extracts of  
Saffron and Castor, and the distilled Oiis of Mace or Mint.

When the Spasms are alleviated, the Physician who intends  
to remove the material Causes of the Disorder, ought care-  
fully to inquire, which of them contribute to its Production ;  
for, if the Disorder is produced by acrid Substances, Poisons,  
drastic Purgatives, or Emetics, their Force is, with all Expedi-  
tion, to be obtunded with mucilaginous and oleous Substances,  
and with Preparations of Milk. This Intention is answered  
by pretty pinguious Broths, and Draughts of warm Water  
continued to a Nausea, that, thus, a gentle Vomiting being  
excited, the Poison may he again carried off.

Sometimes Acids subdue the Force of Poison : And by these,  
*’Hoechstetterus,* in the Case before-mentioned, affirms, that he  
cured a Constriction of the Gullet produced by Malmsey Wine,  
in which Confound had been boiled. And *Forestur,* in the Part  
before-mentioned, informs us, that a Constriction of the Gul-  
let, produced by Aqua-fortis, was Happily cured by Mucilage  
os Quinces.

When Violent Anger, excited at Meals, brings on Spasms of  
theGullet, there generally happens, at the same time, an Effu-  
sion of Bile into the Stomach. In this Case, besides the Mitiga-  
tion of the Commotions, the Bile is to he corrected, lest it ac-  
quire a corrosive and Virulent Quality ; after which it is to he  
eliminated from the Body, by gentie Emetics, or CholagogueS.

**'The** Bile is corrected by absorbent and mucilaginous Substances,  
such aS Decoctions of Oats, or Barley. The Bile, On the other  
hand, is most COmmodioufly eliminated by Preparations Of  
Manns, Join’d with those. Of Rhubarb, or by Vomit, when these-  
Preparations are heigbren’d by one or two Grains Of emetic Tar-  
tar, or Ipecacuanha. But we are no take care, that the Emetic,  
or the Purgative, he not exhibited immediately after the Fit of  
Anger.

But if the Spasms Of the Gullet are produced by a Dyscrasy  
of the whole Mass of Humours Or, particularly, if acrid and  
viscid Sordes. Of the Primae Vise lay a Foundation for a long-  
continued Disorder of this Kind 5 these Sordes are to be corrected  
by inciding, resolvent, digestive, and absorbent Medicines, and  
evacuated by Preparations Of Manna, Rhubarb, and the Pilulae:  
Balsaminae. But as the Disorder frequently proves obstinate to  
this Treatment, there will he no Medicine sound more essica-  
cions, than medicinal Waters -, among which, the best are those  
of *Sedlitss,* drank for about four Days, and then succeeded by  
those Of- *Egra.* In hypochondriacal Disorders, also, where the  
Excretions Of Blood, whether by the Uterus, Or haemorrhoidal  
Veins, are suppressed, besides Venesection and Exercise, the Co-  
*roline* Baths, duly used, are. Of all Other Things, the most bene-  
ficial

A Nausea, produced by acrid, acid, and Viscid Sordes Of the  
Primae Vise, requires the same Cure with that before-mentioned.  
But singular Service is done by Vinous Infusions, prepared. Of re-  
solvent, aromatic, and evacuating Herbs and Roots. iWNau-  
sea, accompanied with a Bitterness Of rhe Mouth, *Gabek’hoverue,  
in Cent.* I. *Cur.* I4. recommends an Infusion of the Root of wild  
-Radish in *Rhenasch* Wins, to be drank every Morning. If aNau-  
sea, accompanied with Loathing, is produced by using any fetid  
Substance, Or fordid Aliments, it is expedient either to excite a  
Vomiting, or to chew Lemon or Orange-peel, Or tO use gene-  
rous Wines Is, whilst malignant Fevers rage, any one is, with-  
Out a manifest Cause, seized with a Nausea, 'tis forthwith expo-  
client to exhibit a gentle Vomit, consisting Of about fifteen Grains  
Of Ipecacuanha, by which means, the Contagion being elimina-  
ted, the Fever is either prevented. Or, at least, render'd more mild  
and benign in its Progress.

Chronical Spasms Of the Oesophagus, which depend On. a  
Weakness Of the nervous System, and Often recur, are rather  
to be cured by dietetic Preparations and Aliments, than by  
strong .Medicines ὁ for, in this Case, we are, for Ordinary  
Drink, to choose Decoctions prepared Of Viperss-grass, Succo-  
ry, and Cinnamon. All Malt Liquors are to be abstained from,  
.and the Patient is to use generous Wine moderately.. The Ali-  
Inents are to be light, and fmall in Quantity, but Exercise is  
io be frequently used. For corroborating the Stomach, halsa-  
rnic Elixirs, prepared without a spirituous Menstruum, are to be  
used. The Redundance of the Blood is to he diminished by  
properly repeated Venesections; and the Generation Of Sordes  
in the Primae Viae is to he prevented by gen de Laxatives. But,  
above all, the Passions Of the Mind, which so greatiy contribute  
to the Production Of Spasms, are to be carefully guarded against;  
then the *Caroline* Springs, and afterwards the Baths Of *Toeplitz,*are to be used.

**PRACTICAL CAUTIONs.**

The Physician who, in order tO sooth Spasms Of the Oeso-  
sphagns, intends to bathe the Feet, with a View to drive the  
‘Humours from the superior Parts, ought to take care, that the  
Peet be not too cold ; for in this Case, the Bathing is to be  
xiesefd for sometime; and the Feet.are to be previously warm’d  
fry Frictions, and Vessels full of warm Water placed under them.  
This Rule is, also, to he observed with respect to the Use of  
’Venesection: -

- If a Constriction of the Fauces is join’d with a Redness of  
the Pace, Inflation of the Vefleis, and a Pulsation of the large  
-Arteries of the Heed, a Vein is to be Open'd, for fear of an  
approaching Apoplexy. Where there are hysteric. Or hypochon-  
driac Symptoms, and Suffocations, as it were, already present.  
Venesection is, also, to he used; the’ not in the Arm, but ra-  
ther in the Foot, fince the Paroxysms are rather heighten'd, by  
-taking Blood from the former.

= - When the Spasms seize the inferior Part of the Gullet, the  
Liniments, and other external Medicines, are not so much to be  
applied to the Breast and Praecordia, as to the Spine of the Back;  
as *Johannes Langius, in Epsfiol. Medic. Part* 2. *Epifiol.c^.* shews  
from *Aetius,* and *Galen,* and, which is still better, from Ex-  
perience : For, as the Oesophagus is immediately Connected with  
'the *Spina Dorsi,* the Force of Remedies applied to the latter  
will the more Certainly penetrate to the former.

In the suffocative Paroxysms Of hysteric Women, where the  
patients lie half-dead, in Order to rouse them, besides Clysters,  
volatile, fetid, oleons Substances, and Preparations Os Castor,  
are useful, when applied to the Nostrils, as, also, the Feathers os  
Partridges, and Other fetid Substances, kindled; for these are of  
singular Efficacy in soothing irregular Motions.

For exasperating, and more effectually confirming the Spasms,  
**- lbeth** Of the Pharynx, and inferior Parts of the Gullet, nothing

contributes more than the Use Of drastic Purgatives. Tis al-  
ways expedient to substitute, in the room of these, mild Laxa-  
fives, such aS balsamic Preparations Os Manna and Rhubarb;  
Or, if the Disorder is join’d with Flatulencies, OleouS and Carmi-  
native Clysters

A Constriction of the Fauces, succeeding an acute Fever,  
besides a proper Regimen, is to he relieved by antispasmodic  
and analeptic Medicines; such aS the *Puluris Marcbion is.* Nitre  
mix’d with Camphire, and the *Tinctura Bezaardica Michaelis*mix'd with the *Mixtura Simplex* , for, in Cases of this Nature,  
Opiates, and the grosser Astringents, are aS bad as Poison.

Spasms Of the Oesophagus, produced by Worms vellicating  
the *Prima Via,* Cannot be removed, till the Worms are elimi-  
nated. But, in this Case, we are to use Purgatives very Cate-  
tioufly ; and, if Mercurials are exhibited, the Patient ought, im-  
mediately after, to drink Oil Of sweet Almonds, lest ths inte-  
stines should be too much vellicated by them.

When the Constriction of the Oesophagus is so great, that **no**Aliments can pass, and, at the ssme time. Continues long;  
then, lest the Patients should be wasted away, it is expedient to  
inject milky and nutritive Clysters: Concerning which, ***see****Langites* in *Epiflol. Medic. Lib.* I. *Epifi.* 8o.

Among the Convulsive Motions Of the Oesophagus, we may  
reckon those Concussions os the Breast, which happen .with **a**Noise in Children, when seized with Epilepsies, and which are  
generally taken for a Species of Hiccup: But they are really no-  
thing else than convulsive Concussions Of the Oesophagus, and  
adjacent Parts, *and* they are generally the fatal Forerunners of  
the Patient's Death. ’ In this Case, the Physician is to use mild  
Antiepileptics, anodyne and analeptic Medicines; but, at the  
same time, he is to predict-instant Death. *Frederic Hossman.*

OESTROMANlA. The Furor *Uterinus.*

OESTRUM VENERIS, in Anatomy, is the **CLITORIS.**

OESYPE, Or OESvPoS, όισήπη, οΓόισυπος. The Sordes Of  
Wool See LANA.

.. OFFA HELMONTIANA.

Take Of the alcaline Spirit Of Sal Ammoniac, fo strong as  
to leave much of its Salt nndistolved at the Bottom; put  
into a Cold and dry cylindrical Glass, with a narrow Mouth,  
so as to fill about one half thereof, pour to it, gradually, a  
Quantity Of pure cold Alcohol, so as to run gently down  
the Sides Of the Vessel, till it be full , a white Coagulation  
will he made upon the Surface, where the lighter Alcohol  
rests upon the alcaline Spirit. Is the Class be now inverted,  
there will instantly appear a white opake Coagulation, where  
the Alcohol and alcaline Spirit mix; and, when they are both  
well shaken together, the Whole becomes a white Opake  
consistent Mass, Concreted together like Stone, so that not  
a Drop will fall Ont os the Glass, while inverted. Stop the  
Vessel close, and set it by: Thus the Mixture will soon  
resolve into a Fluid, that stoats at Top, and a dedse, sa-  
'' fine Concretion, that falis to the Bottom - so that, in a Year’s  
. . time, the Salt will almost become solid below, with a Li-  
(. qUOr floating above it. Is the Whole-Mass, thus produced,  
be distilled with a Toft Fire, an alcaline,. balsamic. Oily,  
solid Salt, will sublime., The-eOlder the Season, and . the  
Place, in which the Experiment is .made, the better -itwjll  
succeed. .

**RE MAR K S. si**

This is One of the more difficult Experiments in Chemistry, as it  
requires both the Liquors to he perfect, and the Observance Of  
several Circumstances, any One Of which being wanting, will  
Cause it to miscarry, but, if they all be Observed, it will suc-  
ceed. Here, then, we see, that pure Volatile alcaline Salt  
will closely attract to Itself the most subtile Oil that is known,  
that is. Alcohol, whence the Soap so produced is the most  
subtile and penetrating os all Soaps, consisting Of an exceed-  
ing subtile and volatile Alcali and Oil, wonderfully united to-  
gether in an Instant. If this Medicine be diluted with Ca-  
nary, .and taken upon an empty Stomach, it passes, perhaps,  
through all the Vessels Of the Body, resolves Concretions, opens  
Obstructions, excites the vital Powers; and thus successfully  
Cures many dangerous Distempers, proceeding from an Ob-  
structing Matter, capable Of being resolved by it. But its Vir-  
tue Vanishes too soon, aS being so extremely volatile, and  
therefore becomes unequal to the more stubborn Distempers,  
It is highly Commended in the Jaundice, unattended with afl  
acute inflammation; it does not dissolve the Stone, or prevent  
the Concretion Or increase thereof; it seems to agree with Salt  
of Tartar rendered Volatile ὁ it dissolves in a gentle Heat, like  
ICe, and returns to a solid Form in the (Cold. If pure Alco-  
hol he thus mixed with One-third Of dry VolatileAlcali, it makes  
a much more solid Soap, aS being without Water, which is  
always double the Quantity in the strongest alcaline Spirit,  
with respect to the pure Salt. *Helmont* needed not have appre-  
hended the sudden Generation of the Stone from hence; for  
this Matter is not the Stone, but dissolves with Heat, dilutes  
with Water, and proves totally and spontanecusty Volatile, so

that it has nothing in common, nor like to the Stone.' *HA-  
taont sms* not the Inventor of the Experiment, though the  
Production he Called *Osset Helmantiarta ,* bur *Raymond Lully,*long before him, and the *English* Author upon the Alcahest,  
supposed to he *George Starkey,* inconsiderately pretends, that  
this Soap, brought to a Liquor by repeated Distillation, will  
become the Alcahest of *Helmont. Boerhaave1 s Chemistry.*

OFFICINALIA. Officinal Medicines, that is, those usually  
found in the Shops.

OFFION. Opium.

OGER, OGERTlNUM, andOGERTUM, *in Paracelsus,  
is* the same as OCHRA.

OLAMPL The Name of a very scarce Gum, brought from  
*America. laemery* informs uS, that it is hard, yellowish, with a  
black Cast, transparent, resembling Copal, and sweet to the  
Taste, with some Degree *os* Astringency. It is esteem'd deter-  
five, drying, and resolvent.

' OLCA. The same as HOLCA, which see.

OLDENLANDIA.

The Characters are *i*

' It hath a Rose.shaped Flower, consisting of one Leaf, "which  
is divided into sour Parts, almost to the Bottom, and resta on rheEmpalement; which Empalement, afterward, becomes an al-  
most globular Fruit, having two Cells, which contain many small  
Seeds

*Miller* mentions but One Sort of *CAdenIandoa;* which is,  
Oldenlandia humilis Hyffopifolia. *plum. Nov. Gen.*

This Plant was discover'd in *America* by Father *Plumier,*who gave this Name to it in Honour to *Henry Bernard Oldenland,*a *German,* who was a Disciple Of Dr. *Harman,* at *Leyden,* and  
was a Very Curious Botanist. *Millers Dictionary, Vol.* 2.

OLEA. S ss

The Characters are.

The Leaves are Oblong, and always green; the Calyx is don-  
tated, and swelling like a Bottie. The Flower is monopetalous,  
with its lower Part tubulated, and the upper multifid; the Lobes,  
or Segments, expanding in Form of a Stat. The Ovary, in the  
Centre Of the dentated and multifid Calyx, becomes a roundish,  
pulpy Fruit, Containing one. Or generally two Stones, inclosing  
Kernels.

*Boerhaave* mentions five Species Os OZ?a; which are,  
- i. Olea, sativa. *Ger.* load. *Emac.* I392. *Parle. Th eat.* I438.  
*C.B.P.* 472. 7. *B. 1. RaiiHili.2..* I54I. *Bocrk. Ind. A.* 2.2I8.  
*Qlea.* Ossie. THE OLIVE-TREE.

The Olive-tree grows to a great Bigness in its native Climate,  
heing full Os Branches, whose Twigs are of a grey Or ash Colour ;  
-having two Leaves set opposite at aJoint, Of an hard firm Texture,  
Of a long Oval Shape, whitish underneath, and Of a fad Green  
above, among these grow Bunches Of small, yellow, monopeta\*.  
Tons Flowers, cut into four Sections; and after them come oval  
-Emit, Of different Magnitudes, some heing as big as a large Plum,  
-as the sparse, and several others; and some, as the Luke Olive,  
a great deal less: They are green at first, and black when ripe,  
- having an hard Stone in the Middle, which is sharp-pointed at both  
Ends, when ripe, they are hot and burning in the Mouth. .

The Olive-tree' grows in *Spain, Italy,* and *Turkey,* from  
; whence the Oil, and the pickled Olives, are brought to ns.

The Oil is press’d Our from the Olives, which are laid together  
awhile, to wither, and then ground in a Mill, and, having hot  
Water pour'd on them, they are press'd out, the Water subsi-  
ding, and the Oil swimming on the Top. What is drawn from the  
unrjpe Olives, is Called *Omphacinum,* and is accounted drying  
and restringent, and fitter sor some external Remedies: What is  
press'd Out Of the ripe Fruit, is Called Oil Of Olives, being what  
Is generally earen, and made use Of in Medicines; the different  
Fineness being from the different Care and Management in the  
making it. The sweetest, and what we esteem most, comes from  
*Florence. \**

Oil is moderately heating and mollifying, rendering the Body lax  
and soluble, it is good for Disorders Of the Breast..and Lungs,  
tempering the sharp Choleric Humours in the Bowels; and so helps  
GripingS, and the Colic 5 and is useful against all corrosive mine-  
ral Poisons, as Arsenic and Sublimate, *etc.* It Opens the uri-  
nary Pastages, and is good for the Stone and Gravel. The pickled  
\* Olives are grateful to the Stomach, and provoke an Appetite 5  
the ripe ones are more eaten in the Eastern Countries, among the  
*Greeks,* being great Part of their Fond, especially in *Dent. Millen's  
. Bot. Off.*

The *Portuguese* Olive-trees, says *Clusius,* bear a lesser sort of  
Clive, [such are those of *Luca,* and other Parts of *Italy,* which  
are most in Esteem among usJ which yet yields much Oil, and  
that of the best kind. So there are some Olive-trees in *Langue-  
doc* and *Provence in Prance,* and in *Andalusia* and *Granada* in  
*Spains* which produce a smaller Olive, but what yields more  
and far better Oil, than the larger Olive.

They gather the Olives in *November, December, January,* and  
*February,* in the Kingdom of *Granada,* where they are not ripe  
hesore. Then they strew them on the Floor, and let them lie  
till they become wrinkled, then grind them, and press out the

Oil. Some strike off the Olives with Poles; but are blamed by  
Others, who gather them with the Hand, by Help of Ladders, that  
they might not frustrate their Hopes Of the next Year's Harvest,  
by striking off the Buds; sor an Olive-tree is Very much injured  
by Beating. It was a Very antient Law established among Olive-  
gatherers, as *Pliny* telis us, “ Never wound nor beat an Olive-  
trees

In *Spain* and *France* they generally pickle them before they are  
ripe, tho’ sometimes they pickle those which are ripe and black.  
Pickled Olives, with us, serve as Sawce to Roast-meat, especially  
Mutton , and they are also eaten in Salads. The *Italians* serve  
them in at a second Course, and eat them with Bread they ex-  
cite an Appetite, provoke to Stool, and dry and strengthen a too  
humid Stomach.

The OliVe-tree was consecrated *to Minerva,* either because  
it was the Gift Of that Goddess, or, as *Martianus Capella* sup-  
\* poses, because Arts and Sciences, which are under her Protection,  
are best leam'd in nocturnal Lucubrations, by the Light which  
Oil affords. The OliVe-tree was, also, an Emblem of Pardon and  
Peace in order to obtain which, the Supplicants used to carry  
in their Hands Branches Of this Tree.

This Tree is distinguished according to its Form, Colonr,Juice,  
Magnitude, Place Of Growth, or first Discoverers; all which  
Varieties it would be endless to enumerate. The AntientS have  
mention'd Various Species, whose Names it would be Very diffi-  
cult t^accommodate to those known at present, for which Rea-’  
son *lent* shall pass them Over. *Pliny, Lib.* 15. *Cap.* 3. seems to  
make the *Colymbades* a distinct Species; ’ but some will have them  
to he pure Olives, preserved and swimming in their Own Oil,  
by way Of Distinction from the *Halmades,* which are Olives  
pickled with Salt; others make the *Halmades* and *Colymbades* to  
be the fame thing.

We observe not so many Varieties Of Olive-trees, aS Of Apple-  
.trees. Pear-trees, and Plum-trees', either hecause the OliVe-  
tree, in its own Nature, is less subject to Vary, being produced  
from Seed, Or because it was not worth the Planter’s while to  
spend his Pains and industry in attempting to multiply Varieties:  
To this may be added, that the Tree, being impatient Of Cold,  
will not Come under the Care of the *Erench, German,* and *Englisu*Gardeners, who are most curious and active in Procuring and  
- producing new Species Of Fruits,

According to *Cherlerus,* the AntientS were very solicitous in  
preserving Olives ὁ tho' they are, in reality, only suited to gratify  
the Palate: SO unbounded was their Luxury, that they eYen made  
bitter Substances subservient to it, for nothing has a more un-  
grateful Taste than Olives, either ripe Or unripe. But Art found  
Means Of bestowing upon them that grateful and agreeable Taste,  
which Nature had denied them. Tho' *Columella* and *Palladius*furnish ns with Various Methods Of preserving Olives, yet they are,  
at present, generally imported to uS, preserved in a very simple  
- Manner, by means Of a Brine prepared Of Vinegar and Salt. .

The' Olives, when ripe, are Of a blackish Colour , Of an acrid,  
bitter, and nauseous Taste, yet the Oil expressed from them is  
generally pellucid. Of a somewhat yellowish Colour, and Of a  
sweet and grateful Taste. \_ Hence 'tis obvious, that the ungrate-  
ful Taste and Smell Only reside in the aqueous Part, Or that which  
remains aster the Expression Of the Oil: But that Oil is reckon'd  
the best, which is most free from all Colour and Taste.

According to the Antients, ripe Olives are moderately hot;  
but they soon become corrupted, and prove Offensive to the Sto-  
mach, Eyes, and Bladder. When roasted and applied, they stop  
*Noma,* and remove the Scurf about the Edges Of Carbuncles:  
When unripe, they are of a drying and astringent Quality. Pre-  
served Olives are said to he os an astringent Quality, to Corro-  
. borate the Stomach, and excite an Appetite. Those imported  
to us are preserved before they are ripe ὁ hut ’tis sometimes  
usual with the *Italians,* to preserve such as are black, and per-  
-fcctly ripe. .

The Leaves of the Olive-tree are Of a drying and astringent  
Quality. They are Only used externally, especially in Fluxes,  
immoderate Discharges Of the Menses, an Herpes, and Other Dis.  
orders of a like Nature. According to *Diofcorides,* they are  
better adapted to Medicines intended for the Eyes, than the Leaves  
Of the wild Olive; because they are of a milder and more geutie  
Natures That Substance which is within the Kernels of Olives,  
if mix'd with Lard and Meal, removes scabrous and rough Naiis.

The juice, which drops from recent OliVe-hrancheS, when  
they are kindled. Cures Lichens, scurfy Disorders, and running  
Ulcers. ’

*Pliny* informs us, that when *Aurnstus,* happening to Visit *Polleo  
Romulus,* then above an hundred Years old, asked him. By what  
means he had so effectually preserved the Vigour Of his Body,  
and the Powers Of his Mind ? the latter answer’d , By the in-  
ternal Use of Mulsum, and the external Use os Oil. *Cardan,* also,  
affirms, thet three Things powerfully contribute to Longevity,  
which are Milk, Honey, and Oil, not externally used, but taken  
inwardly, and among the Aliments. *Aristotle* was Os Opinion,  
that every Man Ought to be well provided in Salt and Oil, hecause  
both or them greatly contribute to Longevity.

Oil seems to he of an aereal Nature, for which Reason it floats  
in Water, and cannot he easily mixed with aqueous Liquors ; but,  
though shaken along with them, soon disengages itselr, and rises  
to the Surface But when these aqueous and oleous Liquors are  
shaken together, and intimately mixed, they assume a whitish  
Colour, and resemble Milk.

. According to *Dioscorides,* that Oil which is expressed from un-  
xipe Olives, and sor that Reason called *Omphacinum,* is most con-  
ducive to Health rAnd that Omphacinum is best, which is recent,  
fragrant; and not of a biting Taste. This Kind is, also, most  
proper sor the Composition of Ointments: It is, also, beneficial  
to the Stomach, in consequence Of its astringent Quality. Is  
held in the Mouth, it braces up the Gums, fixes the Teeth, and  
checks Sweats. It is of a refrigerating, drying, and astringent  
Nature 5 for which Reason it is used aS an ingredient in many  
Compositions.

The Oil expressed from ripe Olives is moderately heating  
and moistening; but the old is hotter than that which is recent.  
It is, also, Of an emolliens, digestive, and Vulnerary Quality: If  
an Ounce Of it is drank with warm Ale, it renders the Body  
soluble, removes a Driness of the Breast, allays Gripes, relaxes  
the urinary Passages, and cleanses and consolidates such aS are  
corroded: Externally it is frequently used in Clysters, and for the  
Cure of hot Tumors; When drank with warm Water, it excites  
Vomiting, for which Reason it is generally exhibited against  
- Poisons.

*Schroder* informs us, that in *Westphalia,* his native Country, it  
is customary to exhibit to wounded Patients Oil of Olives mixed  
with warm Ale, in so large Quantities, that the Sweat Of the Pa-  
tient Often smells Of the Oil.

In Order to render the Body soluble, a Piece Of toasted Bread,  
soaked in Od, and eaten every Morning, is highly recommend-  
ed: And this, says *Cherlerus,* is. a Very grateful Medicine. *Bor.  
relli Observat.*

*Pliny* informs us, that Oil refreshes the Limbs; and it is cer-  
tain, that the AntientS frequently anointed the Body with Oil,  
because they imagin'd, that it not only procured Strength and  
Vigour, but, also, preserved the Tone Of the Parts. But this  
Custom is long ago abolished, and in my Opinion Very deservedly,  
Partly On account of its Nastiness, and partly because it ob-  
structs the Pores Of the Skin, and hinders Perspiration, which  
is absolutely necessary to the Preservation Of Health.

According to *Pliny,* in *Histor. Natural. Lib.* II. *Cap.* Ip. not  
only Bees, but, also, all Other Insects are killed by means of 011 .  
which *Malpighi* found true in Silk-worms, and Other Insects:  
The Reason Of this is obvious, fince the Oil obstructs the Pas.  
sages. Or Pores, through which the Air enters, and return;; in  
consequence of which, the Animal is forthwith destroyed: Nor  
is Respiration less, but rather more, necessary to these Infects  
than to larger Animals, fince, in the former, theVefleis destined  
for the Reception Of the Air am larger in proportion, more in  
Number, and more dispersed through all the Parts Of the Body,  
than in the latter.

Oil, according to *Pliny,* extracts Pitch from CloathS, an Ef- .  
sect not to be Obtained by Water. And *Senncrtus, in Hypom.*1. *Cap.* 5. informs us, that, when the Hands are stained with  
Pitch, they Cannot be made clean by means Of. Water, but by  
Oil, or some pinguiouS Substance, which melts the Pitch.

In a Vessel full of Oil/the superior Part is best; for the infe-  
rior is too much contaminated by the Amurca; and the Surface  
is best Of all, because it is at the greatest Distance from the  
noxious Part, and is not injured by the Ain *Plat. Sympof.* The  
same is, also, asserted by *Macrobius, in Saturnal.* who, also, af-  
firms, that the middle Part of Wine, and the lowest Part Of  
Honey, is the best.

*Dioscorides* and *Galen* inform ns, that the Oil obtained from  
the Twigs of the Olive-tree is useful for a great many Purposes;  
but though the former affirms, that this Oil is made of the Twigs,  
yet the latter asserts, that, in the Preparation Of this Oil, they  
Only add the Buds, produced by the OliVe-Uee. *Paii H. Ρ.*

With respect to the Oil of Olives, it is remarkable, that, if  
nibbed upon any part wounded by a Viper, it effectually pre-  
Vents all the ill Consequences, See VIPERA.

2. Olea, sylVestris, solio duro; subtus incano. C. Β. P. 472.  
*Tourn. last.* 599. *Doer h. Ind. alt.* 2. 2iS. *Oleaster.* Ossic. *Olea-  
ster five Olea fylvesiris.* Park. Theat. I433. J. B. I. II. *Olea  
fylveflris.* Ger. I2od. Emac. I3G2. Ran Hist. 2. I542. THE  
WILD OLIVE-TREE.

AS it is agreed by Botanists, that the Garden Olive-tree differs  
from the wild only in Culture, and that the former, if neglected,  
will degenerate into the other,. which, alfo, is produced from  
the Kernel of the Garden Olive,, it must certainly he granted, that  
the Oleastrum differs from the Oles, not in Species, but in some  
accidental Circumstances, for which Reason we shall be the  
shorter in its Description.

The Oleaster, in Bigness os Trunk or Branches, is not inferior  
to the Olea , but has fewer Branches, and those set with Thorns.  
The Leaves, also, are less, 'though of the same Shape ; the Fruit,  
alfo, is like an Oltve, but less, more shrivelled, and Containing  
an acrimonious purple J luce. To this *clusius* adds, that the Bark

is stnoother than that os the Garden Olive-tree, that the Frmt  
has a recurved Point, and all the Parts are remarkably bitter;

*in Theophrastus* the Trunk is described as gaping, and discover-  
ing some peculiar Caverns, aS in the Garden Olive-tree: Thia  
Defect in the Tree has the Name Of *Gongri.*

The Victors at the *Olympic* Games were usually Crowned with  
the Oleaster, as we are informed by *Pliny,* who, also, fays, that  
the Oleaster Of *Olympia,* with which *Hercules* was first Crowned,  
was religiously preserved down to his Time, as was the Olea  
which was said to he proposed by *Minerva,* in a Trial of Skill,  
at *Athens.*

The Oleaster delights in an argillaceous and stony Soil, aS does  
the Olea, and grows in the same Places. *Dioscorides* and *Pliny*say much of the Virtues os the Leaves Of the Oleaster, for which  
the Reader is referred to those Authors: We suppose the Leaves,  
in this respect, are not much disterent from those Os the Olea,  
only more effectual in their Operation*: Nor* is the Oil, which  
the Fruit affords, any way different from Omphacinum, except  
that it is hotter, more potently astringes, and, yet, at the same  
time, deterges. This Oil is not used in Food; but, if any one  
Constantly uses it about his Head and Board, he will find It to  
retard Greyness. *Amatus,* from *Dioscorides,* fays, that It stops  
the Falling-Off Of the Hair, deterges Scurf and AchorS, Itch and  
Leprosy. \*\* 4

For the Elxomeli, which, according to *Pliny,* distiis from  
Olive-trees, according to *Dioscorides,* from a certain Trunk, fee  
ELAEOMELI, the Account of it is very much illustrated hy  
*Label* and *Pena,* who tell ns, that the Olive-trees in the Vine-  
yards Of *Montpelier,* being wounded in the Trunk, discharge an  
Honey, Or *Elaeorneli:* They assure us, from their Own Experience,  
that from their Common Oles, which is a Tree Of a Very bitter  
and unpleasant Taste, in its Bark, Trunin .and Fruit, also before  
it is pickled, there distiis a truly melleonS Liquor, resembling  
Honey, not Only in Colour and. Taste, but in keeping uncor-  
rupteo ὁ and that, by slightly wounding the Trunk with a Penknife,  
through the Chinks Of the Bark, they obtained enough Os this  
Liquor, not Only to gratify their own Curiosity, but to impart to  
their Friends. But it will be in Vain to expect this Honey, un-  
less the Olive be nearly ripe and blackish. From those Trees,  
also, especially from Wounds made in the larger Trunks, was  
discharged a glutinous Liquor, more liquid than Honey, at first,  
bur, after it had stood a-while, becoming more dense with the  
Cold, resembling rather Manna than Honey, in Appearance  
Taste, Relish, and Manner Of Concretion, in the Opinion Of all  
who examined it. .

AS for the *Ethiopian* Olive-tree, mentioned by *Straba* and *Diosc  
corides,* which discharged a Tear, like SCammony, Or, accord-  
ing to *Paulus,* like Gntta Ammoniaca, and suspected by *Casale,  
pinus* to he Gum Elemi, we are not Certain what Sort Of Tree  
it is, and whether it he the same with the common Olive-tree, or .  
not. However, we are told by *Dioscorides,* that'this Tear is  
good for a Cicatrix and Albugo in the Eyes, and for Dimness  
Of Sight, the Eyes being anointed therewith; that it provokes  
Urine,, and the Menses; and, put into an hollow Tooth, eases  
the Pains thereof, expels the Foetus, and cures the Impetigo and  
Lepra, and that, used in Medicine, it isos a deleterious Quality.  
*Paii Hist. Plant.*

3. Olea; Afra, folio Buxi, crasso, atrovifidi, lucido; cortice  
albo, scabro.

4. Olea; Afra; folio longo, lato, supra atroviridi splendente.  
Infra pallide viridi. *Slangenhout vulgo Batavis.*

5. Olea, Afra, folio longo, angusto, pallide Viridi, fructu ro-  
tundo, purpurascente. *Boerh. Ind. alt. Plant.*

OLEAMEN. A thin Liniment, Composed of Oiis. *Scribo-  
nius Largus.*

OLEANDER. The Rose-hay. SeeNERIUM.  
OLEASTER. See OLEA. .

- OLEASTER GERMANICUS. A Name for the *Tlhaati  
noides; fructifera , foliis Salicis , baccis leviter flavescentibus.*

OLECRANON, ῶλέκρανον. The Elbow. ..

OLEITAS. Oiliness. *Balandus.*

OLENE, ῶλένηί The Cubit.

OLEUM. Oil. Various Sorts Of Oils are used in Medicine,  
prepared from Animals, Vegetables, and Minerals. ' Animal Oiis  
are their Fats, which are originally vegetable Oiis. \* All animal  
Substances yield these Oiis, together with then Volatile Salts, in  
Distillation: For an Account of which, fee the Article CERVUs.  
'. Vegetable Oiis are principally procured by Expression, Boil-  
ing, and Distillation.

There is a Certain Part in Plants, which, being either sponra-  
neoufly fluid. Or easily made *so* by a gentie Heat, is called their  
Oil. This Oil may become thick by long standing, aS we see  
in the Oil Of Turpentine, which, though extremely fluid at first,  
manifestly thickens by degrees- It may, also, grow thick with  
Cold, and thus appear knotty like Fish-spawn; it may even be-  
come solid, as we see in Wax; but by whet means soever it thus  
becomes hard, it stows again upon being applied to the Fire.  
This Oil, therefore, whenever it becomes liquid, is, at the same  
time, unctuous, or exceeding soft and stippery to the Touch,  
though it has, at the same time, a Certain Tenacity, or Viscosity,

in Its Pans, not found in Waters and Spirits. Again, these Oth  
are always inflammable, and seed both Fire ano FLIne, being  
themselves dilpo-ed to go imo Flame; a Property not found tn  
Air, Water, Or Earth. Lastly, On will cor intimately mix with  
Water, but, when shook therein, repels the Water from it, Col-  
Iects together, and separates into a distinct Liquor; in which  
respect it differs from Spirits. Vegetable Oil, therefore, is an  
Unctuous inflammable Liquor, that does not mix with Water.

This Oil is sound Os many different Kinds, in Plants,\* the Vola-  
’tile Sort, which is produced m the Distillation of the Waters from  
unctuous Vegetables, lodges the presiding Spirit, which contains  
the Taste and Smell of the Plants, whence in this Oil the parti-  
cular sensible Properties Of the Plant-manifestly reside, which,  
'heing Once separated, robs the Piant of its Nature: Thus, is ail  
this Oil were totally extracted from Cinnamon, Mace, Cloves,  
Or Nutmeg, these Bodies would remain of their pristine Form,  
fo as to be perfectly known, . though they, retain nothing. Of their  
peculiar Properties: For, when all this Oil is taken away, those  
Spices Can no longer be distinguished by the Smell or Taste,  
though the Body Of. the Ofl receives not its Smell and Taste  
from itself, but entirely from that Spirit, which, when presence  
distinguishes these Oils, and, when absent, leaves them scarce  
distinguishable, and almost of One and the same Nature.

Sometimes, in certain Plants, and- particular Parts thereof,  
this Ofl is collected pore, in little peculiar Cells, Or Receptacles;  
**at** Other times, oily Particles ate mixed with the Juices of Plants,  
and so dispersed therein as scathe to appear in the Form of Oil,  
but lie Concealed in that Os Soap. Rur when these latent oily  
Particles associate, or separate, from the rest, they immediately  
appear in the Form of Oil. Thus the Juices Of a Plant being  
.extracted with Waters inspissated, made saponaceous, and dried.  
It is manifest, that they' contain Oil, by their burning. On the  
Other hand, a pure Oil distils from the Incisions made in the Pin,  
**the** Pine, and the Larch-tree. A transverse Section heing ninde  
into the Root os. Masterwort, newly dug up in the Winter, we  
may, , by the Help of a Microscope, perceive little - Drops Or  
gold-cOIonred Oil, Ousing out from certain Vessels on. the  
Surface; and the same holds true of a Nutmeg, or Almond, out  
with a warm Knife. But we find this Oil ηο-where'more pletio  
thinly than in Cotyledons, Or seminal Lobes os Plants ; where it  
defends the tender Embryo from the pernicious Effects os un-  
seasonable Weather,, or too great Cold ; lor Freezing might pro-  
bably prove destructiyfftofO sine a Structure. This Oil, likewise,  
is" in the Winter-tiine soiind 'driven toward the Baric, by the pre-  
ceding Summer; and, heing there more drained from its watery  
Moisture, is Collected in great Abundance,' especially in the  
EVer-greenS.: The Oil of Vegetables, therefore,'chiefly abounds  
in their more durable Parts, in order to defendthe Other natural  
and more necessary ones *is* and is therefore sound in such Parts,  
as are farthest removed from the absorbing Veffeis Os the Roots,  
and the nutrimenial Juice there drawn in from the -Earth:- Thus,  
more Oil is sound in Tripe Linseed, than, perhaps, 'in all the  
other Parts Os tho Plant together. Sometimes, also, this Oil is  
Collected in such Quantity as spontaneously to appear in its pro-  
per Forth, burst its Cells, and run out , whence the Barks of  
Trees and Fruits principally afford it, as we see in Pine-apples,  
Juniper-berries, and the like, especially in the EVer-greenS, where  
the outward Bark is often cased over with this Oil. The Trees  
in the Northern Regions,-which grow upon the high Mountains,  
exposed to the freezing Cold, more particularly afford it; whence  
it should seem, that this Oil is highly requisite to defend the Lise  
of Vegetables, against the freeLingCold of Winter. We likewise ob-  
serve, that these sat Oils principally grow and collect in full-grown  
Plante, that soon after seem, as it were, to steep, or become  
aged, for both Herbs and Trees contain little Oil in their young  
growing State, but are distended with a diluted thin wateryJuice:  
Thus Flax, soon after it is fust sown, rises in the Form Of Grass,  
and is merely aqueous; bur, when come to Maturity, it loses  
its Greenness, grows yellow, and now affords a copious Oil,  
especially in its Seed: And the same holds true of d young Pine,  
Compared with one that is full-grown. It is, also, Observed,-that  
the. shrubby Plants, which have lively Roots, gradually contract  
themselves upon the Approach os Winter, with-hold their juices,  
perspire but littie, receive little Nourishment from the Earth,  
nor throw much Off into the Air ὁ and thus they continue to do  
in an higher Degree, as the Winter comes On, till at length they,  
in a manner, rest. On the other hand, as the Spring approaches,  
ail begins to move again ’ they take in Nourishment, and per-  
spire. It these Autumnal or Winter-stations may be called Times  
of Sleep, and the Summer and Vernal Periods, Times of Wake'  
ing, in Plants it will generally appear, thartheOiisof Vegetables  
are increased in their Sleeping, but their Water in their Waking.  
Thus the Root Of Masterwort, heing perfectly leafless in the  
Winter, and lying hid and unactive in the Earth, may be called  
dormant, but if now dug up, and examined, it will be round  
rich in Oil, bur, if again dug up in *May,* it appears aqueous, sa-  
line, and by no means so oily as before, and the same is observed  
in Trees. Lastly, We see that old Trees are oppressed with their  
Own Oil, and thence suffocated, through the abundance of Far,  
**aS the** Pins, the Fir» and the likes where this Oil appears in the

Form of a Gum,, but in others, under that cf Rosin, Oil, or  
Balsam. And hence it is, that Gardeners το frequently complain  
Os the Death of Trees, obstructed in their Bark; which thus die,  
aS Animals do, when choaked with their own Far.

The Chymist, therefore, who would extract the Oils os Vege-  
tables, should first learn from Botany, that there are certain Sea-  
sons, wherein Plants abound with Water and Salt, and then but  
littie with Oil; and again, that there are other Seasons, wherein  
they principally abound with Ofl, and but a little with Wa:er  
and Sal:; for whilst new Leaves, Flowers, and Fruit, are form-  
ing in Plants, the Morion os the aqueous Juices, pregnant with  
Salt, is promoted, and the sluggish Oils excluded 5 t ut, when  
the Leaves begin to wither and fall off, the Flowers to shed, or  
the Fruit to ripen, or spontaneously fall off. when perfect, then  
the Oily Parts gradually collect together,Ind preside; the more  
subtle Ones being dissipated by the Summer’s Heat: Whence  
Builders sell theirTimber in rhe Midst or Wimer, that it may  
he durable, and Proof against Moisture and Rottenness. For  
ail the hardest, most ponderous, and lasting Woods, are found  
to abound with a ponderous Oil: Thur-Cedar and Lignum Vitae  
Contain an exceeding heavy. Compact, and copious Oil. Chy-  
mists, therefore, must choose their Subjects for Salt, at a Cer-  
rain Season, and for Oil at' a. Very different ones

. THE PROCESS.

I. The ripesseedS os most Vegetables, when they begin to fast,  
and grow dry, contain a Copious native Oil: These Seeds  
therefore, 'heing; taken,, and somewhat farther dried, are  
‘ ground into a kind of Meal; but. is.’they prove too un-  
ctuous for this Purpose, let them only he bruised in a Stone  
Mortar, by which Action alone some Of them will yield an  
Oil, such as Almonds, Pine-nuts, Pistachios, and the liked  
Let the Meal thus procured he suspended awhile in -the  
Vapour pf boiling Waterand then again be gently dried,  
. to open it the more, and fir it the better for yielding its Οψ  
' by Expression: Put this Meal cr Paste in:o strong hempen

Bags, which are to he close tied op, and place them between -  
two ’Iron PLtes, heated: in boiling V/a: er, and squeeze the  
Bags in a strong Press 5 and thus, the Oil. being melted by  
this innocent Heat, will sweat and drop through the Bags  
into a receiving Vestel, placed underneath, without empy-  
reumai but almost aSjt naturally existed in the Plant. And  
by this means may an Oil be drawn from the Seeds of the  
least oleaginous Plants, such as Hemp, Flax, Lettuce, and  
numberless Other Subjects; in which no Mortal would have  
expected such an Oil should lie concealed. In the same  
manner, a copious Oil may he expressed from Cloves, Mace,  
and Nutmegs; though the sharp aromatic Virtue Of these  
Spices will not be found in their expressed Oil, for Mace  
and Nutmeg, when thus treated, rather afford a mild and  
Very thick Balsam, than art hot aromatic Oil, such aS they  
yield by Distillation. F was'sormerly surprised, that the exi  
.pressed Oil Of Mustard-seed should he ordered with Suc-  
cess in the raging Pain of the Stone; but my Wonder ceased,  
upon finding this Oil so sweet, so soft, and mild, whereas  
that by Distillation from the fame Seed is so Violently sharp  
and fiery, that, to this Day, I cannot sufficiently, wonder at  
the Difference, aS often aS I consider it; tor it seems diffi-  
cult to assign the Reason, why this expressed Oil has not  
the pungent Taste and Odour, which are so remarkable in  
the distilled Oil,' and why rhe Acrimony of the preceding  
Spiris,which resides in the Oil, is not here manifest; and  
this, whether we regard the Water, the Salt, the Spirit itself,  
Or its Oil.

- 2. The Oil of our present Process Contains Very little Salt,  
tho'is has evidently much of the particular Nature Of the  
Plant, aS our Senses inform US.J bur, whilst fresh, it sheaths,  
blunts, and mollifies, what is acrimonious in the Humours;  
relaxes the Fibres, Membranes, Veffeis, and Viscera, when  
applied thereto; softens the Hardness Os the Flesh, and cures  
Its CrispinesS; it mollifies and moistens dead and dry eschars,  
and renders them separable from the sound Flein, by the  
Vital Actions ὁ it defends the naked Parts in Wounds, and  
prevents the dry Air from hurting them by Desiccation. It,  
also, prevents the thin Humours from exhaling too much  
through the open Mouths Of the Vessels in Wounds, and  
thus spoiling rhe extreme Vessels, and hence it becomes an  
excellent Remedy sor expeditiously healing recent Flesh-  
wounds. It is, also, accounted a great Anodyne, both as  
it is emollient, and relaxing. *Boerhaave\*: Chymifiry.*

For a farther Account of these Oils, see CHYLUS.

**DISTILLED OR ESSENTIAL OILS, BY THE ALEMBIC, FROM  
THE RECENT LEAVES OF SAVXNE.**

All Plants are more or less fit for this Operation but princi-  
pally those which are rich in an aromatic Virtue; and none Of  
them are more proper for our present Purpose, than those of an  
high and fragrant Odour, and a pungent, hot, and grateful Taste:  
But in the present Process, which opens the Subject Or essential

Oils, we are more particularly- concerned with the Leaves Of  
Plants: These Leaves are either the recent ones of EVer-greens,  
or the fading Ones Of Plants that shed their Leaves.

The aromatic Leaves of Ever-greens, such aS the ArborVitae,  
Bay, Box, Cedar, Citron, Ivy, Juniper, Lemon, Marum Syria-  
Cum, Myrtle, Orange,. Pine, Rosemary, Savins, Sage, Thyme,  
wild Thyme, ore almost always full of Oil, but principally in  
Autumn, and towards Winter so that the Rule and Method Of  
Working is nearly the same for them all.

But the annual aromatic Leaves, which die spontaneously,  
though, when green, prove highly Odoriferous and aromatic, are  
to he gathered sor our present Purpose, ar rhe time Of their full  
Growth, Or just before they begin to decline from their utmost  
Vigour, for then the aqueous Moisture, and the Salt, heing dissi-  
pated, leave a more tenacious Oil and Balsam behind ; and the  
principal Plants of this Kind we have enumerated under the  
Article AQUA. Experience has shewn, that these Leaves, being  
gather'd at the Time ahove-mentioffd, afford more Oil, if they  
are somewhat dried in rhe Shade, and a moderately fanning Air,  
before Distillation, than if they were immediately committed to  
the Still, with a watry.Juice remaining in them, perhaps, be-  
Cause, the Water being carried Off, the Oils unite the closer, and  
come Over in their proper Form, whilst, being .divided by the  
Interposition Of the Water, they indeed impregnate the distilled  
Liquor with their Virtue, though they do not appear in the Form  
os Oil, but.Care must be had, not to Use too great an Heat "in  
the .Drying, lest the Oil, also, should fly off. Some Leaves,  
however, are sound to contain fo large a Quantity of a balsamic  
\* Oil, aS to afford It Copiousty Upon Distillation; aS we see in  
Mint and Rosemary. There are, also. Others that dry with Dif-  
ficulty, and lose some Of their fine Spirit, which enriches the Cal;  
fuch aS Calamint and Maudlin-tansy, so that some Particulars  
are always to be excepted .from the general Rule.

..THE PROCESS; .

- x. Take the green Leaves, therefore, of any Of thesi: Plants,  
- ‘ which, without bruising, spontaneously and copioufly emit  
their Fragrance: Put them into aStfll, whereof they'may  
Possess two Thirds, and: pour on the distilled Water Of the  
same Plant, to the same Height; then immediately perform  
the Distillation:. And thus Baulm, Calamint, Dill, Dittany,-  
Fennel, LOVage, Marum Syriacum, Marjoram, Maudlin,  
Tansy, Mint, Origanum, Sage, SaVine, Savory, Scurvy-  
grass. Southernwood, Tansy, Thyme, and wild Thyme,  
ail immediately afford their Olis. But Others require to be  
long digested, in a Vessel exactly closed, together with Sea-  
salt. Or the Spirit os Vitriol, in order to fit them to afford  
their Oil in Perfection, and in larger Quantity. Thus, is the  
essential Oils be required from the Leaves of Bays, Box,  
Calamus Aromaticus, Cedar, Chamomile, Citron, Fir,  
Hyssop, Juniper, Lemon, Myrtle, Orange, Or Pine : Let  
them be first gently dried, then put into a Still, so as to fill  
two Thirds thereof, pour on their own distilled Water to  
the same Height, and sor every Pint of Water add half an  
Ounce os Sea-salt, Or a Dram of the Oil of Vitriol; lute  
the Still perfectly close, and continue the Heatup to ninety  
Degrees, for three Weeks before the Distillation. But the  
more tenaciously any Leaves retain their Oils, the more  
Acid, and the longer Digestion, they require, for Acids  
loosen and resolve these Oils, and, perhaps, in some mea-  
sure, increase them, according to the Observation of *Boyle,  
Hoffman, Hamberg,* and Tin *Mort.* Now. therefore, proceed  
to Distillation, aS is directed under the Article AQUA, only  
’ observing to make the Matter boil quick, and the Still to run  
strong, for thus the Oil required will come ever with the  
first Water, whereas, if the Distillation be too stow, the  
Oil will he agitated by a great Heat; yet not being able to  
rise, it will be mixed in among the Water and the Leaves,  
and be thus attenuated, and greatly enrich the Water, to  
the Diminution of the Oil: Let the Distillation be conti-  
nued with this Degree of Heat, so long as any Oil comes  
Over with the Water, the Receiver being Often changed,  
to discover how long any Oil continues to rise, sor the  
Distillation should be continued so long as the Water has  
any Considerable Virtues, aS mentioned under the Article  
AQUA , for this Water is serviceable in procuring new Oil.

2. In this Operation, therefore, the Cells and Skins contain-  
-ing the Oil, being soften'd by the Digestion, and burst by  
the boiling Hear, which sets free, moves, and rarefies the  
Oil; this is, consequently, liquefied, and thrown to rhe  
Surface Of the Water, especially if the Plant be *European.*And, as the oily Particles are carried upwards along with the  
watry, they are together forced into rhe Worm, where be-  
ing condensed, by the Cold, into On, they are thus trans,  
mined into the Receiver pure, considerably natural, with-  
out any Empyreuma; and excellently retaining, in- a small  
Compass, the Odour, Taste, and peculiar Virtues of the  
Plant, leaving its Remainder perfectly deprived of-all the  
Ofl, by the Distillation, and almost without any Mark Os

its Own Nature: For the Oils Of Box, Calamint, and Worm-  
wood, are aS perfectly distinguishable by their Smell and  
Taste, aS the Plants trom whence they were drawn; whilst  
the Plants themfelves, trom whence all the Oil is extracted,  
cannot afterwards be well distinguished from each other.  
Thefe Oils long retain their Virtues, without growing ran-  
Cid; and, therefore, with respect to all there Properties,  
the ChymistS have justly termed them *essential Oils.*

REMARKS.

I. These Oilshave a Certain sharp heating inflammatory Property,  
fo aS to stimulate the nervous Fibres, attenuate Viscidities,  
prove grateful to the Smell and Taste, and' quicken the Spirits:  
Their Acrimony appears from hence, that, if "applied to the  
naked Membranes and Nerves in Wounds, They give an acute  
Pain. We learn they are hearing, because, when takenJowardy  
ly, they excite a greater Heat, than almost any Other simple  
Body, SO that a free Use Of them will bring On burning Fevers,  
keep them up, and by an increased and continued Use, raise  
them even to the utmost Degree os Heat and Violence. When  
externally applied to the Skin os an healthy Person, so that  
they cannot be thrown off, they cause an Heat, Burning, Pain,  
Redness, Shining, Pulsation, and Blisters ; and, if theirAction  
be great, even Gangrenes: Whence ir is manifest how high  
an inflammatory. Power they have, when imprudently given  
internally, where, coming in Contact with the Viscera and  
Membranes, they may produce the like .inflammations; and  
hence, being actuated in the Body, by the Force of Circula-  
tion, they effectually stimulate the Nerves, and may thus ex-  
cellently attenuate, and intimately divide, those Viscidities,  
which, arising from mere Inactivity, ’require to be. resolved  
by a brisker Motion. Again, the odoriferous Kind, by their  
Sweetness and pleasant Taste, prove highly Acceptable and re-  
freshing, in Faintness and Torpidity; and all these Effects they  
have not by means Os their Oily Tenacity, but os the subtile  
Spirits, winch are lodged in this Oil, and contain the proper  
Taste and Smell Of the Plant: These Oils, therefore, by a  
prudent medicinal Use, afford the noblest Remedies against  
all those Distempers,wherein the animal, natural, and vital Spi-  
rits are wanting, or torpid, for instance, in Persons afflicted  
with cold watry Disorders, a simple Leucophlegmatis, or mu-  
' cons SerOsity, proceeding from mere inactivity, without any  
inflammatory Obstruction. Hence, also, they become service-  
able- inWinter Fevers, that are perfectly intermittent, and-at-  
tended with cold Fits, being given whilst the Fever is Osh and  
principalsy before the Cold Fit is expected. A moderate'Use  
of them is, also, serviceable to aged Persons, and to the Hy-  
i pochondriacal, whose Blood is sluggish, and unfit for affording  
" Of Spirits whence such Persons become indolent, forgetful.,  
heavy, lethargic, and subject to weep like.Chfldrenl Tn like  
manner they are serviceable to hystericas Women, but where  
' hysterical Disorders proceed froth a- Plethora, essential Oils,  
: though in Other Cases so excellent, prove Very prejudicial:  
and the like is to be understood of apoplectic Cases: For  
though these Oils are serviceable where the Patient is Old, and  
lethargic through a Want Of Spirits and Activity; yet'they  
prove almost mortal, when the Disorder: proceeds from Blood  
r extravasated within the Skull,. or froth an inflammatory Fish.

nefs. Or Plethora-: Whence fuch Persons have been Often hurt  
by the Use Os apoplectic Balsams, prepared from these Oils,  
tho’ almost every-where-indiscriminately commended. They  
are in no Distempers more deservedly praised, than against Fla-  
tulencies in the Stomach, Gripings, and the Colin 2. bur here,  
alfo, they must be prudently used, because these Disorders  
may' arise from inflammation. Spasms occasioned by. Fulness,  
.. and the like Causes, wherein such Oils are hurtful; though. On  
the other hand, excellent,, when, those Disorders proceed froth  
mere Coldness; languid Circulation, and a cold Viscid SerOsity  
blocking up the-intestines. - ss '

2. With regard ro the ebymical Use of our present Process, it is  
hence manifest, (I.) That aromatic Plants containan Oil, which,  
is Volatile with the Heat Of boiling Water: (ass .That.this.Oil  
principally'contains rhe presiding Spirit, which rises, together  
with it ; and, after Distillation, remains for several Years there-  
in, provided the Containing Vessel be close stopped: {3.) That

Plants contain this Oil only in one Certain Quantity, which be-  
ing drawn out, there remains no more behind: (4J But is the  
boiling Water, in this Distillation, be saturated with aS much  
Salt as it Can dissolve, it will then be hotter than mere Water;  
whence, by means of a large Quantity os Silt, inore essential  
Oil may he extracted from in Vegetable, than by boding Water  
alone, without it; but it is erroneous to expect, by this means,  
more of the Spirit, wherein the Virtue of the Oil resides; for the  
nariveSpirit is separable by rhe boiling Heat Of mere Water; so  
that the Promises made upon this Head are vain. (5.) Hence  
we learn, also, that these Oils are more Volatile, than the saline  
Matter, which, with a stronger Fire, rises in a volatile, oily,  
acid, or alcaline Salt, or that which hy Calcination is changed

into sired Alcsli. (6.) That the proper Virtues Of every Plant  
are found more in these Oils, than in other Of their simple Parrs;  
tho’ this always wish reflect to the Spirit wrapped up in **the**Oil: For neither rhe Water, the fixed Otl, the saponaceous  
Part, nor the Sal: Of the Plant, contain this peculiar and pro-  
**per** Virtue; as, by separately examining all the rest, no One  
Could discover from what Plant they proceed, whilst rhe Ost  
alone, by its Smell and Taste, never satis to indicare the Plant  
it was drawn from; Or, if these Oils should correspond to two  
different Subjects, it is then usual to give them the same Name,  
as in the Oil of Roses, and *Lignum Rhodium,* or Rose-wond.  
So, also, the great Agreement hetwixt the Oil of *Cassia Lignea,***and** Cinnamon, has Occasioned the true Cinnamon-tree to  
he Called *Cassia Lignea,* and the other. *Cassia Fistula.* (7) **Last-**ly, we hence learn what an excellent Part Plants may lose by  
bossing.

**THE DISTILLED OILS FROM DRY LEAVES, BI THE ALEM-  
BIC, SHEWN IN MINT.**

I. We proceed tO shew the same Experiment upon a dry Plant.  
Take Mint, therefore, that was gathered in a proper Season,  
dried in the Shade, and kept for fix Months, digest and distil  
it with its own distilled Water, as in the preceding Process,  
: Observing Only inot to fill the Still above half, with the dry

- Leaves; hecause, heing thus shrunk,they will swell Very much  
with the Water poured upon them, and so easily burn, or boil  
.over. By this means there will rise, thrss the whole Time  
of Distillation, a considerable Quantity of Oil, rich in Taste,  
Smell, and Virtue, and floating upon the distill'd Water.

**2.** If all the Liquor be expressed from the Remainder, and  
pour'd upon a fresh Parcel Of Mint, and all the former di-  
stal'd Water he also returned after the Oil is first separated  
from it, with the Addition, also, of aS much more distilled  
Mint-water, aS is necessary, and the Whole he digestethand  
distilled as before, this second Operation will afford a much  
larger Quanthy Of Oil ὁ andj if several times repeated, the  
more Oil will each time he acquired, for, by numerous Co-  
hobations, the Water will become extremely rich, and full  
of Oil. It is manifest, that the distilled Waters here retain  
the peculiar Virtues of the Plants, aS is sufficiently shewn un-  
der the Article **AQUA.**

**THE DISTILLED OIL OF FLOWERS ; BI AN EXAMPLE IN  
LAVENDER.**

. i. The most odoriferous Part of Plants either resides in-  
tirely, or is found in greatest Perfection, in their Flowers;  
hut, aS it is here sweetest, so it is most perishable, by reason of  
the Delicacy, unstable and falling Nature of the Flowers; tho',  
indeed, there are some, as the kinds of Lavender, which long  
preserve their Fragrance: But the Method os obtaining their  
Oil is nearly the same in all; for which Purpose they are to he  
gathered at that time they are sweetest, which generally happens  
when their Petala begin to open ; let them be gathered whole,  
with the Morning-dew upon them, and immediately he com-  
mitted to the Still, whereof they may possess Two-thirdS ; a  
sufficient Quantity of the distilled Water of the same Flower  
heing poured thereon, and as much Oil of Vitriol as may  
give a grateful Acidity to the Whole .. Then, immediately,  
distil as in the preceding Process ; by which means some Oil  
will appear floating in the Water, which is to he collected, and  
kept apart. Let the Decoction he expressed from the Flowers  
remaining in the Still, and be returned upon a fresh Parcel  
along with the former distilled Water, and a little inore Oil of  
Vitriol; and thus, by repeating the Operation, a much larger  
Quantity of Oil will he now obtained. Repeat the Process  
' three times, or more ; for the of tener the Work is repeated,  
the more Oil will each time he obtained ; the Decoction, each  
**time,** growing thicker, and the cohobated Water stronger, or  
fuller os Oil, which is to he carefully separated aster every  
Distillation: And thus the distilled Waters, also, so often re-  
turned, at length become extremely fragrant, like the Oiis  
themselves, and rich in Medicinal Virtue.

**- 2.** As this Oil is highly odoriferous, and therefore exceeding  
valuable, so it can only be obtained in a very small Quantity,  
whence Chymistshave used great Endeavours to find a Way of  
increasing it, without impairing its Virtue ; and at length ob-  
served, that if **the** Flowers were digested in a close Vessel, for  
fifteen Days, or more, with the Addition os so much Oil of  
Vitriol as might preserve them from Putrefaction, they would  
afford a third Part more of an excellent Oil; as we **see** by an  
Example in the precious Oil of Roses, given in the History of  
**the** Royal Academy of Sciences at *Paris.* Some of the princi-  
pal Flowers that are fit for this Purpose, are the following: The  
Flowers osChamomile, Citron,Clove, Hyacinth, Gilly-fiowers,  
Jeffamy, Lavender, white Lilies, Lilies of the Valley, Lemon,  
Maudlin Tansy, Orangs, *Philadelphus Atbenai,* Roses, and  
**Tansy.**

REMARKS.

**These** Oils, for their excellent Fragrance, are valued by great  
Personages, and sold at an high Price; whence it is worth  
while to study them.

**THE DISTILLED OILS OF SEEDS ; ΒΥ ΑΝ EXAMPLE IN  
FENNEL.**

It has been long observed, that the Oil of Plants is plen-  
tifully lodged in the Cotyledons, or double Placenta of their  
Seeds, whence their Oils have been long sought, especially in  
the aromatic Kinds ; and it has appeared, that the more sharp,  
het, and odorous they were, the more copious and excellent  
Oil they afforded : Yet Nature does not constantly follow this  
Rule alone ; for tho' sometimes the Seed contains this aromatic  
Oil, as in Anise, Cumin, *etc.* yet in others the Oil is not  
sound in the Seed, but in different Parts : Thus the curious Oil  
of the Rose is only sound in its Flower, and none at all in the  
Seed, or Fruit. The Orange-tree contains an excellent  
odoriferous Oil in its Flower, the Rind of its Fruit, and its  
Leaves; but not the least Sign of any in its Seed -. The Seed, in-  
deed, leaves an Oil os its own, but nothing like that excellent  
one we speak of Thus, the Seed os the Cinnamon-tree affords  
none os that admirable Oil which so richly abounds in its Bark,  
Leaves, and Wood. Hence no general Rule can with Cer-  
tainty he laid down, but recourse must be had to particular  
Experiments, for sure Information. The best Seeds, therefore, -  
for this Purpose, we judge to be those Os Ammi, Amomum, . ;  
Angelica, Anise, Bav, Cardamom both the greater and lesser.  
Caraway, Chervil, Coriander, Cubeb, Cumin, Dill, Fennel,.;.  
Garlick,Hedge-mustard, Sweet Marjoram, Master wort. Juniper,  
LoVage, Mustard, Onions, Origanum, Pepper, Rocket, Rue,  
Smallage, Spignel, Scurvy-grass, Tansy, and Zedoary.

These Seeds are to be gathered when perfectly ripe, and **then**to be dried for three Weeks, in an open airy Place, and after-  
wards digested in a close Vessel, with hot and salted Water, for  
three Days; let them afterwards be distilled in the same manner  
as was directed os Waters, only with a stronger Fire; otherwise  
the Oil will not ascend so well: And here, again. Salt **Water**being used instead of common, the Oil will be raised the better,  
on account Of the greater Heat of the Liquor, and so hecome  
purer.

Some of these Seeds contain so copious an Oil, that, rising ...  
collectedly, and fo running into the Worm, it is there suddenly  
cooled by the Water of the Worm-tub; and thus coagulates  
into a solid Mass, which blocks up the whole Cavity in one  
cold Part; so that no more Liquor heing able to descend, the  
Vapour os the boiling Water and Oil, with a Violent Force,  
throws off the Head of the Still, which might prove dangerous -  
to the Operator. It is, therefore, proper to fee, that the Worm .  
here employed be sufficiently wide, and not kept too cool;  
but when theWater, and the Oil, are observed thus to stop these  
Running, let the Head of the Still he immediately taken off  
with Care, and boiling Water pour’d into the Worm, in or-  
der to dissolve the Oil, and drive it out, after which the Distil-  
lation may again proceed as before: The Seeds disposed to  
afford this coagulating Oil are principally those of Anise, Bay,  
Cardamom, Caraway, Fennel, and Zedoary ; the Oiis whereof  
somewhat resemble Camphire, which melts with the Heat of  
Distillation, and immediately grows solid in the Cold ; though  
it still continues a pure Oil, that .in Distillation generally blocks,  
up the Vessels. And, in the hottest Countries, aromatic Plants  
are often so far maturated, that their Oiis thus change to Cam-  
phine.

REMARKS. A

Hence, again, we learn, that a.copiouSOil is lodged in the Lobes  
os Seeds, and proves rich in the peculiar Spirit of the Plant, ' 5being here safely treasured up for long preserving the tender  
Embryo, afterwards to shoot out in its proper Season. Hence,,  
also, we see that the vital Principle may he long preserved  
by such a Balsam, which seems necessary to prevent its be-,  
ing destroyed by the Winter's Cold, or lest unseasonable  
Warmth, or Moisture, should cause it to shoot before the  
Time, and thus expose it to be easily killed ; and hence this  
Oil is principally found in the Seeds and Roots of Vegetables.  
But as there are man)’ Seeds, whose distilled Oil has no re.,  
markable Smell or Taste, whilst residing in the Seed, we are  
hence informed, that the Spirits of many Vegetables escape  
the Cognizance of our Senses, whilst yet they actually distin- ’  
guish the peculiar Properties of Plants from each other ;  
whence we are taught to attribute somewhat considerable, but  
not too much, to the Sagacity of our Senses. Perhaps, the  
more volatile the spirituous Principle is in the Oil of Seeds,  
and of the sharper Taste, the less Time such Seeds will retain  
their growing Faculty 5 and, on the other hand, the less

*ieHivC* that spiritual Principle is, the longer they wist remaju  
fit to propagate their Species. Certainly the fragrant aro-  
mafic Seeds, which have an exceeding pungent Taste, soon  
become effete and barren, as we see in the balsamic umbelli-  
ferous Kind, and the most odoriferous Seeds of the *Indies,*which commonly prove sterile with ua *\xs'Europe* ; inch as  
. Cardamom,' Cubeb, Zedoary, and Ginger ; whilst, on the  
othersiand, the Sheds of Cassia, the Humble - Plant, Sena,  
and Tamarinds,.long remain perfect: And the same thing is  
.found In the Grain Kind, which will long preserve their  
Embryos fit For growing. And here it is highly remarkable,  
that this Oil should continue so very long-unhurt in dry Seeds,  
underthe Form of Oil, so as by chymicasMeans to he drawn  
from thence in full Virtue; and yetas soon as these Seeds  
begin to swell and sprout with warm Water, they should  
immediately begin to lose of their Oil, and become disposed  
to produce Spirit : Whence it should seem possible, that this  
Oil may be fo changed by the Moisture of the sertilizing  
Earth, the Action of the warm Atmosphere, and the sapo-  
naceous Virtue of the Juices, both of the Earth and Seed,  
as to be diflblved, attenuated, and render'd miscible with  
Water, so as to be driven into the tender Vessels os the Em-  
' bryo, through the Canals of the Radicula, planted in the

Lobes or Placenta, and. thus seed the tender PIant with these  
Spirits; and, by communicating its own particular Nature to  
... themutrimental Juices, impregnate the Whole, and produce

the Species; for Seeds once moistened to such a Degree, as  
to give Signs of vital Motion, cannot afterwards he well pre-  
served fit for Propagation.’ - ' - - I - l-

For the distilled Oil of *Indian* Cloves, **seeCARYOPHYLi.US.'**

THE **DISTILLED OIL of SAssAERAs-wooD.**

(I.) The lighter odoriferous oily Woods, cut in theWinter,  
and brought into Shavings whilst sound and perfect, being strongly  
distilled with twenty times their own Quantity os Water, afford  
**a** milky Liquor, and an Oil, which from the Sassafras os *Ame-  
rica,* is almost pellucid, and finks to the Bottom of Water,  
**the’**the Wood that affords it is considerably soft, light, anth  
almost spongy. Let the Distillation be continued so long as any  
Oil comes over, or the Water- continues richly milky, and  
an austere and acid Decoction will remain at the Bottom of the  
Still, *sal.'}* If a fresh Quantity of the same Shavings he distilled  
along with-the former Decoction, and the Water that first  
came over, more Oil will now be obtained, and more again at  
a third or fourth Repetition, or Cohobation. (3.) And by  
this means we obtain the Oil from all the Woods that afford in,  
with Ease ; such aS Fir, Pine, and Sassafras ; the two former  
whereof afford lighter Oils, that float inWater; hut Sassafras, an  
heavy one, that finks therein. (4.) But the hard and ponderous  
Woods must be thinner shaved, and long digested with- Salt  
and Water, before they are distilled ; for, by this means, these,  
also, will afford their Oil: Of this kind are the *Arbor Vites,*Benjamin, Box, Cedar, Citron, Guaiacum, Juniper, Lemon,  
Orange, Rhodium, Savins, Snake-wood, Storax, and other  
Balsam-trees ; as those which afford the Balsams of Capivi,  
Peru, Tolu, and Gum Elemi; for the longer these Words are  
digested in close Vessels with Salt and Water, the .easier they  
afford their essential Oils, by Distillation. (5.) Those Trees  
are fittest for this Process, which are fat, and yield Rosin,  
Balsam, Gum, or Pitch, especially those which are both pon-  
derous and solid ; but those which are light, spongy, and grow  
in watery Places, as the Alder, the Elder, the Lime, the  
Poplar, the Willow, and the like, are unfit for this Operation,  
**aS** scarce affording any essential Oil. (6.) TheTrees, felled at  
the Time when their Juices are in their strongest Motion,  
afford less Oil, and not so good ;. but those cut down in the  
midst of a frostyWinter, affordr a larger Quantity, and a better  
Oil. The Wood os young Trees, whilst in the Vigour of  
their Growth, afford less than thofe which are old, and past  
their Growth. The Evergreens afford a larger Quantity, and  
sharper Oil, than thoseTIees which shed their Leaves: Whence  
the Reason is manifest, why ponderous Woods of a strong  
Texture are required in Building.

REMARKS. - ’

Hence we may understand, that the Ponderosity os Woods is  
principally owing to the ponderous compact Oil, which  
closely binds the other Principles together, tho’ we do not  
mean their ’ essential Oil alone, but principally that fixed  
Kind remaining after Distillation. Os this we have Ex-  
amples in Cedar, Guaiacum, and Juniper-wood. And  
upon the same Cause depends their Durability ; sor the most  
lasting Woods are always the most oily, as appears in Box,  
Cedar, Oak, and Olive. Extreme- Hardness also depends  
upon the same ; sor fpongy soft Woods hold little Oil ; but  
Box, Guaiacum, Ironwood, Olive and Snakewood, abound  
-therewith. And hence we understand the Difference of

-Balsam, Turpentine, Rosin, and Pitch, as being owing to  
. a longer or shorter, a greater or a less inspissating Heat of  
the Sun. Lastly, We hence understand the Nature of Rot-  
tenness in ‘Timber, proceeding from the Worm which feeds  
upon the subtile Oil contained in the particular Cells thereof;  
which Oil being consumed, the Wood afterwards falls into  
a kind of Dust or Ashes ; or else by lying exposed to an Air '  
sometimes hot, sometimes moist, sometimes dry, and some\*  
times cold, the Oil is at length consumed, and only a  
friable Earth lest behind. .

**For the distilled Oil of Cinnamon, see CINNAMOMUM.**

**OILS DISTILLED PER DESCENSUM, SHEWN; IN CLovEs,**

Huinan Industry first discovered, that Plants rich in Oil, be-  
ingagitated by the Fire, swear out their unctuous Matter, so  
that it might he collected ; and hence was discovered the Art  
osprocuring Pitch, by the burning os sat Trees. After this, the  
more unctuous Seeds, being bruised. And exposed to a gentie  
Fire, thus suffered ‘ an Oil to run from them, as in the Case of  
Almonds. At length, thy rhe fame Methods, the aromatic  
Tribe of Plants'were, in particular, made to sweat out their  
Oil, but the Oil, thus procured, differs entirely in Smell,  
Taste, and Virtues, from that which is thence expressed as  
above : But we are to give an Example of the Thing.

Take, therefore, the best Cloves, bruised to an unctuous  
Pulp, and spread it. a quarter os an Inch thick upon a close  
Linen, stretched, and tied over the wide Mouth *os* a cylindri-  
cal Glass Vessel, so that it cannot fall into the Cavity thereof:  
And the deeper this Glass, the better it is fitted for the Purpose;  
because a spacious Cavit}7 serves best to cool and condense  
the oily Vapour. Then take a Dish mads, os Iron-plate, fo  
hollowed with a flat and round Rim, that this Rim may exactly  
rest upon thet os the cylindrical Glass, whilst the protuberant  
Part.os the Dish falls exactly within the Mouth os the Glass,  
the Depth os the Disses Cavity in the Middle, the third os an  
Inch. Let this Dish be a little squeezed upon the Cloves, so  
as to press them with its convex Part, and the Linen that sup-  
ports them, a little within the Mouth os the Glass : When this.  
is done, fill the Cavity os the Dish with clean Ashes, and place  
a sew live Coals at the Top, the Heat whereof, passing through  
the Ashes, will liquefy the Oil, and agitate the native Water  
of the Cloves, whereby they will both be resolved into Vapour ;  
which, coming into the Cavity below, will be 'condensed upon '  
the Sides of the cold Glass, and fall in Drops to the Bottom,  
in the Form of a sharp Water and Oil. The Fine being thus  
prudently continued, nearly all the Oil will successively be  
driven out ; and the Work is then finished, when no more is  
made to descend by that Degree of Heat ; but beware of put-  
Ling on too much Fire, because this would render the Produce  
empyreumatic. . On the other hand, is the Heat be too gentie,  
scarce anything will he forced out : A Medium is easily ob-  
tained, by beginning with a small Heat, and rising by degrees ;  
and thus, by repeating the Operation, any Quantity of Oil  
may be obtained.

./REMARKS.

This Experiment shews the Nature and Appearance of a pro-  
per aromatic Oil: The Oil, so prepared, exactly resembles  
the distilled essential Kind, both in Taste, Smell, and Vir-  
tue, so as scarce, in any respect, to be distinguished from it.  
It is, indeed, obtained in a less Quantity than by Distil-  
- lation with Water ; but the Remainder may be afterwards  
employed in Distillation, or to other Purposes, as retaining  
much os the original Virtue. And this Method is principally  
- of Use, when such an Oil is immediately' required, or when  
we want, to exhibit the Experiment. In other Cases, we  
rather make Choice of Distillation ; but by the present  
Process we can expeditioufly obtain, the Oil from the Rinds  
of Citrons, Lemons, and Oranges, and from Mace, Nut-  
meg, and other Very unctuous Substances. And hence we  
learn, whet Effect this Degree of Fire may have upon.Oils,  
as they are naturally contained in Vegetables, by liquefying  
and separating them, so aS to make them sweat out, almost  
spontaneoufly ; but, when the Subjects are too dry to afford  
this Oil commodioufly, let them be bruised, then put into a  
Linen Cloth, and exposed, for some time, to the Vapour of  
het Water, that thus they may be opened before they are  
committed to the Operation ; for then they will afford more  
Water, and more Oil; and that less altered, and with greater  
Ease. These Oils differ surprisingly from those gained *by  
Expression, as* being much more aromatic, when obtained  
*per Descensum.*

SCHOLIUM.

This experimental History of Oils obtained by Chemistry  
from Spices, particularly in the Way of Distillation, contains  
many extraordinary’ and useful Particulars, rhe principal whereof

we will here briefly enumerate, for the Service of Chyrnistry,  
Natural Philosophy, and Medicine.

i. The entire aromatic Virtue of Plants is contained in their  
essential Oil alone; which being perfectly extracted, the re-  
maining Substance retains not the least Sign thereof.

2. This essential Oil, again, contains the exceeding subtile,  
volatile, minute, sharp, and scarce ponderable Spirit, which  
gives the whole Virtue to the Oil, and which, when separated  
therefrom, leaves nothing particular in the Oil: Therefore, in  
these Oils, the Sulphur is to be carefully distinguished from the  
Spirit, or the refinous Part from that which is sharp and fiery. The  
Spirit easily exhales, hut the Sulphur remains fiuggish behind,  
and gradually thickens, sooner in the Airy and flower in a close  
Vessel; thus becoming, from a liquid Oil, a gross one; then a  
Balsam ; then a more thick and tenacious Substance ; and, at

' last, a brittle Rofin ; from all which State it is again recover-  
able, by Distillation, into a thin liquid Oil. Whence many emi-  
nent Authors have thought, that distilled Oiis are only liquefied.  
Rosins; and Rosins, again. Condensed Oils, Certainly the Sun  
thus changes Oiis in Plants; for the Cedar, the Fir, the Larch,  
and the Pine, weep, by Incision, a liquid and thin Oil, which,  
heing full of Spirit, is extremely aromatic, as I have Often  
tried to my Surprize ; but, when this Oil comes upon the Bark,  
It hegins, with the Heat, gradually to lose of its Spirit, grow  
thick, and become a Turpentine, not only of an higher Con-  
fistence, but less rich in Spirit, than before. Thus Turpentine,  
when more dried by the farther Action of the Sun, hecornes  
resinous, losing its Spirit more and more, so as at length to  
prove almost inodorous and insipid. Hence, when it is said,  
that Rosin, by heing distilled with Water, again resolves into  
an Oil, we must understand it of the sulphureous Part alone,  
hut not'of both the sulphureous and the spirituous; for the  
Spirit does not return, nor is regenerated ; but only the Flu-  
idityof Oil returns. So, also, the aromatic odoriferous Tears  
of Benjamin, Lacca, Mastich, Olibanum, and Sarcocol, lose  
much of the Spirit at first contained in their fluid Oiis; whence  
the more liquid and recent these are employed, these medi-  
cinal Effects are always the greater ; as, on the other hand,  
they grow perfectly effete with Age; and when, at length, all  
their Spirit is gone, the remaining oily Matters are scarce longer  
distinguishable from one another. Hence it seems probable,  
that the Bodies of essential Oiis are greatly alike; and that  
the Spirits alone make the Difference hetween them. Whe-  
ther this Spirit differs with the specific Gravity of the Oils, **I**Jeave to farther Inquiry. It must, however, he carefully ob-  
served, that a sharp Taste and Virtue may depend upon the  
Salt of a Plant, tho', in this Case, the peculiar Characteristic is  
not owing thereto, but to the Spirit os the Oil. Vegetables,  
therefore, lose all that is peculiar to them, when their Oil is  
extracted.

3. The more pungent Odour Vegetables have, the more  
fiery their Spirit generally proves; and the more biting, when  
chewed in the Mouth, the sharper the Spirit of their distilled  
Oil. So, also, they afford the thicker, stronger, and deeper-co-  
loured Oils, when they are ripest, and moderately dried; but,  
when distilled whilst moist and recent, they afford less of a  
thinner, more transparent, less heating, but more Odoriferous  
Oil: Whence, possibly, the Spirit itself may arrive gradually at  
its greatest Perfection in the Plant. This is certain, that **the**Smell and Taste, which proceed from the Spirit, are not the  
strongest, when the Plant is young, nor till it has arrived at  
complete Maturity. We must also observe, that, in certain  
Plants, there seems to he more Spirit contained in less Oil than  
in others, aim *vice verso.* When a Pound of Nutmegs afford  
an Ounce of Oil, and twenty-five Pounds of CalamuSAroma-  
ticuS afford only an Ounce ; this shews that there is not here  
the same Proportion between the Quantity of the Oil and Spirit.  
There, also, predominates a certain peculiar Acrimony in the  
Spirits that distinguish Oils; this Acrimony, in the Oil, or Cin-  
namon, burns, like Fires any Part of the Body it touches, and  
can scarce he washed off under a long time; and there is an  
exceedingly pungent Spirit in the Oiis of Savory and Thyme.  
Hence, therefore, we find there is a strange Disposition in these  
Spirits ; which, tho', upon exhaling from the Oil, scarce dimi-  
nish the Weight thereof, yet deprive it of its V irtue, and leave it  
ungrateful, thick, terebinthinaceotss, and at length resinous. I have  
search'd after theWeight os these Spirits, but could notdiscover it.

4. Essential Oiis are sound of different Colour, according **to the**different Plants from whence they are distilled : The Oil of Mint  
is brown, of Lavender yellowish, of Cinnamon Gold-coloured, of  
Wormwood black-green, of Chamomile and Yarrow blue, of  
Aniseed almost white, and of Camphire quite white. Whether  
this Difference depends upon the Difference of the Spirits, or  
the Oil, or some other third Principle, that in some Cases rises  
in Distillation, is not certain, and deserves to he inquired into.

5. These Oiis are sometimes extremely liquid, almost spiri-  
tuous, or scarce having any Tenacity, as **we see in the** essential

Oil distilled from the Rind of *China* Oranges, this being one  
of the most fluid Liquors; and of this kind is the Oil os La-  
vender, and eVen the ponderous Oil os Sassafras, wood. *Oa*the Contrary, the Oiis of some other Plants are thick; as that  
**of** Fennel and Roses, that of Aniseed is still thicker, and **the**thickest of all is Camphire: Bfit the thick dissolve with a gentle  
Hear, the thicker with one a littie greater, and the thickest  
with a moderate one. Whence this proceeds, should be farther  
examined.

6. Again: **These** Oiis differ remarkably in their specific  
Gravities, some heing considerably heavier than Water ; aS the  
Oiis Of Cinnamon, Cloves, Sassafras, Nutmeg, and. perhaps  
of other aromatic Plants that grow within the *Tropics,* where  
the Violent Heat of the Sun might otherwise prove scorching to  
them ; for these Oils, in Distillation, require a greater Fire to  
**rinse them,** and a shallower Still, only one fourth whereofremains  
empty. Other essential Oils are extremely light; as that'  
*Of* Lavender : And yet tins Excess of Weight does pot make  
the Oiis thicker; for the Oil of Sassafras, as we just now  
observed, ls at once Very thin and heavy, whilst Camphire is,  
at the same time, extremely thick and light, so that this must

\* have some other Cause. The Oil of Aniseed will Often remain  
floating in Water, and that distilled from Jumper-berries some-  
times subside. ' Ἀ.

7. These essential aromatic Oils have an almost inimitable .  
Virtue, entirely depending upon the Spirit so often mentioned,  
which is sharp, inflammatory, grateful, refreshing, heating,  
attenuating, and stimulating to the animal Spirits, and nervous  
Fibres ; and by these Properties the Oiis prove serviceable in  
cold, aged, watry, and phlegmatic Constitutions; and, again,  
in cold Intermittente, moist and cold hypochondriacal and hyste-  
rical Cases, or other Diseases proceeding from cold, acid, or  
aqueous Flatulencies in the Intestines; and, when prudentiy  
used in these Cases, they prove generally powerful and safe  
Medicines ; hut, when indiscreetly applied in Distempers at-  
tended with violent Heat, Motion, or Inflammation, they  
prove poisonous. The Chymista have prudentiy observ’d, that  
these Oiis act by means os their Spirits, which, as lodged in  
the Oil, come to he apply'd to the Parts of the Body, so as.  
there to produce their proper Actions, which would otherwise  
easily he lost through their extreme Volatility; and, when both  
the Oil and the Spirit act together, the Effect is more gentie,  
hut more lasting. These Spirits, therefore, have, and commu-  
picate to the Oil, a certain Acrimony, winch gives the Sensa-  
tion os Fine to the Tongue, and presently occasions Pain; **and**the like Effect it shews, when apply'd to the naked Nerves:  
When apply'd to the external Skin, they soon occasion the  
wholeSeries of an Inflammation, and end in a gangrenous Eschar\*  
If applied to the Lips, or the internal Parts of the Nose or Pa-  
late, where the Nerves lie bare, it occasions the same, with  
greater Violence; and presently bring, on dangerous Inflamma\*  
tions. Whence we easily see whet Effects they may produce .  
upon the Mouth, Throat, Stomach, and intestines, when ime  
prudently exhibited. Hence these Oiis may justly he called At-  
*stammatory* ; tho' we before observed, there is no hetter Reme-  
dy for immediately raifing the Spirits by their grateful and *egrpe*traordinary Virtue; which can scarce the explained, for want  
of general Principles,, otherwise than by direct Experiment,  
They have not only this Refreshing, out, also, an heating  
Virtue; for, if externally apply'd, or internally taken, they im-  
mediately begin to heat the Parts of the Body, and presently  
increase this Heat, thus once begun ; but the colder and more  
languid the Body, the less they heat is, and *vice versa*; so that,  
when rubbed upon a dead Carcase, they produce, no Heat at all:  
Whence it is highly dangerous to give them in a burning Fever.  
They, also, increase the Motion of the Nerves by Irritation,  
propelling the Spirits, and perhaps agreeably wanning to them  
both; and whilst they perform all this, they attenuate and dis-  
solve Viscidities, so sar as can he done, by increasing the Mo-  
tion of Circulation. But we have already enumerated nearly  
all the Virtues, above, which these Oiis have in common, ex-  
ceptingthat they differ as to their different Degrees os Acrimo-  
ny. They have, however, besides these, other Virtues no less  
considerable, and peculiar to each, whereof we have sufficiently  
spoken under the Article AquA. Thus the Oils of the Arbor-  
. Vitae, and of SaVine, are powerful Emmenagogues, where the

Stoppage of the menstrual Discharge arises from a languid Cir-  
culation. The essential Oil of Rue is of Service in the Epi-  
lepsy, from a cold relaxed State os the Nerves; and, likewise,  
in hysterical Disorders, from a cold Cause: That of Juniper-ber-.  
ties, in the cold Scurvy, and the Pains and Heaviness thence  
proceeding; and, also, in nephritic Complaints, from cold -  
Obstructions: That of Mint, in an almost paralytic Weakness  
of the Stomach: That of Lavender, in the Palsy, Vertigo,  
Lethargy, and other cold Disorders of the Head: The fragrant  
uninfiammatory Oil of Roses is a noble Reviver os the lan-  
guid Spirits: That os Cinnamon, Very advantageous in a great

Paucity of Spirits, without Inflammation, either during the Pe-  
rinds of Pregnancy, Delivery, or immediately afterwards, if,  
at the same time, there he no Rupture of the Vessels : Those  
of Wormwood, *Carduus Benedictus,* the Lesser Centaury, Cha-  
momile, and Tansey, are useful against Worms; **for** which  
Purpose they may brimmed into Pills with the Crum of Breed,,  
and given in a sufficient Dose, upon an empty Stomach, the  
Patient refraining from all kind of Aliment, for two Hours  
afterwards: Those of Baum and Lemon-peel, in Palpitations  
of the Heart, from cold phlegmatic Humours: And those of  
Marjoram, Rosemary, and Sage, in Obstructions, and mucous  
Discharges, of the Uterus, from a cold Cause.

S. Is these Oils be strongly ground, for a considerable time,  
with thrice their own Weight of pure and dry Sea-salt, so as  
to divide them well, and then again distilled with Water, they  
become clean, pure, and limpid, or freed from their mucilagi-  
nous or gummy Part ; and fitter for keeping, is put up into  
Glass Vessels that are not too alcaline, and having close Necks  
well fitted with ground Glass Stoppels, and set in a dry cold  
Place ; but they lose of their Quantity by this Rectification ;  
much gross Matter remaining behind in the Still, unable to  
ascend by reason of its Tenacity. Their Virtues, also, are  
lessen'd, which depend upon their Spirits, because these remain  
in the Water used in the Distillation, and are, also, dissipated  
in the Water which comes over. This Mr. *Hombcrg* shews by  
**a** laborious Ind instructive, tho' dear Experiment; for, upon  
distilling such an Oil with fresh Water every time, six-and-  
twenty times over, he at length obtained Only a fourth Part  
thereof; the other Three-fourths hecomingan insipid and tena-  
cious Substance, whilst the Water, four-and-twenty times co-  
hobated with the Oil, was rendered exceeding sharp, aromatic,  
Taline, or spirituous.'

9. When these pure Oils are without Addition, distilled In  
a Glass Retort, with a Fire carefully and gradually increased,  
they always exhale some Water; and afterwards become more  
clear, liquid, penetrating, and light; leaving at the Bottom  
os the Retort, aster the Distillation is performed, a strong  
Heat, a black, fixed, spongy, terrestrial Matter: And, if the  
Operation he thus several times repeated, the greatest Part of  
the Oil will he converted into what the Chymists call *Caput  
Mortuum.* The excellent Mr. *Boyle,* by this means, reduced  
**a** Pound Of essential Oil almost wholly to Earth.

Io. They who have distilled these Olis from pure Chalk in  
.clean Vessels, have found that by cohobating five Ounces of  
Oil eight times, upon fifteen Ounces of Chalk, it afforded  
only two Ounces and one Dram of Oil, two Drams and forty-  
five Grains of Salt; and half an Ounce Of a strongly saline  
Water, containing the Volatile Salt, of the Oil; according to  
the Observation of Mr. *Bourdelin.*

*II.* Again, these Oil? distilled from Lime flaked in the Air,  
and afterwards made exceeding dry, are so changed, that aPound  
'of Oil heing six times distilled, in the way of Cohobation upon  
. fresh Quantities of Lime, with an extreme Degree *os* Fire,  
there came over fifteen Ounces and an half of Water; and one  
Ounce os Oil, according to the Observation of Mr. *Hombcrg..*- Hence these Oils are found to consist principally Of elementary  
- Water and Earth, a little Oil, Spirit, and Salt; and therefore  
. grew from the Union of those different Principles by the Action  
os the Fire: Whence Oil is not a simple elementary Body, but  
a Compound of several others. But whether this be really the  
Case, or whether Experiments may shew, that these Oiis are  
rather transmutable, I do not take upon me to determine. .

I2. This may be said with greater Certainty, that the more  
excellent of these Oiis, being dissolved in highly rectified Spirit  
osWine, digested and distilled with a gentieFire os one hundred  
Degrees, give out their native Spirit, to the Spirit of Wine,  
leaving a tenacious oily Matter behind ; which, being again  
treated in the same manner with fresh Spirit of Wine, affords  
more; and thus at last remains an indolent, scentless, insipid,  
thick, and tenacious Body of Oil, perfectly deprived os all its  
Spirit. And, is even pure Water be long shook with these  
Oils, it takes to itself their Spirit, becomes rich therewith, and  
thus robs the Oil os its Virtue; so that, if the Operation he  
often repeated, it at length leaves the like indolent Remainder  
. as the Spirit osWine. And hence we are furnished with ex-  
. .cellent Preparations, and learn, that these Oiis are separable  
into Spirit and Oil, a little Salt, muchWater,’and much Earth;  
- at least, that these are producible from them by Distillation.

But nothing here seems stranger, than thatWater should remain  
io tenaciously mixed with these Oils, as not to be separated  
from them by Distillation twenty times repeated.

I 3. Hence, again, it is confirmed to us by this whole History,  
(I.) That the peculiar Taste and Odour os Plants wholly reside  
in their native Spirit, (a.) That the Taste and Odour os  
distilled aromatic Waters is solely owing to this Spirit, as pecu-  
liar to each Plant. (3.) Thatessential Oiis, also, have their

respective Characteristics from these Spirits alone. (4.) That  
the Volatile Oil of Plants principally serves for detaining these  
Spirits, and the fixed Oil for connecting the solid Parts togs--  
these; whence the Difference of these two Oiis is Very great.  
(5.) That both the expressed and distilled Oils, before explained,  
.are tolerably natural in the Plants themselves/ And, f6.) That  
the Difference Of Oiis is principally owing to their Spirits.  
*BoerhaavesChyrtistry.* "I ι

Oiis drawn hy Expression are from Nuts and Seeds; and  
those for internal Use are to he drawn cold, becatsse the Fire,  
or any Warmth, .which facilitates the oily Parts to flow out in  
greater Quantities, is supposed to communicate somewhat to  
such Oiis, that damages their Virtues, considered as Softeners;  
and likewise forces out somewhat that gives them much fouler  
Scents, than when drawn cold j though ‘ it is probable, that  
there may be Purposes, for which some of these Oils are pre-  
scribed, which might be better answer’d by the common way .  
*of* Expression with Warmth ; aS where the Oleum Liniis given  
for a Detergent, vzhich it often is, the Property making it *so .*is certainly more increas’d, by heing drawn by Heat; and all  
the Objection in this Case is, that it is not so cleanly upon the  
Palate. \* . z

The common way of. prescribing these Oils internally, hath  
been alone,, or in Linctuses; but a much neater way is in  
Emulsion. But although the College direct these to be drawn  
from many Materials, yet there are none of them in Use, be-  
sides that os sweet Almonds and Linseeds internally, and-  
the Oleum Macis, Laurinum, and Palmae, externally: Tho'  
the last is not taken notice os in the Dispensatories, but  
brought much into Practice by those Travellers who have learn-  
ed its Use in the Countries where it is made.

The next Class of Oils are such as are made by Infusion, or  
Decoction, wherein some ’ Herb or Flower hath its Virtues  
drawn out by the Oil.- Of those in Use are the Oleum Rosa-  
ceum, Chamaemelinuin, Hyperici, Liliorum,.and Sambucinum ;  
and these require somewhat different in their making, on ac-  
count Of some different Qualities in the Things themselves; as  
the scented Flowers, particularly the Roses, do better by long  
Insolation, only in such a Warmth as the Sun will give ; be-  
Cause much boiling would exhale their more fragrant Parts.  
But Oils impregnated with green Herbs, as Chamomile, and  
Elder, require long boiling, before they receive that green  
Colour which is desired in them. It is to be observ'd concern-  
ing these things which require boiling, that, no Oils will bear  
such Management without turning black, any longer than there  
remains some aqueous Humidity, which is herein supply’d from  
the Juice of the Herbs: When, therefore, they grow crisp for  
want of farther Moisture, the Process is finish'd.

There are, likewise, directed, in the Dispensatory, many com-  
pound Oiis, to be made, aster the same manner, by Infusion or  
Decoction; and the like Rules are to be observ'd in them, as  
in the simple ones, *squires.s Praelect. Pharm.*

**DIRECTIONS fer preparing OILS** *from the* **College Dispen-  
satory.**

**QLEUM ABSINTHII.** *Oil os. Wormwood.*

Take of Wormwood, one Pound; and as much Spring-  
water as will stand above it three or four Fingers-breadth;  
distil in a large Alembic, with its Refrigeratory, or in a  
Copper Body, with its Head and Neck winding in a spiral  
Form, through a Vessel of Water. Let the Oil which  
comes out with the Water be separated by a Glass Funnel,  
called the *Separatory* ; and keep the Water so cleared of

- its Oil for another Distillation.

After the same manner are procured the Oils of Marjoram,  
Mint, Origany, Penyroyal, Rosemary, Rue, Savine, Sage,  
Savory, Thyme, *etc.*

After the same manner is prepar'd the Oil os Damaik Roses,  
of Chamomile and Lavender-flowers; as indeed from all other  
warm Herbs and Flowers.

From the same Procedure, also, are procuredshe Oils from  
the dryPeels of Oranges, Citrons, and Lemons: Although Oils  
may, also, be drawn from the same Peels, while green and  
succulent, by bruising and distilling with a sufficient Quantity  
of Water, both in a greater Quantity, and aS useful to any  
medicinal Purposes.

**OLEUM ABSINTHITES.**

This is made after the same manner as the Oil of Roses, by  
a triple Maceration of sour Ounces os the Tops os common  
Wormwood in three Pints of ripe Oil, adding three several  
times four Ounces of the Juice of Wormwood, and evapo-  
rating it again over the Fire, by a flow Boiling.

**OLEUM AMYGDALARUM AMARARUM.** *Oil of bitter  
Almonds.*

It is made after the same manner as that Of the sweet Al-  
monds, unless that there is no Occasion for blanching; nor  
**can** there so much Inconvenienhy arise from any Heat made  
Use of to facilitate their Pressure. After the same manner is  
drawn the Oil of Hasel-nuts, Ben, Acorns, and of Nutmegs,  
from the Nut; as that of Mace, from the second reticular  
Coat of the same Fruit.

**OLEUM AMYGDALARUM UULciUM.** *Oil offweet Almonds.*

Take *os* sweet Almonds fresh and dry, as many as yon  
please ; break and throw away the hard Shells, and blanch  
the Kernels; then beat them in a Stone Mortar, and by  
degrees press out the Oil, without any Help of Fim.

**OLEUM AN'ETHINUM. See ANETHUM.**

**OLEUM ANTIM0NH. See ANTIMONIUM. ‘**

**OLEUM Ε B ACCIS JUNIPERI. .** *Oil of Juniper-berries.*

Take two Parts of Juniper-berries ; os Sea-salt, one Part:  
Bruise them together; and, with a sufficient Quantity of  
Spring-water, distil next Day in the common Vessels.

**OLEUM CARyINUM.**

It is made after the same manner from Walnuts,

**OLEUM DE CASTOREO. See CASTOR.'**

**OLEUM DE CASTOREO COMPOSITUM. See CASTOR.**

**.OLEUM CERAE.** *Oil of Wax.*

With yellow Wax, melted one Pound, mix three Pounds of  
Brick-dust ; put them into a Retort, and draw off the Oil  
in a Sand-heat, and rectify that with new Brick-dustr Or  
to the Oil just drawn off put double the Quantity of fresh  
Wax fliced, and again distil with a Retort in a Sand-heat.

After the fame manner are distilled Oiis from sat Substances;  
as, also, from Gums and Resins, that cannot be reduced into  
Powder. . ' '

**OLEUM CHAMAEMELINUM. SeeCHAMAEMELUM.**

I . - - .

**OLEUM CHAMAEMELI CHYMICL** *Chemical, or Essential  
Oil of Chamomile.*

This is prepared in the same manner as other chymical, or  
essential Oils. The Plant affords but a small Quantity of this  
Oil, as all do which seed littie; and is, therefore, dear. It is used  
principally, as the Oil of Cloves, to correct Purgers ; and  
sometimes, also, it is given as a Carminative, in Boles, a Drop  
or two to a Dose; and it doos often good, by suddenly remov-  
ing those Flatuses, which occasion Stitches and Pains of the  
Side. -

**OLEUM CHEIRINUM SEU KEIRINUM.** *Oil of Wall-stoWcrs.*

This is made of the Flowers, and Oil, in the same manner  
as that of Dill. " \*

**OLEUM CHRYSOMELINUM.**

This is made by the Expression of Apricock-kemels. After  
. which manner, also, is procured Oil from the Kernels os Chet-  
ties. Peaches, Pine-nuts, Pistachio-nuts, and Plums ; as, also,  
from the Seeds of Oranges, Hemp, Bastard-saffron, called  
*Chieus,* Citrons, Cucumbers, Gourd, Citrals, Dwarf-elder,  
Henbane, Lettuce, Linseed, Melons, Poppies, Parsley, Horse-  
radish, Rape, the greater Cataputia, Nicinus, (called. *Oleum  
Cicinum, Recininum,* and *de Larva)* Sesamum, called *Oleum  
Sesuminum,* Mustard, and Grape-stones.

**. . OLEUM COS TINUM.** *Oil of Crostus.*

Take of tho bitter Costus-root, two Ounces; os Cassia-  
wood, one Ounce; of the Tops of Marjoram, eight  
Ounces: Grosiy bruise them together, and macerate them  
for two Days, in twelve Ounces of aromatic White-wine ;  
and then, with two Pints os Olive-oil washed withWhite-  
wine, let them he boded in *Balneo Mariae* to the Con-  
sumption of the Wine.

**OLEUM EUPKoRBII. See EURHORBIUM.**

**OLEUM DE EUPHoRpIO COMPOSITUM. See EUPHOR-  
SIU at.**

**OLEUM eXCESTRENSE. SeeEXCESTRENSE OLEUM.**

**OLEUM oivE BAtSAMUM SIMPLEX HYPERIcI.** *Simple  
so . : . . Oil, or Balsam of St. Jusodi y/ori. '. - - . -. .y.*

. Thisismade from the Oil of the Seeds of St. John’s- worts,  
ground in" a Mill, and pressed out, with the Addition of.the  
Flowers of St. Johnss-wort, duly macerated together.

**OLEUM KYPERICI COMPOSITUM.** *Compound Oil of Se.*

*Juhrfs-vvont. ’.'so*

Take of fragrant White-wine, one Pint; os the Tops os  
St.Johnss-wort, with the Flowers and Seeds,Jour Ounces:  
Let them be bruised, and macerated in a Glass-vessel well  
stopped for three Days, in one Pound of Linseed-oil,  
either in the Sun, or a Bath-heat, and then pressed out':  
Let a second and third Infusion be made os the Tops of  
St. Johnss-wort, after the same manner, without the  
" Wine ; and, after the third Infusion is boiled to a Con-  
sumption of almost all the Wine, press it out; and added  
Turpentine, three Ounces; and Saffron, one Dram ; and  
then give it another gentle Boil, arid put it by for Use. .

This is very near copy’d after the *Augustan Dispensatory ;*for the first of the College hath got a very different Sort, with  
the Addition of many Ingredients, that are os much more  
Trouble than Advantage: It is there called *Oleum Hypocicp  
Compositum, seu Balsiarnum Magistrale Florent.* And it is con-  
tinued down to the last but One, under the Title os *Oleum Hsu  
perici magis Compositum* ; yet it was hardly ever used, being an  
injudicious Contrivance: It is now justly' rejected, and this  
only retained, which in pot so tedious to make, and is well  
esteemed by our Surgeons, for many Intentions of Consequence;  
tho' for some Purposes they blame the Turpentine and Saffron,  
and certainly with good Reason.

**. \_ OLEUM IRINUM.** *Oil of Orris.*

Take of *Florentine* Orris-root, three Pounds; four Ounces  
of white Lily-flowers, with their yellow Heels cut offv  
fifteen Ounces os fresh Cypress, root; six Ounces of Ele-  
campane ; three Ounces of Bugloss-root; two Ounces ,  
of Cinnamon; Spikenard and Benjamin, one Ounce.  
Bruise all as they require, and macerate them together, in  
the Sun, or any warm Place, in fifteen Pounds of old Oil,  
and four Pints and an half of Spring-water; and, after sour  
Days and an half standing in that manner, boil them *in  
Balneo Maria,* to the Consumption of the aqueous Hu-  
midity; then strain by a strong Pressure, and put by for  
Use.

*Mesue* hath given a very concise Prescription of this, with  
nothing but the Orris-roots and Flowers, which the *Augustan*Collection hath preserved ; it is, also, in the first Dispensatory  
of the College, amongst the simple Oiis; but this Prescription,  
which is, also, there, is from *Nicolaus Alexandrinus* ; and, not-  
withstanding it hath been continued down to the last Edition of  
the College, it hath yet been very littie called *for in common  
Practice,* and hardly, I believe, ever made. - .

**OLEUM LATERITIUM PHILOSOPHORUM.** See LA-'

**TER. - .**

**- OLEUM LAURINUM. See LAURUS.**

**OLEUM LILIORUM.** *Oil of Lilies. - .*

**I**

This is made in the same manner as the Oil Of Roses. -

**OLEA EX LIGNIS AROMATICIS.** *Oils from aromatic Woods..,-*

AS from Sassafras, Rhodium, *etc.* the Woods must first be  
rasped, and then distilled.

**OLEUM LUMBRICORUM. See LIrMBRICUS.**

**- OLEUM MAj OR ANAE.** *Col of Marjoram.*

Take of the Herb a little bruised, four Ounces; of good  
White-wine, fix Ounces ; of Oil, one Pound : Let them  
be mixed together, macerated, and expressed, and fresh  
Herbs put in to the third time ; and then the Wine evapo-  
rated by boiling, in a double Vessel.

**OLEUM MAJORANAE CHYMICUM. - See OLEUM AR-  
SINT HU.**

**OLEUM MANDRAGORAE.** *Oil of Mandrake.*

Take common Oil, two Pounds; of the Juice of Man-  
drake-apples, or, in their Defect, of its Leaves, four

Ounces; of the Juice Of white Henbane, two Ounces;  
ef the Juice of black Poppy-heads, three Ounces; of  
the Juice of Violets, and young Hemlock, of each one  
Ounce; of Opium, and Storax, os each half an Ounce. Let  
the Juices, with the Oil, be exposed to the Sun; and  
after ten Days standing, boil them leisurely to the Con-  
sumption of the Juices ; then sprinkle in the Opium fine-  
ly powder'd ; and work in the Storax, first distolved in a  
sufficient Quantity of Turpentine.

This is intended against Inflammations, to procure Sleep ;  
and ease Pains of the Head, by washing the Temples and  
Nostriis with it ; but it is rarely prescribed, and hardly to he  
met with ready made.

OLEUM MENTHAsi CHYMICUM. **See 'OLEUM  
ABSINTHII.**

**OLEUM MYRRHAE PER DELIQUIUM.**

Boil Eggs till they are hard-, split them in the Middle, and  
take out the Yolks; fill the Cavity with fine Myrrh in  
Powder ; place them upon little Sticks about an Inch and  
a Quarter long, three or four os them being prick'd into  
the egg; set them in a clean Pan in a Collar, or some  
such moist Place ; and there will drop from them into the  
Pan a Liquor, which is call'd *Oil of Myrrh.*

This is used only externally to take off Blemishes and Spots  
on the Skin, and is commended aS excellent for such Purposes.

**OLEUM'NARDINUM.** *Oil of Spikenard.*

Take os Spikenard, three Ounces ; of sweet Oil, onePotind  
and an half; of aromatic Wine, and clear Water, of each  
two Ounces and an half: Boil them together in a double  
Vessel, over a gentle Fire, often stirring them, till all the  
aqueous Humidity is evaporated.

**OLEUM NARDINUM CoMPOSITUM.** *Compound Oil of  
Spikenard.*

Take of Spikenard, three Ounces ; Of fresh Marjoram, two  
.Ounces ; os Aloes-wood, Calamus Aromaticus, fresh Ele-  
campane, Cypress, fresh Bay-leaves, of Mace, Camels-  
hay, and Cardamoms, os each one Ounce and an half.  
Let all grofly be beat together, and macerated for a whole  
Day in Water, and generous Wine, of each fourteen  
Ounces; and Oil of Olives, four Pounds and an hast:  
Then with a flow Heat, and in a double Vessel, evaporate  
the Wine and Water, so as to have the Oil perfectly by  
itself.

This is originally ascribed to *Mesue,* and hath hardly been  
omitted in any Officinal Dispensatory since his Time: Tho'.  
where here is put Cypress, in the *Augustan,* is Mace, and, in  
the first Edition of the *London, Indian* Leaf: But such are not  
Alterations of any great Consequence. It is seldom used Or  
made. .

**OLEUM NICOTIANAE.** *Oil of Tobacco.*

Take of Tobacco-juice, and common Oil, each edual Parts ;  
' and boil them in a Bath-heat, *S. A.*

**-. OLEUM PAPAVnRis,** *Oil of Peppier,*

Is made of the Flowers, Heads, and Leaves of Garden Pop-  
pies, and Oil of Olives, in the same manner aS the **OLEUM  
ANETHINUM.**

**OLEUM ROSACEUM.** *Cyl of Rasies.*

Take of the exungulated red Roses not quite blown, and  
bruised in a Marble Mortar with a wooden Pestle,. four  
Ounces; of clean Oil of Olives, one Pound fexpose them  
to the Mid-day Sun, in a Glass Vessel well stopped, for a  
whole Week, and shake them together every Day; then  
fently simmer in a Bath-heat, and press out the Oil:  
nt in fresh Roses, which manage after the fame manner ;

and repeat the Process a third time ; and then let them  
stand together for forty Days; at the Expiration of which,  
set by the Oil for Use, without pressing out the Roses.

This is much the fame aS the *Oleum Roscatum Omphacinum*of the *Augustan* Dispensatory; and the first os the College, and  
the *Olenin Roscium Compositum* os the *Augustan,* and the *Oleum  
Roscium Completum* of the first College Dispensatory, heth

ascribed to *Mesue,* differ from it so little, that they have imt  
heen thought worth any Notice here.

**OLEUM iRUTACEUM,** *Oil of Rue,*

**Is** made Of the bruised Herb, and rrpe O3, as the Oil os  
Roses. .. ' -

**OLEUM SABINAE,** *Oil of Savins,*

Is made after the same manner as the foregoing.

**Ο’τΒσώ SAMBUcINUM,** *Oil if Elder,*

*IS* made from the Flowers And Oil, as the Oil of Roses, ;-

**.OLEUM E SEMINIBUS ANETHI. See ANETHUM.**

piis from the Seeds of Anise, Caraway, Cumin, Carrot,  
Fennel, Parfley Saxifrage, and others, are prepared like the  
oil of Dill. - . . : . su t su \_ .

As, aim, the aromatic Oils, from Cinnamon”, Cloves;  
Mace, Nutmegs, Pepper,, and others, which for these Pur-  
poses are not to he powder'd, but only cut small, and slightly  
bruised. ......... . . ...

**OLEUM SIVE SPIRITUS TEREBINTHINAE. See TERE-  
BINTHINA. . . .**

**OLEUM SUCCINI. See AMBRA. . .**

**OLEUM SULPHURIS. See SULPHUR. -. . .\_**

**OLEUM TARTARI PER DELIQUIUM- See TARTARUS.  
OLEUM VITRloLI. See VITR1OLUA1.**

**OF DISTILLED OILS, AND THE CAUTIONS TO BS  
- OBSERVED IN THEIR DISTILLATION.**

'Tis certain, that there is a pinguious and inflammable  
Principle, by the Chymists called Sulphur, lodged in all mixed  
Bodies which are easily changed and destroyed ; and that this  
Principle i the Matter of their Inflammability, and the Cause  
of their principal Virtues. But fit is sufficiently evident sroni  
various Phenomena, and a great Number of Effects, that this  
Principle os mixed Bodies is not, in each, of one and the  
same, but of Vastly different and even disagreeing Natures  
for, in some Bodies, this sulphureous Principle is os a Nature  
so highly fixed, and temperate, as to act on the Body without  
any Heat, as we principally observe in the Oiis expressed from  
Seeds, or in the Fat and Lard of Animals; all which, tho' in-  
flammable, yet, because they are destitute of that volatile and  
ethereal Principle, do but little heat or alter .the Body. But  
'tis far otherwise with these Oils, which have a strong Smell  
and Taste; and which, upon the Application of a somewhat vio-  
lent Heat, are evaporated into the Air, or distilled; since these,  
when used in a very, small Quantity, exagitate the Body with **a**Violent Heat and Motion. Oiis of this kind are principally  
sound in theVegetable Kingdom ; for from Animals, and their  
Parts, such hos, ethereal, and subtile Oils of a strong Smell,  
cannot be obtained by Heat alone, nor extracted from them  
when macerated in Water, by means of an Alembic, or any  
Other chymical Instrument: Of the fame kind are those Bodies  
with which we are supplied from the Mineral Kingdom ; sor  
from such bituminous Substances, Amber, for Instance, Jews-  
pitch, and common Sulphur, no subtile Oil can be obtained by  
a moist Distillation ; but these hot, volatile, and odorous Oiis,  
are only to be obtained from the Vegetable Kingdom, tho' all  
Plants and Vegetables do not yield such an Oil, but only such  
of them as have a strong and permanent, and not a slight **and**Superficial Smell, aS most Flowers have ; for 'tis to he said  
down as a Maxim in Chymistry, that those Vegetables, which,  
by Attrition and Heat, diffuse *n* strong Smell, by a moist  
Distillation, afford a subtile Oil; so that the more permanent  
and strong the Smell is, the larger Quantity of Oil is afforded ;  
and the more sweet and fragrant it is, the more grateful  
and agreeable the Oil, also, ist And the Opposite of this holcis  
true.

, For this Reason we may, from the penetrating Sinell, form  
an Estimate of the Quality of the distilled Oil, and from that  
judge of the Degree of Smell. That Maxim os the Chyinista  
is. therefore true. That Sulphur is, aS it were, the Parent and  
Principle, from which Smell proceeds ; but 'tis to be observed,  
that many Bodies,, ‘winch affect the Tongue with a strong and  
acrid Taste, yet afford little or nothing by Distillation; because  
they are destitute of Smell. This is sufficiently evinced in  
the Root of Arum, Ginger, Pepper; Zedoary, Mustard,  
and Water-cresses: All which are os a very strong Taste ; for.  
these, when subjected to Distillation, afford little or no Oil: An  
infallible Proof, that the Principle os Taste is different from  
that os Smell; fince the Matter of the latter'is volatile and  
moveable, whereas that os the former is fixed, tho', at the  
seme time, penetrating. Hence it follows, that Medicines, or

Mixtures, ofa strong Taste, without any Smell, such as Pepper,  
Ginger, and Mustard, do not heat The Body so much, nor  
throw its Humours into shch strong Commotions, as those  
Substances, which, having a strong Smell, yield a large Quantity  
os Oil in Distillation.. Hence we justly infer, that fragrant Aroma-  
tics, soch as Cloves and Cinnamon,are of an hotter Nature  
than Ginger Or Pepper, which are absolutely destitute ***of***Smell. -

But in some Vegetables there are OflS of almost three  
different Kinds.- The first is mild, and is that which is gene-  
rally express'd from their Seeds; the second is that obtain’d  
by moist Distillation, and the third, that yielded by dry Distil-  
lation, Or Combustion : For fromrhe Seeds of such Vegetables,  
those Of Baum, sor instance. Origanum, and Hyssop, a tempe-  
rate Oil, with little Smell, is express'd. From the Leaves Of  
these Herbs and Flowers there is distil'd with Water, from an  
Alembic, an Oil of an highly fragrant Smelland what is left  
in the Alembic, when dried, and subjected to a dry Distillation,  
yields an empyreumatic Oil, Of an acrid Taste, and fetid  
Smell, for we are Carefully to distinguish between these Oils,  
which are easily by a flight Fire, and strong Heat alone. Ob-  
tain'd in the Form of Exhalations Only, and those which, by a  
strong and dry Heat; are extracted from mixed Bodies; since  
the former rather Constitute the fluid Parts, which nourish the  
Plant, and circulate thro’ its Vessels; whereas the latter are  
Obtain’d from the solid Parts Of the Plant, the Texture lof  
which is far more firm. Hence they require a stronger  
Degree Of Heat, Or a brisker Fire, for their Extraction. As tor  
the Distillation of subtile ethereal Oils, the following Directions  
are to be observ'd..

From Flowers and Herbs gently and gradually dried in the  
Air, more Oil is Obtain'd, than if they were humid, and as  
yet recent from the Earth: Thus, two Pounds of the dried  
Flowers Of Spike yield an Ounce Of distflsd Ofl, whereas, if  
they are distil'd when recent, they hardly yield above half  
of that Quantity : The same Observation, also, holds good with  
respect to Baum, Sage, Marjoram, and Mint. The Reason is  
plainly this: By the gentie Drying, the aqueous Moisture is Only  
Carried off, thro' which the resinous Particles were dispers'd ,\*  
so that the former being remov'd, the latter are more united,  
and more quickly join with each Other; and, because from  
two Pounds of the moist Plant we obtain no more than from  
one Of the dried Plants, and because a littie of the subtile Oil  
is evaporated, it follows, that more Oil must be Obtain’d from  
theory than from the moist Plant. But 'tis to be observ’d,  
that if the Herbs are dried by an excessive, or too long pro-  
tracted Heat, the Ofl Obtain’d is not Only in a smaller Quan-  
tity, but, also. Of a thicker Consistence, and more saturated  
Colour, because, by the immoderate and long-continued Hear,  
the more subtile Parts Of the Oil are too copioufly exhal’d, and  
dissipated in the Air. Besides, there is this Difference between  
Oils obtain’d from recent Plants and Flowers, and such aS are  
yielded by them when dry, fince the former are Of a more  
mild and grateful Smell, and a fainter Colour, tho’ their  
Quantity is less ὁ whereas the Otis Obtain'd from them, when  
dried, are more penetrating, Of a deeper Colour, and a less  
grateful Smell.

Before Distillation, the Herbs to be distil'd must he mace-  
rated in Water. But, for this Purpose, we are to use River-  
water, but not Spring-water, which is too hard ὁ nor Rain Or  
Well-water, which is too thin; fince the former is unfit for  
Solution and Extraction, whilst the latter has a strong Tendency  
to Putrefaction. It is, also, tO be observ'd, that three Parts  
Of Water are to be us'd for One Part Of the Substance to he  
distil’d.

A few Handfuls. Of Common Salt are to be added. Thus,  
forTnstance, to ten Quarts Of Water we may add three Or  
four Handfuls Of Salt: And this Caution is Very necessary, be-  
cause the Common Salt not only assists the Extraction Of the  
oleous Parts, but prevents Putrefaction. Besides, by this means  
the Water is rendered heavier, in consequence Of which it  
prevents the Descent Of the Substance to be distil'd, lest, sub-  
siding tO the Bottom Of the Alembic, it should be bura'd. In  
my Opinion, common Salt, also, contributes to the Depura-  
non Of the Oil, and lays a Foundation for its being distil'd  
Clear, and not turbid. Others advise the Addition Of an alcaline.  
Salt, Pot-ash, or Tartar; but I can by no means approve Of  
this, because Tartar is with Difficulty dissolv'd; and alcaline  
Salts dispose to Putrefaction, which in Distillation is to be care-  
sully guarded against.

The Maceration is not to he tOOlong, and in the Summer-  
time is Only to be continued for twenty-four Hours, because,  
if the Mixture stands longer, it approaches tO Putrefaction ,  
especially if the Herbs are turgid with a penetrating Oil, such  
as Meat and Marjoram particularly are.

In the Distillation Of Oils, three Parts of the Alembic areto  
he fill'd, and Only One left empty; for, when too great a Space  
is lest, the Oil ascends with Difficulty, and, if it is urged by too  
strong a Fire, loses its sweet Smell, nor in this Case is the Oil  
so easily rais'd, aS is commonly imagin’d, but, if the Alembic

is too full, it readily happens, chain during the Action ofa brisk  
Fire, the Mixture either runs Over the Alembic, Or the slimy  
Particles Of the Herbs are, at the same time, elevated: Hence  
the Oils are turbid, aS if Slime had been put into them , and,  
tho’ in the Beginning, a considerable Degree Of Heat is requisite,  
in Order to make the Water boil, fince without this Circum-  
stance the Ascent of the Oil is difficult; yet the Distillation is  
afterwards to be carried on fry a moderate Heat, lest the Oil  
should he exhal'd like Smoke from the Beak, and dissipated in  
the .Air: In managing the Fires we are farther to observe, that  
a flaming Fire is at first necessary, whereas afterwards one of  
live Coals is sufficient. The Distillation may be finish’d in four  
Or five Honrs, nor is it expedient to protract is longer, because  
the Oil, which is wanted, first ascends, and then a Water, which  
as it is not destitute Of Virtue and Smell,is to be us’d in afresh  
Distillation. - .

AS the Oils to be distil’d differ Inuch from each Other with  
respect to their Texture, Weight, and Degrees Of Subtility;  
so, in distilling each, particular Cautions are requisite, sor such  
aS are heavy, and subside to the Bottom, such as the Oiis Of  
Cloves, Cinnamon, and Sassafras-wood, as, asso? those Oils  
winch are COndenssd in the Cold, such aS the -Oils Of Anise,  
which In Weight surpasses Other Oiis, those, for lnstance, of La-  
vender, or Marjoram, since Our Statical Instrument, which  
descends in Other Oils, stoats in this; such Oils are to be distil’d  
from a lower Alembic, and with a greater Degree Of Fire, than  
the more light and subfile Oils.

Because Oils differ with respect to their penetrating Qua-  
lities, their strong Smells, and powerful Virtues, the Oils Of  
Marjoram, and Rosemary, On account Of the copious Volatile  
and acrid Salt they contain, ought to he distil'd with a far more  
gentle Heat, than the Oil os Mint, which requires a gentler  
Heat, than the Oil of Spike, which, again, requires a still more  
moderate Fire, than Oil of Lavender, which is highly subtile;  
for, if thefe Oils are urged by too intense an Heat, they lose  
their grateful Smell, and genuine Taste, and not Only acquire  
an acrid Taste, and a strong Smell, but, also, assume a more  
yellowish and brownish Colour; for it can hardly he imagin'd,  
how much the Texture of Oils is chang'd, only by the Degrees  
Os Fire.

There is, also, a considerable Difference in the Distillation Of  
Oils, with respect to their Colour, Consistence, and the greater  
Or smaller Quantity yielded by the Things to be distil’d ; for,  
with respect to Colour, the Oil Of Cloves is yielded Very  
white; as, also, the Oils Of Sassafras, Wood, and Cinnamon,  
which, however gradually, and especially when exposed to the  
Open Air, in a Glass which is not full.. Change their Colour,  
and generally become yellowish, and, at last, redish. Oil of  
Lavender is highly limpid; that of Spike js a greenish-yellow  
Colourὁ and the Oils Of Mint and Marjoram are yellow; bus,  
when distil'd by too intense an Heat, they are redish, the Oil  
Of Rue is Of a brownish Colour, and that of Wormwood ofa .  
darkish-green Colour. The Oil obtain’d from Chamomile-  
flowers, without the Addition of other Substances, is Of a beau-  
tiful bluish Colour - aS, also, the Oil Os Yarrow-flowers. But this  
grateful bluish Colour, especially when the Oils are exposed  
to the Open Air, is, in Process Of Time, chang'd, totally destroy'd,  
and degenerates into that Of a Dark-yellow.

Oiis, also, differ with respect to their Consistences; for  
some are yielded, not in a thin and liquid Form, but stoat  
Coagulated like Butter, which holds principally in Oil Of Roses ,  
or firmly adhere, like a thick Magma, to the Sides of the Glass,  
Or the leaden Pipes, thro5 which they pass; .so that they Can-  
not without Difficulty, and an Infusion Of rectified Spirit Of  
Wine, be separated, as we may principally Observe in the Ost  
Of Wormwood, and that Obtain’d from the Tops Of Yarrow:  
And Other Oils, Or Spirits, distil'd in the same Vessels, must  
‘ have a foreign Colour, Taste, and Smell, unless the Vessels are  
previousty well washed.

. in the Distillation of Oils there is, also, a considerable Differ-  
ence with respect to the Quantities yielded , for some Vege-  
tables afford a large Portion, others a moderate Quantity., and  
Others but Very little. Among all the Productions of the Earth,  
I know no Simple, which, besides its Turpentine, yields a larger  
.Quantity Of Oil, than SaVine, fince One Pound Of it, in the  
Alembic, yields almost three Ounces Of Oil. Hence, from two  
Pounds Of it, if the Distillation is duly manag’d, at least five  
Ounces Of Oil may he obtain'd. SaVine is succeeded by Nut-  
megs, a Pound Of which yields One Ounce Of Oil, which, by  
Distillation from an Alembic, is rais’d, whilst, at the same time,  
there is left at the Bottom a large Quantity of Oil, which does  
not pass over the Helm, but is generally express'd from the  
Nutmegs. Hence tis Obvious, that theso Nuts abound with a  
large Quantity Of mild and fin'd Oil, whiob in obtain’d by  
Expression, as, also, with a subtile Oil procur’d by Distillation.

Among Flowers, those of rhe Spike abound most in Oil.  
Hence, four Pounds Of these Flowers, when dried, afford full  
three Ounces of Oil; but a smaller Quantity is obtain'd from  
the Flowers Of Lavender, since four Pounds of them yield only  
one Ounce Of Oil, which, however, is of a far more grateful and

fragrant Smell, than that cr Spike: Four Pounds Of the Leaves  
Os Mint, gently dried, yield an Ounce and an half of Oil -  
whilst, from an equal Quantity Of the Leaves of Minimam,  
hardly one Ounce can be obtain'd. From fifty Pound; Of Cala-  
mus Aromaticus, I only Obtain’d two Ounces Of Oil: There is  
but a Very small Quantity of Oil in Mother os Thyme;  
neither is a large Quantity of Oil afforded by Rue: Andino’  
this Plant is Of an acrid Taste, and penetrating Smell, yet ten  
Pounds of it yield Only half an Ounce, or two Or three Drams,  
os Oil. Hence 'tis certain, that in this Simple the saline is su-  
perior to the olsouS Principle

The Flowers Of common and Roman Chamomile yield  
but a Very small Quantity of Oilὁ for which Reason it must,  
when genuine, be told at a pretty dear Rate, sor the Oris of  
that kind, as commonly sold, are almost all adulterated: The Ca-  
lamus Aromaticus, also.'tho' Of a pretty acrid Taste, affords but  
tittle Oil

The Four Carminative Seeds, which are Anise, Dill, Caraway,  
and Fennel, yield a large Quantity of Oil, but those commonly  
sold are generally adulterated.

We are, also, to advert to the 'specific and distinguishing  
Taste and Smell of some Olis. Thus, the Oils Of Thyme and.  
Savory are so acrid, as to Corrode the Nostrils. The Oil Os  
Wormwood, which is highly bitter, fills the Head with a fetid  
Vapour, and Tis to be observ'd, that this Oil,-when distil’d  
from green Wormwood, is green; but of a brownish-yellow  
Colour,-when obtain’d from old Wormwood. The Oil Os Cher-  
vil, in Taste, resembles that Of Fennel, Oil Of Tansey. in Smell,  
greatly resembles the Herb from which it is Obtain’d.

It is in a particular manner to be Observ'd, that Plants, and  
their Various Parts, whether Seeds, Flowers, or Leaves, do not  
in all Seasons, and at every Age, yield equal Quantities of Oil,  
*for* if Mint, Thyme, Rue, Baum, or Marjoram, when recent,  
tender, and young, are subjected to Distillation, they yield  
little Or no Oil - but they must be arriv’d at a just Degree Of  
Vigour and Perfection , when, for Instance, they begin to rise  
into small Heads, or Flowers: And, as, in Old Animals, the  
Strength is much impair'd and diminish’d, so, also, old Plants  
lose a great deal of theft Virtues, and yield but little Oil.  
Hence 'tis Obvious, that the perfect strength and Maturity of  
Plants Consists in the Abundance Of the Oil they Contain, and,  
which is either large, or small, according to the Period os their  
Age.

Tis, also, to be observ'd, that the Seasons and Constitutions  
of the Year contribute greatly to the Obtaining a larger or  
smaller Quantity of Oil; for I have Often Observ'd, that if the  
Spring Or Summer are too moist, or rainy. Herbs, and their  
Flowers, Spike, for instance. Or Lavender, do not yield so large  
a Quantity Of Oil, as when these Seasons are moderately warm  
and dry: Hence we learn, that a due Temperature, Purity, and  
Γ)finest Of the Air and Weather, contribute greatly to bring Ve-  
getables to their due Maturity and Perfection.

**OF THE ADULTERATION OF DISTIL’D OILS.**

Tis a shameful, tho' true Assertion, that the true and genuine  
Oils Of Plants are rarely to be had in the Shops; since, inorder  
to increase their Weight and Price, 'tis customary, in distilling  
them, to mix with them pome pinguious or Other Substances Of  
little Value. As for the dear aromatic Oils exported from *Holland,*’tis Certain from Experience, that they are almost all adulterated, as  
is obvious in the Oils of Cinnamon, Cloves,Nutmegs, and Mace.

. But in these the Fraud is easily detected by pouring Alcohol of  
Wine, Or highly rectified Spirit of Wine, upon them; for this  
Liquor immediately resolves and imbibes the Particles Of the  
purer Oil, leaving in the Bottom a large Quantity Of express’d  
Oil; either Of Almonds, Or Ben-nuts. But rhe more skilful  
of the Chy mista haVe an artfiil Method Of concealing this Piece  
of Fraud, for they dissolve pure Oil of Cinnamon,or Cloves,  
by adding an equal Quantity of highly rectified Spirit Of  
Wine, which may be so prepared, that one Part Qf the Spirit  
may absorb One Part Os the Oil, whilst the Taste remains,  
and the Smell Continues sufficiently strong and penetrating, so  
that the Imposition is with Difficulty discover'd. But this Piece  
os Fraud is, also, quickly difcOVerO, if these Oils are poured  
into common Water; for then the Water immediately be-  
comes milky, which Effect is not produc'd by pure Oil, when  
put into Cold Water, and left to itself. There is still another  
Method Of adulterating the Oils of Plants, by mixing Oil os  
Turpentine, or Pine, with the Herbs to be distil’d, and this  
Piece Of Fraud is most commonly committed in preparing  
cephalic Oiis from Plants, which abound with a balsamic Resin,  
such aS Mint, Origanum, Sage, Rosemary, Marjoram, Savory,  
Thyme, Mother of Thyme, the Flowers os Spike and Laven-  
der, and Basilicon ; from which, by the Addition of these Oik,  
they Obtain a large Quantity of Oil, tho’ os a bad Kind, and  
inconsiderable Virtues, but fuch Oils, if the Plants are recent,  
retain their specific and distinguishing Taste and Smell. But  
this Piece os Fraud is easily detected; sor, if such Oiis are kept  
for some time, they lose their grateful Smell, and the disagree-  
able Odour Of the Turpentine remains. But there is still a more

expeditions Method Of discovering this Fraud ; for if a Piece  
of Cloth macerated in shoh Oil is put in a warm Place, Or  
exposed to an hot Furnace, the shbtile Fragrance is immediately  
exhal’d, and the Smell of Turpentine discovers itself

Besides, the cephalic Oiis, adulterated with Turpentine, or  
Oil Of Pines, are more limpid than the genuine Oiis, which are  
Of a deeper Colour. There is, also, another Method of detecting  
this Fraud; which is, when the Leiters of the Signature put  
upon the Month of the Glass become successively pale,  
which does not happen with, the genuine Oils; sor the Effluvia  
Of the Turpentine contain a subtile Acid, which, in' Process of  
Time, destroys the Colour Of the ink. Some, in the Distillation  
Of these Oils, instead of Turpentine, add Seeds which Contain  
a large Quantity Of pinguious Juice, such as those Of Poppies,  
and by this means that thick Oil, which at other times is  
generally express'd, with Difficulty passes the Helm, Ἔ rais'd  
and distil’d in Conjunction with a Portion of iubtile and ethe-  
real Oil: And this is the usual Method os adulterating the Ost  
Of Rueὁ for thss Rue is Of a strong Taste, and penetrating  
Smell, yet there is hardly any Plans, which affords a smaller  
Quantity of Oil: But pure Oil of Rue is easily distinguish'd  
from that which is adulterated, since, when genuine, it does  
not become thick and coagulated, when expos’d to the Cold;  
hut is inspissated, when it is adulterated with any express’d Oil.  
The Oils of Chamomile, and the Tops Os Yarrow, when pure  
and recent, are os a beautiful bluish Colour, which is afterwards  
Chang’d into that os brown, for, is this bluish Colour of the  
Oil Os Chamomile-flowers remain above a. Year, 'tis a sure  
Sign, that it is adulterated , for 'tis customary to min with it  
OU of Turpentine, which is of a deep-bluish Colour, on ac-  
count Os the Tincture it receives from the Copper Os the Vessel.  
Tis os great Importance Io the Physician, to ho able to distjn- .  
guish genuine from adulterated Oils; for these balsamic and  
cephalic Oils not only lose much of their Efficacy, but, also,  
acquire a foreign Quality, by being adulterated; and 'tis futh-  
ciently known, that all terehinthinaceous Substances Violently  
exagitate the Mass os Blood and Humours, and Create an intense  
Heat in the Body.

**OF SOME RARE** distil’d **OILS.**

In the Shops there are a great many Oils, most Of which  
may be Obtain’d by Distillation , but some os them ure yielded  
in so small Quantities, and are so rare, that they are sold ar very  
high Prices. But this Circumstance ought not to deter the Phy-  
sician from prescribing them, since they are of singular Efficacy  
in preserving and restoring Health.

Among the rare Oils, especially those obtain’d from the  
Woods, we shall first consider that of yellow Sanders, which,  
on account of its grateful Taste and Smell, and the large Quan-  
tity of Refin it contains, deserves to he more us'd in Medicine,  
than it has hitherto been, for it not Only yields a Very elegant  
Tincture, with highly rectified Spirit Of Wine, bur, also, the  
Wood itself, when rasp'd down, and macerated in Water sor a  
Considerable time\*, with the Addition Of common Salt, affords  
an elegant Oil, of an excellent Taste, .and admirable Virtues;  
since in Smell it resembles the Oil of Amber, a certain Sign,  
that it is possess’d Of a cordial Quality: It is most commodi-  
Oufly dissolv’d in some rectified Spirit, such as that of Roses,  
Or white Lilies, which are COmmodiousty mix'd with corrobo-  
rative, Cephalic, and stomachic Medicines.

From odorous and sweet-scented Aloes-wood is prepared an  
Oil Of a thick Consistence, of a whitish Colour like Camphire;  
for this Purpose about ten Pounds Of Aloes-wood are to be rasp’d  
down, triturated, and, after a sufficient Maceration in Water,  
subjected to Distillation in a Pretty large Still: Upon which, a  
small Quantity of a fragrant and delicate\* refinoUS, or rather  
Oleous Substance, is Obtain'd, but no more than half an Ounce  
was Obtain'd from the ten Pounds Of Aloes-wood. This Oil in  
quickly dissolv'd in Alcohol os Wine, and is an incomparable Me-  
dicine for restoring Strength, and corroborating the Stomach.

Among the rare and precious Oils, we may.justly reckon the  
Oiis of Scurvygrass, and *Syrian* Marum. A small Portion of the  
former is only obtain’d from a large Quantity of Scurvygrass ;  
but it is so highly Volatile, that it is with Difficulty preserv’d  
in Glasses, and must he carefully kept from evaporating in the  
Air, for winch Purpose some Cork the Glass well, and im-  
merse them in Water, partiy to guard against the Heat, and  
partly to prevent the Access Of the Air: It is, also, os fo pene-  
trating a Taste and Smell, that one small Drop of it Communicates  
a strong Taste Io an Ounce of the Spirit Of Wine; or a small  
Drop Of it dissolv'd, and pour'd into a Quart Of Wine, imparts  
so strong a Taste and Smell Os Scurvygrass to it, that it acts  
strongly On the Nostrils, and affects all the’internal Parts os the  
Head. This Oil is, also, very heavyfor, like Oil of CloveS  
and Cinnamon, it subsides in Water. It is sold at a oreat priCe,  
since in *England,* where large Quantities of it are prepar’d, one  
Ounce Of it is sold for Eight Crowns.

The next most considerable Oil is that os true Marum, aPlant which contains an highly acrid, volatile, and oleous  
Salt; for which Reason its Oil, in Tasta and smell, is hardly  
inferior to that of Scurvygrass, neither is it fold at a cheaper

Pate. Among rhe pate and littie knOwn Oils we may, also,  
reckon that or Βεsilicon, winch, on account Of its penetrating  
fragrant Smell, and he cephalic and nervous Virtues, is far su-  
perior to the On of Marjoram, tho' much dearer by reason Of  
the Scarcity Of BafiliCon.

True Oil of Baum, which is at present often mistaken for  
Oil Of Camels-hay, on account Of the Similitude of their  
Smells, may, also, ho reckon'd among the rare and precious  
Oils, because a large Quantity Of Baum yields but a very  
fmall Portion Of Oil. sta Scarcity is, however, compensated by  
its uncommon Efficacy in removing Diseases Of the Head, and  
Corroborating the nervous System.

Among the Oiis Of this kind, we may, also, reckon that Ofthe  
wild Cinnamon, which is not much known in the Shops.  
This Oil is, also dear, because a large’Quantity Of the Bark yields  
but very littie Of it.

Among the Oiis which are but little known, we may, also  
reckon that Os the *Ranunculus ofculenttis,* a domestic and  
Kitchen Herb, whose Oil is possess'd Of a fnbtile and pene-  
stating Taste, and a grateful Smell, and as the Water Of this  
Herb is highly efficacious in an Asthma, especially Of the moist  
kind, so, in this Disorder, the Virtues Of its Ost are mom C0n.  
fpichons, especially when mixed with Sugar, and exhibited;

' From black C urnin-seeds there is, also, an Ost prepar'd,  
winch is not much known, hut which is, of all Others, the most  
powerful Carminative.

- The Oil os *Cretan* Origanum, instead of which rhe Oils of  
Thyme sor Savory are generally us'd, by he acrid Taste and  
Smell, strikes the Nostriis strongly. Operates as an Errhine, and  
dissolves Phlegm: Some highly esteem'd this Ofl, as an Arca-  
num for curing the TOOth-ach.

There are, also. Other rare and precious Oils brought from  
the *Indies,* such as the Oil Of the Flowers of Cananga, the  
aromatic Oil of Cajeputnm, the Oil of Cedar, the Oil Of  
Culilabanum,, the Oil Of *African* HyperiCOn, the Oil of Kike-  
kunemali, theOil Of Spikenard, Oil Of Camels-hay, the Oil  
Of Malabathrum, and the Oil Of Camphire prepar'd with  
Cinnamon, each Of which has its proper Uses and Virtues.

Among the rare, precious, and useful Oiis, we may, also,  
reckon that obtain'd by Expression from recent Orange-peel;  
aS, also, theOil Of Mace by Expression, and that Obtain’d from  
the Flowers Os the Orange-tree duly distil'th

**SOME CAUTIONS TO BE OBSERV'D IN THE DISTILLATION .  
AND PRESERVATION OF OILS.**

It freqnentiy happens, that Oiis, in Distillation, are yielded  
cither too acrid. Or os too deep a Colour, especially if they  
are urg'd by too strong a Fire, and this is principally to bo  
Observ’d, when these Herbs which abound with a large Quan-  
thy Of acrid Salt, such aS Thyme, Savory, Marjoram, and  
*Cretan* Origanum, are subjected to Distillation; for, if tho  
Distillation is accelerated by too brisk a Fire, the Oiis not Only  
lose their grateful Smell, but, alsio, acquire a brownish or redish  
Colour, which by no means happens, if the Distillation is  
Carried on by a moderate Fite.

Hence we learn, that excessive Heat is Of groat Efficacy in  
changing the Texture Of Oils: And this Observation is applica-  
Ole to the human Body, since we see, that, by the intense Heat  
in Fevers, the temperate and sulphureous Parts Os the Blood  
and Humours are surprisingly agitated, so that it is not to bo  
wonder’d at, is' the oleous and temperate Principle of the  
Blood is converted into an highly saline sulphureous Matter,  
which, being discharg’d by Stool and Urine, renders the Faeces  
bilious and yellow, and the Urine intensely red.

'Tis not to be doubted, bur, if right Measures are taken,  
those Oiis, which, by too intense an Heat in Distillation, have,  
in a great- measure, lost their grateful Taste, their Fragrance,  
and their Colour, Inay, by Rectification, the reduc'd to a due  
Degree of Perfection: But if the Rectification is attempted by  
cutting the Oiis in a Glass Retort, and carrying on the Distil-  
lation by a Sand-heat, we find Our selves deceiv’d, fince, by this  
means, these OilS have an ungrateful empyrenmat io Smell, and  
are so far from acquiring their due and grateful Sweetness,  
that they are rather rendered more acrid. The Rectification is,  
therefore; to he made in another manner: Those Oiis, sor In-  
-stance, are to he mixed with Common Salt, with which they  
’are to he strongly triturated, taking three Parts Of Salt to One  
Of Oil: Then, adding a sufficient Quantity of Water, the  
Rectification is tO he made from an Alembic,thy which means  
there is yielded an Oil far clearer, and Of a more grateful Co-  
lour ; and what is surprising is, that in the Bottom Of the Alembic  
there is found a thick black Mass, which firmly adheres to the  
Hands, and the Quantity Of which is the greater, the thicker  
and deeper-colonr’d the Oiis are: I have Often Observ’d, that  
Oil Of Marjoram contain’d more Of this resinous Substance  
than Other Oils, since an Ounce of it generally affords a Dram  
or such a Substance: The Oiis of Mint, Spike, and Lavender,  
thus treated, do not leave so great a Quantity Of Refin; bus  
the Oiis Of Thyme and Savory afford a large Quantiay Of it:

We, also, find that old Oils, and such aS are of a gross Con-  
fistence, yield a large Quantity Of this Resin.

This Experiment sufficiently evinces, that Oiis are nothing  
hut subtile and ; liquid Resins closely united with Phlegm\*  
and siome ethereal Spiritas, also, that those Oiis are hotted,  
which contain, the largest Quantity of Resin: For which Rea-  
son such OilS should always be cautioufly prescrib'd .internally  
by the Physician, because all subtile Oleous Substances induce  
an intense and long-continuing Heat tin the Humours Of the  
human Body. : ..

Tis, also, to be observ’d, that Oils, render'd shore pore and  
limpid by this Rectification, are not so soon dissolv'd by  
recttisied Spirit Of Wine, as they were before; but tor this Pur-  
pose they require highly rectified Spirit of Wine, since they are  
form’d into small Globules, and with great Difficulty incorpo-  
rated with Common Spirit.

Tis, also, certain from Experience, that ethereal, limpid, and  
fragrant Oiis become thicker by Age, and lose a great deal of  
their Fragrance; and, if we want to restore this Fragrance, we  
must infuse them with recent Herbs, and Leaves, and reiterate  
the Distillation from an Alembic , by which means they are agaih  
impregnated with that subtile, sweet, and spirituotis Principle,  
which they had lost by excessive Age.

From this Experiment we learn, that, besides a sulphureous,  
saline, earthy. Or aqueous Principle, there is, also, another in  
OilS, which the Antients Call'd Spirit, which is highly active.  
Of a thin ethereal Substance, and necessary to preserve the  
natural Crasis and Texture Of the Oil.

This Spirit is principally dispos'd to Evaporation, by the  
Heat os the Air; and, when this Spirit is lost,we find that the  
Oil is greatiy Chang'd in its Consistence, Smell, Taste, and  
Vi cues, is, therefore, we intend to preserve Oils, we must not  
Only carefully stop the Vessels which contain them; bur, also,  
deposit them in cold Places, so that, the Spirit being pent up in  
them, their Texture may remain entire.

Because the Air, especially when hot, induces a greater  
Change On the Nature of Oils, and the Quality of the oleous  
Mixture, than any thing else, whilst, by long acting upon them,  
it deprives them Of their grateful Taste and Smell, and in-  
spissates them, the express’d Oiis tending to a rancid State, and  
those disus'd to a terebinthinaceous Nature, the Colour, also,  
heing in some greatiy Chang'd, hence Oils are Carefully to be  
preserv'd from the free Access Of an hot Air, which may be done  
by silling the Vessels in which they are kept, allowing only a  
small Space for Rarefaction, lest, upon the Approach Of Heat,  
they should burst: They are, also, to he carefully stopt, and put  
into Cold and dry Places.

Some, in order to preserve Oils, add some Water; such, for  
Instance, aS distil’d Rofe-water, which is Of excellent Service,  
when there it not Oil enough to fill the whole Glass, since the  
Water, by its ExhalationjkeepS the Consistence Of the Oil thin,  
and hinders it from being inspissated. .

Tis, also, certain from Experience, that Oiis Can never be  
intimately united and incorporated with Water: But these  
Substances, naturally immiscible, Inay by Art be so mix'd, aS  
not to be separated from each Other. This is most commo-  
diouily done, by pouring a sew Drops Os any aromatic Oil on  
Sugar, then putting it into Water, and shaking it; by which  
means the whole Oil in a Moment enters the Pores Of the  
Water. Thus we may, in an extemporaneous manner, prepare  
the Waters of Cinnamon, Cedar, Nutmeg, Mint, Baum, and  
Hyflop, which are Otherwise to he only Obtain’d with Considera-  
ble Labour by Distillation. Besides, by the Addition of a small  
Quantity of Spirit OfWine, these Waters become spirituous. The  
Reason Of this is, that the Oil, by reason of its ramified and  
branchy Particles cannot enter the Pores of the Water; but -  
because the Sugar is easily and quickly admitted into the  
Pores Of the Water, which, easily adhering to rhe branchy Parts  
Of the Ofl, divides and disjoins them, hence they become ca-  
pable of an intimate Mixture with Water. *Hoffman. Obs. Phys.  
Chyrn. Lab.* i.

**OLEUM TERRAE. OffiC. OlL OF EARTH. .Dass.**

**This Ofl is of** two Kinds, the red, and the black: The red is  
brought from the *East Indies,* and is of a pellucid, red Colour-,  
and has a strong Smell like *Petroleum,* but more grateful, as  
*Schroder* says; bur, as to what we know of this Oil, it is either  
the same with *Petroleum,* Or else is unknown in our Shops.

The *Indian* Oil of Earth, described by *Nauhovius,* is scarcely  
eVer brought Over to us, but ingrossed by the *Asian* Potentates,  
but whether it be a Species of *Petroleum,* or *Naphtha,* I Cannot  
certainly determine. What is brought to ns from rhe *Indies,*and sold for *Oil of Earth,* is prepared of expressed Oil of the ?Cocoa-nut, mixed with medicated Earths, as l nave been in-  
formed by a Person Very skilful in these Matters, and there-  
sore wholly belongs to the Class os Vegetables. *Boerhaave.*

These Kinds os *Bitumen* differ only in Degree, aS fomg  
think, so aS that the more spirituous and motile Part of in jS ’  
the *Naphtha,* the next to it the *Petroleum,* and the grosser and  
**more** feculent Part *Asphaltum-,* juft as we **see** in A times, from

which, by Distill xion, there is obtained, first, a spirituous and  
limpid Oil, representing *Naphtha* soon after, comes Off a yel-  
low and thicker Oil, resembling *Petroleum,* and, last of ail, a  
black feculent Matter, which might pass for *Asphaltum. Dale.*

OLFACTORII NERVL The Olfactory Nerves. See NER-  
**vI, and CEREBRUM.**

OLFACTUS. The Senfe Of Smelling.

The Nostrils, which are in Number two, and mn upwards  
from a wide Cavity, gradually becoming narrower, are excel-  
Iently adapted for attracting Volatile Odorous Particles, and ap-  
plying them to their Surface; especially whilst they are, at the  
same time, contracted by the united Action of the Muscles,  
which constrict the Alae of the Note, and which, arising fleshy  
from the anterior and inferior Part Of the fourth Bone Of the  
upper Jaw, are inserted in the Alae of the Nostrils, feme times  
in Conjunction with the Semilunar Muscle of *Eufiachius.*

The Capacity of both Nostrils is all that Space, into which  
Open, first, the frontal Sinuses, which are generally form'd among  
the separated Laminae of the *Os Frontis,* under the Eminence  
lying below the Eye-brow, and which, afterwards. Open upwards,  
with a large *Foramen,* into the Cavities of the Nostrils, next to  
the superior Bones of the Nose. These Sinuses receive the mu-  
cons Membrane of the Nose, with which the whole interior  
Surface Ol their Cavities is lined, and from which the Mucus,  
when generated, drops into the Cavities Of the Nostriis.

Secondly, the *Antra Highmoriana Magna,* form’d in the su-  
perior Jaw, and Opening themselves, with a sarge *Eorarnen,* into  
the Cavities Of the Nostrils, also, are lined with the same Mem-  
brane, prepare, collect, and secrete the Mucus into the Nostriis.

Thirdly, the *Cellulae* os the *Os Cuneiforme,* under the superior  
spongions Bone Of the Nose, opening by *Foramina* frequentiy  
distinct, into the Cavities Of the Nostriis, receive the mucous  
Membrane of the Nose, are covered with it, secrete the Mucus,  
and discharge it by this Very Passage.

Besides, there are lodged in the Cavities Of the Nostrils, and  
in Various Places, Curiously disposed, the sour spongious Bones Of  
the Nostrils; in each two. The superior is anteriorly united  
to the superior Part os the Maxillary Bone, where it is united  
with the *Apophysis* of the 0s *Frontis,* at the internal Angle of the  
Eye. The Other, Or inferior spongious Bone Os the Nostrils, is,  
in the inferior Part of their Cavities,. join’d to the Maxillary  
. Bone. These sour Bones are wonderfully form’d os bony La-  
minae, thinner than Paper, and so wrapt up, or disposed, as to  
form many Cavities; among which, the mucous Membrane in-  
finuates itself in such a manner, as to enter, run Out, accurately  
cover the Surfaces between the Laminae, and leave the Cavity free  
and unconfined. These Cavities of the spongious Bones, and of  
all the *Cellulae,* open freely into the Cavities of the Nostrils,

The Nostrils are lined with a thick 2nd soft Membrane, which  
is furnished not only with an incredible Number Of small arterial  
Vessels, but, also, with round glandular Corpuscles, and a Set of  
minute Vessels, which distil a thin Lymph. This Membrane cu-  
riously insinuates itself into the Cavities Of the six Sinuses, and into  
the *Cellula* os the four spongious Bones. Hence, by a wonderful  
Contrivance in this narrow Cavity of the Nostrils, the Surface  
Of the last described Membrane is greatly enlarged; but yet in  
such a Manner, as that One Part does not incommode another.

The Olfactory Nerves, without being accompanied by the *Du-  
ra Mater,* reaching to the *Os Ethmoides,* apply their tender Fi-  
brils to the small *Foramina* sound in that Bone, and, penetrating  
the sinall Vaginae, which they receive from the *Dura Mater,* the  
Fibres are sent Out from the Or *Ethmoides,* and immediately  
and accurately distributed Over all that large Surface, above de-  
scribed, into all the Sinuses and *Cellula.*

Hence 'tis sufficiently Obvious, that these Nerves are widely  
expanded, and that in no Part Of the Body are there to be found  
Nerves so soft, naked, and. Consequently, easily affected and in-  
jured, as in this.

Besides, by means of the inCOnceivable Number Of Glands  
lodged in this Membrane, and by the large Quantity Of arterial  
Vessels distributed in this Part, in the Form Of *Fasciculi,* there  
is continually here prepared and secreted a mild, fluid, inodo-  
Ions, and pale-coloufd Liquor, with scarce any saline Taste,  
in Order to moisten, lubricate, and defend the Nerves every-  
where, and in all the Cavities above described. This Liquor,  
when left in a State Of Rest, is always Collected, becomes stag-  
nant, and inspissatedand, when discharged in whatever DispO-  
fition Of the Body, is called *Mucus*; by means Of which, the  
highly tender Olfactory Nerves, which would Otherwise be easily  
disorder'd, remain good sor a great Number Of Years.

But, lest this Liquor, which is easily Concreted when it is ac-  
cumulated, stagnant, and inspissated by too long a Continuance  
in its Cavities, should become unfit to pass through the narrow  
Orifices or these Receptacles, there is distributed to these Parrs  
a Ramification of the fifth Pair of Nerves, convey’d hither from  
its Union with a Nerve or the sixth Pair. By the Irritation of  
this Ramification, the intercostal Pair, the *Par Vagum,* and.  
Consequently, the Nerves os the Muscles subservient to Respi-  
ration, are put in Motion. Hence, Sternutation heing produced  
by’ the Force of the Air violently propel’d, and rushing into these  
Cavities, the Mucus is absterged.

The Objects Of Smell are those Parts of Animals, Vegetables,  
and Fossils, which are lodged in their Spirit, oil. Salt, er Soap,  
if they are so divined as to become capable of floating in the  
Atmosphere But Tis Obvious from Experiments, that the subrile  
Principle lodged in Oil, and called the Spirit, is the principal  
Thing which excites the Sense Of Smelling; for, when this Prin-  
ciple is totally separated from odorous Bodies, the Residuum  
hardly retains any Smell 5 and a Fragrance is procured to Other  
Substances, by pouring this Spirit upon them.

An Animal breathing thro’ the *Aspera Arteria,* cut, and ap-  
pearing thro’ the Wound without the .Neck, has no Sense Os  
Smelling excited, even by the most highly Odorous Substances.

The Person who expels the Air from his Lungs thro’ his Nos-  
trils, has no Sente os Smell excited by external Objects, during  
that Action.

The Person, in like Manner, who retains his Breath, is almost  
incapable Os perceiving any Smell.

But the Person who attracts the Air thro’ his Nostriis, has  
the Idea Of Smell excited.

And the more strongly he attracts the Air, and expels it reci-  
procally, the brisker the sense Of Smell is.

The Smell Of Odorous Substances is increased' by Motion,  
Heat, Attrition, and an Admixture of various Things. And the  
smell of Odorous Substances, of an Oily Nature, is augmented  
by a cautions Admixture Of Salts.

The sense Of Smell is, therefore, excited, when the odorous  
Effluvia contain’d in the Air, and, during Inspiration, sufficiently  
strongly attracted thro’ the Nostrils, are, by this Force, applied  
to the Olfactory nervous Fibrils, which, by the Structure of the  
Nose, and the Position of its Bones, are exposed to them. When  
these Effluvia thus act upon the Olfactory nervous Fibrils, and  
communicate this Action to the common Sensory, they excite  
either an acid, alcaline, aromatic, putrid, or Vinous Smell.

Hence we may understand, how great an Affinity there is be-  
tween odorous and sapid Substances, or the Objects of Taste  
and Smell: '

Why Smells, Or Odours, Often restore Life instantaneously,  
and as it were in a Moment:

For what Reason Odours, sometimes, excite Diseases and  
Death; and produce almost all the same Effects with Medicines  
of all Kinds, whether of a medicinal. Or deleterious Quality: k

Why, in different Persons, the same Smell, arising from the  
same Odorous Body, produces so widely different Effects:

Why Animals, who are furnish'd with Very long Beaks and  
Nostrils, and the spongious Bones Of whose Noses are Very  
large, have a quicker Senfe of Smelling than others:

Why the smallest exhaling Corpuscles, whilst, at the same  
time, the Mass from which they exhale, is, upon being weighed,  
hardly diminished, are capable Of Communicating so strong‘and  
long-continued a Smell:

Why the fetid Smell, exhaling from the putrid Parts Of Ani-  
malsand Vegetables, when Once convey'd to the Nostriis, is so  
Obstinate, troublesome, and lasta so long:

Whether the strongest odoriferous Substances are not also  
possess'd Of a sternutatory Quality:

What the Use is Of the Humour and Mucus continually ge-  
Derated, and distributed in the Nostrils:

Why the Sense Of Smelling is dull and languid, when a Person  
first awakes Out of his Sleep j but becomes more brisk and quick  
aster he has sneezed:

Whether the Discharge Of the Mucus is not subservient to the  
cleansing Of the Brain, and how far this Doctrine is true:

Whether the Mucus is Originally thick, when generated, or  
whether it afterwards becomes *so:*

Whence Proceeds the so great Communication Of the inte-  
rior Nose, with the Muscles subservient to Respiration, and the  
abdominal Viscera:

Whether Sternutation is not a kind of Convulsion, and for  
that Reason fatiguing. Often productive of Pain, and sometimes  
mortal:

Why, in the mean time, it excites and increases the Motion  
Of the Brain, Spirits, and all the Humours: Why it is frequent  
in the Morning after Sleep, and what good Purposes it answers.

OLIBANUM.

*Olibanum et Thus maris.* Offic. *Olibanum five Thus.* Park.  
Theat. I6o2. Rail Hist. 2. I84o. *Qlibanum Officinarum.* Geoff.  
Tract. 362. *Olibanum five Thus masculum,* Ind. Med. 75. *Thus.*J. B. I. 302. Schroff 4. 223. *Thus, Thus masculinum Qlibanum.*Mont. Exot. II. *Arbor thurifera.* Get. I247. EmaC. I43J. C B.  
P. 399. *Thus five Olibanum Officinarum.* Ejusd. 50I, FRANKlN-  
CENSE, or OLIBANUM. t .

*Olibanum* is a dry resinous Gum, which is brought from the  
*Indies,* and gotten from a Tree which is said to grow in *Arabiay,*but os what Species it is, we are altogether ignorant; the best is  
that which is in large Drops, ofan opaque, white Colour, with a  
little Yellowness, and sometimes aRedishness, of a strong, resi-  
nous Smell, and a warm bitterish Taste.

It is hot, dry, and binding, useful against Diseases Of the  
Breast, as Coughs, Shortness Of Breath, catarrbous Defluxions  
of Rheum, and Spitting of Blood, it helps a Looseness and Bloody-  
flux ὁ and stops a Gonorrhoea, and the Whites: Outwardly ufed

in Fumigations, in stops DefinxiOns Of Rheum on ths Nostrils,  
and is good to cicatrize Wounds and Ulcers. *Millers Bat. Off.*

The Tree which produces this incense, grows in the Heart of  
*'Africa*, but we know not what it is. It is a good Sudorific,  
and has, by some, been Order’d in Pleurisies, in the Quantity of  
a Dram, heing first baked in an Apple, by the Fine-side, and then  
eaten. This Medicine Ought to be taken in the Beginning of the  
Disease, after the Patient has been blooded once or twice. This  
Method was followed for a whole Years at the *Hotel Diets,* by  
M. *Hangard.* Physician Os that Hospital, with surprising Success;  
but the next Year it had scarce any Effect at all. *Olibanum is*also cordial, and very serviceable in Haemorrhages, when mixed  
with proper Astringents. Externally, it is resolvent, emolli-  
ent, etc. and resista Putrefaction. It may, also, he used as a Fu-  
migation, to raise Sweat, in Rheumatisms, either alone. Or min'd  
with Amber- *Geoffeoy.*

This is a resinous Substance, Of a paie-yellow Colour, some-  
what hard and pellucid, form’d into small Drops, like Mastich,  
of a bitterish resinous Taste, and fragrant Smell It drops spon-  
taneonsty from the Tree which produces it, and is transported to  
us from *Turkey* and the *Eafi-Indies..* That .which is in small  
Drops, is preferable to the other Kinds. It is heating, drying,  
and fubastringent. It is principally used, internally, against va-  
rious Disorders of the Head and Breast; as, also, against Fluxes,  
and Haemorrhages of the Uterus, Coughs, Vomitings, Spittings  
of Blood, Diarrhoeas, and Dysenteries. Externally, Fumigations  
of it Corroborate the Head. It discusses Catarrhs, inCarns hollow  
Ulcers, and brings them to a Cicatrix. It Conglutinates recent  
Wounds, especially those of the Head. It Cures Chilblanes, and  
mitigates malignant Ulcers, not only of the Anus, but, also, of  
other Parts. It, also, removes Redness and inflammation of the  
Eyes; and Carries off beginning Warts and Impetigos. *Schrod.*

What we Call the *Manna Thvrts* Of the Shops, are Fragments  
Of the Frankincense, as small as Meal, produced by the Collision  
Of the Bags with each Other, during the Carriage. But others,  
by the *Manna Thuris,* mean small Portions Of the Frankincense.

Nothing Certain is left upon Record, with respect to the Tree  
which bears the Frankincense. *Theophrastus* informs us, that it  
is noth Very large Tree; that it is about five Cubits high, full  
Of Branches, with Leaves resembling those Of the Pear-tree, and  
a smooth Barlt, like that Of the Bay-tree, but, says he, others  
affirm it to be like the Mastich-tree, bearing a similar Fruit, and a  
redish-colouPd Leaf, whilst others assert, that both its Leaves and  
Bark resemble those of the Bay-tree. *Diodorus Siculus* ascribes the  
Form of the *Egyptian* Thorn to the Tree which bears the Frank-  
incense, and the Leaves Of the Willow. *Garcias* informs us, that  
this is a low Tree, whose Leaves resemble those Of the Mastich-  
tree : ButTfeeuttus informs us, that it resembles the Resin-bearing  
Pines. Mt. *Bay* also affirms, that we are still uncertain of the  
true Form Of this Tree, *Dale. .*

OLIGOPHORUS, δλιγοφόρος. An Epithet for Wine, in  
*Hitppocrates,* importing it being Very small, weak, and watery.

OLISTHEMA, ὸλίἀκημα, from ὸλιέναίνω, IO fall our. A  
‘ Luxation. *Hippocrates.*

OLIVA. An Olive. See **OLEA.**

OLIVARIA CORPORA. Two Prominences, on the Asa-  
*dalla Oblongata* are called by this Name.

OLIVITAS. ’ Oiliness. .

OLOPHLYCTIDES, ολοφλυκτίδες. The same as PHLI-  
CTAENAE. *Erotian.*

OLOR. The Swan. See **CYGNUs.**

OLUS ALBUM. A Name for the *Valeriana\*, arvensis,  
praecox , humilior semine depresse.*

**OLus ATRUM. A Name fofthe SMYRNIUM.**

OLY. The Oleous Substance Of Metals, swimming On the  
Surface of their solvent *Menstruums. Bulandus.*

OLYMPIACUM COLLYRIUM. The Name Of a *Col-  
lyrium* described by *Paulus AEgrneta,* L. 7. C. I6.

OLYMPIANUM OXYPORlUM. The Name Of a Me-  
. dicine described by *Marcellus Empiricus, C.* 2O. and recommend-  
ed for promoting Digestion.

OLI NTHOS, βλυνθβς. An unripe Fig. *Hippocrates.*

OLYRA. Ossie. Park.Theat. II24. *Zea Amylaea five Olyra.*C. B. Theat. *Zea Amylea vel Zeopyrum Amylaeum.* C. B. P. 22;  
*Zea verna,* J. B. 2.413. Rail Hist. 2. I243. *TriticumAmylaeum.*Ger. 63. Emac. 69. SPRAT-CORN.

This Species of Corn is sown in *Germany,* and reaped late.  
The Seeds are used in the Kitchens Of *Germany.* It agrees in  
Virtues with the *Spelt* Wheat, but is somewhat less nutritive,'

Of the *Olyra* a coarse Meal is, also, made. *Dale.*

OLYSCION. The seventh Part Os an *Hemina. Marcellus  
Empiricus.*

OMAGRA. The Gout in the Arficulafion of the *Humerus*with the *Scapula.*

OMASUM. The third Ventricle of a ruminating Animal.

OMELYSIS, ῶμήλυσις, from ώμὸς, crude, as *Galen,* in his  
*Exegesis,* expounds it, is the Meal Of Barley, not parched. He  
adds, that some properly apply the Term only to crude Meal,  
but others use it, improperly, to signify all other Sorts Of Meal.  
*Hippocrates,* in several Places, advises *Qmelysis* boiled in Wine  
and Oil, and reduced to the Form of a Cataplasm, to he ap-

plied warm, Outwardly, to a Tumor Of the Tonsils, and, also, in  
the *Hypoglossis;* and. *Lib.* 2. περ? γυναικ. he prescribes ωμήλυσιν  
κριθῶν, crude Meal of Barley, tn a Potion for an Haemorrhage  
of the Womb, *fee* ἐρυθρῦ, in Women. Sometimes the Word  
signifies all Sorts Of crude Meal, and wants an Epithet to distin-  
guish it, as ῶμήλυσις κριθίν». *Earina hordeacea.* Meal of Barley  
in particular. It is, by *Hes.ychius,* explain'd. Barley-meal, or a  
Cataplasm made thereof. In *Abs.yrtus,* One of the Hippia trie  
Writers, *Qmelysis* is a Mixture Of the Meals of Fenugreek, Lm-  
seed, and Barley, in equal Quantities. In *Ccelius Aurelianus,* it  
signifies sometimes a Cataplasm os Meal, or Of Bread soak’d in  
Water, and sometimes Os Meals prepared in the same Manner.  
It is sometimes wrote ώμἣ λύσις, in two Words.

OMENTA. The Membranes Of the Brain. *Cast Alas* from  
*Mercurialis.*

OMENTUM. See EPIPLOON. .

As the Omentum is a soft and pinguious Part, in Consequence  
of its Laxity, highly subject to receive the Humours convey’d  
to it from OtherFarts, 'tis for this Reason, as well aS the Omen-  
tum and Pancreas, subject to various Disorders, which,  
however, are not described by Authors, because they can hardly,  
if at all, be dsscover’d in live Perlons; and are only to be in-  
vestigated by laying open their Carcases, aS is obvious from the  
Cases recorded by various Authors. Thus *Vesalius* informs us,  
that, in a certain Carcase, when laid open, he saw the Omentum’  
so preternaturally tumid, that it weigh'd about five Pounds,  
whereas, in its natural State, it hardly exceeds half a Pound.  
*Flo asset,* in his Treatise *de Partu Casares,* tolls us, that, upon  
laying Open a Carcase at *Paris,* there was a Very considerable  
Abscess sound On the Omentum. *Biol anus,* also, in his *Anthropo.,  
graphia.,* informs us, that, upon laying open the Body of a young  
Gentleman Of nineteen Years Of Age, he saw the Omentum full  
Of a large Number Of Glands, from which a considerable Quan-  
tity Of fordid Humours had been convey’d to it, whilst, at the  
same time, the Mesentery and Pancreas were, by means of the  
Abscess, putrefied, and the Spleen IO greatly diminish’d, aS to he  
almost entirely consumed. And I myself, upon laying Open the  
Body os a Canon Of *Montpelier,* saw the Omentum scirrhous,  
possessing the whole epigastric Region, and about sour Fingers-  
breadth in Thickness. The Colour of this Tumor os the Omen-  
tum resembled that Os the Spleen : So that 'tis highly probable,  
that the melancholic Humour was translated from the Spleen,  
and accumulated in that Part, since the Patient was of an highly .  
melancholio Constitution, and fince, thro' the splenic Ramifica-  
tions, there is a sufficiently potent Conveyance from the Spleen  
to the Omentum. According to *Hippocrates,* in a Dropsy, the Wa-  
ters are also frequently Convey'd fro m the Spleen to the Omentum,  
from which they gradually drop into the Cavity of the Abdomen.

But aS the Tumors os the Omentum are not, by all the Ef-  
forts of Art, to be distinguished from those of the Mesentery\*  
so their diagnostic or distinguishing Signs cannot possibly be as-  
certain'd Tis true, indeed. Tumors os the Omentum are more  
easily perceived by the first Touch, because that Part lies imme-  
diately under the Peritonaeum, whereas the Mesentery is situated  
deeper : But the larger Tumors of the Mesentery rise to the  
Peritonaeum, and eVen the epigastric Muscles are, sometimes, so .  
united with it, that, a Suppuration happening, these Tumors diss  
Charge their sordid Contents thro' the Navel, Or some other Part.

But this Difficulty Of ascertaining the diagnostic Signs of these  
Disorders by no means produces any Perplexity in the Me-  
thod of Cure, since in all Tumors Of the same Species, possess-  
ing the inferior Parts Of the Abdomen, the same Measures are  
to be taken ; which, however, are not SO successful in the Omen-  
tum, which is not furnished with so commodious Outlets for  
the Matter Of these Tumors, as the Other Parts are. *River.  
Prax. Med. Lib.* IT. *Gap.* 5.

OMOCOTYLE, ῶμοκοτύλη. The Cavity in ths Extremity  
Of the Neck Of the *Scapula,* in which the Head Of the Hume-  
rus is articulated.

OMOLINON, ῶμόλινον, seems to have two Significations,  
One Of which is crude. Or raw Flax, the Other, Coarse, Or un-  
bleach'd Thread, Or Cloth. ..

OMOPLATYE, ώμοπλάται, from ῶμος, the Shoulder, and  
πλατὑς, broad. *The Scapulae.*

OMOS, *aisms:* The Shoulder. The Part of the *Uterus,* beyond  
the Neck, where it grows broad, is, also, thus call’d by *Moschion.*

OMOTARICHOS, ώμοτάριχος, the Flesh of the pickled  
Tunny-fish; which *Dioscorides* recommends, taken internally,  
against the Bites of Vipers, and mad Dogs, *L.* 2. *C.* 33.

OMOTRIBES. An Epithet for Oil, importing its being ex-  
press’d from unripe Olives.

OMPHACINUM OLEUM. Oil Of unripe Olives.

OMPHACIUM, όμφάιειον. The Juice Of unripe Grapes. The  
Antients used to expose the Grapes to the Sun some Days, and  
then press Out then Juice into large Vats; and, in the Time Of .  
*Dioscorides,* they used to let it stand open in them, exposed to  
the Sun, all most Of the Humidity was exhaled, and the Re-  
mainder inspissated into a Rob. This *Dioscorides, L..* 5. *C. 6.*recommends, with Honey and *Passern,* for Ulcers and Relaxa-  
tions Of the Tonsils, Uvula, Mouth, and Gums; and for Pu-  
rulenCies Of the Ears; for Dysenteries, and Uterine Fluxes; in

Clysters, or Injection. He, farther, says, it clears theSigbr, and  
Cures Asperities Of the Angles Of the Eyes; and that it is good  
for a recent Spitting Of Blood, from a Rupture of a Vestel:  
but, in this Case, it must he taken in a small Quantity, because  
is Conodes powerfully

OMPHACIS, ὸμφακός. An ACOrn-cnp.

OMPHACITES V1NUM. Wine made of Grapes not per-  
fectly ripe. It is astringent, and friendly to the Stomach; good  
for a deprayed Appetite, Iliac Disorders, Indigestion, -Relaxa-  
tions Of the Stomach, and in pestilential Disorders, bur must be  
kept many Years, before it is fitryo he drank.

OMPHAClTlS. A Sort Of small Gall, Or Excrescence of  
the Oak, mention’d by *Dioscorides, L.j. C. last.*

DMPHACOMELL A Sort of Oxymel, made of the Juice  
Of unripe Grapes, and Honey, the Method of preparing which  
is described by *Dioscorides, L.* 5. C. 3I.

OMPHALOCARPOS. A Name for the APARINΕ. *Elan.,  
card.*

OMPHALOCELE. An Umbilical Rupture, See **HERNIA.**

OMPHALODES.

The Characters are;

The Calyx is monophyllons, soft, and expanded into siye long  
flender Segments..: The Flower is tnonopetalous, rotated, quin-  
quefid, and expanded into large round Segments, with an Um-  
bilicus rising in the Middle. From the lower, interior, and nar-  
rower Part Of the Flower proceeds a Tube, Closely surrounded  
by five Stamina... The Fruit consists Of four hollow, umbili-  
eased Capsules, resembling a Basket, containing One almost fiat  
Seed, and affixed to a pyramidated, quadrilateral Placenta.

*Boerhaave* mentions three Species Of this Plant; which are,

I. Omphalodes; pumila, verna, Symphyti folios T. I40.  
*Symphytum minimum, repens, five Bdrrago minima Herbariorum.*juB/ 3.597. *Borrago minima.* H. Eysh Hyem. c. I. F. 4. Pig. I.

2. OrnphalOdes, Lusitanica, Lini folio. T. I4o. *IAnurn umbi.  
licatum.* Parin Tbeat. 1687. *Cynoglossectn, minus, album., dint solns  
glaucis, semine umbilicato.* M. H. 3.449. . .

3. Omphalodes; Lusitanica, elatior, Cynoglossi folio. T. I4o.  
*Linum umbilicatum, folio latiori.* Ind. 78. *Boerhaav. Ind. ait.  
Plant.*

It has its Name, *Omphalodes,* from ομφαλὸν, a Navel, because  
the Calyx is excavated in the Middle, like the human Navel It  
flowers Very early in the Spring, bearing a seining Gold-coloufd  
Flower. Some have taken it for Barrage, but the Omphalodes  
is not SO succulent. *Bocrhaav. Hiss.*

OMPHALOMANTIA. A Sort Of Conjuration, Or Divi-  
nation, practised by Midwives, and Old Women, which Con-  
sista in foretelling how many more Children a Woman shall  
have, by Observing how many Knots there are on the Umbilical  
Cord Of One Child.

OMPHALOS, όμφαλός. The Navel.

ONAGER. Rah Synop. A. 63. Aldrov.de Quad. 332.jonf  
de Quad. I4. Charlt. Exer. 4. *Onager five A sorus solve str is.*Gesh. de Quad. 2I. THE WILD ASss *Hati.*

Some think there is no more Difference between the wild  
Ass and the tame Ass, than that the One is wild, and an Inhabitant  
Of the Woods, and the other tamed, and broken for Service:  
Others take them for a different Species. It does not Come  
within the *Materia Medica,* but their Skins are Called, among  
Mechanics, *Cbagrtit.*

ONAGRA..

The Characters are;

The Calyx, Ovary, and Flower, are like those of the Cha my-  
herion ; but the Seeds are not downy :The Flower is rosaceous  
and tetrapetalOns.

*Boerhaave* mentions three Species Of Onagra; which are,

I. Onagra, latifolia. *T.* 302. *Lysimachia, lutea3 corniculata.*

**C. B.P. 245.**

2. Onagra; latifolia; flore dilutiore. *T.* 302. *Lysimachia, lutea,  
corniculatae, non pappose, Virginianastnajorstoresulphureo*.H. L.396.

3. Onagra, angustisolia. *T.* 302. *Lysimachia, lutea, cornicu-  
lata, non papposu, Virgrniana, minor.* M. Η. 2.271. IL L. 396.  
*Boerh. Ind. alt. Plant.*

We know nothing of ite Virtues, nor why It is so Called.  
*Eocrhaave.*

ONBOU. *He Lace.* The Name Of a *West-Indian* Tree,  
with Leaves like those Of the Manga, and a Fruit like a Peach.

ONCOS, οζκος. A Tumor. '

ONDA, in *Paracelsus,* is the Inventor of all Medicines, hut  
especially Of simple Medicines.

ONEIROCRITICUS, from όνβρος, a Dream, and κρίνω, to  
judge. A Person who forms a Judgment Of the State Of the  
Body, by Dreams. *Oneirocritics* is the Art Of forming such a  
Judgment.

ONEIROGMOS, ένειρωτμος. *Ccelius Aurelianus* gives us the  
Description of a Disorder which he calls ένειρόζονος, by which  
he means Venereal Dreams. Though this Word is not found in  
the Wfirings of *Hippocrates,* yet he uses the Verb ὸνειρώσσειν, to  
have Venereal Dreams; from which has been formed the Word  
ὸνειρωζμὸς, a Word used by other Authors; which lays a Founda-  
tion for suspecting, that there is a Fault in. the Text Of *Ccelius  
Aurelianus* and that, instead Of όνειρόγονος, we ought to read

ὸνειρωγμός. This is the Opinion Of *Foesius:* But *Peinesius* asserts\*  
without assigning any Reasons for his Belters, that they are two quite  
distinct and different Disorders. *Ccelius Aurelianus* gives his Sen-  
timents Of this Disorder in the following manner.

The Patients labouring under this Misfortune, being subjected  
to wild \*and delusive Dreams, are, during their Sleep, afflicted  
with an Emission of the seminal Fluid. It receives this Name,  
because it produces the same Effect with a real Venereal Stimulus.  
Bur, in general, it is neither a Distemper, nor the Symptom Of **a**Distemper, but the Result OF the unaccountable Impressions made  
upon the Fancy, affecting the Patient during Sleep, and arising,  
either from an insatiable Desire Of Venery, a- continual Indul-  
gence in Pleasures of that Kind, Or, On the contrary, from a  
long Continence, and Self-denial in the Use of Venery. But this  
Disorder, when often recurring, not only frequently degenerates in-  
to a Distemper, but, also, becomes the antecedent Sign of some  
approaching Disease; fuch as an Epilepsy, Madness, Or some  
other Disorder Os a like Nature ; because it is an effectual Proof,  
that rhe Body is preternaturally affected, and, as it were, touched  
with a previous Sense os its suture Calamity. It is, also, some-  
times the antecedent Cause Of what we call a *Gonorrhoea* from  
.which it differs, since, in the former, the Semen is involuntarily  
discharged during the Day, whilst the Patient is awake, and not  
prompted to Venery by the Workings Os his Fancy ; whereas Ve-  
nereal Dreams, by delusive Impressions made upon the Fancy, Only  
produce an imaginary Sense of Copulation, during Sleep. Some  
ashrm, that the όνειροπόληιφς is different from the ονειρόγονος- for  
the former produces a Sense Of Copulation, without a real Emisi  
sion; whereas the latter creates a Sense Of Venerysh strong and  
brisk, aS to procure a real Emission. But *Milesius* affirms, that  
these two Disorders are not in the least different, since, in both,  
there is the same Discharge made from the seminal Vessels t  
And that the Semen is sometimes ejected, and sometimes retained,  
eVen though the Impressions made upon the Fancy, during sleep,  
are the same, he ascribes to some accidental Causes. - But there  
is no great Difference between these Disorders, nor are differ-  
ent Intentions Of Cure to be pursued, since One and the same  
Method is found sufficient for removing both.

The *Oneirogqnos* is, in different Patients to be treated in dif-  
ferent Manners ; for those in whom it prognosticates an Epilep-  
sy. Madness, or any other Disease, are to be relieved hy Medi-  
cines appropriated to the particular Natures os these Disorders:  
Whereas those in whom this Disorder prognosticates no Other of  
a more formidable Nature, are to be treated in the same man-  
ner with those labouring finder a mild and gentle. Gonorrhoea;  
for an Inurease of the όνειρόγονος. Or ονειροποληοιῆς brings On a  
Gonorrhoea, because the seminal Vefleis are either, joy this  
means, render'd paralytic, or Oppressed with a Defluxion Of Hu-  
rnours from other Parts. It is, therefore, in the first Place, ex-  
pedient to draw Off the Workings Of the Patient's Fancy from  
Venereal, and to six them on other - external Objects, for the  
Impressions made upon the Mind Of the Patient, whilst awake,  
easily exert themselves in Dreams, when he is afleop. Besides,  
the Body is Considerably injured by a Loss Of the Semen. For  
this Purpose, the Patient is to lie On an hard Bed, and use refri-  
gerating Medicines; and, when he composes himself to Rest, he  
is to be Order'd to lie On his Side, Or his Belly, Or a broad and  
thin Plate Of Lead is to be laid under his Buttocks5 or the Region  
of his Loins is to be Cover'd with Sponges, immersed in a Mix-  
ture Of Cold Water and Vinegar, or.with Substances Of a Cold  
Quality, Inch aS Balanstines, Acacia, HypOCystis, Or Fleawort,  
which may be either applied by themselves. Or in Conjunction  
with Dates. Astringent Aliments, or such .as are Os a condensing  
and Cooling Quality, are, also, to he used, and the Patient is to ‘  
drink Cold and astringent Liquors, not prepared in a delicate  
and luxurious manner: Then the Patient is to have his Strength  
restored in the Common Method, and to use the cold Bath, by  
the *Greeks* Called ψυχρολουσία. Strong Frictions of the Parts af-  
fected are, also, IO he usedt for these Measures are sufficient to  
Constrict and brace up the Parts r Some affirm, that a long Re-  
Tension Of the Urine is proper for the Cure of this Disorder, lest,  
by the frequent Discharge Of that Fluid, the Cause of the Miss  
fortune should be excited: They, also, order that the Patient  
should Compose himself to Rest, with a fall Bladder, that by  
this means he may not fall into a profound Sleep, hut, being  
frequently awaken’d, may lose the Impressions os Venereal Plea-  
sures, which exert themselves in Dreams, during Sleep: They,  
also, maintain, that by this means the urinary Bladder, being dis-  
tended, Compresses the adjacent seminal Vessels, and, conse-  
quently, renders them capable os retaining the Semen: Others  
Order the Thumb to have a tight Ligature Os strong Thread ap-  
ply’d to it, that thus, by the intense Pain, a profound Sleep may  
be prevented, and the Impressions Os the Mind hindered from  
.exerting themselves in Venereal Dreams. But both these Methods  
are to be rejected, since Watching is highly injurious to the Pa-  
tient, and an excessive Retention of the Urine Often produces a  
Difficulty in discharging that Fluid 3 and by that moans proves the.  
Cause ot another Disorder, instead of removing that for which  
it was directed. *Geel. Aurel. Islorb. Chronic. Lab.* 5. *Cap. η.*

ONEIROMANTES. The **same aS ONEIROcRITIcUs.**ONEIROPOLESIS. See **ONEIRoGMos.**

ONIS, όνις. Asses Dung. See AsiNUS.  
ONISCI. MILLEPEDES; which fee.  
ONISCUS. Ofsic. *Asellus mallis major, sea albus.* Rail Ichth.

I7o. Ejufd. Synop. Pssc. j5. *Asellus minor or mollis.* Charlo de  
Pish. 4. *Asellas mollis.* Jons. Tab. 2. Met. Pm. 184. *Merlangus  
altera Species Asellorum.* Bellon.de Aquat. Io4. *Secunda asellorum  
Species.* Rondel, de Piso. 1.376. *Secanda ofellarum Species Mcr-  
langus Plandeletii.* Gestr. de Aquat. 85. *Asellus minor alter.* Ald.  
de Pssc. 287. THE WHITING.

It is taken in the Sea, and the Flesh and Liver are regarded in  
Medicine. The Flesh is universally allow’d, and found by Expe-  
rience, to be very wholsome, and the Liver is recommended in a  
Consumption.

The Whiting is a Sea-fish, which often comes near the Shore,  
and is very common in many Parts, and is valued for the Good-  
ness of its Taste, and served to the best Tables. It feeds upon  
small Fishes, and any thing it can find in the Sea. It is very  
J wholsome, and the Reason is, because that it is not burdened  
with viseous Juices, that its Principles are exalted enough, and  
that it is not very compaci in Its Parts; which makes it sight,  
short, and eafy of Digestion.

A Whiting is a Fish that produces no ill Effects, that we know  
of; and there are forne who have eaten of it to Excess, and yet  
found no Inconvehiency by itAnd therefore sick Persons, and  
thofe that are recovering from Illnesses, are safely allowed to  
eat it. *Dernery on Poods.*

ONITiS. Α Species of Origanum mentioned by *Diofcorides,  
Lib.* 3. *Cap.* 23.

ONOBRYCHIS. ' . .

The Characters are ;

It has a cristared. Or echinated Pod, full Of Kidney-shaped  
Seed; and the Flowers are collected into close Spikes.

*BQerhaave* mentions five Species of *Onobrychis,* which are,  
in. Onobrychis major; siliculis echinatis, cristatis, in Spica di-  
gestis *Hist. Oxon. Λ.* I3I. *Boerh. Ind. Α. a..* 47. *Qnabrychis.*Ostin. *Onobrychis vulgaris.* Park. Theut. 1082. *Onobrychisfoliis  
Viciae, fructu echinato, major.* C. B. P. 35o, Tonrn. Insh 390.  
*Onobrychis five Caput Gallinaceum.* Ger. 1063. Emac, I243. Raii  
Hist. I. 9I4. Synop. 3. 327. *Polygulors Gesuere.* I. B. a. 2.5c  
COCKSHEAD-VETCH, or SAINT FOIN.

lt grows spontaneously on the Sides Of *Gogmagog* Hilis, near  
*Cambridge,* and on the. Borders of the Corn-fields thereabouts, in  
a plain Field near *FDiomarket,* on *Salisbury* Plain, and other Parts  
of *England,* but always in a dry, chalky Soil, and Places exposed  
to the Sun. This Plant has been Of late Years cultivated among  
us, for the fake of feeding Cattle, by the Name of *Saint Pain,*that is. *Holy Hay*; the Seed being brought Over from *France.*It has been of vast Profit to many, being round, by Experience,  
to generate Plenty of Milk in Cows, and other Animals; whence  
. it justly deferves the Name of *Polygulon,* given it byoascerr Be-  
sides, it delights in a barren and chalky, and pretty dry Soil, which  
will not well bear Grass nor Corn: Whence the yearly Rents Of  
Lands of this kind have been increased manifold;

It flowas in *June* and *July,* and the Herb is in Use, which,  
according to. *Diofcorides,* being bruised and appl/d, discusses  
Tumors; taken in Wine, cures the Strangury; and rubbed, on the  
Skin, with Oil, provokes Sweat. *DmJcorides, lab.* 3. *Cap,* I 70.

Though the Plant, says *Dale,* which, in Agreement with *Cite,  
stus, Thalius,* and others, I have presented you with, as theoeo-  
*brychis* of *Diofcorides,* he called by *Gofner Glaux,* by *Eobel Caput  
Gallinaceum,* by *Casalpinus Lupinus,* by *Dodonaeus Vicia,* and by  
*iLugdvnensts Pslygula*; yet it is described by *Diofcorides,* as having  
Leaves generally longer than those of the *Lens,* a Stalk nine Inches  
in Length, a fcarlet Flower, with a small Root; and, by *Pliny,*with Leaves a little larger than those of the *Lens,* a red Flower,  
and a fmall and slender Root. And, tho’ both there Descriptions  
are short, yet they agree hetter With this Plant,' than with the  
*Campanula arvensts,* to which it is refer’d by o. *Bauhine,* in his  
Pinax. It is not certain, however, what Herb it is, forne giving  
ths Name of *Onobrychis* to the *Puta Jylvestris ;* others to the  
*Galega ,* others, again, to the *Hedyserum,* and others to other  
Plants: Besides, *Carnarius* thinks the *Onobrychis,* and *Onppordon,*to be the fame.. *Dale.*

2. Onobrychis ; minor';, siliculis echinatis, cristatis, majoribus  
& crassioribus aculeis praeditis, donata. *M.* ii. 2. I5I. *Caput Gal-  
linaceum, minus.* C.B.Prodr. I49.

3. Onobrychis; seu Caput Gallinaceum, minus; fru&r maxi-  
mo insignirer echinato. *Daet.Trimajett. apud fratrem, 65.*

4. Onobrychis ; saxatilis ; foliis Vicias angustioribus, & lon-  
gioribus; Aquifextiensis. T 390.

5. Onobrychis, Cretica; foliis Vicis»; frufiu magno, aculeato,  
& cristato. T. C. a6. *Boerh. Ind. alt. Plani.*

It is called *Onobrychis,* from τίνος, ao Ais, and βρὑχω *(brycha)*to bray, because the Smell of this Plant makes Aflesfiray, or be-  
cause, when an Ass eats there Pods, he is always said to bray. *Hist.  
Plant, adscript. Boer ha av.*

ONoBRYcHts is, also, a Name for several Sorts of HEDYSA-  
RUM.

0NOCHITES. SeeANcsUSA.

ONOCLEA. A Species Of *Arschofa,* which *Paulus Acquieta,*

*Lib. y.Cap.^.* describes as having an astringent, and bitterish '  
Roos.

ONOCROTALUS. The Pelican, an aquarie, web-footed .  
Fowl, as large aS a Swan. The Fat is esteemed emollient, and  
resolvent.

ONOSOLAT, according to *Blancard,* is an *Arabic* Word,  
importing hast a Scruple.

ONONIS. See ANONIs.\*

ONOPERDUM- A Name for the *Carduus,. iomentofos.,  
Oenanthifolio, angustiore.*

ONOPTERIS. See ADIANTHUM NIGRUM.

**ONOS. SeeAsIRAcUs. .**

ONOSMA. Ossic. τβ-3.586. *Lycoasts.* GRP.275. Raii  
Synop. 3. 227. *lay copse Angfica.Viex.poZ.* Emac. 802. Park.  
Theat. 5 I 9. *Eclainm alterum.* Merc. Bor. I. 3 I. Phyt. Brit. 35.  
*Echinus alterum seu Eycopsts Angiica.* Mer. Pin. 33. *Echinus ra-  
mofius annuum store fuave-rubente.* Hist. Oxon. 3.4.41. STONE-  
BUGLOSS.

*Onoscma,* which some *cdAOstnas,* Others *Phlonitis,* and others ι  
*Qnonis,* has Leaves like thofe *oiAnchofa,* oblong, soft, four Digits  
in Length, and one in Breadth, lying on the Ground, and mightily  
resembling the Leaves *oiAnchusu* ; it has neither Stalk, Seed, nor  
Flower. The Root is somewhat long, weak, slender, and mode-  
rately red; it grows in rugged Places. ..

The Leaves, taken in Wine,expel the Foetus; and theyssy, that,  
is a pregnant Woman only treads upon this Herb, she afterwards  
miscarries. *Dioseorides,Lib.^. Cap. tesy.*

The Herb was observed, bysthe learned Dr. *Sherard,* growing . .  
in the Island Of *Jersey.*

The *Onofma* is one Of thofe Plants which have caused Divisions  
among Authors in Botany, who are not agreed whither to refer  
them. *Diofcorides*, in describing the *Onofma,* as having Leaves  
like Ancbuia, but without Sulk, Flower, or Seed, has given great  
Occasion for Dispute. This Error of *Diofcorides* seems to pro-  
ceed from bis having Observed it ooly in the first Year, after its..  
Appearance above Ground, when it shoots forth nothing but .  
Leaves, aster the manner Of the *Cynvgiofsem, Buglossern, Echiurn,*and other Plants Of that kind; to which I should have refer’d it, if  
*Diofcorides* had not treated of them in distindl Chapters. It is,  
however, a vulgar Error, which others, also, have fallen into 5  
for how is it possible for a Plant to be produced without Fruit  
ot Seed ? I chose to reduce ir to this Plant, rather than another,  
from the Cut which *J. Bauhine.* has given us of it, and from the \* s  
Likeness of its Leaves to. thofe of *Aachasu.*

ONYX. Ossic. Worm. 97. Aldrov. Mus Metab pry. De  
Laet. 62. Charle Fossi 34. Kentm.49. om1\* ό'/ἀπόνοόσἀα. Boet.  
24 I. *Onychites.* Schw.386. *Lapis Onyx dictui five Volpins Hu- '  
mani candorem referens.* Cap. Hort. Cash. Supp. 2. 50. THE - -  
ONYX-STONE.

It is an opake, or not very lucid Gem, of the Likeness, Colour,-  
and Splendor of the human Nail, being, at least, of two Colours,.  
white and black, which appear in two distinit Zones, and rather  
opabe, than diaphanous. *Pliny* calls the black Part of it *Morion  
Indicum,* Or *Praemnion,* which, perhaps, is the *Morion A Schvsonbn  
feld.*

As to its Virtues, it is fuppofed to induce Tranquillity Of Mind  
by composing the Passions, and to quicken the Senses.

OOEIDES. An Epithet for rhe aqueous Humour of theEye.  
OOGLA. A Mixture of Milk, and Eggs.

OPALUS. Ossic. Been 190. Calc. Musi 207. Geossi Pradecti  
83. Kentm.47. DeLaet.52. Aldrov.Mus.Metall.978. *opalus olim  
Pedaros.* Worm. Io7. *Opalus feu Opalis.* Charin Fossi Ao. THE  
OPAL.

*Opal* is a beautiful Gem, of almost all Colours: According as  
the Rays of Light are refrafied thro’ ir, it appears blue, purple,  
green, yellow, red, milky, and black ; and hence it has been, by  
forne, called the Gem of Gems. The best Opals are found in  
*India,* the more ordinary Sort in *Cyprus, Egypt, Hungary,* and in  
some *Damjh* lflands. They all grow in a soft Stone, marked  
with black or dark Lines. It is said to have the fame Virtues  
, with the rest, but is never used in the Shops. *Geoffrey.*

OPEREMETHIOLlM. The Spirit of Minerals. *Rulandus.*OPH1ASIS. A Species of Baldness. See AI.opEcrA.

OPHIDION. A sort of short Sea-ferpent, which is esteem’d  
aperitive, and good to purify the Blood.

OPHlGENlUM. A Name in *Oribalius, Collect. Medic.  
Lib.* I. for the *Blapiooboscum* or *Siscrum Germanarum.*

OPHIOGLOSSUM.

The Characters are;

It has but one Leaf; and the Fruit, which is lingulated, or like  
. a Tongue, is divided into many Capsules, situated in a double  
Order, and full of Seed.

*Soerhaave* mentions butone Species of this Plant; which is the  
Ophioglossum vulgatum, *e. B. P.* uy4. *Tovrn. lest.* 54g. *Poersu*

*Ind. A. cry Ophioglessem.* Ossic. J.B. 3. 708. Ger.-3-7. Emac.  
404. Raii Hist. i. rad. Synop. 4... *Gphiuriossecm five Lingua Ser-  
pentipla* Parse *506.* ADDERS-TONGUE.

This is a small tender Plans, about four or five Inches high,  
consisting of a single thick green Leaf, finooth, and without  
Ribs, or large Veins, of an oval Shape, but sharp-pointed at the

End, from the Bosom of which arises a Stalk shout two Inches  
high, bearing On the Top a stender crenated Tongue, about an  
Inch long, in which is contained the Seed, so small, that it is  
hardly Visible. The Root consists of several matted Strings, or  
Fibres, it grows in moist Meadows, and is in its Prime in *May,*the Leaf soon perishing by the Summer Heat, and the Root re-  
maining in the Earth. . .

Adders-tongue is a good vulnerary Plant, both given inwardly,  
either in the Juice, or Powder, for Bruises and Wounds; and out-  
wardly boiled in Oil, for fresh Wounds, Ulcers, Bruises, and In-  
fiammations. *Millefs Bot. Casts.*

*Dodonaeus lens,* that *Baptista Sardas* pretended to cure Ruptures  
by the Use of the Powder os this Herb, and all Sorts OsWoundS,  
by the Oil made by Infusion. *Martyris Tournofort.*

The fresh Leaves conglutinate Wounds, and cure an Entero-  
oele; .for inward Wounds it is exhibited in Water Of *Equiferum.  
Saptifla Sardas* affirms, that the Powder os rhe Herb, exhibited  
for some Days, is of sufficient Efficacy for the Cure Of all Sorts  
os Hemin The Oil, prepared of the Leaves macerated, for a  
Considerable time, in Oil of Olives, Or Omphacinum, exposed  
tO the Situ, Or, which is a shorter Way, boiled over the Fire,  
till the Leaves become dry and juiceless, and then expressed, is  
reckon’d one of the best .Remedies, not Only for recent Wounds,  
hut for Old Ulcers, and an Hernta; especially, says *Parkinson,* if a  
small Quantity of Oil Of Turpentine be dissolved in it.

*' Menttcciide* found a great Difference in the Size os the *Ophio-  
glossem.* about the Town os *Furstenvaald.* The least rises not  
above an inch with its Tongue and Leaf; the middle-sized has a  
Leaf Of two Inches, and a Tongue above three Inches in Length,  
the largest has a Leaf four inches in Length, and one and an half  
in Breadth, with a Tongue in proportion ; in the same Place he  
met with *Ophioglsssu* of three Tongues, and two Tongues. The  
Fanners. Os the *stale do* bruise it, and put it into boiling Putter,

. which, thus used, will keep two or three Years, as anointment,  
wherewith, aster milking,' they anoint their Cows Teats, which

' are cbapt; or sore. *JRaii Hist. Plant.*

The Name *Gphiogloffem* is from οφις, *Ophis, a* Serpent, and  
γλῶσσα. *Glosses,* a Tongue, becaufe the Fruit Of this Plant resem-  
bles the Tongue Of a Serpent. The Plant is vulnerary, consoli-  
dating, and resolvent, and is effectual for inflamed Wounds and  
Haemorrhages. *Caesulpinus* commends an Ointment prepared Of  
this Plant, for an *Hernia* in Infants Many strange Things are  
reported Of this Plant, as that, by Virtue thereof, a Person shall  
he preserved from evil Spirits, and Infection by Poison, with  
. Other wonderful Effects, which none is bound to believe. *Hist.*

*Plant, adscript. Boerhaav.*

OPHlOSCORODON- Viper’s Garlick, or Rocambole. See  
.ALLIUM.

OPHlOSTAPHYLON. A Name for the *Visit Albs,* Or  
*Bryonia Alba. Qribasius, Medic. Collect. Lib.11.*

OPHITES-SERPENTINUS. Ostin. *Ophites.* Charlt.  
Foss I8. Worm. 43. Schrod. 354. AldroV. Muf. Metall. 752.  
*Ophites veterum ;. Serpentine recentiorum.* Boet. 501. *Lapis Qphites.*Match. 1389. THE SPLEEN-STONE, Or OPHITE.

It is a Very hard Sort of Marble like Porphyry, of a deep-green  
Colour, interspersed with some fainter Spots of the same. *Dale.*But we are told by *Dtoscorides,* thet one Species Of this Stone is  
ponderous and black, another Ash-coloured and sported, and a  
third distinginshed by white Lines. All Of them, worn as Amu-  
lets, are effectual against the Bites Of Serpents, and the Head-  
ach ; that with the white Lines, in particular, is said to cure the  
Lethargy, and Pain of the Head. *Dioscorides,Idb.r. Gap. ssez.*

- OPHRIS. See **BIFOLIUM. ....**

- OPHRYS, δφρδο. The lowest Part Of the Forehead, .where  
the eye-brows grow; and the Hair of the Eye brows.

. OPHTHALMIA, ἐφθαλμία, from οφθαλμόστ, an Eye. It  
sometimes signifies any Disorder, Or .Pain of the Eye ; but it is  
used strictly to express an Inflammation Of this Organ. Mon-  
sieur *de St. Tues,* a celebrated *French* Oculist, thus distinguishes  
the several Species of Ophthalmies, and. directs the following  
Methods of Cure for each Sort. .

An Opbthalmy, says he, is an Inflammation of the Conjunctiva, -  
sometimes attended with violent Heat, and a Flux Of Tears,  
sometimes without either Heat or Tears. This. Inflammation  
sometimes extends Over all the Globe of the Eye, and even to  
the adjacent Parts. Ofall Disorders Of the Eye, this is the most  
frequent, aS it aCcompanies almost every Disease to which the  
Eye is subtecti :

Some Of these Inflammations are without. Danger, and easily  
cured Others are Very dangerous, and difficult to cure. Their  
Cause is either external or internal. Internally they proceed  
from the Blood, whether from too great a Redundancy, Or some  
' 'acquired bad Quality Of it 5 such are the Thickness, Viscosity,

Acrimony, Or too great Rarefaction, Os the Blood. -

- It the Quantity Of Blood he excessive, it will be carried too  
-copiousty into the minute Vessels Of the Eye, and so produce an

Ophthalmia. - . . - j

If the Blood be too thick, as it is incessantly conveyed into the  
fine Vessels Of the Eye, its Particles being too heavy and large  
‘ to pass into these Veffeis, the Circulation, in these Parts, must

be Obstructed, and an Inflammation generated.. When the  
Blood is too sharp, the Serosity, furnished. by the lachrymal  
Gland, will partake Of the same Nature, and by irritating the  
ConlunctiVa, which it constantly moistens, will produce an  
Ophthalmia. If the Blood be too much rarefied, aS the Rare-  
faction affects .the fine delicate Veffeis Of the Eye, it will Occa-  
sion an Inflammation. - δ᾽ . .. . .

AS to external Causes, it is evident, chat whatever can vio-  
lently irritate the Conjunctiva, and the Membrane which Co-  
vers it. Or can make a Separation in the Vessels of those Parts,  
will necessarily cause this. Distemper. ... .

An Ophthalmia is sometimes attended with Very dangerous Ac-,  
cidents ; it is often exasperated by improper Remedies, apply’d by  
the Patients, when first attacked; it is sometimesSOViolent, that  
its Progress can hardly be stopped, or the Sight preserved.

. These Inflammations are generally divided into the dry and  
humid : But I shall add some others; for I have Observed differ-ι  
ent Symptoms in each particular Species, aS will appear in the  
Sequel. . '

*The* **DRY OPHTHALMIA.**

This Species brings a Redness On the Eye without Tears, Or  
any purulent Matter. It Occasions no Swelling Of the Eye-lid,  
nor Pain in the eye, or in the Head. It is caused by a thick  
Blood, which stagnates only in some Of the Veffeis Of the Con-  
junctiva, only Part Of the White of the Eye being red.

*The* **HUMID OPHTHALMIA; . - .. .**

This Sort is produced by a great Quantity Of Lachrymal Lymph,  
which, aS it passes continually over the Globe Of rhe Eye, irritates  
the fame by its Acrimony, inflames is, and the inner Part of the  
Eye-lids, which become swelled ; it, likewise. Often ulcerates the  
transparent Part Os the Cornea. This Disease is attended with  
shooting Pains in the Eye, and the Patient cannot behold the  
Light without intenfe Pain. Children, and Old People, are both  
subject to this Disease, in whom it becomes Very obstinate, by ...  
reason Os the natural Moisture of their Temperament. When  
it runs to a Length in Children, their Lips and Noses swell, and  
are covered with Scabs and Pustules, that sometimes Overspread  
the Face. ’ *s. . .*

*The* **OPHTHALMIA,** *from a* **DEFLUXION***-of the* **BRAIN.**

In this Species an Itching is excited in the Eye, a thick gluti-  
nous Matter Onses out, and conglutinares the Eye-lidS in the  
Night. This Kind is most easily cured.

.'. . n. i *. - r. ... - . .. - - ’ ...*

*The* **OPHTHALMIA,** *attended viith dry* **FILM.**

This resembles the first dry Sort ὁ the Conjunctiva is red, and  
the Eye-lids are smeared with dry Film like gritty Flour, Part of  
which falls on the Globe of the Eye, and the Patients think  
there is something in it, which is Very troublesome, and makes  
the Conjunctiva appear red.-

*The* **OPHTHALMIA** *in the* **GLOBE** *of the* **EYE** *towards the***ACANTHI.**

This fifth Kind is when rhe Patient's Eyes are red Only to-  
wards the Angles, while the upper and lower Parts Of the Globe  
are not at all affected , when the Caruncula Lachrymalis becomes  
inflamed, the Vessels which pass under it, swell even to the trans-  
parent Part Os the Cornea. This Disease often changes to the  
Ungu'lS. . See OcULUS. :. - . .

*The* **OPHTHALMIA,** *sticith* **PIMPLES** *on the* **GLOBE** *of the* Eye.

- in this Species there-is a Swelling Of the small Plexus Or Bun-  
dies of Veins, which are sent from the inner Surface of the Eye-  
lidS, and .terminate where the Conjunctiva is Joined with the  
transparent Part Of the Cornea, a Pimple, aS big as a Lentil, alt-  
pears in that Place. Sometimes the Redness is continued to the  
Comes, and, at. Its Extremity, whitish Pus may be seen. Iris  
evident, that the Matter producing these Pimples, onses thro'  
the ends of the aforesaid Vessels. This Disease can Only he Cured  
by piercing the Pimple,.or discussing the contained Matter. - (  
*TEe* **OPHTHALMIA, τυένιί»'LITTLE ABSCESSES** *art the* **CORNEA**

*... - and* **CONJUNCTIVA- ' '**

. In this seventh Species all the Conjunctiva becomes red, with  
small Abscesses, seated partly on the; transparent Cornea, and  
partly on the ConJunctiva. Sometimes there are five Or six Of  
them round the Eye, they are sometimes as big as a Pin's Head,  
and sometimes as big as a Lentil. J 6” -

*- The* **ERYSIPELATOUS OPHTHALMIA.**

This eighth Sort reddens the Conjunctiva, swells the Eye-lids,  
and causes Violent Pains and Heat both in the Eyes and Head.  
The adjacent Parts, as the Temples, the Forehead, and the Noss,  
are covered with Scales and Scabs, that leave, when they fall off,  
Marks for Life, resembling those of the Small-pox.

*Of the* **OPHTHALMIA,** *called* **CHEMOSIS.**

. In this ninth Kind, all the Conjunctiva is swelled to the Thick-  
ness *of* a Fingerss-breadth , this makes the transparent Part Ofthe  
Cornea appear, as it were, sunk in a Cavity. This inflammation  
is attended with Violent Pains in the Head and Eye, with HeaVi-  
ness Over the Orbit, and with Want of Sleep, there is, likewise, a  
Fever, Pulsation, and the like. All the transparent Pan Os the  
Cornea Often comes away by Suppuration, which destroys, the  
anterior Chamber of the Eye The Cicatrix, subsequent to the  
Suppuration, hinders the Crystalline and Vitreous Humours from  
falling out, and, by that means, the entire Decay Of the Globe is  
Prevented : Sometimes both happen.

- This Species of Ophthalmia is often the Consequence of a  
Stroke received in the Eye, or in the adjacent Parts. At Other  
times it comes without any external Cause preceding the Disease.  
It may he caused by a Critical Translation, after a malignant, or  
other FeVer.

t A Lady, who got a Pleurisy by riding in the Rain,, not be-  
ing Ordered tO be let Blood by the Country Physicians, there en-  
sued an Ophthalmia os this Sort, upon which the Pleurisy abated  
but the FeVer, and Inflammation Os the Eye, still continuing, it  
soon turned to an Abscess. The Other Eye was seized, about  
the twentieth Day, with the same violent Symptoms. When  
the Patient was in a Condition to be removed, she came to *Paris  
to* consult me. Having examined her Eyes, I found the first I  
mentioned, was entirely lost, and the Other was covered with a  
Cicatrix, which I took off by proper Remedies, so that .she can  
now see enough to find her Way.

/

*Of the* **VENEREAL OPHTHALMY.**

' This tenth Sort has almost the same Phenomena with the last,  
with this Difference, that the Conjunctiva, which is swelled, ap-  
pears hard and fleshy.’ It begins thus: A great Quantity of whitish  
Matter, with a yellowish Cast, Ouses through the Eye. ” This  
Disease, which proceeds from a Venereal Cause, is Very rare:  
Yet I have seen several attacked with it. In most Of them, this  
Disease appeared two Days aster the Beginning Ofa Virulent Go-  
norrhoea ; the Matter, not running Off by its usual Passages, was  
removed to the Eye; whence there flowed a like Matter, which  
stained the Linen in the same manner, aS when it pasted through  
the usual Chands.

*so: - - The* **OPHTHALMIA** *of the* **CHOROIDES.**

. - In this eleventh Species the ChoroideS and Uvea are inflamed,  
and the Conjunctiva only lightly , it is attended with a Flux Of  
Tears. The looking at the Light is painful to the Patient, who  
feels acute Pains towards the Top of the Head and the Temples.

*The* **OPHTHALMIA,** *from* **STRoKEs** *On the* **EYE.**

" TheViOlence Of the Stroke, Or the Shape of the Instrument,  
makes all the Variation found in this Disease.

*The* **OPHTHALMIA,** *from the* **RUPTURE** *of the* **VESSELS** *of the***CONJUNCTIVA. \_ .**

In this thirteenth Species, the Eye grows Very red, though  
thePatient. seels no- Pain, neither is the Light uneasy to him.  
It is caused by the Rupture Os some Blood-vessel of the Con-  
junctiva, which OccasiOnS an effusion Of Blood hetween the La-  
minae Of that Membrane.'

**.S'.** *Of the***. PRoGNOSTIC of OPHTHALMIAS.**

-TheBymptOmS Of all Ophthalmias are not alike to be fear'd,  
or. accompanied with the same Danger. The humid Ophthal-  
mia is dangerous, either on account of its Duration, or of its  
Returns, Or Of the Acrimony Of the Lymph, that excoriates and  
ulcerates the transparent Part ofthe Cornea, is, likewise, destroys  
Part os the Sight, by the Cicatrices which remain aster the Ulcers.  
\_. The . Erysipelatous Ophthalmia is dangerous, because Of the  
Violent Pains which -it. causes, besides the Considerable Damage  
itdoesto the Sight. (. . .ι

.The Chemosis is very fatal, byIeafonof the Pains which fol-  
low it, .and Often the very Loss Of Sight. The Venereal Oph-  
thalmia is equally dangerous. - - . :. ;

The Ophthalmia os Ihe ChoroideS, and the Uvea, is very  
dangerous, sor in often, destroys the .Sight, or else generates **a**membranous Cataract.

.The Ophthalmia, from Strokeson the Eye is more or .less  
dangerous, according eq -the Parts which are damaged by the  
Stroke, . . ’ . - \_.. ... ...... - ...

The Ophthalmia subsequent to Strokes on the Head, by which  
the Meninges have been hurt, is a Sign of Death.

, y When in the Beginning of the Small-pox the Eyes are, as it  
were, silled with-extra vast ted Blood, it is, also, a mortal Sign.,  
for it denotes, that the Blood is carried with Violence to theHeadi

The Other Species os Ophthalmias, are, in-general, not dan-  
gerouS, being, for the most part, free from any fatal Symptoms.  
A Diarrhoea cures an-Ophthalinia, according to *Hippocrates.-'*

**.7~~~.;** *Ofthe* **CUREofOPsTiIALMIAs.**

'.2.The general Remedies ate, Bleeding, to lessen the Quantity  
of Blood, Purging in seine Cases, which would, in other Cases,  
.he prejudicial. The Spots, Ulcers, and certain Abscesses, Of the

transparent Part Of the Cornea, attended with an Inflam maned  
Or the Conjunctiva, are more speedily cured by Bleeding in the  
Eye, than by any other Means though in some Casas it jg  
not proper. See the Methods of performing this Operation, un-  
der the Article OCULUS.

*The* **CURE** *of the* **DRY OPHTHALMIA.**

For some Days wash the inner Part of the Eye with a Colly.  
Hum, made of twelve Grains of prepared Tutty, dissolved in two  
Ounces of Rose and Plain ain-waters, with the Addition of a  
Spoonful Of Spirit of Wine. Take of *Paul’s,* Betony, Thyme,  
and Red Roses, each a Pugil; two Stalks Of Mullein: Boil  
them in a Gallon of Wine, and, at Night, apply to the Eye a  
Compress dipt in this Wine. ;

As this Species of Ophthalmia is not dangerous. It requires but  
few Remedies; and is sometimes cured by Bleeding, repeated  
according to the plethoric Constitution of the Patient.

*The* **CURE** *of the* **HUMID OPHTHALMIA.**

This Species is sometimes Very difficult to cure, and requires'  
more Medicines than the last, besides such Repetitions of rhe  
general Remedies, aS the State of the Patient may require.

Bleeding at the Neck, and in the Foot, is often necessary.  
Apply a Collyrium, made with the distilled Waters of Fennel,  
Eye-bright, and Plantain, Of each two Ounces; in which diss  
solve two Grains os Salt of Lead. Sometimes we are Obliged  
to use a Seton, a Cautery, and Blisters. If the Vesicatories in-  
commode the Kidneys or Bladder, they must be laid aside, and  
Other Means employ’d. If the first Collyrium, which is design'd  
Only aS a Sweetener, after some Days, does not succeed, let an-  
Other be substituted, which, by Constringing the Pores, will hin-  
der the great Afflux of Tears to the Eye; for which Reason  
you may Omit the Salt of Lead, and dissolve, in the same Waters,  
half a Dram Of the white Troches of *Phases.* When the Flux  
Of Humours has ceased, is any Ulcer remains, as often happens,  
on the transparent Part of the Cornea, make use Of a Dissolu-  
tion Of the *Lapis Divinus* in com mon Water.

To make this Stone, put of Alum, Salt-petre, and Vitriol os  
*Cyprus,* each a Pound, into a glazed earthen Vessel; then  
place the Vessel in a Furnace, and surround it with Char-  
coal, till it comes half an Inch above the Bottom of the  
Vesseland set Fire to it. As you see the Materials melt,  
stir them with a long small Stick ; and, when they are raised  
in the Ebullition about three FingerS-breadih, let the Vestel  
. be taken from the Fire, and throw in two Drams of Cain-  
- phire, continuing to stir the Whole, fill the Camphire is  
entirely dissolved 5 then cover the Pot, as quick as you Can,  
luting its Junctures with some Rolis of firm Paste, a Foot  
long, and half an inch thick. Leave it so for twenty-four  
Hours; then break the Por, and separate the Stone, which  
put into a Glass Vestel, closely stops. —

. The Dose is from twelve Grains to half a Dram, dissolved in  
half a Pint of common Water: The Dissolution of two Drams  
Of Sugar-Candy, with a Spoonful of Brandy, may be added.: .

When the Ulcer is cicatrized, is this Remedy does not entirely  
remove the Spot, make use. Of the Powder of Cuttle-bone and  
Sugar-Candy mix’d together ; drop about the Bigness Of a Lentil  
of this Powder, every Morning, On the Spot. We must some-  
times, have recourse to more powerful Remedies, such are.  
Oil Of Linen, and Powders in which Alum is anLngredient. : :

Humid Ophthalmias are often attended with scrophulous Tu-  
mors, aS appears from the Swelling Os the Glands about the Neck.  
.„ ssn this-Case, we must use Remedies, that can eradicate the  
Cause of this Disease, which Otherwise win destroy the Eyes by  
the Ulcers and Spots, which succeed it . for which Reason, be-  
sides the foresaid Remedies, the following Ptisan must he pre-  
pared. ..

Take Of *China* and Burdock-rootS, sliced, each One **Ounce ,**boil them in five Pints Os Water, to half the Quantity; add

... anHandshl of *French* Marigolds, and some Liquorice. The  
Patient must drink, every Day, about three Half-pints of  
this Ptisan, two in the Morning, and Orfe in the Afternoon,  
to -he Continued for a Month. Let him take thirty Grains  
of Aithiops Mineral, three Days successively. Let him ho  
purged, the fourth Day,' with a Very brisk Purge, . still  
takingeare, that IB be suited to the Disease, Ind the Patients  
Constitution. Then let him rest sour Days, without taking  
any .^Ethiops; afterwards renew the Use os the Athiops,  
for three Days; and' let him be purged again, which must  
be continued, rill he is perfectly Cured.

The Cose Of the AIthiops must he increased, by littie and  
littie, to a shram , for, when it is given in too small a Quantity,  
.it has not-its frill Effect, nor does it answer the End expected  
from in: Regard must still be had to the Patient’s Age, Tempera-  
ment, and the like Circumstances. ᾶ

The-CURE **of OPHTHALMIAS,** *front* a DE **FLUXION. -**

After the. general Remedies, the Ointment of Tutty must he  
used s 'every Night, about the Bigness of a Lentil of it, when

the Patient goes to Rest, must be pur in the Corner of his Eye,  
towards the Nose, so that it may enter into the Eye. The Eye  
must he washed with warm Water and Brandy, ten Parts Os the  
first to One os the last. If the Angles Of the Eye-lids, which are  
Often ulcerated, do not cure wish the Ointment Of Turfy, a Dis-  
solution Of Lapis DiVinuS must he used.

*The* **CURE** *of the* **OPHTHALMIA,** *majth* **FILM.**

Let Sal Ammoniac, and Sugas Of Lead, of each seven Grains,  
he dissolved in Rose and Plantain-waters, os each four Ounces,  
with which the Eye must be bathed three or sour times a Day.

*The* **CURE** *of the* **OPHTHALMIA** *in the* **GLOBE** *of the* **EIE,***toviarde the* **ANOLEs.**

Use a Collyrium made of white Vitriol, and Florentine Or-  
rice, of each one Dram, infused in two Or three Pints of Wa-  
ter, according as it is required, stronger Or weaker.

**c** *The* **CURE of the. OPHTHALMIA,** *attended viith* **PIMPLES.**

\_ Make use Of a Dissolution Of the Lapis DiVinuS in common  
Water, when the Pimples lie Only on the Conjunctiva; but is  
they are spread On the transparent Part of the Cornea, and Pus  
appears between the Pellicles Os that Membrane, then Remedies,  
proper for Abscesses Of the Eye, must be applied ; which are  
mentioned below.

*TheCMPAe. of the* **OPHTHALMIA,** *ccith little* **ABSCESSES** *on the***CORNEA** *and* **CONJUNCTIVA.**

- Apply between the transparent Part Os the Cornea and the Con-  
JonctiVa, where the Abscesses are formed. Remedies proper to open  
them, and likewise to Cicatrize them, for the Inflammation and  
Violence of the Disease do not abate, till the Matter is discharged.

'4- First, then, apply the distilled Water of Camphire; as soon as  
it begins to penetrate, use a Dissolution Of Lapis Divinas in Com-  
mon Water ; it will Cleanse and cicatrize the Ulcers.

*. The* **CURE** *of ths* **ERySIPELATOUs OPHTHALMIA.**

' This Species is difficult to cure. First apply the distilled Wa-  
ter or Elder-fiowers, with 4 tenth Part Of Brandy, warm its  
and bathe the Eye with it. You must likewise have recourse to  
a Seton, to Bleeding in the Arm, in the Neck, and in the Foot,  
afterwards. Purging and Blisters, if necessary, must be employ’d.

*The* **CURE** *of the* **OPHTHALMIA,** *called* **CHEMOSIS.**

.. The Violence of this Disease requires *a* speedy Cure; for winch  
Reason, as soon aS the Derivation on the Eye is perceived, the  
Patient must he let Blood, the first Day, twice in the.Arm; the  
next Day, let him be purged briskly, and.the same Night, if the  
Symptoms continue, let him be blooded in the Footthe Day  
after the Purge, let him be blooded intheNeck. This Disease,  
with regard to the Eye, is the same as the Pleurisy, with regard  
to the Breast, for the Blood has the sameGolonr and Quality in  
both Cases. Let a large Blister he laid to.the Patient's Shonlders.  
In the Beginning, Poultices are generally applied, but that Me-  
shod is very pernicious , for the Weight of the Cataplasms is  
troublesome, and rather tends tO bring the Matter to a Suppura-  
tion, than to discuss it, whereas the proper Remedies are such  
as can mitigate the inflammation, and carry Off the Matter that  
Causes it by Perspiration; such is Brandy,-mixed with a great deal  
Of warm Waters ν The Eye must be washed osten with this Mix-  
tnre. Let a Dram os Diaphoretic Mineral, fresh-made, be mix’d  
in two Pints os common Ptisan, the Patient must drink this  
Quantity in a Day and an half.. If the Purge gives Ease, let it he  
repeated again in two Days and, if the Eye seems disposed to a  
Suppuration, apply a resolvent, discutient Medicine, to prevent  
it. Take Sage, Rosemary, Hyssop; and red Roses; each a Pu-  
gil, boil them, for three or four Ebullitions, in half a Pint of  
red Wine, dip Compresses in it, and. lay them to the Eye, tak-  
ing care not to press it too much with the Bandage. . If a White-  
ness appears in the transparent Part Of iheCOrnea, drop-some Of  
this Wine into the Eye, three times *B* Day ὁ wet the Compress,  
as it grows dry. If, by these means, the Swelling Of the eye  
ceases, and the Globe does not Come taa-Suppnration, or if the  
Matter of . the Suppuration be resolved and discussed without  
injuring the Eye,- then make use of the distilled Water Of Cam-  
pbire; it must be dropped, from tifne ro time, into the eye,  
till all the Redness goes Off' If the Eye, as Often happens, remains  
weak, instead Of this Water, I use a strengthening Water, which  
-restores the Eye to its first State. We. are sometimes obliged  
to Open the Abscess with a Lancet, lest the Stagnationsofits Mat-  
ter might destroy" the Pans of the Eye .which inclose it. The  
Manner Of performing that Operation *we* shall shew presentiy in  
the Abscess Of the Eye, in ’.00.:.

*„ . .. The* **CURE** *os. the* **VENEREAL OPHTHALMIA.**

; This requires aS. speedy'Help aS the preceding Species. The  
Patient must be blooded in the Foot, to make a Revulsion Of the  
Humours from the Eye; he must likewise take the Panaceum  
Mercuriale, he must bathe at home Morning and Evening; he  
must be purged from the first Day os his Barbing, winch some-  
times must be repeated several Days successively; he must take  
the Panaceum every Night ; his Eye must be washed every Mom-

ing, with a Mixture os Water and Brandy, Compresses, wetted  
in the Wine mention’d above, must be constantly kept to his  
Eyes. By this Method, the Disease, if taken in time, will soon  
he cured; Otherwise the Eyes will perish, Or Very little Sight  
will remain after the Cure.

*The* **CURE** *of tht* **OPHTHALMIA** *of ths* **CHOHOIDEs.**

The Cure of this Species is the same aS that Of the Chernosixi  
with this Difference, that two Drops of the distilled Water of  
Camphire must be put into the Patientis Eyes every two Houts.

*The* **CURE** *of the* **OPHTHALMIAS** *from Strobes on thsFTE.*

As in this Species there is always some extravasated Blood, it  
is necessary to apply anodyne discutient Medicines, inch as  
Pigeons Blood, which must he dropt into the Eye twice a Day ὁ  
Compresses steep'd in warm Wine, mixed with some Drops of  
the Balsamum Commendatoris, must be laid to the Eye-lids,  
Bleeding must he repeated once, or Oftener, aS the Disease seems  
to require it. The Eye must be washed, three times a Day, with  
a Mixture Of Aqua Vulneraria, one Spoonful in five Spoonfuls  
of the distilled Water of-Eye. bright. Other Remedies maybe  
afterwards used; still having due Regard to the State Of the.Eye,  
and to the Symptoms subsequent to the Stroke.

*The* **CURE** *of the* **OPHTHALMIA,** *from the* **RUPTURE** *of the***. . VESSELS** *of ths* **CONJUNCTIVA.**

This Species is commonly Cured by dropping Pigeons Blood  
into the Eye, three times a Day; and afterwards applying a Com-  
press, wetted in the Vninerary Water, which must be taken off,  
when it grows dry: Then let sell some Drops of this Water into  
the Eye, to clear it of the Pigeons Blood. The White Of the  
Eye, from, red, at first becomes yellow, and afterwards reco-  
vers its natural Whiteness.

*Os. the* **OPHTHALMIA,** *subsequent to the* **SMALL-yox.**

The Small-pox causes four Sorts Of Diseases in the Eyes; the  
Inflammation Of the Conjunctiva,, the Fistula Lachrymalis, the  
Abscess Of the Cornea, and Ulcers in the Eye-lids. All these  
four are sometimes united, and sometimes there is Only one. In  
the Course Os’the Small-pox, the Face and Eye-lids swell, the  
Eyes, redden, and a glutinous Matter ouses out of them; this  
glews the Eye-lids together, so that, when Care is not had to  
loosen them, they remain shut several Days. This Humour, thus  
confined between the Eye-lids and the Globe, becomes acrid,  
and, by that means, may ulcerate the tranlparent Part of the  
Cornea, and injure the Sight considerably.

When the Pustules Of the Small-pox, in the other Parts Of the  
Body, suppurate, they cicatrize, hut the Pustules on the Edge Of  
the Cartilage Of the Eye-lids, between the Cilia and their internal  
Surface, dO-not cicatrize, by reason of the acrimonious Serofity,  
which incessantly moistens the Eye. Hence follow Ulcers,  
which continue, sometimes, several Years, and even during Lise,  
if they be not remedied. ” ...

. There are two -Sorts of Ulcers caused by the Small-pox in the  
Eye-lids, some ate attended with a sort Os fungous Flesh, which  
retards their Cure, till it be consumed. Others undermine the  
Glands that separate the Film, and so corrupt that Humour,  
which, by sticking to their Surface, contributes Very much IO  
Prolong the Ulcers2. in Length of Time, it makes the Eye-lashes  
sals Off

.The third Accident, caused immediately, by the Small-poy,  
-proceeds from a Viscid Humour,- collected and lodged between  
the'Globe and the Eye-lids, when they have been kept shut too  
long. Thin Humour enters the Lachrymal Points, passes into  
rhe Lachrymal Bag, Creates an Obstruction in the nasal Chanel,  
and so produces a Fistula Lachrymalis.

The fourth Accident Commonly happens twenty Days after  
the Small-pox, and sometimes in the Height of the Disease; It  
is caused by a Pustule, which appears in the Middle of theyrans-  
parent Part os the Cornea, between its Pellicles; the Hardness  
os the Cornea hinders the Pustule from coming out, unless it be  
superficial, then the Pustule penetrates inwardly, and, by that  
means; generates an Abscess, or else theMatter is extravasated  
between the Pellicles, Congeals, hardens, and forms a Spot in  
that Part. ‘ : - . . ’ .

Besides these Accidents, sometimes a Violent Defiuxion super-  
venes, when the Patient, after all the Pustules are cured. Comes  
to take the Ait. As the Pores of the Skin areexposed to the Air,  
they are, aS it were, dosed by it, so that the Perspiration of the  
Residue of the saline Humour, which passed through the IJlcerg  
os the Skin, is hindered by-this Obstruction of rhe Pores. This  
-Humous, thus Obstructed, returns into the Vessels, is discharged  
On the Eyes, and generates an humid Ophthalmia, attended with  
An Humour so corrosive, that it excoriates the Skin of the Face.

**Of REMEDIES** *for the* **OPHTHALMIA,** *subsequent ce* **the SMALL-.**

\* ‘ cr : Pox. ' - -

Here I rntist refer the Reader to the Cure of the humidOph-\*  
thalmiaf I shall only add this Caution: During the Small-pox, use  
a Collyrium made of Saffron, and the distilled Waters *of* Roses  
and Plantain, and the distilled Water os Camphire, is applied  
in the Beginning, prevents all these Disorders. It suffices topnt

fome Drops Of it into the Eye, three Or four rimes a Day; adds  
to hinder the ginwing Of the Eye-lids, which is Of great Conse-  
quince, dip a Feather in this Liquor, and draw it between the  
Eye-lid s several times in the Day and Night.

The Remedies for the Pustules Os the Small-pos, on the transi  
parent Part Of the Contes, are under the next Head ; and those  
for the Fistula LachrVmalis, see under that Article.

In Ulcers on the hedges Of the Eye-lids, Ophthalmic Waters  
are, generally, of little Service, hut I have found from my own  
Experience, that, by touching them with the Lapis infernalis, they  
cicatrize easily. The violent Heat of the Caustic must he abated,  
as soon as they have been touched, by washing the Eye in a small  
Glass frill of warm Water. Bur, above all, Core must he taken,  
that the Part of the Eye-lid which was cicatrized, may not bear  
against the Globe Of the Eye, till the Pain is entirely gone Off.  
They may he touched, in this Manner, Once or twice a Week,  
till they feem to require no more Use of the Caustic 5 then lay on  
these Places, Morning and Evening, Tuny reduced to a Very  
fine Powder, it will cicatrize them. We are to Observe, that  
these Ulcers, which lie deep, are more difficult Io cure, than  
those attended with fungous Flesh.

*'Ofthe* **ABSCESS** *ofthe* **RYE.**

This Disorder may be seated in different Parts Of the Eye,  
sometimes On the transparent Part os the Comea; at Other times,  
- between the Conjunctiva, and the Opaque Part Of the Cornea ,  
and Often On rhe Uvea.

. By Abscess I understand a Collection of Pus, whether it he  
great Or small. When the Abscess is in the transparent Part Of  
the Cornea, as Often happens after the Small-pox, \* it is soon  
known from a Whiteness which attends it: But when it begins  
between the opaque Part of the Cornea; and the Conjunctiva,  
it may he .known from the Swelling Of the Eye, which is more  
tumefied at the Place Of the Abscess, than in any other Part. If  
the Abscess be formed in the UVea, it Often lurks concealed, till  
the Pus is extraVasated into the Aqueous Humour.

Abscesses which attack the transparent Part Of the Cornea, .  
begin, sometimes, by a hide white Spot, which appears on the  
. .first Pellicle of that Membrane, which becomes a little railed.

This Species is easily Cured by pricking it flightly with the Point  
of a Lancet, without piercing the other Pellicles. But if the  
Abscess lies deeper, and in the Middle Of the thickest Part Of the  
Cornea, and spreads to such a Breadth aS to Cover almost all the  
transparent Part Of that Membrane, it then becomes what is com-  
monly called an Hypopion. But if this Abscess he not so large,  
and it breaks on the inside of the Eye, and that the Pus salis in-  
to the. anterior Chamber, between the Iris and the transparent  
Part Of the Cornea, and there makes a Gathering in form Of a  
Speck, shaped like an Half-moon, resembling that which appears  
at the Bottom of our Nalls, it is then Called Onyx.

*" [Heister gives* a different Account Of Hypopion and Onyx.  
See HYPOPION and OCULUS .J

Sometimes the transparent Part of the Cornea is Clear Of the  
Abscess, which lies between rhe Conjunctiva and Sclerotica, Or  
in the Duplicature Of the latter, the Pus breaks into the anterior  
' Chamber, between the Iris and the transparent Part of the Cor-  
nea. In the first Case, the Pressure of the Eye-lidS may occasion  
*it,* and, in the second,'it may proceed from the Pressareos the  
AponeurOfcs of the Muscles os the Globe.'

In all these different Abscesses, there is great Danger of losing  
the Sight , several of them, however, are cured, without the  
least Damage to the Eyes, in the Cure of the Chemofis, I pro-  
posed a Remedy to resolve this Collection of PuS ; and there-  
' sore, I shall here only speak Of an Operation, which is some-  
times. necessary to discharge it. It is requisite, first, to give a  
R.ule to know the Quality of the Pus in the Eye, which requires  
this Operation; for Often the Matter, that escaped into the an-  
Tenor Chamber, between the Iris and the transparent Part Of the  
Cornea, is dispersed by the Help Of Remedies already described;  
Though this Matter cannot be justly said to he discussed, but is  
; rather precipitated tO the Bottom Of the Eye.

When this Pus is not dispersed, but rather increases, so aS to  
; enter the Hole os the Pupfl, it is then full Time to perform the  
following Operation.

Let the Patient be set fronting a great Light, with his Head  
On the Back Of an easy Chair; then make an incision in the  
transparent Part of the Cornea, under the Hole Os the Pupil:  
You must take care the Point Of your Lancet do not touch the  
Iris, which lies behind the Pus, - .

The Aperture must he made long enough to let the Pus out,  
to help the Discharge of it, inject warm Water into the Aper-  
rare; it will wash, and, aS it stows out, bring away the Matter.  
.Apply to the Eye a Compress wetted in a Collyrium, made of  
Rose, Fennel; and Plantain-water, mixed with the White Of an  
Egg; the Compress‘must he kept moist, by sprinkling it, from  
- timeto time, with the said Collyrium *; some Of* winch must he  
drops, three Or four times a Day, on the Orifice in the Cornea.  
Some Days after this PuS is emptied, there is, for the most part,  
**a** Collection Of fresh PuS, in the Place from whence the former  
**- was** discharged. In this Case, introduce **a** fine Stilet ineo the In-

cision made to Open the Abscess, and so let out this Mattes, as  
you had done the first rime. If no fresh Matter gathers, the  
Orifice may he closed, and, if the Eye still continues inflamed,  
apply the proner Remedies," which I need not repeat.

OPHTHALMIATER. An Oculist.

OPHTHALMOS, όφθαλμός. The Eye. See OcULus.

OPHTHALMOXYSlS, from όφθαλμός, the Eye, and ξέω,  
to scrape. A Brushing Of .the Eye. See OcULUs. *Heister.  
Chirurg.*

, OPHTHALMOXYSTRUM, Of the same Derivation as  
**OPHTHALMoXYSIs.** A Brush **for** the Eyes. See OcULUs,  
- OPIATA.. The Anrients justly called those Medicines Opi-  
ates, in whose Composition there was Opium, or tiny other ln-  
gredients, of a narcotic Quality, but, at prelens, the Name of  
Opiates is unjustly and abusively bestow'd upon Medicines pre-  
pared without Opium, whether of the Corroborative, alterative.  
Or purgative Kinds only On account Of then Consistence, which -  
resembles that Of the Theriaca, and other Opiates Of a like  
Nature, . .

These are, more properly. Called Electuaries, which are, at.  
present, divided into those of the solid Kind, otherwise called  
Troches, and those of a softer Consistence, by some Called  
Opiates, both of which were, by the *Greeks,* Called by the com-  
inon Name of Antidote; which, however, did not Comprehend  
purgative Medicines, as Our Word *Opiate* does.

'. Art Opiate, therefore, is a Medicine of a thicker Consistence .  
than a Synip, and, like the tnie Theriaca, Prepared with Opium,  
scarcely fluid. It consists Of Various Ingredients, made up with  
Honey, or Synip; and is to be used sor a long time, either  
for purgative, alterative, or corroborative Intentions.

Hence there are Opiates os three Rinds, that is, of a purgative.  
Or alterative. Or Of a Corroborating Quality. *Morelli formulae  
Medicament..*

OPION. The same as OPIUM ὁ which see.

OP1STH0BARES., όπισθοβαρες, the Name os *i* Collyrium, of  
Use in Asperities of the Eyelids, and described by *Aetius, Te-  
trab.R. Serm.* 3. *Cap.* i Io. from *Oribasius.* It was Otherwise  
**Cased HARMATION, and EUToNoN.**

OPISTHOCHEIMON, σπισθοχειμών, from οπισθεν, hehind,  
backwards, and χειμῶν, the Winter, in *Lib.* I. *Epid,* and *Lib. 1. de.  
Humor,* signifies rhe Cold Season at the latter End Of the Winter,  
which is, generally, then most severe.

OPlSTHOCRANION? οπισθοκρἄνιον, from όπισθεν, hehind,  
and κρἀνιον, the Cranium, in *Acgrneta, Lib. 6. Cap.* **2. is** the  
*Occiput,* or hinder Part Of the Head.

OPISTHOCYPHOSIS, όπισθοκύφωσις, from οπισθεν, hack-  
wards, and κήφωσἐς. Of κῦφος, gibbous, is the same aS *Cypho-  
sis,* or an Incurvation of the Spine backwards. Gibbosity.

OPISTHOTONOS, ὸπισίνοτονός. Of Οπισθεν, hackwards, and  
τονος, from τείνω, to stretch, is a Species of Convulsion, for  
which see TETANOS, and EPILEPSIA.

OPIUM. This is an inspissated Juice, of a blackish-brown  
Colour; sometimes redish. Of a bitter Taste, and a very dis-  
agreeable Smell. The *Greeks* distinguished two Kinds Of it; one  
got by wounding the *Papaver album,* Ossicin. the other by  
Expression. The Opium which we have, is Os the first Kind; and  
as it was cultivated formerly in *Egypt,* "near the City of *Thebes,*it has acquir'd the Name of *Opium Thebaicum.* If we may believe  
*Kempfer,* all the Opium now used in the East, is whet transudes  
spontaneoufly from the Plants in *Natolia,* and other Places. But -  
M. *Tournefort,* and several Other modern Travellers, Could find  
no such *Opium* among the *Turks,* all that they met with heing  
the same with what is brought to ns in soft Lumps. They, al-  
so, Observe, that the sober People among the *Turks* seldom take  
above a Dram in a Day, and a few Grains of that Quantity are  
always mix'd in their Coffee. In the Empire of the Great *Mogul,*Opium is sold aS commonly in the Shops, as Tobacco with ns.  
-The Inhabitants prepare it in different Manners, and mix it with  
different Ingredients, such aS Rhubarb, the Extract Of Rhubarb,  
and the like. Some add to it Other narcotic Substances, such  
as the *Datura.* This last is generally the Artifice of the Quacks,  
by which they who rake this, are thrown-into pleasing'Dreams,  
which they take for Ecstasies, and believe to be real. *Kempfer*relates many wonderful Effects Of this Preparation, winch he  
terms the *Indian Nepenthe-*

The Effects Of Opium are always' narcotic, whether taken  
inwardly. Or applied externally, and it has been found tO cause  
Sleep, when given in a Clyster, better than when taken thy the  
Mouth. When applied to the Eyes and Ears, it has caused  
Blindness and Deafness ὁ and *Galen* relates, that an Opium-plai-  
ister, laid on a Gladiator’s Head by a Stratagem Of his Enemy, '  
killed him in a littie time afterwards. This Author, also, says, that  
he never used Opium, except in Very pressing Cafes., Opium  
does not make the Pulse quicker, or harder, than it was before;  
but only greater, and heats very much, which is a sore Proof,  
'that it dissolves and rarefies the Blood ,' and this appears also froth  
its causing an Itching in the Skin, and sometimes Sweat. It is  
Observed of the *Turks,* who are lolled in Battle, that aS soon aS  
their dead Bodies are removed from the Places where they fall,  
they begin to bleed, their Blood being made more fluid, by the

Opium winch they take. By this Rarefaction of the Blood in  
the Vessels, the Nerves which he near these Vessels, are com-  
press’d ὁ and thus the Course of the animal Spirits is stopt, as  
is, also, the Secretion Of many Fluids, such aS the Bile and Urine,  
which Occasion Costiveness, and the making Of Very little Water.  
Opium, in all Probability, acts by its narcotic Sulphur, which  
divides and rarefies, m an extraordinary Manner, the sulphureous  
Parts Of the Blood: And accordingly we Observe all Vegetables,  
which contain an Oil of this kind, such aS Nutmeg, Saffron, and  
the like, produce in the Body an Effect of the same Nature with  
that of Opium. Neither is it at all unfeasible, that Sulphurs  
should be capable Of a Very great Degree os Rarefaction, fince  
the Smell Os Musk, Or Ambergrise, may extend through so large  
a Space. *Pitcairn* was Of Opinion, that the Effects Of Opium  
were Owing to its volatile Salt, but it seems to contain that Plin-  
ci pie in too small a Quantity for fuch Operations.

When a Person has taken too great a Quantity of Opiuns, the  
first Thing to be done is, to empty the Vessels by copious Bleed-  
ing, if the Patient’s Strength can bear it. The next Thing is to  
drink acid Liquors, Inch aS Vinegar, Lemonade, Syrup os Bar-  
berries, and such-like, which coagulate the Blood, and thus give  
the Vessels room to contract. Smelling to Vinegar, and all Aro-  
matics, is also proper, and, if the Stupor he Very great. Scarifi-  
cations Ought to be made; and Vinegar and Salt sprinkled upon the'  
scarified Parts. Blisters and sharp Clystersansiver the same Effect.  
; The Rules to be observed in taking Opium, are these,  
. I. If the Patient be plethoric, he ought not to take Opium,  
till he has lost some Blood. .

2. It Ought not to be given in the time of the Menses and  
Lochia Of Women, nor during the usual Flux Of the Haemor-  
thoides in Men, because it stops all these natural and healthful.  
Evacuations. Neither ought Opium to be given in every Diar-  
rhoea,because, is it he Critical, the Stoppage thereof may be Very  
hurtful. It mushalso, be Very improper in a Suppression Of Urine,  
and the general Rule is, that, when the Suppression Of any One  
Evacuation by Opium is foreseen. Other Evacuations, especially  
by Bleeding, Ought to succeed.

3. Opium Ought never to he taken On a full Stomach, be-  
Cause it hinders Digestion, and proves, commonly, emetic. The  
Digestion Ought, therefore, to be completed at the Time Of tak-  
ing it, and the fame thing is to be said Of all other Narcotics,  
which, given unseasonably, and for a long Continuance of Time,  
quite destroy the Appetite, bring On Hickups, Nauseas, and ha-  
bitual Vomitings.

4 Persons who begin to take Opium, ought to venture Only  
on a very small Quantity at first, because the Effects Of rhe same  
Quantity On different Persons are Very different; and there is no  
way to determine, but by Experience, how much any Person can  
hear. Half a Grain has been found to cause Sleep for twenty-  
four Hours together, to a Person who, afterwards, required half  
a Dram to produce half that Effect. For it is a Certain Obser-  
vation, that they who accustom themselves to take Opium ha-  
bitually, must often increase the Dose, Otherwise it gradually loses  
its Effect On them; and the elder *Geoffroy* knew a Woman who  
took seventy-two Grains every Day, merely to ease the Pain of  
a cancerous Breast. The common Quantity among the *.Turks is*a Dram in a Day, but some take much more.;

The Antients were extremely cautions in giving Opium, -bur,  
in the Beginning of the last Century, *Felix Plaferus,* a learned  
Physician Of *Basil* in *Switzerland,* began to bring the Use of it  
in Vogue. *Sylvius de le Boe,* Professor of Physic at *Leyden,*perfected what *Pl at er us* began; and, from that Time, many of  
.the most famous Physicians in *Europe,* such aS *Sydenham,* and  
ethers, found, by certain Experience, that it was one oi the most  
valuable Medicines in the World, when prudently administred, in  
Calming the too Violent Motion of the Blood, and easing Pain.

There are, however, still some very great Men, who continue  
Enemies to Opium , and among these Μ. *Stahl* has declared  
himself, in his Dissertation *De Imposturis Opii.* They are afraid to  
use it for the Ends just mentioned, for fear Of sufpending the Cri-  
fes which commonly happen after Violent Pains, such as those ol  
the Gout and Rheumatism, and in acute Distempers, in which  
the Fluids are Violently agitated, they apprehend, that by giving  
Opium, to diminish these Motions, they only throw a Veil over  
the Distemper j which hinders them from Observing its true Ge-  
nius, and the Tendency Of Nature in the Course Os it. Of this  
they cite Pleurisies as an Example; and they are certainly in the  
right, not to give Opium in that Disease.

; But, notwithstanding all the Strength Of these and Other Rea-  
sons against the Use os Opium, and the Authority of those who  
advance them, this Medicine is undoubtedly Very proper On  
many Occasions ; as in great want of Sleep, too great Motion of  
the Fluids, occasioned by purgative, and other kinds of Medi-  
cines, in great Deflations, and in stubborn Coughs. *Geoffeoy.*

**PREPARATIONS OF OPIUM.**

**EXTRACTUM OPII: EXTRACT OF OPIUM.**

Put four Ounces Of good Opium in thin Slices, into a Glass  
Body, wherein there are two Pounds of Spring-water; set

is in Sand, and stop the Mouth of the Body with snothef  
Glass: Make Fire under it, till by gradual Heat it is made  
to boil, in which State keep it two or three Hours; then let.  
out theFire,and, while the Diflolution is hot, run it thro’ a  
Flannel Bag, and press it strongly into an earthen Vestel;  
Put that which remains in the Bag into a Matrass, tn  
which there is a Quart Of rectified Spirit Of Wine, make  
a double Vessel Of the Manass, and let it stand in Digestion  
twenty-four Hours, thow-and-then shaking it; then rake it  
Out, and, when it is cool, run it thro’ a Flannelὁ put the  
Spirit Of Wine, which is charged with the gummy  
Part Of the Opium, that the Water was not capable Of  
dissolving, into A Cucurbit; and in a gentle Heat draw Off  
Two-thirds of the Spirit of Wine, which will serve again  
for the fame .Uses Then put both the EEtractions toge-  
ther, and in.a clean.earthen Pan, with a moderate Fire,  
eVaporatejtfll of a Consistence sit to form into Pills, which  
keep in a Pot for Use.

This is a most certain Opiate yet known, and is very Cons,  
venient for any Compositions Of Laudanum; and some prefer  
it. to any Of the Liquid Preparations, because the Dose. can  
more certainly be assigned. It is often prescribed by the Title  
Of *Extractum Tbebaicum* t The Dose is from half A Grain to  
two Grains. Some do this without any thing hut common  
Water, and that, indeed, is a certain way to purify the Opium  
of all its Dross.

**DR.-GODDARD’S COMPOUND EXTRACT OF OPIUM.**

Take Of Saffron, and Nutmegs sliced thin, of each one Ounce j  
Of Castor, half an Ounce 5 put them into a Martrass .with  
Tincture of Tartar, twelve Ounces , set them on a gentle  
Heat Of Sand (with the Mouth Of the Martrass well  
stopt) in Digestion twenty-four Hours, shaking it Often;  
then let it cool, and press it thro' a Cloth into st clean  
earthen Pan: What stays in the Bag, put into rhe Martrass  
again, and put to it rectified Spirits Of Wine, half a Pint; let  
it stand warm for twelve Hours; strain it off to the other:  
Into these Tinctures put, Ofthe Extract of Opium, five  
Ounces, -set them over a gentie Fire to evaporate into an  
Extract. '

This has the Virtues of the former, but may be . ventured  
in somewhat a larger Dose, so far aS to three Or four Grains.

**GUTTAE VITAE: DROPS OF LIFE.**

Dissolve Of the best Opium in Water, aS in the *Laudanum  
Liqutdum ctim Cataphora,* four Ounces, Then take of  
*English* Saffron, one Ounce, of *Russia* Castor; One Ounce  
and an half. Cochineal and *Virginia* Snake-root, of each  
half an Ounce; Nutmegs, Zedoary, of each two Drams,  
Of Camphire, one Dram; Powder these Ingredients, and  
Put them into a Matrass; pour upon them Tincture of  
Antimony, (made with Salt-petre, and *Aatimoniurn Dia-  
phoreticum)* one Pint - let them stand three or four Days  
in a gentle Heat, shaking the Matrass often, rill a good  
Tincture is produc'd, which put to one Quart *os* the  
Dissolution of Opium: Then let all stand in Digestion  
forty-eight Hours, and, when seeded, decant for Use.

This is the Medicine which *Salmon* made so much Noise  
with: It is an excellent Medicine in proper Hands, and one of the  
best Preparations of this kind, tho' it is not enough known to be  
much met with in Prescription. The Opium is so well guarded  
with Cordial Aromatics, that it may be Ventured upon in Very ’  
Considerable Doses, and there is no Fear Of Nauseas afterwards  
at the Stomach; it promotes Sweat Very much, and is won-  
derfuily carminative: A Patient may take from IO to 40, JO  
and do Drops.

**PILULAE MATTHAEI. MATTHEwis PILLS.**

Take Of the Extract of Opium, Of black Hellebore, Of Li-  
. quorice, and the Soap of Tartar, (described under the  
Preparations of Tartar) of each four Ounces. Let the  
Hellebore and Liquorice be made into a subtile Powder.  
Beat and mix these four Ingredients very well; then, with  
two Ounces or three Ounces Of tins Mass, mix of*Englistj*Saffron, One Ounce; cut into small Pieces, and beat them '  
well together, till the Sassion is perfectly mix'd with the  
Mass; so that no Part of it is discernible from the rest;  
then beat and mix. that with the rest ofthe Mass as well. If  
this Mass be too dry, you may mix with it some of theOil  
which comes from rhe Soap, which it spueS our, when it  
stands a long time by. Or, in its stead, so much rectified  
**Oil** of Turpentine, as is sufficient to make it into a Mass fit  
to form into Pills. Then put it into a wide-mouth’d Glass,  
or Gally-pot, ty'd oyer with a Bladder or Leather;

There arc many ways of making this Medicine: *Bates* puts  
in white Hellebore - but, how much soever it may be imagin'd  
to stand corrected here, it is much safer left Ont, and the Me-  
dicine still lest efficacious enough to all the Intentions it is  
ordered sor. The Saffron in this is not in that Of *Bates',* hut  
belters the Medicine in many Cases. It is an admirable and  
safe Opiate, and promotes yhe Discharges both by Sweat and  
Urine, and the Soap of Tartar is so aperient, that is makes it  
safe, even in Asthmas, when no Other Preparation Of Opium  
. dare be Ventured upon. It may he given from three to ten  
‘ Grains: When it grows dry with keeping, it must be again  
moistened with fresh Oil or Turpentine; but the Oftener it has  
had those Amendments, its Dose may he enlarged; for the  
Turpentine will not dry away fo much, as not to leave enough  
behind to give some Augmentation to its Bulk.

PiLuLAE STARKEL DR. STARKEI's PILLS.

Take Extract of Opium, sour Ounces; Nutmegs, and mineral  
Bezoar, Of each two Ounces, Saffron, and *Virginia* Snake-  
root of each one Ounce: Beat the Nutmegs and Saffron  
together into a Paste, so that they Cannot be distinguished  
from One another. Let, also, the Mineral Bezoar and Snake-  
root be an impalpable Powder. Then mix all together, with  
half a Pound of the Soap Of Tartar Of Oil Of Sassafras, haff  
an Ounce, and two Ounces Of Tincture Of Antimony:  
Let them be all well incorporated, by heating in a Mor-  
tar : Then keep them in a Glass Or Gally-pos, testes over:  
with a Bladder Or Leather, for Use.

This, Mr. *George Wilson lens,* he had from Dr. *Starleofs* owjj  
Mouth, in the Year I665, a little before his Death; who then  
told him, he gave *Matthews* the former for a little Money,  
hut that this was what he successfully made use of himself. It is  
both more diaphoretic, and more anodyne, than the former;  
and they who have made use Os it in their Practice, affirm st  
to be the best Laudanum they ever met with. And yet thin  
is not- the Sort which is kept in the Shops, and it is not in  
so constant Prescription aS the former. Indeed there are hardly  
any os the Shops that prepare this 3 so that a Physician may  
write for it in Vain, while the other is so ready for a Succeda-  
neum. This may he given in a good handsome Dose, when  
Rest is wanting, in Fevers, and is not so hazardous in its Effects  
as common Opium, Or any other Of its Preparations. Tho  
Alexipharmics, likewise, in its Composition, Cause it sooner to  
raise a Sweat, because, at the same time that they warm and  
attenuate the Fluids for Secretion, the Opium relaxes the Fibres,  
and makes more Way for their Passage thro' the Cutaneous  
Pores. . 7.6-

**THE UNIVERSAL ANODYNE.**

Dissolve Of the best Opium, four Ounces, in a sufficient Quan-  
tity Of Water, evaporate to one Pint and an half, to which  
put One Pint Of rectisyd *Trench* Brandy; of Saffron, half  
an Ounce , of Cochineal, two Drams; and Of the Tincture  
Of the volatile Salt Os Tartar, two Ounces (or, in its stead,  
two Ounces of the Soap of Tartar), Of *Sal Volatile  
Qleosum,* and the Spirit that was drawn from the Soap of  
Tartar, Os each three Ounces: Digest these for four Or five  
Days in a well-luted Matrass in a gende Heat, then strain  
it for Use.

This Preparation has some time since been in great account  
, amongst some particular Persons; but it never Obtained to be  
a Shop Medicine: lt is Very good for all the Purposes Of the  
*Pectoral Sudorific Liquid Laudanum,* (described under the Ar-  
ticle LAUDANUM; which see) given from ten to fifty Drops.

*Opium is the proper or milky Juice, which issues from incisions  
made in vibice. Poppy.beads, thickened in the open Air into a  
foUd, but soseiso resinous Gum, os. a dark rediflo-brovm Colour,  
and of a very hot bitter Taste ; and strong, heavy or soporiferous  
Smell brought from the* Levant, *and the* East Indies, *in round  
flat Cakes, or more irregular Loaves, of different Sizes, from four  
Ounces, to a Pound and upwards, in IViight , and covered voith  
Leaves, or other vegetable Stuff, to prevent their running and  
flicking together.*

So little is the History of Opium, even at this Day, suffici-  
ently known, that in this short Description there is scarcely one  
thing asserted, which is not contradicted by famous Authors:  
And therefore I am under a Necessity to explain and Confirm each  
Part Of it. -

I. It is well! known, that a milky Juice stows from Poppy-  
heads, when hurt or wounded. That this bears a Very Itnall  
Proportion to the Juices got by Expression, and widely differs  
from them in Taste, Smell, and Qualities; also, that the  
Opium Or the Antients was made of the Milk, and their Meco-  
nium os expressed Juices, or Of the Decoction Os one and the  
same Plant 5 and that, in their Opinion, the Meconium was  
much weaker than the Opium. Bur it is disputed, whether the  
Opium now used be the true Opium, or the Meconium only.

Ou the one hand, it it affirmed by *Garcias ab Horto, Bel.  
Ionites, I-lausislflo, Tavernier,* and, to name no more, by Dr.

*Kesnpser,* that onr Opium is the Milk drawn from Poppy-  
heads by Incision, Or is the same way prepared, as was the  
Opium Of the Antients, according to the Account *Dioscorides*and *Pliny* have given Of in On the Other hand, it is aS post-  
tiVely asserted by Prosper *Alpinus, Bellontus, Lemery, Savard*and *de la Candominegirstay.* the Opium Of the Shops is nothing  
but a Meconium. .

But that Our Opium is neither an Extract, nor an inspissated  
expressed juice Of Poppies, may be demonstrated by Argu-  
ments, which' to me appear.unanswerable. For, I. The .  
milky Juice drawn by Incision from Poppy-heads, and  
thickened either in the Sun, or Shade, eVen in this Northern  
Country, has all the Characters Of good Opium, its Colour,  
Consistence, Taste, Smell, Faculties, Phenomens, are all the  
same. Only, ifCarefully collected, it is mote pure, and more free  
Of Feculencies. TO Obtain this Tear, I first followed the Di-  
rections Of *Dioscorides,* and on a clear dry Day, before Noon,  
Cut off the Asterisk aS he\calls it. Or Crown Of the Poppy-  
headS, so aS to avoid penetrating into the Cavity Of the Fruit;  
and Collected the pure Milk, with a littie Silver Spoon, and  
my Finger, into a China Tea-cup. I made Choice, for this Pur-,  
pose, of Poppy-headS Come to their full Bigness, and before  
they began to harden or dry. The Juice soon thickens (a  
small Quantity in a Day Or so) to the Consistence of Opium,  
in the Open Air. It was Of a fiery-hot and Very bitter Taste,  
and soporiferous Smell; both hotter and stronger scented than  
the Common Opium; Os a dark yellowish-brown Colour on  
. the Outside, somewhat lighter within when broken, and not all  
Of the same Colour, but, aS it were, composed of Drops. I  
have of it by me, and, though now more than ten Years old, it  
retains both its Colour and Taste, though it is not fo strong-  
smelled aS when new. This Specimen was taken from the  
white Poppy: About the same time I gathered Opium, also,  
from the wild Poppy, which was a littie lighter-coloured; but  
this I thought accidental Only; for the Milk turns soon black  
on the Knife, and so may Colour some Of the Juice more than  
another; and in nothing, else they differed. -

I made Trial afterwards Of the *Persian* way of making  
Opium. I had not the five-edged Knife but, as quickly aS I  
Could, superficially scarified One Side Of the Poppy-heads, in  
four, five. Or six Places, according to their Bigness. Next Day,  
when the Juice was aS herd aS Opium, I scraped it Off, and kned  
it together ; so could not discover any thing like Drops in it.  
Notwithstanding all my Caution, I sometimes penetrated the  
Head, and some few Drops sell to the Ground, both which  
would have probably been prevented, had I been furnished  
with a right *Persian* Knife. I et I found, that I was able to Col-  
lect considerably more this way, ln the fame Time, than in  
*Dios.corideds* way. That I might have the true Tear, aS clean,  
free of Dust, and fair as possible, I cut off the Star Os several  
HeadS,and, hending them down, suffered the Milk to drop into  
a Tea-cup, then set it in a Window, being well covered with  
Paper; when it was aS solid as Opium, I scraped it out, and  
pressed it into a Lump, lt is altogether of the fame Colour,  
and the whitest I ever saw. I made] use of the white Poppy  
for these Experiments also ; and repeated them on several Va-  
rieties Of the Poppy, both with the white and black Seed, with-  
Out observing any Difference Of the juice.

2. Both the Extract, and the thickened expressed Juice, differ  
very much from Opium; and scarcely any way resemble it. I  
Ordered both to be prepared, but neither of them has so much  
of the Taste Or Smell os Opium, that any one could know  
thereby, that they were all got from the same Plant. The brown  
Extract is black when dried, as is, also, the green inspissated.  
Juice; bur, when diluted, the former is brown, the Other green.  
The extract is pretty tough and stickings the Juice is rough,  
and more friable. Both were evaporated in a gentle Sand-heat;  
the Juice beginning to turn mouldy in two Days after Expres-  
sion, though kept in a dry Place, and a broad Bason. I own some  
Part Os either Of these may be mixed tn some Places with the  
true Opium, and perhaps the greenish-brown Opium, mentioned  
by *Condamine,* may have some of the expressed Juice in  
it, but it cannot be much, sor the Reasons following, and  
probably it is some other aromatic Substance that gives it the  
penetrating Smell, which it Cannot derive from the Poppy.

3. The common Opium contains more Resin, or Sulphureous,  
than either the expressed inspissated Juice, Or Extract, of Poppies  
can possibly do. For, as will appear below, about the third  
Partins the common Opium, as well aS of what I made, is  
Rosin or Sulphur. Of the Extract, and thickened expressed  
Juice, Alcohol did not distolve the' hundredth Part, and  
was even scarcely tinctur’d by them.

, 4 If Opium was not the true Tear, there needed not be so  
many sarge Fields sown with Poppies, aS there are in Naro/ha,  
Egypt, and *Persia* , neither Would Opium he so strong a Medi-  
Cine aS it is; its Virtues, aS an Anodyne, depending chiefly, if  
not entirely. On the proper milky Juice.

The Objection, taken from the Price of Opium, seems to he  
Of no Force , because I could have collected here, without the  
*Persian* Knife, and that Dexterity which can be acquir’d only

by Use, notwithstanding the Climate, and the consequent  
Smalness Of Our Poppy-heads, in an Hour's Time, about a  
Dram Os Opium. For these Reasons I Conclude, *That Opium  
is, at least for Ahe far greatest Part, the true Tear of the Poppy.*

II. Another Controversy is, whether Opium is got from the  
white Poppy, Or from the black.' The Antients seem to have  
believed it was from the black. But I think it of no Conse-  
quence, whether from the black Popps, or the white, with  
regard to the Medicine, though of great Consequence with re-  
gard to the Makers of Opium, interest, therefore, will direct  
every-where to Cultivate, for Opium, only such Poppies as hear  
the largest and most juicy Heads in the Country, and Conse-  
quently, so sar aS I know, the white. Thus we find it is from  
the white Poppy they procure the Opium in the Eastern  
Countries

, III. AS to the Choice Of Opinm, I shall pass it aS known.  
But fince *Dioscorides* writes, that Opinm is sophisticated several  
ways, and *Bellontus* telis us, that the Merchants increase the  
. Quantity Of Opium before it is distributed among the Pro-  
vinces, it may be asked, whether all the Opium we use is from  
the Poppies, or whether any Other Drug is mixed with it, inch  
aS Glaucinm-gum, Juice Of wild Lettuce, and Suet Or Tallow,  
all mentioned by *Hioscoridesr* Though I Cannot answer this  
Question with Certainty, yet I think it probable, that nothing  
is mixed with it, if it be not a small Quantity of some inno-  
cent Liquid, or a milky Juice of the same Nature with that  
Of Poppies; Otherwise it would be weakened, and not so strong as  
what we make here. I know not the Glancium Of the Antients,  
nor did I ever see any Opium, that I had Reason to suspect  
to he adulterated with Gum Or Suet; but the wild Lettuce  
abounds, mote than any Poppy I know, with a Milk Of the  
same Taste and Smell: Perhaps therefore this, if it can be more  
easily collected, may still, in some Places, be mixed with  
Opium, and the Medicine be nothing the worse, the Milk even  
of the common Lettuces being, anodyne and somniferous, as  
well as that Os the Poppies. - '

IV. I said. Opium comes to us Covered with Poppy-leaves,  
*etc.* because every Author says so; but what I have seen here  
is covered with the Flowers, Seeds, Chaffy Husks, stripped  
from the Stalks of some of the Lapatha Or Dock-kind.

*Opium,* or *Opion,* now the most common Name of this  
juice, was, I believe, given it by *Pliny, Galen* being the first  
among the *Greeks* I have seen, that uses it. . -

That Opium was known to the Antients,shobody denies, hut  
whether the *Greeks* Or *Egyptians* were the Inventors, is a  
Question not yet determined: Whet seems most probable, is,  
that this Honour is due to the *Greeks,* and that its soporiferous  
, . Quality at least was discovered, if not by *Hippocrates* himself,  
not long before him; and those learned Men who are of Opi-  
nion, that Opium was the *Nepenthes* Of *Homer,* seem to be  
' mistaken. .

AS for the Opium-plant, it is evident from *Homer,* that it  
was cultivated long before *Hippocrates* lived. The Invention Of  
it is even attributed to *Ceres,* and so acceptable was it be-  
lieved to he to that Goddess, that she *was* named *Mecone,* that  
*Cereale* was a Common Epithet Of the *Papaver* among the  
Poets; that it was offered to her in her Sacred Rites; and that  
she was represented holding it in her Hand. So much Honour  
Could never have been done to a narcotic Vegetable, especially  
hy the *Bomans,* had it not been Otherwise very useful, and  
reckoned One Of the Frumenta, which *Cores* first taught the  
*Greeks* at *Attica* how to’cultivate and use, for which she was  
deified after Death. That the Seed Of the Poppy was used  
in Food by the Antients, and particularly in Deserts, will  
not. be denied by any in the least acquainted- with their  
Writings: This Le *Clare* acknowledges5 but he thinks  
thiuksj.is was On some Other account than Nourishment, or  
that the Manner os dressing it divested it of the somniferous  
and noxious Qualities. But I must be Of a contrary Opinion;  
for, even in *Hippocratests* Works, it is called nourishing; and,  
without depending On the Testimony of the Antients, Poppy-  
seed is Os a more delicious Taste than sweet Almonds, it is  
Oily and farinaceous, and I have eaten large Quantities of the  
black Seed, as well aS Of the white, frequently, and never found  
them somniferous Or noxious: Besides, it is still used tn Food in  
some Places, as well aS the express’d Oil, which is aS innocent  
and wholsome as Olive-oil.' If this Seed was noxious, baking  
would not free it Of its bad Qualities, the narcotic Part Of  
Poppies being very fixed, and not at all volatile. Hence is  
Confirmed what was said above, that the anodyne and foporife-  
Ions Virtues of the Poppy are lodged in the Milk, and in it  
Only: In this it is not singularfor the proper Juice in many  
Plante differs much in Nature from the common Juices, aS  
the Milk Of the common Garden Lettuces is hypnotic, while  
all the Plant besides is Cooling, diluent, and nourishing.

It is, also, certain, that Our Garden-poppy is not specifically  
different from the μήκων Or *Papaver* of the Antients; for  
although we could not make a tolerable botanical Description  
Or this Plant, out of all they have left uS concerning it, yet  
.we find in their Works so many Marks os it, as are sufficient  
to distinguish it from others: For instance, we learn from

*Theophrastus,* that it is an Herb, which does not Cast its  
Leaves, Contains a milky Juice, has Very small Seeds Contained  
in Heads, from which the milky Juice is collected. *Dioscorides,*also, gives Marks to this Effect. This may appear to some a mere  
historical Nicety ; but is the Identity Of the Medicine be not  
first demonstrated, we cannot be benefited by the Experience  
and Observation of former Ages

*Opium eases Pain, procures Sleep, promotes Perspiration, bust  
checks all other Evacuations , cheats the Spirits, incrasseates the  
Humours, and relaxes the Fibres. Hence it is recommended in  
intense Paras, Watchings, Spasens, Spleen, Vapours. Eluxes,  
Haemorrhages, Tenefinujes, and in all Diseases proceeding from  
Tension* **or** *Irritation of the Nerves, irregular Motions of che  
Spirits, or from Thinnest ar Acrimony of the Fluids.*

It would he too tedious here to recount, the Various Opinions  
Of Authors concerning Opium t Let it suffice to hint briefly at  
such afterwards, as are contradicted by plain Experiment.

I. Opium is acrid, bitter, and strongly odoriferous. *Dios.cAn  
rides* fays, it is bitter in Taste, and carotin and sopori serous  
in Smell; *Matthiolus,* that it ulcerates ths Tongue .and Palate,  
if kept for some time in rhe Mouth- Some call the Smell  
*urirosus,* others *grands, teter, penetrans}* and tho like. If one  
attentively tastes Opium, he will perceive, first, a nauseous  
and diffusive Bitterness; then, in about half a Minute, a pungent  
Heat, affecting first and principally the Tongue, then the Pa-  
late, and, last of all, rhe Lips, in a lower Degree. The Heat  
-Continues more than fifteen Minutes, the Bitterness still longer,  
prOVOking a plentiful Discharge of the Saliva. It heats and irri-  
tates, also, the Nose, and creates an Inclination to sneeze.

Hence, were we to judge of the' Virtues Of Opium by its  
Effects on the Mouth and Nose, or by its Taste and Smell, we  
would reckon it an acrid, diaphoretic, nervine and cathartic  
Medicine. It Certainly is diaphoretic, and properly enough  
may be called nervine, but not Purgative, though by Accident  
it sometimes has that Effect. *Erasius* thinks, that,' if it was not  
for its .stupefying Powes, it would always prove cathartic.  
According to him, therefore, the narcotic Virtue has no De-  
pendence upon the above sensible Qualities. This will appear  
the more probable, if we consider, that some Narcotics are  
acrid. Others mild, some bitter, others sweet; some odorife-  
rous, Others not, some purge, others stop such Evacuations;  
and yet all Os them are anodyne, and almost equally narcotic  
and Virulent, is the Dope be proportioned to their Strength;  
and, also, that there are not a sew Cathartics aS acrid, hitter,  
and strong-smelled, as Opium, which are no ways narcotic.  
Consequently, we ought to distinguish between the stimulating  
and narcotic Qualities Os Opium, .at least, we may at present  
Conceive Os them aS different.

These sensible Or stimulating Qualities, in the Opinion Of  
some, sufficiently Confute the old Notion Os the refrigerating  
Faculty os Opium, and prove it to be a very hot Medicine;  
and certainly in one respect it is so. But it is as certain, that its  
Effects in diminishing preternatural Heat, observable in a Variety  
Of Cases, also, evince its cooling Virtues; insomuch that it  
would not be difficult to-prove, that Opium may more properly  
be said to cool, than to heat.

a.Dpium consists! Of Gum, Rosin, and terrestrial Parts, in  
such Proportion, that in twelve Parts of Opium there are about  
six Parts Of Gum, four Of Rosin, and two of terrestrial Fecu-  
lencies, neither dissolvable in watery or spirituous Menstruums.

I distolved Opium in Water, Wine, Vinegar, Spirit of.  
Vinegar, and Brandy; and drew a Tincture from it with Spirit  
Of Wine rectified with Salt Of Tartar, Or Alcohol, keeping  
always the Proportion Of one Part os Opium to twelve Parts  
Of the Menstruum, and found that Alcohol distolved Four-  
twelfths Of Opium, there remaining Eight-twelfths;' of which  
Water dissolved Five-twelfths, and left Three-twelfths of Faeces.  
Water dissolved Eight-twelfths, and, of Four-twelfths remaining.  
Alcohol dissolved one, leaving of earthy Parts aS above. .It  
must be Owned, the Proportions were not always exactly the  
fame, but did not much differ. Hence Water dissolves about \  
Three-fourths Of the Sulphur of Opium. I found, alfo, that  
Water dissolves Opium as well, and aS soon, as-Wine, Vinegar,  
or Spirit of Vinegar5 Only the Solution in Water, in three or -  
four Days, becomes turbid, and soon aster mouldy, separating  
from it a whitish Substance, containing Part of the distolved  
Rosin , that Brandy, or Proof Spirits, dissolves both the  
gummy and resinous Parts Of Opium, that is, all that Water  
and Alcohol - separately can dissolve, and that even without  
Heat, leaving nothing but the feculent Part. Hence, there  
being, in twelve Parts of Brandy, about eight Parts of  
Water, so much Water, Wine, Or Vinegar, is a sufficient Men-  
struum for One Part Of Opium. But though I tried this Pro-  
portion Of eight to One, and it answered ; yet, because twelve  
to one completed the Solution sooner, I kept by ir. For Water,  
Wine, Vinegar, and Brandy,' in the Proportion of twelve to  
One, took but four or five Days for the Solution without Heat,  
if frequently shaken, but Water, in the Proportion os eight to  
One, took ten Or twelve Days; Alcohol requires about a  
Month. And the Residuum of a Solution of Opium in cold  
Water contains nothing which boiling Water can extract.

Surpassing, therefore, that the Rosin Or Sulphur of Opium is  
as good, Or aS much wanted, aS the Gum, Or the mucilaginous  
Parr, Brandy is certainly the best Menstruum.

3. The Gum Of Opium has the same Taste and Smell with the  
Juice; hut the Rosin has no Taste, and smells rather musty  
than Of Opium. This is taken notice Of, also, in the *Col. Chym.  
Laid. C.* 3 Io. This Rofin is much Condemned by Dr. *Jones,*and others I wish they had given more convincing Evidence of  
the Mischiess it does. The World is too cautions now to be-  
lieve implicitly every general Assertion.

It is well known, that the Solution Of Opium in Water is  
anodyne and soporiserous, has all the good Qualities Of the  
juice, and operates in aS small a Dose, and yet that Opium in  
. Substance is sometimes preferable to it; that, allowing half the  
Sulphur of Opium only to he Rosin, eVen thus One half *Of iz*is in all the aqueous Solutions and Extracts; and that a few  
Grains or the most tenacious, tough,and sticking Rofin, Cannot  
do much Prejudice, if not Otherwise hurtful, far less the Third,  
or Fourth os a Grain. Common Aloes is fully as resinous as  
Opium, and its Rosin aS stacking. This ROfin os Aloes haS  
generally been blamed for causing the Tenesmus Hxmorrboida-  
lis, *etc.* by its irritating Acrimony. But a late Member of the  
Royal Academy (who asserted, also, that Rhubarb was not  
astringent) has attempted to prove it not' Only innocent, but  
very friendly to Nature, and the heft Corrector of the Acri-  
mony Os the Gum. Lest this should he the Case with Opium,  
I made Experiment upon myself with a Tincture of the Refi-  
duum OF Opium dissolved in Water, extracted by AlcobOh I  
took at first ten Drops, then fifteen, and last Of all twenty-  
five; and must Own, that it tasted strongly os Opium, and '  
- was somniferous -, but I was not sensible os any bad Effects of  
it. I may add, that the Balsamum Anodynum is found to he  
really Anodyne internally, aS well aS externally, though the Tin-  
cture is extracted with rectified Spirit. But, whatever is in this,  
crude Opium may be preferable to the Solution, aS it does not so  
soon dissolve in the Stomach, Or aS it increases the diaphoretic  
Quality, or On account os some Singularity in the Constitution.  
'But, for the most part, what does not dissolve in Water may be  
unnecessary. Hence I infer, that the narcotic Virtue os Opium  
does not depend on its *vaporosum Sulphur,* according to *Fred.  
Hostman,* nor on its Sulphur *crassum ad modum rarescibilg,* accord-  
ing to *Geoffeoy,* akin to that Os *Crocus, Castor,* &c. Few Vege-  
table Substances have less Sulphur than Crocus. It. yields all  
to Water, nothing to Oil. And I may add, that Castor and  
Aromatics are commonly reckoned Correctors Os Opium.

4. Though Opium is ratheralcalescent, than acescent, yet it  
Cannot be. Called an Alcali. This I learned by many Experi-  
ments : For l dropt into a Solution of Opium in Water, In  
different Glasses, and separately, the Spirits of Vinegar, Harts,  
horn and Vitriol, and the Oil of Tartar *per Deliquium.* None  
of them caused the smallest Ebullition Or Effervescence, the  
Acids Only diluted the Solution , but the Alcali turned it milky,  
the Mixture soon separating into two Parts, below it was clear  
and transparent as before, and the milky Part gathered above,  
like a thick Cream, which, on shaking the Glass, subsided, leaving  
the upper Part Clear: Yet this did not always happen; for. On  
repeated Concussions of the Glass, the Cream sometimes re-  
turned to the upper Part Of the Solution. The Solution, with  
the Oil Of Tartar in it, smelt somewhat urinous. The Cream  
separated by Filtration, and dried, melted. and flamed with  
Heat, and dissolved in Alcohol, but not in Water, and conse-  
quently was Part Of the Sulphur Of Opium, which the Water  
had dissolved. TO he more certain Of this, I dropt Oil of  
Tartar, and Spirit of Harrshorn, into separate Portions of a  
Solution in Water Of the Residuum, after extracting the  
.Rosin Of Opium with Alcohol; and found that neither the  
- Volatile nor fixed Alcali caused the least Separation, Or Precis

pitation, but only diluted the Mixture, Alcohol having dissolved  
and extracted all this Sulphur.

I mixed the Solution os Opium in Water, with an Infusion  
os Violes; it did not turn red. Or undergo any Change, except  
what necessarily follows the conjoining of two Colours so  
different, when the one does not destroy the Other. Tincture of  
Saffron in Water had the same Effect. I infused, in the said  
Solution, a Piece Of blue Paper, with which Sugar loaVes are  
commonly covered . and poured some of it upon another Piece  
os the same Paper, till both were thoroughly melted with the  
Solution; and though at first, when it was covered with the  
red Solution, the Paper appeared redder than before, yet, when  
dried, it was so far from being redder, that it had lost its  
. native redilh Cast, and was become os a worn-out Or faded

Blue, rather greenish than redish. I mixed, also, the Solution of  
Opium with the Tincture of Turnsole in Water, and it  
turned of a bright-red Colour. The aqueous Tincture os Saf-  
fron made the same Change. The Tincture Of Turnsole, be-  
twixt the Eye and the Light, is os a deep Crimson, but, when  
it dries On the Glass, is blue like the Juice. Whet dried on the  
Glass Of that mixed with Opium, continued a Bright-red. A  
Solution of Opium in Water, also, turned a Solution Os corro-  
five Sublimate milky, and curdled it. Spirit Of Vitriol made

it again clear, in a word, this Solution of Opium gave more  
Phenomena Of an Alcali, than Of an Acid: So that I ranoor  
imagine what made Mt. *Geoffeoy* assert the contrary.

All these Experiments were, also, made with rhe Opium I had  
collected here, and likewise with rhe Solutions Of common  
Opium in Wine, Vinegar, Spirits, *etc.* with the same Event,  
except in so far as the Menstruum made a Difference. Thus  
Spirit of Vitriol precipitated the Tinctures; Oil Of Tartar *per  
Deliquium* would not mix nor incorporate with them, thoutsh  
Often well shaken together.

I poured a few Drops of the Oil Of Tartar *per Deliquium*upon crude Opium, but could observe nothing like an Ebulu-  
tion, or Effervescence, which some have asserted. It became,  
indeed, a littie whitish, when dried, and smelled somewhaturj.  
nous, by reason Of the Alea i sc Action on the Suiphur, and essen-  
tial Salt. The Occasion of this experiment, which might other-  
wise seem superfluous, was because Professor *Hoffman* attributes  
this Change of Colour and Smell to the Congress os the  
Alcali with the acid Sulphurs, though he denies, that the  
Blood can be Coagulated, or that the animal Spirits Can he fixed,  
by it.

Blue Vitriol turned a Solution Os Opium in Water whitish,  
and Opake, or milky, but this subsiding, the upper Part waS  
transparent, and Os a beautiful green Colour. Green and white  
Vitriols made it black, like a dirty Ink. TO see whether this  
was owing to the heterogeneous Substances, which the Opium  
was Covered with, I drew a Tincture from them separately,  
and mixed it with a Solution Os green Viiriol, but it did not  
in the least make it black.

From these Mixtures I may infer, I. That the essential Salt  
Os Opium is ammoniacal. 2. That Opium contains a Very  
small Proportion os an Acid. 3. That it is somewhat astringent.  
Or makes the same Change On Chalybeates, that vegetable Astrin-  
gents do.

5. The most active Principles os Opium are not volatile, but  
very fixed; for it keeps well. I have os it forty Years old,  
which is still hard, solid, and retains its Taste. I kept a Dram  
Of Opium in the Heat of boding Water for five Hours, and,  
though fresh, and pretty soft, it scarcely lost One Grain and an  
half in Weight. Ἴ had Opium, dissolved in Water, fermented  
and distilled, but got no Proof Spirits from it, though eight  
Ounces Of Opium were used. The fust four Ounces of Spirit  
that came over, were hot to the Taste, and had a peculiar Smell  
and Flavour Very different from that Of Opium, and not  
bitter, the second four Ounces were much weaker, and the  
last four almost tasteless. The first and second Spirits, or rather  
Waters, were mixed and rectified by Distillation; and I got  
from them about three Ounces, which I thought would have  
been a Proof Spirit, but. On Trial, it appeared weaker than the  
first four Ounces. Then having filtrated what remained alter  
the first Distillation, I dried the resinous Residuum, and had aS  
much fully, as if no Fermentation had preceded. The filtrated  
Liquor I evaporated to an Extract, but, before it was cold,  
the Vessel in which it was, being broken by Accident, I lost  
Part os it; bur, so far aS I could guess, I should have had a  
Quantity Os Extract and Residuum, Very near equal to the  
Quantity of Opium 1 employed. The Extract had nothing of  
the Smell Os Opium, but the Residuum still retains a littie of  
it, though it is near five Years fince the Experiment was  
made.

Hence, I. Old Opium is but a little worse Or weaker than  
new. 2. Toasting Opium on a Plate of Iron, with a Design to  
Correct it by divesting it Of its narcotic Part, which was long  
practised, and much commended, by Authors, may burn it, but  
cannot make it better. 3. Opium affords little or nothing by  
Distillation: Is, therefore, we would have the Virtues of the  
Theriaca in a liquid Form, we must infuse Wine, Or rather  
Brandy.

*6.* By a Chymical Analysis, Phlegm, urinous Spirit, Oil, Vola-  
tile aS well as fixed Salt, and earth, may he got from Opium,  
Although it must be acknowledged, that some Simples, aS  
different in Figure, Nature, and Qualities, aS possibly can he,  
afford the Very fame Principles by a Chymical Distillation, such  
as Deadly-nightshade, and Cabbage; and consequently that.  
Very’ little ot the Virtues Os Opium can be thus either investi-  
gated, or explained; yet, seeing some by the Analysis pretend  
to prove, that the Effects Or Opium depend on its Sulphur;  
Others, on its volatile Salt, Others, that its Sulphur is narcotic,  
and Salt diaphoretic, I thought it not amiss to repeat this Pro-  
cess three times; and found that sixteen Ounces os Opium  
distilled by itself in a Glass Retort, with a Sand-heat, gradually  
increas'd, gave,

I. Os Phlegm,an Ounce and two Drams This Phlegm was  
very fetid, and empyreumatic, like that from Mustard-seed;  
it made no Effervescence, either with Spirit Of Vitriol, Or Oil  
Of Tartar; nor did it change the Colour of Syrup of Violets,  
but turned the Tincture Of Turnsole into a pretty bright Red,  
which Oil of Tartar again changed into blue; it also whitened  
and precipitated a Solution Of Corrosive Sublimate.

*2. Of* Spirit, four Ounces two Drams; and Of Oil,'two  
Ounces. The Spirit was Very fetid and acrid, and made a  
great Ebullition with Spirit Of Vitriol , the Ofl was black and  
light, partly thin, and Partly thick. '

! 3. Of Volatile Salt, adhering to the Neck Of the Retort, about  
sour Grains.

si 4. Of Caput Mortuum, six Ounces. SO I lost in the Opera-  
tion about two Ounces three Drams and fifty-six Grains. ; '

The best Method I could devise to find how much Volatile  
Salt was Contained in this Spirit, was to compare its Strength  
with the Strength Of Salt of Hartshorn, in enervating the Spirit  
Of Vitriol, and, finding that one Part Of Salt of Hartshorn, dis-  
solved in Water, saturated as much Spirit Of Vitriol as eighteen  
Parts Of the Spirit Of Opium, I thought I might conclude,'  
that, in thirty-four Drams Of the Spirit Of Opium, there -was  
not more than II4 Grains of Volatile Salt , which, with the  
four Grains in the Retort, made One Dram fifty-eight Grains:  
That is all the Volatile Salt we could Obtain from sixteen Ounces  
Of Opium, and Consequentiyone Grain Of Volatile Salt from sixty-  
fix Grains Of Opium. Hence it appears, that the Virtues Of Opi-  
um do not depend On its Volatile Salt or Spirit, far less on - its  
spirituous and Volatile Parts, coagulating the Blood aS Spirit Of  
Urine does Spirit Of Wine, which was *Craniusts* Opinion. . '  
' The Caput Mortuum, by long and repeated Calcinations in  
**a** Crucible, was reduced to four Drams forty-nine Grains. **I**made a Lixivium Of it with, boiling Water, filtrated; it, and  
dried the Earth, which weighed two Drams fifty-one Grains, so  
Water extracted One Dram fifty-eight Grains. This Lixivium had  
**a** saltish Taste, made no Effervescence with Spirit Of'Vitriol, nor-  
with Oil Of Tartar *per Deliquium-* neither made any Change On  
Syrup of Violets, lincture os Turnsole, Or theSOlution ot cor-  
rosive Sublimate. I evaporated it Oyer the Fire to a Pellicle,  
and to Driness, inaDefe Plate, in the Air, and had Of a pretty  
white Salt in Powder, with numerous small prismatic Crystals  
in it. One Dram thirteen Grains, neither Alcali nor Acid  
by any Experiment. The Earth I again calcined for three  
Hours, by which it lost about fix Grains in Weight, and, be-  
ing elixiviated and dried, it was diminish'd twenty Grains  
more, but the Remainder os the Lixivium, evaporated to Driness,  
gave.only about ten Grains of a Salt like the former, though  
notat all alcaline, but white: So of the calcined Caput Mor-  
tuum Water extracted two Drams eighteen Grains, which,  
with the six Grains lost in the last Calcination, subtracted from  
four Drams forty-nine Grains, gives two Drams twenty-five  
Grains, as the Quantity of Earth contained in a Pound os  
Opium. The Quantity Of the Salt is not equal to the Sub-  
stance dissolved in the Water, hecause Part Of the Lixivium  
was employed otherwise.

The PropoitiOnS Of Salt and Earth were much the same In  
the Caput Mortuum Os all the three Analyses, and, also, in the  
Ashes of some Opium I calcined by itself, none of them  
affording any fixed Alcali: But, having by me a little fixed Salt  
Of the second Analysis, which had been kept five Years, by  
evaporating the Lixivium in a Tea-Cup in a Chamber-win-  
dow, and was in small, somewhat prismatic, but irregular, and  
yellowish Crystals, I dissolved it in Water, filtrated and  
Crystallized it without Heat aS formerly, and had a Salt like  
brown Sugar-Candy, which is a true fired Alcali by every Experi-  
ment. . During the five Years it had lost about an eighth Part  
of its Weight, and the Paper was moist in which I kept it, it  
does not run Or melt *per Deliquitimobut* is still perfectly dry. TO  
account for this, it requires more Experiments.

In the first Analysis, we increased the Fire slowly, and  
Changed the Recipient so soon, as all the Phlegm was Come  
over; in the second, we did not change the Recipient, but  
raised the Heat to the greatest Degree the Retort could bear,  
as fast aS we could, and continued it for ten Hours ; in the  
third we first kept the Retort in Balneo Mariae, or boiling  
Water, for the greatest Part Of a Day, and then changed the  
Recipient, and gave it the Sand-heat. Thus we had two Drams  
less of Water, than in the first Analysis; neither Of them effer-  
vesced with Acids or AlcalieS; but the Water in this third  
Process, which was almost tasteless, smelled more Of Opium,  
and was less empyreurnatic, precipitated a Solution of corrosive  
Sublimate, and redened Syrup Of Violets, and Tincture of  
Turnsole. Hence Opium contains but little Acid, or a very  
weak Acid, though Mr. *Geoffuoy* said he found in it a powerful  
acid Salt.

A Pound os Opium, by a Chymical Analysis, gave, accord-  
ing to Dr. *Pitcairn,* Of Spirit, forty-five Drams ; of Oil, ten Drams  
and an half; Of Caput Mortuum, sixty-two Drams; and there  
were lost in the Distillation ten Drams and an half, according to  
Mr. *Geoffuoy,* of Spiris, forty-nine Drams, os Oil, nine Drams  
and an half; Caput Mortuum, sixty-two Drams, lost seven  
Drams and an half; and the Caput Mortuum, calcined to eight  
Drams twenty-five Grains, yields of fixed mere alcaline Salt  
two Drams twenty-eight Grains and an half, consequently there  
remained Of Earth fin Drams six Grains and a half: But, by Our  
Processes, of Phlegm, forty-two Drams, six Grains; volatile  
Salt, one Dram fifty-eight Grains, - Oil, sixteen Drams; fixed

Salt, two Draths eighteen Grains; Earth, two Drams twenty-\*,  
five Grains; and there evaporated in the Distillation, perhaps of  
Air, nineteen Drams fifty-fix Grains, and consumed in Calci-  
nation of Oil, *etc.* forty-three Drams fevenieen Grains. '

The Effects of Opium on Other Animals are not much dif-  
ferent from its Effects on Men; Or it is, IO some Os them at  
least, innocent, hurtful. Or poisonous, according to the Dose.

I. I, one Evening, put a big strong Frog into a Pot of Wa-  
ter, wherein a small Quantity Of Opium'was dissolved; it soon  
appear'd to be uneasy,' by making strong Efforts to get Ont Of  
it si bus, in a -short time, it stag’d Or grew dull, making Very  
little-Motioh; and next Morning it was dead, and much swell’d.

II- I convey’d, through a small Glass Tube, a few Drops of a  
Solution os Opium in Water, into a Frog’s Stomach and, put-  
ing the Animal into a Glass Cylinder,' adapted it so to a good  
Microscope, that wo had. a distinct View Osa Part os the Mem-  
brane hetween the ToeS os its hinder Toot, where the Circula-  
tion of the Blood may easily he seen. : My Design was, since I  
found Opium killed Frogs, to Observe is there was any Visible  
Change made by it in the Blood itself, or in its Motion: I  
could not, indeed, see any Alteration os the Blood, as to its  
Consistence, Colour of the Serum, Magnitude, Figure, or Co-  
lour os the red Globules; but I saw. Very distinctly, a shrprising  
Diminution Os the Blood's Velocity for it did not move half so  
swiftly, aS iruses to do in- these Creatures. But, in less than hast  
an Hour, I saw the Velocity Of the Blood gradually increase, the- .  
uneasy Frog recover its wonted Vigour, and the Blood its com-  
mon Celerity, upon which, we put the Frog into a Bason Of  
clean Water, -and allowed'It half an Hour to refresh itself; then  
gave it. another Dose of Opium, and Viewed it.as before; the-  
Blood then moved flower than it did the first time; and, its Ve-  
locity gradually decreasing, at length it stagnated, first in the  
smaller, then in the larger Vessels; and, in about a Quarter Of an  
Hour, the Animal expired. One Thing very observable was,  
that, notwithstanding the diminished Velocity Of the Blood, there  
was no sensible Diminution of the Frequency Os the Pulse, when  
there was even no Circulation, or progressive Motion, of the  
Blood in this Part, the Pulse was Visible by an undulatory Mo-  
tion; that is, the Blood returned as far hack at every Diastole Of  
the Heart; as it was protruded by the preceding Systole, this  
Continued fill the Frog appeared to be quite dead. I then .  
Opened it, and found nothing in its Stomach but a clear Mucus,  
like a Gelly, a little coloured with the Opium, of which it was  
full; every thing else seemed perfectly natural. This Experiment  
we frequently repeated, and it had always the same Appearances  
and Event. The Recovery, however, of one of the Frogs,  
which, for a considerable Time, appear'd to be dead, is not to  
he Omitted. Having, one Evening, seemingly kilted a Couple  
Of Frogs, aS above, with Opium, I laid the strongest half in  
Water on a The, in the Bottom Of a Water-pot, that, if it  
recovered, it might sit either wet Or dry, as it chased ; the  
Other I left.On the Earth, dry, under an Hedge; this I found,  
next Morning, dead, as I left it, but. the other, in the Water-  
pot, was alive, and appeared to be in perfect Health.

We injected into the crural Vein Of an old Dog, weighing  
about forty-two Pounds,-half an Ounce of Opium, dissolved in  
four Ounces of Water filtrated, and of the same Warmth with  
the Blood of the Animas, in the following Manner. We first  
threw in, very stowly, about fifteen Drams. It had no ObserV-  
able Effect. About an Hour aster, we injected, also stowly,  
eight Drams more, and immediately the Dog was seized with  
strong Convulsions, the Pulse was frequent and small, and, after  
some time, he foam’d at' the Mouth. But there appearing no  
Signs Of immediate Death, after we had waited an Hour more,  
we threw in, as quickly as we Could, the last nine Drams, upon  
which, the Pulse became full and stow, and, in about a Minute,  
the Dog expired.

Opening his Thorax, we found the Lungs sound, but. very  
small and white, without any Blood in them; the Heart Very big,  
and all its great Vessels much distended with Blood. In this State  
they continued till next Day, when, on Opening them, clotted  
Blood ran Out from the Right Ventricle, and Vena cava ; the  
Blond in the Lest Ventricle, and Aorta, being much more coagu-  
lated. But we could Observe nothing in the Brain, Or Abdomen,  
preternatural. Some Days before, a Solution, neither filtrated  
nor warmed, had been very forcibly injected into a Dog upon  
which, he fell immediately into Violent Convulsions, and .died  
in three Minutes. See Dr. *Ereind Ernmenakg. C.* I4.

We gave, also, to a little Dog, Of about fifteen PonndsWeight,  
at different Times, in the Space Of a few Minutes, and wrapped  
np in the Crum of new Bread, two Drams of Opium. Being  
Very hungry, he swallowed it greedily, without shewing any in- .  
clinarion to Vomit. W e watched him about an Hour; but, Ob-  
serving no Alteration or Effect os the Opium, we lest him till  
next Morning, when be was not steeping, but had lost the  
Power of his Limbs, and would neither ear nor drink. In this  
State he continued sour Days more, without tasting any thing,  
and then perfectly recovered. The Quantity Of Opium, dissolved  
in boiling Water, had more fudden and more fatal Effects on  
the Don mentioned bV Dr. *Mead*

Opium, externally applied, is discursent, anodyne, and sopO-’  
riferous, and has almost **the** same Effects aS taken inwardly.  
**One** Os the InconVeniencies following **the** immoderate Applica-  
tion os Opium, Mandragora, and Hyoscyamus, for Pains of **the**Eyes, taken notice Of by *Galen, {Method. Med. L.* 3. C. 2.J is  
the Mydriasis, or a preternatural Dilatation of the Pupillas And  
Mr. *Ray* was Witness to a remarkable Instance Of this **kind. A**Woman having applied Part Of a Leaf of the deadly Night-  
shade, to a cancerous Ulcer, a little below her Eye, in **one**Night's time, the Uvea lost entirely its musculous Force, and  
was so relaxed, that the Pupilla, in the Clearest Light, remained  
four times bigger than that Of the other Eyes Bnlo tin removing  
**the** Leaf, the Tunica Uvea recover'd its Tone by degrees.  
That Opium gives Ease in Pains Of the Teeth and Ears, in Co-  
lics, Inflammations, even in cancerous Ulcers, etternally ap-  
plied, is well known 5 but that it stupefies the Pan to which it  
is applied, so aS to make it insensible of any Pain, without the  
Intervention of Sleep, is not so evident. I applied it, by way of.  
Plainer, round my little. Finger ,\* also to my Arm, immediately  
**above** the internal Condyle, for **a** whole Night; it grew soft,  
and stuck fast to those Parts, but neither stupefied nor inflamed  
them, nor had any Effect that I Could observe. I hays, also,  
several times, applied a Solution of Opium in Water, to Parts  
excoriated, and superficial Wounds, and found it always hot  
and irritating, like weak Spirits, the Pain Continuing for some  
Minutes. ’

Hence, I. Opium is nos, properly speaking, narcotic exter-  
nalsy, and there may he Pains which, it Cannot remove aS a To-  
pic. *Platerus* found, it ineffectual in the Gout. If, therefore,  
the common Caustic, prepared with Opium, gives no Pain when  
tiled, it is a Very extraordinary Phenomenon. I never tried it,  
not because I fear'd a Gangrene, hot because the Fact is im-  
' probable. '2. That Narcotics, at least sometimes, impair the

Tone Of the Muscles, and Cause, for a time, a Relaxation Of  
the Nerves, or Palsy, about the Place to which they arc applied  
externally.

Opium rather Coagulates Or thickens, than diflolves or attenu-  
ates the Blood. I mixed a Solution of Opium in Water, with  
Mills, Serum of the Blood, and Blood itself, drawn fresh from  
Arteries, aS well as Veins. It made no Observable Change in  
Milk; yet, after the Mixture stood some Days, there was a Se-  
juration, a white gnimous Part subsided; it had a Cream above,  
and hetween these it was Clear, and of the Colour *Of* the Solu-  
tion. It turned the Serum Of the Blood more thick and whi-  
tish, and curdled it a little; it, also, had the same Effect on the'  
Blood fresh-drawn, which always precipitated a sort of whitish  
Coagulum,- and so Test what was uppermost *a* littie thinner.  
*Sydenham’s* Laudanum made the Blood from a Vein appear more  
crimson-colour’d, but nextDay it was darker, there was a grey-  
ish Precipitation, and the upper Pan was hot Coagulated aS usual;  
perhaps, hecause shaken and diluted by an uncoagulahle Liquid.  
These Trials agree with Dr. *Freindos* Experiments, and seem to  
favour the Affirmation Os some Authors, that the Blond has  
been found congealed and frozen about the Hearts of such aS  
have died by Opium. There was grumouS Blood in the upper  
Part Of the Brain of the Dog, winch Dr. *Mead* mentions. *Meeh.  
Account Peis.*

Habit, Or Customary Use, makes that Quantity Of Opinm safe,  
and even beneficial, which would Otherwise be Poison. A few  
Grains os Opium are Death to any Person in Health, and unae-  
custoin’d to it, but, is One, beginning with small Doses, hahi-  
tuatc himself to it by degrees, he win not only, in time, he  
able to hear a much greater Quantity, but also, at length, find  
. it aS necessary as Wine or Spirits are tOTipplers. I said, in Health ;

hecause some Diseases. as Madness, in a great measure, enervate  
the Force Of this Medicine.

The Action Of Opium is very analogous to that of Wine, or.  
**vinous** Spirits, excepting only in so fir aS it depends On the Quan-  
tity requisite for tho same Effect: For, both the good and ill  
Effects Os Opium are Very little different from the good and ill  
Effects of Wine. Vinegas, also, is aS much an Antidote to  
Opines, aS it is to Wine. Hence Wine cannot he said to correct  
Opium, nor can Opium be said to act,by rarefying the Blood, **fince**Spirits, which Coagulate it, produce much the same Effects.

The Virtues Os Opium, internally taken, depend, principally,,  
on its Action, Or Influence On the Stomach. I have often Ob-  
served a Violent Tenesmus removed in a Moment, **by a few**Dropf of liquid Laudanum, Vomiting stopt. Pain eased, and  
Sleep procured the same Way, and almost as soon. **There are**many instances in *ioreps.er, (de Cicuta aquatica}* os very terrible  
Symptoms, and Death itself, caused by Narcotics, before they  
went out Of the Stomach, and without so much as inflaming it,  
or undergoing any Visible Change in it, far less vitiating the Mass  
of Blood, and, also, of the same Symptoms being removed, and  
Death prevented, by Vomiting.

Several other Praecognita may he here insisted on. I. in Pain  
there is a preternatural Contraction in the sensible Fibres, and in  
Sleep a Relaxation, Or, aS it were, a Palsy, Os the Organs Of Sen-  
heron, and Voluntary Motioni. 2. The most inconsiderable or mi-  
nine mechanical Impulse on the Nerves, or unusual Impression

on the Mind, may he the Cause Of the greatest Changes in **the**animal Oeconomy. 3. The Virtues os many Medicines depend  
solely On their Action On the Nerves, or nervous Fibres. 4. The  
same Force Or Impression on the Nerves os One Part has very  
different Effects from what it has On the Nerves Ofanother, and  
often at one time from what it has at another time On the **same**Part; aS Asarabacca in the Nose, and in the Stomach 3 Tohac-  
co at first, and after it is habitually used. 5. This Action Of the  
Nerves being, many times, no Otherwise discoverable than, by its  
Consequences, the primary and secondary Effects Os Medicines  
may be, and too Often are. Confounded. *6.* AS the prirnary Ef-  
sects Of a Medicine have frequently several secondary Ones, so  
the same Simple sometimes differently affects the same Nerve,  
Or at least, different Nerves Of the same Part, so aS IO produce  
Effects altogether independent Of one another: This our Taste,  
in many Instances, Can discover, and the Taste of Opium, Com-  
pared with that. Of Other Narcotics, sufficiently evinces it to .he  
the Case here ὁ that is, that the stimulating Qualities of Opium  
have very different Effects from the narcotic Part; and, if we  
Compare the Effects of wholsome Aromatics with those *of* Ihe  
most Virulent Narcotics, we may add, 7. That the stimulating.or  
aromatie Part os Opium is so intimately united to the narcotica  
as thereby to mitigate it in some measure, and render it more  
friendly to Nature, than the Narcotics, that want it, are, aS **the***Hyoscyamus major vetnigee,* or *Sium Erucae folio. . .*

From all that has heen said, I may draw the following infer,  
fences ..

i. That the anodyne and hypnotic Virtues of Opium depend  
not on its Action On the Brain, or on the Blood, whether exter-  
nally or intemalsy nseda . ' .

*2.* That it affects, first and principally, the Nerves to which.  
it is applied; next, such as are more immediately connected to,  
or Communicate with them, then those which serve for Sense-,  
tion, and voluntary Motion ; and, last of ail, by Consent, **the**whole nervous bystem. , ,, . . ..

3. That this Impression, Action, or Influence on the Nerves,  
differently affects the Common Sensory, and the Mind, ac-  
cording to its Degree, and the Nature and Function of **the**Nerves primarily acted Upon. .. - : ?

« Those who take a moderate Dose of Opium, especially, is  
io not long accustomed to it, are so transported with the pleasing  
" Sense it induces, that they are, aS they often, express them-.

selves, in Heaven, and, though they do not always steep, yet  
Q they enjoy so perfect an indolence and Quiet, that no Happis  
“ ness in the World can surpass the Charms of this agreeable  
d Ecstasy.” *.Mead an Poisons.* Which, therefore, *caeteris pari- .  
bus,* must remarkably promote a *free* Circulation and Perspi.  
ration, and, by removing Impediments, dispose to Sleep.  
But if the Dose he immoderate, or excessive, and the Impression  
exceeds the Bounds prescribed by Nature, aS in Drunkenness,  
these Transports of Joy degenerate into ridiculous Mirth, De-.  
llriousness, or the like, or end in profound Sleep and Lethargy,  
or a Palsy, Apoplexy, or sudden Death, finish the Tragedy, ac-  
Cording to Circumstances, whereas .the Effect of Opium in the  
Mouth and Nose, on Parts fore or excoriated, are Very different,  
aS haS heen formerly Observed. The anodyne Virtue of Opium,  
externally applied. Cannot he the Effect of any delightful Sensae  
tion in the Part: Pleasure may well he the Consequence, but it  
does not appear to he the Cause, of the Removal os Pain. .

4 That the primary. Or first observable Effect os the mecha-  
nical Impression or Action Of the narcotic Part of Opium on  
the Nerves, is the Relaxation Of their Fibres.

Whether this Relaxation is the physical Action of Opium on  
the Nerves themselves. Or Only the Effect Of the impression made  
by it On the Common Sensory, that is, whether Opium is  
immediately. Or Only mediately, the Cause of it, I shall not po-  
sitively determine.. It may, perhaps, be aS difficult to explain  
how the Action of NarcotiCS On the Nerves causes a paralytic  
Relaxation, as hew the Images painted on the Retina cause \*  
Vision.

Neither Can I say, that the stimulating. Or aromatic Part of  
Opium does not contribute to its easing PainS; for. Spirit of  
Wine is anodyne, but it causes no Relaxation of the Part, or  
near it, to which it is applied, in which it evidently differs from  
NarcotiCS.

Now, as this Relaxation of the Nerves, and Consequently of  
**the** moving Fibres, demonstrates Opium to he more than a palo  
liatiVe Remedy, in a great many Diseases, so it is not.difficult,  
by it, to account for Its bad, aS well as good Effects; for, by  
relaxing to certain Degrees, it may prove anodyne, cordial, din-  
phOretic, hypnotic ὁ or Cause Stagnations, Deliriums, Lethar-  
gies. Apoplexies, and Death.

I have hitherto, on purpose, taken little Notice Of Opium’s ra,  
relying the Blond, though asserted by Authors whom I very much  
esteem; not only because, by the foregoing Experiments and Oh-  
serVations, it appears to have no such Effect; at least, that the  
Action or Operation of Opium cannot depend on it; hut also  
because, were this Theory admitted, it might he Os bad Conte.  
queues, and lead into dangerous Errors in Practice. Thus, if  
Rarefaction Of the Blond he admitted as the Caute of direful

Symptoms, which the Abuse of Opinm sometimes occasions, the  
Remedy indicated would he Venesection , whereas some Authors  
affirm, that it is Death to Open a Vein, even the Day after a  
Narcotic has been taken. Besides, If it rarefied the Blood, bout  
Could it be so useful in Haemorrhages, Small-pox, and the like,  
as it is found to he ? ...

It is by no means necessary now, to answer the Objections,  
against the Use Of this Medicine, in distinent Ages, fince it has,  
at last, triumph'd over all Opposition; and is not only os more  
universal Use, but, also, does more Honour to Medicine, than any  
Remedy whatsoever. '

... Opium is commonly given to adult Persons, unaccustom'd to  
it, from balsa Grain to three, hut to such as are used IO it, to  
four, five. Or more Grains, till It produce the desired Effect.  
The usual Preparations are, the Extract, Tincture, *SydenhAnstp.*Liquid Laudanum, anodyne Balsam, and pacific Pilis, and it is  
the Basis Of the Storax-pills, Mithridate, Theriaca, and DiascOr-  
dinm. . . .

With relation to the Dose, the general Rule, that It is safer  
to give too little, than too much. Of efficacious Medicines, is in  
no Instance more to he Observed, than in the Administration Of.  
Opium, especially, seeing its Effects appear *so soon,* that the  
Defect may much more easily he supplied, than the Excess can  
he remedied. For, if too much Opium is taken, the Muscles  
become soon paralytic, so that nothing can he swallowed; and  
. all we Can do, is to endeavonr to provoke Vomiting, by tickling  
the Throat, or by Clysters, and Cataplasms of Tobacco, and  
filch emetic Applications; and, at the same time, to rouse Na-  
ture by strong Sinapisms. If thus the unfortunate Patient is en-  
ahled to take Medicines, after emptying the *Primae Viae,* Diapho-  
retics mixed with Vinegar, and suCh-like Acids, will seldom fail.'  
to Complete the Cure. -

To conclude, I am very sensible, that Opium is an edged  
Tool, and may do Hurt, but it is, also, a diVine Remedy, and  
may do much Good. A Physician may be too timorous, as well'  
aS too bold, in Practice, and the Sick oftentimes suffer the One.  
way, aS well as the other. AS, therefore, I see no Reason absolute-  
ly to Condemn the giving Os Opium to Infants, to weak, ple-  
thoric, or aged Persons, to pregnant Women, Or in malignant  
Diseases, so, on the other hand, if removing Pain, procuring  
Sleep, Checking Evacuations, preventing a salutary Haemorrhage,  
or the like, be dangerous Or unsafe, he must either be ignorant  
Os the Healing Art, or of theNature Of Opium, who, in such  
Cases, rashly prescribes it. *Edinburgh Medical Essays, Vol.* 5.

. Among all the vegetable Substances used in the *Materia  
Medica,* none has had so Various a Fate as Opium , for some,  
both of the Antients and Moderns, esteem’d it rank Poison,  
because they found, that it often induced Drowsiness, Torpor,  
Sleep, and sometimes Death, Or, at least, that Diseases were  
rendered worse by it, . whilst some Others, especially among the  
Moderns, extol it aS the most efficacious Os all Medicines, for  
alleviating Pain,, procuring Sleep, and preserving the Strength;  
so that some Physicians, and among the rest, *Platcrus* and *Syfn  
majus3* who brought this Medicine into Reputation, after it had  
long lain in Obscurity, have not scrupled to affirm,, that they  
would not be Physicians, if Opinm was banish’d from the *Ma- '»****trtia*** *Medica ,* and the incomparable *Sydenham* thanks Aimighty  
God for having bless'd the World with Opium, a Medicine -  
highly efficacious in removing a large Number Of Disorders in-  
Cident to Mankind. Besides, some Authors Of Note and Learn-  
ing have wrote on purpose to screen Opium from the Calumnies  
with which others had loaded it, and shew that it is the safest,  
most efficacious, and universal Medicine, provided it is cantiousiy  
Used. But though the Use Of Opium is os vast Importance in  
Practice, yet its Abuse is no less fatal and destructive, fince it  
accidentally proves poisonous, and ’tis,. at present, hard to de-  
termine, whether the Good procured by its due Ufe be greater,  
than the Misfortunes induced by a preposterous Exhibition thereof  
But.as Physicians differ with respect to the Efficacy Of Opiates,  
so their Sentiments are no less Various about its Method of act-  
ing 5 so that 'tis hard to Choose which Side to embrace. As  
none Of their Hypotheses are satisfactory, we shall now briefly  
inquire, whether the Influence Of anodyne and narcotic Medi-  
cines On the human Body Cannot he accounted for from the  
Motion of the Blood.

AS, therefore, that Hypothesis is Certainly best, which is most  
easy, perspicuous, and best calculated for accounting for Pheno-  
mena, and solving Difficulties; so 'tis incumbent on those who  
would investigate Truth in a proper Manner, and establish a ra-  
tional Hypothesis, Carefully to advert to all Effects, Phenome-  
ns, and Circumstances, that, by comparing these with the  
Hypothesis, their Affinity, Or Incongruity, may be the more pal-  
pably discerned: For this Reason we shall consider the most  
remarkable Effects produced in the human Body by Opiates, ac-  
cording to the different Times, Doses, and Methods in which  
they are exhibited.

'Tis, therefore. Certain from Experience, that all vegetable Sub-  
stances, which sor a long rime disthse an acrimonious Smell,  
whether internally or externally used, excite Sleep, Drowsiness,.  
and a Stupor Of the Senses , and if they are used for st Considerable

Time, and in large Quantities, they produce the same. Effects  
with Narcotics. Tis, also, to be observed, that all fragrant and.  
Volatile Substances induce a calm and gentie Sleep; but this Oh-  
servation holds most Conspicnousiy with respect to the Flowers,  
of Rosemary, Saffron, Lily Of the Valley, Cowflips, Elder, the  
Lime-tree, the *Egyptian* Thorn, aS, also, the Flowers Of Oranges,  
Jessamine, and white Lilies, the Waters Of which, especially  
when distilled with May-dew, are Of singular Efficacy in allaying  
the tumultuouS.and irregular Motions of the Spirits in Epilepsies,  
add spasmodic Disorders. To the same Class, among animal  
Substances, belong Musk and Civet, and, among Sea substances.  
Amber, which, when frequently exhibited in due Doses, is.Of  
singular Efficacy in allaying the most violent epileptic Fits: On  
the contrary, 'tis Certain from Experience, that those Substances,  
which for a long, time exhale a violent. Vinous, and fixed Va-  
pour, are rather Of a stupesactive Quality, by which theStreogth,.  
Senses, and Operations Os the Mind, are considerably .weaken’d,  
and sometimes totally destroyed. .Os this Kind are all the Spe-.  
Cies of Poppies, Henbane, Nightshade, and Mandrake, and:  
fetid animal Substances, such as Castor, the Shavings Of Hosps  
arid Hoofs. Some Animals and Insects dried, generally, do nor  
produce a narcotic Effect, but Only, by checking the irregular  
Motions, prove beneficial in alleviating painful Spasms. . .

Tis, also, to he Observed, that no Substances are possessed Of  
an anodyne Or narcotic Effect, unless they Consist Of a Volatile  
Principle; according to the more fix'd Or volatile Nature Os  
which, they produce different Effects. Hence, an anodyne, or  
narcotic Quality is falsely ascribed to Nitre, Or Vitriol ; though  
’tis Dot to be denied, that these Substances, when rigbtiy pre-’  
pared, and duly used, are Of singular Efficacy in alleviating Pain,  
fince they both fix and weaken the bilious Acrimony in.the *Pri-  
mae. Via.* From whet has been said, we may easily assign a Rea-,  
son, why unboil’d Opium produces Sleep,, and alleviates Pais, far  
more expeditiousiy, than when it is deprived os its Volatile Prin---  
Ciple by boiling aS, also, why the oleons and pinguinus Parts Of  
the Seeds Of Poppies and Henbane are less narcotic, than their  
Plants, Leaves, Flowers, and Roots, which consist os a refinous  
Volatile, though, at the same time, a Principle not exhaled with-  
out Difficulty; and'tis certain, that the Vapours exhaled from a  
somewhat fix'd Volatile Substance affect the Brain more Violently,  
stop the Motion of the Blood and Spirits more effectually, and  
suspend the Action of the animal Functions more throughly, than  
if the Matter diffusing the Exhalations was of an highly subtle  
Nature. Hence, the Water and Spirit of Poppies, and the Wa-  
ters obtain’d from the Flowers of the wild Poppy, and the white  
Lily, ate far more mild, than their more fixed and .resinous Ex-  
tracts. .

Tis, in like manner. Certain from Experience, that Opiates, .  
duly prepared, cautioufly used, and exhibited at proper Times,  
especially in young and full-grown Persons, filch aS are neither of  
a plethoric nor Cacochymid Habit, hut os sanguine and Choleric  
Temperaments, provided the Strength is sufficient, and the Pulse  
such aS indicates the Vigour of Nature, are the most safe and  
effectual Remedies in violent Pains, Convulsive and spasmodic  
Disorders, excessive Discharges of Blood or Serum, and Con-  
tinual Watchings: On rhe contrary, 'tis equally certain from Ex-  
perience, that Opiates, in unskilful Hands, have often either kill'd  
Numbers, or render’d the Disorders, for winch they were exhi-  
bited, worse, especially if, when not corrected, they are exist- .  
bited on too large Doses, to Persons os weak and delicate Con-  
stitutions, to such aS labour under malignant Disorders, to such  
as have a weak and small Pulse, or are phlegmatic, sat,. pin-  
thoric, cacochymic. Or costive. si.'.....

.But 'tis principally remarkable, that Opiates, and all NarCOUCS,  
unseasonably exhibited, are, in a particular manner, noxionS Ip  
the Brain, and animal Functions, sor nothing is more frequent,  
then that the Use Of Medicines of this Kind is succeeded by an  
Oppressive Pain Of the Head ; a profound Sleep, accompanied  
with terrible Dreams; a Vertigo so Violent, that the Head can-  
not be kept erect, a Torpor of the Senses, a Redness and Tur  
mor Of the Face, an Inflation of the Veins Of the Head,.a Lan-  
guor Of the Strength, and an Inability to Motion. Put still  
more terrible Disorders Of the Brain have, by skilful Physicians,  
been observed to be produced by the injudicious Use Of Opium 3.  
such aS profound Sleep, Stupor, and a surprifing Loss Of Memo-  
ry. Thus *Willis, ru ffiis Pharmacop. Ration. Part. 1.* Observes,  
that some, by taking a small Pill os Laudanum, have been thrown  
into so profound a Sleep, that they could never afterwards he  
roused Out Of it, and though from their Pulse, Respiration,, and  
Heat, they seem’d to be alive, and in a due State, for three Or.  
four Days, yet they could never, either by internal Remedies,  
or external Applications, be recall'd to Sensation and Waking.  
The same Author, in the Work last quoted, informs us, that by  
taking a small Dose of Opium, he has Observed, that.OtherS have  
hardly stept at all, but that they immediately became worse  
wlth respect to their Pulse, Respiration, and Heat, since such  
Patients forthwith became more breathless, and could not be  
restored by any Cardiscs, but gradually languished, till they  
died. The same Author, in his Treatise *de Anima Brutorum,*gives us the History Of a Man, who, in order to alleviate a Colic,

took large Quantities of Opium; immediately after which, he  
complain'd of a violent and oppressive Weight in his Stomach.  
His Friends exhibited Wine, Cordials, and hot Spirits, which  
afforded him ho Relies; for the Oppression, spreading farther,  
excited Languors about the Praecordia, and DeiiquiumS, till at  
last, though he continued awake, and preserved his Reason, he  
Complain'd that his Spirits were, gradually, more and more ex-  
hausted, and died in three Hours. -

That the unskilful Use of Opiates greatly injures the Brains  
**Senses,** and mental Powers, we learn from a Casie in *Miscell.  
Nat. Curios. Decad.* I. *a.* 5. where we are inform’d, that a cer-  
**tain** Man, upon ignorantiy taking a large Quantity of Opium,  
was fust afflicted with terrible Dreams, and then deprived, in  
some measure, of the Use of bis Tongue; an Hour aster winch.;  
he was seized with a Vertigo, a Disturbance, and gyratory kind  
**of** Motion in his Head. The Patient, also, afterwards, told, that  
he and the Bed seem'd not only to he suspended in the Air, but,  
also, to fly Thus he remain'd, as it were, in an Apoplexy, and  
unconscious of his own Existence. In the Beginning os his Dis- ’  
order, he said, he neither perceived the Taste of the strongest  
Vinegar, nor the Smell or the Spirit Os Sal Ammoniac. His  
Pulse was low and, when he shut his Eyes, he had the Appear-  
ance os a distracted Person. During this Condition, spirituous  
apoplectic Water was exhibited to him, by which his Spirits  
feemed to be forthwith recruited after which, he perceived an  
Itching all Over his Body. *Stalpart Vander igriel, in Obs.* 42.  
justly cautions, that Nurses, and Women who have the Charge  
Of infants committed to them, should not, when any Pain Or  
**Uneasiness seizes** them, forthwith exhibit somniferous Medicines τ  
fince it often happens, that though these do not prove fatal, yet,  
if Often used, they frequently weaken the Brain, and nervous  
System os Infants, and, as we find from Experience, induce a  
Tremor Of the Joints, a Palsy, and Stupor. And *Willis,* in his  
*Pharmac. Rational Part* I. telis us, that, by means Of Opium,  
he knew several Persons who contracted Slowness of Genius and  
Stupidity, and others confirmed Folly. And in the same Work  
**he** informs us, that he knew a Certain Man, who by taking a large  
Dose Of Laudanum, when he was feverish, lost his Memory to-  
tally. *Tilingius,* in his Treatise *de Laudano Gpiato,* gives ns an  
Account Of a Servant Maid, who, instead Of the Theriaca, took  
Laudanum Opiatum, by which means she was immediately seized  
with a Stupor and Drowsiness, which lasted all her Lise: Her  
Memory in the mean time was lost, nOr did she ever recover  
her usual Health. *Schneider,* also, in his Treatise *de Catarrhs,  
Lib.* 4. *Cap.* 8. informs us, that by the Use of Opium rhe Son  
Of a certain *Indian* King lost both his Reason and Memory.

. From what has been said, we may understand, why Opiates are  
fo prejudicial to the Head, aS we observe in Violent Disorders of  
the Head, such aS Apoplexies, Epilepsies, Lethargies, Palsies,  
Diminution Of Memory, and Vertigos, which, aster the Use Of  
Opiates, are always increased, and become more dangerous:  
Thus *Bartholin, in Act. Hafotiens.* informs us, that a certain Wo-  
man, upon allaying an Head-ach by Narcotics, was from that  
time seized with a Vertigo, Stupor, and Weakness Of the Head.  
**In** Diminution of Sight, and Difficulty of Hearing, Opiates are  
by no means to be used. Thus *Walds.chmid,* in *Dissert, de* Ord-  
*aetorurn Noxa,* informs us, that a Woman, labouring under a dan-  
gerous Haemorrhage Of the Uterus by the Use of Opiates, con-  
traded a Blindness not to he removed by any Medicine.

Besides, Opiates and Narcotics disturb the Use Of the Senses,  
**and** Os Reason, and often excite Folly and Deliriums; which,  
**also,** holds true with respect to the more fixed stupefying Medi-  
cines, such aS the deadly Nightshade, the Roots and Seeds Of  
Henbane, Mandrake, and Lolium, which, when eaten, accord-  
ing to the Observations Os Authors; produce an Alienation Of  
Mind, and drive Persons into Madness*so* that they seem to **be**possessed by Devils. In some they produce surprising Convul-  
sions and Agitations of the Members, accompanied with Mad-  
**ness:** Instances of which aresto be met with, in *Matthias de  
Lobells Nava Stirpium Adversaria, Mattbiolses in Dios.corid. Jgrie-  
rus de Freest. Haem. Olearius in Itin. Persico,* and *Timaeus.*In a Manis these Medicines, also, generally increase the Rage,  
for which Reason *Helrntmt,* in his Treatise *de Lithiasi,* justly  
charges those with an Error, who attempt to mitigate a Mania by  
Opiates, fince all the Medicines Of this Kind naturally produce  
Distraction, which is nothing but a waking Dream. And in his  
Book, intituled *'Retenta,* he confirms the same Doctrine, by tell-  
ing us, that Narcotics, exhibited in Dofes sour times aS large aS  
those commonly used, hardly procure Sleep to mad Persons,  
but rather increafe their Madness. *Frgitagius,* in his Treatise *de***Opin,** *Cap.* 3. observes, from *Prosper Alpinus* and *Bellonius,* that  
the *Egyptians* and *Turks* eat Opium, in Order to render them-  
felves chearsul, bold, and salacious. But these two Authors, **at**the same time, observe, that though these Devourers of Opium  
seem to enjoy good Health, and not to he injured by its Use, they  
yet become colder, their Functions are render'd worse, they  
almost always appear drunk and torpid, become comatous, stu-  
pid, and inconstant; sometimes affirming, and at other times  
denying, the same thing, so that they are neither fit to he dealt  
**nor** Conversed with, and Persons who Contradict themselves are.

by way of Reproach, said to have eaten Opium, just aS we an-'  
euse Others of being drunk. - . ' ' I I

Besides, Opiates greatly stop the Vital Motions Os the Heart and  
Arteries, and render the Circulation of the Blood mom faint and  
languid; for which Reason Opium generally renders the Putin  
weak, and the Respiration difficult, producing, at the same time,  
an Anxiety about the Praecordia, especially in Persons who abound  
with thick Blood. Hence we are enabled to assign a Reason,  
why weak Persons, and those labouring under malignant Disot-  
ders, are easily destroyed by Opiates, fince the Exhibition of -  
them is succeeded by an extreme Lofs of Strength, Syncopes,  
and at last Death. Hence Instances Of the fatal Events Os Opium  
are every-where to be met with in practical Authors. Thus, we  
are informed by *Frederic Hossnian,* in *Metal. Mortis.,* that a certain  
Physician of *Hall,* labouring under a burning FeVer, in Order to  
remove continual Watchings, took some Grains of Laudanum,  
by which means he soon died: *Sanctorius,* also, in his *Methodo.  
urit and. Errores, Lib.* 8. *Cap. i2.* tells us, that in the Confines of-  
*Hungaryssc* saw a Soldier, who, upon taking seven Pills of Opi-  
um, forthwith began to breathe with a kind Of Impetus, and-  
soon aster expired. *Forefius,* also, in *Lib. y. Obs.* I4. makes  
mention Of a cacochymic Patient, who, upon an exhibition of  
Opium, in nephritic Pains, by an unskilful Physician, had aSleep  
procured, out of which he could never afterwards he awaked.  
Instances of the like Kind are tO be found in *Wil lists Pharma,  
ecus, national,* and *Sennertus,* in *Prax. Lib. 6. Parturi. Cap. i.*It is, also. Observable, that Opium, injected by way of Clyster,  
has proved fatal to many; Various Instances Of which are col-  
lected by *Telingrtts,* in his Treatise *de Opio, Sennertus,* in *Lib. si.  
Prax. Part Ap. Cap.!,* and *Marcellus Donatus,* in hisTreatise de  
*Histor. Medicis Mtrabilibus, Lib. A Cap.* IS. which, in my Opi-  
nion, happens, because the Opium, by stopping and checking **the**Motion of the Blood, induces a Sphacelus Of these Parts.

It is, also, to be observed, that Opium proves a Stimulus to  
Venery, Chearfulness, and Cruelty; for which Purposes it is  
much used by the *Turks* and *Indians,* who, of the purest Tears  
of Opium, prepare, by Fermentation, what they call *Massachis*very intoxicating Liquor, which procures a kind of Madness,  
and which they use when they are either about to enter the Field  
of Battie, or embrace the Fait. This is Confirmed by *Joh. Jac.  
Saar,* in his *Itiner. Ind. Orient,* who tells tis, that the *Indians* of  
*Bantam* prepare a certain Electuary Of Opium, which they call  
*Assam,* a Substance Of a cineritious Colour, of a sweetish and some-  
what bitter Taste, and by the Use of which they are render'd  
fierce. The *Chinese,* also, in *Batavia,* use this Electuary.aS a  
Stimulus to Venery, which it excites so powerfully, that they  
Continue the brutal Gratification of their Lust for a wholeNight,  
and often oblige their Prostitutes to make their Escape, when they  
are able to sustain rhe Diversion no longer. See B: *D. D. Sachs.  
Torn. 2. Ephern. Germ. Obs.* 69. where other Authors are, also,  
?[noted , and the celebrated *igredeltus,* in his Treatise *de Opio,.* in-  
orms us, that in hot Constitutions Opium excites nocturnal  
Pollutions and Tentigos, especially if the Persons are naturally  
disposed to such Disorders: Hence, is it is mixed either with  
Amber, or the Essence of Amber, it proves an excellent Stimulus  
to Venery. | J

It is, also, necessary we should consider the Method of Cor-  
resting Opium, for as crude Opium is rarely to be trusted to, so,  
when rightly prepared and corrected, it proves a Medicine of  
singular Efficacy. *Galen,* in his Treatise *de Theriaca ad pifonem.  
Gap.* I 3. convinces ns, that he was Very cautious in the Use of  
Opium, by telling us, that Opium used by itself was fatal; but,  
when prepared with other Substances, a salutary and beneficial  
Medicine. Hence, in my Opinion, those Things Correct Opium,  
which lessen its Virulence, render it mild and salutary to the Body,  
and especially which rouse the languid Motion of the Fibres,  
brought On by the Use of Opium, for since Opium, as we find  
from Experience, generally stops all the Motions of the Blood  
and Spirits, it must of course be salutary, to mix with it such  
Substances aS excite and promote these Motions. Hence, from  
a Mixture Of these two contrary and repugnant Substances,  
there results a kind of third and neutral Substance, which is at  
Once os an aperient and sedative Quality : And aS those Things  
which induce the most Violent Motions in the human Body,  
are by all allowed to be Sudorifics, Purgatives, spirituous and  
aromatic Substances, saline and diuretic Medicines, so Opium is  
most commodioufly mixed with them ; by which means they are  
render’d surprisingly efficacious, and, as it were, universal. Of  
this kind are the Theriaca os *Andromachus,* so highly esteemed  
for so many Ages ,\* the Diascordium os *Fracaflorius*; the *The-  
riaca Coelestis,* the *Requies Hicolai,* and the *Theriaca de* Crrro;  
which are highly safe and efficacious Medicines, in many Dis-  
orders, Pains, Defluxions, and Spasms. Opium is, also, an er-  
Cellent Medicine, when mixed with Purgatives, such aS the Ex-  
tract Of Aloes in the Pilulae Wildegansii, the Extract or Powder  
of white Hellebore, in the Pilulae Starkii, or Matthhe\*. For  
these Preparations, as we often observe, render the Body soluble,  
powerfully excite Sweat, and generally never bring on a Torpor,  
turbulent Dreams, a Vertigo, and an oppressive Torpor of the  
Head, like Other Opiates, left to themselves, without any kind

of Correction. Opium mixed with tartarized Tinctnreof Anti-  
mony, or with the acrid Tincture, prepared from the Regulus of  
Antimony, is both a safe and efficacious Diuretic: Spirituous  
-Substances, such aS GoVes, Cinnamon, and its Od, aS, also.  
Malmsey and *Spaniso* Wines, excellently prevent the Injuries of  
Opium, and convert it into an innocent Medicine; for this  
Reason the Laudanum Liquidum of *Sydenham* is justly tD.be com-  
mended, because we know from Experience, that it is safely ex-  
hibited in all Disorders, where Sedatives are indicated as proper.  
*Stahlius* greatly commends the following Spirit, prepared from  
.Opium by Distillation.

Take of SyosrseWine, one Quart, of the best Opinm, half  
an Ounce, Of the Flowers of wild Poppies and Elder, each  
three Pugiis. of Saffron, one Dram; of Nutmegs, Cloves,

'. Cinnamon, : and Cardamoms, each two Drams

. These Ingredients, when mixed, and duly distilled, yield a Spi-  
rit of a grateful Taste, a pleasant Smell, and an essicaciouS Virtue.  
This Spirit is of a nervous, antispasmodic, and sedative Quality.  
Its Dose is one Spoonful.

- Having thus consider'd the principal Effects of Opium on the  
human Body, we now come to investigate the Method in which  
Narcotics, and especially Opium, operate. TheAorients, then,  
universally imagin’d, that these Medicines operated by a certain  
Occult, poisonous, and refrigerating Quality, which extinguished  
the innate Heat of the Constitution.. Among the .Modems,  
*Willis, in P.* 2. *Parholog. Cap.* 3. affirms, that these Medicines  
are a Species Of Poison, which, by Its Vapour, surrounds, and, aS  
it were, overwhelms the animal Spirits, whilst the Blood, in the  
mean time, and solid Parts, are not in the least injured. And in  
his *Pharmacop. Rational. SeS.y.* Cap. I. he tells us, that by Opi-  
ates the Spirits are affected, and, aS it were, poison'd, so that by  
their Vapour being, as it were, confined in Chains, they forth-  
with become languid, and cease to perform their Offices. The'  
learned *Ettmuller,* in his *Disput.de Virtute Opii Diaphoret. Cap.*5oI. affirms, that Opiates fix the.Spirits, and that, in Cases where  
the animal Spirits become fierce and exorbitant, they are checked,  
and reduced to a due Order, by Opiates, The celebrated *We-  
delius,* in his *Tractat, de Opio,* explains the Operation of Narco-  
tics, from the Condensation Of .the Spirits, and aniObstruction  
Of the Pores Os the Brain: For, says he, the Operation of Opi-  
um consists in ^ particular Kind of Evaporation, which Obstructs  
the Pores Of the Brain, already open'd, and dilated by too Jong  
Watching 5 hinders the Immoderate Influx Of the animal Spirits;  
Condenses, and, aS it were. Coagulates them , and by that means  
procures a grateful Rest to the Body. Nor Can it he denied, says  
hie, ip the same Work, that the Nerves Of the Stomach imme-  
diately receive this Vafesur or Exhalation, especially fince Opium  
Contains a Sulphur, which is easily resolved in Vinegar, Wa-  
ter, and spirituous Liquors *Gladbachius, in Prax. Med. Idea  
wva,* informs us, that Opinm produces its Effects by its volatile  
Salt, and gross Oil; which, when resolved in the Stomach, and  
expanded in the Blood, by its. Ramifications involves the Spirits  
resolved by the Fermentation, so that the Blood may not be thrown  
into a Commotion and Fermentation. Hence the gross and ir-  
regularly moving Spirits in the Blood, which, by obstructing the  
Nerves, hinder a free Circulation, are suppressed, and deposited  
in smaller Quantities in the Brain. Whilst this is a carrying on,  
the Blood is more (lowly propelled from the Heart, the Pulie be-  
comes more languid, and the Circulation is hinder'd.- The *Car-  
teflons* imagine, that Narcotics, by a certain foreign λΕι her, in  
some measure coagulate he Blood and Humours, and stop their  
Motion, notwithstanding their Volatile Salt and subtile Oil, which  
Otherwise seem rather adapted to increase the Motion Of the  
Blood: Hence, when the Motion Of the Blood in the Obstructed  
Parts in no longer so Violent aS it was before, the Pain must **he**somewhat mitigated. And, say they, it is very probable, that the  
volatile Salt Of Narcotics, being highly subtile, but, at the same  
time, sufficiently acrid, is capable of separating some of the slender  
Fibres os the Pans, which, being by that means render'd more  
flaccid, cannot Convey so brisk a Motion to the Common Sen-  
scry. This Opinion is, also, embraced by Granins, who, in  
*bis Tractat. de Homine,* informs ns, that the spirituous and Oleous  
Parts Of the Opium coagulate the Blood, in the same manner  
with the Spirit of Urine, and the rectified- Spirit of .Wine, by  
which means a Drowsiness is afterwards produced, and the Pain.  
alleviated, because, by the Volatile and acrid Salts of the Narco-  
tics, rhe Fibres or the Nerves are so resolved, aS to lose their  
Tension, and, consequently, cannot Convey the \_ Action of  
Objects to the Common Sensory. Some, by various Experi-  
ments, endeavour to prove, that Opium .contains an acid Sulphur;  
het especially because crude Opium) by an Affusion of.Oil os  
Tartar per Deliquium, produces an Ebullition. Hence they are

. Of Opinion, that this. Acid Coagulares the Blood, and fires the  
Spirits.

.. But a little Attention easily Convinces us, that none of these  
Hypotheses are sufficient for accounting for the before-mention'd  
Effects. And, first. Tor the Opinion *Di* those AntientS who took  
Opium Jot a Poison, because, by its excessive Coldness, it **ex-**

tingnisheS the native Hear, Or Sulphur and Spirit of the Blood,  
we Observe that, even according to *Hippocrates,* Opinm is hot ὁ  
consists Of an hot and inflammable Sulphur; and, when exter-  
nally applied, softens and resolves Tumors, a Property peculiar  
to hot Substances. Much less can the Favourers Of this Opinion  
ascertain, wherein this poisonous Quality, which extinguishes **the**vital Spirits, Consists NOr do I think they could, upon their ‘  
Hypothesis, disentangle themselves, if one was to ask them why  
theTheriaca of *Aridrornachus,* the Theriaca Coelestis, Mithridate,  
and the Diascordium of *Fracaflorius,* whose Basis is Opium, have  
for many Ages been accounted the most present AlexipharmicS,  
and justly celebrated Remedies. Besides these, manyPanaceas,whicn  
have longest sustained their Character for Efficacy, have Opium  
in their Composition; such aS the Pilulae Wildeganfii, sold under  
the Name Of *Panacea Solaris,* the Piluke Starkeanoe, and Others.  
Opium is, also, the most present Aphrodisiac, because it produces  
a Turgescence Of the Semen, and an Erection os the Penis; and  
the *Eastern* People render themselves bold and hardy in Battle by  
its means. The like Effects I myself have, also. Observed pro.  
duced by it on others, when used moderately: But, in such  
Cases, ir must produce an additional Stimulus, rather than an  
Extinction of the Spirits, And though we are, fay various  
Observations, taught, that several Persons have been killed by  
Opium, or, at least, subjected to Violent Symptoms, yet no-  
thing else is proved by this, than that Opium is an highly active  
and powerful Body; and though all drastic Medicines, such aS  
ethereal Oils, Sudorifics, Emetics, Purgatives, and Mercurials,  
when exhibited in large Doses, not Only induce terrible Sym-  
proms, but, also, sometimes Death, yet they are not, for this  
Reason, to he called Poifons: And the same holds true with  
respect to Opium. . , -

.. Those, also, who affirm, that Opium coagulates and sixes the  
Blood' and Spirits, principally On account Of its acid Sulphur, are,  
in my Opinion, greatly mistaken ; for though I readily grant, that  
Crude Opium, by an Admixture of alcaline Substances, is con-  
creted, and undergoes a Change, with respect to its Smell **and**Texture, by means Of the Acid peculiar to almost all the resinous  
and gummy Extracts of Vegetables, yet we cannot hence Con-  
Clude, that this Acid fixes and coagulates the Spirits, and much  
less the Blood; for it is known from Chemistry, that all Resins,  
resinous Gums, andWOods, are possessed Of an acid Taste, which,  
however, does not render them narcotic. And, if the Effects of  
Opiates proceeded from an Acid, certainly the Oil Of Vitriol,  
which is highly acid, concentrated Spirit of Vinegar, and Spirit Of  
Nitre, intist produce the same Effects in a greater Degree, which,  
however, they do not. Besides, no Traces Of an Acid can he  
discover'd in .the Water of wild Poppies, Opium, Saffron,  
and the Seeds Of Poppies and Henbane. It is, also, to he ob-  
served, that Opium resolved in Tincture Of Tartar, by which  
means its Acid is taken away, still retains its somniferous Quality.  
And, granting that the Acid of Opium is a Sulphur of a fixing  
Nature, uncommon to Other Acids, yet it Cannot be Conceived  
how it Can stop or Coagulate the Blood Or Spirits, the most move-  
able Fluid, perhaps. Of any in Nature. Nor is this Hypothesis  
proved hy that Experiment, ι in which rectified Spirit of Urine  
is mixed with highly rectified Spirit Of Wine; for this is not fo  
much. a Coagulation, as a Precipitation of the volatile Salt, eon-  
tain'd in. the Pores of the Phlegm, by means Of the highly rec-  
tified Spirit Of Wine, imbibing the'Phlegm. Besides, no one  
Can Conceive, that Opiates alleviate Pain, because, by their highly  
saline and volatile Acrimony, the Fibres of the Nerves are **so**resolved so aS to lose their Tension, and due Sensation; for those  
Spicula, .if there are any in Opinm, are not so Considerable, as  
to dissolve the Textnrerof the Nerves, Or Membranes, for by  
this means they would rather increase the Pain, and Volatile  
Salts, and. acrid Substances, such aS Things prepared-with-Pep-'  
per and Cantharides, would, for the same Reason, ease Pain,,  
which, however, they do not. And whar is advanced about **a**foreign Ether, is equally unsatisfactory, because such a Substance,  
notcorning under the Cognizance of our Senses, cannot be de-  
fined. - Those who derive The diaphoretic and Pain-alleviating  
Virtue. Of Opium froth its volatile oleous Salt, aS being an Acid,  
and the Principle which removes the Pain, as *Bontekoe* in his  
Works affirms, embrace an Hypothesis equally ill-founded; for  
Only a small Quantity of volatile oleous Salt .can be Obtained by-  
Art from Opium, Mandrake, Nightshads, and Poppy. Besides,  
it may he justly asked, why Volatile Oleous Salts, exhibited in **a**larger Dose, do not produce the same Effect.

But those who seem to have consider'd this Affair with greater  
Accuracy, are Of Opinion, that Opium, by its highly subtile and  
sulphureous Vapour, which is of a branchy Nature, acts imme-  
diately upon the Spirits, and the Pores Of the Brain and Nerves,  
the former Os which it clogs and overclouds, whilst it obstructs  
and blocks up the latten Hence a more languid Influx Of the  
Spirits into the muscular Pans, and the Hears, happening, the  
Organs Of Sensation are deprived Of their Tension, the Circula-  
tion of the Blood and Humours render’d (lower, and all the Se- \*  
Cretions and Excretions weaken'd. Though these are very con-  
siderable and important Circumstances, yet it is justly to be.  
doubted, whether they exactly Quadrate and correspond to the

Essects Of Oplrtes; sor first it is hard to he Conceived how. by  
the Power Of the Stomach, the highly subtile Vapours os the  
Opium, heing resolved, and passing into the BlcOC, should he  
again separated from the Blood in the Brain, and how they should  
cbdtuct the minute, medullary, and nervous Ducts,' since a va-  
porous Substance does not enter peculiar Ducts, much less ob-  
struct the Motion of rhe subtile and elastic Lymph os the ani-  
anal Spirits. But granting that the vaporous Exhalation of Opium  
is exhaled through the Pores of the Arteries ol the Brain, yet in  
will with Difficulty find its Way into the *Corpora Striata fouls* Bot-  
tom of the Brain, where the Nerves generally arise, and, if it  
should by chance get Possession of these Parts, it may again he  
easily dissipated through their Pores. Hence it cannot, in my  
Opinion, be accounted for, why Opiates, and Other stupefying  
Medicines, often leave behind them a long-protracted Torpor, a  
Sensation Of Weight in the Head, a Stupor, a Vertigo, an In-  
flammation of the Head, and a Loss os Memory. It may he,  
also, asked, why other fragrant Substances, which diffuse a pene-  
Hating and copious Smell, do not, like Henbane or Nightshade,  
produce stupesactive Effects, even though these latter are less  
vaporous than the former. Nor can it be commodiousty ac-  
counted for, why, in some Persons, Opium should be an AphrO-  
thsiae, and sometimes produce Watchings and Madness, or dis-  
rush the Fancy and Reafon; for is the Pores of the Brain are  
Obstructed, or the Spirits condensed, by these Vapours, their due  
Influx into the Partsmust be retarded; which, however, cannot  
happen in Watchings and Madness, where, by the Consent of all  
Physicians, the Pores are Open, and rhe Spirits conveyed with a  
preternatural Fury and Impetus. That highly fetid Vapours, of  
the sulphureous Rind,. have pot a Power os extinguishing the  
Spirits, is obvious from this, that kindled Hairs, or Feathers, in.,  
ullibly rouse hysteric Patients, and those labouring under a Syn-  
Cope, and rather restore than extinguish the Motion of the Spirits.  
I have frequentiy ObserVed, that, in burning and inflammatory  
Fevers, the Exhibition Of a small Dose of Opium has brought  
pn a Disorder Of the Head, and a gentle Delirium, succeeded by  
ariong Haemorrhage, by which the Delirium was afterwards ter-  
ininated. Put this Phenomenon can but ill he accounted for  
from this Hypothesis, which supposes that Opium operares thy  
Vapours and effluvia; foris this Delirium, Alienation Of.Mind,  
and Stupor Of the Brain, proceeded from Vapours stagnating in  
she Brain, undoubtedly Sudorifics, and such things aS recruit the  
animal Spirits, would most quickly remoyethose Effects, which,  
however, does not happen. . - ..... : .

. In an Affair, therefore. Of sh difficult a Nature, we shall briefly  
propose what we think most probable: First, then. It is .not to  
he denied, that the Principle by which Opiates, and other Nar-  
Coties, act, is a Sulphur Capable of .Resolution and Evaporation,  
that is, which, by the Addition Of a sufficient Degree of Moisture  
and Heat, is resolved into highly subtile Vapours. Now Sul-  
phurs may be commodioufiy reduced .to three Classes.; for some  
Of them are pingnious and unctuous, and abound wish a gross  
Eanhrand.a. large. Quantityof Moisture^;such aS all expressed  
Oils, Fats, Or Lards, which are with Difficulty resolved into  
Vaperyrsr Other. Sulphurs .consistof a subtle and saline Earth,  
which, however, infixed thy acid .Particles, such as all resinous  
Substances, which,, if: they are freed a from the Substances in  
which they are involved, become too subtle and ethereal, such  
aS all distilled Oils: And Other Sulphurs are of a temperate Kind,  
consisting of a Fluid, a Salt, and a subtile ethereal Earth, mote or  
less fixed, and. ail such Substances exhale a Certain gross and  
song-cootinning Vapour, and are either of a fragrant or a fetid  
.§melh \_ Those Bodies, therefore, which Consist of such a rem-  
perate Sulphur, and not Only yield to temperare, bur, also, to  
aqueous Menstruums, are. possessed .of an, anodyne and stupe-  
factive Quality, for which Reason, when they are taken .into.  
the .Body, they are, .by 4 kind os fermentative and rarefactive  
Motion, resolved in the Stomach and Intestines, *a.* mild Heat,  
the shliVal Menstruum, and the Fluid Of the Air, concurring to  
the Production Of the same Effect. But-the sulphureous and:  
highly subtle Panicles, thus resolved, are partly conveyed imme-  
diately IO the Blood, through the porous Substance, by - means  
*cis* the membranous and nervous Ducts; and they are, also,  
partly convey'd to the.Blood, along with, the Chyle and Lymph.  
But when the Blood, impregnated with an highly subfile vapo-  
rous Principle, arrives at the Lungs, .it is.there more expanded,  
attenuated, and render’d.elastic, by the elastin Pans os rhe Air,  
Conveyed thither by means of Inspiration. Hence the Bicod is  
necessarily expanded, ‘and filis a larger Space. But when a Blood  
too much inflated, rarefied, and turgescent, approaches the cor-  
tical Substance or rhe Brain, and the small arterial Ducts sur-  
rounding thePia Mater, these Ducts, whose Coats are Very stem.  
der, are tfretematuralsy distended and expanded by this rarefied  
Blood, a Circumstance which renders the systaltic and conrtactile  
Motion less and flower: Hence the-.Circulation of the Blood  
through the Head and Brain is render'd flower, and more lan-  
guid, since, in order to the Return of the Blond through the  
Veins, the Systole or the Arteries, ants, consequently, the subse-  
quent Impulse, am always necessary.. . 1

Put from a flow Return of the Blood through the Veins of the  
Head, a Distention Of **the** Arteries, and a Stagnation of rhis  
Blood there, all the Phenomena and Effects, produced hy the  
Exhibition os Opium, may be ccmtnodicusiy explained and ao.  
coun'ed sor; for, whilst the Blond thus retarded moves through  
the Veins, the thin aqueous Parts are easily secreted through the  
PoreS, and induce a profound and gentle Sleep; And if a his-ger  
Quantity of this Sentm, secreted from the Blood, should over-  
flow the adjacent Parts, an Opp.essive Pain of the Head, aTor-  
por, a Loss of Memory, and .an Alienation Of Mind, m2y he  
produced. But when rhe Blood, in Consequence of itS preter-  
natural Thickness, becomes stagnant. Or when it is agitated hy  
an acrimonious Principle, Or a violent, hot, and intestine Mo-  
tion, then Various Fancies, turbulent Dreams full Of Terror, and  
even Madness and Watchings, are excited. Hence the Reason  
is Obvious, why, aster the Use of Opiates, the Vessels os the  
Head are render'd turgid and tumid, the Face becomes red, aud  
Haemorrhages of the Nose sometimes succeed. Bur, when the  
Blood is thus stowly Conveyed through the Brain, a small Quan-  
tity of animal Spirits are secreted and generated, and whilst this  
happens, the due Tone and Tension of the Nerves, which de-  
pends upon a proper influx of the Spirits, and is highly necessary  
to ail Sensation, is destroyed in the Parts; and hence the Priva-  
tion of Pain draws its Origin: Hence, also, we are enabled to  
assign a Reason, why those Spasms Os the whele Body, which  
depend upon an impetuous influx Os the Spirits, are alleviated,  
and aS excessive SpalmS generally hinder the Excretions of Sweat,  
Urine, and Stool, it happens, that, after the Use of Anodynes,  
the Swear, suppressed by such a Cause, aS, also, the EVacua-  
tions by Stool and Urine, stow more freely, and are reduced to  
better Order. And aS the Excretions Of Blood, and the Eva-  
cuations thy Stool, derive their Origins from an influx of **the**Spirits, hence Opium generally stops immoderate Haemorrhages  
and Euxes, fince it retards And lessens the Influx Os the Spirits,  
because, by this means, rhe due Flux and Reflux of the Blond  
in the Head is intercepted: Hence the Reason is Obvious, why,  
aster the Use os Opiates, the Pulse becomes weaker and flower,  
since, by the Consent Of all Anatomists, it iS granted, that **the**Motion of the Heart depends upon the Influx or the animal Spi-  
fits: Hence, also, we understand why, in a Defect of Strength,  
proceeding, from a diminished Circulation of the Humours, in  
malignant Fevers, aS, also, in all Disorders of the Head, such aS  
Apoplexies, .Vertigcs, Palsies, Weakness Of the Senses, Deliri-  
ums, and Loss Of Memory, which arise from, a retarded Circn-  
lation of the Blond through the Head, Opiates produce present  
Mischief, and render these Disorders more dangerous. The same  
fetal Effects are produced by Opiates in all weak Persons, Inch as  
are fat, those Of phlegmatic Habits, and whete-ever the Strength  
is impaired,. in which Cases an incautious Exhibition Of Opiates  
may often produce Death. That Opium, in some, proves a Sri-  
mulus.ro Venery, may he easily accounted for, from this Hypo-  
thesis, for the Blood in the whole Body, heing rarefied, and quick-  
ly Carried through the Vessels, -expands the Muscles Of the Penis,  
by which means it is erected; for Erection is procured not  
Only hy the influx Of the Spirits, but, also,- by a large Convey-  
**ance,** and long Continuance, of the Blood to the Penin

As *Pliny* and *Matthiolus* have Observed, no Substances are  
more efficacious for removing the Symptoms brought on by  
Opiates, then Acids, which, especially when Of the Volatile Kind,  
by their acid Spicula, communicate a certain Motion to the Fi-  
bres, and partly stop the excessive Rarefaction Of the Blood,  
and hinder the Effects of the sulphureous Vapours Purgatives,  
also,\* and all Substances which produce a Commotion in the  
Body, have a Tendency-to prevent the mischievous Effects Of  
Opiates, because, by these, the Fibres heing stimulated tO a brisker  
Morion, the Stagnation in rhe Head is, by that means, generally  
render'd less: And in this Cose the worst os Symptoms are not to  
he expectedi This Hypothesis is greally confirmed by a curious  
History,, recorded in *Lenti'ii Mis.cell. Mid. pract.* where we  
are told, that, half an Hour after a certain Person had used some  
Hemp-seeds,-there was shcb an Expansion Of the Cranium, that  
the Surgeon could take the Blood extravasated in the Wound,  
through the FissureS of the Cranium. Now, that Hemp-seed is  
possessed of a narcotic Quality, is shewn by *Simon Pauli,* in his  
*Gsoadrupart. Botan.* The *Dutroy* is, also, by many Authors  
who have wrote concerning the *Indies,* accounted a Species of  
Hemp, aS we are insormen in *Itiner. Olearii Oriental.* Hence  
*Eenrslius* justly concludes, that the Substance of the Brain is ren-  
tier'd turgid, and possesses more Space, by the Fumes Of Opium.  
Besides, that Narcotics operate by retarding the Motion Of the  
Blood through the Brain, is obvious from dissecting the Carcases  
of those who have perished by the Use of Narcotics: Thus  
*Juach. Curaeus, Lib.z. de sensu. Cap.* II. and *Lavinus Lemnius  
de Occ. Nat. Mir- Lib.* 2. *Cap.* 52 informs us, that, in Subjects  
os this Kind, the Blood has been sound congealed like Ice in the  
Ventricles of the Brain.

Lastly, That the Effects of Anodynes may be commodioufly  
explained and accounted for from the Rarefaction and ETpansion  
Ol the Blood and Humours, is obvious from this -, that there Sub-

stances which produce a rarefactive and expansive Motion in  
the Blood and Humours, are, also, possessed of a remarkable  
Power Of inducing Sleep. Thus the immoderate Use or Brandy  
is succeeded not only hy profound Sleep, but, also, by a Stupor.  
And *Platerus,* in Lrse I. *Obseru.* informs us, that he- frequently^  
observed, that those who drank immoderately Os Brandy, or Aqua-  
vitas, were first seized with an intolerable Heat , afterwards her-  
Came stupefied, aS if they had taken Opium, and snored till they  
died. That Amber, Musk, Saffron, Camphire, and Nutmegs,  
raresy, expand, and attenuate the Blood, whilst, at the same time,  
they produce anodyne Effects, is Certain beyond Dispute: That  
Baths for the Head, Feer, and whole Body, dsspose to mild and  
gentle Sleep, is well enough known ; which is Owing to nothing  
but their inducing an Expansion of the Humours,\* by which  
-means they render the Body turgid and inflated, in consequence  
Of which, the Blood moves slowly thro’ the Head, and a gentle  
Sleep succeeds. The Vaporous and fragrant Substances, which  
exhale from Flowers, are, also, possessed Of a singular Power Of  
.inducing Sleep ; for which Reason *Strabo,* in GFogr. *Lib. 65.*affirms, that a Carns may he produced by highly fragrant Sub-  
' stances, for the sulphureous Vapours, being possessed of a remark-  
able Elasticity, and received into the Pores thro' the Blood, by  
/dilating and expanding it, produce the above-mentioned Effects.  
Tis, also, certain from Experience, that, by means Of the inco-

- ercible and expansive sulphureous Exhalation arising from live  
1 Coals, many have-been seined with a Stupor, and sometimes with

Death. Instances Of this kind frequently Occur in practical Au-  
r thors. But, that, during Sleep, the Humours and whole Habit  
.'Of the Body are expanded, is sufficiently certain, since, in sleep-  
. ing Persons, the Inflation Of the whole Body and Head is sussi-  
- ciently conspicuous ; and 'tis observed, that the Shoes, Stockings,  
and other Cloaths Of such Persons, are tighter than when these  
very Persons are awake. Hence, also, the Reason is Obvious,  
why in rainy, warm, and Summer-weather, aS, also, in hot Baths,  
: which manifestly rarefy the Blood, Persons are more excited to  
Sleep, than when the Weather is cold, dry, and serene; because,  
‘.by this last-mentioned State Of the Atmosphere, the Fibres of the  
: Body-ere more Constricted, the Humours more condensed, and  
. the Circulation of. the Blood more brisk and accelerated. From  
. what has been said, the Reason is, also, obvious, why Persons in  
... aoeep Sleep are Commodioufly roused by Cold Water, Or rather

Vinegar, apply’d to the Region of the Liver, the Genitals, and  
. the Back: AS, also, why Acids, fuch aS Lemon-juice and Vine-  
- gar, whether internally Or externally used, Commodioufly remove  
. Sleep and Drunkenness. Tis to be Cautionsty observed, that this  
. Expansion Of the Blood and Humours, which is necessary to in-  
educe Sleep, and procure a Freedom from Pain, varies much as  
ι to. its Nature, according tO the different Causes by which it is  
produced. Thus, ’tis a Circumstance of great Importance, by  
\what Anodynes, Or somniferous Medicines, the Sleep is induced;  
-for,.if it is procured by fragrant Substances, or suebas contain a  
\* mild and gentie Sulphur, which is friendly to the Spirits, the Synt-  
proms induced arenot very dangerous, nor much to be dreaded.  
But if the Sleep is brought on hy -a sulphureous, fetid, and foreign

- Vapour,: Which is .unfriendly to Nature, and the Spirits, then a  
more terrible Train osSymptomsinfallibly succeeds ; for ?tis cer-  
tain, that those Spirits, which .are so useful to the. Body, and are

.subservient to Reason, and the Functions Of the Mind,7derive  
Ibeir Origin from the highly subtile Vapour Of the Blood, sand the  
most fine and: elastic Portion Of the Air’. ' Hence we may easily  
- Conceive, that, by Anodynes and Narcotics, Our Spirits most be  
-Varinusiy affected;.and; changed, so .that Opiates and -'Narcotics  
exert their Efficacyimmediately,Dot Only on the Blood., but, also.  
On the Spirits. hess *. girti l'.cr*

.? From what has been said, L think-tis sufficiently OheriOimIhat  
Opiates are not without the greatest;Caution to: he exhibited in  
ribose Disorders, where there is a-manifest Languor of-theSpirits,  
va Defect Of: Strength,, and an Impaired' Motion Of the Blood,  
.especially in the Head.' Hence, Iin-Diforders of the Head, Deli-  
titims, all Fevers, anil especially those Of the inSsmmato'ryTind,  
-Opiates and Narcotics are either he verto be tiled,-or exhibited

**4 .with** great Caution; t *Hoffenan.* ὑ tio. '-n *- 'su s' -'-’l sisu*

The AntientSy having experienced, that Opinm. would often  
.kill, though takenm.no large Quantity,Tanked it with Poisons,  
and gave it the first Place among those, which, from their fin-  
.pesyrng Quality, TheyCalled Narcotic.-' .estes Vi

- True, indeed, it. is, that we ἰ every Day find thi2.ro be, in a  
-small Dose, One.of.the most noble Remedies in the World- But  
it is not worth the while to engage in the Controversy warmly  
debated by some Authors, how far Poisons are medicinal, since  
it is notorious enough, that Medicines sometimes prove poi-  
sonoUS. And, take the Matter aS we please, it may-serve to Very  
good Purposes to understand the; Manner Of Operation Of so  
celebrated a Drug, and help us, in a great measure, to ascertain  
Its Use in different Cases, if we are beforehand rightly apprised  
.Of its Nature, and Way of acting.

ln order hereunto, it is necessary, besides some Other Precog-  
. mita, since one of the chief Virtues of this Medicine is hypnotic,  
to define distinctly what Sleep is,-or rather (to avoid Confusion  
and Disputes about Words) whIt. Difference there is in an animal

Body, when afleep, and when’ awake. For 1 shphersestheHistoryJ  
Manner os preparing, *etc.* Os Opium, to he already fufficienrty  
known. ‘

First, then, there is no one but knows, that in Sleep there is  
a Cessation 'from Action. When waking, we walk, discourse,  
move this or that Limb, *etc.* bur, in natural and undisturbed  
Rest, there is nothing Os all these; that is,whereas, being awake,  
we perform several Motions by the Voluntary Contraction of  
Onr Muscles ὁ when asleep, those Muscles Only are Contracted,  
whose Action is in a manner involuntary. Or to which rhe Mind  
has always so constantly determined the Spirits, that it acts by an  
Habit, without the Intervention of the reasoning Faculty, such  
are those Of the Heart and Breast. . .

SO that there is, at this time, a kind Of Relaxation, Or Loose-  
ness. Os the moving Fibres Os the several Members, Or, at least, in  
such a quiet Position and State of them, by which all the anta-  
gonist Muscles are in an Equilibrium, and Equalny Os Action,  
not Overpowering One another. For this, indeed, seems to he  
One great Design os Sleep, to recover, to theParts over-stretched  
by Labour, their former Tone or Force 3 and, therefore, we  
naturally, when .composing ourselves to Rest, put our Body into  
tharPosture, which most favours the particularly-wearied Limbs,  
and conduces to this Ends - -

In the next place, it is Very plain, that there is, in Sleep, not  
Only a Rest ano Suspension from acting Os most of Our bodily  
Organs, but even of our thinking Faculty too: That is, (for **I**would prevent CavilST a ceasing from such Thoughts, as, when  
waking,-we are exercised about, which we reflect upon, and  
will, to .employ Our Mind with. For the' Dreams are Thoughts, ’  
yet -they are but imperfect and incoherent ones, and are, indeed,  
either so saint and languid Representations; aS to be consistent  
with our Sleep, aS seme may be 5 or else, if they he strong and  
lively, they are, aS every one knows, the Interruption and Disturb-  
. anee of it.

- Hence it will follow, that the Motion Of the arterial Fluid  
must he, *cateris paribus,* more sedate, even, and regular, in  
the Time os sleeping than waking 5 for, besides the Various Altera-  
tions, which, in -the-latter State, this receives from the several  
Passions Os the Mind, the Very Contractions of the Muscles them-  
.'selvearin Exercises Ofthe Body, do differently forward its Course;

whereas, in Sleep, the Force of the Heart, and pectoral Muscles,  
heing more Constant and uniform, gives it a more Calm, and  
equally-continued Impulse.

Hence, also, it will come to pass, that the Influx of the Liquor  
Of the Nerves into the Organs of the Body, as, also, its Reflux to-  
wards the Brain, inin Sleep either none. Or Very inconsiderable ;

' that is, that this Fluid has at this time hut little or no Motion:  
For it isinuscularAction and Sensation that require it to be thus  
determined this Why, or that, which are now hardly any5 and  
yet, by the Arrival of the Blood at .the Brain, this juice will still  
be separated there, fit to be derived into its Canals or Tubes :. So  
that by these means there will be a kind Accumulation, Or laying  
tip In Store, Of Spirits *for* the Offices and Requirements Of

-Waking.si- *susc.-’s. si.'.*

Thus we may, in short,IOOk upon the Time Of Watching, as  
the Time Of wearing out, or the Destruction, of the animal Fa-  
' bric, and the Time of Sleep, aS that ip which it is repaired and  
- recruited,- not only upon the account Os what we haVejust men-  
- 'tinned Concerning the nervous Liquor, but, also, with respectto  
-all the Other Parts, as well fluid aS solid. For Action does ne-  
Cestarily, by degrees; impair the Springs and Organs, and, in Mo-  
Tion, something is continually abraded and struck off from the  
distractile Fibres, which cannot Otherwise be restored, than by  
- their being at Rest'from Tensionbesides, that such a regular  
; and steady Course Of the Blood, aS we have Observed to be in  
'Sleep, is by far more fit and proper for Nutrition, Or an Appo-  
fition Ofparts to rhe Vessels, which an uneven Hurry Of it is more  
. liable to tear off, and wash away.

The Case being thus, st is Very plain, that whatsoever can in-  
duce such a Disposition os the Fluids, and muscular Parts, Of the  
Bods, as this we have described, will so far cause Sleepiness And,  
in like, manner, when any thing interposes, and hinders this Com»  
’ sposedness and Tranquillity, the removing os the Impediment will  
the the causing of Sleep; inasmuch aS this is only reducing the  
- animal Oeconomy to its right State, in which, by natural Order,  
there thust be a Succession of Sleeping and Waking.

Thus it appears,- how necessarily continued Exercises make  
uS 'sleepy, since .these exhaust the Juice Of the Nerves, that  
is, both lessen itSJnstux into the Organs Of Motion, and incline  
The Mind not to determine it any longer that Way, upon the ac-  
count os the Pain and Uneafineis, with which too Violent aTen-  
'sion of the Parts is always attended , which, therefore, we must  
needs desire to relax; or lay to Rest.

-' That Sleepiness which follows upon a Fulness of the Stomach,  
.'alter .Eating or Drinking, is owing to a disserent Cause , and,  
indeed, so nearly falls in with the Effects of opiate Medicines,  
that It requires a particular Consideration.

' As Hunger, Or the Emptiness of the Stomach, is a painful Sen-  
seston; so the satisfying or removing of this, is a pleasing or agree-  
one. Now all Pain is a Srimtthrs rim., νν,Α D,..v .

and this, we all -know,, .being attended with Contnct ions of the  
piined Membranes, causes a greater Afflux than ordinary os (he  
nervous Juice that Way. On the other hand. Pleasure, ora de-  
lightful Sensation in any Part, is accompanyd with a smooth Un-  
dulation, and easy Reflux, Or the Liauor Os the Nerves towards  
The Brain. This is, as it were, the Entertainment Os the Mind,  
with which being taken up, it doesnot determine the Spirits to  
the Organs Of Motion , that is, there is such a Relaxation of the  
muscular Fibres, and such a Disposition of the nervous Fluid, as  
we have observed to be necessary to Sleep. \*

This is the Reason of th it Chilliness os the Limbs, Of which  
\* we commonly complain after a good Feast.

Is it seem strange, that a Pleasure in the Stomach should so  
poweifallyinfluence the Mind, let it beconsideredjonthe other  
hand, how Violent Effects an uneasy and disagreeable Sense *Of*the same Part produces, whet a terrible Agony two Or three  
Grains os Crocus Metallorum throws the whole Fabric into ;  
how readily the Fluid Of the Nerves is, with a more than ordinary  
Impetus, determined and commanded into the Muscles of the  
Stomach and Abdomen, in order to throw off the Enemy, and  
remove the ungrateful Sensation. .. ... ......

Now the Consequences, which we have ascribed to a pleasing  
' Sense in this Part, are only just the Contrary os these we find  
the opposite Affection of Pain induces. And, indeed. Pleasure  
and Pain are two great Springs os Action in the animal’ Oeco-  
nomy, the Changes they make in the Fabric are the Causes Of  
many Effects which seem surprising, because we do not regard  
the Mechanism by which they are produced; but these' must be  
'more considerable in rhe Stomach, then any-where else, this Part  
being, for Very wise Purposes, Of so acute a Feeling, that some  
Philosophers have, for this Reason, thought it to be the Seat of  
the Soul. '

Besides this Consideration, we must take notice, that the Sto-  
mach, being distended with Food, presses upon the descending  
Trunk of the Aorta, and thus.causes a greater Fulness os the Vein  
f as in the upper Parts , whereupon the Brain is loaded. Or the  
Derivation of Spirits into the Nerves diminished, and Unactivity,  
Or Drowsiness, ensues. -Hence proceed those Flushings in the  
Face, Redness, *etc.* after plentiful Eating or Drin king, most 'Visi-  
ble in those, whose Vessels are lax and weak, aS in exhausted and  
hectic Persons they more especially are.

; Thus we may, without the Assistance of the new Chyle en-  
soring into the Veffeis, account for that Inclination to Sleep, which  
.follows upon a full Stomach. Though we must, also, allow the  
Distention from this, to be a Considerable Cause of the same  
Effect , but this does not happen immediately, nay, sometimes,  
perhaps, not within two Or three Honrs after eating; and, there.  
fore, the sudden Drowsiness must (aS well as the present Refresh-  
, Inent and Reviving which Meat gives) the Chiefly Owing tossome  
more speedy Alteration.

Ἱ . We come, in the next place, to Opium itself; thechymical  
Analysis Of which. Out Of One Pound, affords a Volatile Spi-  
rit Of the like Nature with that drawn from Hartshom, five  
'Ounces and five Drams, of a fetid Oil, one Ounce two Drams  
and an half. Of Caput Mortuum, smelling like Spirit OfHartshorn,  
'seven Ounces and six Drains. *—.A.* s.

The Virtues, therefore, of Opium are owing te a volatile al-  
ealine Salt, intimately mixed, and combined with an Oily her-  
spbureous Substance , the Effects of which we must Consider,  
first. Of all, upon the Stomach, and afterwards, when they have  
Passed the Primae Vise, upon the arterial Fluid itself.

An agreeable Sensation, produced in the Stomach, together  
with a Distention os its Membranes, we Observed before to be  
the Cause Of that Sleepiness to which we are so prone after Eat-  
ing. The One of these engages the Mind, the other acts upon  
‘the Body. For Pleasure, amuses the Soul, aS it were, *io* thattt  
does not think. Or exercife itself, about any Outward Objects;  
that is, is inclined to Resh And the Fulness Of the Vessels in. the  
Brain checks and hinders, in some messure, the Derivation Of  
the nervous Juice into the Organs, etc ~ ' -'.so ....

Now, if they who take a moderate Dose of Opium, especially,  
is not long accustomed to it, are so transported with the pleasing  
Sense it induces, that they are, as they, oftentimes express them-,  
selves, in Heaven, and tho' they do no: always steep, .(which  
proceeds from the Presentation os pleasing Images to the Mind,  
being so strong, that, like Dreams, they over-engage the Fancy,  
and so interrupt the State of Rest) yet they, however, enjoy so  
perfect an Indolence and Quiet, that no Happiness in the World  
’Can surpass the Charms of this agreeable Ecstasy. . .

Thus we have, from this Medicine, but in a far more eminent  
Degree, all those Effects, which we observed to follow upon that  
grateful Sense in the Stomach, which a moderate Fulness pro-  
duces. For no Bedies are so fit and able, pleasingly to affect our  
sensible Membranes, aS those which consist Of Volatile Parts, whose  
‘Activity is tempered and allayed by the Smoothness of some lu-  
bricating and oily Ones; which, by lightly rarefying the Juices of  
the Stomach, and causing a pleasant Titillation of its nervous  
Coat, will induce an agreeable Plenitude, and entertain the Mind  
wi h Ideas os Satisfaction and Delight. -

The Case being thus, we easily see upon what Mechanism the

other Virtues Of Opium depend, its easing Pains, cheeking  
Evacuations, *etc.* not only in that the Mind, being taken up Whh  
a pleasing Sense, is diverted from a disagreeable one; hot, nil Pain  
being attended with a Contraction of rhe Part, that Relaxation of  
the Fibres, which is now Caused, eludes and destroys the Force  
os the Stimulus.

In like manner, in immoderate Secretions, there is, most Com-  
Inonly, an Irritation Of the Organs, the Removal of which will  
abate the Discharge. And herein lies the incrassating Quality of  
this Medicine, in that rhe twitching Sense upon the Membranes  
Os the Lungs, Bowels, etc. being now lessened, the sharp Humour  
is suffered to lodge there in a greater Quantify, before it is so trou-  
blesome, as to be thrown off, and expelled; it being all one, as  
if there were no Irritation of the Part, is the uneasy Sense thereof  
he not regarded by the Mind. These Effects will all be height-  
ened by the Mixture of the opiate Particles with the Blood;  
which is hereupon rarefied, and distends its Vessels, especially  
these Of the Brain; and thus still, to a greater Degree, lessens  
the Influx Of the nervous Fluid to the Parts, by pressing upon  
theJittle Tubuli, or Canass, through which it is derived.

This is the Reason Of that Difficulty Of Breathing, which they  
for a time experience, who take this kind os Medicine; this  
Symptom heing inseparable from the Rarefaction os the Blood  
in the Lungs.

Hence it appears, that the Action Of Opium is Very analogous  
to that os Other Volatile Spirits, only, that a small Portion of it  
has a Force equal to that Of a greater Quantity of them.

This is Very evident in those who accustom themselves to take  
large Doses Of it, aS the *Turks* and *Persians* do to that degree,  
that it is no uncommon thing there, to eat a Dram or two at.a  
time; for the Effects of it, in them, are no other than down-  
right Drunkenness ὁ upon which account, it is a common Saying  
with them, and On the same Occasion, *He has ent Opium,* Or,  
with us. *He has drank too much Wine.*

Neither do they Otherwise bear such large Quantities Of it, than  
Our Tipplers will a great deal Of Brandy, that is, by habituating  
themselves to it by degrees, beginning with small Doses, and  
requiring still more and more, to raise themselves-to the  
sime Pitch. Just aS *Galen,* telis ns Ofa Woman, at *Athens,* who,  
thy a gradual Use, had brought herself to take, without any Hurt,  
. a considerable Quantity os Cicuta, or Hemlock: Which in-  
stance is the more to our Purpose, because *Hie. Fontanus* knew  
one, who, being recovered os the Plague, and wanting Sleep, did,  
with Very good Effect, eat Hemlock for some time, till, falling  
. ill again of a Fever, and having left off the Use of this Remedy,  
he endeavoured ro procure Rest by repeated Doses of Opium,  
which (Nature having been accustomed;to a stronger Alterative)  
had no Operation, till the Help Of Cicuta was again Called in  
with desired Success. n—...; ... ἐν

It is a sufficient Confirmation of all this Reasoning, that *Prosper  
Alpinus* Observed, among the *Egyptians,* those who had been ac-  
Customed to Opium, and were saint and languid thro’ want of  
it, (as Drinkers are, if they have not their Spirits) to be reco-  
Vered and put into the same State Of Indolence and Pleasure, by  
large Doses Os Cretin Wine, made hotter by the Infusion Of Pep.  
per, and the like strong Aromatics.

Nor is it, perhaps, amiss to remark, that in maniacal People,  
. aS is frequently Observed, a quadruple Dose Of Opium will scarce  
Produce any considerable Effect. Now, in .Persons so affected,  
the Mind is deeply engaged, and taken up with some Images Or  
. Other, aS Love, Anges, and the like ; so that it is not to be so  
easily moved Or diverted by those pleasing Representations which  
It would attend to at another time, and upon which the Virtues of  
this Medicine, in a great measure, depend. Beside this, those who  
are maniacal, to a Wonder, hear the Injuries Of Cold, Hunger,  
and the like, and have a prodigious Degree Of muscular Force,  
which argues the Texture of their Blond to-be very strong, and  
the Cohesion of its Globules great, so that the.spirituous Parts of  
The Opiate cannot make that Disjunction and Rarefaction Of this  
Fluid in them, which it does.in ordinary Bodies, and Constitutions.

Many are the Improvements which might he made Of this  
Theory, with relation to the Practice Of Physic; but these will '  
he obvious enough to One instructed in the animal Oeconomy.

TO conclude, then, aS to the Subject in Hand,.it is Very plain,  
that there needs no more to make Opium prove destructive, or  
a Poison, than to take too great a Quantity. Ostt; for, then, in  
must inflame the Stomach, and rarefy the Blood to such a De-  
gree, that the Veffeis cannot again recover.their Tone; where-  
upon apoplectic Symptoms will ensue.

To he convinced os this, I forced into the Stomach of a small  
Dog about half a Dram os crude Opium, dissolved in boiling  
Water. He quickly Vomited . it up, with a great Quantity of  
frothy Spittle, bus, repeating the Trial, by holding up his Head,  
and beating him, I made him retain three or four Dofes, inter-  
mitting between each, about a quarter of an Hour: When he  
had thus taken, aS I could guess, near two Drams, I watched  
him about an Hour, then he began to steep, but presently started  
up with Convulsions, fell into universal Tremblings, hjs Head  
constantly twitched and shaking, he breathed short, and with  
Labour; Jost entirely the..Use, first, os his hinder Legs, and.

.then, of the sore ones, which were staff and rigid, like Sticks.  
As he lay snorting, to hasten his End, I was giving him more Of  
the Solution , bur, on a sodden, his Limbs grew limber and he  
died.

Opening his Stomach, I found it wonderfully distended, tho’  
emptyof every thing, but some Water and Opium ; Parceis Or  
frothy Mucu- swimming in it; the Inside was aS clean, aS if scraped  
. and washed from all rhe Slime of the Glands, with some Red-  
ness here-and there, aS in a beginning Inflammation. The Pylo-  
rus was contracted. The Blood-Vessels of the Brain were Very  
full; and I took Out a large Grume of concrete Biood from the  
upper Part Of dr, cutting into the Sinus Longitudinalis, as it is not  
uncommon io apoplectic Carcases; but found no extravassted  
Senimin the Ventricles, nor among any of the Membranes.

. -I AS to the Cure of Inch a Case, besides other Evacuations, acid  
Medicines, and lixivia! Salts, must certainly do Service thesis,  
thy Ibeir diuretic Force, causing a Depletion of the Vessels. This  
is the Foundation, upon which *Starkey* compounded his *pacific  
Pill.* Generous Wine; which the Antients gave for an Antidote,  
can be no otherways useful, than aS it dissolves the resinous Clam-  
myParts of the Opium sticking to the Coats of the Stomach,  
and so forwards its Expulsion by Other Helps, which cause a  
Contraction Of the muscular Fibres. *Mead on Poisons.*

One *Mtflapha Shatoor,* an inhabitant os *Sndique,* a Village  
fix Miles hom *Smyrna,* by Trade a Coffee-inan, about forty-  
five Years Old, a most famous Opium-eater, told me, that his  
Constant eating was three Drains a Day of crude Opium, One  
half of which was his Dose in the Morning, and the Other half  
in the Afternoon ; hut that he Could safely take double this  
’ Quantity. Resolving therefore to be an. Eye-witness of what  
he Could do, I provided the best Opium I could get, and  
weighed it nicely into Drams r Ho came to me, at my Desire, at  
Nine in the Morning; but excused his having taken half a  
Drain before, because he had not Strength to rise Out of his  
Bed without it. *I.* laid before' him my Opium made up in Pilis,  
each weighing a Dram, and desired hint to eat what he pleased;  
he took one Drath and an half, making it up tn three Pills; and.  
Chewing it with a little Water, he commended the Opium;  
but was not willing to eat more at a time,'and I would not  
press him for sear of Accidents. He staid with the about half  
an Hour, after he had eaten the Opium: The Visible Effects it  
had upon him, were to snake his Eyes' sparkle, and to give a  
new Air Os Lise and. Brightness to his Face. He told me, that  
**he** was extremely refreshed by my Entertainment., and I found  
him half an Hour afterwards labouring heartily at cleaving  
Wood to burnt At Three in the Afternoon he came to me  
again, and took the same Quantity as in the Morning, and  
the fame Symptoms appeared. He says that it has always- the  
same Effects, giving him Vigour and Spirit, and is now be-  
come aS necessary to him, as any other Part of his. Sustenances  
and that it makes, him sitter for Procreation; for he has many  
Wives and Children , that it never affects him with Sleep and  
Drowsiness, bur rather hinders his reposing when he happens  
to take too much of it; that he entered upon this Practice  
twenty-five Years ago, beginning with, the Bigness os a Crain,  
and so training up Nature gradually to larger Quantities; and  
that the Want of it,, and theDesire of taking more, grow daily  
Hponthitin ’ .

The Alteration and Impairment, which this Custom has’  
produced in him, are Weakness, his Legs being small ». his  
Gums eaten away, so that the Teeth stand bare to the Roots ;  
his Complexion Very yellow, and appearing Older by twenty  
Years; than he really is. \_'.. .

Opium-is commonly taken by the Messengers *ittTtcrscy,* who  
are employed in making quick Dispatches, 'tis generally, part  
Of their Provision: They take it when they find themselves tired,  
and it gives them Strength and Spirit to proceed. I had the  
following Relation Of One Of them, that, coming *f* rom *Constan-  
tinople* try *Nix. Skiausl Barnardistoes* a Merchant Os *Smyrna,* at  
entring inso’a Gentleinin's House,he fell down for dead ; at which  
when the whole House was surprised .and concerned. One of  
the' Servants rightly judging, that this fainting away was oCca-  
sion’dthy the Stock . Of Opium laid in Tor his Journey being  
spent,-forced aslittle ofit into his Mouth ; and thy fins means he  
recovered presentiy, and acknowledged the Servant had been his  
Physician.. ... ........ Ἄ. . ....... .'. .lffa.-ssS  
i **The *Turks*** use Opium'made up with something that ren-  
ders it palatable, at their Feast called *Biram, to;* make "them  
chearsul; which may be one Reason of its Prevailing so much ;  
for, finding it then entertains with pleasing Fancies, they are  
temptedTOimntinnwIt, and so the Use Of it becomes necessary,  
and grows upon them. . *Philosophical Transact. Abr.gros.us  
' Some* pound The Heads and Leaves together, then subject  
them to the Press, afterwards bruise them in a Mortar,, and so  
reduce them into Troches; this Preparation is called *Meconium,*and is more gentle than Opium, spy ὸπδ᾽ The Way Of pre-  
paring the Juice, Or Opium, is, first, aster the Dew isdryd up,  
to Cut' Out the Star sin the Head Of the PoppyJ with a Knife,  
in so Clean a manner,' that none os it be forced inwards, and

then to make strair, but flight, incisions at the Sides Of the Head,  
which will he follow’d by an Eruption of the Tear, to be wiped  
Off with the Finger into a Saucer. And, if you return after a  
.littie while, yon will find more Of the Tear Condensed, and  
so again the next Day; after this pound the Whole in a Mortar,  
and, reducing it into Troches, lay them up for Use. By way  
Of Caution, when yon Cut the Poppy, take Care to retire back,  
that the Juice might not he wiped off in your Clothes. *Diof-  
ctrrtdes. Lib. An Cap.sees.*

OPOBALSAMUM. See **BALSAMUM.**

OPOCALPASON,OPOCARPASON, οποκἄλπάσον, όποκάρ-.  
πασον, the Juice of a Tree Called *Calpasi*, this Juice resem-  
bles Myrrh , but is poisonous and deadly, inducing a Strangu-  
lation. *Galen, de Acstidoe. Lib.* I. says, that in the Course of  
his Time he had observ’d the fatal Effects in many, who had igno-  
rantly taken Myrrh mix’d with *Opocalpasum.* For they who pre-  
pare Antidotes, he says, purposely mix thisas an Ingredient, taking  
It for the best Sort of Myrrh; because they had Observ'd it to  
he a Very good Medicine in Collyris, where it attenuates  
Sanies without Corrosiveness, and sometimes removes an inci-  
pient Cataract. And if yon put, says hs, this Kind of Myrrh  
into a Planter, Cerate, or any attenuating Medicine, to be out-  
wardly apply’d, you will increase its Virtue, but the Effects  
of it taken into the Body are deadly.

OPODELDOC. The Name Of a Plainer said to be invented  
by *Mndcrerus,* tho' Often mention’d by *Paracelsus. See* EM-  
**PLASTRUM. . .**

\* There is a famous popular Ointment, which goes by the  
Name Os *Opodeldoc* , which is said to he thus prepar'd.

. Take Of the Roots Of Marshmallows, Comfrey, Gentian,  
r Long-birthwort, Angelica, of each one Ounce and an half;

Of the Herbs Sanicle, Ladies-mantle, Mouse-ear, Colts-  
foot, Snakewood, Periwinkle, bruised. Of each half an  
Handfill, of the Leaves of Rosemary, Sage, and Laven-  
: der, of each one Handful and an half. Flower os Rosemary,

Sage,, and .Lavender, os each One. Handful, Junipsr-ber-  
. . riesxtwo Ounces; Cumin-seeds, Ong Ounce 5 Camphire and .

Castor powdered, os each One Ounce and an half5 and Of  
- ’ Spirit Of Wine, three Pints and an half.

Put all into a Glass Cucurbit, well luted, and digest for ten  
Hours in Balneo Marite, that is, in hot Water, but not to boil,  
then strain., and, the Spirit Of Wine being sufficiently impreg-  
nated with the Ingredients, then add one Pound os Castile Soap  
shaved thin then digest in the fame manner as before, until the  
Soap is dissolved. - ... -

**... A FARTHER ExPLANATION.**

Lute the juncture carefully, with two Or three- Doubles 6f  
Paper, daub'd Over with the White of Eggs, and tied about  
with Thread, the Luting heing dry’d, then digest io Balneo  
Mariae for ten Honrs, the Matrass being sir'd in the middle Of  
the Kettle; with a Layer Os Straw under It, to keep it at the  
Distance Of two inches from the Bottom : For the first eight  
Hours, keep the Water so hot about st, that you can scarce  
hold your Finger therein, and the two other Hours augment the  
Heat, but not so much as’to make the Water boil. ......  
- After the Spirit of Wine in thoroughly impregnated with the  
Tincture of the Roots, Herbs, Leaves, and Powders, cool it  
gently ; and, strainingin thro' a Linen Cloth, pour it again into  
the Matrass, with One Pound Of Castile Soap shaved,thin,, then  
fit the Vessel Of .Rencounter to rhe Matrass ylute the Junctures,  
and digest as before, till the. Soap is entirely mix'd wish the  
Spirit, and the Whole reduced co an Ointment ; then take out the  
Matrass, and suffer it to cool.. r \_ si εἴ ' ' ' '

If the Doses, and other Directions, are duly Observed, it will he  
the Consistence of an Unguent, neither too thick or thin; and  
the Method of trying if'tis truly prepared, is, to mlj some Of it on  
your Hand, which, ir will immediately penetrate, leaving only  
a. greenish Stain 2. tho' the natural Colour of the Ointment is  
brown; frsu'et - Vs’si / ’ "

- Tis excellent in Strains, Relaxations of the Sinews in  
Horses, as well aS human Kind ; alsov in all Pains, Numb-  
ness, Weakness in the Joints, Or Other Parts, **being well tub'd**“Tilts .. -S.SS .4. : 7 - .

-Stffasu:: **ITS SUCCEDANEUM. -**

Take Of Castile Soap, two Ounces,, os'rectify’d Spirits **Of**Wine, four Ounces, -and of Camphire, two Drams;

‘ 6 Mix; '4. - .

OPOPANAX. C. BE. 404. Schroff 4. 4o3. Ran Hist, is  
4II. Mill. Bot. Offic. 32I. Path. Theat. 17441

..This is a Guin which is brought from *Turhy,* flowing, aS is  
generally believ'd, from rhe wounded Root 0s a SpecieS **of***Panax Heracleum* call'd by *Gerard, Panax Heracleum majus, and***by** *Bocrh'adnte, Pastinaca, Olusatri folio. . t - -*

The best *Opopanax* is Of a deep.yellow Colour,, hut whiter  
within, in large Drops,’ but yet usually sticking together, of a

*y&J* strong, not unpleasant Smell, and of a warm bitterish  
Taste, easily dissolving in Water, which it turns Of a milky  
Colour.

This Gum is hearing, dissolving, and evacuating tough  
Phlerm, from the remote Pans of the Body, and On that Ac-  
count is useful against Old Coughs and AstnmaS, it helps the  
Gout, Sciatics, and rheumatic Pains in the Limbs, and is Very  
good ro procure the Catamenia: Outwardly applied, it is good  
to disselve bard Swellings, Tumors, pestilential Bubcer;and to  
Cute the Bitings of mad Dogs, and other Venomous Creatures.  
*Millers Bot. Off.*

*Geoffeoy* says, the Dose is from twenty Grains to a Dram,  
and it is an Ingredient in many Compositions. See PANAx  
*Heracleum.*

OPOPIA, όπἀπια, the Plural Of όπώπιον, *Opopion,* from ώψ,  
the eye, in *Hippocrates* πΞρἰ *ociaeer for.* are the Bones of the  
Eyes.

OPOPYRON *suasedani.* A Name given by *Paracelsus, de  
'Visa longa, Lib.* 2.'flap. 5. to a Remedy, which, he says, re-  
moves a Fever; and prevents its Dilatation, aS he calis it. *Opo-  
Ayr a* is the Name Os a Composition, *in Antid. Hicolai Operum  
spdesueo* against spasmodic and paralytic Affections.

CHORE, ὸποὐρη, has two Significations, for, first, it means a  
.Certain Season or the Year, Or the latter Part of the Summer,  
comprehending half. Or but One Third 0s it, according to the  
various Divisions os the Ancients. *Galen, pluribus Locis.* Some  
by ὸτιίρη understand the Autumn. Secondly, It often signifies  
the Fruits which come to Maturity in the aforesaid Season,  
particularly Figs and Grapes; but *Hippocrates,* as he is generally  
render’d by Interpreters, uses the Word ὸπώρη to signify Autum-  
nil FruvS. anj principally Apples.

OPOstICE, ὸπωρικύ, from the preceding Word, is a noble  
Remedy, as *Pliny* calls ir, composed mostly of Fruits Of Trees.  
It Consists, he says, of five Quinces with, their Seeds, aS many  
Pomegranates, a Pint Of Services, and a like Measure Of what  
they call *P.hus Syriaconf* (Syrian Sumach) with half an Ounce  
of Saffron, put all together into a Congius of white Must,  
and boiled Over a gentle Fire to the (Consistence of Honey; it  
-is excellent for Dysenteries, and Disorders of the Stomach.  
*Pliny, Lib.* 24. *Cap.* I 4. .

. OHOS, όπὸς, Juice, in general, but more particularly the  
crude juice or Piants,whether expressed,or distilling spontaneousty;  
*Galen. Simp. Fa cult. Lib.* I. *Cap. ast.’Orio,* taken simply. Or  
fey way of Eminence, signifies, in *Hippocrates,* according to  
*Galen* in his *Exegesis,* ths Juice Of Sllphium Or Laser, as the  
general Word καυλὸς *(Cattles)* a Stalk, in the same restrained  
sense, signifies Only the Stalk Os that Plant, the’ *Hippocrates,  
Lib. of Epid.* and in many Other Places, chutes to express the  
atne by όπὸς σιλφίου, « the Juice Os Silphium," at large. The  
Word has been found, also, to signify not only the Juice Of  
the Laser, but the Very Silphium, and Laserpicium,, thus  
*-Galen,* in his *Exegesis,* expounds καρπὸν ῤπὸ, u the Print Of the  
*" Opossi* by σιλφίου σπέρμα, the Seed of the Silphiumwhich,  
he says, is, also, called by some *Phyllon* and *Magydaris..* Όπὸς,  
among the Antients,'waS usually put, also, for the milky Juice  
Of the *Picus* and *Caprificus,* with which they used to curdle their  
Milk. *Castellus. Foesiuss ....*

- OPPILATIO, from *oppilo.* Os *pilo,* to condense, to com-  
pact, Oppilation, is a Very Close knd sqf Obstruction; for  
*apptlare* imports not *CsoN occludere,* to shut up, but *implere,* to  
fill. *Rhodius in Llumic.Scribon.* SeeOBsTRUcTio.

OPRIMECHIOLUM, a Term coined by *Paracelsus,* by  
which he would express all forts of Fumes arising from Coppen  
' OPSIG0NOS, οψίγονος, from ὸψἐ, an Adverb signifying  
Lateness of Time, and γίνομαι, to be generated, is an Epithet of  
those last *Dentes molares,* which are latest in appearing, and dis.  
cover themselves at an adult Age. They are, also, called  
*Cranteres* and *Sophronsfieres,* σωφρονεστῆρες, or *Dentes-sapientiae.*See **CRANTERES.**

OPSIS, οψις, from *oxsoplau,* to see, in *Hippocrates,* is the  
Pupil of the Eye, as appears from several Places in 2 *Prorrhet.*Sometimes, however, it means the whole Eye, Or Vision itself,  
as *Lib.* περί όψιος, and in *Prognostic .ants Coac.* Again, it signifies  
the Aspect, Countenance, Or whatever appears to View: Thus  
*Lib. de* R. *V. L A. dial* δὲ οψιες πολλαἰ τῶν καμνόςτων.“ Various  
“ are the Aspects Of the Sicks' Ou jvhich *Galen* co^penting  
says, οψιας έιρηκεν ώσανει διαφορἀς, ἢ τρόπκς, &c. " ftAe said  
“ Aspects, that is. Differences, Modes, or Forms of the Patients,  
V instead. Of saying. Various are the Forms Of the Diseases with

which the Patients are affected.\*’ And again he says, όψιας  
«υν ειπε καμνόντων, geo. " The Differences or Alterations which  
" we find in the Sick, upon a thorough View, he calis *Opfies,*" Aspects."' - .

OPS *Metallum.* Quicksilver. *Rufandas.* h. .

.; OPSOMANES, οψομαφάστ, from οψον. Food, and μαἰνμαι,  
her he mad, one who in particularly fond Of this or that sort Of  
Food, beyond all Reason. *Castellus.*

OPSON, όψον, in *Laaru Onsondum,* corruptly *(Arsonium, in*general signifies all sorts of Food which are brought to Table,  
except Bread and Wine. *Athenaeus, JAb.* 7. restrains it to Meats

prepared by the Fire. Among the Antients, the Term *Cpson* was  
more oeculiarly appropriated to Fish; whence φίλινψοι *{Philapfoe*and όψοφάγοι *{Opsophagi)* are Persons who are. great LoverS of  
Fish. *Poesius. Castellus.*

OPULUS. *The Gelder Rose.*

The Characters are;

The Leaves are like those of the Maple-tree: The Flowers  
consist Of one Leas, which expands in a circular Rose-form,  
and is divided at the Top into fine Parts, these are collected  
(for the most part) in form of an Umbel, the largest of which  
grows on the Outside, and are barren but those in the middle  
are fruitful, producing red Berries, in each of which is contain'd  
one fiat Heart-shap’d Seed.

*Boerhaave* mentions two Sons of *Opulus',* which are,

**I. Opulus.** *EuellU* **28I.** *Sambucus, aquatica, flore simplas.*

C. B. P. 456. *Sambucus aquatica.* J. B. I. 552.

2. Opulus, flore globoso. *T.* 607. *Sambucus aquatica, flore  
globoso pleno.* C.RP. 456. *Sambucus rosea.* J. B. 1.553.

Besides the two foregoing Species Of *Qpulus, Miller* mentions  
a third; which is, ..

Opulus, flore globoso, folio variegato.

' Tnere are no medicinal Virtues ascrib'd to either Of these  
Plants at present, that I know Of.

**OpULUS is, also,** a Name for the second Species of ACER;  
which see. ' : .

OPUNTIA.

The Characters are, . .

The Flower Consists Of many Petals, which expand in form -  
Of a Rose, having a great Number of Stamina in the Centre, .  
which grow upon rhe Top Of the Ovary; The Ovary after-  
wards becomes a fleshy uinbilicated Fruit, with a soft Pulp  
inclosing many Seeds, which are, for the most parr, angular.

*Boerhaave* mentions eleven Species of *Opuntia -,* which are,

I. Opuntis, maxima, folio spinoso; latissimo, & longissimo.

*T. aAsari Ficus, Indica, seu Opuntia maxima, folio spinoso, loto-  
gissima, et latissimo.* H. L.

2. Opuntia, major. Validissimis spinis munita. *T.* I30. *Picus  
Indica, seu Opuntia major, folio spinis longissimis et validissimis  
armato.* Breyn. Prod. I. 35.

3. Opuntia j folio minori; rotundiori, & Compressiori. *H. L. Τ.*239.

4. Opuntis, folio spinofo, longissimo & angusto. *H. L. Te*24°.

5. Opuntia; folio Oblongo media. T. 239. *Picus, Inesca,  
solio oblongo, media.* H. R. Par. 7o. .

6. Opuntia; vulgo; Herbariorum. *J. B.* I. I54. *Tourn.  
Boerh. Ind. A.* 2. 82. *Opuntia.* Ossic. *Ficus Indica..*

Ger. 1329. emac. I5I2. *Picus Indica, spinosa, major.* Parkin-  
son. Theat. 1497. *Picus Indica major.* Parad. 433. Rail Hist.  
I464 *Picus Indica folio spinoso fructu majore.* CB.P. 458.  
*Tunalnaortimsisems.* Dendr. THEPRICKLY PEAR-TREE.:

The only Parts of this Tree which are us’d, are the Fruit  
and Leaves; which are of a refrigerating and moistening Qua-  
lity, and good for extinguishing burning Fevers, and allaying  
Thirst. *Dale.*

7. Opuntia, minima; folio sitbrotnndo. T.240.*FicusIndices  
minima, folio subrotundo.* H. R. Pat.

8. Opuntia -, Curassavica; minima. *H. Beaum. Ficus Indica,  
sou Opuntia Curassetvica, minima.* H.A.I. IO7. .

9. Opuntia; flagelliformis, angustissimis, longissimis foliis. .

Io. -Opuntia , latifolia; crassiori folio, spinis albis numerosis:  
armato. ‘ ἐν . '

II. Opuntia; folio plano, glabro, Scolopendriae. *Ficus Indica,  
Scolopendriaefolio, Eptphyllitis.* Par. Bat. App. 8. *Poerh. indo  
alt. Plant. Vol. z. .*

See **COCHINiLLAS.**

OPUNTlOIDES. A marine Plant. Ἕ τι. : ....

The Characters areστ- —i' T‘".

It is brittle and hard, .and in Shape like the *(apuntia. .*

*Boerhaave* mentions two sorts of *Optcntioides* which are,

I. OpuntioideS marina; parva, forma Tfichomanis. . 'si  
2Ψ Opuntioides Inarina.quae COrallina latifolia, & Opuntia  
marina. *Plukn. istas. T. u.6.* I.. *Scutellaria, sive Opuntia marina*J. R 3. 802. *Lichen rnarinus.* Clus. H. 2. 25O. *Scrtolara.* Im-  
per. 653.*' Eoerh.Tnd. alt.Plant. Vol.* I. sp

It is esteem'd good against the Worms. ‘ . ς;

OQlJICHITLl. A Name for the *Tagetes, Indicusmedius^,  
flore simplici, luteo pallido. ' . - . . . - .*

ORBICULARE OS. The Name of a small round Bone, in.

the internal Eat. See **AURIS. ss**- ORBICULARIS. A Name for the Fungus, call **CREPITUs.  
LUPI.'** *Blancard.*

**ORBICULARIS MUsCULUS.** The Name Of a Muscle os the

Eye.lids. See **OCULUS. .. . ...**

OR6IS. The Name Of a large Sea-fish, Cover'd with an hard  
rough Skin, but without Scales, of winch , there are many Spe-  
cies. It is thus Call'd because os its orbicular Form. The  
Teeth are recommended aS astringent, and good to imp  
Diarrhoeas and Haemorrhages, taken in Powder.

ORBITA- The Orbit of the Eye, or. circular Cavity, in  
which the Eye is plac'd.

ORCA. The Name of a very large Sea-fish, of the Ceta-  
ceous Kind, shaped like a Dolphin, but much larger, \* some  
weighing a thousand Pounds. The Fat is said to he resolvent.

ORCHEA, ορχία, is explain’d by *Galen,* in his *Exegesis,*βσχεος, the *Scrotum.*

OR CHEST2E ACOPON. The Name Of an *Aoopon* re-  
commended by *Artius Tetrabib. rsuem.* 4 C. 5.

ORCHEsTAE UNGUENTUM. An Ointment describ’d by  
*Aetius, Tetr.* 3. *Serm.* 4. *C.* 44.

ORCHlLUS. A Bird, said to be a Friend to the Crocodile,  
and Enemy to the Eagle.

ORCHtS, βρχις. A Testicle Hence a Plant is thus Call’d  
from the Similitude of its Root to Testicles : Hence the follow-  
ing Plant.

ORCHIS;

The Characters are.

The Root is tuberous, and. Consists sometimes of three,  
sometimes two Tubers, and sometimes a single Tuber, shaped  
like Testicles, Or fleshy, and resembling an Hand. The Leaves are  
simple, and like those of the Lily ; the End Of the Pedicle passes  
into an Oblong, tricapsular, trivalve Ovary, pervious in three  
places, and containing dusty Seeds. The Flower, seated On the  
Apex os the Ovary, is os.a surprising Contexture, irregularly"  
hexapetalous. Collected into Spikes, and hardly to bo described.

*Boerhaave* mentions fourteen Species Of *Orchis,* which  
are,

I. Orchis, latifolia, hiante Cucullo, major. *T.* 432. *Cynoscr.  
. riots, latifoliae, hiante cucullo, rnayor.* C. B. P. 8o.

2. Orchis, latifolia, hiante cucullo, altera. *TOUrn. Infi.^2..  
Sacrh. Istd. A.* 2. 152. *Cynosorchis.* OssiC. *Cynosorchis major.*Ger. I56. Emac: 205. *Cynojorchis prior Dodonaei.* J. B. 2. 7y8.  
Rail Hist. 2. I2I3. *Cynosorchis latifolia hiante cucullo altera.***C.** B.P. 8I. *Qrchis major latifolia altera.* Park. Theat.1343.  
DOG-STONES. . .. '

It grows in the grassy Places about *Basil*; and the Root, which  
is the Part-used in Medicine, agrees in Virtues with those of  
other Species of *Orchis. \_ .*

’ 3.' Orchis, morio; mas, foliis maculatis. 6. Β.Ρ. *ZC.Parh..  
Theat.* I 346. *Bait Hist.* 2.1214. *Synop.^.^nsi. Town, durst.* 432.  
*BoerhTnd. A.* 2. I 72. *Satygrum mas.* Ossie. *Cynos.orchis morio  
mas.* Ger. ISS. Emac. 2O8- *Qrchis major, iota purpurea macu-  
losa altera.* J. Β. 2. 973. MALE SATYRION.

. This *Orchis,* which is the common Satyrion Of the Shops,  
has two Oval Roots, about as big as a-small Olive, os a whitish  
Colour, full of a slimy juice, which, contrary to most Other  
Plants, have several white Fibres growing above them , from  
these springs' a single succulent Stalk, encompassed with three  
shining, smooth,. Lily-like Leaves spotted with black. The  
Flowers grow On the Tops os the Stalks in a long Spike OrzThyrsus, Of a purple Colour - each Flower being of an irregular  
Form, consisting of six Leaves, somewhat, resembling, a Galea,  
with a small Piece Os Ear standing erection each Side, and a  
broad Labella spotted with deeper Spots. The Seeds are very  
small, included in a triangular long Caplula; it grows in  
moist Meadows, and flowers in *April.* The Roots Only are

**. Used. ’ ' / ' . . ' - si**

They are accounted a Provocative and a Stimulus to Venery,  
and a Strengthener os the genital Parts, and help Conception,  
and for these Purposes are a chief Ingredient in the Electuarium  
Diasatyrinm: Outwardly applied in form of a Cataplasm, they  
dissolve hard Tumors and Swellings.

' The only Officinal Preparation is the aforesaid Electuary.

*Millers Bot.Osse -* ὓ - Ἀ

: It grows in Meadows, and Places over-run with Bushes and  
Brambles. The Root, which is used, is heating and moistening,  
and Of a sweet Taste. Its principal Virtue consists, says *Schroder,*in restoring manly Vigour , it is believed also to strengthen the  
Uterus, and dispose to Conception. . : - . .

**-4.** Orchis; morio; foemina. *C.B.P.* 82. *Parle. Theat.* I347.  
*Synop.* 3. 377. *Tourn. last.* 433. *Bocrh. Ind. A a..* 152.. Ssary-  
*riurn foemina.* Ossie. *Cynosorchis morio foemina.* Ger.- I78. .Emac.  
2O8. *Orchis minor purpurea, et aliorum colarum curn alis viren-  
iibus.* LB. 2. 762. FEMALE SATYRION. .\_

. This is a lower and somewhat lesser Plant than The former,  
having no Spots On the Leaves; the Spike Of Flowers .is less,  
' and not so beautiful. Of a purplish Colour, having the Labella  
striped with green Stripes ὁ it grows in the like Places with the  
former, and flowers somewhat later. The Root is much alike,  
and it is supposed to have the same Virtues. -

Though these Plants are used in the Shops for the Satyrion,  
yet they are not the Satyrion of *Oios.corides,* and the Antients -  
that being, as is plainly proved by *Parkinson,* and other skilful  
Botanists, Our common Tulip, which much better answers the  
Description Of *Hios.corides,* than any Of the *Orchises. -Milers*

It is as frequently to he met with as the former, and grows  
in the same Places, hut is later in flowering.

These two last Species are of the same VirmeS, where it in  
*to* be observed, that there are a Multitude of Species of *Susy-.,  
rum.* Or *Qrchis,* which may indeed he used p.Omiscuoufly ; ygt  
Our Shops have thought fit to make choice of the last-men-  
tiOn’d *or* .Female Satyrion hesore the rest, .. . '

There are two Species Of the Satyrion, mention'd by Pinsio.  
*rides,* who describes the one Of them in the following manner i  
α Some give the Name Trefoil to Satyrion, because it has three  
" Leaves bending to the Ground, like those Of the Dock or  
Cc Lily, but less,, and of a redish Colour. Its Foot-stalk is  
" about a Cubit long, naked and white, like the Flowers of  
Ci Lilies; its Root is of the bulbous Kind, aS large as an Ap-  
Cc pie, of a darkish-brown Colour, within white, like the White  
Cc of an Egg, iweet and .grateful to the Palate." The other  
Species he describes thus: iC There is another Satyrion distin-  
Ci guish’d by the Epithet *Erithronium Dr Erythraiccn,* that  
“ is, red , whose Seed is larger than that ofa Grain Of Linseed,  
" bard, smooth, and shining, and which, aS well aS the Skin, is  
iC said to be a Stimulus to Venery.. IrS Root is cover’d with &  
Cc stender rough Bark; but white within, and Of a sweet and  
" grateful Taste.” Since the Days os *Di osier ides,* there have  
been great Disputes among the learned Physicians and Botanists  
Concerning this Plant, some ascribing itS Name to one, and  
Others to another Plant, but most of them agree, that it he- .  
longs to some of the Species Of *Orchis,* of which Opinion our  
Shops, also, are: For this Reason, in a former Work, I gave  
the lame Name io the Roots of the now us'd Satyrion, rhe', at tho  
same time, I was not ignorant, that some Authors gave this  
Name to the Orchis Palmata, and Others to the Cynosorchis: \_  
Bur, having now chang'd my Sentiment, I think the Satyrions  
Of *Dioseorides* are sossiciently determin’d hy *Parkinson,* and  
Others, who rook them for Species Of Tulips, which come the  
nearest Of any to the Descriptions of the two Satyrions given  
by *Dioseorides. Dale. Ar... . .*

5. Orchis; morio j ssoemina, store roseo. *H. R. Par. H. L.*

**46O.** *ssns' - .. . :*

6.: Orchis, morio, foemina; flore niveo. *H.R. Par. H. Li*46°. ' fr -su .

*J.* Orchis, morio ; foemina - store Cameo: *Comrnelin. Ind.* 82.  
.8. Orchisyalba;thifo!ia; minor; calcari Oblongo\* *C.B.P.*

83. T. 433. *Orchis Serapias.* I. Doth ‘p. 237. . - . . ; -

L. ORCHIs; PALMATA,pratensis, latifolia; longis calcaribos.  
*C. B. P.* 85. *Tourn. Inflo* 434. *Eoerh. Lid..A.* 2. I52. *Orchis  
palmata.* Offic. *Qrchis palmata major mas sive Palma Chrisii  
mos.* Park.-Theat. 1356. *Orchis palmata non i maculat a.* Rail  
Hist. 1223. *Palma Christi mas.* Get. Ido. Emsc. 22o. MALE  
SATYRION ROYAL. - ι.δ᾽ squ L- ’ ι "

Itis produc’d in moist and marshy .Soils, and flowers im  
*May.* Its Root is only us’d, and seems, in Virtues to agree with  
the other Species Os Satyrions.

2. Eadem5 flore cameo. *Palma Chrisii crecta,flore incarnatio.*H. Eyst. O. 4. F. 5. Fig. 3.

gni.Eadem, flore albo.ss - \* . . -

4. Orchis, palmataT.pratensis; maculata. 6. B-. *P.* 85. *Μ-  
Ή.* 3.498. *Palmata, speciosiore thyrse, folia, maculato.* J. B. 2.  
774. *Satyr^urn, Basilicum, feminat* Doth p. 24o. *Palma Chrisii  
maculata.* H. eyst. Verse 0. 2. F. Iy. Fig. 3;

5. Orchis;- palmata; palustris, latifolia. C .Β. *P.* 86. *Palmatae,  
seu Serapias, palustris, Latifolia, flore albos.ubpurpurascente.* j. B.  
*rccyssS. Satfrium Basilicum, foliosum.* Dnd. p. 24I.

*6.* Orchisx Lilifolia4. minor; sabuletorum Zelandite & Ba-  
tavhe. .7. B.t2. *Jyo.Alhamaeorchis, Liliferia.* C. B. P. 84. *Ps.euda  
Qrchis bulboja, Lilifolia, palustris,, nostras, flare subviridi.* M. H. '  
3. 500. *Boerh. jnd. ais .Flant. Vol.sca*

Besides rhe foregoing.-Species Of *Orchis, Dale* mentions the  
five following; . ι c τε . . . /

I. *statyrium vel Orchis.* Ossie. *Orchis militaris major.* Tourn.  
Inst. 432. *Orchis firateumatica mayor,* j. B. 2. 758. *Orchis sira~  
teumntica.* Ger. 165. Emac. 2IT Rail Him 2. I2I5. *Cynos.orchis\_  
militaris mayor. C.* B. P- *S L Cynos.orchis militaris sive firatetima..  
tica mayor.* Parkinson.. Theat. I345. THE FRENCH SATY-  
RION.ss *.y-* ' ς .τε ced - si-'  
- This Species of Satyrion is produc'd in mountainous Places,  
and flowers in *June'.* Its Root is only us’d, and is possess'd Of  
the Tame Virtues with rhe former Species; of Satyrions.

: 2. :0r*chis. Hermaphroditica. bisiolia.* J. Β. 2.772. Rail Synop. 3/  
380. Ran Hist. 2. I22I. *Qrchis Hcrmaphrodittca.* Ger. 162/  
Emac. 2TI. *Orchis biselia altera.* C. B. Ρ. 82. Tourn. Inst. 433.  
*Orchisserapias bifolia trssalia minor. Puskc* Theat. Iaeo. BUT-  
TERFLY'or GERMAN SATYRION.

This Species is produc’d in Woods, and flowers in *Mays* Its  
Root is med, and is possess’d of the same Virtues with the other  
Satyrions.

*..^..Serapias,* Ossie. *Scraptas sieve Saleps.* Marl. Obs. *Orchil  
foemina procerior,, majore flore.* Toum. HerbaT Par. 508. *esc  
sententia nuperi amici celeberrimi D. Gulielmi Shcrardi,* LL. D.  
SALOP.

..Thisis an oblong, somewhat clear,.and pellucid Root, ofa  
yellowish-white Colour, very hard and almost horny, some-

what flat and wrinkled, Of very little Smell, having a muctlagi-  
rous Taste- It is brought Over from *Turfy,* and seems to he  
the dried Root of some Species Of Orchis.

Or these a Decoction is mads, and drank hot, like Tea, be-  
ing accounted analeptic and strengthening, proper to prevent  
Milcarrlage; and, like Satyrion-root, is supposed to he a Pro"  
vocative to Ventry. *Millers Bat. Off. ;*

This is the Root of a kind of Orchis, or Satyrion, which  
grows On the Mountains Of *Bursia,* near *Constantinople.* The  
*Turhs* pretend, that it is very effectual in restoring decay'd  
Strength, and exciting Venery. It is, also, said to prevent Abor-  
tion , and is used both in Substance, and in Infusion. *Geoffroy.*- The Taste of the Root resembles that of Gum Tragacanth,  
hut has no Small, and is accounted good against Sterility. It is  
to he prepared in the same manner with Chocolate.

The *Turis* and *Pcrscans* call the Roots of the Orchis, *Salop*and Of it prepare a Drink with Milk and Ginger, which they  
also call *Salop,* which they drink hot, and esteem an excellent  
Medicine against Venereal Disorders.

They chiefly use the Root of rhe *Orchis morio'foemina,* of  
*Caspar Bauhine,* winch is most copioufly produced, and much  
broader than that os the Northern Countries, nor does the Or-  
*chis fcemitta procerior, majore flore.* Of *Tournefors,* seem to he  
a different Species. *Dale.*

. 4. *Tragorchis.* Offic. *Tragerchis maximus.* Gen ido. Emac.  
nio. *Traporcbis. maxima.* Park. Theat. I348. *Orchis barbata,  
odore hirci, breviore longriorequefolio.* C. B. p. 82. Tourrj. lost,  
ψ,?. *Orchis barbata foetida.* J. B. 2. 775. Raii Hish 2. I2I2.  
Symop 3. 3-6. *Orches, Cynoserchis, Satyrium.* Chain 146.  
GOATS.STONES.

This is only .produced in sat Soils, and flowers in *May* and  
*June.* Its Root is Only used,, and, in Virtues, agrees with the  
Satyrion. *Ibid.*

5. *Triorchis,* Ossie. Ger. 167. Emah. 2r8. *Triorchis alba,  
major alum ntrior let minor.* Park. Theat.I354. *Triorchis vel Te-  
trorchis alba, odorata mayor.* C. B. P. 84. *Orchis spiralis alba,  
odorata.* J. B. 2. 7.69. Ran Hist. 2. I2I7. SynOp.a.273. TOurn.  
Inst 434. TRIPLE LADIES TRACES. .

This is produced in-.dty Soils,, and flowers in the Autumn. Its  
Root is, also, used, and agrees in Virtues with the former. *Dale.*

ORCHOS, όρχός, the Extremities Of the Eye-lids, where rhe  
Eye-lasheS grow. - .

ORCHOTOMIA. Castration. *Grjchotomus* is the Person  
who performs this Operation.

OREOlOELLA Chluisii. The Name Of an *Indian* Flower,  
which is mix'd with.Chocolate, in Order to Communicate to it  
a fragrant Smell, and agreeable Taste. It .is, also, called *Xochi.  
jiacantlis,* and *Oresuelas. Ran Hist. Plant:.*

OREL LAN A... A Name for the *Mitella , Americana;  
maxima, tinctoria. . . - . ...*

. OREOSEUNUM.

The Characters are ; .

The Root is stenderer than that Of the Dancns, and not lacte-  
scent; the Leaves are like those of the *Apium,* or *Cicuta,* and  
the Seed is oval, flat, large, striated, marginated, and sometimes.  
easts Off its *involucrum.* Or Husk. \*

*Boerhaave* mentions three Species Of*Oreoselinum,* which are,  
I. Oreoselinum ,1 Apii folio, majus. *Tourn. Inst.* 318. *Boerh.  
Jnd. A.Any. Gentiana nigra.* Offic. *Dauctes montanus Apii folio  
anajor.* C. Β. P. I5o. *Daucus Selinoides mayor.* Park. Theat. 89S..  
*Libanotis Theophrasti.nigra.* Ger. 858. Emac. Io IO. *Libanotis  
.altera quorundam, aliis dicta Cervaria nigra. J.* Β. 3. 165; Raii  
Hish.l.4I3. *Laserpitium minusPaludapii folio; semine cristato.*Pink.’ Almag. 207. MOUNTAIN DAUKE.

. It grows in the mountainous Parts Of *Italy,* and flowers, in *July.*The Seed is used, which is of an heating. Opening, and. incidtng.  
Quality, provokes Urine, and the Menses , expels the Birth, and  
discusses Tumors.

. 2. Oreoselinum,\* Apii folio; minus. *Tourn. Inst.* 3I8. *Boerh.  
Ind. A.* 68. *PaetrosclinumnumtanumXAEC.. Oreoselinum.*Ger. 863.  
*quoad descript.* Emac. lots, *Apium.montanum.vulgatius.* Park.  
Theat. 927. *Apium montanum nigrum.* C. B. P. I53. Rail Hist;  
I. 413. *Apium montanum. Dale champii* J. Β. 3. Io3. -MOUN-  
TAIN PARSLEY. -. - -

It grows iu the.mountainous Pans Of *Germany,* and is found  
in great Plenty on the Sides Of.the Mountain *Gurca,*not far from  
*Geneva,* the.Root, and Seed are used..

As to its Virtues,. It is Of an heating and drying Quality; and is  
alexipharmic, sudorific, dinretic, and discutient. Its principal  
Use is in the Stone of. the.Kidneys and Bladder; in xbe.Pestir  
lence. Flatulencies, and the Strangury.. *Dale* from *Schroder..*, 3. Oreoselinum; pratense; Cicutae:folio. *T.* 3IS. *Daucus,  
Alsuticus.* C. B. Prodr. 77. *Hmbellifera, Alsutica, magna, ujnr.  
bella, parva, subluted.* J. B. 3. 2- ro6. *Angelica, praprnsis, Apii  
folio, altera.* T. 3I3. *Boerh. Ind. alt. Plant: Vol.* I. -.

*Oreoselinum Africanum.* A Name for *she. Ferula, Africana q  
Galbanisera - folio et facie Ligustici.*

ORESTlA. This is a Plant mentioned by *Oribafius Medic.  
Collect. L.* 12. which must he different from the *Oresiiumc,*. for .  
he describes it aS a small Herb, shooting up three or four Digits

above Ground,, with Leaves and Branches like those Of the Co.  
*ronopis,* or *Gramen,* os an astringent Taste, and a very slender,  
white, capillary Root, of a vinous Savour, and four Digits in  
Length ; it grows on Hilis.

ORESTlON. A Name for the *Helenium, in Dioscocides,  
la.q. C.66.*

OREXIS, όρεξις. Properly Appetite, but it frequently signi-  
fies, in *Paracelsus* and *Helmont,* an Heat os the Stomach.

ORGASMUS, from ὸργάω, to desire Vehemently, to be tur-  
gid. Or, properly, to be in Heat, aS certain female Animals are,  
at certain Seasons of the Year. An Orgasm ; that is, a Violent  
Turgescence, and Motion of the Humours.

ORlBASlUS. This Physician, though commonly reckon'd a  
*Sardian,* was born at *Pergamus,* and bred up, together with *Mag.  
nus* and *Ionicus,* in the School Of *Zeno* the *Cyprian,* who taught  
then, l suppose, *it Sardis,* though afterwards he removed to  
*Alexandria,* where he became a famous Prosestbr. *Eunapius,*who had good Knowledge in Physic, and is the same Person,  
probably, to whom the sour Books *de Eaporiflis, See.* are inscribed,  
represents *Oribafius* aS the greatest Scholar and Physician os his  
Time, and a Very engaging and agreeable Man in Conversation.  
He describes him as no less considerable in his Interest, than in his  
Learning. According to his Account, he contributed very  
much to the Advancement Of *Julian* to the Empire, who, iu  
Return, made him Quaestor Of *Constantinople-,* and who, aS ap-  
pears by One Os his Letters, had an entire Confidence in him. In  
the succeeding Emperor's Time, through the Envy os his Ene-  
mies, he fell into Disgrace, had all his Estate Confiscated, was  
banished,, and delivered into-the Hands of Barbarians; among  
whom, in a little Time, by bis Courage and Skill, he gained io  
much Love and Reverence, that they, seeing what great Core, he  
perform’d, adored him aS a God. At last, he was recapd by  
the *Roman* Emperor, and flourished in Reputation and Riches,  
at the Very. Time when *Eunapius* wrote thia Account, which  
must be near the Year 40O ; for *Eunapius* was then, aS it should  
seem, in the first Rank of Physicians, and was. hut twelve Years  
Old ar the Death of *Julian,* in 363.

*Oribafius* wrote, seventy (according to *Photius)* Or (accord-  
ing to *Suidas)* seventy-two Books of Collections, which he Com-  
piled not only from *Galen,* but from all the preceding Physicians,  
and his own Experience, at the Desire of *Julian ,* the fifteen first  
Of which are only remaining, and two Others, treating of Ana-  
tomy, which, are Called by the Translator, *Pas.arias,* the twenty-  
fourth and twenty-fifth of that Collection. Afterwards he made  
na Epitome Of this great Work, and reduced it inio nine Books,  
for the Use of his Son *Eustathius.* He also wrote four Books  
about Medicines and.DisternperS, as was before observed, to his  
Friend *Eunapius.* Besides these, *Photius* gives an Account of two  
Other Pieces, extant in ins Time , one consisting Of four, the  
other Of seven Books,, which were merely an Epitome of *Galen’s*Works, and dedicated likewise to *Julian. Paulus* mentions this  
Epitome; but inis now lost, aS are some other Tracts, which  
*Suidas* takes notice of. There are several Receipts of *Oribafius,*quoted by *Artists.* The Commentaries upon the Aphorisms of  
*Hippocrates,* putt Out by *Guinthcr* under his Name, are, without  
doubt, spurious. : -

DI. *Freind* observes, that *Oribafius* uses a great Variety of Ex-  
pression, os which we have this Advantage, that Often one Place,:  
or One Author, explains another; and this Justice ought to be  
done to him, that he helps, us the better to understand several  
Passages *iu.Galen,* relating both to Anatomy and Medicine. He.  
was,, by all Accounts, a Man, not only Os a great Genius, hut  
Os great Business and Experience: And, , accordingly, if we per-  
use him. withAttentinn, which,! believe, has scarce ever been  
done by those who have pretended to give a Character os him;  
we shals find very justsRulesjof Practice laid down in several  
Cases.. 4.

The Works Of *Oribafius,,* mentioned by*Phatius* andyances,  
are:,- . 7 . . . ..

I. Four *Books of Medicinal .Commentaries,:* contracted from the"  
Writings *CiLGalen,* by the Command of the Emperor *Julian* the  
Apostate, and dedicated to him. These are mention'd by Ordur  
*basius* himself, in the Preface to his. *Synopsis,* hut have long'fince.  
heen lost; at least, were never published.- - . . ..-

' 2. His *Synapsis,* compiled notOnly *ftocaGalen,* hut other Phy-  
licinus, thy Command of the lame emperor; who had approved  
the former Work OfthiS *Synopsis,* which: consisted, according"  
to *Saidas,* of seventy..two. Books, there are:extant the first, file..  
teen,, with the twenty-fourth and twenty-fifth,, .transtated into)  
*Latin* by *Jo BaptiseaBasurius,* .a Physician *osNtrvara,*with *seism,  
basiurs* Preface to the Emperor *Julian. : - - ...*

3. A *Synopsis* Of the formenfeventy-two Books,-written-after  
the Death Of the Emperor *Julian* to his Son *Eustathius,* - and..  
contracted into nine Books. This, also, .is,extant in *ffi&Tdatins*Version of *Ras.arius* aboVe-mention'd.

.4 *Euporista,* or.Medicines easily prepared, in four Books, ton  
*Eunapius,* or, aS it is in some Copies, according to *Phatitts,* tor  
*Eugenins ,* but: the Copies, made use Of by both the *Latin* Trans-  
lators, read *Eunapius.* Fortthese sour Books were translated -in..-:  
to *Latin* by an *Anonymas,* and published by *J. sickard,* toge-

ther with *Citlius Aureliantes,* of Chronic Diseases at *Basil,* I529. 1  
in Folio, (not Printed in Octavo, aS it is said in *Merkliofs Lin-* t  
*denius renovatus)* and afterwards printed with a new Version, by 1  
the ahoVe-mentioffd *Bascrius,* together with the rest of the WorkS \*  
os *Oribasius,* at *Basil,* :I557. Octavo; and also with the *Medon  
Principes* Of *Henricus Stephanas,* at *Paris. insiy.* FOl. There '  
was an Old Manuscript *Latin* Version Of *Oribasiurs* Works, Very ς  
different from that published, both with respect IO tho Order Os i  
the Books, and the Matters treated Of in them, in the Library ’  
Of *Bend Moreau,* aS we are told by *Labbeus, Dibl. noiyae Manu-* i  
*scrip, p.* 2I4 There is, also, an Epitome os the Wfirings of *Qri-* i  
*basses,* composed at the Command of. the emperor *Constanti-.  
nus Porphyrogenitus,* by one *Theophanes, in Greek,* which - lies,  
somewhere or Other, in Manuscript, in the Emperor'S Library.

*Fabricii Bibl .Vol.* p. p.45t. -

To this Account we are to add, that the six first Chapters Of  
the fifth Book Of the *Synopsis,* and the fourteenth Chapter of the  
first Book to *Eunapius,* on Waters, in *Greek,* together with the  
Fragments Ol *Galen, Rufus, Dioclet,* and *Athenaeus,* On the same  
Subject, with a Latin Version of them separately fubjoined, was  
Published at *Ponte, An.* I 543. Quarto, by the Care *Cd Aug. Pie-  
ches,* a Physician of *Luca.* in the Catalogue of the *Bibliotheca  
Bigotiana,* are mentioned -some Of *Oribassuds Medicinal Colle-  
ctions,* printed in *Greek,* at *Paris,* I 556. in Octavo, which Book I  
never yet bad the Fortune to see. *Antonius Verdcrius,* in his  
*Bibliotheca Gallica, fays,* that he saw a *Trench* Manuscript Ver-  
sion os *Oribastusts* Works, by one *Adam de la Vallee.* The two"  
Books of Chtrurgical Bandages and Machines, from *Heracles,* or  
*Heraclides Ephesius, Soranus,* and *Heliodorus,* are also extant in  
*Datin,* tranflated by *Vietus Vidius, in G esuers* Collection Of Chi-  
anrgical Treatises, published at *Zurich,* .I555. in Folio. The  
*Synopsis Media,* to his Son *Euflathius,* in- nine Books, tranflated  
by *Rasurius,* was printed at *Venice,* I555. Octavo;.and all that  
remains extant Of rhe seventy Books of his *Synopsis,* tranflated,  
also, *by Rasurius,* printed at *Paris,* I555. Octavo. The Com-  
mentaries on the Aphorisms of *Hippocrates,* printed first in *Latin,*by *J. Guinter Andernac,* at *Paris,* I553. Octavo, for *Simon Co..  
linaetes, were* reprinted at *Basil,* I535. at *Venice,* I553. and at  
*Padua,* I658. Octavo. -It is easier to say, they were nor written  
thy *Oribasius,* than to assign their true Author; but they seein to  
he composed in *Latin,* and by some Christian. The Fragment  
of *Qribasius,* concerning Diet proper, for all Seasons os the Year,  
.was published in *Latin,* with *Plinius Valerianus,* by *Albanus  
sirorinus,* at *Basil,* I528. Folio. *Qribasius of Simples,* with sour  
Books os the *Euparifia.oi Octavius Horatianus^* the Physios of  
*Tiildogardes-,* the Regimen of *Theodorus* the Naturalist sc. and  
*AEsutlapius* Of the Causes, Description, and Cure of Diseases,  
were printed at *Strasburg,* I5 3 3, and 1544. Folio. Extracts from  
-the Works of *Oribasius,* on Watersand Baths, tranflated by *Aug.  
'.Gadaldmus,* of *Modena,* were printed in a *Venetian* Work,  
which treated Of Babr, *An.* I55 3. Folio. *Fabricii Bibliotheca  
.Graeca. .- - y.*

ORICHALCUM. The same **as AURiCHALcUM. :ss'**ώ .ORICIA. : The Name of a sort os Turpentine-tree, so Call'd  
*kiassi-Oricus,* a City of Epirus, near, which it grows  
an.ORICULARIS. -\_ -The same **aS AURICULARIS, Or AURIcU-  
I.ARIUS.** *' sisisi ' 's ἐν. -* s -..'νε.. ; ..

? ORIGANITES. Wine impregnated with *Origanum, Diosc  
corides, L.^.* C.6I-. - '

-ORIGANO COGNATA A Name for the *Mayor ana, ro~  
tundifoUa, scutellata, exotica. - .*

. ORIGANUM. : . εί-. -Ἀ- ν-

οῦ;'The-Characters are,::

The Calyx is long, simple, tubolous, and closely seated among  
cfoliaceous Scales; in this is situated the Flower, having an erect,  
roundish, bifid Galea, or Crest, and a Beard divided into three  
Parts,- the middle one being hollow, like a Spoon. The Flowers  
are collected into squamous Spikes, resembling those of the Mus-  
cari, and sometimes form a sort of Umbella, shooting .forth. One  
on;each Side Of the Scales. :

*Boerhaave* mentions eleven Species Of *Origanum,* which are,  
I. Origanum, sylvestre; hiimile. C. .6.Ρ.223. *Prodr.ioy.*2. Origanum; sylvestre; humile; floribus candidioribus. -  
3. Origanum; humilius; latifolium; glabmm. *Τ.* I99. ά  
- 4. Origanum; sylvestre, Cunila Babula-Plinii..‘ C. B. Ρ. 223.  
*Tourn. Inflo* I99. *Boerh. Jnd. Ai iycy. Griganum.* Offic. *Origa-  
num evulgare spontaneum.* -J. B. 3. 236. Ran Hist. I. 539.. Synop.  
3. 236. *Origanum Anglicum.* Gen. 54I. Emac. 666. *Majorana  
silvestris.* Parin Theat. 12. WILD MARJORAM. .

This Origanum, or wild Marjoram, is a Foot, Or more, high,  
having many hairy, brown, brittle Stalks, with two broad, round-  
pointed Leaves, bigger than Marjoram, set at a Joint on Very  
short Foot-stalks, and Of a brownish green Colour. The Flow-  
ers grow on. the Tops of the Stalks, being small, labiated, and  
gileated. Of a purple Colour, among long Heads, composed Of  
a.great .Number of-green Scales: she Roots are woody and  
fibrous. It grows in Hedges and Thickets, and flowers in *July.*The Tops and Leaves assured. - - - ..

This Origanum, though not so strong aS the Origanum Creti-  
cum- yet is Very good for Obstructions os the Breast,-Liver, and

Womb; helps theJanndice, Shortness of Breath,sand Stoppage  
of the Menses; comforts the Head and Nerves. The distilled  
Oil - helps the Tooth-ach, being put upon Lint into the acnino.  
Tooth. *Millers Bat. Gascs.*

The wild Marjoram is acrid, aromatic, detersive, and gives a  
very saint Tincture of red to the blue Paper, which makes uS  
conjecture, that this Plant is filled with a Volatile, aromatic, and  
oily Salt, not entirely destitute Of Acid ; whereas, in the artificial  
volatile Sall, the Acid Of the Sal Ammoniac has been detain'd by  
the Salt Of Tartan Besides, the wild Marjoram Contains abun-  
dance Os terrestrial Parts. It is diuretic, diaphoretic, good to  
make One spit, and provoke the Terms. A Tea Of it may be  
used in an Asthma, Violent Coughs, Indigestion, and Pleurisy.  
It is used in the Washings for rhe Feer, and Semicupiuins for '  
the Vapours, Green-sickness, and Palsy. Take wild Marjoram,.  
dried at the Fine, and wrap it warm in a Linen Cloth, and  
Cover the Head well with it, for a Rheum and Rheumatism in  
the Neck, Commonly call’d *Tortioolis. Martyyis Tournefort. -*

It is opening, abstersive, and astringent5 and principally used  
in Obstructions Of the Lungs, Liver, and Womb: Whence it  
is Os Service in a Cough, Asthma, and Jaundice It increases  
Milk, and expels ichorous Excrements by Sweat, being taken  
before Bathing. Outwardly, it is of frequent Use in Baths for  
the Head and Uterus, and for the whole Body under the Itch. -  
*Raii H. Ρ. p.* 539. ...

5. Origanum, sylvestre; album. *C. Β. Ρ.* 223. *M. H.* 3.359?  
*6.* Origanum , sylvestre, foliis Variegatis, argenteis. *Flor.* 2.78.  
*ή.* Origanum, sylvestre, foliis Variegatis, aureis. F/or.2.79.

. 8. Origanum, Creticum. *Oflic. Ger.* 54I. *Emac.666. Kaii  
Hist.* I. 54o. 7. Β. 3. 238. *C. Β.* P.223. *Boerh. Ind. A. pricy.  
'Origanum selvesire sive vulgare.* Park. Theat. Xe. ORIGANY  
OF CRETE. . ...

The Origanum, whose Tops are found in the Druggists Shops,  
grows taller than common sweet Marjoram, having longer and  
whiter Leaves, and larger, and longer scaly Heads, white and  
hoary also, among which grow small white Flowers, like those  
Of sweet Marjoram, of a most pleasant, strong, aromatic Scent.  
It grows in the Ifland Of *.Candia,* or *Crete,* and Other Parts of  
*Greece,* and flowers in *June. ". :*

This is what Ought to he used, when the *Plores Origani* are,  
at any time. Order’d to be put in a Composition.

This Origanum is heating and wanning, and good for Diseases  
Of the Lungs, to Open Obstructions os the Womb, and bring  
down the Menses, and to heal all kinds Of Venomous Bites. *Mil-  
ler’s Bot. Qjs.*

; 9. Origanum , Creticum; store purpureo.-

. io. Origanum; Orientale; folio Brunelhe glanCO, florealhoi  
*VaiU. . - -*

-'II. Origanum, Dictamni Cretici facie; folio Crasso, nunc  
villoso, nunc glabro. *T. C.* 13. *T gray.* I. 240. *Boerh. Ind. alt.  
Plant.* . . . . r. -

There is no Plant more Celebrated by *Hippocrates,* than Ori-  
ganum, he recommends’ it in Diseases which require Heating,  
'Dissolving, and Stimulating: Whence it is Of Use inExulcera-  
tions of the Lungs, being boil’d in Wine, and then sweeten’d  
with NOney, and so supt hot.- Thus prepared, it is a Very  
good Medicine to expectorate Phlegm, but, however, is not to  
be exhibited, where an Haemoptoe is to be fear’d. It is, also»  
adapted to Diseases of the Kidneys; for it is aperient, dissolvent,  
and balsamic. -This Herb is more heating than the *Dictamnus,*but not of so subtile Parts, it is Os excellent Service in hypo-  
chondriacal. Disorders, and Tertians, and where languishing Na-  
ture requires Relief by molding. The Leaves boil’d in Wares,  
and sweeten’d with Honey, are proper for Old Persons in a great  
Cough, being relaxing and stimulative. The Herb is heating and  
penetrating; the Juice thereof, sweeten’d with Honey, is good  
for Impostumes Of the Lungs, the Asthma, and Jaundice. Ori-  
ganum provokes Sweat, and is proper in soporous, hysteric, and  
catarrhous Disorders, and increases Milk. The Preparations from  
this Plant are, a distil'd Water, a Spirit, and an Oil. The Seed  
of Origanum is Very hot, like Pepper, and of Service in putrid  
Fistulas, and the Oil, prepared Os the Flowers, is good against  
the Scurvy and Colic.-. A Tea of the Leaves is effectual in the  
Asthma, a Violent Cough, and Indigestion; and, in Bathe, the  
Leaves are used for the hysteric Passion, Chlorosis, and Palsy.  
*Hist. Plant, adjcripr. Boerhaav.* χ

*Origanum* is, also, a Name for the *Dictamnus, Creticus* ; and for  
the *Dictamnus, montis Sy pili, Origani foliis.*

*Origanum Smyrnaeum.* A Name for the *Majorana; Cretica,  
Origani follisndllosu, Satureiae odore, corymbis majoribus.*

Besides the foregoing Species Of *Origanum, Dale* mentions the  
following. ' . . .

*Origanum Heracleoticum.* Offic. Ger. 54I. Emac. 666. Raii  
Hist. I. 539. *Origanum Hcracleoticum verius.* Path. Theat. x5.  
*: Origartum Heracleoticum. Matthioli, aliis forte Creticum.* J. B. 3.

237. *OriganumHcracleoiicumoCunila gallinacea* Pimir.C B.P.222.  
Tourn. Inst. X99. BASTARD MARJORAM.

It is cultivated in Gardens, and flowers in the Summer. The  
- Herb is in Use, and is proper, as *Dyioseorides* says, for Bites Of Ser-  
i Seats, and exhibited in Ruptures, Convulsions, and Dropsies.

ORIONIUS. Urinous: an Epithet for the Spirit, and Salt  
of Urine

.. ORIZEUM. Geld. *Ortzaeus Color* is a yellow Colour in the  
Eyes, or Urine.

ORLEANA. See ACHIOTL.

’ ORMlNUM. The same as HORMINUM.

ORMS. A Hen. *Palandus.*

ORNITHLE, ὸρνιθίαι. *in Hippocrates, Epidem. L.* 7. these  
are the Vernal Winds, which bring the Swallows, and other Birds  
of Passage- *Pliny* fays, these Winds blow from the West; and  
that, by some, the *Etesiae* are thus called. Others are of Opi-  
nion, that the Winds here meant blow from the North, or North-  
east, aS the *Etesiae* do.

ORNITHOGALUM.

The Characters are; .

The Pedicle, Proceeding from the Stalk, ends in a long thin  
Membrane. The Flower innaked, hexapetalous; the Petals ex-  
Panding into a Circle ὁ and bears in its Centre an erect, floral,  
and hexapetalous Tube; each Petal having a Stamen, or CniVe,  
growing to its upper Part, On the Inside; the Flower, with'in  
Tube and Ovary, Closely embraces the Ovary, and its Tube. The  
Ovary is furnish'd with a long Tube, having a spherical Apes,  
and hecornes a roundish Emit, full of roundish Seeds. the Root  
is bulbous. Or tuberous,

*\* Boerhaave* mentions eleven Species Of *Corntthogalum,* none of  
which have any Uses ascribed to them, except the seventh, winch  
is thus distinguish’d.

Ornithogalumumbellarum; medium; angustifolium. *C. B.*Ρ. 7O. *Tourn. Inst.* 378. *Bocrh. Ind. A.* 2. I42. *Qrnithogalare.*Ossie. Ger. 132. Emac.. i6I. *Ornithogalum evulgare et verius.*IlETHLliHEM1\*\* 2 1X53\* Synop. 3.472. STAR OF

It is Cultivated in Gardens, and flowers in *May,* and the Root  
and Seed are in Use; the first of which, aS *Diofcorides* says, is  
eaten either raw or boil'd, and the Other is baked in Bread.

*Orntthogalo-assinis.* A Name for the *Phalangium ; Africa.,  
sum, foliis Tricoidis , floribus, spicatis, aureis.*

*Ornithogalum maritimum.* A Name for the *Scilla, vulgarise  
radice rubra.*

ORNITHOGLOSSUM. Is a Name given, for the Seeds.  
ofthe Common Ash-tree. See FRAXINUS.

ORNITHOPODIO AFFINIS. A Name for the *Ferrum equi-  
num, Germanarum, siliquis in summitate.*

ORNITHOPODIUM.- \_

The Characters are ,

-TheLeaves are conjugated, in a Series of several Pairs, and  
end in an odd one. The Pod is hooked, jointed, and undulated,  
or waved. Containing, within each Joint, one round Seed. The  
Pods grow many together, from the same Origin, in shch a man-  
ner, as to resemble a Bird's Foot..

*Boerhaave* mentions six Species *os Ornithopodium',* which are,  
i. Ornithopodium; majus. Ger. IodI. *Emac.* I24i. *Town,****last.*** 4oo. *Boerh. Ind. A.* 2. 50. C. Β. Ρ. 35o. *Ornithopodium,*Ossie. *Ornithopodium radice nodosa* Park. Theat. IO93. Rail  
Hist. 93 I. Synop. *sTdichepodium tuberosum Daleckarnpii,*

' It grows in sandy and gravelly Places, and flowers in Summer.  
The Herb, which is Of Use in Medicine, breaks and expels the  
Stone in the Kidneys and Bladder, and is effectual in an Hernia.

2. Ornithopodium; minus. C. ***Β.*** Ρ. 350. This agrees in Vir-  
. tues with the former. ....... .

. 3. Ornithopodium ; radice tuberculis nodosa. *C.* Β. *P.* 3 Jo-

ed Ornithopodium , Portulacae folio. *Tourn. Inst* 4oo. *Boerhe  
Ind.* a. x 5o. *Scorpioides.* Ossic. *Scorpioides Matthioli.* Ger. Emac.  
337. Rail Hist. i. 931. *Scorpioides Matthioli fove Portulaca folio.*Park. Theat.. II IT *Scorpioides Portulaca folio.* C. B. P. *stSa.Tele..  
phiurn Dios.cortidts sou Scorpioides oh siliquarum similitudinem.* Eiufth  
*TelephiumScorpioides.se* B. 2.889. SCORPIONWORT. .

It is cultivated in Our Gardens, and flowers in Summer. The  
Herb is used, and is, according *to Galen,* Of an heating and dry-  
ing Quality; and, as *Diofcorides-*says, is a present Remedy against  
the Sting of the Scorpion, being apply’d to the Part.

5. OrinchopodiunLi minimum, δικέρατοκ vel ὸλιγοκέρατον.  
.Μ.Η.2.125.

. 6. Ornithopodium ὁ Scorpioides; siliqua compressa. *T.* 4OO.  
*Ornithopodio affinis, hirsuta, Scorpioides.* C. B. P. 35o. *Scorpioides,  
legvnnnosu.* JoB. 2. 349. *Borri?. Ind.alt. Plant.*

ORNUS. A Name set the *Sorbus, Aucttparia.*

OROBANCHE. si

The Characters are,

. The Root is squamous, and. the Plant appears aS if it were  
hare Of Leaves. Toe End of the Pedicle opens into a multifid  
Calyx; the Flower is monopetalouS, anomalous, bilabiated, (the  
Galea being hollow, and the Beard tfifidy collected into Spikes,  
and embracing an Oblong Ovary, furnished with a long Tube,,  
tinicapshlar, bivalve, opening, when ripe, into two Valves, and:  
pregnant with very minute heeds.

*Boerhaave* mentions four Species Of *Orobanche,* which are,  
.1. Orobanche, major; garyopbyllufn Olens. *C. Β.* Ρ. 87. *Bare  
Synop.* 3.228. *Tourn. Inst.* 175. *Boerhe And. A* 240. *Orobanche\**

Ossie. *Orobanche flore majore.* L B. 2. 78O. *Orobanche, five Ret.  
pum Genista.* Ger. II30. Emac. Ia II. Park. Theat. Ietio  
BROOM-RAPE. 3

It frequently grows to the Roots Of Genista, Or Broom, whence  
it is called *Bapum Genista,* Or *Dr oom. rape* , it is found also amonv  
Corn. The Herb preserved. Or its Syrup, is Of excellent Use in  
splenetic and hypochondriac Disorders, and an Ointment prepared  
Of the same, with Swines Fat, is good for hard and scirrhous  
Tumors. z - .

It grows in gravelly and dry Places, and fiOwerS in *June* and  
*July.* The Herb, dry'd and pulverized, ’ is a present Remedy for  
Xhe Pains Of the Colic. *Dale.*

*2.* Orobanche, ramosa, floribus purpurascentibus. *C.* Β. *P.*88. *M. H. %.* 502. *Orobanche minor, purpureis floribus, five ra.  
mosc.* J. Β. 2. 782. *Orobanche.* III. πολήκλαδος. Clus. Η. 27I.

3. Orobanche; ramosa; floribus coeruleis. *C.B.P.* 88.  
. 4. Orobanche, ramosa, floribus subalbidis. C. Β.Ρ.88. *Ind.  
alt. Plant.*

. OROBION, ὸρόβιον, in *Hippocrates,* according to *Poesius, is*the Meal of the *Orobus.*

OROBOEIDES HYPOSTASIS, όρο&ειδὴς ὑπόστασιν A Se-  
diment in the Urine, resembling the Meal Or the *Orobus,* that  
is, Of.a dark-red Colour, such as is made in a Jaundice.

OROBO. Metallic Glass.. .

OROBUS.

The Characters are ;

It has a smooth round Pod, full Of oval Seeds, and two Con.  
jngated Leaves growing to a Rib, which ends in a Point.

*Boerhaave* mentions nine Species OftheOroedvr, which are,  
. I. Orobus; purpureus; sylvaticus; Vernus, C. J3.P.35I. *Go.  
lega nemorosa, verna,* j. B. 2. 343.

2. Orobus; sylvatiCus foliis Viciae. 6.S.P. 352. *Astragalo,  
ides.* Doth P.55L

3. Orobus, Pyrenaicus, foliis nervosis, latifolius *Sch. BoL.  
Par. T.*

4. Orobus, sylVaticus, foliis Oblongis, glabris. *Tourn. last.*343. *Boerh. Ind. A.* 2. 46. *Raii Syrsop.* 3. 324.. *Orobus.* Omc.  
*Astragalussiylvaticus.* Ger. Emac. I237. Ran Hist. 1.916- *Asireo-  
galussiylvaticus foliis oblangis, glabris.* C. B..P. 3yr. *Astragalo-  
idos seu Astragalussiylvaticus Astragalo magno Fuchsii, seu Char  
rnaebalano legurninola affinis planta.]* .B.2.334 WOOD-PEASE,  
Or HEATH-PEASE. - - - -

The Plant grows in woody and bushy Places; flowers in *April,*and the Seed is ripe in *May.* The Tubera of the Root taste  
much like Liquorice, and the *Scotisc* Highlanders make use of  
them in the same Disorders Of the Thorax, for which Liquorice  
is proper. They call the Plant *ILarernyle,* and use those Tubera,  
temper'd with Water, to .enable them to support Hunger and  
Thirst the longer, for which Purpose, they find them Very ser-  
viceable , for, by their sweet and Viscid Substance, they Correct and  
mitigate, and even fix and restrain, the acid and acrimonious Hu-  
mours in the Stomach ; and, by that means, are a Remedy against  
Hunger and Thirst. If this Plant, therefore, be not the same  
with what *Theophrastus,* calls *Seythica,* (winch is generally thought,  
by the Learned, to be Liquorice) it is certainly Very much like  
by being leguminous, siliquous, and Of the same Qualities.. And  
it seems Very probable, that the Tubera of this Plant were the.  
Fond with which the *Britons* sustain’d themselves for some Days,  
when they were pressed by the Enemy , as it is related by *Dion,*in the Life Of the Emperor *Severus.* For rlus Plant, says Dr. *Sib-  
bald,* in his Introduction to the Natural History of *Scotland,* has  
the Virtues Of I.iguorice; and its Tubera, by Our Highlanders,  
who, to this Very Day, retain the Manners, and Way of living.  
Of the antient *Scots,* are still applied to the same Uses; hut, as for  
Liquorice, I know not, that it grows any-where in the wholelstand,  
without Cultivation. RaiiH-P.cHo.

5. Orobus, angustifolius, Italicus; flore Vario. T 393.

si. Orobus, latifolius, repens, siliqua parva, *irsd.* I62. *Galega  
nemorensi similis, multiflorae’, flore purpureo.* J. B. 2. 345. ν

7. Orobus;; latifolius, repens, flore coeruleo, foliisAc siliquis  
hirsutis. *Sherard. Ind.* I62.

8. Orobns; sylvestris, vernus; fiinrealbo. *ThalH.*

9. Orobus; Creticus, folio Viciae. *Boerh. Ind. alt. plant.  
Orobussutivus.* A Name for *thcErvum-, vcrum.*

*. Hippocrates* recommends, this Plant in the Pleurisy, Peripneu-  
many, and nephritic Disorders; for which Purposes, let the  
Seeds be roasted and bruised, and then have hot Water poured  
upon them, aster this, it must stand a Night,, and then be'sopt  
hot, with an Addition Of Oxymel. This Liquor IS said to he le-..  
nitive, . and Of a penetrating Virtue, and is the same as our Costae ;  
but, whether this he the *Orobus* of the Antients, is a Queftiom  
The Seed of this Plant, On account Of its farinaceous and mth.  
Cilaginous Quality, answers to Fenugreek, in mollifying and ma-  
mrating Abscesses, and, by Virtue of its diuretic Salt, which it  
contains in common with other leguminous Plants, it is of Ser-  
vice in prOVoking Urine, and espelling Gravel. *Host. Blaese.,  
adscript. Bocrhaave*

OROGAMO. Gold. *BuIandas'i*

\_ . OROS, όρος. The entire superior Part of the Foot isipere.  
times thus called.

’ ORRHAGOGON, ῤῥῥαγωγὸντ from *opscs. Serum,* and ἄγῶ, to  
brinss away. An Epithet for Purges which evacuate *Scrum;-*

ORRHOPISSA. The serous. Or most fluid Part of Tar.

- ORRHOPYGlON, ὸῤῥοπύγιον. The Line, Or Seam, which  
runs from the *Penis,* along the Middle Of the *Scrotum,* to the  
*Anus.* It, also, signifies the Extremity . Of the Spine. *Gorraeus.*

ORRHOS, ὸῤῥός. The Whey of Milk, or *Scrum os* **the** Blond 5  
ῤῥῥὸςπίιουης is the same aS **ORRHOPIsSA.** But

**ORRHoS, όῤῥὸς, is the same as ORRHOPYGlON. ἐν**

' ORTHOCOLON, όρθόκωλον, from όρθός, strait, and *uMlumv,***a** Limin Such a Species of stiff Joint, aS is form’d when it  
Cannot be bended, hut remains inflexible and. strait.

\* ORTHODORON, ορθόδωρον, a *Greek* Measure os Length,  
equal to the Space between the upper Part of the Hand, next  
the *Carpus,* and the Extremity Of the middle Finger; Containing  
eleven Dactyls, or Digits. *Arbuthnot.*

-- ORTHOPNOEA. See **DYSPNOEA.**

' ORTHOSTADEN, ὸρθοστάδην. An Adverb, frequently used  
by *Hippocrates,* importing that a Person is up, and about his  
Affairs, and not confined to his Bed by Sickness.

ORVALA. A Name for several Species of SchAREA. ’  
ORUCORIA. The Name of a siliquiferous *Indian* Plant,  
the Juice of the Fruit Ofwhich is said to consolidate Wounds;

ORVlETANUM. The Name of a\* celebrated Antidote,  
thus call'd, according to *Lemery,* from *Orvieto,* a City Of *Hasp,*where it was first used , but, according to Others, from *Hierony-  
mus Ferrantes Orndeianus,* a celebrated Mountebank, who in\*  
vented it.

The *Antidotum Orvietanum* is thus prepared.

Take of old Tberiaca, - and dry’d Vipers, with their Hearts  
and Livers, each four Ounces ; Os the Roots of Vipers-  
grass. Carline-thistle, Masterwort, Angelica, Bistort, the  
- : smaller Birthwort, Contrayerva, white Dittany, Galangals,  
Gentian, Costus, and .the true Acorns, os the Seeds Of  
*Macedonian* Parsley, Of the Leaves of Sage, Rosemary,  
GoatS-me, Carduus Benedictus, and Dittany os *Crete,* **Of**Bay and Inniper-benies, each One Ounce, es Cinnamon,  
' /Cloves, and Made, each half an Ounce; and of the best

Honey despnmated, eight Pounds: Make into an Antidote.

- Reduce all the Ingredients into a common Powder; despu-  
mate the Honey, and boil it to the Consistence Of a thick Syrupr  
Suffer it to become half-cold, and then, by means of a Spatula,  
carefully mix with it the Theriaoa, and the Powder, tn Order to  
make an Electuary; to be kept, forUfe, in a close-stopt Vessel.

- Tins Electuary, Or Antidote, is highly esteem'd, as good  
against the Plague, the Small-pox, and the Bites of poisonous  
Animals. lt, also, corroborates the Brain, the Heart, and the Sto-  
mach. The Dose is from One Scruple, to a Dram and an half  
- AS the Goodness of the Orvietanum is principally estimated  
hy its Smell, the following Preparation of it will have the due  
Smell? Strength, and Efficacy. 'ς... .

Take Of Angelica-root, two Pounds; Of drind Vipers, with  
their Hearts and Livers, ’ of the -Roots Of Contrayerva,  
Gentian, the true Acorns, (Costus, Galangals, Carline-thistle,  
- Ginger, Spignel, white Dittany, long BirthwOrt and Ma-  
' - sterwort, each two Ounces, of the Leaves Of Sags, Rose-  
mary, Wormwood, Calamint, Savory, Marjoram, Scor..  
ditim. Dittany of Crete, Hystop. Thyme, End Poly-  
mountain, each two Drams; of the Flowers of *Arabian*Stoechas and Lavender, of the exterior Rinds of Citrons  
and Oranges, Mace, Cinnamon, Bay and Juniper-berries;

' of the Anthelminthic Seeds, the Seeds of Cardans Bene-  
dictus, Citrons, the lesser Cardamoms, *Macedonian* Parsley,  
Caraway, together with Sal Ammoniac, and the Salt of  
- Tartar, each One Ounce; of old Thefiaca, one Pound;

of *Peruvian* Balsam, two Ounces; of the Oil of Rosemary,  
One Ounce and an half, and os despumated Honey, twenty-  
three Pounds. Mix up- into an Antidote, or Electuary ;  
the Dose os which is from One to four Scruples.

\* The *Electuarittrn Orvietanum* of *Frederic Hoffman* is thus  
prepared. -. ..1 . εἴ. o:

‘ Take of the Roots' of Swallow-wort, Zedoary, the Carline-  
thistle, Angelins, Butter-bur, Valerian, white Dittany, Ele-  
campane, and Celandine, each three Ounces, of the Leaves  
..Os Dittany Os *Crete,* Seordlum, and Rue, each two Hand-  
fuls ὁ Of the Powder Of Vipers, two Ounces; Of Oriental  
Saffron, one Ounce and six Drams; of Galbanum, one  
Ounce and an half; Of the best Myrrh, Sulphur, and Seal’d  
Earth, each one Ounce; os the Volatile Salt Of Vipers, six  
Drams; of Cinnamon and Cloves, each half an Ounce;  
or corrected Opium, Or the Laudanum Opiatum, three  
Drams; of the Oiis of Amber and Citron, each Ono Dram  
and an halt ; and Of the Honey of Juniper, ten Pounds:  
Mix all together into an Electuary, 2nd allow the Prepa-

ration to stand in Ferinentation, for some Months: in *ΐ.*close Vessel . - . ’ - .. \*

Reduce the Roots, the Leaves, the Cinnamon, and the Cloves,  
to a Powder together. Then reduce the Saffron to a Powder  
by itself, after having dried it slowly between two Papers The  
Seal’d Earth and Sulphur are to be reduced, also, to a Powder by  
themfelyes. The Galbanum, also, which Ought to consist Of the  
purest Tears, is to he reduced to a Powder with the Myrrh ὁ  
and all these Powders are to be mixed with that Os the Vipers.

Then prepare, in the Ordinary Manner, teh Pints of-the. Ex-  
tract Of juniper, in the Consistence of Honey, Or a thick Sy-  
rup. Dissolve in this Extract, whilst as yet warm, the Lauda-  
nam, and, the Powders; and when the. Preparation is entirely  
Cold, mix with it, exactly, the Salt of Vipers, aster having dis-  
solved it in two Ounces Of *Spamsc* Wine At the same rime,  
also, mix with it the Essences, or distil’d Oils, Of Amber and  
Citron-peel, for an Electuary, Or Opiate , to he kept for Use iti  
a close-stopt Vessel; allowing it to stand in Fermentation for .  
some Months, before ’tis used.

This is possess’d Of the same Virtues with the former, and is to  
he exhibited in the same Dose. .

This Orvietanum,’ says, *Denary,* is one Of the best to he found  
any-where. However, he is of Opinion, that soino Of the sh-  
perfluons Ingredients should he retrench'd, such as the Seal’d  
Earth, and the Celandine-root, and thinks, that the small Quan-  
tity of Opium is not sufficient to render the Preparation somni-  
serous. *Demery Pharmacopie.* 1 ' i

ORYCALUS. . The Name Os a Cetaceous Fish, mention'd  
by *Oribasius, Collect. Medae. Is.* 2. *C.* 58. where he says, it is a  
large *Pelamis,* Tunny; ....

ORYX. A Sort Of wild Coat, the Homs Of which are said  
to be sudorific, and good against the Bites os Venomous Animals,  
taken either in Powder, or by way of Decoction. It is said to  
he found, principally, in the Woods Of *Getulia.*

ORYZA. l .

The Characters are,

It hath its Grains disposed into a Panicle, which are almost Of  
an oval Figure, and are Cover'd with a thick Husk, somewhat  
like Barley. - - '

*Boerhaave* mentions but One Sort OF Orynd , which is.  
Oryza. *Ossie.* Ger. 72: *Emac.* 79. *Park.Theat.ttast. Bait Hist.*

2. I246. *C. Β.* P. 24. *Theas.* 479. *J. B.* 2. 45I. *Tourn. Inst.* 5141  
*Boerh. Ind. Ac* 2. Ido. RICE

. This Grain, which is so much in Esteem in the Eastern Conn-  
tries, that it is the principal Com they use, grows to be three  
Or four Feet high, with Leaves broader'than those Of Wheat,  
bearing loose Spikes, much divided, and Composed Of Oblong  
flatish Grains, having each a Beard, Or Awn, two Or three inches  
long, forked at the Top, and frequently Curled at Bottom. They  
are of a white Colour, inclosed in a brown Husk or Skin. Rice  
is sown in *Italy, Turley,* and the *East-Indies*j. and we have as  
large and good from *Carolina,* aS from any Part Of the World.

It is more used for Food than Physic; being a wholiorne  
strengthening Grain, restringent, and good for those who have **a**Slipperiness in their Boweis, Or are inclinable to a Flux Or Loose-  
ness. *Millers Bat. Offe*

Rice is the principal Fond in all the Countries of the *East.\**ramies; whence it was first imported into *Greece* and *Italy.* It  
thrives Very west, also, and is a profitable Grain, in *Egypt,* some  
Parts Of *Syria,* and the *Canary Iflands',* as, alfo, in *Spain,* **and***in Italy,* where, says Ray, we have observed it to grow in **the**marshy Places of the Territory Of *Ferrara.*

It delights in a moist Soil, and grows in the very Waters. **In**the Island of *sieylan,* they have Reservoirs Of Water, for water-  
ing their Fields of Rice, in which Country, they say, the fat Sod  
is so moisten'd and soften'd with perpetual Inundations, that the  
Reapers, in the Time Of the Rice-harvest, stand up to the Knees  
in Water. It ripens with the Heat of the Summer, and its latest  
Harvest is about the Autumnal Equinox; so that our Northern  
Regions, tho’ redundant in Moisture, are too Cold for bringing  
this Grain to Maturity. - . -

- Rice is very much used among Aliments, by all the Eastern  
Nations, and especially the *Indians.* It is more easily digested,  
and more grateful to the Palate, when boil’d in Cow's Milk, Al-  
mond-cream. Or pinguious Broths, prepared Of Flesh, lt is com-  
modioufly mir'd with Aliments, intended for those who labour  
under a Dysentery, the Coeliao Passion, Or a Diarrhoea, especi-  
ally when 'tis previonsty toasted, and boil'd in Milk, in which  
ignited Stones have been extinguish'd. *Masih.*

Rice, among the *Indians,* is made into Bread in various Man-  
ners, described by *Caspar Batthine,* in his *Theat.* Bor. *IAb.* I.-  
*Sect. An Cap. say.* The Inhabitants, also. Of many Parts of the  
*Indies* prepare a kind of Drink of Rice, as the same Author in-  
forms us, in the Part last quoted. The *Turks* prepare *Panadas,*and several Other Dishes, of it. The Various Methods of prepar-  
ing Rice for Aliments, in *Europe,* where the Bread is made Of  
Wheat, are to be found in *Caspar Bauhins,* in the Part last  
quoted.

**.. Tis a** Common Opinion, that Rice renders those who **eat  
of** it, sat ὁ for which Reason, in some Places, lean and flender  
Women frequently use it with Milk, and a large Quantity Os Su-  
gar. But this Notion is contrary to the Opinion of the .antient  
Physicians, who reckoned it not only among the όλαγὸτροφα, or  
**inch** Things as Only nourish little, but, also, among the διίσπεπτα,  
er such Substances aS are of difficult Digestion. Buts says Mr.  
*Ray,* l am of the same Opinion with rhe common People, nor .  
dare I condemn the Aliment used for so many Ages, by To many  
Nations: That it renders the Patient moderately costive, I grant,  
for which Reason I don't deny but it is beneficial in the hepatic  
Flux, a Discharge Of bloody Urine, and a Cough, when used in  
Conjunction with other astringent Substances. The Meal Of  
Rice is, also, mixed with repellent Cataplasms, and such aS **are**intended to remove beginning inflammations of the Breasts, with  
an Addition of the Flowers ot Chamomile and Roses. *Helmont,*in a Spitting of Blood, recommends Rice boiled in Water, Or  
Chalybeate Milk. *Diol. Lib. 3. Cap-* S. *Sell. s6. D. Soame.*

- A thin Decoction Of Rice with Water is, among the *Indians,*very frequently used as a Vehicle for many Medicines. -

... Some call the Vinous Liquor extracted from Rice, *Arrack.  
Bait Hist. Plant.*

*OS. A Bone, ‘ .... .*

- The Bones are subject to the like Disorders with those inCi-  
- dent to the softer Parts Of the human Body.

It is certain, that a Knowledge Of the several Diseases incident  
to the Bones is a Circumstance Os the highest Importance, not  
Only for understanding, but, also, for curing, a Lues Veneres, the  
Rickets, and the Scurvy.

That the Bones, which by *Galen,* in his Book *de Ossibus, in  
Prooemio Charter. Tom.* 4. ate justly called the most hard, dry,  
and terrestrial Parts of Animals, and subservient ro the Support os  
the others, should he subjected to the same Disorders with the  
softer Parts, may at first possibly seem surprising; but that they  
**are so,** will sufficiently appear from the following Considerations.

: All the Bones in the human Body were Once soft; for the'  
whole Rudiment of the Embryo, some Days after Conception;  
unless sustained by the equable Pressere of the circumambient  
Fluid, is dissolved into a Species of Mucus, without either Form  
**or** Shape; aS is obvious from the Observations of *Malpiguli,* in  
the Generation Of a Chicken in the Egg. ln the Foetus, egifo,  
when born, there are many Membranes, and soft Parts, which are  
afterwards converted into the most solid BoneS: This is suffi-  
ciently obvious in the BoneS of the Head, which, she a long  
time, retain the Nature Of a Membrane, imthatPartof the Ver-  
tex, called the *Fontanel,* which in some continues membranous  
till the eighth Year of their Age; And, which is still more fur-  
prising, the Teeth, which afterwards become incredibly hard,  
when latent in the Jaws of new-born Infants, resemble a soft  
Mucus, lubricated by an incredible Number of small Vessels,  
In the Original State, therefore, of the Bones, that is, when  
they are sott, and not indurated, they may be subject to the same  
Disorders with those incident to the softer Parts: And even aster  
they have acquired that Degree of Solidity, which renders them  
subservient to the Various Purposes of the human Body, and are  
not entirely herd-and dry aS in Skeletons, but are, in some mea-  
sure, succulent, they are still lubricated and moisten’d by a large  
Number Of Vesseis, winch convey Fluids not Only through, the  
Substance Os the Bones, but, also, through their Cavities\* Hence,  
in consequence os these containing Vessels, and the Fluids con-  
rained in them, the same Disorders may happen to the BoneS with  
those incident to the softer Parts. Hence it is, also, obvious,  
that the Bones are most obnoxious to such Diseases, when they  
most approach to the Nature os the softer Parts, that is, io young  
Persons, which is, also, confirmed by daily Experience; Hence,  
the Spina Ventosa is almost only found in young Patients, And  
in decrepit Old-age, the BoneS, when dry and sapless, are broken  
by the flightest Cause,\* but such Patients are generally little sub-  
ject to the Other Disorders of the Bones.- χ

Besides, it is Certain from undoubted Facts, that, by means os  
Diseases, the Bones have been so changed, as, losing their Solidity,  
to acquire the Softness Os Flesh t An instance of which we have  
*in Petirs Traitd des Maladies des* Or, *Lib.* I. *Cap.* 4 where that  
justly celebrated Author informs us, that he has often observed:  
a similar Degeneration os the Bones into a soft and fleshy Sub-  
stance From all which Circumstances it is sufficiently obvious,  
that the Diseases incident to the softer Parts mayo also, happen  
in the Bones; which is still more effectually proved from ana-  
- tomical Observations, with respect to the Fabric and Structure

Os the Bones. : -mi

. . For die Interstices os the BoneS are lined with a (lender  
Membrane furnished with the same kind os Vesseis, and con-

. tinually moisten'd by the same Liquors, as moisten the-, softer.  
- Parts.

The celebrated *Clapton Navors,* in *Ofleol. Nov.* and *Oominicus  
Gagliardus, in Anatom. Ostium,* have demonstrated, that the Bones

of thehnman Body consist os Laminae mutually applied'to each  
other, though in such a manner that they are not always closely  
united, but leave between them interstices, through which a large  
Number of Vessels run. Bur this appears most conspicuouflytn  
the larger hollow Bones, such aS those of the Thigh, Humerus,  
and Tibia; form that Part Of the Bones which is equally distant  
from both their Extremities, the Laminae appear closely united,  
and the Compages of the Bone is there sound to he most firm ;  
but, aS the Laminae recede from the Middle to either extremity  
Of the Bones, the internal Laminae begin gradually ro recede from  
their incumbent Laminae, and leave, considerable interstices-  
The nearer these Laminae approach to the Extremities Of the.  
Bones, the greater Number Of them recede from each Other,  
till at last there is only left, in the Extremities Of the Bones, a thin  
bony Crust, which covers and defends that surprising cellular;  
Substance, Observable about the Extremities os the Bones; for as  
the Laminae mutually recede from each Other through all the  
Bone, its Cavity is gradually lessen1 d, and at last entirely filled up  
at the Extremities with a bony and cellular Substance, ‘for, be-  
tween the receding Laminae of the Bones, small bony RamifiCa-  
tions every-where arise, unite the separate Laminae, retain them  
in their Situation, and divide the interstices between them into  
smaller Celluhe. Butin thesmaller Bones, which.have not large  
Cavities, such aS the Phalanges os the Fingers, this Union and  
mutual Concretion Os the Laminae does not appear in the middle  
Space of the Bones; bur many of the interior Laminae are, thro'  
their whole Length, distant from the incumbent Laminae; and  
not only towards their Extremities, but, also, every-where, form  
bony Cellulae, like those Observed in the larger Bones: Hence  
appears the Reason why these BoneS are far weaker than others,  
since the Strength of BoneS depends upon the-Union and Con-  
Cretion of many bony Laminae with each Other. The like bony  
Laminae, lying above each other, are Observed to constitute the  
Cranium, and in some Craniums manifest Interstices are Ob-  
fervable between them. -

The Interstices left between these Laminae, receding from each  
other, are lined with their proper Membranes, through which a  
large Number.of. Vessels are distributed: This was sufficiently  
evinced by the Injections made by *Buysels,* and may be pal-  
pably perceived in the larger Bones Os newly killed Animals, so  
that it is no Wonder, that the Bones should bo subjected to the  
same Misfortunes with the softer Parts, since they are furnished:  
with the same kind of Vessels, and the same Fluids.

This Structure Os the Bones, consisting of Laminin mutually  
applied to each other, excellently Corresponds to the Phenomena  
sometimes Observable in Diseases. If, aS is Observed under the  
Article CAPUT, the Pericranium is wounded, .and the Bone re-  
mains bare for a considerable time, its Colour is gradually  
Changed, and at last a corrupted Scale is separated from the sub-  
jacent sound Bone. And, when small Perforations are made in the  
Bone affected, the live subjacent Vefleis spring up through them,  
separate the Corrupted from the sound Part, restore the lost Sub-’  
stance Os the Bone, and form a new Periosteum, in the same  
manner aS the Substance lost by means Of a Wound is restored  
in the muscular Parts Of. the Body. Under the Article CAPUT it  
is, allo, shewn, that, in Order to this Separation, it is not necessary,  
that thePerforationshould reach the Diploe ,sor, that there areves-  
seis there, nobody can doubt ; but in flight Wounds shallow Per-  
forations are soshcient, and the live Vessels spring up through them.  
Hence It is obvious, that between the Laminae Of the Cranium  
Vessels are distributed, which,, when the corrupted Part of the  
Bone is removed, very soon rise through the Perforations *CeL  
sous,* in the second Chapter of his. eighth Book, when treating of  
the Cure of Disorders os the Bones, speaks in the following man-  
ner, *We must first,* says he',, *lay open the Ulcer, and render the  
Bone bare,. And, if the Disorder of the Done isbrcruder than the  
Ulcer, an incision is to be made in the Flesu, sufficient to lay the  
affected Part of the Bone, barey Then the actual Cautery is to he  
once or prince applied, or the Part is to be scraped, till a Discharge-  
es. some-Blend is made, vahich is a Sign of a found Caine,, for the  
Part disorder'd must necessarily be dry.*

The greater the Interstices between the Laminae of the  
- Bones are, the more, in these particular Parts, the Bones ap-  
proach to the Nature of the soft and muscular Parts. - ...

For,)aS the Interstices between' these Laminae have flender  
Membranes furnished. with Vesseis, so the larger these Interstices  
are, the greater will the Number of Vessels be, and the Bone  
must, os course,, in such a Part, approach very much to the Na.:  
Cure and Structure Qf the soft Parts.

For this Reason, such Parts Of the BoneS are most subject  
ta the Disorders incident to the soft Parts, -

This is.sufficiently obvious from whathaS been said; for in  
these interstices there are Vesseis and Humours, aS well aS in thesoft Parts, for which Reason a too great Weakness or Strength  
of theseVefleis, and a spontaneous Degeneracy of the Humours  
they contain, may happen. The Motion, also, of the HumourS

.through these Vessels, may be cither too quick, Or too saint and  
-languid. In Consequence Of these Circumstances, there may he  
Obstructions, Solutions Of Continuity, Inflammations, and all  
their Consequences, in the Bones, aS well as in the soft and muse  
Cular Parts.

Or this Kind are the broader Parts of the Bones near the  
Joints , whereas they are more compact, and less vascular, in  
- the Middle, Or Part equidistant from their Extremities.

We have already Observed, that the Laminae which constitute  
. the larger Bones, are, in that Part of the Bone which is equi-  
instant from irs Extremities, so closely united aS to leave hardly  
any interstices: Hence in such Parts the Solidity Of the Bone is  
greatest, and none, or Very few, and small Vessels are distributed  
between these Laminae: But aS the Laminae, gradually recede  
more and more from each other, in proportion aS theyapproach  
to the Extremities of the Bones, and the Interstices are enlarged,  
.io the Bones are enlarged about the Joints, but are at the same  
time weaker, and more easily injured, because there the external  
bony Craft, formed by the Union Of the Laminae, is tbinesta  
*.Clopton Havers,* in bis *Osieologra Nova,* tells us, that in the Middle  
Of a Thigh-bone, hesore the Laminae began to.be separated,.the  
observed them five times thicker than at the Top of rhe Bone.  
But, says *Van Svpriten,* in a Thigh-bone curiousty prepared,  
.1 Observed the Laminae in the middle Part Of the Bone twenty  
times thicker than the thin bony Crust, with; which the Head Of  
that Bone, the Trochanter Major, and the inferior Part at the  
Articulation with the Tibia, are covered : Hence the Reason is  
obvious, why near the Joints the Bones are most generally sub-  
sect to the Disorders incident to the soft and muscular Parts.  
Hence, also, it is that a more terrible Train os Symptoms at-  
tends Fractures happening in' the large Parts Os the Bones near  
theJointS, in consequence Of the Injury done to the numerous  
Vessels, and the Effusion and Corruption Of their contain'd Fluids.  
It is requisite the Bones should be more strong and firm in the  
Middle, than at the Extremities, because, whilst, for Instance,  
the whole Weight. Of the Body is supported by the Os Femoris,  
the greatest Force acts upon the Middle Of the Bone, End at the  
same time there is here formed, in consequence Of the Close  
.Union of the Laminae, a Cavity for the Marrow, whilst, by such  
.an Union, the Strength of the Bones is, also, increased; for.it is  
demonstrable, from the Principles of Mechanics, that an hollow  
Cylinder is broken with greater Difficulty then a solid one, con-  
fisting of the same Quantity of Matter.

Hence arises the primary Distinction between the Diseases  
- incident to the Bones-- :.. *,'s*

- For .the sake of Distinctness, ^ is necessary to rank theDifor.  
ders of the Bones under certain Classes, according aS the Various  
Parts constituting their Fabric are affected; for the Effects Of  
these Disorders are quite different, and require different Methods  
os Cure, according to the Various Parts affected. Now the first  
Distinction of these Disorders, in the large articulated Bones, is  
taken from the Part affected, the Middle, for instance, where  
they are most solid, or their Extremities, where they are indeed  
larger, but less firm, and os a more Cellular Texture, i ..." - \* .1

χ. ; The Bones, besides the Vessels common to.the softer Parts,  
have, also, in their larger Cellulas, Vesicles full Of a subtile

Ἀ medullary Oil,; .there secreted and accumulated for Certain Pur-  
poses SThese Vesicles, which about the Joints are pretry large,  
are about the Middle of rhe Bone gradually destroyed, and

7 almost Vanish into small .Ducts,:.which contain aminguious  
..Substance. ν.'πέ.ι .osi-.:-:.;.', χ-

Since, therefore? the larger Parts of the Bones, near the Joints,  
approach pretty much to the. Structure of the soft Part.-, so the  
Disorders incident to the latter may happen in the.former. Be-  
fides, another thing.often gives Birth to the most terrible Disor-  
ders os the Bones; sor the thin medullary Oil is. lodged in their  
Cellular Part, secreted from rhe arterial Blond, and collected in  
Vesicles, which not Only communicate with each other, bur,  
also, with the whole medullary System, in the Cavities Of the  
larger Bones; and through the Pores Of the Cartilages, with which  
the Extremities of the articulated Bones are Covered, discharge  
their Contents into the Cavities of the Joints, in order TO form,  
in Conjunction with theglutinous Humour of the Glands Of these  
Parts, a kind Of Ointment for rendering the Joints more move-  
able Besides, these medullary Vesicles, lodged between the re-  
ceding bony Laminae, teem to distribute some Partpf the.medul-  
lary Oil to the bony Laminae, in order to prevent the too easy  
Breaking of the Bones: For, as we shall afterwards shew, in  
these Parts, where the Laminae are most closely united, theme-  
dullary Oil enters their Pores, and is distributed hetween the  
Laminae, adjoining tO each other, fince in the middle. Or most  
solid Part of the Bones, there is no Space Or Room left for the  
medullary Vesicles. This medullary Oil, therefore, lodged in  
these Vesicles, seems tO .answer two Ends, which .are, first, to

'lubricate theJointS; and, secondly, to diffuse Itself between the  
Laminae Of the Bones, in Order to prevent their too great Dri-  
ness: Hence, when, either in consequence Of decrepit Old-age,  
Or Diseases, this medullary Oil becomes defective, the Joints  
Crackle, and move with Difficulty ; the Bones, also, when de-  
PriVed of this Oil, are easily broken.

How great a Quantity Of this medullary Oil is lodged in this  
Cavernous Part Of the Bones, is sufficiently obvious in the Bones  
Of Beef, when boiled: For, after all the Marrow contained in  
the larger Cavities of these Bones is taken our, if their Extremi-  
ties are split, or struck with a Mallet, a large Quantity Os this  
medullary Oil is discharged. We shall hereafter consider the  
Structure Os these Vesicles, which Contain the medullary Oil.;  
since they are similar to those which constitute the Marrow lodg’d  
in the middle Cavities os the larger Bones, only with this Differ-  
cnee, thacedn the cavernous Parts of the Bones, few Vesicles, er  
Perhaps only one, are lodged in the smaller Cavities *whereas*the Marrow is a Congeries of many such Vesicles, Contained in  
a Common Membrane. Now, where there IS a greater Distance  
hetween the receding Laminae, It is sufficiently obvious, that a  
larger Number *of* Vesicles may be lodged there: But in the .  
Parts where these Laminae are contiguous, or, at least, very littie  
distant from each other, there are no such Vesicles, but the thin  
medullary Oil is either distributed between the Laminae; by means  
of small Ducts propagated from these Vesicles, or it enters by  
the Pores Of the bony Laminae, which we shall afterwards de- ‘  
Tcribe.

- - - Hence arises another Class, Or Order, of Diseases incident to  
the Bones, ς - -

Another Origin Of Diseases in the Bones is, when the Vesicles  
containing the medullary Oil are assessed; in conscqnence of  
which, a Violent Corruption of that Oil happens, and many  
Disorders, which shall afterwards be enumerated, will be pro-  
duceth .......1 .

- The Boneshave an external Periosteum, which not Only fur-  
rounds-and Covers their convex Part, but, also, conveys the ar-  
' rial Vessels into their Cellulae and Marrow, and receives an  
incredible Number of Venous Vessels, both large and small

*-' Clopton Havers,* in his *Osieologra Nova,* has demonstrated, that  
all the Bones Of the human Body are covered with a fine Mem-  
brane, os an acute Sensation, and which consists of Various Strata  
Of Fibres, applied to each other, rhe' not interwoven: These  
Fibres run parallel to each Other, and in the same Direction with  
the Length Os the Bone. In some Places this Membrane is  
thicker, than in Others, -and seems to consist Of Fibres variousty  
decussating each Other But this is produced by the Muscles, and  
their .Tendons, running along the Periosteum, before they are  
inserted into the Bones: *Clopton Havers,* also, observ'd, that the  
Periosteum running along the Bones was wanting in those Place\*,  
where the Ligaments uniting the articulated Bones arise; and that  
thePeriosteum runs upon the Ligaments, and is thus convey’d to **the**adjacent Bone.. Hence he imagined, that the Periosteum was Only  
*z* Continuation of One and the same Membrane, which, drawing  
its Origin from the Dura Mater, covered the Cranium, and is  
thence extended Over the Surface Of all the Other Bones, and is  
. so perfectly accommodated to all their Cavities and Eminences,  
that it exactly Covers their whole Surface. But that Part of the  
articulated Bones, which is contained within the Ligaments which  
constitute the articular Capsulis, are destitute Of the Periosteum,  
which, there, is separated from them, and runs upon the Liga-  
merits. Nothing, therefore, can be either conveyed to or from  
the Bones, except by means of the Periosteum: All the Vessels,  
then, conveyed to the Bones sor their Nutrition and Growth, Or  
which penetrate into their, cellular Part, or are, through distinct  
Perforations, carried to the Marrow collected in their middle  
Cavities, previonsty pass through the Periosteum. ‘In like man-  
ner,..the small Veins which return the Blood, pass through that  
Membrane, which, in consequence os this Circumstance, is of  
an highly vascular Nature, aS *Buys.che,* in his *Adverser. Tsecaed.*

3. *Tab.* 2. *Tig.* 8. has beautifully demonstrated.- Besides, the Pe-  
riosteum is closely united to the Bone by means of the Rami-  
fications of Vessels, convey'd from the former to the latter, and  
the Veins returning from the latter to the former, almost in every  
Point: Hence it adheres Very firmly to the Bone, especially in  
young Persons, for in decrepit Old-age, where many of .the  
Vesseis are abolished, the Periosteum is observed to adhere but  
slightly to the Bone. *Clopton Havers,* before the Discoveries Of  
*Ruys.cio,* being surprised at the firm Cohesion Of this Mem--brane with the Bones, helieved, that this happened principally at  
that Age in which the Bones are soft, and, aS it were, glutinous.  
This Physician, also. Observed, that it was united to the Bone  
by means of sinall Fibres sent Out from it into the Substance of  
rhe Bone. Put it was afterwards-discovered, by the Injections  
Of *Ruys.ch,* that these Fibres were small Vessels sent from **the**Periosteum to the Bone in an incredible Number. Nor are the  
larger Bones alone cover’d with a Vascular Periosteum ; but, also.

**the** small Bones of the Ear, which some great Men **have** assorted  
to he without in The internal Cavin of the Tympanum is,  
also, covered with its Petiosteum, which is furnished with innu-  
merable Vessels, as *Ruysch,* in *Apist. Anatom. y* has shewn by  
the Figure he there gives of in

Hence arises a third Series Or Class of Disorders incident to  
the Bones.

Whatever Cause therefore hinders the free Passage of the Hu-  
mours through the Vessels of the Periosteum into the Bone, or  
prevents their Return from the Bone to the Periosteum, may pro-  
duce Disorders in the Bone, though the primary and immediate  
Cause of these Disorders is nor lodged in the Substance of the  
Bene, properly to called, but in rhe Periosteum only. The Rea-  
son ot this is sefliciendy Obvious, from what heS been said in the  
preceding Paragraph.

The Bones have an infernal Periosteum, which lines and  
covers rhe Cavities containing the Marrow, distributes-the  
. arterial Vessels to i be medullary Vesicles, and receives an in-  
credible Number of venous Vessels, posh large and sinall.

The internal Periosteum is not so easilyexhibited to the Senses  
as the ex'emal; yet there, seems to he fuch a Membrane, though  
of an highly render Nature, since it is safely defended by .the  
Bone which covers it. The Dura Mater covers the Cranium,  
and serves it instead of a Periosteum.. But as this Membrane  
sends off Vaginae, by which the Nerves arising from the Medulla  
Oblongata and Spinalis are safely defended, it was necessary its  
Fabric should be somewhat thicker and stronger., This Mem-  
brane,being in the large hollow Bones, defcnded from ell external  
Injuries, and serving only to cover the internal Surface of the  
Bones, and receive theVeffeis, does not require fo great Finn-  
nt si and Strength as the external Periosteum; and, in consequence  
of its Slenderness, is with more Difficulty discovered: ln those  
Bones whose internal Surfaces are totally cellular, such a con-  
tinued Membrane is nor easily diseovePd, sincethe Strudlure and  
Fabric of such Bones is highly intricate and perplexed. Nor is  
it easily discovered about the Extremities of the larger Bones,  
inhere the receding bony Laminae form a surprisingly spongions  
Substance. But this Membrane is principally found in that Part  
of the larger Bones, which, by a close Union-of rhe. bony La-  
minae, is most solid, and has a large Cavity in irs Middle, destined  
for containing the Marrow. *Buysth,* in *adverser. Decnd.* 3.  
informs us, that Anatomists often talked at- random, with re-  
sped mi the Membrane which they suppose to surround the Mar-  
row; and affirms, that in those Bones whore Cavities are fust of  
**an** Osseo-fpongrous, or un osseo-filamenrary Substance, them is  
no common Membrane investing the Marrow sound. Norns  
this tobe wonder’d at, since, in such Bones,-rhe Marrow.‘is trot  
collected into a common Cavity, hut dispersed into different  
Cellulin.. . Beit *Puysch,* in *Thesaur.* io. send. desonhes

the Fabric of the Os-Humerj of a Child, when longitudinally  
divided into two, in the following manner,' and .has given us  
**a** Representation of rt: *The interior Substance,* fays he, *.which  
is of as sssensiongious -iJatore, is fisrniseed: vcith a medullary  
Liquor, .and lined with, a Membrane as plisse.de a Spider's Web,  
and ibis Membrane is surmsted with small .arteries fnll of Eland,  
quioich, by that-means, give a redi/b Colour to the Membrane. -* ln  
the Part, also, last quoted, the same Author describes a Portion  
of the Os Femoris of an infant, in .the Cavity of which, when  
divided with a Saw, there appears a stender Membrane, like: **a**SpideFskVeb, which surrounds the Marrow; .and,.also,thesinall  
Arteries dispersed through this Membranes Hence ir is sufficiently  
obvious, that there is tiich a stender Membrine in the internal  
Cavities of the Bones. But it may feem dubious, whether mis  
Membrane belongs to the Marrow, or is the internal Periosteo m  
of the Bone; or whether ir answers both these. Purposes. But  
if we consider what *Clogton Havers* has, in his *Osteclegul-Nmia,*advanced, concerning the Strudture of the Marrow, it is highly  
probable, that this Membrane is distinct .from it; for that Au-  
thor informs us, th at the entire Marrow is coveted with **a**thin and pellucid Membrane, which, in some Places, is- of a  
redisu Colour, as if small Blood-vcstels were distributed through  
its Structure: BUt, when he cautiousiy separated this Membrane  
from the Marrow, which was of 2 pretty firm Consistence,  
he ofientaw entire Veffeis running along rhe Surface of the  
Marrow. And he says, **he** was absolutely certain, that **these**Veffeis did nor at all belong to the incumbent Membrane-then  
separated from them. Immediately after, he subjoins, that this  
Membrane not only adheres to the Bone by small Veins.; but  
that it, allo, insinua.es irfelf into the transverse Pores, sound in  
rhe internal Surface of the Bones. From this Description it is  
sufficiently obvious, that this tendet Membrane adheres to the in-  
ternal Surface of the Bones ;. and tbar, under it. Vessels, formed  
into another Membrane, run-along the Surface of the Marrow;  
and, consequently, tbattbe inrernd Periosteum is distinct from  
the Marrow contiguous to it. . The Use, therefore, of this in-  
ternal Periosteum is notegly to distribute the arterial Vessels, to

the. medullary Vesicles, and receive rhe venousVeffeis returning  
thence, hot, also, by mesns of the Vessels sent irno the Substance  
of the Bones, and returning thence, to he subservient to the  
Lise and Nourishment of these Bones. This is, perhaps, evinced  
in the surprising Phenomena observable in some Diiotders of  
the Bones. *Ruysch, inThofaur.* Io. N» I7ss not onlydefcrihes,  
but, also, gives us a Figure of an Os Cabin, rendered cations  
and corroded ; in whose Cavity there was a bony Pipe, entirely  
separated from the exterior Substance of the Os Cubin, aod  
capable of heing moved every Way. Ir is nor improbable, rhar,  
by some Disorder of the interns! Periosteum, the interior Part  
of the Bone, which is principally nourished by thet Periosteum,  
had been afleched, and that the tubular internal Part Of the Bane  
had been separated from its external Part.

Hence arises a fourth Division of Disorders incident to the  
Bones.

For since this interna] Periosteum, as **we have** already ob-  
served, confisis of Vessels, fo Obstructions, Inflammations, and  
all their Consequences, may happen therein. Hence the con-  
tiguous Bone will be affedced, and the Misfortune he next com.  
Inuninated to the subjacent Marrow.

The Bones have , in their Cavities an infinite Number of  
Vesicles, filled with a subtile medullary Oil, which they keep,  
distribute not ionly among each other, butioeiso, between the  
- Interstices of rhe bony Lamina, the Cavities of the joints,  
. and this thro’ streight Pores. These Vesicles are furnished with  
- Arteries, Veins, Lympheducts, adipose Ducts, small Nerves,  
and slender Membranes. ' cr - -.s' u- '

We have already consider’d .the Vesicles full of a medullary  
Oil, lodged in the cellular Pans of the Bones.about the Joints;  
Bur here we treat of the Marrow, properly so called, which is  
lodged in “the Cavities of the larger Bones, and consists of'an in-  
finite Number of Vesicles, collected and Unicedin one common  
Membranei ' *Clopton Havers,* as he informs us .in his *ristealsgul  
Nava,* observed, that, the medullary Oil is mot lodged in 'rhe  
Cavity of: the Membrane sorrouodiog the Marrow, but is col-  
leched into sinall Vesicles, by-the Union of which, larger'Lobes,  
cover’d with a .peculiar Membrane, are form’d; and of these  
Lobes the whole.Mass of Marrow observable in rhe Cavities os  
the larger Bones is composed, s But these minute Vesicles, cool-  
taming the medulla! y Oil, seem to communicate with each oiher,  
as do, asso, the larger Lobes formed by them: Hence this Oil may  
ise.conveyil/not anly to rhe Substance of the. Bone, but, also,  
to the Cavities of thejoints, from all, and even the most distant  
Parts *of* the Marrow; sor, when *Cloptors Havers* wounded the  
Membrane'of such a' medullary Lobe, he found that the medul-  
lary Oil was nor all at once, but gradually, discharged; bur that  
rhe Whole was, however, gradually evacuated by a gentle Com-  
pression, without threakingube minute Vesicles.:; When he, by  
means of the Fire, rnelienthc harder Parts of the-Marrow, he  
saw it gradually drop away, leaving the Vesicles- and Losies  
empty. This is, also, confirmed bythis, that by an Increase  
of Motion,' and a Defeet .of Nutrition, the Quantity of the  
Marrow isdecreased; hut enlarged by Reft and. High-living;  
as *Du Verney, in Acadern. des Sciences, Ann.* I 7oo. fays, has  
heen confirmed : by various Experiments. . The same Author,  
also, describes the Fabric of the Marrow to be like what we  
have represented in But the medullary Oil seems-capable of he-  
ing discharged from its containing Veficledin three Manners;  
for it is either derived to the Extremities of the Bones, through  
the communicatingVesicles andLobules, and there ouses through  
the Pores of the Cartilages, with which the Extremities of the  
articulated Bones are incrustated, into rhe Cavities of thejoints,  
that thus their Monon, as we have already- observed, may be  
performed - without any Attrition and Abrasion of the Bosses  
moved; hence, also, it is.that, afreri violent Motion, the Quan-  
tity I of the Marrow is lessen’d: Or, perhaps, thisctiinand highly  
attenuated Ost enters the sinall absorbent Veins, and is mixed with  
the Blood ; for it is certain, that, in some acute Diseases, wh  
often observe the whole Fat of the Body almost consumed jna  
few Days; And, in the last Place, this medullary Oil seems to  
enter the substance-of the Bones, and procure to them a dhe  
Degree of Cohesion and Uoctiiosity. When *Clapton Haver's  
vsas* investigating the particular Ways, by which this medullary  
Oil insinuateditiSf into the Substance of the Bones; he found that  
their internal Lamina was full ofnumherlefs Perforations, thro’  
which, however, aster an exedi Scrutiny, be saw, that no Vessels  
were either conveyed to the Marrow, or returned from it. .In  
the next succeeding Lamina he observed similar Pores, though  
not corresponding directiy to the others, but situated in different  
Pans: For which Reason rhe medullary Oil cannot, from the  
Pores of the internal Laminae, dire&ly enter those of rhe suc-  
ceeding Lamina, but, must,-niter it has entered the Pores of the  
first Laminaj run between that, and the fecond, till st meeu-wirh  
similar Pores; after which it runs- between rhe second Sne third  
Laminae, till it enters the -Pores of the latter, and is thus sue.

cessively distributed between the Laminae Of the Bone, till it arrives  
**at** its Surface. Thofe Perforations, which the medullary Oil en-  
**tered,** were, by that Author called transverse Pores ; and he called  
these Passages, thro’ which the medullary Oil was convey'd be-  
tween the Laminas, before its Recepiinn into the transverse Ponce,  
longi: udinal Pores, hecause they run in the same Direction with  
the Fibres which constiture.the Laminae Os the Bones. The same  
Author, also, informs us, that these longitudinal Pores are not to  
he discovered without the Assistance of the best Microscopes,  
hut that they are Of all other Parts most easily discovered in **the**Ribs. He, alsio, adds, that he could clearly distinguish them  
in the thickest Part Of the Scapula, where the bony Laminae im-  
mediately cohere to each other; and be observed, that the Mar-  
row which entered these longitudinal Pores, adhered IO their Sides  
like Oil. He, also, affirms, that in an human Bone, consisting Os  
eleven Or twelve distinct Strata of Laminae, he observed these  
Tores. The transverse Pores, then, only transmit the medullary  
Oil, hut these of the longitudinal Kind Convey it between the  
Laminin Of the Bone, so .that the Interstices' hetween these La-  
in inae are lubricated by Ibis Oil. But such a Distribution Of the  
medullary Ofl thro’ the Substance Of the Bone, Obtains only in  
those Parts where the bony Laminae are Contiguous to each **ether.**Put .about the Joints, where they are at a considerable Distance  
from each other, are found the medullary Vesicles already de-  
scribed, and .which are easily capableof distributing such an Ofl.

\* . Inconsequence Of this Curious Structure, the medullary Oil is  
inost equably distributed thro' the Substance *Of* the Bone, and  
fince the internal Lamina of the Bone must transmit the Quan-  
tity OLMarrow subservient to its Own Uses, and those Of all **the**incumbent Laminae, hence .there is found in .it the greatest Num-  
**ber** Of transverse Pores, in smaller Number in the succeeding La-  
**Inina,** and the Number gradually decreases, in proportion, as  
the Laminae approach, nearer to the Surface Of tho Bone, aS  
*Clapton Havers* found Upon accurate Observation. ...

Thus the Bones, the most dry and terrestrial Parts of the hu-  
man Body, are supply'd wish this fine and subtile Oil,by means of  
which it, perhaps, is, that the Union Of the terrestrial Parts is  
maintain'd, fince it is’ interposed between them, as a kind, of  
Glue, Tor the Bones, when all the Oil is, by means osFimex-  
fracted from them, become friable, bur when calcined in a .strong  
Fire, and immersed in Oil, they again resusne their Cohesion, aS  
Is shewn under the ArticleTIRR A. . . ...I

.. .Hence the Reason is . Obvious, why'the Bones, which" are frir-  
nished with suchst. large Quantity Of pinguious Oil, ate so  
good Fuel for the Fire *, so* that *Herodotus,* in his fourth Book,  
intituled *Melpomene,* informs us, shut the *Scythians,* when they  
wanted Wood, bofled the Flesh Of their Sacrifices, by kindling  
their.Bones 5 and if proper Vessels were wanting for this Purpose,  
they threw all the Flesh into their Bellies, .with an Addition Of  
Water,.after which, they put Fire to their Bones, by which means  
an Ox, in some manner, boiled himself. Hence, also, appears  
the Reason why the. best-prepared Skeletons, where the larger  
Pones are perforated, and all the Marr6w“difcharged by boiling,  
again become not only yellow, but are often moist with a pin.  
guious .Oil, for the’ medullary Oil, distributed between the La-  
mime of the Bones, gradually advances to. their Surface, r s ,  
*s* This medullary Oil is separated from' the. .arterial .Blood,ι Col-  
lected in the medullary Vesicles, and thence discharged for the  
seyerarPurposes destin'd for it by Natures *Glopton Havcrsurin  
bis .Osseologra Nova,* informs us, that he observed, the Arteries  
distributed to the Marrow quite distinct from those which convey  
the Vital Humours rbro’the Substance Of thelBones, anssthat they  
were, fiso, convey’d to the Marimw thrss proper Perforations  
in the Bone,, though' in such .a manner .as not to penetrate the  
Bones in athrect .Coiirdin buy run Obliquely a considerable Way  
thro' the. Suhstande'Osthe Bone, before.thby reach'd the Marrow.  
The. same Author. Observed an Artery of this Kind IO run an  
Inch and an half etithin the Subflaside-of the Bone,,the Thick-  
ncss Os.which, in ihatTaH,hardly.hereededtheeigh'thPnrt of.an  
Itich.7 But he,could not discover, whetherLthis.ArtcTy,.Iheo';all  
ins Course, distributed any.sman.R2thificatsqns.shtetthe SspstanGe  
of the Bone. After stsch in. Artery eoinesstnto thexCayimsossthe  
Bones,'tis generally divided into two Ramisications,ca.ch of which  
nins to Opposite Extremities of the Bodes, and .sends off numberless  
small Ramifications rbro’ the medullary Vesicles. But tho’, by means  
Of a. Microscope, IhinAIIthor observed many small Blood-Vessels  
dispersed thro' the most' minute medullary Vesicle, yet.he inge-  
nuobfiy confesses, That he could' not discover whether every Ve-  
sicle was furnished with such Blood-Vessels:'And'he seenis to he  
of Opinion,, ihat.Ibis Circumstance was, by no means, necessary,  
fince these Vesicles communicate with , each other,\_in. conse-  
ejochceinf whichssthe. medullary Oil, .secreted by the arterial Fa-  
bric Of some Of them, maybe convey’d to the Others. . Put, by  
the Injections os *Bufsch,* it' is certain, that the Whole Of the  
Marrow is furnish'd with such Vessels, in consequence, of which,  
highly probable, that a similar Apparatus of Vessels Is sound  
in all' the medullary Vesicles . -E

Aster the medullary Oil is secreted, the remainingBinod is con-  
vey'd to small Veins, which, being collected into larger.Trunks,  
at last terminate in one Vein, which generally goes Out. ax .the

same Perforation at which the Artery enters. The same Author,  
also. Observed, that the'minute Veins arising from the Marrow  
entered the substance of the Bones, and there disappeared. Per.,  
haps these Veins return rhe Blood convey’d to the Marrow by the  
Arteries for its Nutriment, which nourish the Biood, for, in many  
other Parts Of the Body, there is Observed a double Apparatus Os  
Arteries and Veins. One of which is subservient to the Secretion  
of a particular Fluid, and the other to the Lise and Nourish-  
ment Of the Part.

But fince these Parts become red by Injections, which were  
before white and pellucid, 'tis Obvious, that there are, in such  
Parts, small Series OfVeffeli, and consequently lymphatic Vessels.  
This is, also, Certain from this, that all the Cavities Of the  
Body, whether large or small, are moistened by a fine exhaling  
Liquor, in consequence of which there must be in thelo Parts  
similar absorbent small Veins.

But whether in these there are any adipose Ducts, by means  
Os which the medullary Oil, collected in the Vesicles, is convey’d  
IO particular Parts, *Havers* confesses, he could not discover.  
He rather thought, that the contiguous SsdeS Of these Vesicles  
were full Of Pores, by means of which they communicated  
with each Other. But he sound considerable adipose Ducts, by  
means Os which the medullary Oil waS convey'd from the caver-  
nous Parts Of the Bones to the Cavities os the join.s. *Du Ferney,  
in Mem. de i Acad, des Sciences, An.* I -oo. has demonstrated, that  
there are Nerves in the Marrow, for he Observed, that, in (hern-  
junction with the Vein and the Artery, a Nerve was convey’d  
thro' the Bone IO the Marrow. He, also. Observed, that these  
three Vessels were inclosed in a common kind Of Vagins, which  
was a Production of the Periosteum. Besides, he proved by un-  
deniable Experiments, thar the Marrow was furnished with a  
Sense Of Pain; for, in the Hospitals, when, after the Amputation  
of Limbs, the Dressings were renewed, he often ordered rhe  
Marrow to he somewhat roughly touched , upon which the Pa-  
tients immediately expressed a Sense of Pain. And, that this  
Truth might be the more effectually evinced, before the Mem-  
bers of the Royal Academy at *Parti,* he cut Off the Thigh of a live  
Animal, and, waiting till the Pain Of the Operation was, in some  
mealure, ahaled, he thrust a Probe into the Marrow, upon which  
the Animal forthwith discovered Marks of the most intense and  
exquisite Pain. '

- Hence arises the fifth and last Class, or Division, Osthe Diss  
orders incident to the Bones.

Since, in the most-concealed and internal Marrow of the Bones,  
them atessuch a Variety os Humours, and such a Number *of Ves-  
sels,* almost all the Disorders already enumerated may,also, happed  
here; Io that this is another, and the lest, DiVision of the Disorders  
incident tOthe Bones; For, first, we considered thofe Diseases which  
affect the Substance of the Bone, properly so called the Differ-t  
enceS Of which were drawn from their possessing either the broad  
and cellular Part near the Joints, Or rhe middle and more solid  
Parts.,. secondly, we confioered the Vesicles full os a medullary  
Oil lodged in the Cellular Parts of the Bones, and shewed, that  
another/Kind Of Disorders arose from them , thirdly, we con-  
sidered the external Periosteum surrounding rhe Bones, and shew'd,  
that .itinight prove the Origin os another Species Of Disorders;  
fourthly, .we shew'd,' that almost the same Misfortunes were in-  
cident to the internal Periosteum ; in the fifth and last Place, we  
haye Considered the Structure and Use Of the Marrow in the Ca-  
vities Os the larger Bones, according to the Discoveries of thy  
best Anatomists, that by this means the Disorders incident so  
this Part, might be the better known. \_ From these, duly con-  
sidered, we. are better enabled to form the Diagnostic and Pro-  
gnostinOf Diseases Os the Bones, and to make Choice Of proper  
Curative Intentions, which Ought to differ according, to the dif-  
ferent'NathteS of the .Disorders.

- If-the-medullary Oil stagnates in its proper Vesicles, emun-  
ctories, .or in the Interstices of the Bones, and, by the Vital  
Heat-and Motion,' becomes acrimonious, putrid, and sanious,  
' it will -prevent a new Secretion, Obstruct the Vessels which

convey the Humours to the Part, and those which secrete  
them,-and inflame-its.proper Vesicles Then it will produce  
- a' Suppuration, or, by a gangrenous Putrefaction, corrupt the

Fluids and Solids. Hence the Substance Os the .Bone, not  
only destitute os Vessels, and Vital Fluids, but, also, corroded  
-by acrid Humours, as changed intoa.kind osciueritiouS Calx,  
.\* where it is most thin and slender, that is, in the Cellulae os the

Apophyses. By this means Violent Pans, Heat, Pulsation, Tu-  
' inor, Abscesses, andCsries, are produced. Such a Stagnation  
. may arise from every Obstruction ; but, is it arises from an in-

ternaliCanse, . then rhe Disorder is called *Spina Ventosa.*

In this Aphorism are considered the Diseases incident to the  
Bones, when the medullaryOil secreted from the arterial Blood,  
. collected in the Vesicles dispersed through the cellular Parts os the  
Bones, Or accumulated in these Vesicles in the Marrow, becomes  
stagnant'and corrupted.

From whet has been said, 'tis obvious, that' this Oil is collected  
in .these Vesicles sor Certain Purposes, and that it, perhaps, stag-

**nates** for fome time. Or, at leash moves very (lowly in them; **for**in Animals, kept in a State Os Ease, 'tis found ro he accumulated  
in large Quantities, whereas, after violent Exercise, 'tis much  
diminished. By Stagnation, therefore, is meant inch a'Condi-  
tion os the medullary Oil, or os the Parts which contain and  
convey is, aS renders it incapable os performing those Motions,  
which, in a State os Health, it Ought necessarily to perform.  
For this medullary Oil ought to he capable of discharging itself  
into the Cavities of rhe Joints, in order to lubricate them. It  
ought, aim, to insinuate itself into the Interstices of rhe bony  
Lamina:; it Ought, in like manner, to pass freely thm’ these minute

‘ Vesicles into those adjacent, till, at lash it is convey'd to the Parts  
where it is requir'd. By every Cause, therefore, which hinders  
such a Motion Os the medullary Oil, a Stagnation will be pro-  
duced. But we observe, that the mildest pinguious Substances  
spontaneously assume a Violent Degree Os Acrimony, some sooner,  
and some later. Mild and recent Oil Of sweet Almonds, when  
exposed to the Summer-heat, in a few Days, becomes so acri-  
njonious, as to burn the Fauces, when it is swallowed. . Butter  
is generally conupred in the same manner, the' not so soon.  
Tis true, this Corruption is surprisingly accelerated by the free  
Access os the Air*, so* that the Marrow, stagnating in the Cavi-  
ties of the Bones, requires a longer time before it is Corrupted,  
though, by its Continuance in that State, it will, at last, dege-  
nerate. Now, the Vital Heat will soon render this stagnant Oil  
putrid, especially since it has a natural Tendency to Putrefaction;  
for, in a sew Days, the Marrow of the soundest kill'd Animals is  
generally corrupted, and becomes intolerably fetid; and, its oleous  
Tenacity being destroy’d, it is dissolved into a thin, hut highly  
putrid Sanies. It will be sufficiently obvious, what terrible Mis-  
fortunes must necessarily be the Consequences of this, if we Con-  
sider the highly tender Fabric os those Parrs which secrete, collect,  
and convey, the medullary Oil, for aS soon aS the Arteries, con-  
veyo to the Marrow, have reach’d to the CaVities of the Bones,  
laying aside, in all Probability, their callous CoatS, they become  
so soft and pulpous, that the Marrow of an old Ox may be easily  
reduced to an oleous Mass between the Fingers. When a Cor-  
ruption, therefore, is once begun here, the medullary Oil, con-  
Verted into an acrid Sanies, will Corrode the Vesicles which,con-  
tain it, and, in like manner, destroy the adjacent sound ones.  
Thus, such a Misfortune, happening in a small Portion Of the  
Marrow, will he soon propagated thro' the adjacent Pans. These  
small Veffeis may, therefore, be inflamed, and all the Consequences  
Os an Inflammation be produced in the Marrow. But a benign Sup-  
puration Can hardly happen here, because putrid Serum i: Of an  
highly acrimonious Quality , and tho’ such a Suppuration should  
happen, yet the Pus, collected in a close Pisce, and not bring  
Capable of having itself discharged, would, in like manner, be-  
Come attenuated and putrid. Hence, when the vital Veffeis Of  
the Marrow are destroy'd, a gangrenous Corruption, Of the worst  
Kind, must necessarily ensue. \_

Besides, the Malignity of this putrid Sanies, being daily aug-  
mented, renders the Disorder worse, acts upon the whole Surface  
Of the internal Cavity Of the Bone, and will, consequently, soon  
destroy the external Membrane Ofthe Marrow, and the internal Pe-  
riosteum. The Substance, therefore, os the Bones thus destitute of  
vital Vessels will be at Once corroded and destroy'd by an acrid  
Sanies. But this will happen soonest in the largest Parts Os the  
Bone, or in the Cellulae Of the Apophyses, where the bony Sub-  
stance is most tender, and the medullary Vesicles are lodged- be-  
tween the receding Laminae of the Bone. . Hence, in such Places,  
the corrupted medullary Oil will act upon both Sides ofthe bony  
Laminae, and, consequently, soon destroy them. Bus,- about the  
most solid Partes the Bones, the bony Substance is morestowly  
destroy'd, because the Bone is there thicker, and the corrupted  
Sanies only touches the internal Lamina, of the Bone, ί But, aS  
this Sanies is attenuated in proportion as, itbecomes acrimonious,  
it win gradually insinuate itself into the Pores os the extemal La-  
mella , and thus it may be convey’d between the bony Laminae,  
in the same manner with, the medullary Oil. By thisineans a  
Corrosion os the Substance of the Bone will happen; το.that.the  
most solid Bones, their Cohesion bring destroy'd, become a kind  
of Calk. Thus, under the Article FRACTURA, 'tis shewn, that  
the largest Bones of the Body, when hecorne carious, are broken  
by a Very small Force. ; .......

*Since,* therefore, am Inflammation, .with, all its Consequences,  
may happen in these Parts, and since .the Marrow is furnished  
with **a** Sense os Pain, the Reason, is obvious, why Pain, Heat,  
and Pulsation, are found in these Parts. Surprising Tumors  
os the Bones have, also, been Observed . to he produced :by  
-this means, since the bony Laminae, mutually. receding from  
each other more and more, especially near the Joints, **have, en-**larged the Bones far beyond their natural Size. Hence 'tiS ob-  
vious, that the more soft cellular Parts, about the Joints os the  
Bones, often degenerate in a very surprising manner, and that in-  
flammations and Abscesses may, sometimes, be found in them.  
But, when the medullary Oil is corrupted, terrible Misfortunes  
happen, and even a Violent Caries of the Bones, which is said to  
he present, when the corrupted Bone, as it were, moulders into  
Powder, and no longer resists the Probe. Hence *Celsus,* **in ‘the**

second Chapter Of his eighth Book, informs ur, " That, in **a**α Caries os the Bones, we may know whether the Caries is deep,  
" Or superficial, by the Probe’s penetrating farther. Or less, into in”  
Α Caries, therefore, is the worst Of all the Disorders incident to  
the Benes, since it generally indicates a total Corruption or Cor-  
rosion of them , for the slighter Disorders or the Bones are ge-  
nerally Cured by an Exfoliation, or a Separation of the corrupted  
Lamina:; whereas a Caries can never he cured by Exfoliation,  
hut must, by means Of the Knife, er actual Cautery, he removed,  
till we come to the live Parts.

Since, therefore, many Causes os an Obstruction may produce  
such a Stagnation os the medullary Oil, so 'tis Obvious, that the  
terrible Disorders arising from the medullary Ofl may draw their  
Origins from Causes very Various and different. But Compres.  
sionS or Destructions os **the** Vessels, by extemal CanseS, are rarely  
form'd in the Marrow, because it is pretty safely defended by **the**Bone. Tis, however, pretty certain, that the Marrow may he  
injured by violent Contusions, or Fractures Os the Bones. But  
when **a** Corruption os the medullary Oil, without any external  
Injury, arises purely from an internal Disorder, the Disease is ge-  
nerally, by Physicians and Surgeons, called a Spina Ventosa,  
which, according to Doctor *Freind,* in his History Of Physic,  
was first described by *Rhazes,* an *Arabian* Physician, and received  
the Name os Spina Ventosa, because it Consisted in a Corrosion  
and Corruption of the Bone, aCcompan/d with a pungent Pain  
and Turnon For when this Disorder, beginning with a Cor-  
ruption of the Marrow, has Corroded the Bone, the Teguments .  
are surprisingly swelled, and the Substance Os the Bone often  
greatly distended. The Name os Spina Ventosa displeased  
*Marcus Aurelius Severinus,* who wrote a whole Treatise on this ,  
Disorder, and would rather have it called by a Compound *Greek*Word, *Paedarthroeace,* which signifies a Disorder os the joints  
Os Children, hecanse this Disease is most frequently incident to  
Children, and most generally observed about their Joints. This  
Author gave the following Definition Os **a** *Paedarthroeace:*li This Disorder, says he, in his Treatise *de recond. Abscejs.  
" Natur,* is a corrupted Abscess, Or Sphacelation of the Bone,  
“ happening about the Joints Of Children, in consequence of  
\* the primary Sordes Os the Sperm, and menstruous Blood, not  
" being sufficiently purged Osh but collected and putrefied.\*  
He did not, however, deny, but this Disorder might happen to  
Adults; and in the same Treatise, he gives tis an instance of a WO-  
than, arrived at the Years of Maturity, who laboured under this  
Disorder. *Petrus de Marchettis,* in hrs *Observat. Medic. Chirurgi*affirms, that he has. known both Men and Women to labour  
under this Dsorder till the twenty-fisth Year of their Age, but noi  
longer, unless,having before been afflicted wish this Misfortune,  
they were not as yet recovered. But aS, in rickety Children, rhe  
Tumors of the Bones, about the joints, are frequently observed  
without any Corruption os them, the Name Of *Paedarthroeace*seems rather to be too ambiguous. And *Severinus* himself, in  
another Passage, of the same Work, seems to be in a kind of He-  
sitation, and thinks, we ought not absolutely to assert, that the  
Spina Ventosa is the same thing with the *Paedarthroeace.* Tis,  
therefore, proper so retain the Name of Spina Ventoss, in order  
to distinguish this Disorder, since it was used by *Pbaxes,* the first  
Physician who wrote any thing distinct upon this Disorder; and  
the Meaning of the Word may be sufficiently limited from what  
has been already said , namely, that it is a Corruption of rhe Bone  
arising from a peccant Quality of the Marrow, for which Read  
son the Corruption hegins in the interior Part Of the Bone, and  
is gradually propagated thro'all its Substance, rill, the Periosteum  
being Corroded or torn by the tumid Substance os the Bone, a  
Pain and Tumor Of the superincumbent Parts **are** produced;  
Bus, when the Corruption begins in the exterior Parts of the  
Pone, it. proceeds gradually to the more internal Parts . and  
though, ar last, it affects the Marrow itself, yet still it may he  
Called a Caries of the Boney by which means all the Disputes of  
the Learned, whether the Spina Ventofa Of the *Arabians* waS  
known and described fry the *Greeks,* will be cut Off; for that a  
Caries Of the Bones, and a Sphacelation of them, were known  
to the antient *Greeks,* is Certain but we have no Accounts, that  
that Species Of Corruption Of the Bones, which arises from a  
previous Disorder of the Marrow, was known among them, si'

Tis Obvious, that the Signs of this Disorder, when at Its  
Height, are the same with those of a deep Inflammation,  
\* which is not exasperated by the extemal Touch.

Tis to be lamented,'that this Misfortune is very often not to  
he discovered, till too late, .when, for Instance, the Boneheing  
totally corrupted, the superincumbent Parts begin to he raffed  
in a Tumor. Now 'tis Obvious, that a Discovery Of this Kind  
must necessarily he Very difficult, if we only consider, that the  
Disorder is lodged in the Middle of the Bones. The following  
Considerations may, however, give us some Light in this Affair.  
If we know, for Instance, that there is such a morbid Cacochymy  
in the Body, as is most frequently observed to affect the Bones ;  
**such** aS a Lues Venerea, the Scurvy, and, in young Patients, rhe  
Rickets, which last Disorder Often affords a strong Suspicion of a

It’ent Lues Veneres. From these we know, that the Causes pre-  
disposing to this Disorder are in the Body- But the almost only  
Sign os the Presence of the Disorder is, when a profound, obsti-  
nate, and intense Pain affects, aS the Patients say, the internal Parts  
“of the Bone, and is accompan/d with a Sense of a stow Corro-  
from Besides, this Pain is increased by the Heat of the Bed, by  
violent Exercise, and the immoderate Use of Aromatics and  
Wine. But tho’ the Part affected IS strongly press'd or rob’d,  
yet the Pain is not by this means increased. Nor is this to be  
wondered at, since the hard Bone hinders the external Touch  
from acting upon the fart .affected. These are the Signs of the  
Disorder, when beginningbut when, after the Corrosion of the  
Bone, the external Periosteum hegins to be affected, the. Pains  
are increased, and greatly augmented, by being rudely touch’d; at  
the same time a soft Tumor of the superincumbent Parts arises,  
and, for the most part, the Substance of the Bone is previoufly  
raised in a Tumor; and, in this Cale, the Disorder is easily disco-  
vered, but too late, because the whole Substance of the Bone,  
being already corrupted, admits of no Cute, but will either he  
spontaneously separated from the live Parts, or must be remov'd  
cither hy the Knife, or the actual Cautery.

A difficult Separation, Abstersion, and Cleansing of the Part,  
prognosticate many Misfortunes, and a difficult Cure.

δ᾽μά \*' .. . . .

If we carefully Consider what has been hitherto said. Concern-  
ing the Nature of this Disorders it will be sufficiently Obvious,  
that, in such a Case, the worst Symptoms are to be dreaded, and  
that the Cure must he highly difficult; for, in the middle Cavity  
Os the herd Bone, is lodged the corrupted medullary Oil,, which,  
in Order to the Cure, must he removed, and washed away. But  
there is no way in which it can be discharged, unless the Bone is  
previoufly corroded, or a Perforation artificially made in it. This  
Oil, in the mean time, will by its Continuance, and the Heat of  
the Body, become daily more acrid, by which means all the Sym-  
ptoms will, he increased. Besides, if the internal Surface of  
the Bone should he corroded by this acrid Sanies, tho' the Parte  
of the corrupted Bone should be separated from the sound live  
Parts, yet they would remain in the middle Cavity Os the Bone,  
and,, by their Bulk and Asperity,, injure the tender Marrow, and  
hy that means produce new Misfortunes. Tis certain from  
practical Observations, that snrprising.Degeneracies Of the Bones,  
intolerable Pains, and Death itself, have been produced by this  
Disorder.

TheGnreof thisDisorder is mostcommodiousty attempted,  
. first, by filling, all the Vessels with inch Decoctions aS are not  
Only Of an highly penetrating and abstergent Nature, but, also,  
. resist Putrefaction-; secondly, by moving all the Humours  
strongly, and soliciting a Discharge Of Swear, by means Os  
..warm Vapours, properiy apply’d to the Body; and, thirdly,  
at the time the Sweat is flowing, thy determining the Motion  
Os the Humours to the Part.affected, by means, os Fomenta-  
tions, and warm Vapours apply'd to it in particular.

. When the Tumor os the superincumbent Parts Openedssponi  
laneouflyj.KFaeis, according TO Doctor *Freind,* in his History of  
Physic, was for no other Method of Cure, than: removing the  
Corrupted Part Of the Bone, either by the Knife,, or the actual  
Cautery. *Petrus de Marchettis,* .in *Qbs.ervaV. Medie. Chirurg, rayior.  
Syllore,* as soon as a Patient complained Of a-pungent Pain in  
the Joints of his Hands Or Feet, tho' there was no Tumor, yet  
ordered ardeep Incision to be made,-and the corrupted Part Of  
the Bone to be removed , by the.Knife, and the actual Cautery.  
But, before this cruel Method is used, the following Measures,  
which have often- been attended; with Success,, may he taken.

. I. The Fornes Of the Disease is lodged in the Cavities Of the  
Bones, in consequence of which external: Remedies: cannot?  
reach it, excepte in so far. as,theing received into the bibulous\*  
Veins, and: mixed: with circulating Blood, they; are'-along with-it''  
convey’d thither.. ’ The .Only-Method, then, remaining,seems to1he, to fill the Body with a thin Fluid, which is not Only penetrating1and detergent, but, also, resists Putrefaction. Then let this Fluid  
hecarry’d through theVefleis with ^ accelerated Motion, and  
Its Efficacy, as.mnehas possibly,determined- to the Parr affected,  
for in-this Case ins highly probable, that- such a;Fluid being con-  
veyd to the Part affected .thro^ -the: vital Vesseis- lodged in the  
Substance of the Bone and the Marrow, as yet not destroy'd, the  
Putrefaction may, by that means;be stopt, the.'corrtipted-Parts  
separated from, such as are live and sound,-the medullary Oil di- .  
Inted, resorbed by the bibulous Veins, and carry’d“Out of the'  
Body-byDrineor Sweat, forthat the putrid Humours, lodged in-  
the Cavities of the Bones, maytheresorbId by the Blood, is suffi-*V*Cientiy obvious from a putrid, hectic Fever,-which, when - rising"  
io a.great Degree-Of Malignity;-often infects the'Blood-with a-  
violent Cacochymy. But the liberal Useos such a penetrating,-  
detergent, and antiseptic Fluid' will hinder the absorbed putrid:Humours from proving injurious. The theft Ingredients sor-  
preparing: a .Fluid of this Kind are those Woods which are fnher  
nish’d with an aromatic Fragrance, and **a** large Quantity of **bah.-**

samtc Resin, such aS Jnnipur-wood, Boy-wood, Oak, imd, what Is  
of. all Others the most proper forthis Purpose, Guaiacum.wOod,  
a Decoction Os which, when duly prepared, is gently acid, and  
highly balsamic. But as these Woods are hard, and contain **a**large Quantity of Resin, the Water cannot easily penetrate into  
them, unless they are previoufly shaofd down, digested for some  
time in a gentle Heat, and boiled for some Hours in a close  
Vessel. Sometimes, when these Woods stand in Digestion, a  
small Quantity Of some alcaline Salt is added, that the Water  
may the more easily penetrate into their Substance 5 and, towards  
the End of the Boiling, a few Ounces of rectified Spirinpf **Wine**are to be added, that all the resinous Portion Of **the Webds may**be the better dissolved. Thus :

Take of green and weighty Gnaiacum-wood, ten Ounces;  
and of the Salt of Tartar, half a Drath . After these are di-  
gested in six Pints os Water for twenty-sour Honrs, then boil  
for two Hours in a Vessel placed within another, (in  
Diplomate) adding towards the End sour Ounces os recti-  
Tied Spirit Os Wine. Then let them boil a little, and keep  
for Use,- and upon tho Residuum of rhe Decoction pour three  
Pints of fresh Water, and let them boil for four Hours.

Of the former Decoction, let tfc Patient take four Ounces,  
four times a Day, in the Morning'at Seven O’Clock, then at  
eleven, then at sour in the Afternoon, and lastly at Seven in **the'**Evening. ; .

\* The weaker Or second Decoction he Inay use for common  
Drink.

Decoctions Of the Woods Of juniper,- Sassafras, BOX, 2nd Oak,  
may be prepared in rhe satne manner. -

The Fomentations are to be Linen Cloths soak’d in these  
Decoctions..——.-

In such a Decoction' Inay be Infus'd Shavings Of the Wood  
Of Sassafras, which, being furnish'd with a kind of volatile Frau  
grance, cannot bear long boding without losing its medicinal  
Virtues. The Patient is to take a few Ounces of this Decoction  
three Or four times a Day, using? at the same time, for commoti  
Drink, a weaker Decoction, prepared by an Affhsion ol Wares  
to the Residuum os the former. A larger Or a lesser Quantity  
Of these Decoctions is to he us'd according to the Age, the  
Temperament,Or Strength, Of rhe Patient, but 'tis always bene-  
ficial to drink aS much of them as he can bear, for by this  
means the whole Body will he fill'd with a penetrating deter-  
gent and antiseptic Liquor, which is the first Intention of  
Cure. . - . -

2. After the Vessels are full, and the Body begins to become  
tumid by a liherai Use of these Decoctions for some Days, it  
is expedient to accelerate the Motion Of the Humours thror  
the Vessels: We may at Pleasure increase the Motion Of the  
Blood by Frictions, for which Intention they are generally us’d;  
but this Effect is most Commodiouhy produc'd by a warm- Va-  
Pour surrounding and acting upon all the parts of the Body, and  
by that means procuring a Sweat; by which the fluid Drink  
is dissipated, and a fresh Opportunity afforded Of filling the  
Body again with the same Decoctions: For this Purpose the  
Patient is to the stripe naked, cover’d with a waxed Linen Cloth  
and; exposed TO the Steam or Vapour of warm Water, or, which  
is Of all others the most effectual, that of Spirit of Wine:  
This penetrating Vapour can hardly act upon the Body for St-  
few Minutes, before the Patients begins to become warm, and  
have his Body Cover’d with\* a' prhstise; Sweat, which IS some-  
times observ'd to smell of the Decoction drank. Bytish means?  
so profuse Sweats are- excited, that the most robust" Patients  
Often, fall into- Deliquiuths, when expos'd for a considerable  
time TO the Steam Or kindled Spirit of Wine. For this Reason  
great Caution is necessary; fince we know from Experience, .  
that the Use OP. this Method, in a LnesVenerea, has sometimes  
destroy’d the Patients, whilst, by unskilsuf Practitioners, these'  
Sweats-have - been longer conrinned, than the Strength of the  
Patient would admit, in weak COnsqtutio'ns\* 'tis shfficient try  
oontintie the Sweatingssor half an) Hour every Day, and'the  
most robust and-Vigorons'can hardly hear it for two‘Honrs; *sot*which Reason 'tis expedient, that the Physician should: always  
be presenr,.in order to judge how long- the Sweat should' by  
Continued. After this the Patient into have his Body - wiped  
with warm Linen Cloths, and be laid Jo I warm Bed; by which  
Ineans the-will swear gently-for an’ Hour. Or two. Bhe since,  
after the Swear, the Access'Of the cold Air' would produce *she*worst-ofCon sequences, 'tss expedient1 the Air'of rhe ChamheY  
should he sufficiently warm, which End is most Commodioufly  
obtain’d byinndling properMare rials ’in a'Stove. For this Purpose,-  
also, some rather Order, that the Patient should he in Bed, wishc  
out a- Shirt,; and have' the Steam Of kindled' Spirit os Wine  
Convey'd to this Body, fry means Of RFunhel under tho Bed-  
clothes 5 for thyinis means the Action of ryhe cold Air on the'  
Body will he prevented- \_ Bur whether the Patient sweats in *Λ*Bed, in a Quadrangular Box, or‘under'whatsuf commonly oalledd'  
*Craticula,* rhe Head is always m“he free arid disengag'dTor sear,’  
Of'a'-Sufincation: Asterine'Sweating is-oyer. Broth rwerinrodf

Ilf lean Fleshj ora small Quantity of Wine, is so he exhibited,  
that the Strength, which is often languid after Inch profuse  
Sweats, may be recruited.

Tis sufficiently obvious, that, by an accelerated Motion Of the  
Humours, Inch a penetrating Decoction must he convey'd thro'  
**the** whole Body; but 'tis requisite, the Efficacy of the Medi-  
cine should act principally upon the Part affected. There are  
Means of determining the Efficacy Of Medicines,at Pleasure, to  
any Parts of the Body. This End is obtained by such Measures  
as increase the Impetus and Quantity Of the vital Fluids in the  
Part to which the Efficacy of the Remedies ought to he deter-  
min'd. Whis Intention is answer'd by diminishing the Resistance  
. of the Vessels in these Parts, and increasing the Velocity Of the  
Circulation in them. The former of these Ends is procured by  
the Application Of warm and soft Fomentations, Cataplasms of  
**a** like Nature, or by Cupping-glasses, and the latter by Frictions,  
and the Applications Of stimulating Substances: in Disorders Of  
this kind, 'tis highly beneficial tO foment the Part affected,  
with Woolen Cloths soak’d in a warm Decoction of Guaiacum,  
.and tO make the Steam Of kindled Spirit Of Wine act fust  
Upon it.

This Method, if peestessed in for a considerable time, often  
. produces happy EffedaPf especially when us’d in Conjun-  
ction with a Diet Of an attenuating Nature, and such aS  
. resista an oleons Putrefaction.

When all. the Circumstances mention'd in the preceding Pa-  
ragsaph Concur, siich a penetrating and antiseptic Decoction,  
by an accelerated.Motionofthe Fluids, is rapidly Carried thro' the  
Vessels, and the Corrupted Matter eliminated from the whole  
Body, and especially from the Part affected, in consequence  
of the Determination Of the Decoction thither by means Os  
Fomentations, and warm Vapours: But such an Obstinate Dis-  
order is not to be remov'd in a few Days, sor which Reason  
such Sweats are for three Or four Weeks to be daily excited, a  
due regard, at the same time, being always had to the Strength  
of the Patient. The Strength is in the mean time to be sup-  
ported thro' the Whole of the Cure, by the best Aliments, but  
such aS are of easy Digestion, and not pinguious; for, by this  
Method, the Patients are generally greatly emaciated, and  
their whole Fat not Only dissolv'd, but also, carried *off,* by  
Sweat, and, as the principal Malignity Of the Disorder arises  
from the corrupted medullary Oil, 'tis Obvious, that pinguious  
Substances are to be abstain'd from, lest they should increase  
the Nature Of the Disease: Broths,therefore,prepared ofFlesh,  
and the Fat carefully remov'd. Biscuits, Decoctions of Barley,  
Oats, Rice, and Millet, Panadas, and ripe Summer Fruits, ate  
most proper in this Case: For Drink, Whey, or Milk diluted  
with three times the Quantity *Of Water, may* he us'd, but a  
weak Decoction Of Guaiacum, render'd palatable by Raisins  
Or Liquorice, is still better, and more efficacious.

All these Measures, duly taken, often produce the desir'd  
Effect in such Disorders, even aster tho Extirpation Of the  
Parts has been judg’d necessary. The Remission of the Sym-  
ptoms, and the Subsiding Of the Tumor, are the Signs, by which  
**we** know, that the Cure proceeds well; but 'tis to be observ'd,  
that sometimes the Fabric of the Bones, by means of these  
Disorders, so degenerates, that thro' the whole Remainder of the  
Patient's Life there remains a considerable Tumor in the Part  
affected, tho' .the whole Corruption Of the medullary Oil is  
happily remov'd, and such a Tumor is often afterwards at-  
tended with no Other Inconvenience, than the Deformity Of  
the Part: It has, also, been sometimes Observ'd, that, during the  
**Cure, the** Corrupted Part Of the Bone has been happily separa-  
ted, and, a Suppuration of the soft incumbent Parts happening,  
extracted, and a successful Cute Produc'd. . -.

: But, aS this Disorder is frequentiy incident to Children, they  
cannot always be prevail’d upon to drink a .sufficient Quantity.  
of such Decoctions, and» aS their tender Bodies are hardly able  
to bear this Method *of* exciting Sweats, it is proper once An  
Week to give an hydtagogne Purge; and. On the intermediate,  
T)ays, gentle Scorbutics. The Part affected is, in the mean time,,  
to be continually wrapt up in penetrating Fomentations pre-  
par’d Of Vinegar, Salt, Urine of sound Persons, Rue, and  
*Alliaria.* Whey is, at the same time, to he us'd for Drink.  
Thus, says *Van Svociten,* I have known a Cute happily pro-  
duc'd by the Use Of these Measures for some Months: But:  
in such a Case there is almost always a small Perforation spon-.  
taneoufly made in the integuments, a Certain Quantity Of  
Sanies is discharg'd, the Swelling os the Bone gradually sub-.  
sides, and sometimes the Parts Of the Corrupted Bone Come  
**Our,** and an hollow Cicatrix remains ever after.

But when this Disorder is become so inveterate, that almost  
the whole Marrow is corrupted, and the Vital Vestals running  
thro’ it totally destroy'd, scarce any happy Effects are to he  
hoped for from the best Remedies; for the Use Of Decoctions  
will he Of no Service, fince the Soundness of the Vesteis is re-  
quisite, in order to convey their medicinal Virtues to these  
Parts, in such **a** Situation the worst Consequences are to he

**expected,** since the corrupted Oil, which daisy becomes more  
malignant, is lodg'd in the Cavity of the Bone: The only re-  
maining Method, therefore, is, to make a Perforation in the  
Bone, and by that means procure a Discharge of the Corrupted  
Matter; for by so doing we imitate Nature, which, by a Corro-  
fion Of the Bone, sometimes throws Out all the Corrupted Oil;  
and the best Surgeons furnish ns with instances, in which this  
Method has succeeded.

If the arterial venous Or lymphatic Vessels are Obstructed,  
either thro' a Defect Of fresh Fluids, Or a Stagnation Of those  
Convey'd to them, similar Disorders are Produc'd in these  
Parts, the Order being only inverted and chang'd.

Thus, 'tis obvious from what has been said, what terrible  
Misfortunes are produc'd, when rhe medullary Oil becomes  
stagnant and corrupted in its Vesicles, or in the Interstices os  
the Bones. But that there may be a due Secretion Os the Mar-  
row, and that it may be reabsorb'd, perhaps; partly by the  
Veins, without heing consum'd by the Motions os the Body, a  
quick Circulation or the Viral Juices thro' these VestelS, which  
Convey the Fluids to the Marrow, and Carry them thence, is  
requisite. Is, therefore, an Obstruction is, by any Cause, produc'd  
in the Texture of those Vessels, which are distributed among  
the Laminae of the Bones, which near the Joints recede from  
each other. Or in those Vessels which run thro' the Periosteum,  
Or the Membrane which externally surrounds the Marrow, the  
Secretion of ths medullary Oil will he disturb’d, and that Part  
of it, which is already secreted, will become stagnant, since **the**tender medullary VehCleS, and their Emunctories,are Compress'd  
by the adjacent obstructed and tumid Vessels. The fame **effect**will, also, be produc'd by an Obstruction of the Vessels os the  
external Periosteum ; for we have already Observ'd, that It trans-  
mitS all the Vessels, which are either Convey'd to, or return  
from, the Celluhe of the Bones, and the Marrow.. Thus a Dis-  
order of the external Periosteum may he propagated, not only  
thro\* the whole Substance Of the Bone, hut, alfo, thro' the  
Marrow, only with this Difference, tint the Order of the  
Symptoms is inverted, for when the medullary Oil is first Cor-  
rupted, being chang’d into an acrid Sanies, it will Corrode **the**Vesicles, in which it is Contain'd, and their Vascular Texture.  
Hence it will, in like manner, destroy the Membrane of **the**Marrow, the internal Periosteum, and the Substance of the  
Bone and, at last, having corroded the Bone, it will affect the  
external Periosteum, and thus the Misfortune will he propagated  
from the internal to the external Parts: But, when the Disorder  
begins with an Inflammation Of the external Periosteum, it pro-  
ceeds from the external to the internal Parts; and, first affecting  
the Bone, at last conveys the Taint to the Substance Contains  
in its Cavity; for that a Disorder of the Periosteum forthwith  
affects the Bone, is snssicientiy obvious from what is said under  
the Article CAPUT, and *Aristotle in Histor. Animal. Lib.* 3.

*. Cap.* II. observes ψιλήμενα τὰ όστἄ τῶν ήμένων σφακελίζει, ‘c that  
‘ζ the Bones become sphacelated when depriv'd Of their Mem-  
*" branes.”* But, how soon the Vital Fabric of the Bone may he .  
destroy'd by a Disorder of the Periosteum, is sufficiently obvi-  
Ous in a Paronychia, in which a Violent inflammation, accom-  
panied with intolerable Pain, happens in the Periosteum of **the**last Phalanx of the Fingers, for such a Disorder hardly conti-  
nues for a few Hours, till the whole Phalanx is entirely spha-  
Celated, and at last falis Off.

The Diagnostics, therefore. Prognostics, and Cure, of these  
two Species os Disorders are the same.

For when the Texture Of the Vessels of the external Pthe  
riosteum of the Substance Of the Bone, and of the internal pe-  
riosteum are first affected, the Disorder will at last reach the  
medullary Vesicles, and the same Effects will: be produc'd, aS if  
the Disorder had. proceeded from a Corruption Of the medul-  
lary Ofl, sor which Reason the Method of Cure must he tho  
same in both Cases. . -. .6

Hence 'tis, also. Obvious, that there is great Danger ac-  
cording to the different Parts, in which the Cause os tho  
i Disorder is lodg'd ; and these things premis'd render **the**

Diseases of the Bones better understood, .'.ss

The' the shghtest Inflammation Jn the external Periosteum  
may Produce those Disorders, which otherwise arise .from **a**Corruption Of the medullary Oil; yet 'tis obvious, that such an 1  
Inflammation may be more easily cur’d, than when the inter- .  
nal Periosteum, and the Membrane surrounding the Marrow,.  
are inflam’d, since in the former Case happier Effects aro to :  
**be** expected from external Medicines; and fince, in many PartS  
Of the Body, the Surgeon’s Hand may have immediate Access  
**to** the Part affected, by making an Incision in the integuments ; -  
in Consequence Of which, its Separation, Abstersion, and MundIsi-  
cation, may be the more easily obtain'd. It is, therefore, a Consi-  
deration Or great Moment, in what Pan of the Body the first Cause

ofthe Disorder is lodg'd; and, every Other Circumstance heing  
alike, the Danger always bears a direct Proportion to the Depth  
of the Disease. Thus, from what has been said, we are hefrer  
qualified not only, to know, bus, alio, to cure, the Disorders  
incident to the Bones. -

I. A flight Inflammation Of the Bone is produc'd by an  
Inflammation of the external Periosteum, the Cautes of which  
are very numerous, aS is obvious from what is said under the  
Article 1NFLAA1MATIO : And its Effects are sufficiently  
known.

The most flight Disorder, therefore. Of the Bones is that  
which begins in the external Periosteum ; which, as we have  
already observ’d, consists of an Intertexture of numerous *Ves-  
sels ,* sor which Reason an inflammation may happen in it from  
a great Number of Causes specified under the Article **INFLAM-**KiATIo; and when an Inflammation is once produc'd, all its  
Effects will follow; and its Various Terminations are to be  
expected.

2. Such an Inflammation is known by the Symptoms com-  
mon to a profound or deep Inflammation, the Pain os which  
is increas'd by being press’d. **I**

AS is observ’d under the Article INFLAMMATlo, the prin- l  
Cipal Signs Of an inflammation are Tumor, Redness, Heat, 1  
Pain, and Pulsation, in the Part affected. But, if the external i  
Periosteum alone is inflam'd without the incumbent Parts, 'tis j  
sufficiently obvious, that the Tumor and Redness cannot be j  
perceiv'd, in which Case the Pain, the Heat, and sometimes, ]  
‘alsio, the Pulsation, are (o be accounted the Signs Of the ln- i  
flammation; but when the Part affected is so press’d, that the  
Effects of the Pressure reach to the Periosteum, the Pain is  
augmented, and by this means the Disorder is distinguish’d  
from an Inflammation of the internal Periosteum, the Mem-  
brane surrounding the Marrow, or the Marrow itself; for in  
such a Case, as we have already, observ’d, the Pain is not aug-  
mented by external Pressure, because all these Parts are safely .  
defended by the bard Bone. But in those Parts where the  
Bones are cover'd by strong Muscles, and a large Quantity of  
Fat,, about the Os Femoris, lor Instance, the Pain is not aug-  
mented, except by a strong Prestine. Y- -

3. Many terrible.'Syinptoins are to be expected, unless this  
Disorder is speedily cured.

For, since all the Veffeis conveyed to the Substance Of the  
Bone pass thro' the external Periosteum before their Insertion in  
the Bone, 'tis obvious how dangerous an Inflammation in this  
Part must be ; for all The Disorders before enumerated may arise  
from an Inflammation ofthe Periosteum; and, tho' the injury done  
to the Bone is Only very flight, yet tedious and long protracted  
Misfortunes often ensue; tor, is the Bone is only Corrupted in a  
small Part, the Periosteum will never grow there again, but the  
adjacent and incumbent Parts vzili be irritated by an acrid  
Sanies, by which means malignant and incurable Ulcers are  
often produc'd , especially if this happens in those Parts of the  
Body, where a large Quantity of Flesh covers the Bone, and  
hinders a safe Incision to the Part affected. Thus, for Instance,  
when the Periosteum Of the Os Femoris, near its Articulation  
with the Coxa, is inflamed and suppurated; 'tis Obvious how  
difficult the Cure must be, and what a Train Of Misfor-  
tunes must arise from that Circumstance. Thus, says *Van  
Siueiten,* I know a hopeful Youth, who, after neglecting a deep  
Inflammation Of the Periosteum of the OS Femoris in this  
Part, which ran between the Interstices of the Muscles, could  
never have the Part depurated, the' Various Incisions were made  
in order to procure a Discharge of the Pus. Hence, after an in-  
tolerable Degree Of Misery protracted-sor some Years, he at last  
died os a purulent Tabes. When, therefore, from proper diagnostic  
Signs, 'tis certain that such a Disorder is present, the most  
efficacious Remedies are forthwith to be tried, in order to cure  
the Inflammation by a Resolution. Thus, a Suppuration in these  
Cases so dangerous, and, winch is still more *so,* a Gangrene,  
will he prevented. ’. - ’ .

4. This Disorder is cured like Other inflammations, making  
it, at the same time, the principal Intention, to carry the pec-  
cant Matter from the Bone outwards; winch End is obtain’d  
by Fomentations, and sometimes by incisions.

In this Case, therefore, all the Measures mention'd under the  
Article INFLAMMATIO, for the Cure Of a resolvable Inflam-  
mation, are forthwith to he taken: And aS, in this Case, the  
Corruption Of the subjacent Bone is justly to be dreaded, we  
are by all means to endeavour to draw the Disorder to the  
external Parts. For this Purpose all those things are to he us'd,  
which are specified undor the Article INFLAMMATIO, as pro-  
per for preventing the spreading of that Disorder, - a Revulsion,

for Instance, of the Impetus Of the Blood to other Parts, by  
Suction- Friction, Epifpastics, and Vesiatories, Fomentations,  
Baths, Fontaneis, Setons, and strong Purging. Thus the softest  
Fomentationsand Cataplasms are to be Day and Night applied to  
the Part affected for, by this means,theextemal Integuments will  
he render'd flaccid, and the inflammatory Matter isfometimesde-  
riofd to that Parr, where it does far less Harm, than if the sub-  
jacent Bone was affected by it: There are many Instances Of  
deep internal inflammations thus deriv’d to the external Parts,  
and the Patients by that means greatiy reliev'd ; and *Hippocrates,*in the forty-ninth Aphorism Of bis seventh Section, telis us,  
" That a Tumor and Redness, appearing on the Breast os Pas  
" tienrS labouring under a Qinnsey, are lucky Omens, since  
(i they are Signs, that the Disorder is carried outwards.” Hence»  
in that Disorder, the most skilsin Physicians with so great Success  
foment the Parts with the softest Fomentations, and even some"  
times irritate them by Sinapisms. In the most Violent Ischiaric  
Pains, *Hippocrates* Ordered the PartS affected TO be soften’d  
with Barbs, Fomentations, and Liniments. And, in his Treatise  
*de Loots in Homine, Cap.* 9. he directed the peccant Matter to,  
he .extracted by means of Cupping-glasses. Tis, alsio, well  
known, that, in the severest Tootb-imh, the Patient is forth-  
with greatly reliev’d, when the affected'Side of the Face becomes .  
rumid and inflated. .

But when, after the unsuccessful Use Of thefe Measures, **no**Relief’is Observ'd to be afforded,‘the only remaining Method is,  
:o make an Incision of the Integuments allot once, aS far aS  
he Bone, if the State and Condition Of the Bone admit Of  
inch a Practice. In an highly acute Paronychia, - which, gene-  
sally arises from an Inflammation of the Periosteum of tho  
aft Phalanx Of the Fingers, or Os the Tendon affixed to it,  
unless an Incision is soon boldly made to the Bone, the Bone is  
sphacelated, and the Phalanx falls off aster intolerable Pains, and.  
sinuous Ulcers, which often prey upon all the adjacent Parts,  
and render the whole Hand rigid and immoveable. In lschiatic  
Pains, after Fomentations, Baths, and Cupping-glasses, had been  
us'd in vain, all the antient Physicians ordered the Part affected  
to be deeply cauteriz’d. The good Effects produc'd by an In-  
cision of the Teguments os the Cranium; after Contusions and  
Wounds,‘in Order to hinder the Bone from being affected, , are  
specified under the Article CAPUT.

That such an Inflammation is tending to an Abscess, is  
‘ known, first, by the manifest Signs os a previous ‘ Inflamma-  
, tion; seoondlyjthy the Pulsation, Fever, and irregular Horn-  
pilation; and thirdly, by an Absence Os **the** Signs Of **Re-**''solution. -' \* - . Ἀ - . - ’

So long as there are any Hopes, that the inflammation of the  
external Periosteum may be cured by Resolution, all the Mea-  
sures directed in the preceding Paragraph are to be tried. But,  
when the Disorder tends to a Suppuration, other Methods be-  
come requisite, and the following Signs inform us, that an  
Abscess is to be expected, j ....

I. There is some Hope, that a gentle Inflammation may **be**Cured by Resolution\*; but .when all the Symptoms are Violent,  
and continually augmented, the best Termination Of the Dis-  
order, which can be expected, is a Suppuration. An intense  
Pain, a Perception of a Violent Heat, and an acute Fever, are  
the principal Signs, which inform us, that such a profound In-  
flammation is incapable of Resolution, and sends to an Abscess.

2. When an Inflammation tends to a Suppuration, all its  
Symptoms are generally augmented. The Pulsation then will he  
greater, and more, distinctly perceiv'd, in the Part assessed ; a  
Fever, also, the Concomitant Os every considerable Suppura-  
Iion, will generally be present. But the principal Sign is the  
irregular Horripilation, winch when present, always lays a Foun-:.  
dation for suspecting a Suppuration in the internal PartS. in this  
Cafe the Patients are seiz’d with a Sensation like that produc'd  
by pouring cold Water On the Body, almost in the same man-;  
ner aS happens in the Beginning of intermittent Fevers. But'  
such an Horripilation is immediately remov'd, and afterwards  
returns in an irregular Manner. Now 'tis certain from practical  
Observations, that such irregular Horripilations are present,  
when any considerable Inflammation is converted into a Sup-  
puration. '

3. The Signs of a Resolution are explain’d under the Article  
INFLAMMATIO: But, in such Cases, the Recency of the Dise  
order, the Slightness of the Pain, the Smalness of the Fever, and  
a moderate Sense Of Heat in the Part affected, lay a Founda-  
tion for the Hopes of a Resolution. If, therefore. Symptoms con-  
trary and Opposite to these are present, an Abscess, Ora Gangrene,  
is to be dreaded.

Bur, that an Abscess- is actually present, may he known  
from the Signs Of a deep-lodg’d Suppuration, specified under  
the.Articles INFLAMMATIO and ABScESSUs.

Unless, from previous Signs, ’tis evident that **a** violent **In-**flammation has preceded, the Abscess, subsequent to it, is not  
easily discover’d, in Abscesses lodg'd near **the Surface** of the

Body, the Softness Os the Parr, the Fluctuation Os. the  
consain’d Pus, and the' Whiteness, are sufficiently shewn un-  
**der the Article SUPPURATIO: But where the Disorder is**lodg’d about those Bones, which are cover’d with a large Quan-  
fity of integuments, the latent Abscess is not without the greatest  
Difficulty Io he discover’d; for sometimes Only a small Quan-  
City Os Pus, collected between the Bone and the Periosteum, pro-  
duces no sensible Tumor: It, also, frequentiy happens, thasp in  
such Cases, the Pain does not remit, tho’ the Pus is form’d,  
because, being gradually increas'd in Quantity, unless it corrodes  
rhe Periosteum, it makes a Way for itself, between it and the  
subjacent Bone, and, thus by a flow Dilaceration, separates the  
Periosteum from the Bone, a Circumstance productive os the  
most intense and intolerable Pain: Tis not, therefore, to he won-  
tier'd at, if such a latent Disorder should sometimes deceive the  
most skilful, and remain undiscovered till too late, that is, till  
the Bone is corrupted. Or the Pus, aster corroding the Pe-  
riosteutn, is distributed thro’ the adjacent Parts, and produces  
malignant sinnons Ulcers. But when an Abscess is formed about  
rhe Spine of the Tibia, it may be Very easily discover'd, whereas  
in other Places we almost Only know, that an AbscefS is form’d,  
by the'Signs from which we conclude, that an Abscess will  
he form'd.

Then the Pus, corroding the Periosteum, will soon lay the  
' Bohe bars, deprive It of Vessels, and corrupt it. See the

Article **StiPPURATIo.**

In a Suppuration, as is Observ'd under the Article INFLAM-  
**MATIO,** the small Vefleis, insarcted with an inflammatory Mat-  
ter not capable of Resolution, are broken. When, therefore,  
tins happens in a Suppuration os the Periosteum, the Vital Com-  
munication is destroy’d in that Part os the subjacent Bone,  
which receiv'd its’Juices from the Vessels already destroy’d by  
**the** Suppuration, and consequently a Disorder must necessarily  
happen' in’ the Bone itself. Besides, the Pus, lodg’d in a deep  
Parr, will become gradually more acrid, and corrode the con-  
tiguout Surface Of the Bone, by which means all the Sym-  
ptoma-will be soon augmented. And the Quantity of the Put  
being enlarg'd, unless, in consequence of a Corrosion of the  
Periostium4.it is dispers'd thro' the adjacent Parts, it will more  
and more separate the Periosteum from the Bone and conse-  
quently a larger Portion os the Booe, will be. depriv'd Of its  
periosteum, and corrupted. Besides all these Disorders, which  
happen to the subjacent Bone, from a Suppuration of the Pe-  
riosteum,’ all . those are also to be dreaded, which are produc'd  
by Pus,' remaining long, and becoming corrupted, in a close  
Place. See the Article **SUpRURATIo.**

For this Reason the Abscess is to be forthwith opened, the  
Pus eliminated, and the Ulcer cleaned. Then the Bono is to  
he treated’ in the manner directed under the Article  
CAPUT, when the Craninm is denudated, or laid bare.

In . order to prevent all. these Misfortunes, and cure those  
others already present, there is no other Method left, than  
boldly to mahe an Incision in all the Integuments, that thus the  
Pus may be discharg'd; and an Access procur’d to the Bone, as-  
fected.‘It is dishchlG and often highly dangerous, to make,  
such a deep Iheisiohe But, as *Celsus,* in *Lib. J. Cap.* 33’. when  
speaking .of the Extirpation of Members, excellently observes,  
that tC 'Tis a Matter os no Moment, whether the only remain-  
stag Method osRelief be sufficiently safe or not," but since'in  
fuch Cases, not only‘the Reputation of the Physician, but  
also, the Life os the Patient, is at Stake, great Prudence and  
Caution are requisite: Anatomy demonstrates the Situation of the .  
large Vefleis, and other Parts, which ought to be avoided. Tis  
howeverX so beobserwd, that, in different Persons, the Situation  
-of the Vesseis is often found Very different; for which Reason,  
in 'difficult Cases, 'tis more expedient, first, to make an Incision.  
in shei Fat and Skin,and then to consider, whether, and in what  
manner, we may safely proceed farther, than to plunge the Knife  
at \ once to the affected Bone, for it often happens, that when  
an.Incision is shade'in .the common integuments, the Pus,  
having corroded the Periosteum, and diffusing itself thro' the  
adjacent Parts, finds a" way for Its own Discharge, sand points.  
our a Method os making, a safe, incision into the sinuous Ulcer,  
and arriving at the Past affected. All the Measures taken in the.  
Cure, os an Abscess, specified under the. Article **SUPPURATIO,**are, also, to be taken, and since, in Cases Of this kind, the Pus  
generally makes sinuous Passages.’for 'itself, and fince the Parts  
Off which it acts are sordid,.’ especially 'when It has remain'd  
for a Considerable time, mild Detergents are generally injected ;  
especially such aS are prepar'd of Aloes, Mynh, Mastich,“and  
Sarcocolla, withan. Addition'of Honey, Turpentine, and-the  
Yollcof an egg) For these, not Only answer the Intention *os*cleansing the Ulcer; but, also, prove beneficial, to the affected  
Bone. Besides, all those.. Measures recommended under, the Ary  
ficin CAPUT, in the Cute’Of the Cra run m,s.then depriv'd, ofthe  
. Periosteum, are tohe taken in fuch Cafes,when, alter an Abscess,  
the Bone is depriv'd of the Periosteum;

That Inch an Inflammation is tending to a Gangrene o .  
the Parr, is known, first, from rhe Signs of the highest In-  
stammatiorij secondly, from a Freedom from Pain in the  
Part affected, without a sufficient Cause, and thirdly, from **a**dense flow-increasing, and not Very painful, Tumor of the  
incumbent Pans.

Under the Article INFLAMMATIO, when treating of the Va-  
rinds Events of an Inflammation, 'tis observ'd, that a Gangrene  
sometimes shcceeds it, and the Signs are describ'd, by which **a**future Gangrene is foreseen, and a present One known, but,  
among these Signs, there are some, by which a Gangrene is only  
discovered in the external Parts of the Body, which, however,  
are not sufficient for distinguishing a deepsseated Gangrene of  
the Periosteum for the Blisters of the Epidermis, the livid, dark,  
and black Colour, are not present, till all the Pans are corrupted.  
But here we treat Os those Signs, by which a Gangrene Of **the**Periosteum may be discover’d, tho’ the incumbent Parts are  
pot as yet affected with a Gangrene.

I. That a terrible Inflammation is present, may be known  
from the Violence, and sudden Augmentation, ofthe Symptoms,  
Now the principal Signs Of an Inflammation of the Periosteum,  
as we have already Observ'd, are Pain, Heat, and a Sense of **a**deep-seated Pulsation, and, if all these are Very Violent, and in-  
crease suddenly, a Gangrene is justly to be dreaded.

**2.** How fallacious a Sign is the sudden Removal Of Pain in  
violent inflammations, is shewn under the Articles IN FLAM-  
MATIo and GANGRENA, where the Reasons are, also, given,  
why, when the Vessels are destroy'd by a Violent Inflammation,  
a Cessation of Pain ensues. The same, therefore, will happen in .  
this Cafe , when the Inflammation is cur'd by Resolution, the \*  
Pain is indeed diminish'd, but slowly and gradually ; nor will **a**good. Resolution eVer happen after a yery Violent Inflammation,  
as is obvious from the Article INRLAM.MA.TIo: When, there-  
fore, without a good and laudable Caule, that is, without the Signs  
of a Resolution, a sudden Removal of Pain happens after **a.**violent Inflammation, it is a bad Sign, and always indicates, that  
**a** Gangrene has succeeded the Inflammation.

3. Then the Taint is propagated thro' the incumbent Parts 2.  
and, first, the Panniculus Adiposos is affected; which, by very  
flight Causes, is Often rais'd into a large Tumor. But as all the  
Symptoms of an Inflammation Cease, when a Gangrene is pre-  
sent, the Tumor will not have the Hardness and Resistance  
Observable in a Phlegmon hut will he flaccid, hardly sensible  
of any Pain, and, in this Case, always indicates, that the Tunica  
Adiposa is, in like manner, becoming gangrenous. See the Ara-  
**Cle SUPPURATIO. -**

That, a Gangrene is present, may be known, not Only from  
the Signs enumerated in the preceding Paragraph, but, also,  
from the pale, Cineritious, and livid Colour of the incum-  
bent Parts.

For when those Signs, by which we discover that an Inflam-  
mation Of the Periosteum tends tO a Gangrene, continue. Or are-  
increas'd, we know that the latter is either already present. Or  
will soon be so. The chang’d Colour Of rhe Integuments,)  
mention'd under the Article INFLAMMATIo, indicates, that the-.  
Gangrene, begun in the Periosteum, is already propagated to the: -  
incumbent Parts. Thus *Hippocrates, its* the second Aphorism of  
his seventh Section, telis us, " That, his a bad Sign, when the  
"Flesh becomes livid, in Consequence of a Disorder Of the  
" Bone," .

Then the Bone, heing laid bare, .and deprived of Vessels, ,  
and vital juices, is by the acrid, putrid, and gangrenous  
Matter, consum'd and render’d carious; and he Contagionis:  
. quickly spread to the adjacent Parts.

For, when the Periosteum is. Corrupted by a-Gangrene, the  
vital Influx and effinxi Of the Humours is totally. destroy’d in  
that Part of the Bone, which was coVered with the mow Cor-  
rupted Part os the Periosteum, and Consequently the; external  
Lamina. OF the Bone will become mortified : The intermediate  
Vesseis‘hetweed this and the succeeding Lamina, may receive \_  
the Vital Juices, either scorn the Vessels of the internal Pe- -  
riosteum, distributed thro' the Substance of the Bone, or from  
the Vesseis running between-the Lamina Of the: Bone, Or those  
rising, from the 'external Periosteum, which is .aS yet sound:  
But the mortified Part, incumbent, upon these Vessels, will not  
Only soon suffocate .and destroy their Life; bur. the gangrenous  
Gore of the mortified Parts will, also, conode all around it, and  
by.that, means, prodnee.a . terrible Caries.Of the Bone. Now  
when all the incumbent Tarts, together with the .Bone itself, are...  
corrupted, a Sphacelus .is present, which soon, infects the ad-  
jacent Paris:. Hence, the Reason is Obvious, why this Disorder  
spreadsdo first.

FOI.this.Reason an Incision is forthwith so be made,, in the:  
Part affected, to thcEoaet and the-Wound is to be Cleans'd,

and the Bone Cur’d in the manner directed under the Article  
**CAPUT.**

\*

. The whole Hopes Of a Cure consist in this, that, if there is  
still any Part Of the Substance os the Bone alive, this live Part  
may he separated from the incumbent mortified Parts, and re-  
generate the lost Substance; Os, if all the Vessels dispers'd thro'  
the whole Thickness Os the Bone are already mortified, an  
Aperture is to be made in the Bone, thro' which the corrupted  
Marrow may he discharg'd. For 'tis impossible the Marrow  
should retain a laudable Quality, when the whole Substance Of  
the Bone is mortified. The latent Disorder is, therefore. Io be  
forthwith uncovered, by making an Incision to the Bone; nor  
is this Practice so barbarous and Cniel, as at first it may feem,  
fince all the incumbent Parts are generally gangrenous. *Celso's,*therefore, when in the second Chapter of his eighth Book treat-  
ing Of the Cure Of these Disorders, justly advises. “ First, to lay  
" bare the Bone, to extirpate rhe Ulcer, and, if the Disorder Of  
" the Bone is larger than rhe Ulcer, to remove the Flesh, till  
" the Bone appears sound on all Hands.” For if, aS we have be-  
fore observ’d, there is sometimes a Necessity sor malting an In-  
cision in the live Parts, Covering the inflamed Periosteum, in  
Order to hinder the Disorder from affecting the Bone, such an  
Incision will be still more requisite, when a Gangrene and Cor-  
ruption or the Bone are already present; for there can be no  
Depuration of the affected Bone, unless there is first a Passage  
outwards made for that Purpose.

. After the Incision, therefore, is made, dry Pledges are to he  
put between the Lips of the Wound, which, when left till next  
Day, and becoming tumid with the affluent Humours, will en~  
large the Orifice of the Wound, and discover the naked Bone to  
the Eye: We may, also, knthv from its chang'd. Colour, its  
Roughness and Other Circumstances, what Kind and Degree Of  
Corruption is present. See the Article CAPUT. *Hippocrates, in*the eighth Chapter of his first Book *de Iiiorbis,* seems to have  
approved of this Method of Cure; for, when he is treating Of a  
Spnacelns of the Brain, he describes a Corruption of the  
Cranium in these Words; C Is the Brain is sphacelated, a Pain  
" seizes principally the anterior Part of the Head, which  
ς \* becomes tumid and livid, the Patient being in the mean

" time seized with a Fever and Horror. In this Case, an  
iC Incision is to be made in the tumid Part; and the Bone,  
" when cleans’d, is to be scrap’d." Unde? the Article  
CAPUT, the Method is describ’d os making small Perforations  
-in the Cranium, in order to make way for the subjacent sinall  
Vessels, that by this means the corrupted Part of the Bone .  
may be the sooner, and the more easily, separated, and the lost

. Substance regenerated, and 'tis sufficiently obvious, that this  
Method must prove beneficial in the like Disorders os Other  
-Bones. But, that an happy Effect-may be expected from this  
Method, 'tis necessary the whole Substance Of the Bone should  
not be Corrupted, out live Vesseis, lying under the mortified

- Parts, are requisite. When, therefore, a Bone laid bate by Incision  
is found totally corrupted, *Celsus,* in the second Chapter Of his  
eighth Book, Orders the mortified Part to be removed with the  
Knife, or the actual Cautery, and in this he has been follow’d

- by Celebrated Surgeons: But Nature, assisted. with laudable  
Aliments, and proper Remedies, is sometimes capable Of Coing a  
great deal in Cases of this Nature.

An Inflammation of the internal Periosteum proceeds from  
the same Causes, produces the same Effects with respect to  
the interior Part of the Bone, and terminates like an Inflam-

' mation of the external Periosteum, either in an Abscess, Or a  
Gangrene; but is worse by reason of a.want Os Exhalation.  
Hence the whole Marrow, and then the whole Bone, are de-  
stroy'd by an highly fetid Putrefaction and Caries.

The internal Periosteum is by the Bone more safely defended,  
‘ than the external Periosteum sor which Reason the former is  
less frequently subject to Disorders, than the latten But since the  
internal Periosteum is Vascular, there may be many Causes of an  
Inflammation in it, and consequently Various Terminations Of  
these inflammations: And as the external Periosteum distributes  
numberless Vessels thro’ the Substance of the Bone, and re-  
ceives those which return from ir, so this seems to hold true  
in the internal Periosteum. Andas the Disorders Os the external  
Periosteum principally affect the Bone, because, when these  
Vessels are destroy'd, the Circulation of the vital Juices thro\*  
the Substance of the Bone is of course abolish’d, the same  
will hold true in Disorders of the internal Periosteum; so that  
the internal Part of the Bone may be corrupted, whilst its eg-  
temal Part is as yet sound. This seems to be confirmed by the  
Observation os Mr. *Bttys.ch* already mention'ci, for, in the Cavity  
Of rhe cubital Bone, a bony Pipe was lodg’d so entirely separate

-from its exterior Substance, as to be disengag’d and moveable.  
’ Hence, as, in the Bones of the Cranium, the’ Vesseis os rhe

Pericranium touch the external Lamins, and those of the Dura  
Mater the internal Lamina, so the same almost happens in the  
larger hollow Bones; and as, in the Diploe - between the two

Lamins of ths Crantum, these Vessels Of the Pericranium and  
Dura Mater meet, so likewise the same probably hep-hers in  
the middie Or the Bone. *Buyfih.* aS he informs us in *Thesuur.*10. N° I76. preserv’d an OS Humeri, in which un olseo-  
spongious Substance, like the Diploe Of the Cranium, is found  
between two Lamina: and he affirms, that he observ'd this in  
some Other Bones. Hence he explains how such a hony Pipe  
Could be separated from the external Part of the Bone. The  
same Author, in his *Museum Anatom,* and *Thes.* 8. N° 8.  
*Tab. III. Fig. An* 3, and 4. has a similar Instance for the Confir-  
mation of this Doctrine -, for from the OS Tibiae corrupted by  
an inveterate Caries, hy the Force OfNature, there was form'd a  
Piece os Bone, round and hollow, the Figure of which he has  
delineated in his Tables. All the Disorders, therefore, which  
happen to the Bones, in consequence Of an Inflammation, Sup-  
puration, or Gangrene of the external Periosteum, may, in like  
manner, happen, if the internal Periosteum labours under the  
same Misfortunes. But if we consider, that all the Corruptiori  
produced by Disorders of the internal Periosteum is lodg'd in  
the Cavity of the Bone, and cannot possibly find a way for  
its Elimination, it will be sufficiently obvious, that Disorders  
of the internal Periosteum are most to bo dreaded. fos, by this  
means, the Marrow will foon be Corrupted, and ail the Missor-  
tunes before-mentioffd produc’d.

Hence ’tis, also, obvious, that whether this Membrane is  
itselTfirst inflam'd, or afterwards injur'd, by a Contagion com-  
municated from the Marrow before corrupted, the same  
Disorder, that is, a Caries Of the Bone, will soon he pro-  
duc'd to such a Degree, aS hardly eVer IO admit of a Cine.

For the internal Periosteum Covers the Concave Surface  
of the Bones, and is Contiguous to the common Membrane,  
which surrounds the Collected medullary Foliicules. Hence  
'tis sufficiently Obvious, that, when the internal Periosteum is  
inflamed, the Marrow must soon be affected; for, if this In flam..  
mation terminates in an Abscess, or a Gangrene, 'tis evident,  
that the Pus Or sanies must Corrode the highly tender Fabric  
Of the. Marrow ὸ and consequently that it will be soon corrupted,  
and all the Misfortunes already enumerated produc’d. The  
Difficulty of the Cure will, also, appear, from what has been  
hitherto said i NOr do I think, that any One can readily distin-  
guish, whether the Membrane surrounding the Marrow, the  
Marrow itself. Or the internal Periosteum, is inflam'd, since, in  
either Cafe, the signs Of a profound Inflammation. are present,  
the Pain in not increas'd by a pretty strong Compression, and  
the Effects are the same, that is, a Caries of the Bone, and a  
Violem Corruption of the Marrow; for which Reason the same  
Method Of Cure is requisite in either Case.

This Disorder, whilst in a State of Inflammation, may  
be known; first, from the general Signs of an Inflammation ,  
secondly, from the Deepth Os the Part affected; thirdly,  
from an Obtuse, fix’d, and continual Pain, which yields to no  
Medicines, and is not increas’d by Pressure, and, fourthly,  
from the Increase of such a Pain after muscular Motion.

, Since this Disorder is generally discover’d too late, that is,  
from its bad Effects, those Signs by which it may he discover’d  
in the Beginning ate carefully to be investigated, which, how-  
ever, js not to be done without great Difficulty.

I. Since most of the Signs *of an* inflammation Can only he  
observ’d in external Paris os the Body, so rhe Heat alone, the  
Pain, and the Feyer, the general Concomitant os considerable  
Inflammations, are to he Consider’d aS Signs of this Disorder,  
for the Pulsation can hardly he discover’d in so.deep a Part,  
for this Reason principally, that the Vesseis Os the internal Pe-  
riosteum are highly tender.

2. If these Signs of an Inflammation are present, and, at the  
same rime, no Disorder perceiv'd in the external Parts, 'th greatly  
to be inspected, that the Disease is lodg’d in the most internal  
Parts of the Bones.

3. Patients in this Situation generally Complain Of a Sensa-  
tion, as if their Bones were split from the internal to the exter-  
nal Partin The obtuse Pain, indeed, remains fix’d in the same  
Part; but is, at the same time, highly uneasy, because it can  
neither be mitigated by changing the Posture Of the Part  
affected, nor by means of any Fomentations or Cataplasms;  
and.ismor,at the same time, augmented by a strong Compression.

’ The Reason of this in obvious from what has been before  
said. \*

. 4. Tis also. Obvious, from what has been said before, that the  
medullary Oil can pass from the Cavities Of the Bones into the  
Cavities of the Articulations Of the moveable Bones, where it  
serves to lubricate and anoint the Extremities and Lioaments

. Of the Articulations, and is consum'd by an Increase of’'Motion  
in the Body. Hence, therefore, by such an Increase os Motion,  
the Fluids, stagnating in the Cavities Of rhe Bones, are put in  
Motion, and their Motion is render'd brisker, and more acce-  
lerated. If, therefore, a Pain arises from an Inflammation of

. the internal Periosteum, or of the medullary Membrane, 'tis  
evident the Pain must be increased by an accelerated Motion of  
the Humours thro’ there Parrs. Such an increase of Pain is al-  
ways produced in the Patients by this Caine, as, also, by their be-  
ing heated by a copious Use of Wine, or aromatic Substances.

This Disorder is cured, first, by the general Method used  
in Insiammations; seethe ArticleINFLAMatATro: And, se.  
condly, by the Method already proposed, strichy and duly  
observed, as soon as the Signs of a beginning Resolution  
**appear.**

The Cure of an Inflammation by Resolution is, of all others,  
the heft and most desirable, but cannot, in this Cafe, he  
obtained, without the greatest Difficulty. For, during the first  
Days of such a Disorder, Physicians are rarely consulted, whilst  
the obtuse and deep-reared Pain is either entirely negledied,  
or treated with extemal Remedies; which, in the very Na-  
ture of the Tbingi can herdly be expected to do any Service-  
Bur, bow much the Recency of the Disorder contributes to the  
Cure of an inflammation by Resolution, is obvious from the  
Article INFLAMMATIO. Besides, Fomentations, Frictions, and  
Baths, so useful in other Inflammations, cannot, in this, reach  
the Part affected. Hence, in this Cafe, nothing remains to be  
done, but by Venesection, and ansiphlogistic Purgatives, to di-  
minish the Impetus and Quantity or the arterial Fluid; and to  
ufe a stender Diet, in Conjunction with attenuatiog and diluting  
Medicines.

Secondly, If, after the Use of these Medicines, the Symptoms  
are mitigated, but not entirely removed, rhe Physician is not to  
give over his Efforts, but to use bis utmost Skill, in order to  
make a perfed Cure; for the smallest Disorder left in this Part  
often afterwards lays a Foundation for the worst Misfortunes of  
**an** incurable Nature. Though, therefore, the Inflammation is  
allay’d, yet ’tis still expedient to use the Method before recom-  
mended, that js, filling the Body with penetrating Decoflions,  
and taking the other Measures there prescribed; that, by this  
means, all Remains of the former Disease may **be** removed.  
But since, by this Method of filling the Body with Decodions of  
the Woods, an artificial Fever is raised, ’tis sufficiently obvious,  
Ibat it cannot he attempted, till the Inflammation is cured; Other-  
wise **all** the Symptoms would he render’d worse.

But if a Suppuration, or Gangrene, should happen in this Part,  
and be known, not Only by the palpable Signi of a previous  
Inflammation, but, also, by the deep-feated, fixed, and os,  
tofe Pain; then the Method by Decoctions is the only Thing  
capable of producing **a Cute.**

But when the Medicines proper for the Cure Of an inflamma-  
tion by Resolution have not been used at all, or too **late,** or  
when the inflammation is so violent, that it cannot he resolved  
tho\* all these Medicines have been seasonably applied; we must  
then expefl other Terminations of the Inflammation, that is, a  
suppuration, or a Gangrene; for, since there is no Method for  
the Discharge Of the Pus, or the gangrenous Gore collided here,  
’tis sufficiently Obvious, what terrible Misfortunes must be pro-  
duced by that means. That these Terminations of an Inflamma-  
tion are present, may he known from the Absence of the Signs os  
a Resolution, and the fix’d, deep-seated, and obtuse Pain. In this  
Case, the only Hope Of Relief consists in the Method before **re-**commended, that is, filling the Body with Decoctions, and, by  
chat means, washing off all the corrupted Matter. But if the  
Diforder cannot be cured by thefe Measures, and if an incision  
can he safely made to the Bone, it is to be perforated to its Ca-  
vity, that thus the corrupted Sanies may he eliminated. Thar  
this Method has been sometimes ufed with great Success, is suf-  
ficiently obvious from what has been already said. A Salivation,  
excited by means of Quicksilver, has often been tried io Cafes  
of this Nature; but, fays *Pan Switen,* f never saw it prove of-  
feared. Hence ’tis Obvious, that no good Effects can be pro-  
duced by any Other Remedies.

For then the internal Part of the Bone becoming putrefied,  
tumefied, inflamed, and carious in all its Substance, the ex-  
temal Periosteum is inflamed, distended by the Tumor of  
the Bone, and corroded by the acrid Maner; and the in-  
cumbent Parts, being corrupted by the flow-spreading Con-  
tagion, become fpongious, tumid, and painful, rill rhe  
ς whole Member is at last destroy’d. In fueb a Situation,  
Extirpation is the only Method of Relief.

For the Pus, retain’d in a warm and clofe Place, will become  
attenuated, putrid, and acrid. See the Article SUPPURATIO.  
And, if a gangrenous Gore is present, it will still sooner degene-  
- rate, and assume a malignant Quality. The medullary Oil dis-  
charged, in consequence of he baying corroded its containing  
Vesicles, will become stagnant, and acquire a rancid Acrimony,  
Of an highly malignant Nature. Thus the whole Cavity of rhe  
Bone will soon he fill’d with an highly putrid and acrid Smies.

The concave Surface of the Bone will, therefore, he corroded  
by this acrid Ichor, the Veffeis distributed between the Lamins  
of the Bones will be inflamed; the Laminw, before contiguous,  
will he separated; a Tumor will happen in the Substance of the  
Bone; and, at last, all the Parts will he corroded. Whilst these  
Changes are happening, fresh Pains arise; for all the Parts con-  
rain’d in the Cavity of the Bone being corrupted, the former  
Pain often ceafes, or, at least, remains very obtuse: Bor when  
the external Periosteum, which is highly sensible, begins to he  
distended by the Tumor of rhe Bone, or corroded by the acrid  
Sanies penetrating to ir, the Parient is afflicted with the most in-  
teofe and violent Pains. Then the soft Parts, incumbent on the  
Bone, begin to he assessed and corrupted by the flotv-fpreading  
Contagion; and in there Parts, especially in the Membrana Adi-  
posa, arise Tumors, sufficiently large,- but fpongious, and yield,  
ing to the Touch. Thus the Diforder is gradually propagated  
to rhe external Parrs, the Whole of which become corrupted by  
degrees, rill at last, the whole Member is destroy’d; for all the  
Parts, together with the Bone, being mortified, a true Sphacelus  
is present, which can only be cured by Extirpation. In malig-  
nant Gangrenes, and violent Conrusions, the’ many Of the Pans  
are destroy’d, yet there is still some Hope, that there are, under  
the mortified Parts, live Vessels; by means Of which, the cor.  
rupted Parts may be separated, and the lost Substance regene-  
rated. But, in this Case, the subjacent Parts are soft corrupted.

A Venereal or Scorbutic Quality of the Humours, or their  
Tendency to tint Diforder call’d the Rickets, are frequently  
theCaofesof this Disorder. Hence we may understand what  
Gummata, Tophi, Nodes, Exostoses, Abscesses, a Caries,  
and a Spina Ventofa of the Bones are.

Thol an Inflammation of the internal Periosteum, of the Mem-  
brane surrounding the Marrow, and of the Follicoles containing  
the medullary Oil, may arise from almost all the Causes capable  
of producing an Inflammation in other Parts of the Body; yer,  
since there Parts are so safely defended, an inflammation is rarely  
produced in them by the common Causes. Bur ’iis observable,  
that, in some Disorders, a Cacochymy generated in the Bleed  
is deposited in the Bones, and corrupt their Fabric. Of this  
Kind is

*A Venereal Quality of the Eland.* Tis certain, from frequent  
Observations, that, in this Disorder, the subtile Contagion, mix’d  
with the Blond, is afterwards deposited in various Parrs of the  
Body, where it gradually corrodes all around it; and is, at the farne  
rime, possess’d of such a Quality, as to corrupt the found Hu-  
mours, and so transform them into its own Nature, that, by their  
means, the like Misfortunes may not only be produced in the  
Neighbourhood of the Part affected, bur, also, in remote Parts;  
for it is certain, that rhe Venereal Potion surprisingly insinuates  
itfelf into the oleous and mucous Parrs of the human Body: Tis  
not, therefore, to he wonder’d at, if it insinuates itself into the  
pinguious Oil, whether dispersed thro’ the Substance of the Bones,  
or conceded in their Cavities; and then, by a generally stow Cor-  
rosion, corrupts all rhe Parts. The worst, and most malignant  
Disorders of the Bones are frequently observed to arise from **a**Lues Venerea; especially when it is inveterate, and has taken  
deep Roost; for the Bones are rarely affested by this Disorder,  
when recent. But, when the Disease is of long standing, ’these  
intolerable and obstinate Pains arise, which often yield to no Re-  
medics; but, becoming milder by a Salivation, or Decodions  
oftheWoods,afrerwards return. The Marrow is,also, affected by  
the Lues Venerea ; and ’tis certain from numberless well-voucssd  
Observations, that this Disease often produces very terrible  
Disorders ,of the Bones. Thus *Van Svueiten* informs us, that  
**he** saw the Ribs, the Sternum, and the Clavicles, consumed by  
a Lues Venerea, the Vertebrae of the Neck corroded by a Vene-  
real Ulcer of the Pharynx, and the outward Plate of the Right  
Bregma render'd fo carious by a Lues Venerea, as to fall off  
These Observations are sufficient to prove, that a Lues Venerea  
is frequently the Cause of Disorders in the Bones.

*As for a Scorbutic duality of the Humours*; the first Signs'  
of a Scurvy general!}’ appear about the Gums and Teeth r And  
’tis well known, not only that the Teeth, being render’d carious by  
this Disorder, fall Out by Pieces, but, also, that the bony Part of  
**the** Maxllla is greatly affected by it; and the obstinate Ulcers of  
the Legs, so frequent in fcorbutic Patients, are ofien accompanied  
with a Caries of the Bones. In the most malignant Species of  
this Disorder, all the Bones have been found carious; an Instance  
of which we have in *Mem. de sAcnd. des Sciences, .Ars. platy.* And  
*Petit,* in bis *Traits des Maladies des* Os, *Tom.* 3. informs us, that  
in a great Number of Soldiers, who died of a Scurvy, he found  
**the** Periosteum, which was in a great many Parts corrupted en-  
tirely, separated from the Bones, and under it a dark-coloured or  
blackish Lymph, of an intolerably fetid Smell. Hence ’tis ob-  
vious: how unfriendly a Scurvy, especially of the inveterate Kind,  
is to the Bones; for it has, then, many Symptoms in common  
with a Lues Venerea, and especially nofiurnal Pains.

*As sor a Tendency of the Humours to that Diforder call'd she  
Pickets*; Sis obvious that this Disorder has a great Astinivy with

the SCarvy, and Offen lays a Foundation for suspecting an **Ad-**mixture or a Venereal Taint; for it most frequentiy seines Chil-  
dren procreated ha Parents infected with a Venereal Taint, or who  
have been so unfortunate aS to have frequent Gonorrhoeas. But  
we observe, that, in this Disorder, the Bones are severely affected ,  
for the Teeth become black, and, growing carious, fallout; the  
Epiphyses become protuberant, and are, by a flight Force, se.  
parared from the Bones to which they adheredr And, in the  
highest Degree Of rhe Rickers, a Caries and Spina Ventosa of  
.the Bones are frequently Observed.

From what has been said, we are the better enabled to un-  
derstand the following Diseases Os the Bones; that is.  
*Gummata,* which are Tumors arising Out Os the Substance Os  
the Bones, Os fuch a tenacious and soft Nature, aS to yield to  
the Fingers, almost like the Gum Os Trees, when soften'd by  
the Rays Of the Sun, Or before it has acquired its perfect Hard-  
Dels, ln Patients labouring under a Lues Venerea, such Tumors  
are frequently Observed, nor Only On the Head, but, also. On the  
middle and most solid Parts Of the larger Bones. Now these  
Tumors seem to be produced, when the Vessels, running be-  
tween the bony Laminae, being either Obstructed Or inflamed,  
are dilated, and by that means raise the incumbent Laminae.  
Perhaps, also, in lhch Tumors, the Substance Os the Bone, pro-  
perly so call'd, which is naturally hard, degenerates into a pre-  
, ternatural and morbid Softness. There are, in practical Authors,  
surprising Instances, in which, from latent Causes, not only par-  
ticular Parts, bus, also, the Whole, of the Bones have been render’d  
soft. From such Observations, 'tis sufficiently Obvious, that in  
Certain Disorders, the Bones become soft, and it has, ar the same  
rime, been frequently observed, that the Bones, thus soften’d in  
particular Parts, have there become tumid. Hence appears the  
Origin of the Tumors Call’d *Gumm ata.*

. I is, also. Obvious, from what has been said, that such a Softness  
os the Bones sometimes succeeds Abscesses of the adjacent Parts;  
and that sometimes the Origin Of this Disorder is lodged in the  
Substance Of the Bones, and especially when they ate affected  
with a Lues Venerea. Such Gummata have, however, been  
sometimes observed On the Bones, when no adequate Cause could  
be discover'd. Perhaps the acid Cacocbymy of the Blood may  
sometimes prove the Cause Of a Softness of the Bones. Thus in  
weak Children, whose Aliments are, sor the most part, of the ace-  
scent Kind, and whose Vessels and Viscera are, at the same time,  
so weak, that they cannot fubdue the Quality Of the Chyle gene-  
rated from their Aliments, the Rickets, and a preternatural Flexi-  
bility of the Bones, are so frequently produced. *Buys.ch,* in his  
*Thes.aur.* 4. N° 38. informs us, that when the Liquor, in which  
he preserved a Foetus, was made too acid, the Ribs were so soft-  
eno, that they could not only.he bended any way, but eVen ty’d  
in a Knot, like a Rope. - \*

*As for Tophs and Nodes*; when Tumors Of the Bone arise,  
harder than *Gummata,* but softer than the Substance of the Bone,  
they are cased Nodes, Or Tophs. The celebrated *Boerhaave*used to Compare Tophs to the Horns Of Calves, when aS yet under  
the Skin; and Nodes to these Horns, after they appear’d with-  
out the Skin, but had nor, as yet, acquired the Hardness of an  
Horn. Hence 'tis obvious, that Nodes and Tophs only differ  
from *Gummata* in their different Degrees of Firmness.

*As for Exofios.es,* these are Tumors which equal, or, per-  
haps, surpass, the Bone in Hardness. Sometimes the whole  
Bone is enlarged into an Exostosis, aS is sometimes Observable  
in tho Bones Of the Carpus and Metacarpus, those os the Tarsus  
and Metatarsus, and the Phalanges os the Fingers. In the larger  
Bones, this Very rarely happens, since only particular Parts Os them  
are generally raised into Exostoses. The Nutrition and Increase  
of the Bones, and the Restitution of the lost Substance os the  
Bones, Considered under the Articles CAPtIT and FRAcTURA,  
sufficiently prove, that the hard Substance Os the Bone may he  
restored by means Of laudable Humours convey'd in a due  
Quantity, and with a proper Impetus, thro' sound Vessels. Be-  
sides, in the Cure of Fractures, it is Often Observed, especially  
in young Patients, that the Callus generated is raised above the  
Surface Of the Bone, and Often remains an herd and hOny Tu-  
mor, during the whole Lise Of the Patient. But that Substance  
which unites and consolidates fractured Bones, and restores the  
Substance lost, is first soft, and Only gradually acquires a bony  
Hardness. See the Article VULNUS. If therefore, by any  
Cause, those Vessels are dilated, which convey the Matter by  
which the Bone is nourished, and the lost Substance repair’d,  
there may he an Enlargement os the Bulk, and a Tumor, pro-  
duced in the Bone. And fince between the Laminae Of Various  
Strata, Of which the large Bones consist, 'tis highly probable,  
that such Vesleis are distributed, as is observed under the Ar-  
ticle CABUT, so the Bulk Of the Bone may he enlarged in theft  
Interstices, and the Laminae of the Bone teparared farther from  
each other, in consequence of which, the Thickness of the  
Bone will, in theft Parts, he augmented.

Now, according as these Tumors protuberate to the external  
or internal Parts, according as they affect different Parts of the

Bone, according to the Diversity Of the adjacent Parts injured  
by these Tumors, and according to their different Bulk ano Fi-  
gure, so various, and Often surprising, Misfortunes are produced  
by them, as we learn from practical Observations.

*Buyseh,* in *Thes.aur.* io. No. xyS. *Tab.* IL *Fig.* 4. and 5. in-  
forms us, that, by means Of a Saw, he longitudinally divided  
a Part of the Os Tibiae, affected with an Exostosis; upon which  
he found, that an hollow Exostosis had arisen from the internal.  
Surface of the Bone, and render’d the Cavity, in whichrhe Mar\*  
row was contain’d, narrower. Hence 'tis Obvious what Misfor-  
tunes might arise from such an Exostosis', fince, hy its means,  
the Marrow might he compress'd and injur'd , and Consequently  
all the Symptoms arising from that Circumstance, and already  
enumerated, were to be dreaded. The Exostoses arising in the  
middle and most solid Part Of the large Bones are generally  
pretty hard in all their Parts; hut such aS appear near the Joints,  
have sometimes been sound only with their external Parts hard ;  
and, under this hard Crust, surprising Degeneracies Os the soft  
Parrs lodged between the receding bony Laminae, into fungous  
Flesh, Pus, Sanies, and Mucus, have been Observed. See *Petit  
Maladies des* Or, *Tom. 2.* If rhe interior Lamina Os the Cranium  
is raised into such a Tumor, 'tis sufficiently obvious, that, in  
consequence Of the Compression os the Brain, Epilepsies, Palsies,  
and Apoplexies, are to be dreaded. Bur, aS Exostoses arising On  
the external Surface of rhe Bone {lowly distend the incumbent  
Periosteum, highly intense, and sometimes long-protracted. Pains  
are produced by that means, which, however, cease sooner, if  
the Tumors are Of an acute Figure.

Such Tumors Os the Bones sometimes succeed external Inju-  
ries , and are, also,Observed to proceed from internal Causes; but  
from none more frequently, than from a Lues Venerea. In **a**malignant Scurvy, the Ulcers Of the Legs, so often incurable by  
all Remedies, are frequentiy accompanied with a Caries, and  
sometimes with ExostoleS Of the Bones. Exostoses arising from  
external Causes are generally pretty mild, tho' not to be Cured  
without great Difficulty; whereas those arising from internal  
Causes sometimes disappear. Or, at least, are much diminished,  
when the Disorder producing them is removed, aS is frequently  
Observed in Venereal Exostoses. 'Tis, also, certain, that ExostoseS  
may be produced by flight Contusions, especially in those Parts  
where the Bones are Only cover’d with a few Integuments. Hence  
such Tumors are so frequently observed in the Spine of the Os  
Tibiae. And aS this Part is much obnoxious to external injuries,  
*Petit,* in his Treatise *des Maladies des Os,* informs us, that there  
are few Men who have not some Asperities in the Surface os that  
Bone. What surprising Exostoses may be produced by strong  
Contusions, is obvious from a Case recorded in *Mem. dell Acad,  
des Sciences, An.* I 720.

Exostoses produced by external Injuries are rarely cured, un-  
less they can he removed by a chirurgica! Operation; but, aS they  
are generally of a pretty mild Nature, this Method, which is al-  
ways difficult, and sometimes dangerous, is not adviseable, un-  
less by their Bulk, Figure, or Situation, they are productive of  
Considerable lnconveniencies.

But Exostoses arising from internal Causes' are Often cured,  
or, at least, much diminished, when these Causes are removed.  
But *is,* after the Cure of these Disorders, the Exostoses should  
remain, as IS sometimes observable aster the Cure ossa Lues  
Venerea, an Incision is to he made in the Integuments, and the  
ExostoseS removed either by the Knife, or the actual Cautery,  
if any terrible Misfortune is to he dreaded from suffering them  
to remain. Yet, says *gran Svseiten,* I have seen many Cases,  
in which, after the Cure of a Lues Venerea, the Exostoses have  
remain’d for many Years, without any farther Disadvantage than  
the Deformity *of* the Part. The most commodious Method Of  
removing Exostoses is found in *PetidsTraitd des Maladies des Os,  
Tom.* 2.

*As sor Abscesses* ; under the Article SUPPURATIO is described  
what is meant by an Abscess of the soft Parts, and 'tis obyious,  
from what has been already said, that the Bones are subject to si-  
milar Misfortunes. Tis, also, certain from practical Observations,  
that not Only in the cellular Parts, near the Joints of the Bones,  
but, also, in the middle Cavities of the large Bones, Inflammations  
have degenerated into Abscesses. Besides, an Abscess is said to  
happen in the Substance Of the Bone, when one or more Of those  
Laminae, by the Union Os which the Bone is form'd, becoming  
mortified and Corrupted, are disengaged and separated from the  
subjacent live Vessels, and a Substance like the separated Lami-  
nae regenerated ; and, on this regenerated Part, a new Periosteum  
is form'd, by which means the Substance lost is restored. See  
the Article CApUT, where 'tis said, that *Hippocrates,* in Wounds  
of the Head, Observed, that a denudated Bone, or the Remains  
Os a Weapon lest in the Bone, were generally separated from  
that Part Os the Bone which was still furnished with Life and  
Blond. We may, also, refer to Abscesses Of the Bones, those  
surprising Observations Os *Buyseh;* since in the middle Cavities  
Os the large Bones a round bony Pipe was sound, separate from  
the rest Of the Bone.

*As for a Caries of the Sones’,* this is a Diforder far more  
terrible, and entirely distinct from an Abscess of the Bones; for.

an an Abscess Of the Bone, it still retains its Cohesion, and is  
-generally leparated in the Form of a Lamina; whereas, in a  
Caries, the Substance Of the Bone is so corrupted and corroded,  
that it moulders away into a kind Of Powder, so that a Caries  
indicates a far oreater Corruption of the Bone, and a far greater  
Difficulty Of Cure. How a Caries of a Bone, cover'd with Flesh  
and Integuments, may be known, we shall hereafter specify:  
But when the Bone may he either seen with the eyes, or touch’d  
with a Probe, the Caries is easily discover'd. *Celsos,* in the *se-  
cond* Chapter of his eighth Book, informs us, u That we may  
" soon, by means of a Probe, discover a Caries of the Bone,  
\* since the Probe will penetrate farther, or less, according as  
" the Caries is deeper, or superficial \* for the carious Part of  
a Bone has scarce any Solidity, but yields to the Probe; and,  
when the Probe Comes to the sound Part of the Bone, a Resist-  
ance is perceived. Hence *Celsos,* in the same Part, after, sor the  
Cure of these Disorders, he has order’d the Bones to be rasp’d,  
adds, “ But we must rasp them no longer, then till we have ar-  
" rived a: a white Or solid Part Of the Bone ; for 'tis certain,  
" that the Blackness is removed, when we Come to a white,  
.“ and the Caries, when we come to a solid Part of the Bone.”

*As for a Spina Ventosa,* which is the worst Species of a Caries  
Of the Bones since the Marrow, Corrupted by an internal Couse,  
conodes them, we have already treated of it.

Hence we know why a carious Bone so variously changes Its  
Colour, from a whitish-blue, to a pinguious white, a yel-  
low, a Cineritious, a livid, and a black Colour, and what De-  
gree Of Corruption each of these Colours denotes

When, under the Article CARUT, those Signs are Considered,  
by which we know that the Cranium is affected, it is observed,  
that, in live Persons, the Colour Os sound Bones is somewhat red-  
ish or bluish; and that the first Sign of a Vitiated Bone is a  
Change from this Colour to a white, a yellow, a dark, and at  
last, a black Colour. The same, also, holds true in the other  
Bones, and generally the greater Degree of Corruption is in-  
dicated, the more they recede from their natural Colour. The  
first Change of Colour is, when the Bone becomes whim, which,  
as it were, denotes a beginning Mortification in the Bone. Hence,  
when small Perforations are made in a Cranium thus affected,  
the first Sign, that the Cure succeeds happily, is, when the where  
Surface of the Bone begins to assume a redish Colour. But  
fince we have alreaby demonstrated, that the medullary Oil passes  
thro’ Pores Of the Laminae mutually applied to each Other, to  
the external Surface of the Bone, where it is, perhaps, received  
by the small Veins Of the Periosteum, and mix'd with the Blood ;  
’tis fufficientiy Obvious, that when the Vital Fabric of the Bone  
is destroy'd, the Oil convey'd thither must he accumulated, be-  
come stagnant, and corrupted. For this Reason the Bone will  
become pinguious and yellow, aS *Celsos,* in the second Chapter  
of his eighth Book, excellently observes, when speaking Of the  
Disorders of the Bones. \* The Vitiated Part, fays he, generally  
\* shit becomes pinguious, and then either black, or carious.” In  
proportion as the Disorder increases, the Colour becomes cine-  
XitiouS, livid, and at last black, which indicates a perfect Monifi-  
Cation, and a Violent Corruption Of the Bone. This successive  
Change os Colour is, also. Observed in the Teeth, when they begin  
to he corrupted, for, first, they hecome pinguious, then yel-  
JOw, then dark-colour'd, and,last of all, black; when, becoming  
Carious, they fall out by Pieces.

From what has been said, ’tiS Obvious, why a carious Bone  
is unequal, rough, spongious, friable, soft, and easily broken;  
for the external and internal Arteries no longer compress the  
Lamins of the Bone.

Tis obvious, from what has been already said, that the Bones  
consist os Laminae mutually applied to each Other; and that be-  
’ tween these Laminae Veffeis are distributed, which convey the  
'vital Humours, requisite to the Life and Nourishment Os the.  
Bones, and especially in those PartS of the Bones, where large  
In.erstices are left between these Laminae. The small Arteries,  
therefore, lying between the exterior Laminae of the Bone, and  
the next succeeding one, when in their Diastole, endeavour, al-  
most in every Point, to raise the external Laminae; but the small  
Arteries dispersed thro’ the Periosteum, when dilated by an equal,  
or perhaps a greater Force, resist the Elevation os this Lamins,  
When, therefore, by whatever Cause, the Periosteum is corrupt-  
ed, the Action of the Arteries running between the Laminae of  
the Bone will prevail, and the external Lamina will be elevated ;  
and lois sufficiently obvious, that the same may happen in all the  
Interstices hetween the Laminae os the Bone. Perhaps the Action  
os these small Arteries may appear too inconsiderable for ele-  
vating an hard Lamina Of Bone, and separating it from its subjacent  
Lamine, but is we consider, that these small Arteries, almost  
in all Points of such a Lamina, repeat their Pulsations four thou-  
sand times in an Hour, it will .not, perhaps, appear so surprising,  
that so small a Force, so often applied, should produce such an  
Effect.. When, in Wounds of the Head, the Surface Of the

Cranium, divested Of the Pericranium, is disorder’d by the Ac-  
cess Of the Air, or the Application of pinguious Substances, rhe  
corrupted Lamina has Often, in a few Days, been separated by  
the Force os these Arteries. See the Article CAPUT.

The Reason, therefore, appears, why the internal Arteries  
that is, those which run between the Laminae, elevate these *Lt*minae externally, as soon aS the Pressure Os those Arteries ceases’  
which were capable Of acting upon the external Surface of these  
laminae. For this Reason, the Surface Os the corrupted Bone is  
rough, and, in consequence Os the Laminae receding from each  
other, becomes spongious, more friable, and losiS a great deal os  
its natural Solidity; for, in sound Bones, the firmest Part is that  
in which the bony Laminae are most, contiguous to each other;  
which is generally in the middle of the large Bones, and, on the  
contrary, the Bones are far more spongious, soft, and easily  
broken, near their Extremities, where the bony Laminae are at  
great Distances from each other. But the Friability Of carious  
Bones is much augmented, because the Humours, becoming stag-  
nant and acrid, ‘.Corrode the Substance Os the Bone, and this Ef-  
fect is principally produced by the Corrupted medullary Ofl. Be-  
sides, the Cohesion of the Bones seems to depend upon the In-  
terposition os the Oil, which, like a kind Of Glew, unites their '  
terrestrial PartS, for, aS we hesore observed, the Bones become  
highly brittle, when, by means Of an open Fire, their whose Oil  
is ex racted; and such Bones, render'd thus friable by long Cal-  
cination, again cohere firmly, when immersed in Oil. Since,  
therefore, the attenuated medullary Oil is consumed by Putre-  
faction, and the Bone, at the same time. Corroded by acrid Hu-  
mours, the Reason is obvious, why carious Bones are so friaolc  
as to moulder into Dust upon the flighted Touch Of a Probe.

Hence, also, the Reason is plain, why from such a Bone an.  
highly fetid Smell, like that Of rancid Bacon, is exhal'd.

This fetid Smell is so strong, that Skilful Surgeons are able,  
from it, to tell that there is a Cories of the Bone below the Ul-  
cer. 'Tis, therefore, expedient to know this Smell, which can-  
nor, in the Very Nature Of the Thing, be described by Words,  
but approaches to that Of corrupted and rancid Bacon. When  
. the Caries Os the Bone reaches to the Marrow, this fetid Smell  
may be easily accounted sor, but 'tis, also, perceived, when the  
Coruption Of the Bone is only superficial. We have already Ob-  
served, that the medullary Oil passes thro' the Pores Of the La-  
minae, and is carried in their Interstices to the external Surface '  
Of the Bone: Though, therefore, the exterior Laminae should  
only be carious, the medullary Oil, convey'd thither, will hecome  
stagnant. Corrupted, and produce the same fetid Smell.

From what, has been said, we also understand, why in an  
ulcerous Part, by means of a subjacent Caries Os the Bone,  
the superincumbent Flesh is soft, flaccid, fungous, inflated,  
and tumid, and the Lips os the Ulcer inverted; the Sanies  
clear, subtile, hardly at all glutinous, fetid, and full Of small black  
Scales ’, as, also, why the Disorder returns, without any appa-  
rent Cause, and the Ulcer proves obstinate against the. best  
Medicines for Other Ulcers,

- We now come to Consider these Symptoms which generally  
accompany a Caries of the Bone, the Presence of which Often  
discovers such a latent Disorder to the skilful Surgeon.

*Why in an ulcerous Part.* When, in consequence of a pre-  
vious Disorder, and Corruption Ofthe Bone, the incumbent PartS  
are affected and exulcerated, they are generally Corroded by de-  
grees, and raised into a fost and flaccid Tumor, aS is always Ob-  
served by Surgeons, and, in a particular manner, appears in the  
Spina Ventosa, which seems to have received its Name from this  
Circumstance; for the Putrefaction ofthe subjacent Bone diffuses  
a malignant Exhalation thro' all the adjacent PartS; by which  
means the Membrana Adiposa, naturally so prone to become tu-  
mid, is soon inflated. Nor is it, in this Cafe, tumid with an jn-  
flammarory Hardness, but soft, lax, and, aS it were, fluctuating  
under the Fingers. For this Reason, when Skilful Surgeons exa-  
mine old Ulcers, they always search with their Fingers, whether  
all the adjacent Parts appear firm and sound; for the incumbent  
Parts do not adhere to the corrupted Bone, nor can they, hy any  
means, be made to grow to it, till all the corrupted Part *is first*removed. When the Teeth become carious, the Gums ares se-  
parated from them, and never aster grow to them. We have al.  
ready Observed, that, in Patients who died of a malignant Scurvy,  
the Periosteum is found not to adhere to the Bones: Hence,  
also, in Wounds Os the Head, we know that the Cranium is  
affected, if, about the seventh Day, the Flesh is separated from  
it, a.Pain is felt, and the Pus is thin and fetid, which discovers  
the Malignity of the Wound. See the Article CAPUT. Per-  
haps, also, the elastic Matter, for the most part generated by  
the PuIresaction, increases the Tumor os the incumbent Parts.

*Why the Lips ofthe Ulcer are invested.* The LipS of a Wound  
are retorted, in a sound and robust Body, by a rising of the  
*Membrana Adiposa,* when unconfined by the Skin. By the same  
Cause, therefore, the Lips os. such an Ulcer will be inverted by

the instated *Membrana Adiposa* But in a Wound, the Lips are  
of a live red Colour, whereas in such Ulcers, they are sordid,  
pale, and often livid; and, as *Hippocrates* justly Observed, with -  
respect to Wounds os the Head, accompanied with a Corruption  
Os the Bone, the Lips resemble Resh macerated with Salt.

*Why the Sanies is clear and subtile.* Under the Article SUP-  
BURATIO, 'tis observed, that Gmien and *Hippocrates,* sometimes,  
-used the Word Putrefaction, in Order to denote a Suppuration ;  
but they accurately distinguished a Suppuration from a Putre-  
faction, Properly so call’d ; fince the former was a Sign that Na-  
ture was Conqueror, and the latter, that she was conquered.  
Hence *Galen* justly concluded, that a Suppuration was not simply  
Putrefaction, but had something of Concoction in it; and that  
by the remaining Power os the Vessels, those Humours which  
would Otherwise become putrid, were converted into Pus. And  
the same Author adds, that in Ulcers there is generated a Liquor,  
more Or less degenerating from the Nature Of good Pus, ac-  
cording as the concoctive Powers are stronger Or weaker, and  
according as the Matter to be converted into Pus, is more Or  
-less Obstinate. Since, therefore, in an Ulcer, attended with a  
Caries Of the Bone, there is a malignant Putrefaction, produced  
fry a Corruption Of the medullary Oil,and fince the incumbent and  
adjacent Parts are flaccid, soft, inflated, and often almost half gan-  
grenous, it is Obvious, that the Matter to be Converted into PuS  
is highly obstinate, and the concoctive Powers, at the same time,  
excessively weak. It is not therefore to be wonder'd at, if in-  
stead of a laudable Pus generated by the superior Force of Na-  
tore, which is white, thick, smooth, equal, and inodorous, there  
should here be formed a Sanies which is thin, fetid, sometimes  
dark-coloufd, and highly acrid. For the most part the black  
Scales Of the corrupted Bone are discharged along with this Sa-  
nies, which Surgeons justly take for the most infallible Sion Of a  
Carious Bone: For this Reason, in Ulcers of long standing, they  
always carefully view the Plaisters and Pledgets, upon renewing  
the Dressings; and if On these there is any Blackness, and if they  
have a fetid Smell, a Caries of the Bone is justly suspected.

*As for the Return os. the Disorder, 'without any apparent Cause,*Unless the affected Bone is previoufly depurated, the Fomes  
Of the Disorder always remains, though the Ulcer should be  
healed up, for which Reason it will always return. Nor is a  
laudable and firm Cicatrix ever formed upon such Ulcers, fince  
it is always soft, elevated, and infirm , and the Place will after-  
wards, sooner Or later, become open. When corrupted Teeth  
produce a Caries in their Sockets, there IS Often a sudden In-  
flammation and Suppuration produced in the Gums. Upon the  
opening of the Abscess, a fetid Pus is discharged, and the Dis-  
order seems cured; but it generally recurs in a few Months, un-  
less by an Extirpation Of the Tooth, and a sufficient Depuration  
pf the Part affected, a thorough Cure is made. Thus *Van  
'Sweiten* informs us, that ho knew a Boy, who, after the Cure Of  
the Small-pox, was seined with Tubercles full Of Pus, in Various  
Parts Of the Body, and in the Forehead with an obstinate Ulcer,  
which frequentiy appeared to be healed, by means of drying  
Medicines; but soon aster broke one afresh, till about two Years  
after, the corrupted Part of the Bone being separated, the Ulcer  
was perfectly Cured in a few Days.

*As for lehe rebellious and obstinate Nature of the Ulcer.* NO  
Ulcer can he perfectly cured, till it is reduced to the State and  
Condition os a clean and pure Wound; for any mortified or  
corrupted Part remaining in the Ulcer, is an heterogeneous Body,  
.which will hinder the Union of the separated Parts, so long aS  
it remains there. Under the Article CAPUT, the various Me-  
thods, and the most efficacious Remedies for removing inch  
Sordes are lepecified. Surgeons often find, that in seemingly in-  
considerable Ulcers, a long-continued Application of such Me-  
dicines, Produce no happy Effects, in which Cases they always  
find that the Bone is carious. *Hippocrates, in Aph.* 45. of *Sect.* 6.  
informs ns. *That is. Ulcers continue a Thar, or longer, they muse  
of Necessity assect the Bone; some Part of vchich being separated,  
riuill leave deep and hollow Scars.* Sometimes these Disorders Of  
the Bones are fo obstinate as ro yield to no Medicines at all:  
And *Hippocrates,* in his Treatise *de Fracturis,* telis us, that when  
the Os Calcis is corrupted, the Disorder cannot be cured.

From what has been said we, also, understand, why a Ca-  
ries os the Bone, arising from an external Cruse, is most easily  
. Cured: Why that arising from an internal Cause is not to be  
cured without Difficulty : Why a Caries arising from a Lues  
Venerea, is still more difficult to be cured: And why that  
arising from a Spina Ventosa is. Of all others, the most dish.  
cult to he cured.

The Cure of a Caries iseafier, or more difficult, according to  
the Various Causes, which produce it; for when a Cities arises  
from an external Cause, a Contusion, for Instance, or a Wound,  
there is only some Part of rhe Bone thus corrupted, and the  
found Humours, convey’d, by means of entire Vessels, through  
the remaining Substance of the Bone, will be able to separate  
the corrupted Part, and restore rhe lost Substance: Hence, in  
Wounds Of the Head, a Caries of the Cranium is often soon

and successfully Cured, provided the Patient is found in every  
Other respect: But when, in consequence of a morbid Cacol.  
Chymy, the Humours flowing through the Substance os the  
Bone, are become so acrimonious aS to Corrode it, it is sufficient-  
ly obvious, that the Cure must be difficult, fince, after the ha-  
rious Part is Cleansed, the same Causie which first produced it  
Often still remains. The more difficult it is to subdue and cor-  
rect this Cacoobymy, the more difficult the Cure must of Course  
he. Since, therefore, in a Lues Venerea, the Contagion, when  
Once affecting the Bones, is not without great Difficulty to .be  
removed, and fince, aster the Cures with Mercury, and the De-  
coctions of the Woods, the latent Disorder often appears afresh,  
with equal Malignity, some Months after, it is sussicsently Ob-  
Vinos, that the Caries, arising from this Cause, is not to be Cured  
without the greatest Difficulty. In a Spina Ventosa, as we have  
before observed, a Caries Of the Bone arises from a previous Cor-  
ruption Of the medullary Oil; for which Reason it hardly ap-  
pears, till the whole Substance of the Bone is Corroded: There  
are, therefore, no Vital Parts under such a Carres, capable of  
separating the corrupted, and restoring the lost Parts4 and the  
Only remaining Method Of Cure consists in an artificial Separa-  
tion Of a large Portion of the corrupted Bone. After some  
Months, Or eVen Years, the Corrupted Bone has been sometimes  
separatedfrom the found, as is certain from chirurgioal Obser-  
Various, However, it is certain, that the Cure Of such a Caries  
is. Os all others, the most difficult.

From what has been said .we, also, understand why, in the  
solid Parts of the Bones, a Caries is bad j in their spongious  
Parts, worse, and in their Joints, worst of all, the first.of  
these flow, the second quickly spreading, and the third still  
more so: Why in Children, a Caries spreads quickly, and is  
with Difficulty cured: And why a Spina Ventosa generally  
affects a considerable Number of Places, either at One and  
the same time, or successively.

It is certain,’froth what has been already said, that the Middle  
Of the large Bones is most thick, and least Vascular, and that im  
Proportion as they approach to the Extremities, the bony La-  
minae recede more from each other, and leave greater Interstices,  
which are filled with a great Number Of small Vessels, and Ve-  
sicles full of Oil. It is, also, before shewn, that in those Parts  
Of the Bones which constitute theJoints, and are cover'd by a  
Capsula of Ligaments, which unite the Articulations, such a  
cavernous Substance is sound in the largest Quantity, and Only  
cover'd with a thin bony. Crust, which, even in the Os Femoris,  
hardly surpasses the Thickness os One's Nail. If, therefore, there'  
is a Caries in the most solid Part Of the Bone, it is bad; but at  
the same time, there is great Hope, that the Separation of the  
carious Part may be obtained, nor will the Substance of the  
Bone, here so firth, he so soon corroded aS in other softer Parts.  
But, when a Caries Of the Bone arises in a spongious Part Of the  
Bone, this thin bony Crust will soon be destroyed, and the sub-  
jacent soft Parts Corrupted: Hence a Violent Putrefaction, and,  
what is in a particular manner to be dreaded, a Corruption Of  
the medullary Oil will follow. But since about the Joints the  
Substance of the Bone is'most tender, and the Number Of the  
FOllicuies containing the pinguious medullary Oil greatest, the  
worst Symptoms will follow. If at the same time we consider,  
that the putrid Sanies collected here, aster corroding the Surface  
Of the Bone, may fall into the Cavity or the Articulation, the  
Reason will he Obvious, why a Caries produced here, must be  
followed by the worst Consequences, which can hardly ever he

' removed, except by rhe Extirpation os the affected Part.

From what has been said, rhe Reason is, also, obvious, why a  
Caries stowly consumes the thick and solid Part of the Bones;  
the spongious Part sooner ῆ and soonest Of all, that cavernous  
Substance of which the Extremities Of the large articulated Parts  
Of the Bones consist. - .

But, because obstinate and numerous Disorders of the Bones,  
happen in their most vascular, and, consequently, softest Parts:  
Hence the Reason is obvious why, in Children, a Caries Of the  
Bones spreads fast, and is cured with Difficulty; for in young  
Patients, there is a far greater Number Of Vessels in all the Parts  
Of theBody, many os which are, as Age advances, abolished, and  
Concreted, aster an Expression of their Contents, as is observed  
under rhe Article FIERA. Hence in the Bones of Children, the  
Number of Vessels is greatest for which Reason their Substance  
is soft; in consequence of which they are easily injur'd, and soon  
corrupted. It is, also, certain from Observation and Experience,  
that a spina Ventosa, or that Cartes Of the Bones which ariscs  
from a Corruption os the medullary Oil by internal Causes, is not  
generally confined to One Part, but affects several Parts, and these  
often removed at a considerable Distance from each other j Thus  
*Van Sweeten* informs us, that, in the Finger called the *Index,*he knew a Spina Ventosa, affecting the middle Phalanx, a tew  
Weeks aster the same Disorder appeared in the Tarins, and after-  
wards in the Os Jugale: A considerable time after, the corrupted  
Part of the Bone was separated, and the Disorder cured, hut In  
such a manner as to leave an unseemly and deep Cicatrix. Hence

in his Treatise *des Maladies des Os, Tow. i.* fells us, that in a  
fractured *isuttela* he knew rhe luxuriant Callus to produce an An-  
chylosis, which, however, was afterwards Cured, because the  
Substance Of the Callus had not acquired a bony Hardness  
When, in fuch a Case, an Anchylosis is dreaded, skilful Surgeons  
Order the Part affected to be so situated, that the Callus may, by  
- its Own proper Weight he determined to some other Pair; that  
Compresses he gently secured, between the Joint and the Frac-  
ture, that, by this means, the Callus may he hinder'd from fall-  
ing to the Joint; and, lastly, that the joint he gently moved,  
when the first Dressing is removed, afterwards every two Days,  
and then every Day: Nor, if the joint is prudentiy moved, is  
there any great Danger lest, by this means, the reduced Bones  
should be removed from their Situation, hecause, as the Bones  
are largest about the Joints, the fractured Parts will touch one  
another in many Points, and, consequently, not .he easily re-  
moved from their Situation. *Petit,* in the Part last quoted, telis  
ns, that by fuch a Motion Of the Joint alone he removedanAn-  
ChylosiS already formed by this Cause. .\_

By *an Inspissation os. the Mucilage of the Joints.* That the  
Extremities os the articulated Bones might move easily, without  
being injured by their mutual Attrition, they are lubricated by a  
mucilaginous Liquor, the Nature and Constituent Parts of which  
are accurately described by *Clapton Havers,* to whom we Owe  
so many beautiful DiscOVerieS, with respect to the. Fabric and  
Structure of rhe Bones. *Hippocrates,* aS is Observed under the  
Article LUxATIo, informs ns, that there is naturally in all joints  
such a mucilaginous Liquor; and that the Joints are sound when  
this Liquor is pure: Now this mucilaginous Liquor, aS is obvious  
from the last quoted Article, consists Of three distinct Liquors,  
that is the universal perspiring Matter, the medullary Oil, and '  
the Mucilage secreted from the Follicules situated in these .  
Parts: If, therefore, by whatever Cause this Mucilage is not dis-  
sipated Or resorbed, it will he gradually accumulated, so aS sto  
fill the Cavity Of the Joint, and hinder the free Motion of the  
articulated Bones. In the mean time the thinest, and most sub-  
tile Part Of this Mucilage will be dissipated, and the Remainder,  
Os Course, render’d thicker: And aS the Motion of the Joint is  
the principal Cause by which this Mucilage, after it has perform'd  
its Office, is dissipated, so, when such a Motion is either hip-  
dered. Or totally abolished, there will he a greater ACdumula-  
tion Of the Mucilage, and the Disorder will become incurable,  
partly by the Inspissation of the Matter, and partly by the Acri-  
mony it has acquired by Stagnation, and which will be Capable  
Of Corroding and Corrupting the smooth Cartilaginous Surfaces of  
the Bones, and the Ligaments which secure the joints. .

This Disorder is known by a Tumor of the joint, which is  
at first soft, and then gradually enlarged, but not extending itself  
beyond the Joint. This Misfortune is most frequently Observed  
in the Joint Of the Knee. ς

*Hippocrates,* in the twenty-fifth Aphorism Of his fifth Section,'  
tells us, that *Those who have Tumors, and Pains of the Joints,  
vnthout Ulcers, are greatly relieved by throvding large Gsuantigites  
of cold Water upon them.* And Celebrated Physicians have since  
approved Of this Method. Perhaps in the Beginning Of the Dis-  
order it may prove beneficial, by suddenly contracting the Parts,  
by means os the Cold, in consequence Of which the Humour  
beginning to he accumulated, may he repelled, provided it is  
sufficiently thin: But where the Humour is already thick, and its  
Quantity large, it is not probable that a great deal of Relief can  
be afforded by this Method. But often repeated Frictions, Mo-  
tion of the affected Joint, penetrating Fomentations of Wine,  
Salt, Vinegar, and the Urine of sound Persons, with an Addition  
Of aromatic Herbs, such aS Horehound, Scordium, and Rue,  
and Cataplasms prepared Of the like Substances, will prove be-  
neficial. In the most dishcult Cases, Embrocations of warm  
mineral Waters, falling slowly, and from an Heigbr, upon the  
Part affected, have not Only afforded great Relief, but, also,  
sometimes produced a perfect Cure. The want Of mineral Wa-  
ters may he supplied by the penetrating Fomentations just re-  
commended, and applied by way Of Embrocation. *Petit,*in this Treatise *des Maladies des Oso Torn.* I- informs ns, that he  
saw happy Effects produced by Quick-lime-water, with a Lixi-  
vium oi Sal Ammoniac, poured from an Height upon the Part  
affected, for by this means there is instantaneousty produced an  
highly penetrating Spirit Of Sal Ammoniac, which is justly esteem'd  
the most powerfully attenuating Medicine. But when the Quan-  
tity of this accumulated Mucilage is so large, that it Cannot be  
dissipated by all these Methods, *Petit* Orders the most depend-  
ing Part of the Tumor, to be laid open with a Lancet, to the  
Very Cavity Of the Articulation, that the contained Liquor may  
be thus discharged, aster which he orders the Use Of the Medi-  
cines before prescribed.

*A Rigidity of the Ligaments.* That the articulated Bones may  
move freely, 'tis requisite that the Ligaments should he suffi-  
ciently firm to secure the Joints, and, at the same time capable  
Of yielding, and being lengthen’d, whilst the Joints are hending.  
When, therefore, by whatever Cause the Ligaments are become  
rigid, tho' all the Other Parts os the Joint are in their natural  
Condition, there will he an Immobility produced, which, will

it is, alio, obvious, that we are .not rashly to proceed to the  
Extirpation os a Spina Ventosa in one Part, since it generally  
springs up and appears in some others. The Reason Of this seems  
to be, that a Spina Ventosa draws its Origin from an internal  
Cause, and Of all Others most frequently, as we have already ob-  
served, from a venereal, scorbutic, or rickety Cacocbymy, which  
is generally deposited, not in one,, but in Various Parts. Besides  
this Disorder happening in one Part, may infect the found Hu-  
mours acting on the Part affected, and, by this means, propagate  
the Disorder through thewhole Body, aS is particularly observable  
in a Lues Veneres, winch Often affects the Genitals first, and  
then the whole Body.

If, to what has heen said, we add the Doctrine of Contu-  
sions, Luxations, and Fractures Of the Bones, delivered under  
- their respective Articles; as, also, what, under the Article CA-  
PUT, is said concerning Wounds of the Head, which injure  
the Bone, we shall have both the History and Cure of the prin-  
cipal Diseases of the Bones, especially if to. these we add an  
Anchylosis, which is an Immobility of the Joint, attended with  
an hard Tumor, and principally produced by a Callus of a  
Bone, fractured at the Articulation, an Inspissation Of the Mu-  
. Cilage of the Joints, mentioned by *Clopton Havers,* a Rigidity  
of the Ligaments, and an Exostosis at the Joints The Cure  
of this Disorder, which is highly difficult, is to be adapted Io  
the Diversity Of Causes, from, which it proceeds.

From what has been alreadysaid, we may understand theprin-  
fcipal Diseases observable in the Bones, especially if we consider  
what is advanced concerning the Bones, under the Articles CON-  
TUsIO, FRACTURA, and LUxATIo: For under the Article  
CONTUsIO are enumerated the Disorders subsequent to Contu-  
fions. Under the Articles FRAcTURA and LUkATIo are many  
Things relating to the Diseases of the Bones ; And under the  
Article CAPUT there are Various Observations relating to the  
Knowledge and Cure of Diseases Of the Bones. Yet we shall  
here say something concerning the Anchylosis, since it frequentiy  
arises from Disorders of the Bones, though it may sometimes  
happen without them, when for instance, the Ligaments of the  
Joints become rigid; Or when the Mucilage which lubricates  
The Extremities and Ligaments of the Articulations, is inspissated  
and accumulated.

Under the Article LUxATIo, when treating of an Anchylosis  
as the Consequence of a Luxation, it is Observed from *Celsos,*. that Contractions Of the Joints, by means of recent Cicatrizes,  
are by the *Greeks* called άγκυλας; but that *Paulas AEgineta* called  
an Immobility os the Joints ἀγκύλας, and ἀγκυλώσεις, the Causes  
os which were, according to him, an Infarction Of the Humours,  
er a Contraction Of the Nerves. Now it is Certain, that this  
Misfortune, which may he justly defined. An Immobility of the  
Joints, accompanied with an hard Tumor, may arise from a Diss  
order of the Bones. When this Disorder arises from the luxu-  
riant Callus of fractured Bones, or an Exostosis near the Joints,  
it is sufficiently obvious, that an hard Tumor is present. But,  
when it arises from a Rigidity Of the Ligaments, or an Inspissa-  
tion Of the Mucilage of the Joints, this Mucilage must gradually  
he accumulated in the Cavity Of the Joint, , fince, in consequence  
Of its Immobility, it is not consumed. For this Reason the Mu-  
cilage will distend the articular Capsula, and produce a Tumor,  
which, when the thiner Parts os the accumulated Matter are dissi-  
pated, may become pretty.hard. For this Reason an hard Tu-  
mour generally accompanies an Immobility Of rhe Joints, Or at  
least succeeds it, is it does not appear in the Beginning Of the  
Disorder. There is, however, one Exception tO this: An In-  
stance of which, says *Van Svseiten,* I myself saw, where the  
whole Arm was dried up by a true Marasmus; in which Cose,  
all the Parts being dried, there was an Immobility of the Joints  
of this Member, without any Tumor. But, in order to the due  
Mobility Of the Joints, a proper Figure Of the articulated part Of  
she Bones is necessary ; a Lubricity Os their Surfaces, where they  
mutually touch each Other, and a due Flexibility of the Liga-  
ments surrounding the Joints: So that an Anchylosis arises from  
the following Causes. . .

*A Callus of the Bone fractured ai the Joint.* It is Observed  
under the Article FRAcTuRA, that Fractures are sometimes suc-  
ceeded by a Luzuriancy of rhe Vessels os the Bone, and an In-  
equality of the Calins, by which means the natural Figure Of the  
Bones is altered and deformed. It is certain from many Obser-  
various, that fuch an unseemly Prominence, arising from the Luxu-  
riance of the Callus, has often continued in the fractured Pan,  
during the whole Remainder Of the Patient'S Lise. If, there-  
fore, the Fracture is near the Joint, it is obvious, that an Immo-  
bility of the Joint may afisa from such a Change of Figure in  
the Bone, it is true, in most of the Joints, the Extremities of  
the articulated Bones are sasely defended, and covered with a large  
Number Of Parts; for which Reason they are not to be easily  
broken, in those Parts contained within the Cavities os tbeJoints.  
But in fome Pans the Bones are sufficiently bare and ill deiended;  
about the Elbow, for instance, and the Knee , for which Rea-  
Ton an Anchylosis may happen in these. Parts. Thus *Petis,*

*'Celsus* gives no Opinion of the Cause of the Caries, and de-  
scribes very few Of its Symptoms; but is very pgrrimher in his  
Directions Concerning the Cure.

His Method is no lay all the Carious Parts bare ; and, if it be  
then doubtful how deep the Caries goes; to pierce with the Te-  
rebra, Or pyramidal Perforator, till the Raspings are no more  
black. If the Caries he superficial, he orders it to be burnt Once'  
and again with an hot Iron, that a Scale may separate from it; Or  
to rasp it till either Drops of Blood busing Ont, or the white  
Surface Of the Bone, shew all the carious Part to be taken away,,  
when Nitre, well-pounded, is to he sprinkled on the Bone. When  
the Caries is deep, he advises a great many Holes to be made  
through it with the Perforator, till the Bone be quite dry: For  
thus, adds he, the corrupted Part will be brought Off. When  
the Caries penetrates ro .the other Side of the Bone, it must be  
cut Out. When the Extent Of this deep Caries is not larger than  
what the Head of rho T repan will cover, he employs this instru-  
ment to take ffmouL If the Caries be large, he Orders Holes to  
be made round the Edges of it with the Perforator and them  
Cutting the Bridges be"ween these Holes thro' with a strong Knife  
struck with a Hammer, he takes away all the carious Part.

The Medicine which *Diosc or ides* principally recommends for  
bringing away the Scales os Bones, Or for what is now called  
their Exfoliation, is the Powder of the Root os the Peucedanum,  
and thejuice of Euphorbinm; adVising the Teguments to he de-  
fended with Liniments, Or CeratS, when the Euphorbinm is to  
he applied.

*Galen* defineSThe Bones to be the hardest, most dry, and ter-'  
restrious Parts Of the Body, whose Qualities are .cold and dry.  
He thought a Caries in a Boneanalogous to an Ulcer in a soft  
Part; and that it was Occasioned either by the adjacent Flesh get  
Derating a bad Sanies, with which-the Bones being moistened,  
were corrupted. Or that it proceeded from a- mucous Humour  
drove to the Bones, υ

In Consequence of this general Doctrine Concerning Bones,  
and their Erosion, with the general Axiom, *That Contraries ari  
the Remedies of Contraries, Galen* mustnecessarily have been led  
to discharge all things which he esteemed cold, and to recom-  
mend Driers in a Caries. He is Very sparing in his Recommen-  
dationS Of particular Medicines for this Disease , Opooanax in  
Ulcers of Bones, and the Root of Peucedanum for Exfoliation,  
with some compounded Piasters, are all he mentions.

- The *Greek* Physicians, aster *Galen,* have added little Concerning  
this Disease, except some few Medicines, answering *Gallums* In-  
tentions of Cure. *Paulus ABgrneta* has something of a disserent  
Formula for making the affected Part Of a Bone separate: It is a  
Cataplasm made Of the Leaves of the wild Poppy, and of the.  
Fig-tree, with Barley-flour and Wine ; Or, instead of it, he re-  
Commended equal Parts Of the Seeds Of Henbane, and Of  
Vitriol.

- The *Arabians* added greatly to the List Of drying Medicines,  
most of them actually so, .that is, in the Form Os Powders, and  
the greater Number potentially so too, that is, such as,'when  
tasted or applied to Sores, stimulate, raise Heat, and some De-  
gree Of Inflammation. They, also, restored the *Celsian* Practice  
Of burning and rasping diseased Bones, which had been neglected  
by the *Greek* Physicians, but has been generally mentioned by  
Writers after the *Arabians.*

- One of the *Arabians (Albueasts)* advises, in a Compound Fra-  
cture, where a Bone is bare, to put a Cloth, dipt in black styptic:  
Wine into the Wound; hut not to make use os a Cerat, Or any  
thing in which there is Oil, lest it make Corruption happen to it.

Those who wrote on Surgery, when Learning began to be re-  
stored in *Europe flu* the fourteenth and fifteenth Centuries, copyss  
mostly the *Arabians*; but, aster burning the Bone, which is the  
Method Of Cure in the Caries, that the most eminent of them  
are fondest Of, they applied oily Medicines to the cauterized  
Bone.

After Chymistry came to be cultivated in the sixteenth Cen-  
tury, Other Methods Of cauterizing were introduced.

*- Angelas Bolognintes* telis us, that some, in his Time, made  
use of scalding-hot Oil, heated Roots Of the Asphodel, kindled  
Brimstone, and the Water by winch Gold is separated from  
Silver.

*Joannes de Vigo,* besides Aqua Regia, mentions Oil Of Vitriol,  
Unguentum .ZEgyptiacnm, and Vitriol burnt and mixed with  
Aqua-vitae, aS CauterieS. Aster cauterizing, he dressed with  
Unguentum Absterfivum de Apio, and says, that, by this Method,  
the Separation of the diseased Part is made in forty Days aster  
Cauterizing.

*Vesalius* mentions Oil Of Sulphur and Euphorbium for the  
Caries, but prefers a Preparation Of Antimony, which he does  
not describe.

*Fallopius* agrees with *Vis.alius* in the Form of the drying Me-  
dicines to be applied, and in the Management of a Bone after it  
was burnt: The Place, say they,immediately aster being burnt, is  
to be frequently moistened with Rose-water, and the White Of  
an Egg, that Inflammation, and other Symptoms, may he pre-  
vented , afterwards the Eschar is tO bo ripened with Butter, Or  
Unguentum Tetrapharmacum.

asterwards he succeeded by a Tumor, because the Mucilage, ac-’  
cumulated in the Cavity ofthe Joint, is not, as in a sound State, dii-  
sipaned by Morion, in consequence of which, there will be a  
perfect Anchylosis. This Disorder may he produced by all the  
Causes capable of producing too great a Rigidity in the solid Fi-  
bres, as, also, by the Causes Capable Of producing the same Effect  
in the small and large Vessels, see the Article FIBRA. Thus we  
Observe, that decrepit Old Persons have almost all their Joints  
stiff and rigid, partly through a Defect Of the pinguious Oil,  
**destined** for the Lubrication of the Bones, and partly because  
the Ligaments are become callous, and sometimes bony. These  
Effects are, also. Observed in those Men, who, hefore they  
have arrived at a great Age, have laboured intolerably hard,  
whilst, by too strong a muscular Motion, the firm Parts of the  
Body are indurated. This Disorder, also, frequently succeeds  
violent and ill-cured Inflammations of the Ligaments, fince the  
Fluid, becoming stagnant, and coagulating, is concreted with the  
Vessels which Contain in Hence those who have been fre-  
quently afflicted with the Gout, are so Often sitbject to an  
Immobility of the Joints. Besides, it is shewn under **the** Article  
FIBRA, that too great a Distraction Of the solid Parts renders  
them weak, and that the. Weakness arising from this Cause, is .  
Cured by every thing which removes their too great Distraction.  
When, therefore, the Ligaments, in consequence os the ImmO-  
hility Of the Joints, are not stretched, they are generally spon-  
taneousty contracted, and become so rigid, aS afterwards totally  
to hinder the Motion of the Joint. After Fractures and Luxa-  
lions, unless, during their Cure, the Joints are sometimes mov'd,  
an Anchylosis frequently arises from this Cause, aS also, in paralytic  
Members, and, in this Case, as the Flexor Muscles are generally  
stronger than those Called the Extensors, the Joints are somewhat  
bended and become rigid, not OnlyOn account Of the Indura-  
tion Os the Ligaments, but, also, because, by the long State Of  
Rest, the Flexor Muscles are gradually Contracted and shorten’d,  
so aS to hecome almost incapable Of being lengthen’d any farther.

Tis, therefore, ObVionS, that a preternatural Rigidity Of the  
Ligaments is. Of all others, the most frequent Cause of an An-  
chylosis , but, at the same time, there are, for the most part, great  
Hopes that filch a Disorder may he Cured, provided it is not  
**of** too long standing, nor draws its Origin from Causes which  
cannot he surmounted by any Art, as in decrepit Old-age: For  
Instance, Is soft Aliments are used, and the Part affected, fre-  
quently exposed to aqueous Baths, and especially .Vapour-baths.  
If after these the Part is well cleansed, and rub’d with emollient  
Oils, and the Motion Of the joint attempted, by bending and  
extending it as much as possible, without producing any consi-  
derable Pain, Diseases Of this Kind are, by these Measures, often  
**Cured,** when they were thought desperate. But these are more fully  
considered under the Article FIBRA. A memorable Instance Of  
the Power and Efficacy Of this Method is found in *Mem. de PAcad.  
Bofoele des Sciences, An.* I72I. SeeANCYLE. *Paulus AEgrneta* gives  
**a** Cure Of the Anchylosis, pretty much the same with this, whilst,  
**in** the 55th Chapter Of his fourth Book, he Orders the Part affected  
**to he** anointed with Hydrebenm, in which Linseed, Marsh-  
mallows, and Fenugreek, have been boiled. Then he orders it  
**to he** anointed with Liniments, Composed partly Of emollient,  
and partly of aromatic Ingredients, and to he Covered with  
Piasters of a like Nature. He, also. Commended gentie and  
Continual Friction, in Conjunction with thin Method, and fre-  
quent Attempts to bend and extend the Joint.

*.. An Exostosis about the Joints.* Since, to the due Motion. Of  
the Joint, a certain . determinate Figure Of the Extremities Of  
the articulated Bones is requisite, \*tis sufficiently Obvious, that this  
Figure being changed by the Exostosis, the Motion of the Joint  
**must,** of course, be hindered. Tis obvious, from what has been  
said, that there may be such Tumors about the Joints. To this  
Species Of Disorders, we may, also, refer a Concretion Of the  
articulated Bones, whether by an Inspissation of the Mucilage  
naturally lodged between them. Or a Consolidation of their rough,  
and,perhaps, corroded coutiguons Surfaces,’ memorable Instances  
of which are found in *Hildanus de lehore et Meliceria, Cap.* 25.  
*Hist, de PAead. des Sciences, An.* 17 Id. and *Columbus de Re Ana-  
tomica, Lib.* 15.

That an Anchylosis is not to be Cured without great Difficulty,  
is Certain from what has been already said : But the prognostic  
Signs Vary according to the Diversity of the known Cause, for  
if inproceeds froth a Callus Of a Bone fractured near the joint,  
and If that Callus has acquired a bony Hardness, the Diforder is  
incurable, aS, also, when it arises from an Exostosis, Or Concre-  
tion Of the articulated Bones. But when it arises from an In-  
spissationof the Mucilage Of the Joints, Or ^preternatural Rigi-  
dity Of the Ligaments, there are still Hopes Of a Cure to he en-  
pertained, if the Disorder is not inveterate. *Van Smajeten.*

in the Works commonly ascribed to *Hippocrates,* the Caries is  
said tO be a dried Phlegm hetween the Laminae of the Bones, Or  
Earth dried by Heat, or a Defect Of the Mucus. The Account  
of the Symptoms is very incomplete. The Prognosis is aS super-  
ficial ; sor I see no more, than that, in tedious Ulcers, the Bones  
are affected, and the Cicatrices are hollow; and livid Flesh, in a  
.diseased Bone, is-a bad Sign. As tO rhe Cure, Cold is said to be  
hurtful to Bones, and this Disease is to be treated aS a Fracture.

*^Ambrose Pare sales,* more explicitly than *'Albucasis,* that “the '  
Application Of unctuous and oily, or Of moist and suppurating  
Medicines, corrupts Bones. *Pare* seems, also, fonder of the  
simple Driers, that is, the absorbent Powders, than those who  
went before him, whose Driers were as much potentially so as  
actually.

*- FaheiciusabAquapendentestdaoushusa^lumitsi* among the stronger  
Driers, and recommends theJuice of Leeks with Salt.

*. Gulielmus Fabricius Hildanus* is rather inOre positive than *Pare,*in forbidding the Application of all moist and oily Medicines to  
Bones laid bare: He seems, in one Part of his Writings, to expect  
always an Exfoliation from Bones laid bare, though, in other  
Places he relates Examples of Bones laid bare, heing cared with-  
**out,** any Desquamation. .......

*. . Hildanus* introduced the free Use of Euphorbinm-, and he  
Tincture, in Spirit of Wine, the Acrimony of which the Wri-  
ters hesore him had warned their Readers to guard against.

*Marcus Aurelius Severinus* takes notice of the shrill Sonnd,  
as if a Void was below, which a Piece of Bone has, when struck  
after its Exfoliation begins. He recommends Oil of Eupbor-  
hium, and inf Lime, aS a proper Application to corrupted  
Bones. .

. Soon alter *Severinus'sTime,* that is, about the Middle of the  
seventeenth Century, the essential aromatic Oiis of Vegetables  
were introduced ... - '

*Nicolaus Tulptnsis* savourice Medicine for exfoliation was Ost  
**of** Cinnamon, with Oil of Sublimate.

**In** the latter Part of the last Century, not only Variety of these  
Oils were used, and differentTinctures in ardent Spirits, and Other  
Compositions Of the Driers of the Antients, and of the aromatic  
Oils, were contrived, but the alcaline Salts, both fixed and Vola-  
tile, such aS Salt Of Tartar, Spirit Of Sal Ammoniac, *etc.* came  
to he employed, aS well as the acid Spirits, Oil of Sulphur, **Vi-**triol, *Arc.*

While the Generality Os Writers at this time, were so fond of  
**the** Aromata, Tinctures,' elixirs. Spirits, *etc.* Some mention  
their hiving cured carious Bones by perforating, trepanning, and  
'cutting them out. Or by burning and destroying them with Cau-  
stics. Others successfully employed watery Medicines, and dry  
Lint.

Among the Writers Of this Time, *Wiseman* is more accurate in  
relating the Appearances Of carious Bones than former Authors:  
They generally remarked only the black Colour,Greasiness,Rough-  
Hess, spongy Softness, and stinking Smell, and thin brown Ichor  
Of Bones, when carious, with the spongy Flesh growing Out  
from them: *Wiseman* observes, that carious Bones may he of a  
white, brown, or black Colour; and adds. *If the white be pory,  
the Caries may be deeper, and more dangerous, than if st vacre  
'black and hard.*

His Method of Cure is like to *Cels.usts* in several Particulars:  
He orders allthe cations Part to be laid bare, with Caustics ap-  
plied to the Teguments, then to scrape the rotten Flesh away,  
or to consume it. with Escharotics: Where that cannot he done,  
because of large Veffeis, Nerves, or Tendons in the Way, he  
desires .the Orifices of the Ulcer to be dilated with Sponge,  
Tent, Gentian-root, *etc.* But if the Cure Of the Caries is *of  
greater* Consequence to the Patient than these Parts are, he ad-  
vises to Cut them through to comeat the Bone. When the carious  
Bone is laid hare, if the Caries he superficial, he would have it  
rasped, and then to be dressed with the milder Sarcotics, or di-  
gesting Ointment: In few Days after the Application Of which,  
he says, you may see the Flesh thrust forth in small Grains, which  
is Callus. Burning with an. hot Iron he frequently used with  
Success, for hastening the Exfoliation, at Other times he pinched  
away, or broke off the Caries: His Medicines .are the Driers,  
Chemical Oils and Escharotics, only that in several Places where  
the Bone lay deepj he used Injections, composed of the Vulnerary  
Plants, hofled in watery Liquors, with some ardent Spirit, and **a**little dulcified Spirit of Vitriol.

I took notice hesore, that *Hildanus* expressed himself as if **he**thought Bones laid hare must exfoliate: This came to he a gene-  
ral Opinion, as is evident from the Directions which most chi-  
rurgical Authors give for treating Wounds, where Bones were  
laid bare, and *Bellas, e* telis us, it was the universal Practice in his  
time, to dilate inch Wounds, and to keep them Open, in Ex-  
pectation Of the Exfoliation: He endeavours to shew the Ab-  
surdity of this Practice, and recommends to Surgeons .to endea-  
vour to prevent Exfoliation in fuch Cases, and sor this Purpose  
he not only advised what *Felix Wurtz,* and *Cafar Migatus* had  
done before him, to bring the Lips of the Wound nearer toge-  
tber, and to dress seldom, but, also, proposed, that, when a  
Considerable Space of the Surface Of smooth firm Bones is laid  
bare, there should be a great Number of small Holes, made  
with a Perforator of a Trepan, as deep as the Diploe, or Can-  
celli Of the Bones , after which be says, fleshy Papillae rise out  
from these Holes, and extend themselves all over the bared Sur-  
face Of the Bones, and the Wound is soon cured, without any  
Exfoliation: This Practice has been approved by some consider-  
able Men, though, so far as I know, it has not been general  
among Surgeons. *Bellofie* Condemns the Application of acid

Spirits to Bones, aS increasing the Caries; and being of Opinion;  
that the Air acts by its Acid on Bones, he insists in rather stronger '  
Terms than most former Writers bin done, that Bones should he  
well defended from the Air.

*Petit* is the only Author of this present eighteenth Cen-  
tury, whom I need to mention: He names the several Diseases  
in which Caries most frequently happens, and relates the Sym-  
ptoms by which rt may be judged, that a Bone is corrupted:  
Such are the deep-seated Pains preceding an Abscess forming  
near a Bone, with a livid Colour, and Sponginess in the Tegu-  
meats; an Ulcer Continuing long near a Bone ; the sprouting Flesh  
Of such Ulcer appearing spongy. Of a pale Colons, easily pene-  
trated by a Probe, and bleeding readily without giving Pain, **the**Quantity Os Matter being larger, than commonly comes from an  
Ulcer of that Extent; the thin Consistence, brownish Colour,  
and stinking Smell os the Matter; its appearing black on the  
Plaisters, though there be no Lead in their Composition, seeling  
the Bone scrabrons and unequal.

*Petit* observes several Appearances that rotten Bones have,  
which may make so many Species os Caries. I. The Surface  
Of a Bone may be corrupted; and may, notwithstanding, he pretty  
firm and smooth, without throwing Out much Matter: He calls  
this a *dry* Caries. 2. If the Surface of a Bone be Very unequal,  
with a Number Of small Holes, discharging large Quantities of  
Sanies, he names the Caries *Vermotcillt* or *igrorrn-raten,* from the  
Resemblance it has to Wood eroded by small Insects. 3. Flesh  
may grow in the Interstices of the Corrupted bony Fibres, and  
may fill up the Cavernulae. 4. Sometimes the Bones are im-  
perceptibly wasted in Cancers.

*Petit* says, the dry Caries is generally the most soperficial,  
and cures more easily by Exfoliation than the other Kinds, which  
has made him think. *That the Exfoliation of Bones is only made  
readily, when the carious Part has no more Communication ccith  
the Vessels of the sound Bone: This Communication entirely flopped,  
gives Ground to believe, that the Juices, which move in the Vise  
seels of the sound Part, make an Effert against the corrupted Part,  
and that these Escorts, redoubled by the Ilesiflance, and repeated  
every Moment os. Lise, are the Cause which insensibly separates  
the corrupted Part of the Bone.*

*I perceive soon,* says he, *Fl esc rising in the Circumference of the  
corrupted Piece, vshich grows more and more. I have Beason to  
believe, that, proportionally as the first Essences of the Liquors  
make the Separation, these nutritive Juices congeal, and forni  
llleso, and that it is the insensible Growth of this Flesch, mohich  
completes the Separation of the diseased Bone, and thrusts it out-  
ewards. I am the more certain Nature acts thus, because I find this  
granulated Fleso in the Place vshere the separated Piece of Bone  
vias; and that the good Gltcalities of this Elejh make me certain,  
that the Bone is sound below.*

The Motion of the Corrupted Piece Of Bone, and the Bleed  
Coming Out below it, are the Symptoms by which. *Petit* telis ns, '  
the Exfoliation may be known to begin.

Our Author remarks, that the Worm-eaten Caries, and that  
where Flesh rises in the Cavernulae, may be Of different Depths  
in the Bone, and are more difficult to Cure than the dry Caries.  
When the Quantity Of Sanies (which is generally bloody in the  
latter Species Of Caries) is very large, there is Reason, says he;  
to suspect it Comes from the *Cancelle,* where the Marrow is con-  
tained, and where the Disease frequently begins, from which if  
**it** does not find an Exit, it will kill the Patient.

*Petifs* Methods Os Cure are these.. When the Carles is  
very superficial, and . of the dry Kind he dresses it with Dossils  
dipped in Spirit Of Wine, as he would do a sound Bone laid  
bare, which he affirms does not always exfoliate. If the Caries  
is deeper, and an Exfoliation must he hasten'd, he applies to it  
Aqua.fortis, Or Spirit Of Nitre in which Quick-silver has heen  
dissolved, which he recommends as a favourite Medicine, and  
afterwards he makes use Of Spirit Of Wine He discharges the  
exfoliating Part to be taken away, till it be quite loose. If the  
Carious Part Cannot be separated by these Means, he recommends  
the red-hot Iron, Rasping, the Perforator, and Trepan, aS *Celsius*orders. -

After the Caries is thus removed. *Petit* judges by the white,  
thick, mild Matter, firm Flesh, and hollow hard Cicatrix, that  
the Bone is sound; or he dreads a Relapse, if the Appearances  
are otherwise.

The general Practice Of Our Surgeons is to keep Ulcers with  
carious Bones, as much dilated aS they can, by Dossils, Sponge-  
tent, and the like, to destroy the spongy Flesh with Escharotics,  
to apply Spirit Of Wine, Tincture os Myrrh and Aloes, Tin-  
cture of Euphorbinm, and such like, to the Bone, and frequently  
to all the Sore. As these ardent Spirits are applied to hasten the  
Exfoliation in a Caries, they are applied sor the most part, also/'  
to sound Bones laid bare, as Preservatives, it is said, against theif  
Corruption, and to prevent Exfoliation.

From this historical Sketch of what Authors have said Of the  
Caries, it is evident how little the Circumstances of this Dis-  
ease have been consider'd, and what a contradictory odd Medley  
Os Practice has been followed. Surely all os it Could not have  
been supported by Observations tolerably made ! Of late indeed

some Species of this Disease have been distinguished, hut the  
Practice is too uniform In all Of them. TO reform this, it will  
he necessary to examine-more accurately the Appearances Of this  
Disease.

Previous to any Account of the Caries, it will be necessary to-  
remark, that Bones have their Veffeis, and circulating Fluids, and,  
in short, the same general Texture which other Parts have; so  
that Solidity, and stronger Cohesion of PartS, are the only evi-  
dent distinguishing Characters Of the Composition of Bones. Of  
this Truth there are many Proofs, such aS,

**I.** Bones are in the State Of Membranes and Cartilages, before  
they Ossisy.

**2.** The hardest Bones have sometimes Changed back again'  
into a soft State.

.. 3. The granulated Flesh, which rises out from Bones after  
Fractures, Amputations, the Trepan, or in Exfoliation, differs  
frothing from whet would CIrne from any soft Part, yet in several  
Cases becomes sound solid Bone.

**4.** When the Texture os Bones is unravelled artfully, and com-  
pared with the Texture Of the softer Part, it appears alike in  
each.

5. By a chymical Analysis, the same Principles are obtained  
from Bones, aS other Pans, the Proportions of these Principles  
being different in different Parts.

6. By comparing the Diseases of Bones with similar ones in  
softer Parts, aS I shall do in Considering the different Species of  
Caries, the general Proposition, of Bones differing Only in Soli-  
dity, and Cohesion Of Parts, from the Other softer Organs of  
the Body, will be further confirmed.

. The Species os Caries which l have had Occasion to see, are,  
I. What *Petit* calls the. dry Caries, where the Bone is  
pretty smooth and firm, and throws out little Matter. Though  
the Surface Of the carious Part of a Bone in this Species is not  
of a very dark Colour ar first, yer, before Exfoliation, it becomes  
of a dark-brown or black Colour. An Exfoliation is more easily  
Obtained here, than in any other Kind. Before the Corrupted  
Part can Otherwise be Observed to separate. One will hear, aS  
*Severinus* remarks, a shrill Sound, when it is struck with a Probe,  
as if it was hollow soon after this the Edges of the carious Part  
**rife** a little, and Pus, or, if it should be pressed. Blood, is seen  
coming out below them, granulated Flesh then appears at these  
Edges, the Bone is more raised gradually towards the Middle,  
till all the Carions Part be separated from rhe new fprouting Flesh,  
which arises up on the whole Surface Os the Bone below, and.  
seems to push off the carious Scale, so that- it becomes qni-e  
loose, and Can he taken.away without any Violence. TheUlcer  
is then in a fair way Of curing, and though a considerable Thick-  
**ness** of Bone is come away, yet, in fome time after, little De-  
pression is to be felt on the SursacesusL the Bone, the new Flesh  
having gradually become harder, ti| ri supplies, in a good mea-  
sore, what was taken away. .

Whoever has seen the Separation of a gangrened Piece Os  
Skin, Or Of the Eschar Of a Caustic, applied to the Skin, where  
**a** Fissure first appears in the Margin of the mortified Part, Pus  
begins to Onse out there , the Division between the sound and  
mortified Part becomes larger, new Flesh arises; the Separation  
goes on from the Circumference to the Centre, till the mortified  
Part drops off, and the new Flesh supplies its Place; Whoever,  
I say, has seen this, and compares it with the Phenomena Of the  
dry Caries, will judge that. Allowance only being made for the  
Rigidity of the bony Fibres, which cannot contract, as the Fi-  
bres Of Skin do, the Appearances are the same in both Cases:  
And, therefore, I would call the State of the Bones, described  
above, the gangrenous Caries.

II. The second Kind of this Disease is *Petirs* worm-eaten Ca-  
ries, in which the spongy, or cavernnlous Texture is evident;  
**it** has not such a dark Colour as the former, the Quantity Of  
Matter sent out-from the Cellules Of the Bones is greater than in  
the former Kind, and is Vastly increased when the corrupted  
Sanies comes Out from the Marrow of the Cancelli. Pieces of  
the rotten Bone may be broken Off here, or they may fall away;  
but no regular exfoliation is to .he expected, unless, when, by  
Art, it is reduced to the former Species. The'gradual Wasting  
of the bony Fibres, by the Suppuration, is often Very remarkable  
in this Caries; a Piece Of Bone, which appeared aS large as the  
End of One’s Thumb, and or a solid Substance, shall become  
less than the Point Of the little Finger, and so spongy, that it can  
scarce be touched without breaking.

The worm-eaten Caries, where the Substance Of the Bone  
only is affected, may be compared to an Ulcer of the soft Parrs,  
which has a Number os little Sinufes in its Sides; such aS I have  
frequently seen, when hard Tumors had only in part suppurated,  
, and were not all melted down into Pus; Drops of Matter could  
he seen drilling out from the numerous Orifices of the small  
Caverns in its Sides. When the Sanies comes from the cor-  
rupted Marrow in the Cancelli, the Disease is analogous to an  
Abscess, the Matter Of which has eroded a Number of small  
Holes in the Skin.

HI. Frequently a spongy, Needing, fleshy Substance rises in  
all the littie Caverns os the v.orm-eaten Cures, when it-may he

Called Corneas ; and is much akin to Ulcers, with Hypctsa?  
Colin \_ . .. .

IV. As the soft Parts are distblved into a mucilaginous Sutol ,  
stance, which destroys their original Form and Texture in the  
white Swellings, aS they are Called, so, in this Disease, and some  
others, the Periosteum becomes thicker, the Bone turns softer,  
its Surface is eroded, a yellow-red spongy Substance sprouts out,  
and, proceeding deeper into their Substance, wastes the bony  
Fibres.

The Difference of the Appearance of this Rind froth what I  
Called the carnous is, that, in the Carnotis, the spongy Flesh grows  
Out Of the Caverns, while the grey, or brown-coloiired, spongy j  
bony Sides of them still remain *- whereas, in* the other, the bony  
Fibres disappear where-ever the spongy Flesh Comes, so that one  
Can scarce determine, by the Probe, whether or not the Pone  
is carious. Upon scraping away this Bone-Consuming Flesh, the  
Surface Of the Bone appears rough indeed, but not much eroded,  
nor greatiy altered in itS Colour. I have seen some Ulcers in  
foft Parts, where such a consuming spongious Plessi arose.

*N.* Frequently, upon opening an Abscess, one shall fee, at the  
Bottom of it, a white smooth Bone, without its Periosteum, or  
Connection to any of rhe neighbouring Parts, except by its Lt-  
gaments at its Extremities, By any Trials we can make, and by -  
what we can judge Of the Bone, changing its Colour gradually,  
aS it continues exposed to the Air, and the Necessity of Its com-  
ing all away, before any Cure can be made of the Ulcer, it ap'd  
pears, that there was no Circulation Of Liquors in such Bones,  
before the Abscess was Opened.

ThisWay Of Bones mortifying happens most Commonly in sero-  
phulous Patients, in whom something analogous io this is often  
to be Observed in the Glands, round which a stow Suppuration  
is made, which leaves them almost entirely separated from the  
surrounding Parts,

VI. In one Species of Exostosis, the tumefied Part ofthe  
Bone is softer than the rest os it, and is not composed os regular  
Fibres, nor Cavernous, but as is the ossifying. Juice had been  
thrown out irregularly; Over which a Cartilaginous or tendinous  
Substance is spread, and from this a firm, shining, smooth Flesh  
grows Ont, which, aster the Teguments are removed, sends forth  
a thin, stinking, acrid Sanies; the Patient complains often Of  
throbbing Pains in its and sometimes considerable Haemorrhages  
are made from imperceptible Vessels in its Surface.' May not  
this be compared to ulcerated Glands?

VII: In the spreading, eating Cancers, of which all Practised  
know the Symptoms, the Bones are wasted, aS well aS the soft  
Parts, and the Appearances are the same in both, unless that thd  
Bones do not consume quite so fast.

AS the AEtiology would lead the into too largo a Field of Dis.  
pure, and the Prognosis would require so many Suppositions as  
would be tedious, or would be so general as to be os little more  
Use than the common Directions laid down by practical Authors,  
**I** shall, therefore, proceed to the Cure.

In treating any Caries, it is altogether necessary to examine  
strictly all Circumstances, and to discover,- if possible, what  
Cause, either general or topical, may have made the Corruption  
Of The Bones, that Endeavours may ho used to remove it, if it  
still subsists. Seeing it would he Very improper to pretend to  
give here Directions for the Cure os the Tues Venerea, Sero- .  
phuke. Scurvy, Gangrenes, Abscesses, Wounds, Contusions,  
and all the other Diseases which may occasion Caries, l must  
Confine myself to the topical Management Of the Caries, with-  
out any regard to the Habit Of the Patient, or to any other  
Disease. 7

A speedy and safe Separation of all the corrupted Part is, then:,  
the principal indication co bespursued, for executing which, you  
see from the History, Very many Means have been proposed: To  
. know which of these are preferable in ’the disserent Cases which  
may be under Our Care, it will be necessary to Consider the evi-  
dent Operation and Effects of the several Medicines proposed,  
which may be reduced to the following Classes.

I. The insipid terrestrial Absorbents, such as Powder **os**Coral, Crabs-eyes, and the like, put into an Ulcer, where **a**Bone is carions, can have little other Effect than to imbibe the  
Matter of the Ulcer; If they fall into any CaVernaculas of the  
corrupted Bone, they may remain so long there, as that the Mat-  
ter they imbibe may become acrid. Scraped Lint is an Absor-  
bent which has not this Disadvantage.

2. The Powders which have aromatic. Or other acrid Parti-  
cles in them, such as the Powders Of the Roots of Birth wort.  
Bryony, Peucedanum, Aloes, Myrrh, Euphorbiam, not only  
absorb Liquors, but give more or less Stimulus in proportion to  
their Acrimony; and aS the effect of all Irritation is some De.  
gree of Inflammation,, which in Sores is principally removed by  
a subsequent increased Suppuration, these Powders may assist to  
separate Corrupted from sound PartS. Such of them as have bal-  
samic Particles in their Composition, encourage the Suppuration  
mosh Several Of them resist the Putrefaction os animal Sub-  
stances, and, therefore, may preserve a carious Bone, or the  
Matter coming from it, from such an high Degree of Purrefac-  
tion as thev rniobr orherwisc or, *rr,* .1—o. rmn. .... νθηι»

*Sore,* regard must always he had to their Operation, if any of  
their Particles are absorb'd into rhe Blood-Vessels; for some Os  
them produce more Or less Of Fever; others become Purga-  
tives, *etc.* according to their different Powers, which are known  
to those who are acquainted with the Virtues of Drugs.

3. Ardent Spirits, aS Aquavitje, Spirit of Wine, being liquid.  
Can he introduced further into a carious Bone than Powders,  
they stimulate Sores, resist Putrefaction, harden the Fibres, .  
Coagulate the Liquors, hinder Suppuration, and quicken ths  
Pulse when absorbed.

4. The Tincture,of the Powders above-mentioffd, in these  
Spirits, partake of the Nature of both, principally of the Spirit  
Of which the larger Share of the Composition consists.

5. The essential Oiis, aS Oil Of Cinnamon, of Cloves, and  
the like, stimulate, erode, resist Putrefaction, and, mixed .with  
the Blood, raise some Degree of Fever.

6. Common Oils, Balsams, Resins, relax, increase the Pu-  
trefaction, and are allowed universally to he the most effectual  
Suppurants and IncarnerS.

7. Water relaxes the Solids, and dilutes the Fluids, when  
nearly of the same Heat with Animals.

8. Vinegar stimulates and resista Putrefaction; when weak,  
enjoys, also, the Virtues of Water; when strong,approaches to  
the following Class.

9. The natural Salts, Nitre, Sea-salt, Alum, the Vitriols,  
have different Degrees of Pungency, and proportionally sti-  
mulate Or erode , otherwise they preserve animal. Substances  
from Putrefaction.

Io. Acid Spirits, extracted from Fossils, by the Force of  
Fire, such as the Spirits Of Nitre and Sea-salt, the Oiis of Suh  
phur and Vitriol, coagulate the Liquids, and mortify the Solids;  
by being diluted with Water, they approach to Vinegar.

II. By dissolving metallic Substances in those acid Spirits,  
generally their corroding, sphacelating Power is increased, and  
some Os them give such Violent Pain, aS frequently to bring On  
Convulsions. . '

*12.* Metallic Bodies, corroded by Acids, generally erode,  
when applied to Sores. Some os these, for Example, *Sublimate  
Mercury,* and some other mineral Substances, particularly  
Arsenic, have shaken the whole Frame of the Body, when ap-  
plied externally ὁ and the Mercurial Preparations sometimes enter  
the Blood, and produce a’Salivation.

I3. Alcaline' Salts and Spirits, aS the Salt and Spirit Of  
Hartshorn, Salt and Spirit Of jSal Ammoniac, Pot.ash, Salt of  
Tartar, Oil Of Tartar, and the like, stimulate, erode, and in-  
crease Putrefaction, when absorb’d, aS the Volatile Ones Very  
readily are, they quicken the Pulse. The eroding Power os these  
Salts is greatly increased in their Preparations with Quick-  
lime, aS in the common Caustic, which mortifies any Part of a  
living Animal it is applied to, but with remarkably less Bain  
than what the Acids, Or their Preparations with Metals, give.

I4. All Bodies heated beyond a certain Degree, and applied  
to Our Bodies, give ns Pain, stimulate, and inflame; when  
greatly heated, they mortify whatever .Part Of an Animal they  
touch.

I 5. The Effects of rasping. Cutting, breaking, and trepanning  
Bones, are altogether evident.

I6. In every Wound, Or Ulcer, the Matter discharged into  
it must he the most constant Application to the Side Of the  
Sore, when this Matter is laudable mild Pus, it is one of the  
tnost powerful good Digesters, Suppurants, and (nearness; when  
it stagnates too long, or when the Liquors Or Vessels are faulty,  
it may become an acrid stimulating eroding Sanies; when  
absorbed into the Blood, it insects all the Liquors, stimulates  
the Vessels, and is capable or producing Violent Disorders.

The Effects I have attributed to these Medicines, are such,  
as are evident to the Senses, and what all who practise know ,  
but do not always consider, when they make use of them;  
otherwise, they would have adapted them better to the several  
‘ Species of Caries, and to the different Stadia Of each, the Cure  
Of which I now proceed to.

**OF THE DRY OR GANGRENoUS CARIES.**

When the dark Colour, and dry Surface, Of a carious Piece  
of Bone shew it to be fully mortified; especially, is the shrill  
Sound, and rising Edges Of it, with Pus coming out below  
them, discover rhe Exfoliation to he begun. Nature Of herself,  
or with Very little Assistance, will make the Cure..

If the Pus be mild, and in due Quantity, it will prove the  
heft Suppurant and InCarnes, for making the new Flesh thrust  
Off the carious Piece of Bone; care Only being taken not to  
remove it too frequently, nor to suffer it to remain so long as  
to become too acrid.

If the Quantity of Pus be too littie, it is to be supplied by the  
Medicines, whose Effects are nearest to it; so that those of the  
sixth Class are proper. The *Unguentum Basilicon,* the *Linimen-  
tum Arcaei,* or such-like, every Surgeon employs to hasten rhe  
sailing out of a Piece of Skin mortified by a Caustic. I have  
often employed them, with equal Succefs, in bringing away a  
Scale of a Carious Bone., the Seoaration of which would

necessarily be retarded by every thing which checks Suppura-  
tion, and the Growth of new Flesh, as the common .favourite  
Medicines comprehended under Class third and fourth necessa-  
rily do, though it must be acknowledged, that Nature, with  
the Assistance Of the Balsam Of her own preparing. Pus, will  
Often get the better or all that Surgeons do against her.

While the Exfoliation is making, the external Opening in the  
Teguments is large enough, if the Pus be so evacuated, that it  
neither forms sinuous Ulcers, nor is absorbed to taint the Blood;,  
for otherwise it hastens the Separation os the carious Part os the  
Bone, more by being collected upon it, than when, it has a  
free Exit. .

If, by the external Orifice being small, either os the herd  
Consequences just now mentioned happens, the Aperture ought;  
to be enlarged, either by filling it with prepared Sponge, which,  
expanding itself, stretches the Orifice; or it may be enlarged by  
Cutting with a Knife, or eroding with a Caustic the Teguments  
which cover the Caries; and they are afterwards to he kept,  
asunder, by filling the Sore with soft Dossils, and pressing them  
in gently by aproper Bandage.

When the Colour os Part Of a Bone is considerably alter'd’  
from wbat.it should be in a sound State, but is not .so dark as  
it can be judged to he entirely mortified, while there are no  
Signs os its Separation, it may prove a Very tedious Task to.  
trust the exfoliation tO Nature and therefore, after laying all  
the altered Part bare, is it can be done by the Methods -pro-,  
posed in the preceding Supposition, the Surgeon Ought to try  
with the Perforator, or with the Rasper, how deep the Disease  
goes. Is it be Only superficial, a complete Mortification is m.  
be made, by applying a red-hot Iron, Or the potential Cautery,  
after which, the Case, and its Management, are the feme aS were  
mentioned already. ....

If the Alteration of the Bone be deeper than the Action of  
the Iron, or Caustic, can reach, the Surgeon may Cut off all.  
that is suspicious, with a Very sharp Instrument struck with **a.**wooden Mallet, which gives little Shock to the Member;aster  
which he is to promote, as much aS possible, the sprouting of  
granulated Flesh, such as rises in Exfoliations, from the whole.  
Surface os the Bone, without which no Cure is made; but the.  
Surface anew alters its Colour, and corrupts. If it were asked  
Surgeons, what the Medicines are, which would most readily  
procure the Growth of Flesh, they would readily answer, in  
general. Pus, and balsamic or unctuous Medicines; and such  
they would apply in all such Cafes, except where the Bones are  
bare. For what Reason this Exception should he made, I under-  
stand not: The Parts which yield new sprouting Flesh with the  
greatest Difficulty, Ought, one would think, to have the most  
powerful IncarnerS applied to them: And now, aster a great  
many Trials, I can assere vcu. that no Medicines so effectually  
prevent the Corruption *Sc.*Bones laid bare, and assist to cover .  
them so soon with Fiesiss\* Ointments, Balsams, and Dressing;  
seldom, to have the Assistance os the most effectual Balsam of all.  
Pus. .With these we see daily the Extremities of amputated  
BoneS covered Over with Flesh, and by this Method i have bad.  
the Pleasure to see large Parts os the Skull, Tibia, and other  
such Very solid BoneS, covered in a littie time with granulated  
Flesh, after they had beep made quite bare by Wounds, made  
even with bruising Instruments, and, likewise, After their exterior  
carious Surface had been cut off, aS above directed; and **a**complete Cure was made, without the least Observable Exfo-  
liation.

It is plain, that in the Case I now treat Of, where the Cor-  
rupted Part of a Bone has been all cut away, or when found.  
Bones have been laid bare, and we wiih to make a Cure without.  
Desquamation, that all Medicines, winch can mortify the ex-  
terior Fibres, such are all eroding Medicines, are to be avoided,  
as are all such aS harden and dry Fibres to which they are ap-  
plied, so aS to prevent the growing of Flesh, which ardent  
Spirits most effectually do and therefore, of all the Classes of  
Medicines which I mentioned, there are none except the Ab-  
sorbents, Νο I, and 2. the unctuous and balsamic, N« *6.* and  
Water, N° y. which are not opposite to the Indications of Cure.,  
The terrestrial Absorbents are of no Use; Water dilutes and,  
washes away the Pus; so that some Of the more active Or bal-  
samic Powders, and the unctuous Medicines, **can** only he **the;**proper Remedies here

Whoever has taken notice of the Progress Of the Exfoliation  
os a Bone, or Of the Cure Of a Bone laid bare without Exfo-  
liation, must have seen the granulated Flesh, rising from every  
Part os the Surface Os the Bone to cover it and that what Flesh  
grew Out from any neighbouring Part, though it may lie **OVer.**the Bone, and hide it from the Sight, yet it does not grow to **the**Bone; and no Cure is made, unless by what rises from every  
Point Of the Bone. Surgeons are eVen often obliged to destroy  
such OVerloping spongy Flesh, to promote the Cure; from which  
it is reasonable to conclude, that *Bellasse? s* Dressing seldom  
Contributed much more to the Cures he performed without  
Exfoliation of Bones laid bare, than ths Holes he proposes to **he**made with thepersorator into the Diploe or Cancelli: The Flnih  
arising from that softer Substance, Overspreading the.Surface in.

the Circumference Of ihe Holes, Can be no better than the  
spongy Flesh, winch hatigs Over the Bone from the Sides Of the  
Sore.

**Is,** notwithstanding **our** Endeavours **to** make Flesh rife froth  
**the** Surface Or a sound Bone laid bare, or or one that has had  
its mortified Surface cur off, we cannot obtain this wished for  
Incarnation, and the Surface Of the Bone shews its beginning  
Corruption by a Change os Colour, it must be treated as above  
directed in the Case, where we supposed a superficial Caries, it  
must be completely mortified.

When the carious Pan Of a Bone IS too thick for being se-  
parated, either by the Rasper, or Cbissel, it is to be taken out  
by the exfoliating Trepan, or by making a great many Holes  
in the Circumference Of the Cariesand then. Cutting the  
Bridges between them through, the middle Os it is raised. Or cut  
Off, after which the Management is the same aS in the preceding  
Case-

Very often there is not Space enough in the Sores to apply  
right the instruments proper sor cutting away the carious Part  
Of a Bone, and it cannot be safely enlarged : Wden this is the  
Case, we can only hasten the Exfoliation, by fully mortifying  
all that is spoiled, by repeated Applications of a red-hot Iron,  
Oros potential Cauteries. When the hot Iron is to be used, the  
Bone Ought to be previousty well dried, that the Iron may not  
he extinguished by the Moisture, and we are commonly desired  
to guard the Sides of the Sore with wet Rags, whereas, when  
either the Iron is to be applied from time to time, or we can  
judge, that the Exfoliation cannot be speedily made, while we  
wish to continue a large external Opening, the reasonable Pra-  
ctice is Of Design to burn the Sides into a fully mortified  
Eschar, if some Part is not to be hurt, the burning Os which  
might be Os Very ill Consequence, for, while this dead Eschar  
remains, less Moisture will be. thrown Out, to prevent the  
Effect Os the Cautery, and the subsequent Applications Os the  
hot Iron can be made with little Or no Pain to the Patient,  
and the Orifice does not contract. Is a carious Bone, which is  
to be burnt, lies deep, the hot Iron Ought to be introduced  
through a Cannula placed upon the Bone, that the Iron may  
he rightly directed.

If the potential Cauteries are chosen, rather than the actual,  
the Common Caustic, prepared Of Quick-lime and SOap.lees,  
deserves the Preference to any Of those composed Of the acid  
Spirits; for it gives not near so much Pain, and is not so  
ready to occasion Convulsions, it penetrates better than the  
dry Forms of eroded Metals; and'does not run so much when  
it melts, as the mere liquid Acids do, it either is not absorbed,  
er its Effects are not observed in the Blood, whereas the .Mer-  
curial Preparations frequently raise an unexpected Salivation.  
The Reasons given for burning the Sides of such a Sore as I  
now treat Of, are equally good for forming an Eschar all round  
the Sides, with the potential Cauteries. This Eschar Ought to  
he kept from separating, aS long aS the Surgeon oan: The most  
effectual way of doing this, is to soak it frequently with ardent  
Spirits; by which Management the Exfoliation Of the Sides  
(pardon the Expression, which I use to shew the Analogy) may  
sometimes be near as long in making, aS the Exfoliation of the  
Bone, if the Suppurants, Pus, and digesting Balsams, are rightly  
applied to it. - .. .

When the affected Part of the Bone is fully mortified either  
Of these ways, the Case is reduced to the Supposition I first  
made, and is to be treated the same way.

Though Necessity obliges to use Caustics, in the very deep  
dry Caries, yet, because they require fo much Time, and so  
frequent Applications, before they can pierce through any con-  
fiderable Thickness of a solid Bone, I would prefer the chirur-  
gical Instruments, with which the whole corrupted Part can  
be taken away at once,where-ever they can be conveniently made  
use os.

After an exfoliating Piece Of Bone is moveable, the Orifice  
Os the Sore Ought to be made fo large, by the Methods be-  
fore proposed sor enlarging Orifices Of Sores, aS the sepa-  
rated Piece can easilv be brought Out, and without leaving any  
considerable hollow LJlcer under the Skin; for thus the prick-  
ing Pain, which a loose Piece of rotten Bone frequently Occa-  
sions, when left to work its Way through a small railage, and  
the Suppurations, which may be Occasioned by its remaining  
under the Teguments, tnay be prevented ; and there is no Dm-  
ger of leaving a sinuous Ulcer, which may require more Time  
and Labour, than is otherwise necessary for a complete Cure  
Os the Sore, which needs no Other Treatment, aster all the  
. corrupted Bone is brought away, and rhe sound Part is covered  
with firm Flesh, than what any common Ulcer does

The Cafes I have supposed may serve for understanding the  
different Stadia of this dry Caries, with the Management ne-  
cessary in each, and, therefore, 1 proceed to the second Species  
**os** Caries.

**- OF THE WORM-EATEN CARIES.**

The Calls formed in the eroded Bone, in this Species Of Ca-  
ries, lodging and retaining the acrid putrid Sanies, which In-

creases the Disease, it is necessary to destroy all the assessed  
Part Of the Bone, as soon as Can Conveniently he done.:  
Where-ever the proper Instruments can he applied; Rasping;  
Chisseling, or Trepanning, according to the Depth or Extent  
or the Caries, will most fpeedily answer the Intention. After  
any of these Operations are performed, the Method os Cum is  
the same aS was proposed, when we supposed these Operations  
to have been performed in the dry Caries.

. When the Sanies comes from the Cancelli of the Pones, the  
corrupted Sides ought to be taken Out by One Or more Applica-  
tions Os the Trepan. If the Carious Part, be of large Extent,  
the Trepan is to be applied all round the Circumference os is ;  
and, the Bridges being cut through, it is to be all raised up. **A**Patient was received into the infirmary at *Edinburgh,* for a /well'd  
carious *Tibia,* the Teguments were all mortified by Caustic, and  
then cut away; the Operation Of the Trepan was performed  
fourteen times in the Circumference of the Corrupted Part,  
and all the anterior internal Side of the middle of the Tibia was  
taken out; new Flesh rose from the Cancelli, and became firm  
Bone, before he went from the Hospital.

Is less Of the firm Sides of the Bone ate found to be cor-  
rupted, than what, upon Opening the Cancelli, we discover  
them affected, care must be taken, that the Marrer within the  
Bone should be easily discharged. .

. When, by the Orifice through the Sides of the Bone being in  
the lower Part Of the putrid Cancelli, the Matter easily flows  
out. Or all the affected Cavity can be filled with proper Dress  
sings, the Cure may be made without taking any moro Off the  
solid Sides of the Bone. A Girl, aster the Small-pox, heving  
an Ulcer Very near the internal Malleolus, an Hole was eroded  
by the Matter through the Bone, large enough to admit **a**Finger; a Probe was introduced three Inches upwards within  
the Tibia, without meeting any Resistance; bur, on directing  
the Probe downwards, we felt the Bone full of firm Flesh. A  
Pastil made of Myrrh, Aloes and Honey, had been put every  
Day into the Bone’, and the Girl had a constant Purging, which  
ceased after I ordered the Aloes to be omitted in the Dressing  
of the Sore. An Injection composed Os Digestive, and Honey  
of Roses, dissolved in Water, with some Vinegar, was thrown  
every Day into the Bone ,\* the Pastfl of Myrrh and Honey was  
introduced a little Way, the Cavity Of the Bone gradually filled  
up with, new Flesh, and a complete Cure was made.

When the Sanies stagnates, because Of the unfavourable Situa-  
tion Of the Aperture in the Sides os the Bone, one Or more new  
Openings must be made with the Trepan, till either the Sanies  
has a free Exit, or all the Part of the Bone, Covering the putrid  
Cancelli, is taken away, when the common Cures for' Other  
Ulcers are to be employed. -

If we cannot perform the necessary Operations for re-  
moving a worm-eaten Caries, we must burn it frequentiy with  
a red-hot Iron, the Directions for which Operation were  
already given in treating of the dry Caries. The hot Iron seems  
To be preferable hereto the potential Cauteries; because these  
may sink into the Celis, and erode deeper than we.incline,  
while they might not destroy the exterior part.

When, in this Species of Caries, the Sanies is in great Quan-  
tity, and Very fetid, and the Bone cannot be come at, to do  
what is necessary for a free Discharge, so that there is Reason  
to be afraid, that not Only the Bone may be farther eroded, but  
that the Sanies maybe absorbed, to Occasion an hectic Fever,  
and all its fatal Consequences, it will be sit to encourage the Dis-  
chargeof the Matter aS much aS possible, and to apply such Medi-  
cines as blunt Or destroy its Acrimony. It is, therefore, necese  
sary to dress frequently, in this Case, and to wash out the Sanies,  
at each Dressing, with a proper Liquor. Ardent Spirits, the  
Tinctures made with them, and essential Oils, indeed de-  
stray or confound the putrid Smell Of such Sanies; and, by Con-  
tracting the Vessels of any Sore they were put into, lessen the  
Discharge of the Sanies, which makes them answer the old  
Theory of their being proper Medicines for the Caries Of the  
Bones; which Disease was supposed to proceed from too much  
Moisture thrown upon the Bones, whose natural Quality is dry,  
and, therefore, required drying Medicines to cure them. These,  
**I** am persuaded, have been the Reasons, why those Medicines  
came to be employed for carious Bones: But, from what has  
been observed Of the disserent Circumstances of Caries, it is  
evident, that these Reasons Cannot be alleged for employing  
them in all Caries: And in the Very Case, which we now  
consider, and which is the-most favourable for using them,  
there are Objections to.them, which make others appear more  
reasonable to be employed, and which, upon Trial, I have  
found more successful. The Objections are, that ardent Spirits,  
and essential Oils, in Very small Quantity, or diluted, (for when  
pure, and in large Quantity, they are caustic; and penetrate too  
deep) retard the Separation of the corrupted Parts; they render  
all the Ulcer callous, which is indeed Of some Advantage to pre-  
vent proud Flesh, whilst the Bone is not separated, but is  
troublesome to remove afterwards; they are very readily  
absorbed, and produce more or less Fever, which hurts the  
Patient. Some Of the -most Common Tinctures, employedj ’

that of Aloes particularly, frequentiy brings On a Constant  
Purging. Common Digestive, Or Honey, Or both, dissolved in  
Water, with which Vinegar, Or some Drops of an acid Spirit,  
have been mixed, mare effectually correct the putrid Sanies,  
and can be used in any Quantity, to wash it out of the Sore,  
' without either retarding the Separation of the spoilt Bone, or  
' raising the least Disorder, if absorbed; bur, on the contrary,  
preventing the Mischief, which the absorb’d Sanies would  
otherwise produce. When the Ulcer is deep; this Medicine ought  
**to** he thrown into it from a Springe, that it may penetrate  
every-where, and Inay bring the Sanies away with it when it  
recoils.

Of the **CARNOUs CARIES, OR ULcER OF THE BONES  
wITH HYPERsARcOsts.**

This Disease differing only from the immediately preceding  
**in the** Addition of spongy Flesh growing in the Celis of the  
Bone, the general Indications of Cure alter very little; only, as  
this Flesh bleeds easily, and obstructs the Surgeon's View, the  
Rasping,Chisscling, and Trepanning, cannot be so proper here as  
' the Cauteries for destroying the corrupted Part; and, seeing  
the Liquors, Constantly Oufing from the spongy Flesh, soon  
' extinguish the hot Iron, the potential Cauteries are preferable to  
the actual Cautery. The Application Of the Caustic will re-  
quire to he frequently repeated, because this kind of Caries is  
generally very deep 3 and, therefore, it will he Convenient to  
make an Eschar round all the Sides of the Ulcer, at the first  
Application Os the Caustic, and to keep it aS long on, aS we  
**Can,** by soaking in ardent Spirits, that it may serve aS **a** Fence  
for preventing the future Caustics from spreading too far. Or  
giving Pain. The Moisture which the ipongy Flesh in this  
. Disease spews Out, especially when irritated, is so great, that I  
have daily dressed with Powder Os common Caustic, removing  
**a** considerable Quantity Of gelatinous Stuff, which collected on  
the Surface, where the Caustic had been applied, instead of the  
Escher, which uses to be made in drier Parts. If the Caustic  
makes an adhering Eschar, it is in Vain to apply any more  
Caustic, till that Eschar separates, which is to he hastened by  
suppurant Ointment. By such repeated Applications of com-  
mon Caustic, I have, in a very short time, consumed a whole  
metatarsal Bone of the great Toe of an Adult; and have pene-  
trated into the Cancelli, in the middle of a Tibia, the lesser and

-more spongy Bones consuming sooner.

\* What has been said Of the two former Species of Caries,  
will readily make One know, what further is to be done in ma-  
«aging the differing Stadia of this Caries.

**OF THE PHAGEDENIC CARIES WITH HvPERSARCOSIs,**

- The Management Of this Caries is nearly the same with the  
former , Only One Or two Applications Of the potential Caustic  
are sufficient to mortify some Of the Surface os the solid Bone,  
which seems to reduce it to the dry Caries. But I must observe,  
that when this Caries is partial, I mean, when it Only seizes One  
Part Of the Bone, which seldom is the Case, the Flesh which  
thrusts off the mortified Scale, is, for the most Part, aS  
phagedenic. Or bone-consuming, aS what appeared at first: And,  
therefore, even in this most favourable Suppofirion, the Stir-  
feon should not promise a Cure, unless he has corrected the

labit. Or topical indisposition, by internal Remedies.

When this Disease has taken firm Root, it will spread upon  
one End Of a Bone, which was in Appearance sound when the  
- Cure of the other End attacked with it was begun , and it will  
creep along from One Bone to another, with this Disadvantage  
too, that it is far advanced hefore one can well discover it.

Of **THE ScROPHULOUS CARIES.**

The spoilt Bones here being principally retain'd by their lu-  
gaments, which we seldom can conveniently come at, to cut  
through, and which are too sensible to be eroded. Surgeons  
not only lose their Labour, but do considerable Mischief, when  
they forcibly keep Open and dilate the Orifice of Ulcers where  
.such Bones are, by cramming them with hard Dressing, kept in  
. by a firm Bandage, and by wasting down the spongy Flesh with

Escharotics, while they are forcibly endeavouring to make the  
Bone come away; such tender Constitutions, as these Patients  
have, cannot bear such rough Treatment; they languish and de-  
cay under it. What I have always sound of most Service, or  
rather that did the least Hurt, was to destroy fully the Tegu-  
ments covering the Abscess formed on the Bone with Caustic,  
to cut the Eschar through the Middle, to evacuate the collected

- Matter, and to save the Eschar on the Sides aS long aS I could;  
to order Very mild Applications afterwards to the Sore, and to  
wash it frequently with Water. Nature at last separates the  
Bone, which is to be taken out, whenever it is quite loose.

Of THE SctRRHo.cANCRoUS CARIES.

Actual and potential Cauteries have the same Effect here, as  
in ulcerated Cancers os the Glands; they don't diminish the  
Tumor, Create great Pain, occasion Haemorrhages, when their  
Eschars separate, and the like. Mosh other Medicines do Miss

Chief, none of them do Good; Extirpation only can mste a  
Cure, which may he done, either lry trepanning round the  
Root of rhe Escrefcence, cutting tie Bridges between the  
Holes, and bringing all away, or the Member is to be ampu-  
tated. All of them I have yet seen were so situaced, (hat it  
was impossible to make the partial EEtirpItionso that I can-  
not say positively, how it would succeed. After the Ampu'a-  
tion of the Member, the Wound cures as well aS in other  
Diseases; but some of the Patients have since been- seized wish  
the same Disease in another Member.-

**OF THE SPREADING CANOROUS CARIES.**

This sort os Cancer seldom cures, it will sometimes get si-  
skin upon it after cutting Or burning, or with gentle drying  
Medicines, or dry Lint; often breaks out again unexpectedly, i  
and there is no certain Cure yet sound for it. I never saw this  
Disease Originally formed in the Bones-,, they are Only affected  
by.heing in the Way os the Disease, lo that whatever Change  
the originals Disease undergoes, the Bones partake Of it. *Montes,  
in the Medical Esseys, Fol.* 5.

**CARIES** *of the* **BONES,** *from* **HEISTER. ' . .**

The Carles or Corruption os the Bone may he reckon'd  
among the principal Cauies Of the Depravity Of obstinr-te Ulcers.  
For, when a carious Bone is Conceal’d in an Ulcer, it is scarce"  
possible to heal it; or, ir it should he brought tO appear loued  
Outwardly, it will soon break Out again, nnleis the carious Part of  
he Bone be removed.

A Caries of the Bone happens, when the Bene, from whatever  
Cause, is deprived os itsM’emorane, or Periosteum; and, having,  
lost its natural Heat and Colour, becomes pinguious, yoilow,  
brown, and, at last, black. This State, - which is the first and  
gencest Degree of this Disorder, was call'd by the Antients, Os  
*vitiatum,* and also *Nigrities.* But the greatest Degree os this Diss  
ease is, when the Bone is corroded, and become rough, and sunk  
in.O little Holes, when a fetid Sanies is discharged, the Acri-  
mony Of which loftens,- relaxes, or consumes the adjacent Flesh,  
so that the Bone seems as it it were ulcerated.- All the Bones of.  
the Body are subject to this Distemper: And though this Ulcer  
may sometimes appear to be perfectly heal'd, yet, some time after  
the Cicatrix has Deen induced, an Abscess will he formh, and the  
Ulcer retura, discharging the corrupt, acrid Matter, Collected  
within, from the carious Bone, and producing many dreadful  
Symptoms, such as Horror, Vomiting, and a Fever, attended  
wtth a new Corrosion os the Flesh.

Os this Disorder, and those which are nearly allied to it, there  
are many different Names and Species, lt is denominated Caries,  
Spina Ventosa, Or Spinae Ventositas, a Gangrene Or Cancer of the  
Bones; by *Celsus*, and sometimes it assumes the *Greek* Appellations  
Of *Teredo* and *Padarthrocaces.* But although some Authors  
have constituted aS many Species of this Dilease, as there are  
Names, lo many Distinctions appear to me unnecessary; because  
I can see but two material Differences, which can only make  
two Species: I. When the Disorder proceeds from the internal  
Part Of the Bone. 2. When it begins on the Outside Of the  
Bone, or arises from an external Cause. This Species, with the  
generality Or Physicians, I Cail Caries, and that Spina Ventosa,  
or, with *Severinus,* when it happens in Children, *Paedarthrocaces.*- The Caries of the Bone, properly so call’d, may be produced  
by two Causes, I. If, after a Wound, Blow, Contusion, Frac-  
ture, or Fall, the Bone should be deprived of its Periosteum, so  
aS to be exposed to the Injury of rhe external Air, Or corrupted  
with the ptnguionS oily Dressings, which are commonly appiied  
to simple Wounds, inch aS the Oil Of St. John's-Wort, Or of  
white Lilies, *Samaritan* Balsam, and the like. 2. if by exter-  
nal Violence, Or an internal Cause, the Circulation Of the Fluids  
be interrupted, and succeeded by Inflammation and Suppura-  
tion: Whence the Vessels designed for the Nourishment of **the**Bone and Periosteum are inflamed and Corrupted, and the Bone  
itself becomes corroded. This Disorder, if not quickly cured,,  
like Ulcers in the soft Parts, spreads, and communicates its  
Corruption..by degrees. .

Hence it may appear, that there are several Degrees of Erosion,  
Or Caries Of the Bones. The first and mildest is, when the Bone  
is laid bare, looks greasy, and turns yellowish but, aS soon as it  
^becomes truly yellow, brown, or black, it degenerates into a  
work State The third Degree is, when the Bone comes to be  
consumed, rough, and uneven. The more the Bone is Corroded,  
the more rough and uneven it is render’d, aS, when .the Cra-  
nium is perforated, or the OS Tibiae, Or OS Femoris, or con-  
fumed to the Very Marrow, the Caries is reckon'd Very severe.  
But the most malignant, and almost desperate Degree os this Dis-  
ease, is when the Caries attacks the joints, or any Other Part of  
the Bone, which lies deep, because the Hands cannot then have  
Access to clean the Bone, and the Case admits of no Remedy,  
but Amputation ot the Limb.

A Caries may be discover’d two Ways, as it is conceal’d, or  
aS the Corrupted Bone appears to View. .When the Bones ate

open to the Eye, the Caries may he discovered by the following  
Signs: The Bone looks pinguious, and degenerares from its nam-  
ral Colour, to yellow, brown, or black; the Bone is hare, arid  
the Periosteum destroy’d; if a Finger, or a Probe, he applied to  
the Bone, in will he found uneven, rough, and perforated. Or  
spongy. 2. But when the Bone is concealed by the Flesh, or  
Other Causes, the Caries will discover itself by the following Signs:  
The discharged Matter will, for the most part, appear oily, brown,  
or black, and stink like corrupted Bacon: When the Dressings  
are taken off, they will he tinged, by the Corrupted Matter, with  
a blackish Colour: When there is Room for passing a Probe to  
the Bone, winch is not always the Cass, it wifi he found to be  
rough and uneven , the neighbouring Flesh will appear flaccid,  
soft, loose, spongy, and stink like corrupted Bacon: Lastly,  
when the Bone can neither he seen, nor reached with a Probe,  
we may reasonably suspect a Carious Bone, when the Ulcer fre-  
quently breaks Out afresh, after it has been heated, without any  
Other manifest Cause. - ;

- Hence it may he deduced, that Ulcers Of this kind are always  
cured with great Difficulty, and seldom without Deformity Of  
the Pan; that they are subject to spread, especially if the Caries  
cannot be conveniently reached; and eVen when they are healed,  
as was already Observed, they frequently break Out again; but  
when the Disorder increases, and extends to a Joint, aS the Knee,  
no Relief can be- expected, but from Amputation Of the Limb.  
If the State Of the Patient will not admit Of this Operation, he  
is attack’d with a Languor, and flight Fever, which are soon flic-  
eeeded. by Death. A Caries in the Os Femoris, OS Coccygis,  
OS Sacrum, OS Cranii, OS Tarsi, and Ossa Palati, are extremely  
difficult of Cure; but when it attacks the Cranium, and, as  
often happens, even penetrates to the Dura Mater, the Patient is  
tormented with intense Pains in theHead, continued Watchings,  
Vertigos, a disturb’d Imagination, with many Other such dan-  
gerous Symptoms. ' 5.

. With regard to the Cure Of a Caries, various Methods have  
been attempted with Success. The first and easiest Method is  
used in the slightest Degree Of a Caries, by the Application Of  
spirituous Medicines, aS the Spirit of Wine, Or *Hungary* Wa-  
ter, or by BalssmiCS, such as the Powder Of Birthwort, and  
*Florentine* Orris, or the Powder Of Myrrh and Aloes: Let one  
er Other Of these be daily sprinkled-on the affected .Bone, after  
theSanies is wiped Off with dry Lint, till the morbid Part Of  
the Bone is'almost exfoliated,, and the Flesh appears new, sound,  
and firm. Is sue Carses -penetrates deeper, stronger Remedies  
are required; such as the Powder'or Essence Of EuphOrbium,  
prepared with the'best Spirit os Wine, which powerfully de-  
frroy the Canes, or the Oiis Of Cloves, Cinnamon, -Or Lig-  
frumGuaiacum.ss These may be applied 'with a Pledget Of Lint,  
and Cover’d with dry Linen. Some use, in the same Manner,  
andwith equal Success, other corrosive Medicines, .such as the  
AquacPhagedaenica/? oriSpirin Of Wkriol, Or Of Sulphury Or  
a Solution Of.Mercuryi in Aqna-fOHis, Or the Spirit Of Nitre,  
may. be substituted ini the room Os all the rest. These we have  
.enumerated as. the principal Remedies -used for this'Purpose,  
without taking notice Of those which are too weak for the In.-  
tention,-Or too strong ~ to be admitted with Safetyshch as  
Arsenic, or Sublimate Mercury in Substance. When, by this  
Method, an Exfoliation, of the Bone jo-procured, you must pro-  
ceed to. incarn, and complete .the Cure with Balsamics.s There-  
fore; the next Dressings should Consist Of *Hungary* Water, *l* Or  
the Essences, of Masticb,-Myrrh, Amber,' Aloes , also *Peruvian*Balsam, Or Balssm -of Gapivi, Or other Balsams of this Kind ,  
Covering the Whole wish a Plaister, and proceeding, asin.the  
Cure Of common: Ulcers. See .ULctisi; *- Ise. Dran* has given  
us fome curious Observations on the Caries of the Bones, espe-  
cially in the *Cubit, Qbs.ryx,* 52,4 3 Y in the Loins, *Obs.Sa ,* after  
thehenall-pox, Ose.yo; Jo *the:'Os ilium,.Dbsqu^,* in the greater  
Trochanter, *Obs.* 97 , in the Knee, *Obs. 102,* io34. .and in the  
Leg; *Oast* IO4. ~ a rl 'Lsse *si-is A . ' \ .: .*

-.The Cure for the second Degree Of Caries Consists in . perfo-  
rating the Bone,-after being laid bare;:withche Perforator, or In-  
strument, described in *Tab.* XXVIIl. *Fig.* 2. *QtFig. si* A;-or  
*Tab.* XXXVI. *Figci.* as far as the sound Part, in the.same man-  
ner as is done after a Wound in the Cranium.: The Dressings  
may Consist either Of dry Lint, Or the balsamic Medicines above  
recommended. By these means, - not Only the morbid Part Of  
the Bone will he exfoliated, but new Vessels will shoot, into the  
small Perforations, which; coalescing with the neigh touring Flesh,  
form a new Covering for the Bone: oitn ... . ... : ,’o". .

When it is certain, that the morbid Bone is black, withaRaspa-  
tory, or File, scrape away all the corrupted Part, till the Bone  
appears white. Or red, and sound. *Celsus* advises this Operation to  
be done Vtgorousty, for Expedition; Otherwise littie Or nothing  
Can be effected by it. *. Scuttetus* thinks the .Raspatory .shonldmot  
he applied, till the Bone lies fairly exposed. Or not till it begins  
to separate from the sound Part, and that the Pone should be  
dressed only with dry Lint, till this happens ; which; however,  
is not a general Rule. Others, in particular Cases, use a Mallet  
and Chtssel (see *Tab.* XXVIII. *Big.* io,Ii.)' for separating the  
corrupted Parts from the sound, with Or without a Perforation

Put both’these Methods have been generally disused by the InOI  
dern Surgeons, tho’ *Petit* affirms, that the best Method is ed  
rasp the Bone, the’ the luxuriant Flesh should he continually  
sprouting, and afterwards to apply the actual Cautery.. And in  
those Tumors Of the Bone, now call'd *Spina Ventos.a,* which  
refuse to yield to Medicine, he directs not only to make frequent  
small Perforations, bntthat the Tumor should .he taken off with  
the Mallet and Chistel. .

The fourth, which, tho’ the Oldest, is the readiest and most  
Certain Method Of Cure, especially in the higher Degrees, of the  
Disorder, is perform'd by burning the morbid Part Of the Bone,  
with the actual Cautery, having the Instrument adapted to the  
Place (fee different Kinds in Plate XXIV.) But particular Can-,  
tion must be Observed, in this Operation, not to injure the ad-  
jacent Flesh, and soft Parts..; For this Purpose, the Lips os the  
Ulcer should be held asunder hy an Assistant , or, if they are toO  
narrow, they should be widen'd with an absorbent swelling Tent»  
made os. Gen rich-root. Or a Piece Of Sponge, Or, otherwises  
they must be laid open-by Incision, till the Bone fairly appears.  
The Bone should, likewise, be cleaned with dry Lint, and the sun-  
gons Flesh removed, before the hot Iron ho applied, lest the  
Matter should extinguish it, or, at least, weaken its Action. Is  
the Caries penetrates deeper, or spreads wider, so that it Cannot be  
destroy'd by the first Cautery, more Applications must be made,  
either immediately, or sometime after, when it appears that all  
the morbid Part Os the Bone is not removed. If the Caries be  
wide, the first Application Of the Cautery shonld be in the Middle,  
thence proceeding towards the Edges. No violent Pain attends  
this Operation, is the soft Parts are untouched, the Bones having  
no Sensation Of Pain. But,, in a Caries Os the Bones Of the Cra-  
nium, there would be great Danger, from this Operation, os .in-  
juring the Membranes of the Brain, .Or eVen the Brain itself; and  
a like Danger would arise, is it were perform'd On some of the  
soft, spongy Bones, as upon the Sternum, Or Carious Ribs ; in  
both which Cases the Cautery should be avoided. Nor will the  
Carpus, Tarsus, .and Other spongious Bones Of that. Kind, admin  
of Cauterizing, principally, hecause Of the neighbouring Liga-  
ments, .Nerves, and Tendons, which can scarcely avoid be-  
ing injured , and this would be follow'd with dangerous COnse-  
quences.

’ .The diseased Part Of the Bone being thus cauterized, the first  
Dressing must be dry Lint, Os, if the Patient still feels a Sense  
Of Heat in the Part, the Lintlmay be moisten’d with tepid Spirin  
:Of Wine. The Dressings may, afterwards. Consist Os the bal-  
samic Remedies , before recommended, till the Exfoliation sue-  
ceeds, and the Vacuity will soon he supplied with new sound  
Flesh, which will be a Proof, that the Cure is completed. But  
.where the Bone Continues; hare. Or. where the new Flesh is soft,  
lax, and spongy, and does not sufficiently adhere to the burnt  
Part of the Bone, Or where the Bone remains discolour’d, the  
Disorder is evidentiy mot extirpated. ’ In these CircumstanceS,  
the new Flesh must be cut Osh Or abraded. Or consumed with  
burnt Alum, and red Precipitate, Or some Other stronger corro-  
sive Medicine; and then the actual Cautery may he repeated;  
Or,: according tO the Circumstances of the Disorder, some Of the  
Uther.MethOds, before recommended, may be used, Otherwise,  
no permanent Curecanhe expected.

-... If the.CarieshaS penetrated even to the Marrow Of the larger  
Bones, *Petit* advises, after the' Example Of *Mechren,* to make  
one, two, more Perforations with the Trepan, and gives ns  
a Cafe, where, after having.used the actual Cautery, he perfo-  
rated.the *Tibia* thrice, and Cured the Patient. But this Method  
Can seldom the .used in anyotber great Bone-hut the Tibia, he-  
cause Of the Obstruction Occasion'd by the Thickness of the Flesh.  
He farther informs ns, That rhe OS Pectoris, Or sternum, may  
he sometimes perforated in this Manner; which not Only makes  
a Passage for. the Discharge Of .the confined Matter, but, like-  
wise, gives an Opportunity Of immediately applying proper Re-  
medies, even to the innermost Recesses of the Wound.. Put  
this Operation must be Perform'd with the highest Caution' and  
Deliberation-upon the Sternum; hecause Respiration may be in-  
jured, .and: Other Violent Disorders produced. It is proper to Ob-  
serve, here, that when , the Caries extends to. Or begins in, the  
Marrow Of the Bones,.(which is Called a Spina Ventosa): it does  
hotaltyayS. proceed from an internal Cause, but sometimes from  
the intefiOrVesselSOs the Bone being broke , by external Violence3  
and the Bood, being discharged into the Cavity of the Bone, by  
degrees, degenerates into: PnSssand corrodes the Bone.. Thus  
a Caries is produced, whichspreadS from- the Marrow to the ex-  
terior Parts, \. : , .ι.ι.,γν,..; 6 *\ am? . -s'.'i : . .. .*

If the Blackness; Or .Cories, textendS to the other Side Os the  
Bone, so that .is. seems, thoroughly Corrupted, *Celsus* advises to  
take it entirely out. If the.lower Part is sound, .only what is afT  
fected must be remov'd.: dsRBonc of the Head, of rhe Breast, or  
if a Rib, be carious, the Cautery will have noTssect, and it must,  
likewise, tie-cut out. This Operation must he eipeditiousiy per-  
form’d, for the Bone, must be taken out aS soon aS it is laid hare,  
before any .inflammatory Symptoms appear; by which means the  
whole Operation may be perform'd with greater Safety. When a  
Cartilage , in Carious, it must he scraped with a: Knife, till no-

thing remains bnt-what is sound. I am obliged to *'Celsus* for  
what I have here advanced, who treats on these Subjects better  
than any modem Writer. .

Upon the Whele, we may Conclude, that the Cure of a Ca-  
Ties Of the Bone principally depends upon removing, in the most  
Proper and expeditious Manner, all the Corrupted Part of the  
Bone: And this, I have found by Experience, may he done in  
the gentlest Cases, by Spirit Of Wine, and *Hungary* Water; in  
more violent Degrees of this Disorder, hy a Solution Os Mer-  
'cury in Aqua-fonts 5 and in the most malignant, by the actual  
Cautery, or Amputation. The Cute Of the Cicer may he com-  
pleted, as in other Uscers, by the balsamic Remedies so often  
recommended. .. ..

' Is the Bone be considerably consented hy the Cories,. Or if it  
extends itself [OwardS a Joint, as the Knee, Or Of the Hand, or  
Foot, so that tne affected Part cannot he removed by Incision,  
Extraction, Or Cauterizing, consistently with the Preservation of  
the rest Os the Limb, there remains bat One Remedy, for **the**Safety Of Life itself, which is amputating the whole affected  
Mem her; otherwise the Patient leads a miserable Lise, and, after  
being exhausted with Pain and Trouble, with a Loathing Os Ali-  
ment, Watchings, a flight Fever, and a long wretched Train of  
symptoms, will at last expire: But when Only One Side of a  
large Bone, aS the exterior Part of the 0s Maxillas, Humeri, The  
hiss. Or Claviculae, is Corrupted, or a Part Of a Rib, Of the U|-  
ha, Radins, Or Fibula, and the likenot the whole Limb, or Bone,  
must he immediately removed, hut Only the Carious Part, which  
may he done in the properest Manner, as we have already di-  
rected. When fc happens, that more or less Os the morbid Bone  
separates rpontaneouily from the rest, if it Can he laid hold On,  
and the Ulcer he sufficiently wide, it should he extracted with  
Ihe Fingers, or the Forceps, but, if the Orifice Of.theLjlcer he  
too small, it must be widen'd with the Knife. A remarkable  
Instance Of this we have in *Meckren, Obs. Chir.* where a  
large Portion Of a Corrupted Bond was taken Out Us the Arm ;  
and another in *Buyseh,* where is was extracted from the Tibial

**‘ Op THE SPINA VENTOSA, PAEhARTHRocACE, AND Eros-  
TO5IS, WHICH MAY BE CALLED TUMORS Op THE BONES.**

. That Species of Corruption of the Bones,« which proceeds  
from their internal Parts, which, by degrees, enlarges the Bone,  
find swells it into a Tumor, is now gcherally called a *Spina Vess.,  
'rose,* and, by some. *Spinae Ventositas,* tho' these Names were  
unknown to the Antients, who termed them *Sideratio, Gangraena,*Or *Cancer Offis,* and sometimes *Teredo.* Some *French* Authors  
-Use the Appellation *Exostosis* ; though this Term more properly  
belongs to Certain preternatural Eminences, or acuminated Ex-  
!crescences, which arise from a Fracture, Contusion, or other  
Gause, and are Often attended with a Caries, though I have **fre-**iluently seen Bones with such Eminences, without any Appearance  
of *a* Caries. *Spina seems* to have been a Term applied to this  
Disorder, because it occasions a Pricking in the Flesh, like the  
.punctures Of Thorns, producing very violent Pains . and **the**Epithet *Fentofa* is added, because, upon touching the Tumor, it  
deems to be fill’d with Wind, though this is seldom, .or' never,  
the Cause Of the Distention. Afterwards some Authors, parti-  
oularly *Pandalpinnus,* barbaroufly distorted the Word into *spina  
‘-jrentnsit as. . . .*

- Children ate Often affected with this Disorder 2. and then, with  
*Severinus,* many denominate it *Paedarthrocaee,* from ητάις, **a**Boy; ἄρετρον, a Joint, and κακὸν, an Evil; intimating, that this  
-Disorder frequently appears about the Joints of Children, and  
Oftener in them than in Adults, because the Bones Of Children  
are chore soft and fpongions, and. Consequently, more easily cor-  
rodedthy peccant Humours, and distended into Tumors, some-  
times Of a surprising Deformity. *Severinus* makes another Di-  
function between the Spina Ventosa and Paedarthrocaee, **for  
the** Tumors Of the first Kind are frequently attended with Pain,  
Redness, and all the Appearances Of Inflammation; but the *Pae.*darthrocace is accompanied with littie or no Pain in the Be-  
ginning, as may he often Observed in ricketty Children. But  
these Names are now generally used Promiscuousty, aS synony-  
mous Terms for the same Distemper, and not improperly, as  
*Merilin* Observes; for though this Disease, in Children, is, at  
first, attended with little or no Pain, **yet** the Pain increases with  
the Disease. ,'

7 Other Names have been already mention'd, which agree better  
with the Spina Ventosa, than with the Caries -properly so Call'd;  
aS, a Cancer Ossis, Gangraena Or Sphacelus Ossis, Sideratio Oss  
fis, frequentiy used by the Translators *os Hippocrates*and, also,  
Τερήδων, Or Teredo, from Its Resemblance IO Wood eaten and  
consumed by a Species of Worms Called *Teredines.* All these  
synonymous Terms of the Spina Ventosa may, probably, have  
been applied to different Degrees Of that Disorder, which has  
-heen sufficiently proved by *Merkldes,* in his Annotations upon  
*Pandolphinus.* The same Author has, also, demonstrated, that  
this Disease was not unknown tO the Antients, as some have irna-  
gined. One Observation remains; that *Petis,* in his Treatise On  
**Diseases nf rhe lsorleS-***Casts if.* **corrsnrAhendc all risese Diseases,** and

their **Nines, finder** that Of Exostosis; anth at. **the same tiros, «I-**trrely omits those Names which were better-known, and more.  
commonly used. I shall principally use the Term *Spinayentofe,***’aS** it is now most generally received.

AS these Diseases, especially their Difference and Degrees, have  
been generally imperfectly described, and aS many Cases of this  
Kind nave occur'd in my Practice, I intend to fllustrate their  
Distinctions particularly, which may he Very serviceable in pro;  
mating their Cure. A Spina Ventosa is a Corruption, Corrosion,.  
Or kind Os Caries Of the Bone, which is generally produced inon-  
taneoufly, by some peccant Humours, and seldom arises from  
an external Cause, lt begins not in the Surface Of the Bone, but  
in its Laminae, Or Cells, Or within its internal Cavity, proceeding  
towards the exterior Part, and affecting the Whole, or more *C.I*less of the Bone, spreading in Breadth, -or rising into aTnmor, **(see***Tab.* XXXI1I. *Pig. 16.* AB) which is frequently hard, and some-  
times without Pain, sometimes it appears filled with Wind, and  
is attended with a greater or less Degree Of a Corrosive pungent  
Pain, at last it reddens, renders the Patient unable to move, and  
has a Train Of other bad Symptoms, at last, the Bone is Cor-r  
roded, and the Skin, and Other integuments, which were at first  
sound, partake or rhe Corrosion, and break Out into most ma-  
lignant Ulcers. When these TtimOrS Λ the Bones are hard, withe  
Out inflating the soft Parts, and without Redness, Inflammation,  
and Pain, as frequently Occurs in ricketty Subjects, they do not.  
then so readily ulcerate, nor are attended with inch malignant  
Symptoms, while they remain so.- *Sevcrinus* denominates this  
Species *Paedarthrocaee,* because Children **.are** most subject to  
it, and in order to distinguish it from the Spina Ventosa Of the  
*Arabians.* But when the Tumor is painful, red, and instated;  
to which Children and Adults ate equally liable, it is named *Spi-  
na Ventosa, Cancer,* Or *Gangraena Offis,* and *Telesio.* I Call an  
Exostosis, a preternatural acute Eminence of the Bone, Or any  
Excrescence of the Bone, with or without Corrosion. The Spina  
Ventosa differs from the Caries, aS it is attended with aTnmor;  
and from the Rickets, hecause, in them, the Epiphyses or Extre-  
mities of the Bones are affected with deformed Tumors, with\*  
Out Pain Or Corrosion. . j

These Disorders generally begin about the Extremities, Heads,  
or Epiphyses, of the larger Bones, where they are most tender  
and ipongy, and where the morbid Matter may not only have  
sufficient Room to lodge in the Cellular Substance, but. where  
it will, also, meet with the least Resistance in softening and ex-  
panding the Parts. However, they often appear between **.the**Laminae, in the middle of these Bones,, especially in the;Tibia.  
Tophi, and Venereal Gummats, aS they are called, intheFom-  
head. Cranium, and other Bones, especially the Tibia; as they  
owe their Origin to an internal Cause, may he included in this  
Species, though they are easily distinguished by nocturnal Pains.  
The Spina Ventosa, therefore, attacks the Bones of the Head,  
Face, Neck, and Breast , but most frequentiy those oftheFeet,  
Arms, Fingers, Carpus, Metacarpus, Tarsos, .and Metatarsus,  
and there is scarcely a Bone in the Body, hut what -is subject to  
it. Cases of this Kind may he seen in the Notes of *.MerklU  
upontPandolphinus.*

They are Commonly produced spontaneoufly by internal Causes,  
**aS** by acrimonious, scorbutic, rickety, Ur variolous Humours,  
but generally from a Venereal Taint, for, before this Disease ap-  
pear'd in *Europe,* they were little known. However, both Rea-  
son and Experience inform us, that they sometimes proceed  
, from external Causes, especially in an Habit inchdable to such  
; Disorders, as from a Contusion, Fall, Fracture, Fissure, or  
other external Violence, by which the Velreis, internal Lamina,  
or Marrow of the Bones are injured or lacerated, the Humours  
are extravasated, and putrefy. Corrupt and destroy the Marrow,  
and soften and corrode the Substance os the Bones. . Hence arise  
Pains, Tumors, Ulcers, and Fistulas, both in the Bones,: and  
external Parts, -... gi st *.. . "s*

The immediate Cause of this Distemper is a Collection or **Dee**fluxion of a viscid and tough, or an acrid and corroding Hu-  
mour, or an Inflammation in the Marrow, or in the Cellular  
Substance of the Bones, which degenerates into an Abscess, and  
forms Ichor, or Pus. For, as these Humours Can find no EVacua-’  
tion, they stagnate in the Cavities of.the Bones, where, in time, they,  
gradually putrefy, become acrimonious. Corrode and Corrupt the  
neighbouring Parts, Convert the Marrow into a similar Sanies, and,  
**at** last, attack and consotne the Bone. This Collection of Viscid  
and pituitous Humours, and Swelling of the Bone, sometimes  
happens without Pain, as in the Paedarthrocace; . but the Corro-.  
fion of the. Parts Can never happen without the most intense  
Pains, proceeding, according to the common Expression, from-  
the inmost Marrow, which Pains are sometimes called Osteocopr.  
When, in the Beginning Of this Disorder, it is confined to the  
interior. Part Of the Bone, the morbid Part feels no Increase Of  
Pain by an external Touch, Or Preflure; but, when the Pain he.;  
comes increased by the Touch, the Disease has extended itfelf  
to the exterior Parts Of the Bone. When this happens, the Pe...  
riostenm, and Other adjacent Parts, together with the Substance:  
of the Bone, and the Cellular Coat, are tumefied: Whence arises.a-  
Sensation,.as if the Parts were inflated. .When this Tumor is

opened by incision,' or, as it frequently happens, spontaneoustyj if  
the morbid Part is exposed to View, ir will appear like aSponge, or  
**a** Pumice-stone, full Of littie Holes, as in the Caries ; and from  
what has been said, the Resemblance or these two Diseases, their  
Signs **and** Distinctions, may easily he discovered. ; \_

. The Spina Ventosa, strictly so Called, may he properly divided -  
into three Species: i. When the Osteocopi, or Pains in the  
Marrow of the Bone, **are** incessant, so as to deprive the Patient Of  
Sleep, bur without either Tumor, or external Pain ; in this State  
the Disease is Confined to the interior Part of the Bone.  
. 2. When these Painseither continue, or cease, and a Tumor gra-  
dually appears upon the Bone either harder. Or softer, and, as it  
were, inflated, attended with external Pain, which sometimes  
abates, and sometimes increases. 3. When this Tumor induces  
An Abscess, which either bursts spontaneoufly, Oriis Opened by  
Incision, discharging a fetid Ichor, or a purulent Matter smelling  
like rancid Butter,or Bacon, this Efflux Of Matter continues more  
**Or** less, as in the Cations Ulcer; and that Kind Of Ulcer is pro-  
xiuced, which the'Anrients frequently Called an Ulcer with .Ca-  
Ties in the Bones. This Species may he Called an inveterate  
Spina Ventosa, and **the** first an incipient Or recent One.. ‘ .

.. A Paedarthroeace generally begins with a Swelling Of the Bone,  
without any Pain, or external Cause,but,if it continues long, it  
is Often attended with Pain and Inflammation, and at last with  
im Abscess, Ulcer, or Caries, like the Spina Ventosa, especially ’  
about the Joints and Extremities of the Bones. Hence there ap-  
Pears some Reason sor reckoning a Paedarthroeace a distinct  
Disease , which, however, if not timely prevented, will degene-  
. tine into a Spina Ventosa. , so that they seem to differ Only in

From what has been now advanced, and what we hefore de-  
Iivered of the Prognostic of the Caries, it will be no difficult  
Matter to understand and foretel the Consequences Of these Dis-  
orders. For when it appears, that the present and Corrupt acri-  
InoniouS Matter is lodged in the Cavity, Laminae, Or Celis Ofthe  
Bone, winch Nature is unalste spontaneoufly to discharge, and  
which Can hardly he evacuated by Art, it must necessarily follow,  
unless prevented by timely Assistance, that the adjacent Parts will  
he Corroded and Corrupted, till at last the Bone itself is altoge-  
ther destroy’d, so that there can he only One Method left of pre-  
serving the Patient, by the Amputation of the whole Limb. What  
is still worse, if the Disorder proceeds from a Vitiated State Of **the**Blood, it is Osten so malignant, than when it has seined One Part,  
the Arm sor Instance, when this is extirpated, it will then attack  
the Other Arm in the fame manner, as,in Cancerous Affections;  
hut this may he prevented by purifying; and correcting the Blood  
by a primer Regimen and Remedies.The Poedartbrocace, and  
imildest Degree Of the spina Ventosa, frequently yield to proper  
Medicines. But the.Cute will he difficult, .in proportion Io the  
Inveteracy Ofthe Disease, the Progress jt has made, theWeakness  
**Of** the Patient, and the Corruption ofthe Blond, Joined: with  
other violent Symptoms. Sometimes it becomes irremediable,  
and,rhe Strength of the Patient being exhausted, he is, aS it were,  
’Consumed by a stight Fever, and he dies Os an inveterate Caries.  
\ There are two Methods.of curing a. Spina Ventosa, adapted to  
the different States Of the Disease: *1.* in the two fust Or milder  
Degrees, if thePatien:he an Adult, he must daily.aise4.for cor-  
‘ recting the Blood, a Decoction of the Woods, aS It is commonly  
hailed, as of the Roots Of Sarsaparilla, .China, Scoraonera, and  
the Woods Of SasafraS, Guaiacum, and Juniper, drinking each  
time eight,: ten, or twelve Ounces, accordihe tO the Strength  
- of the Patient, taking it warm like Tea, Or Coffee. - -Let. him ..  
drink this- Quantity every Morning in Bed, giving him,in **the** 1  
Tirst Draught, fifty Or sixty Drops of the Essence of the Woods, *s  
or* of white Burnet, Or the like, endeavouring to raise a gentie  
Sweat, that they, may thoroughly penetrate the stnaller Vessels,  
**of even the** bony Fibres, and expel Or correct the peccant. Hu-  
inotns:'They, likewise, greatiy promote the Digestion and Dis-  
cussion Of stagnated Humours and Tumors.- 2. This intention  
will he greatly forwarded by fumigating, several times aiDay, the  
affected Parts, with the Steam from Decoctions of resolvent Or  
aromatic Herbs. 3. In the intermediate Times, let the Part he  
rubbed twice **a** Day wnh a Mercurial Ointment, add applyIO it  
**w** Mercurial Plaister. : 4 Mercurial Remedies shouldY likewife, he  
- prescribed inwardly. Once in weakly -Constitutions, Or .twice in

InOre robust Habits, in order to raise R gentle Salivation, or nor,  
.according to the different DegreesOf the Disorder, Or-StateOs the  
'Patient: For Experience has convinced me, that nothing Can **be**..effected in the Cute Os this Diseased fry. pther Remedies, alone,  
without the Assistance Os Mercurials; which makes it the ’more  
Probable, that this Distemper is uttherioontracted by a Venereal  
Infection, Or is very nearly allied-tO it.- -When, therefore, this  
Method has been Continued some Weeks, (for- a shortTime -is  
of no Service) the first Degree of this Disorder may he re-  
.moved , and even in the second Degree, where the Osseous Tu-  
mors are already formed, they may he digested. Or discussed. Or  
reduced to such a Stare, that they may continue without in-  
creasing, without Pain, or without any great inconvenience to  
**the** Patient. This I have often seen happily obtained, when **a**

Discussion could not he procured, especially when the Patient  
used a regular and moderate Diet, living upon Broths, Vegetables,  
and the tendered Sorts Of Flush, thereby tempering and lweetenr  
ing the Blood, and using, for common Drink, small Decoctions  
Os the Roots and Woods above-named, or Of Hartshorn, Barley,  
Oats, and the hke watery, soft, thin Liquids.

The same Methodis to he observed in the Cure Of the Paedar-  
throcace, OrTumorS in the Bones Of Children, without any. Ora  
at least, much Pain 5 exhibiting, at the Iame time. Medicines for  
gently opening the Belly, principally prepared with Mercurius  
Dulcis. If this Disorder is accompanied with the Rickets, Re-  
medies adapted to the Rickets must he prudently exhibited, and  
frequent Motion and Exercise must he used- -

But if either Of these Disorders are become so Obstinate, as  
Hot to yield to' the Medicines we have already advised, if **the**Pains and Tumors Of the Bone are increased if an Abscess appear,  
and the entire Destruction Of the Bone he threatened, you must, if  
the Abscess he not already burst, lay the Bone bare in the most  
proper Place, which is generally the lowest, and most painful, .  
without staying for Maturation; Or, if the Orifice he too small,  
after the Abscess has burst, it must, also, he widened by Incisions,  
or, in the Timorous, by the Caustic. Then, with the small Per-  
forator, *(iaTab.* XXVIIL *Fig. 2.* Or 7.) penetrate several times  
into the Marrow Of the Bone, in Order to Open a Passage for the  
morbid Matter. But, where these small Perforations are not sussi-  
client for discharging the Sanies, then pierce the Bone with the  
Trepan, as was before directed in the Cure *os* the Caries; by  
which means the Matter will not Only have a freer Passage, btit  
Medicines for Cleansing and healing the Part may more readily  
be appliess After these Operations, the DecOctionsand Essences  
Of the : Woods, with antimonial and mild Mercurial Medicines,  
ought to he prescribed internally, and detergent and balsamic\*  
Remedies ought to he Outwardly applied, such aS the Decoction  
Of Agrimony, SanicleYSt. Johnis-wOrt, or Birthwort, with Honey  
Of Roses, and Essence of Myrth and . Aloes, for deterging the  
Ulcer, or Mercurius Dulcis dissolved in Plantain-water, Or Lime-  
water. Afterwards the Dressings may Consist of the Essence  
just now recommended, or. the Essence Of Mastich or Amber,  
*spread,* uponLint, Covering all with a Mercurial, or other proper  
Plaister, till the Ulcer he healed. Sometimes the actual Cautery,  
if it)Can be Conveniently applied,,is not improper for rooting  
out the Disorder, when it is confined to the Lamina, especially  
if- it scan he Conveniently apply'd ; Otherwise Abrasion may he  
used, tho’ this Operation Teems better adapted to the Caries, than  
the Spiru Ventosis, *-'.-edf.;*

.. But if all these RemedieSare ineffectual, and the Part he so much  
Corroded and destroyed, that it cannot he preserved, there remains  
but one Remedy; osssaving the Patient, winch is Amputation,  
and this may he performed in different manners, according to the  
different Circumstances of the morbid Part. . When the Disor-  
der is situated in the .final! Bones, as in the Carpus, Tarsus, Me-  
taearpus, or Metatarsus, Or in the Finger, there is no Necessity  
.Of extirpating the whole Finger, Hand, or Foot, but only Of ex-  
tracting the small putrefied Bone. Thus, when the Bone at **the**End Of the Pinger, or even that Os the middle PhalanI. is Cor-  
rupted, shave extracted the foul Bone, and preserved the sound  
Part Of the Finger Thus, from a Boyof ten Teats Of Age, who  
had the metatarsal Pone, which supports the great Toe, corrupted,  
the Toe itself remaining unaffected, I extracted only so much of  
the Pone aS was Corrupted, leaving the sound and anterior Fart  
behind, and healed the Wound with Balsamics, and the Boy,  
afterwards, walked as well aS formerly. - -But when the entire  
Finger, Or Only the first Bone of it, has been corrupted, I have  
amputated the Whole. But when a large Pone of the Shoulder»  
Thigh, or Leg, or When any Of the JOints in the Armj Knee, **or**Foot, a^e affected, no Cure can he expected, except by extir-  
pating the whole Corrupted Part, with all the inferior Part Of **the**Limbs, making the Amputation in the found Part above. .

In some Species of the Spina Ventosa, when the Tumors will  
notyield to the Remedies already proposed, to which the Hand  
can be readily admitted. *Petit* advises IO lay the Bone hare by a  
.cpocial-lncisiOn, and to out Off the Extremities Of the four Angles  
Of the Shin, and then to dress with dry Lint. The next Day he  
orders the Osseous Tumor to he pierced with the Perforator,  
and she Holes to he made so near One another, and so numerous,  
. as to represent a Sieve, and then to extirpate the whole Tumor  
with the Chides and Mallet. He afterwards filis, up the Wound  
: with dry Lint; and, that the diseased Part may sooner separate  
, .fromthe sound, he ordersa Solution Os Mercury in Aqua-fortis

Io he- apply'd to the corrupted Parts till, it he wholly removed:  
This Method he highly recommends, and prefers it, in my Opi-  
nion, not unjustly, IO every Other Remedy in these Cases, and  
even to the actual Cautery, if the Corruption he not too deeply  
.fimated... -) etsmsa .i.s

- When an acute Eminence, Or preternatural Excrescence, op-  
pears upon a Bone, which is properly Called an Exostosis, and is  
accompanied with no Trouble, Pain, or Deformity, nor any  
Symptoms of a Caries, Or Spina Ventosa, in such Cases, no Cure,  
in my Opinion, should he attempted. For the Remedy would

hot only he worse than the Disease, het by laying 'the Pone *bice, '*a Caries, *or* Other inconveniences, might he occasioned. On the  
Contrary’, if it produces any Deformity, impediment of Actions -  
Pain, or Other Mischiefs, it may be removed by the Methods  
-already prescribed. Various Cases of the Caries, Spina Ven oss,  
.and Exostosis, are given thy *Ches.elden,* in his Osteography, from  
*Tab.* XLL to the End and *Pstysch,* in his *Observer p.* 94.  
and, in bis *The scaur. Anas.* -8. *-Tab.* III. and *Thesuur.* To. *Tab.* IL

*'^Heister. -- . : :*

; OS. The Mouth... \ y -' su

**C OF THE CANCER OT THE LIPS,-AH D MOUTH. .**

Cancers Of the Lips, like Other Cancers, are either Occult, dr  
-Open. An Occult Cancer happens, when A Tumor appears in  
The Lip,attended with Hardness, Pain, and Heat. An Open Cancer  
-is, when that Tumor degenerates to an Ulcer; or when a can-  
Cerous, phagedenic, and setid Ulcer is\* produced in **the** Lip  
without any previous Tumor ; discharging an acrimonious Sac  
hies; os a most disagreeable Smell,- which not Only ‘corrodes  
The Lip, but frequently the whole Face in a most miserable  
-manner, and is for the most pan situated'in **the** under Lip. **See***nsiab. XLL-Fig.***-II.** *a a a. . '-si'- ; .*

*t- This,* like other Cancers, is produced-by a certain Acrimony  
of the Blood, and an Obstruction 'OFthe spongy Glands, of the  
Dipsi Hence a livid painful Tumor, Or Wart, which by degrees  
degenerates into a malignant Ulcer, Or Open Cancer, quickly  
dividing the Lip, at first like a small Fissure, which’ gradually  
^widens. See *Fig.* II. This Disorder may-likewise arise from an  
accidental Bite, Blow, Puncture, Fall, or from the -Lip- being  
affected with an acute Pain in the Teethe-. ‘ t ' se

AS little Can be effected by Medicine in the Cure of this  
' Disorder, recourse must be had to the Knife. The Incision  
should he made without Delay , Otherwise the Distemper would  
spread, and produce large Tumors:in the Neck and Fauces, .so  
as even to strangle-the Patient. But, when the incision irfimely  
made, there may be some Hopes of a Cure; especially,, if. the  
corrupted Blood he corrected byprOper-Medicines,aTask'which  
in, indeed, difficult to he performed; - upon' which Account **a**-Relapse generally ensues. This mostpernicious Disease isinore  
: easily cured in-young than in old People, and more -easily when  
it proceeds frorn an external Cause, then from the PeocanrQpa-  
lity Of-the Blood alone. ' ...δ᾽ :-

so. The Cure must , be adapted to The 'different States Of- **the**Disease.- I.-Whenasmall Fissure appears On the upper Paherof  
the Lip, like an Ulcuscle, attended with Hear and -painssand is  
.produced by the Coldness Of the Air, anoinrit with the Honey  
Of Roses, arid Peruvian Balsam, or Ointment .‘of Lead Ot  
Diapompholygos, mixed- with a littie:-Mercury(, and afterwards  
- apply a Plainer Of Lead, Or a leaden Plate, rubbed with Quick-  
-silver, to the Part, -tilsthe Disonher .be -entirely removed; \* In

. the mean time, a proper Diet, with Medicines for- purifying **the**Blood, ought not to\* be neglected-: I cured a young Woman Of  
inis Disorder, by the Application of the Juice Of rotten Ap-  
ples mixed with Mercurius.Dulcis, and **the .Use** Of proper in-  
ternal Medicines. In *Ephemerid. Nap.. Curios. .Clint. 6. Qbse* 43;  
.we read of Cancers of this kind -being Cured by *Roman*Vitriol, with orwithbbr'the-Oil 'os dives/- But when\* neither  
these cor the like-Medicines have any Effect, and the Disorder  
increases, the readiest“Remedy is,~ with, the-Knise, Or Scissars,  
l.to Cut out Os the Lip .all the indurated Or 'cancerous Parry by

. two or three Incisions, observing tathere to take away some Of  
.the sound Flesh, than IO leave any Of the Cancer behind.‘The  
Dipsios the Wound snay he united with two Or three Pins, in  
.the.-ssme manner as irtime Hare-lip; Or, if the Fissure he Tint  
"small, the knottedSuture .will he sufficient. This1 Method T  
-successfully, took-with 'the Cancer represented in *Tab.* XLL  
*.Fig.AL. ''* \* : ‘ - --r’wed.’ etpri.

2. Bur if the Cancer-haS not'degenerated'into an Ulcer; and  
The Lips are infested with an hard troublesome Tumor near the  
-Skin, some Physicians have advised to’ destroy the. Tumor by  
-Corrosive Medicines, afterwards healing' up 'the Wounds\_ But  
- though these Remedies tnav nos he Improper, when theDisor-  
elder. proceeds from an external Cause, or when the Tumor is  
encysted; yet, aS the Application of- Corrosives in Cancers is  
,-generallydangerous, I would prefer, with: the wisest Physicians,  
; Incision with the Knife,, or Scissars,’which may he performed  
htwo.ways, according toe -‘the Nature of the -Tumori -'IF -the

Tumor is moveable. Open the Skin -with. the Knifey and, after  
freeing the Tubercle from its Adhesions,’hy 'the-KhiserOi-seis.  
- sirs, the Wound thaw he healed in the usual Manner, but'if the

Tumor is fix'd, iinthoveable, and firmly adheres to the Skin, all  
. that Part of the Lip which contains is, must/be cut away, and the  
.-Wound must he treated with the Sutdre,- aS before directed.

Whatever Method Of Cure be used, a regular Course'oT Life,  
-and proper Regimen, mast not oaly-he nsed, but, likewise; inter-  
‘nil Medicines, for removing the Virions Affections of the Blood,  
lessening its Quantity, and destroying sta-Acrimony,.in order to  
. prevent a Relapse, which often happens. - Consult *SdurltetusNe  
-Dran,* and *Garengrvt.. .....* .ϊ CO tio \*"

**: OS LEONIS. See ANTIRRHINUM.**

OSATTS. The same aSTSATIS. Woad.' ’ : ’

- OSCHEAL1S HERNIA. A Scrotal Rupture. SeeHERNrT  
OSCEDO. A Propensity to Oscitation. Sometimes it ini-

**ports the same aS APHTHAE:-** *Castellus. '* 1 j

OSCHEOCELE. A Scrotal Rupture. See HERNIAS- \*  
OSCHEON, **όσχεον.** The *Scrotum. The Amphidium, or Crt*

*Uteri,* is, also, thus called by *Galen. -- . i*

OSCITATIO. Oscitation is performed by expanding, at one

- and the same time, almost all the MufcteS capable Of spontaneous  
Motion ὁ. hy greatly extending the LungSj'hy drawing in gradually  
-and' flowly a large Quantity Of Air, and gradually and (lowly  
- breathing it out, after it has been retained for some time, and ra-  
refied 5 and then restoring the Muscles to their natural State.  
Hence, the Effect os Oscitation, or Yawning, is to move, ac-  
celerate, and equally distribute, all the Humours through all  
the Vessels os the Body, and,4.onsequently,. to qualify the Muscles  
and Organs os Sensation for their various Functions. *Bocrhaap.  
instituti,* I . \* ' .' ' '. -

- A great deal is insensibly “discharged; when Nature endeavonni  
to gets rid ids the retained perspirable Matter, by yawning, and  
stretching os theLimbrs -si -/ ' : -

. TO these a Person is Itiost inclined just aster Sleep, because,  
**a** greater Quantity going Off by the Pores, os the Skin, than st  
other times, whensoever a Person wakes; -the increased Cool  
traction that then happens. Cluses a great deal of the perspirable  
Matter in-the Cutaneous-Passages, which, will Continually; give  
such Irritations, as excite Yawning and Stretching 7 and such Mo-  
lions, by shakingthe Membranes Of the whole Body, and shifting  
the .Contacts Oft their-Fibres; and'the- indlosed Matter, by de-  
greeS throw it Osh ' so'"

- Hence we see the Reason, why healthful strong People are most  
inclined to sech Motions, hecause they perspire most in time of  
Sleep, and,-therefore,’have more of the perspirable Matter so  
lodge in the Pores, and greater Irritations thereunto. . \* ’ ''  
' I Cannot here Omit the Vast Advantages of shine littie-Er-  
.erCiseS just after waking in the Morning. At that time, by the  
Quantity which. is gone .off during Sleep; the Body is rntiefi  
emptied and lessened, and all the Fibres invigorated with a fresh.  
Btock Of Spirits.: That Firmness, therefore, and due Tension os  
the Solids, which are so necessary to I good State of Health,  
are then::most easy IO' he Obtained, because the. Fibres at that  
time may most conveniently the drawn up, and hardened, by any  
fuch means aS gently contracts them, and ar thesirme time shakes  
Off their grossest and most useless Moistures.- -Now that Exercise  
Contracts-the Solids -nothing is more manifest; and, therefore,  
nothing Can he Of greater Service, than.to usejit .at these times.  
But such, is the best; as- gives^a gentle'Motion sto all the Parts,  
especially the Membranes, and cutaneous Fibres; and this.can be  
effected no surer Way that I know Of, than bythe Flesh-limlls,  
which ought to he osed dustssIefoIe rising, and-putting on; any  
Cloathsr and if now-anththen the Perion.would leap about, and  
stretch this Arms with Weights in each Hand, it would wonder-  
sullypromote the good Ends which areto be procured hereby:’  
By this means all that‘ Matter whichi 'is sufficiently digested for  
Perspiration, would he drawn out, and the Solidshave no man-  
ner of Weight left Upon them but the necessary. Fluids, by which  
they would he enabled to perform their Oshdes-with Ease and  
Vigour; and as in a Clock or Watch new cleaned, the'several  
Motions oLthe whole-Machine would go on with great Regu-  
larity.’. ’ : t . λνύ . . ab -ι -sf

' Yawningsand stretching the Limbs alter Sleep, is a Sign the  
Body has perspired very well ; τ . - . - ἐν. ψ

- Stretching and yawning, aster Sleep, is occasioned by ae great  
plenty of perfectly well-digested perspirable Matter, which isin  
Readiness to he thrown off - . ' /Ἀς

.. The Body,- by yawning and stretching, in the Space of half **an**Hour, perspires more than in three Houts at at any other tithtioj- SuchExtenfions in general, or of any particular Part, proceed  
from'-some gentie and pleasing lrritations of the muscular Fibres:  
And xhat such Irritations, or gentle Vellications, are occasioned by  
Ἀ great Quantity of the digested perspirable Matter hanging about  
the-Surface and extreme Parts of the Body, and not thoroughly  
-discharged, is no difficult Matter to conceive - For it appearings  
that, in -time-OfSleep, there is a continual Course and Tendency  
:Of a find thoroughly-digested Matter towards the Circumference  
r which is discharged thro-the cutaneous Pores, and that, during  
' Sleep, likewise, the Nerves-are.in a State Of Relaxation; it can-  
'-not but'happen, that when a Person awakes, both the Course of  
rthese Streams will he Considerably diVerted, and jhe -Fibres some?-  
thing more Contracted *I.* and, consequently,’the perspirable Maj-  
.ter just passing, detained’ at the Extremities of the excretory  
Ducts; which, as the Sleep is still shaken off and the Solids are  
tmtore and more drawn up, will be squeezed so close, as at last  
-to give those Vellications to the small Fibres composing those  
.Glandules where they stick. and insomuch that sometimes **the**

Muscles themselveS are drawn into Consent, and provoked to  
-those Tensions and Concussions, by which they excite the Stretch-  
ings andYawnings, to which at times we find ourselves inclined.  
tAod thefe.inClinations.Iemain, until all that- Matter is thoroughly  
shook off; whichjby this means, is loosened from its small En-

meat, and dispersed as Water is shaken Off a wet Sheet; and  
this is the Reason why Perspiration is so large at those rimes.  
*Sanctoritts.*

OSEUS, *ic Paracelsus is thz Scrotum.*

. OSMUNDA-

. The Characters are-;

. It produces no Flowers, hut hears its Fruit in CusterS.

*. Boerhaave* mentions two Species Of *Os.munda*; which ars,  
**. .1.** Osmunds vulgaris;. & palustris. *Tourn. last, iferp. Boerfoe  
Ind. Ac* 27. *Filix florida, Os.munda regalis.* Ossic. *Filtx florida  
siuepsenunda regales.* Ger. Emac. II3I. Ran Hist. I. I51. *Filia  
ramose non dentata, florida.* C. B. P. 357. *Filix floribus insignis.***J.** B. 3. 736. *Osinunda regalis.* Ger. 97 I. *Osentinda regalis sive  
Filix florida. Park.. io^Z.* OSMUND ROYAL.

- This is the biggest of our *English* Ferns, sending forth several  
large branched Leaves,, whose long broad Pinnulae are not at all  
indented about the Edges like the other Ferns, they are Of a light  
yellow Colour; among these arise several Stalks, which have the  
like Leaves growing on Them on their lower Parts, but towards  
the Tops they are full of round, flender, seed-bearing, curled  
Heads, an Inch or more long when ripe, of a brown Colour,;  
Covered with small dusty Seed These appear in *June,* and ripen  
*its July.* The Root consists Of a great Number of small, long,  
round Parts, matted together, blackish On the Outside, and green  
within, covered over with small Fibres. It grows in marihy,  
boggy Places, Particularly in a Bog, at the Backside os *Wcolurich,*near the Warren. . .

The Roots are the Only Part used, are accounted good for Ob-  
structions Of the Liyer and Spleen, and particularly esteemed for  
the Rickets in Children, -as, also, for Ruptures, Wounds and)  
Bruises. *Miller's Bot. Off. . ; .*

*. Lobelias* informs us, that.the Root of this Plant is highly bene-  
ficial in the Cure Of Hernias and Ulcers, that it is serviceable in.  
Colics, and Disorders of the Spleen, and that it is somewhat hot,  
acrid, and Of an agreeable Smell.x -

. The middle and whitish Part Of the Root is thought highly ef-  
ficacious not only in recent Wounds, but, also, where the Patients  
are stab'd, have any Of their Vesseis ruptured. Or have fallen  
from Eminences, when boiled or bruised, and drank, with some  
- Liqouh ' . . ' ; . '.

si The Root Osethin Plant is thought an effectual Cum for the  
Rickets, without any Other Medicine, in the Rickets, says Doctor  
*Bowles,* I generally use, with Success, Conserve Os Asparagus, Or  
Os .the tender Buds Of Osmund-royal, and the male Fern, Or those,  
of Milt-waste, and Hartis-tOngue. *Pau Hist. Plant.*

2. Osmunda, soliis lunatis. Thisrn. l«si.54I. *BoerhTnd. A.cq.  
Lunaria. Offic. Lunaria minor.* Ger. 328. Emac. 4O5. Park.  
507.- Ran Hist. I. I27. Synop. 44. *Lunaria racemosa .minor, vel  
vulgaris.* C. B. P. 354. *Lunaria Botryitis.* J. B. 3. yoo. MOON-  
WORT. - . E! ; ' susa. .  
-This is.a small lowplanr, seldom growing to. he above three,  
or four Inches high, having only one Leaf, which is pinnated or  
cutjnto several half-round. Sections,fstanding about .the Middle  
of rhe Stalk, which has, towards the Top, several Bunches of  
small globular -Heeds, in which, k Contained its dusty Seed. It

\* grows in dry hiliy Pastures, aS in the Warren, by *Igrooscatich in  
Kent,* being in its Perfection.in *May: ;* .l.-'/.r-i

Some have a great Opinion Of this Plant, and .esteem it good  
for all'Softs Of Wounds. . The People in *Wales* make an Oint-  
ment Of it, which, apply’d to the Reins, they reckon-a very sove-  
reign Remedy for. the Bloody Flux. It is bur little used in the  
§bops.. *Millers Bot Osse - v:* .\* τ

According to Doctor *Eales,* it stops the Menses/ and, accord-  
ing *to Bobart,* puts a Stop rotheFncer *albus. Dale, y*c.OSOROR. Qpiumss . .' . ; .... prise:

OSPR1ON, όσπριον. A Bean; and all Sort of PulS.

OSSA *Parallels...* An universal -Medicine in theGout. Xu-  
*lofndus. ’ yz so dur'. - ; so .* ' .Ἀ.-

. o OSSIFICATIO. .Ossification , that is, the Formation os a Bone.  
It .is either natural. Or morbid, aS when any Part,, which Ought.  
to be soft and flexible, becomes bony. ' ‘

HoweverTolid and Compact adult Bones are, yet they were  
Once Cartilages, Membranes, and even a mere Jelly. This needs  
no further Proof,, than repeated' Observations Os Embryos, when  
dissected: And how much more tender must the Bones he before  
that time, when neither Knife or Eye is'capable to.discover the  
least Rudiments Of them ? By degrees they become more folid,  
thenassume the Nature Of Gristles, and at last Ossify: Which is  
brought about partly by the BoneS heing, more than any Other  
Parts, exposed to the strong Pressure Of the great Weights they  
support, to the Violent Contraction of the Muscles fixed , to them,  
and to the Force of the Parts they contain, which-endeavour to  
make way for. their Own further Growth. By all this pressing  
Force, the solid Fibres and Vessels of the BoneS are thrust closes,  
and Inch Panicles Of the Fluids, conveyed in these Vessels, aS arefit  
to he united to the Fibres, are sooner and more firmly incorporated  
with them., whilst the remaining Fluids are forcibly driven out, by  
The Veins, to be mixed with the Mass of Blood. In consequence Of  
which, we observe, that gradually, aS the BoneS harden, the pro-  
portional Number and Largeness of their Vesseis decrease. From

which, again, we Can understand One Reason *scat* the Bones Of young.  
Creatures sooner reuniting Aster a Fracture, than those Of Old.  
From this, also, we Can. deduce the Cause Of Horses, Bullocks, -  
**and** other young Creatures Of a large Breed, decaying in their  
Size, when put too soon to hard Labour.

That the Ossifying Of Bones depends much On fuch a Press  
fure, seems to be evinced from the frequent Examples we meet  
with of Other Parts turning bony, when long exposed to the com-  
pressing Force Of the furronding Parts, er when they are subjected  
to the like Circumstances her their own frequent and Violent Con-  
traction ,\* witness the Bones found so frequently near the Bone Of  
the Heart in some old Men, and in. several Other Creatures: And  
the muscular Substance Of the Heart has been ossified in shch.  
Instances of which *Ches.elden* and *Garengeor* givens; and the Ar-  
teries of old Men often become bony. The Cartilages Of the  
Larynx are generally ossified in Adults, jn Beasts Of Burden, the  
Cartilages between theVertchrae Ofthe Pack and Loins Very Often  
Change into complete Bones, and, being intimately united .with the  
Vertebras, the Whole appears one'continued Bone: Nor is the  
Periosteum exempted from such an Induration; for Peyer telis- '  
us, he divided this Membrane into several bony Platea.

TO confirm this Argument stall further/we may Observe, that  
BoneS begin their Ossification at the Places, where they are most  
expos'd to these Causes, *viz.* in. the cylindrical BoneS from **a**middle Ring, and» in the broad Ones, at or near then Centre,  
from one Or inore , distinct Points: The Reason Of which is,  
that these Parts are Contiguous to the. Bellies of .the Muscles an-  
nexed. to the Bones, where the Swelling Of these moving Powers  
are the greatest. What the Effects, of this , may be, let **any**judge, .who view some , of the Bones, as the Scapula and Ilium,  
which are on each .side covered with Muscles, how compact  
and thinthey are in Adults,. where rhe Bellies *of the* Muscles **were**lodged,, whereas in Children they are thicker. But this heing  
the middle Part of these Bones, where the greatest Number of  
Fibres is, this particular Place would have been much thicker in  
Adults, had not this forcible Cause been applied, which has not  
had such Effects in.Children, whose Muscles have not been much  
exercised. Besides, iswe allow, that all the Parts Os a Bone are ‘  
equally increased by...the.Constant Supply Of new Particles, each  
Fibre, and every Particle os a Fibre, will endeavour to make  
way for its Own Growth, thy pwihing the One next to it ὁ . and  
Consequently by far the greatest Eresthre will be on the Middle,  
whereby the Particles there will be made most firm: And **here**It IS, that Bones begin their Ossification. Lastly, the Pulsation  
of the medullary. Arteries, which enter the BoneS near to this  
middle Part, may, aS Authors have alleged. Contribute, perhaps,  
sqmewhat to this induration. - '

From theEffects Of Pressure only it is, that we can account  
for the Bones of Old People having their Sides set much thinner;  
yet more dense and solid, while the Cavities are so much larger  
than in young Bones, . and for the Prints of Muscles, Vessels, etc  
being so much stronger marked on the Surfaces Of Bones, ac-  
cording to their Ages, If they belong to People Of near the same  
Condition of . Life,' . or if they belong ro those Of the same Age,  
according to the'Labour or Exercise they have had , the Bones  
Os old People, anthof those accustomed to Labour, being more  
strongly impressed: than’ those of young Folks, and Os ’ such who  
have lived inlndolence and Inactivity, .jo' ’ ‘ -- ‘

**Ir is,** also, probable, that Ossification depends On the Vessels **Of**the Bones being so disposed, and Os suchDiameters, aS to sepa-  
rate a Liquor,, which may easily, when'deprived of its thinner.  
Parts, .turn.into a bony. Substance; as It seems plain from the  
Observation Of the .callous Matter separated after Fractures and  
Ulcers, where Part ofimeBone is.taken out 5 for, in these Cases,  
this-Liquor hardens,sand soften cements the two Extremities Of **a**Bone, though at a good Distance from each other 5 aS I have seen  
happen in two or three .'Cafes, and Of which there are Abun-  
dance of Very remarkable instances handed down by Authors.  
One, scarce inferior to any Of them, was communicated to me  
by Mt. *Laing,* Surgeon at *Jedburgh,* and is now published, Ol **a**Child, whose Tibia- he took out, leaving little more than the  
Epiphyses at each Extremity , all that he took away Of the Bone  
was supplied by a bony Substance, on which his Patient walks  
easily and firmly. . si’

Perhaps both the Causes of Ossification above-mentioned may  
be assisted by the Nature of the Climate People live in, and the  
Food they use: Whence, in hot Countries, the Inhabitants sooner  
chine to their Height os Stature, than in the Northerly Cold Re-  
gions: And thence seems to have arisen the Common Practise  
among the Ladies, Of making Puppies drink Brandy, Or Spirit Of  
Wine, and Of bathing them in these Liquors, to prevent their  
growing big. And it has been Observeo, that much **Use os**inch Spirits has occasioned Parts naturally soft to petrefy in some,  
and to Ossify in other People Of no great Age; wimess **the**Causes related by *Istttre* and *Geoffrey.*

Whoever is desirous to know, in what Time and Order each  
Bone, and its several Parts, begin to assume a bony Nature, let  
him consult *ILcrcleringius,* who gives us the Delineations Of Abor-  
tions from three Days after Conception, and traces the Ossifi-  
cation of the Bones from three Weeks and a Montis, till the

Tinae Of the Birth: TO whom should he added *Coif erst* and *Eyso  
sendees.* **A** pretty complete Account of this Subject might also **be**collected Ont Cl *BuysePs* Works, where some Of the Mistakes  
committed by former Authors **are** corrected, and several more  
Particulars, to make the Account Of the Osteogenin more accu-  
rate, have been fince added by *Nesbitt* and *Albinas. Monrds  
Osteology.*

OSSIFRAGA is the same **aS OsTEccoLLA..**

OSSIFRAGUS. The Ossifrage. The Stomach of this Bird,  
**taken** internally, is reported to break the Stone *Dioscorules,*Iv.xC.5g. -

OSSISANA A sandy Slone, said to be found near *Spire***and** *Harmstad,* celebrated for conglutinating fractur'd Bones.

OST AGRA, from όςέον, a Bone ; and ἄγρα, a thing said hold Of.  
**A** Forceps, to take out Bones with. .. - - - - -

OSTEOCOLLA *Osseo. Sehrod.* 355. *Dougl. Ind. 6.6. Worm.'*. 53. *Charlt. Posse ra.. Cesteoeollus.* Aidrow Mus. Metall. 626.  
Schw. 387. *Ofieoeollus cruflaceus.* Gesn. de Rar. Foes. 3o. *osii.  
fragus Lapis.BcxLi* THE BONE-BINDER.

This is a Substance of a seemingly middle Nature between  
Earth and Stone, white, friable, crustaceous, sabulous ; in Fi-  
gure resembling a Bone, and growing Out Of sandy Places, and  
Other stony Soils; It is highly Commended for the speedy Con-1glutination Of Bones, because it quickly affords Matter for **a**proper Callus 5 and consequently hastens the Conglutination.  
*Scheod.* It also stop; the Fluor albus, and removes intermittent  
Fevers. But *Hildanus, in Cent.* 3. *Obs. 9a.* justly cautions us to  
he very Circumspect in exhibiting it to young Persons furnished  
with a laudable Habit Of Body, because it generally leaves an un-  
seemly Scar ; for which Reason he thinks it iS only to he used  
in old and extenuated Patients, whose native Heat is weak and  
languid. According to *Wormius,* they in some Shops fell for **the**Bone-binder, a Species of the GalactiteS, which is white, po-  
rous, smoo.h, soft, easily dissoluble into a Liquor, and of a sa-  
line Tastes *Dale.*

I find,, that Osteocolla grows in a sandy, yet nor gravelly Soil,  
and not at all (that I know) in any rich Or clayey Ground. It  
shoots down two Mens Depth under-ground , the Branches most  
Commonly growing strait up; yet, sometimes, also,they spread side-  
ways The Branches are fome Of them thicker, some stenderer;  
and the farther they are distant from the common Stem, the'  
thinner they are, the thickest Stalk usually equalling the Thick-  
ness Of an Ordinary Arm Or Leg, and the Branches the Thick-’  
**ness** Of a little Finger. ... . ... \* z n ‘ ::

Upon the Sand, which is here sat' *Franchfort* on the *Cyders.*every-where yellowish, there appears a whitish fatty Sand, which,'  
if it be.dng into, hath under, it a dark, fatty, and. (how hot add\*  
dry soever the Sand be) a somewhat moist arid punid Matter,  
like rotten Wood; which Matter spreads itself here-and there’  
in the Earth, just as the Osteocolla itself does, and is called, by'  
those whom I have employed to look for it, the Flower of this  
Substance. The Osteocolla, being thus sound, is altogether soft,  
yet rather friable than ductile: Wherefore, if One has the Curio-'  
sity os gettingOut Of the. Ground a whole Piece of it with its  
Branches, the must very Carefully remove the Sand every Way  
from it, and then let it the so awhile; its Quality heing, that?  
remaining exposed to the Sun for half an Hour, Or somewhat  
longer, it grows to that Hardness, as it is found in the Shops.

It seems to be a kind os Marie, Or to have great Affinity  
with it. Of which we here have, also, great Store, .yetnot near those  
Places, where I have found Osteocolla. It, also, requires ranch  
Time to come to Maturity, which appears from hence, that, in  
the Very same Place where-I digged iome.ofitlast Year, ! this  
Year found more, yet with this Difference, that the first grew  
hard, aster the Manner before described, but The last remains  
still soft and friable, though now in the fifth Month.1 : -

The Cause os its being divided into so many Branches, **I** Con?  
lecture to be from the Roots, which spread themselves hereland-  
there in the Earth, so that the Maner gathers and settles. Itself  
about them ; and afterwards, according to the Division of the  
Roots, acquires a plants! Form and Appearance. Whence**It**seems also to proceed, that through the Midst Of the Osteocolla  
there always passes a dark Line, which is thought to he a Piece  
**os the** Root. And it Often happens, that .the Stroke loses itself  
by little and littie, and the Osteocolla in the Middle grows  
clear , which comes to pass, when the Roots by the Cor-  
ruption begun in the Osteocolla, is reduced to Powder. -Yet.  
have l sound a Place hereabout, where the Osteocolla was not’  
hollow at all, but there I observed, that, instead of setting about  
a big Root, it had gathered itselfabout many small Fibres : Whence,  
also, this Sort had acquired Pores through its whole Length, but.  
no Cavity like the Other. *Philosophical Transactions.*

OSTEOCOPOS, όςεοκοπος, from δστμά, a Bone, and κόπ».  
Labour, Or Uneasiness. That Sort Os Pain and Uneafiness, ex-  
cited by too much Motion, which is called a Weariness Of the  
Bones.

OSTEOGENICA. Medicines which promote the Genera-  
rien of a Cdlu'. - '

**OSTIARIUS. The PYLORUS. -**

OST1OLOG1A Osteology; that is, the Doctrine relative

*tcf* the Bones; Or a Description Of the Bones.\* ' - -

OSTRA CITES. Ossie. *Oflracites.* Boer, de Lap. 393. **Laerj  
de** Lap. X24. Gesm de Lap. 84. Plot. Hist. Oxon, *ios.* Mor-  
ton. Northampt. I 89. *Oflracites maximus rugosus et as.per. Lior.*Hist. A. A. 226. An. n. 37. ejusd. Hist. Concn. App. Lin. Ης  
*Cfiracites maximus conglobatior admodum crasses in. argillaceis Aor  
lites.cens.* Luid. Lithogr. 26. N. 471. *Qsiracites rugosus et alum  
datus mediocris subcinereus subrotundus.* Lang. Hist. Lap Fig.  
poi. Tab. 47. 2. *Ostrea labris non crenas is.* WOOdw. Am. *2 -*43. HOBGOBLINS CLAW. r

Women use the Ostracites instead Of a Pumice-stone, to take  
Off Hairs. A Dram Of it, taken in Wine, stops the Couse of’  
the Menses, and two Drams thereof, exhibited four Days after,  
the menstrual Purgation, prevent Conception. Applied out-  
wardly, it is effectual against spreading Ulcers, and Inst mma-  
tions Of the Breasts. *Diofcorides, Lib.* 5. *Cap* 165. Taken with’  
Chamomile-flowers, it is esteemed an excellent LithontriptiC.  
*Dale.*

OSTRl FES. A Name for **the OssrEOCOLLA. ‘**

. OSTRlTIUM, Or OSTRUTIUM. Names for **the** *Imped  
rdtoria,* Masterwort.

**- OSTRYA. The same aS OSTRvS.**

OST RYS. Ossie. *Ofirys five Ofiria.* Park. Theat. 1406. *Gse  
tryaulrno similis, fructu in umbilicis so iaceis.* C. B. P. 427. Rail  
Hist. 2. I428. Synop. 3.451. *Tragus sepium vulgo Oflrys Theo-,  
phrafli. J.* B. 2. I 46. *Carpinus.* Tourn. Inst. 582. Boerh. lnd.  
A. 2. I76. *Betulus sive Carpinus. Get. 12.96.* Emaci I47o;  
THE HORNBEAN. - \*-

It grows every-where tn Woods and Hedges in *England,  
France,* and *Germany.* The Wood is white, herd, and fir m s  
Whence it is much used by Wheelwrights. Being wounded In the.  
Spring, it discharges a Tear, aster the Manner Of the Birch;but  
I find no medicinal Virtues ascribed to this. Or any Other Parti  
ofthe Plant. *Ray, Dale.*

OSYRIS. Ossic. *Qs.rris frutescens baccifera.* GB. P. 2I2.’  
*Cassla Poetica labelii.* Ger. II IO. emac. I295. Raii Hist. 2.  
1489. *Cassla Poetica Mems.peliensium.* Park. Theat. 452. *Cassla  
lignea Mansoeliensium.* L β. I. 458. *Cassia Poetica Monspeliensium,  
an Theophrafiisc* Tourn. Insta 664. *Cassla Latinorum.* Alpin.  
Exot.4I. POETS ROSEMART

The whole Shrub has something Of an astringent Qutaliry, the  
Root is hard and woody and covered with a redish, thick Bark,  
which is Very astringent.ί It grows in *Italy,* and about *Monp.,  
falser* in *France,* where *Bay* observed it in great Plenty ; and flowers-  
*in January,* and sometimes in *April* and *May ,* and the Fruit in  
ripe in *October,* Or sooner. .

The whole Plant being astringent, it is likely to he Of Efficacy  
in Fluxes of the Belly, and Other Disorders'Of that Kind. *Bay:*Some Shops, as 7 *Bauhine* says, used it instead Of the Cassia of  
the Antients, but it must have contrary Effects, aS appears from'  
its astringent Taste, and he more proper for Fluxes of the in-  
testineS." *.Dales-* ..j

- OTALGlA, ῶταλγία, from *lie,* an Ear, and ἄλγος. Pain.  
A Pain in rhe Ear. :\*

. OTENCHYTES, ῶτεγχὑτηῆς-fromίς, anear, and ὲγχήβὑ  
to pour into. ;A Syringe tor the Ears. st

OTHANI. Mercury os the Philosophers, . .

OTHONNA. See **AFRICANUS FLOS.**

- OTIS. .The Bustard, a large Bird sound in *England,* and:  
other Countries. The Fat is said to be anodyne, and rtlolvent.:  
The Dung is resolvent, and .'a good Application tor the itch.

OTlTEss A Name sor rhe Finger next to the little Finger,. .  
called, also. *Digitus Auricularis.:*

OVAR’A.--The Ovaries. See **GENERATIO. .**

OVATUS, or OVIFORMIS HUMOR. The Aqueous  
Humour Of the Eye. : ~ ....

-DVIDUCTUS. The TUBsE-FALLOIIANAE. '

OVlS. Ossic. SchrOd. 5. 303. Schw. de Quad. 57. Jons **de**Quad. 38. Gesm de Quad. 770. Aldrov.de CaIed. Bisul 370.  
*Ovis domestica:* Ran Synop. A. 73. *Mas Aries dicitar, Patus  
Agnus.* THE SHEEP. See **ALIMENTA. - . - -**

: The Pans used in Medicine are the Brain, Gall, the Oesy-  
pus,' the raw Or unwashed Wool *(Lanasuccida)* the Fat, Lungs,.  
Cawl,-Dung,-Urine, Bladder,-Fdead, Feet, incinerated Bone,  
and Rennet. -- ι

The Brain of a Ram is said to be effectual in preventing im-  
moderate Sleep, in epidemic Diseases, and to facilitate Dentition..  
The Gall loosens the Belly 5 applied outwardly, cures a Carcino-  
ma; and is os Service in a Purulency os the ears: The Gall Of  
a Lamb is prescribed for the Epilepsy. The Oesypns is emcl-  
lient, resolvent, heating, anodyne, and proper in Luxations,  
Contusions, and the like. The Wool os a Lamb is good to miti-  
gate and mollify Tumors in the Neck. The raw Wool os a  
Sheep is beating, emollient, lenient, and ltas the same Virtues as  
the Oesypns. The Far, given in Red-wine, stops Haemorrhages,  
and cures a Diarrhoea, Dysentery, and Gripes. The Lungs, ap-:  
plied to the Head, mitigate the Pains, and immoderate Heat  
thereof, and compose the disordered and tumultuous Spirits;  
whence it is of principal Service in Phrensies, Want Of Sleep, and  
the like Disorders. The Cawl, applied hot, cures the Pain Of

**the** Cohe. The Dung is refrigerating, drying, aperitive, and  
discurrent: Whence it is of very great Efficacy in the Jaundice,  
and other Distempers ; and, used externally, cures a Tumor of the  
Spleen, a Thymus, Corns, Wans, and other cutaneous Tumors ;  
**and** is,also, very comfortable in Ambustions. TheUrine, drank,  
expels the Water in an Anasarca. The Bladder, burnt, and ex-  
hibited,-. relieves those who cannot retain their Urine. The  
'Herd and Feet of a Wether, well milled io running Water, are  
serviceable in Atrophise and Contractions. The Bones of a Lamb,  
incinerated, promote rhe Consolidation of Wounds, even of  
these which are most difficult to be consolidated. The Rennet  
is good against Poisons; to curdle Milk; and for venomous Bi:es.  
*Dale* from *Schroder. -*

. You are to cbuse the Flesh, and such other Parts Of a Sheep as  
are young,'pretty fat, tender, well-fed, and bred in.a pore and  
dry Air. ‘ ;

' Well-fed Murton yields goad Nourishment, and is easp os Di.  
gestion.

When it is old, it is dry, hard, and not easily digested.

Mutton contains much Oil, and volatile Salt, in all the Parts  
of in ... '; t .. ' -

Rarns-flesh is feldom eat, because of rts unpleasant Smell, and  
rankTaste, almost like that of an He-goat. The Flesh of an  
Ewe is a little more used; yet not much in Esteem, because it is  
insipid, viscous, and subjeib to produce gross Humours, and bad  
Juice. .

As for what is properly called *Mutton,* which is the Flesh of a  
-Wether, it is much esteemed, because it is tender, well-tasted,  
very mollifying, full Of oily balsamic Parrs, and volatile Salts,  
proper to produce the good Effects we attribute to it. *Limery  
on Foods. ..... . c... - ... \_ -*

: As the Sheep lives On Vegetables and Water only, and the  
habitual Exercise Of this Animal is very small; in consequence  
of these, the Juices are not much inclined to an alcaline Putre-  
faction, especially if it is suffered to blced sufficiently, and not  
killed whilst heated by Exercise:  
. OVUM. See ALBUMEN. χ -

Eggs differ very much, according to the Birds that lay them;  
according to their Colour, Form, Bigness, Age, and the differ-

ent way of Dressing them Those most used in Food are Hens  
Eggs. You ought to chafe those that are new-laid.; Some Au-  
thors, also, require, that they should he very white and song.

. Eggs are nourishing and good Food; they increase the seminal  
juices, qualify the sharp Humours of rhe Breast, are good for  
..phthisical People, easily digest, ease the Piles, and arelooked upon  
to he good to make the Voice loud and fine.

,.ΐ When Eggs are too old, they heat roo much, produce bad  
juice, and are-more especially noxious to thofe who are of an  
hot and bilious Constitution: They contain much Oil and Salt,  
and agree at all times with any Age and ^Constitution; pro-  
:Yidedthey are endued with the good Qualities before-mentioned.

Λ . so- RE M A RKS. ' **Y . ... .**

There is no Food more in Use than Eggs i They are good in  
X Sickness and Health, and make a Part of the Composition of

several medicinal Remedies. The various Ways of dressing  
them make them more or less who!some. In general, if you  
would have Eggs produce good Effects, they should be mo-

: derately boiled; for, when they are done too little, they con-  
tinue stirny, and, consequently, hard of Digestion ; "and, when  
they are done too much, they are hard ano heavy in the Sto-  
mach; because the Heat hath dissipated their more volatile

... and exalted Principles, leaving-none but rhe grosser Parts be-  
hind, which being close united together, make rheEggscotn-  
paci and hard; and, therefore. Eggs ought neither to he too

. stirny, nor too hard, but of a soft and moist Substance.

The Egg consists of two Parts, the \Vbite and the Yolk; and  
these, being taken separately, have different Virtues: The  
White is . full of oily and balsamic Principles, that make it  
moist, cooling, nourishing, and fit io qualify the Violence of  
the juices. The Yollt abounds more in volatile and exalted  
Principles, by the Help of. which it strengthens thesolid Parts,

" increases the Spirits, and keeps the Humours in a just. Fluidity.  
Thefe two Pans of the Egg, though differing in Virtue, fast  
not to concur together, in producing the good Effects attri-  
buted to the Egg.

The freshest Eggs are the best, and most healthful, because they  
abound more in volatile and exalted Principles; besides, their  
oily and saline Parts heing in a more perfect Union one with  
another, they yield a more eary Food: Old Eggs, on rhe con-  
trary, have undergone a Sort of Effervescence, which not only  
dissipates the more volatile Parts, but, also, destroys the Union  
between this oily and saline Principle. Therefore such Eggs are  
very heating, have often an unpleafantTaste and Smell, and  
produce bad juice.

*Aquapendente* relates several^Vays howto know whether Eggs  
- are new-laid, or not: He would have them held to a Cmcle,

and then see whether 'the Humours contained therein ard clear,  
thin, and transparent; for, if they he otherwise, it is a Sign the  
Eggs are old; because rhe Effervescence has embroiled and con-  
founded the insensible Pans ol thefe Humours, and .made them  
dark. . ... .......

Lastly, Hold an Egg to the Fain, and Isa little watry Moisture  
sticks ro it, it is new; but if not, it is old: Because a new-laid  
Egg is tnoister than the old; and its Humour, being thinner,  
work easier through the Pores of rhe Shell.

*Galen,* in his third Book of the Nature of Food, assures us,  
that the best and wholsornest Eggs are thofe of the Hen and  
Pheasant; but he disallows of iheUfeof those of the Goose and  
Ostrich: But Other Authors much extol them.

*Hippocrates,* in his third Book of Diseases, fays, that the While  
of Eggs, well beaten in Spring-water, make a Dnnk that, is very  
moistening, cooling, good for those that are sick of Fevers, and  
for opening the Body. Some assert, that Peacocks Eggs are good  
for the running Gout; and that those Of the Raven are an excel-  
lent Remedy for the Bloody Flux. . '

*- Aristotle, in Lib. 6. Hist. An. Cap. 2.* fays, that long Eggs  
produce the Female, and round the Mile Kind. *Scaliger,* in  
*Comm.* seems to be of the fame Opinion. *Pliny* is Of the oppo-  
site Side; for he pretends, that the long Eggs are for the Males,  
-and the round for the Females: *Columella and Avicen* agree  
with him. But these Opinions are supported by no Foundation,  
aS the Authors give neither good Reasons, nor Experiments, to .  
prove their respective Assertions, and it is very likely, thar both  
the round and the long Eggs may indifferently produce Male  
and Female.. *Dcrnery,* ο» *Foods. . . . .*

fa a Knowledge of the Nature Of Aliments, aS well as Of  
Medicines, is of great Importance to Health; since the former  
contribute very much, not only to the Preservation and Restitu-  
tion of a sound Stare, but, also, to the Generation Of. prions ,  
Disorders; SO we shall investigate the Nature, and muWr up  
various Experiments, relating to the Eggs of Animals, especially  
those Of Hens, which are justly accounted the rnost falutary, and  
best adapted for nourishing and recruiting the human Constitu-  
tion.i - -' " .

First, It is, therefore, to be observed,,that in Bulk and Weight  
Hens Eggs greatly differ from each other; bat an Egg of an or-  
dinary Site weighs generally about two Ounces, whilst the Shell  
**is.** sor the most part;about one Dram and a few Grains; **the**Yolk, about half an Ounce; and the White, an Ounce and an  
half, that is, by one Third heavier than the Yollt.

. Secondly, If a new-laid Egg, weighing two Ounces, is boiled  
ro Hardness, in Water, its Weight is diminished one Dram and  
an half; an infallible Proof, that, by the Boding, some Portion  
of that most fubtile Principle, which.is the Cause of its.Fluidity,  
is carried off through the Pores of the Shell.

^Thirdly, A new-laid Egg, when boiled, does not suddenly be-  
come hard, but a Portion of rhe White appears Suid, sike Milk j  
-a Proof, that an highly subrile and fluid Matter is contained in  
an Egg, and in Process of Time tran spires; which is, allo, evinced  
from-this, that old Eggs not only become dry and colkpsedTo  
as to leave a certain Cavity within, but, also, easily become rot-  
ten, especially in the Summer-rime, when, rm consequence of  
the great Heat, this subtile Matter is most copiously carried off  
by Transpiration uHence we may lay it-down as a Role, That  
new-laid Eggs, especially in the Summer-time, are most com-  
inodiouily kept fresh in a cold Place, Or rather in cold Water,  
impregnated with Salt. : . ,

pourthly. If an unboiled Egg is laid immediately upon live  
Coals, which are not very hot, a Liquor is observed ro sweat  
through its Pores;- for the Heat fo increases rhe Elasticity of the  
Fluid in the Egg, as forcibly to open the Pores, and protrude  
the Liquor: Hence we learn, that the Snell of an Egg is a very  
perfpirable Substance.

. Fifthly, The White of an Egg, by a very gentle Fire or  
Warmth, is forthwith resolved, and melted down ; but the more  
the Heat is increased, the more it is inspissated. For this Reason,  
if we examine incubated Eggs, we find the White highly attenu-  
ated and liquid, but never thick. And these so different Effects  
are to be ascribed to the Augmentation or Diminution of the  
Degrees of Heat; sor the White of an Egg becomes iofpiflitted  
by an Heat surpassing that of a found Person : Hence we may  
justly infer, that 00ached Eggs are very improperly exhibited in  
feverish Heats: Hence, also, we learn, that a moderate Heat is  
more efficacious in softening Tumors, than that intense Heat  
generally produced by the Application of Cataplasms, and- other  
Topics; tor in'cnse Heat, whether external or internal, proves  
hurtful to the human Fluids, by disposing them to Thicknels.

Sixthly, If in a Sand-heat, duly hot, we distil the White of **an**Egg» inspissated by Boiling, there is sith yielded a large Quan-  
tity of Phlegm, which, being void of Taste and Smell, is neither  
acid, nor alcaline. Afterwards, upon augmenting rhe Fire, there  
is yielded a Spirit of a yellow Colour, which, by Rectification,  
yields a Water, a volatile Sale, and, at last, a thin, fend, and  
heavy Oil. In the Retort there remains a spongious and insipid  
Earth, deprived of all fixed and alcaline Sait, and which, in an  
open Fire, becomes Sight, spongious, and insipid. Hence we leam,

what various Effects the different Degrees of Fire may produce  
- in the same Process, and how great Necessity there is sor a cau-

tions Application Os these Degrees of Fire

Seventhly, TheWhite of an Egg, upon an Admixture os highly  
-rectified Spirit Of Wine, is strongly coagulated, which, also,  
happens upon an Admixture Of the Oil os Vitriol, or any Other  
ACid: Since, therefore, the nutritions Juices os Animals approach  
-Very much to the Nature Os the White os an *Egg,* which affords  
the first Nourishment to the Chicken, hence it is obvious, how  
prejudicial Brandy must he to the habitual Drinkers Os it; for  
nothing is more injurious, either to the Life or Health os Ani-  
mals, than that which coagulates the vital Humours, and destroys  
their due Fluidity, fince they Ought continually to be carried  
through numberless Vesseis: For, by this means. Various Diseases  
are generated, and the Viscera disposed to Obstructions, Indu-  
rations, and a Scirrhus: Hence, also, terrible chronical Disor-  
ders, inch as a Phthisis, a Dropsy, a Cachexy, polypose and  
calculonS Concretions, not only arise, but are increased. It is,  
also, certain from Practice, that spirituous Substances, such aS  
camphorated Spirit. Os Wine, are not always beneficial in diss  
cussing Tumors, and removing Palos Of the Joints, since it is  
certain from Experience, that, in arthritic Patients, tophaceous  
Concretions are easily formed by the frequent Application Of  
spirituous Substances. *Hoffenan, Observat. Phys. Chym. Lib. z.  
Obs.* 2o.

OXALIS. The same aS AcETOSA; which see.

OXALME. See ACETUM.

OXELAIUM, ὸξἐλαιον. A Composition of Vinegar, and Oil.

OXERUM EMPLASTRUM. A Name for a Plainer,  
. mentioned by *Aetius, Tetrabib. 2. Serrn.* 4 Cim. 53.

OXINES, οξίνης. Wine which is four, but not quite Con-  
vened into Vinegar. ... ..

ΟΧΟνξος. Vinegar, si

CSfcYA. The *Fagus.* Beech-tree;

OXYACANTHA. See BERRE Rte.

. OXT BA PHON, όξύβαφον. A Measure The same as Acs-

TABULUM, which see. -

' OXYCEDRUS. A Name for the *Cedrus, folio-Cypressisp  
mayor; fructu flavescente. \_ -*

' ONI COCCUS. Offic. *Oxyeoceus Tournesurtii.* Rupp. Flor.  
Jen. 74. *Oxycoccus five Vaccinia palustria.* J. B.I. 525. Raii  
Syhop. 3.267. Tourn. soft. 565. *Vaccinia palustria.* Ger. I 367.  
Emac. I419. Raii Hist. I. 685. *Vaccinium palustre.* Park. Theat.  
T229. *Vitis Idaea palustris.* C. B. P.. 471. MOOR-BER-  
RIES.

’ The Plant grows in a marshy and putrid Soil, and flowers in  
*June si* The Fruit, which is useful in Medicine, stops a Loose-  
ness and\*Vomiting, quenches Thirst,, strengthens the Stomach,  
mitigatesrhe Heat in Fevers, and resists the Pestilence. *Dak.*

OXYCRATUM, όξήκρατον. Oxycrate ; that is. Vinegar  
- and Waler. ' '

. OXYCROCEUM EMPLASTRUM. The'Nainrf of h  
Platster, described under the Article CROCUS? ’ .so su.  
si OXYDORCIA. The Name Of *sa Collyrium.* SeeDA ch in-  
RON.- ... si: ' \_ sisispse

OXYGALA, ὸξύγκλα. Sour Milk. Ἀ '

OXYGARl/Nl, όξύγαρον. A Composition Of *Garum,* and  
’Vinegar. I, .sc so... ”

- OXYGLYCU, όξυ'γλμκυ. This is a Species of Drink pre-  
pared of the sweetest Honey-combs, macerated and bod’d. The  
Combs,- from which all the Honey has been express'd, are to her  
put into a Pot with pure Water, and boil’d, till they seem to have  
deposited all their contain'd Honey in the Water.\* This Liquor  
is kept, and, when diluted with cold Water, is to be drank ih  
**the** Summer-time, in order to remove Thirst. *Galen,* in *Com.  
rnent.* 2. *de Fracturis,* and in *Comment.* 3. informs us, that the  
«ξυγλυκἐς is the same with the ἀπόμελι; and that it is, by forne,  
made with Honey and Vinegar, and, by others, with Honey-  
cotnbS and Vinegar. The ἀπομελι, then, is an acid Liquor, Of  
**an** inciding and refrigerating Quality. . . .

r OXYLAPATHUM. A Name for the *Lapathum, folio,  
acuto plana. ‘ .*

OXYLIPES, οξυλἰπός. An Epithet for Bread, which has a  
Portion Of Vinegar mix’d with it. .' .

OXYMEL, οξύμελε, from όξος. Vinegas, and μέλι, Honey.  
A Composition of Vinegar, and Honey We have already given  
the Methods of preparing the several Softs of Oyymel, under the  
Article AcETUM, and, under the Article ALcALI, we have spe-

cisy\*d the Medicinal Virtues of *Oxymel.* See, therefore, AcETuM,  
and ALCALI.

OXYMYRRHINE. A Name for the *Ruscus* BRUScUS.  
See BRUScUS. . ’ .

OXYNITRUM. The Name of a Plaister, described by  
*Aetius, Tcerabib. An Serm. C. ty. r,*

OXYPETRA. A Sort Of Stone, or Earth, of a yellowish  
white .Colour, and somewhat acid, found in the Terrhories of  
*Borne.* **It is** recommended for mitigating the excessive Heat **os**Fevers, and quenching Thirst. For this Purpose it is infused in  
Water, and the Water is drank.

OXYPHLEGM ASIA. An acute inflammation.  
OXYPHOENICA. An Epithet for Tamarinds.  
OXYPHYLLON. A Name for the *Cnicus,* according to  
*Oribafius, Malic. Collect. la.* I2. But he does not seem to  
mean the Plant we now call by this Name. '

OXYPORON, όξὑφαον, from ὸξύς, quick, and *ratipri,-* to .  
pass through. A Name for several Medicines, thus call’d, he.  
cause they are extremely penetrating. \* - .: '

OXYREGMlA, ὸξυρεγμία, from οξὑς, acid, and έρεύγω, **to**break Wind. An acid eructation.

OXYRRHODINON.. A Composition Of Vinegar, and Oil  
ofRoses. . εἴ’ ῖ ... .

OXYS, ὀξιις. Acute, or.acid . . ..

OXYS. ί. . -

The Characters are,

The Calyx |S quinquefid, monophyllous, tubulous, and Bell-  
shaped the Leaves are Heart-shaped, like those Of the Trefoil,  
and acid. The Flower is monopetalous, pentapetaloidal, and  
Bell-shaped , containing five inferior, and five superior Stamina, of  
which the latter are almost concreted tO one another, at their  
lower Part. .The Ovary, which is seated in the Bottom of the  
Calyx, shoots forth five Tubes, and becomes a membranaceous.  
Oblong, quinquecapsular Fruit, 'furnished with five Valves, which  
burst asunder from the Base upwards towards the Area, and full  
Of Seeds, involved in an elastic Calyptrs, by whose Force they  
are discharged with Violence. .' . .

*. Boerhaave roeniions fat* Species of Oofyr; which are,

**I. Oxys; flore albo. See AcETosELLA.**

**2.** Oxys; flore purpurascente. *T.* 88. . .. ~

3. Oxys; lures. *J. Β.* 2. 388. *T.* 83. . . '

' 4: Oxys,.lutea, Americana, erectior/Ὑ 88. .

5. Oxys; bulbosa, alsithiopica; minor; folio cordato ὁ flore  
ex albido purpurascente. Η. estes 1.43. o :ss

*6.* Oxys, bulbosa, Africana, rotundisolia;. caulibus & flori-  
bus purpureis, amplis. *H. Ale* iu4I. *Boerh. Ind. alt. Plant.*

OXYSACCHARUM. A Composition of Vinegar and Sugat.

OXYSAL DIAPHORETICUM ANGELISAL.fi. This  
Medicine is prepared in the following Manner..? t . ς

Take of the best Salt Of *Car dates Benedictus,* in Grains, urntit  
" in a Pot, and gradually pour upon it Spirit of strong Wine-

Vinegar, Or Spirit of Sugar, prepared by a gentle Heat Of a  
*Balneum Mariae,* without any empyreumaticTaste or Smell,  
till the Salt is not Only dissolved, and the Vapour, produced  
by their Conflict, stops, but a grateful,, and somewhat acid.  
Taste is acquired by the Mixture; the Humidity Of which is  
to he consumed by a gentle Evaporation. Aster this, when  
the Salt is again dissolved in Water, and left in Digestion *in  
Balneo Mariae,* for eight Days, a Liquor, of a beautiful and  
pellucid Colour, is produced, which, when, pour'd Off clear, '  
into a proper Vessel, is to he again reduced to a dry Consist-  
ence, and kept in 'close-stopt Vessels, lest, by the Access  
of the Ain, it should be OOlliquated, which it is Very subject  
to. *Angelas Sala. - .. .* .- . i::

OXYSCHOENO3. A Name *sot the Juncus, acutus; capi-  
tulis Sorghi. , .*

. OXYTOCA, όξήτοκα, from οξὑς, quick, and τίκτω. Io  
bring forth. Medicines which promote Delivery.

OXYTRIPHVLLUM. A Name for the Lotus; *poly ceratus-,  
frutescens, incanas, alba, siliquis curtis’, crassioribus, brevioribus  
erectis.*

OZiENA, όζαινα. A Disorder Of the Nose. See NARES.  
OZE, όζη. A FoetOr, Or ill Smell, Of the Month. . Y  
OZEMAN. The White Of an egg. *Bulandus.*

**-- OZO.-** Arsenin. *Rulandus. -*



FOR -the Signification of this Letter in. the Chy-  
mica!Alphabet, see ALPHABETUM., Phin.Pre-  
seriptiion, sometimes imports a *Pugit,* and some-  
*rdicse&Parti. .* οχοῦ-in:-Γ‘ *- λ~.* anv:v.-.πό:

PACAL; The NamerOf' a Tree which: grows  
*in Peru,* the-.Ashes of which the inhabitants use; mix'd -with

Soap, in order- to cure leprous Eruptions . in any ParTOf the  
Body.: *Rail Hist:Plant.* . r .m grtied sstcstm

s PACCIANUM.? The Name of: *RCoUyrium* menaion’d by  
*Galeri* and *Aetius.* ...Ἀ .-.--.καὶ. ...I ... . . luth. fe.'io.j ... *i*PACHUNTICA. Incrastining Medicines, -du 37a alt,. - o: *i.*'- 'PACHYS, παχύς. Thick. *Hippocratis,* in his Treatise, of  
internal Diseases, describes a Disorder,-or rather'severai Disor-  
ders, under the Name of παχή νοσημα. This Disease is of a'  
Very.singular Nature, 7 and; there are Various Species oscitin.TThe  
first is produced-by Phlegm aim Bile, which, heing convey'd to  
the. Stomach, and .Inflating it, ares, with great Violence, dis-  
charg'd heth by Vomit and Stool.: :.The Patient js seiz'd with.  
Shiverings, and a Fever: The Pain is removed from .the Sto-  
maohto the Head, andxwhen itdeseends to the intestines, it  
produces a Suffocation. - Sometimes the Patient vomits adour,  
and sometimes a saline Phlegm : After Vomiting, he perceives a  
bit terTaste in .his: Mouth; a Redness,, accompanied iwithHeat,  
appears in his Sides ;rand his Back becomes, in some measure,  
incurvated; he cannot endure to have any Part.of. him touch’d- ;  
and the Pain he feels. IS so great, that his Flesh palpitateshis  
Testicles are drawn up/-and . the Heat and Pain at. the .same;  
time :affect the Anus'and Bladder .his.Urine, is.thick, like  
that, of dropfical.Patrents ; the Hairs fall from his Heath and.  
his. Feet.are always cold: At lash: the Pain principally’affects his  
Sides,this Back, and- the Nape of hisTNeck; and he imagines,  
that somethingais creepingor.crawling. all over his Skin This,

Disorder sometimes.rem its, and sometimes not. The Skin of  
theCHead-hecomes red and thicin ThisDisease lastsssix, and  
sometimes ten Years, and towards its End the Patient: is seized.  
with-a copious Discharge Of fetid Sweat. During his Sleep he  
infrequently subject.to-Pollutions, and;the Semen hedischarges'  
is bloody and livid. iss ἀπὸ n.Ir

.Tho' Teems heresattfirst -to describe-a Cholera,

OrshmeSpeciesof Colic, yet whar he afterwards advances seems  
tothave no .Analogy to these two Diseases. . - 4 . i .I Δ

. The second Species'Of this Disorder, .is produced' by Bile  
alorimconveyedsso the Liver, and the Head. The Liver-is in-I  
stated, and presses .upon the Diaphragm. The Head, and prin-  
cipal lyt he Teinplesare at first feizedwith Pains. .'The Patient  
does not hear well, and often sees but Very little. Then, that,  
is, arthe Beginnings of the Disorder,-a -Fever and Shivering  
come on; and: the .Disease has sometimes r considerable, and  
another, timessess Relaxations. *c-* The longer the Disorder lasts,i  
the more intense the Pain becomes ; the Eye-balls dilate them-:  
selves, , and. the Patient becomes blind. To that, is a Finger is  
held before his Eyes, the neither perceives It, nor winks, Dur, if"  
any *Degree* of Sight IS deft; herds with.this Pingers continually  
drawing the Knots of Wool upon the Bed-clothes, imagining  
them to be Filth, - or Lice. : But wheff'the Liver extends itself  
farther to the Diaphragm, the Patient - becomes delirious, and  
imaginesthatthe.sees: before hiur.Reptiles, wild Beasts, of all  
Kinds, or armed Men.. All these he:is inclined to encounter  
with, and agitates himself, as..is he was in a real Battle. Is he  
isnot left to. do as.he has a mind, he uses menacing Language;  
and, if he is allowedro walk, he drops down- HisFeet are al-  
ways cold, andyts he fleeps,sstis with continual Startings. He is  
frighted by terrible Dreams, and, when he wakes, he relates  
every thing helhas’ done and seen I. at other times he re-:  
mains in Bed the whole Day and Night without, speaking one  
Word, with avery difficult Respiration.. His Deliriumin, also,  
remov'd at certain Intervais, he returns to himself, answers the  
Questions ash'd him,: and.hears what is: said to him-, hut soon  
aster, relapses: into.this , former . Condition. This Disorder is  
principally incident to Travellers, and those who, having passed  
thro' uninhabited Places, have been frighted, by .the Sight of some  
Spectre. ... .' ?:«:: .:et- ' i.-. . .... i , miss’..

. The third Species, ofIhis Disorder isi produced byPhlegm, as  
is obvious from the Eructations .of the Patient, which-smell as  
is he had eaten Horse-radish. That Species of the Disease, or  
the Pain.accompanying.it, begins at the Legs, whence it  
ascends to the. Abdomen ; and there communicating itself to the  
Entrails,. produces :a Violent Noise and Rumbling, which is  
succeeded by a Vomiting of acrid and putrid Phlegm. But  
this evacuation affords no Relief to the Patient; on the con-

trary, hejo seized with a Delirium, and an intense Pain osithe  
Entrails, and sometimes a Pain ofthe.Head so.achte. .andtfikrd,  
thatshe only hearsand sees Very confusedly.;I He sweats, a groat-  
deal,-and the Sweat is fetid ;:but he-in relieved by this: means.  
Heinos the same7Colour withthosejabonring -under the Jaun-;  
diced'’.' This Disorder:is lessfrequentiy. mortal, than the..former  
Species, i .‘.r .savin ..(..c :: co l *sz---': -* 7 *A* .m’fi.C

.’The; fourth Species.ofi This.Disorder draws its Origin: from;

white Phlegm, and succeeds long and chronical Fevers. This  
Kind of it heginS in the Face, which is instated:;'then the  
Abdomen is affected and elevated. The Patient seeisi a . Pain  
resembling. that produced by too Vicdent Exercise,, and the Ab-  
doinen is, as it were; loadedtvith nigreat Burden ;; the.Feet.arei  
also inflated, r It Rain: falls upon the Earth; the Patient, cannot  
beari the Smell exhaled by that means; and is, by chance, :heJs  
exposed to the RainT and perceives the Smell of the Earth,.he  
forthwith falls down. ; This Disorder’hassts lucid InterVais;r.but,  
it is longer protracted than :the precedingriforit lasts fiveYears.ss

Neither the modern Tractitionertio nosoany .who. succeeded .  
*Hippocrates,* have describ’d-any particular Disease, accompanied  
at one, and the same time with .a Train os.To seemingly incoin-  
patible Symptoms.-vSothe may, therefore, infer, that, these Dis-  
orders either no longer attack.Persons,lor. that they have never:  
had any Existence, but are describ'd at Pleasure. Neither of  
these Circumstances., are.probable 7 btitsstis.- far more, reasonable  
to. (oppose, that the Book here quoted is noothe: Preduction i of.  
*Hippocrates,* but of the *Cnidian* Phyftcisnsf-whoareby,.isq5-  
quirraher. condemn’d son the .Very Fault, which reigns, thro', thia.  
Work;- which is,.jmultiplying the:Speciessio{ .Diseases without\*  
any Necessity : And Ibis unnecessary Multiplication-.and Di-  
stinction of Specfesaccounts for rhe. Perplexity and Obfcurity  
with .which .this Disordersiis.’.describ'ffarilrd *Clere,.Hosts. Mede  
Libs^s Cap. Aet.ef yscsul. .-'* 23 . - ss:i. , i..

PACO-CoAATINGA.. *Metrcgrr* A: coniferous Species. OP  
*Brasilian* Canna, ‘οῦο: ..fo si.: ? . ir.

TheStalk os this Plant,heingohewed,.attracts Humours from  
the Head 4 Thus irsed,'-It:is heating;;and breaks the Stone; .and,;  
being chewed srequentiy.in a Day, and: the Juice swallow'd,. in  
an excellent Remedy against the Gonorrhoea, which it cures in  
less than three: Days, without the Help os any other . Medicines -  
It is offensive to the Stomach by its-Acor,, and, therefore, the  
frequent Use of it is ro.he avoided. . c . T . /i

3 There is a second Species :os this Plans,; which is distinguish'd  
by .the Sweetness of its..Leaves underneath, and its red Flowers ;:  
and a third Species, known by its?, ceruleous, tetrapetalotio  
Flowers. E *Rail Hi P.scuri ^* .ι.:.Ἱ .,c ξ .2.6. . ; -o ..υ: τι

- PAC0EIRA. Pison. Marcgr. A Name for *ffics Musca,* or-.  
Plantain-tree.- ?i fid.t ιί.ς. . . *.r ssc icspet.:* . v. - '. tio

’ PACO-SEROCA, *Brasillensisius,* Marcgr. Pise, A Specie of,  
*Prasilian* Canna, which bears its Fruit in Clusters at the Bottom  
of .the Stalk. The fresh Leaves, as well as the Stalk and Fruit,  
before it is ripe, being rubbed, give assmell iike Ginger,.- which  
is Very, grateful; and: therefore, serve instead of Spices: They  
are, also, used in hot.Baths. *Raii Hi P. νύ , . s*

: PACOURII. *De Laet.*A Vast Tree growing in the Ifland  
of *Maragnan,* belonging to *Brasil*; so bears Leaves like those  
of an Apple-tree,;.a white Flower, land a Fruit of the Bigness  
oLtwo Fists. TheRind, or Peel, of this Fruit, which is about;  
half an inchthick, bring .boiled, or preserved-with Sugar, in,  
reckon'd- a Delicacy.*Rdii Hi P. -mi; ..\* r.sc.:,.* ,.τ;

, PADRI. H. M. A siliquous Tree of *Malabar,* spearing a,  
pentapetaloas Flower, and long, narrow,"quadrated, inflected  
Pods..: : i \*: v,: .-tsar . -I .t.f . r-. .j..r?v ss

The Decoction of the Leaves, cures .the intolerable Rigor of.  
theVifcera; theJuice, hereof, mixed with the Juine os Lemons,  
is a Remedy for a Mania; the Juice os the Bark, worked,up  
’ with the Fruit of thePera, restrains the immoderate Flux os  
the Menses. The Skin, .or Peel, of the Root, bruised with.  
Calamus aromaticus and Ginger, and. mixed with the Joice of  
the Leaves, is prescribed as a Remedy soy the putrefying Bite  
of the Snake called by. *ffiC Malabarjans P-olengas Raii Hi.Puri ..*

. PADUS. See CERASUS. ; χ ,-i-.καὶ!: ..-/‘iT.Yai

EAeDANCHONE, from Ταιδίέν, φΓ- πάις, a Child; and  
ἄγχω, th strangulate. SA Species Of. thyQinnsey, familiar, **to**Children. . . .: .Vse;;.-. .Sr„.?ss.;.',. *c: ...*

P.dEDARTHROCACE,from παῖς,3Βο7;ιάρθρον, inJoint; and  
κακὸν, an. Evil. A Disease principally incident to Childreu,where  
the Joints swell, and .most commonly the Pones are rotten ;  
fo helled by *Marcus Aurelius Severinus,* in his Treatise de  
*recondite Abseeffeuum Natura.* The Joint Evil.

REDOPHLEBOTOMLA. The Phlebotomy, or Bleeding  
**of** Children.

PAENOE. The Name of a very large Tree, which grows..  
*in Malabar. -*

The Refin discharg’d from the Roos, Bark, Fruit, and other  
Parts of this Tree, when boiled either with a large or small  
Quantity of Oil, is used either for hard or liquid Pitch, and is,  
in **the** *hrAirrn* Sacrifices, sometimes burned instead of Incense.' :

The Kernels of the Emit, when bruised, and, in Conjunction,  
**with** warm Water, levigated on a Marble, corroborate the Sto-  
mach, remcwe a Nausea and Vomiting» allay racking Pains of.  
the Belly, and cure the Cholera. The Refin os tins Tree,-  
when melted with the *Oleum Sesemi*is an excellent vulnerary.  
Balsam. When reduced toaPowder, and exhibited, it, also4.  
powerfully cures Gonorrhoeas, and Other Venereal Symptoms.  
*Raii Hist. Plant. — —* t λ... *} A:.:;*

PAEONIA. \_ - . ί . in-.rd

The Characters are π .  
Itarises from a Seed, like a monocotyledmous Plant ; the Root  
is tuberous and thickjoand the Calyx, poryphyllous. The;  
Flower is like a Rose, Very large, posypetalous, and furnished  
with Very numerous Stamina. The Fruit consista of a Mule  
titacinof horned Pods, whose Number is uncertain, iricurvated  
downwards,, cover'd with Down, and. gaping lengthwise ;. the.  
**Seeds** ape-commonly globular,\_ and contain a small Kernel. Ἄ .i

*Boerhaave* mentions twelve Species of *Paonia*; which are,  
—I. Paeonia; mas. *Cofsic. Ger.* 83o..Entac..98o. *Bocrh. Indi.  
A..castsu. Park. Theat. isist.. Parado xic Rati Hast:AL.-6sfoys  
Paonia mas pracocior. J . E.* 3. 492- *Paonia folia nigricante  
sistendi da, qua mas,* C. B. P. 323. *I (turn .Inst. Isp'g.* MALE..

- This Peiony has several large branched.Sections, usually five,,  
os long round brownish-green Leaves, somewhat hairy under-,  
neath, not indented about the Edges, growing on a round.  
Foot-stalk? The Stalk on which the Flower grows, is about  
twoi Feet hath, hexing one or two smaller Leaves, and on the'  
Top. a large deep-red Flower, made of five or six pretty big;  
round Leaves, set about a triangular greenish Head, encom-.  
pasted-with yellow Chives. - When, the Flowers are fallen, the -  
Head swells into two or three Seed-Veffeis, which are angular,.,  
whitish, and hairy, handing, downwards, and opening Length-  
ways ; when ripe, shewing the large black oval Seed. The.  
Root consista of a Number- of TuberS, some round, and some  
longer, that hang by Strings to the main Head 7 it is planted  
in Gardens, and flowers in *April* and *May.* . - Τ - .

The Roots, Flowers, and Seeds, are cephalic,, and counted  
good against the Epilepsy, Apoplexy, and all Kinds of Con-  
vulsions, and nervous Affections, both.inYoung and Old; aS,  
also, in hysteric Cases, the Obstructions of the Menses,, and the.  
Retentionos the Lochia.' The Root and Seed: are hung about  
Childrens-Necks, to prevent Convulsions.in breeding, their;  
Teethe . *Millers Bnt. Off. ’*

*Peiony, for Glycyside,* is by some called *Paentorobon*; and some:  
call the Root *Idaeus. Dactylus. -Dioscarides. .* It is called *Pao-  
nia* from *Paeon,* the Physician, who with this Plans, as *Homare  
slums, Odysse* E', cured *Pluto,* when he was wounded by  
*Hereulati-. ... ..... - .. .* .-..Xi.... \

I saw, says *Galen,* a Boy who was freed from the Epilepsy  
fur eighth whole Months after he had worn the Root of Peiony ;ς  
but when 'by chance-it had fallen: off from this Neck,, about,  
whir h it had hung, he was immediately seized with- the same  
Disorder, which was- again removed by hanging another-Root  
aboutthis Neck. I then resolved, he. says, for the, surer Trial,  
to-take off the Root again; which being done, and the Boy  
relapsing into Convulsions, we hung a large and fresh Piece of  
the Root- about his-Neck,- from which time he was never  
troubled with any Disorder of that- Kind. This Experiment  
of *Gale»* is confirm'd by1 *Montanus, Fernelius, and Apollonius  
Menubenus,* in his Book *de Alce,sseap.* 7 ...

By whet Property, or Quality, inherent in Peiony, this was-  
effected, remains a Doubt ; but, whatever it were, says *Julius  
Alexandrinus,* in bis Notes on *Galen de S.M.Pwe use* fru-  
strated in our.Hopes.of the like Success at present. Either, there--  
sere, our Peiony is-riot so effectual ins that of sorneother Coun-  
tries, or Diseases-in- the Time *Df-Galen were* less severe than in  
ourDays, perhaps on account of the Change in Regimen for  
stlonworset- Some pretend-that the whole Affair depends on-  
taking, up the Root under a certain Position of the Stars4. and  
this is an Opinion which seems to border too much on Magic,  
and-sopershtious Vanity. And *Co Hessenan-y:lum'ex&* a Question,  
whether Ginin's wasof such- Virtue in- its own Nature, or aS it  
was τετελεσμένη *(teteles.menefa conjused-,* for the Devil in- many  
Things helps *or* hinders. Nature. *Syluius seys,* that, he had  
seen nothing extraordinary effected by-virtue of the Root, and  
Seed os this Plant, tho' he had Very often used them. *-Raii  
B.F - - ss ’*

2. Paeonia; communis; Vel soemina. *CoB. P.* 323. *Taunt.  
Inst, asper. Bocrh. Ind. A.* 294. *Peeonia feemlaa.* Ossic. Ger.  
83O. Emac. 98 I. Raii Hist. i. 694. *Paonia feemina vulga-  
ns, store simplici.* Park. Theat. I38O. Parad. 4oo. *Paonia  
fcrmina vulgatior. T.* B. 3. 402. FEMALE PEI-  
ΟΝΥ.

This Peiony has larger,, taller, and greener Leaves than the  
Male; and .arises higher, bearing Very large; red Flowers, com  
fisting of a great Number of Leaves, the outermost large and  
broad, :hut the innermost composed of various Magnitudes,  
some very narrow and flender, others broader, and sharp-pointed,  
set about a. double whitish woolly Seed-Veffel,in which some-  
times grows round black Seed, less shining than in the Male.;  
The Roots grow after, the seme Manner as Ihe *former, Rnflo*indeed, heing more increasing, and easier to he had, they are  
generally, sold *for* the Roots of the Male ; they, are cultivated In  
Gardens, and flower in *April* and *May.* The Root and  
Flowers are used. . - Css. - -gista. sta

. .They, are accounted useful for all Distempers for which the  
Male reinny is serviceablessand indeed they generally siupply  
its Place. of - *. -..n... 'so* L.h'ed:.. j ....J

Officinal Preparations from the Peionies are,, the *Syrupus  
Florum Paonlae,* and the *Syrupus Paonia compositus, c;* the:  
*Aqua. Simplex,* and the *Aqua Peeonia compositusy* .Both, the:  
Seed and the Root are put. into, the *Pulvis ad Guttetani. . Miltv  
leofs Bat. Osts. .* /. ι ... /X id

. 3. Pxonia; soemina; altera;(?.5.p.323..M.ZE3.455..

4. Paeonia, peregrina; .store, saturate; rubente., *Co B.P..*

324. *M. Hilg.erss. .... λ* - -ἝἝ

5. Paeonia; peregrina ; flore saturate rubente maxima.. ;

.6. Paeonis ; solio subtus incano ; flore albo, vel pallido.:  
*C. B. P.* 323. Me Hi 3. 454. J ; .:i

.7. Paeonia ; tenuius laciniata ; subtus pubescens ; flore pur-.  
puree. *C. B. P.* 323. Me Hi ,3. 455. υ '. ?

8. Paeonia ; folio maxime lactniato; store kermesino simplia..  
*An Paonia, aquilina foliis. C. B. P.* 323. *M. Hi* 3. 454.

9. Paeonia; soemina ; flore pleno, rubro, majore. *C.B.P.*324. *Tourn. last.* 274. *Bocrh. Ind. A.* 2q5. *Paeonia.* Offith.  
*Paonia faemina multiplex.* Ger. 83 I. Emac. 98 I. *; Paeonla: .  
fcBmiiia vulgario flore pleno, rubro.* Park. Theat. I 380. Parad.  
34I. *Paonia store pleno, rubra.* LB. 2. 4Qq. COMMON:'  
PEIONY. .. . ,

It is frequent in Gardens, and flowers in *May*; the Flowers,  
which are the Part used in Medicine, agree inVirtue with those  
of the Male Peiony. . . . .

IO. Paeonia; store pleno, colons **ex** rubro & roseo Variegati.

II. Paeonia; flore exalbido pleno, major. *C. B. P.* 324.  
*Raii Host.* I. 695. *Tourn. last.* 274. *Boerh. Ind. A.* 295-ι  
*Paonia flore albicante.* Ossic. *Paonia flore pleno albicante.*Park. Parad. 342. *Paonia faemina Polyanthus flore albo.* Ger. .  
83 I. Emac. 982. *Paonia albo flore pleno, sive Polyanthos alba  
faemina. JuB.* 3.494. WHITE-FLOWERED FEMALE-.  
PEIONY. - . .. .S γ .

The Virtues are. the same with those os the Male Peiony. ... .

I2.. Paeonia; tenuifolia; caesia; store pleno, **ex pe-.**talis latioribus & angustioribus, rubro, *Bocrh. Ind. ale,.  
Plant. -* ..T; . ... . .. . - χ -μα

The Root, Flowers, and Seeds of this Plant discover, by.:  
the Taste, an aromatic and.somewhat astringent Quality,,  
attended, with a Viscidity ; whence it is effectual in all Dis-o  
orders proceeding from too great Laxness of the Brain; and inj,  
nervous Affections. The Root is taken up- in the Month of;  
*March,,* about the New Or Full Moon, dried, and cut **into:**Slices, and. may then, he preserved for a considerable time. A.  
Dram of this Roos, given everyMorning to an epileptic Person,.  
will prevent the Fir, as! have made the Experiment in Children;  
hut, aS soon as you- desist from giving it, theFit returns ; for  
Peiony has not Virtue sufficient for eradicating an Epilepsy.  
Dr. *Grew* observed, that the inner Kernel is a strong Cathartic  
but,, while it remains involved within its Cortex, has no Ope-;  
ration at all. The Root is hung about the Necks of Children,  
to prevent an Epilepsy ; and the Seeds are strung as Beads, to  
make a Necklace for the same Purpose. . Of the Flowers are  
prepared a Conserve, and a distilled. Water half an Ounce os,  
the Syrup of the Flowers, given three or sour times a Day,, in.  
an excellent Remedy for Children.affected with: the Epilepsy..  
Some prepare Emulsions of the Seeds with proper Waters. The  
Virtues I have mentioned,, belong, in a more eminent rnanner,  
to the first Species, whiclrcuresall Sorts of Convulsions, Palsies, .  
Tremblings, nocturnal Frights in Children, . and Apoplexies.  
*Hist. Plant, adscript. Eoerhaafv.* . - ... t.u . . .

PAPALe,. ποκιπἀλη. \_ Exquisitely **fine** Flour.. ***Gorraus.***

PAGAN IN A- An *Italian* Word,, by winch are meant the  
first Excrements *of* Infants, reduced: to avery.fine Powder;.,  
which, taken for many Days together, is **a** most approvedi.  
Remedy for the Epilepsy. *Castellus. .rr. : z*

PAGOYIjM. A *Paracelsic* Term, signifying that spiritual  
Being which is the Author of occultDiseases, or those which  
depend on Inchannnertt. On this imaginary Subject *Paracel-  
sus* has written a Treatise, which he calls *Pagaytesu Castellus.*

PAGRUS, *five* PH A GRUS, πάγροςἤ φάγρος. Akind of  
Fish living near the Shores, reckoned by *Galen, de Aliment. Fac.  
Lib.* 3. *Cap.* 3I. among Fish which: have an herd Flesh, are  
difficult of Concoction, and generate thick and salt Juices in  
the-Body. " sc'". . su ; fr-' '

; PAGURUS. A kind of Crab, good to eat, but difficult of  
Digestion : It contains much Oil, and volatile arid fixed Salt ;  
and is aperitive and pectoral. The Shell, Clawaisand rhe Stone  
in its Head, are aperitive and alcaline, good for tne Stone, to  
provoke Urine, for Disorders in the Throat, tossop a; Loose-  
ness and Haemorrhages: The Dose is from half a Semple to a  
Dram. \_ *Lernery des Drogues.*S χr-.. τ ο \* ‘ r. 1 *I .*

PAIANELI. .EL M.. A. tall filiquous, or Podthearing  
Tree of *Malabar,* os which there are two Species.

I. *Palega Paianeli,* which has an Heart-shaped Leas, .and a  
very large oblong flat Fruit,'containing a inembrahout Seed.  
The Barkos this Tree, bruised,; and applied with Wine, Ton-  
folinates Fractures and Cuts 7 a Decoction os the" Root is  
good for a Dropsy; and the tender Leaves, bruised, And applied;  
with Saffron os *Malabar,* to Ulcers, conduces to their Cute. "  
" ί2. *Paianeli,* with the larger iniseronated Leaf, which princi-  
pally distinguishes st from the former. The Root of this Tree,  
. bruised, and hoised in Oil, serves toanoint the Head under a  
Pain or Cold. The Bark os the. Root, given in a Decoction,  
is good to resolve Tumors; anda Decoction of'she Bark and  
Leaves, bruised together, is used to anoint the Body affected  
with' Pustules and Uloejs, *Rail Histsi Plant.'i*

'' PAIOMIRIOBA, *Rsiii. Ά'*Name for the *Senna orientalist  
fruticose Sepfoera dicta. so ... ......*

' PAI-PAROCA, *feu Couradi.* H. M. A bacciferous Shrub  
of *Malabar,* with a 'fiat, round, hairy Fruit, containing four  
Stones; it is an Ever-green, flowers in *July,* and the Fruit is  
ripe In *November.* An Apozem is, prepared of the Leaves,  
Roots, and Fruits, boiled in Water, which is said to be os excel-  
lent Use in the Gont.f *Rati Hist. Plant,* s "άτ I

PALA. Avery tall filiquous Tree *of Malabar,* pentaphyl-  
Tons, and lactescent, with Very long and narrow Pods: The  
Bark, bruised, and given in Decoction, is good to mollify the  
Belly ;'and, with an Addition os a little Salt and Pepper, to cor-  
roborate the Stomach, to discuss. Flatulencies, and allay she  
immoderate Heat of the Liver; the same bniised, . arid . taken in  
warin Water, kills Worms; bruised, and applied with Water,  
it cleanses and heals Ulcers, and mitigates the Pain os the Gout;  
and, boiled inOil with the Seed of *Cudu Parits,* and instilled  
into the Ears, it cures Deafness. *Rail Hist. Pselnt.. "*

PALJESTE, παλαισίν. A *Greek* Measure of Length, the  
same as *Dochme, ex Dor on,* being sour Fingers-breadths, or Di-  
gits. *Arbuthnot. . . „ . . .*

„ PALssiTYRUS, παλαιτυρος, from παλαιός, old, and τυρὸς;  
Cheese, is old Cheese. *Blancdnd. . ; "s'"*

PALATINAS *Glandulae.* Conglomerated Glands adjoining

' to the Tonsils. *Castellus,*

'PALATUM. The Palate.' -susu. \ suetscsi

The Palate is that Arch and Cavity of the Mouth, surround-  
ed anteriorly by the alveolary Edge and Teeth of the .upper'  
Jaw, and reaching from thence to the great Opening’ of the  
Pharynx, ί This Arch is pardy solid and immoveable, and part-  
ly soft and moveable. The solid Portion is that which is bound-  
ed by the Teeth, being formed by the two Ossa Maxillaria, and  
two Offa Palati. The soft Portion lies behind the other, and  
Inns backward like a Veil fidind to the Edge of the Osta Palati,  
being formed Tartly by the common Membrane of the whole  
Arch, and partly by several muscular Fasciculi, *etc. ’*

\* The Membrane that covers all this Cavity, is like that, which  
lines' the' superior and middle Portions of the Pharynx. 'It is'  
very thicksset with small Glands, the Orifices of which are\*  
- not so 'sensible as in. the Pharynx, and especially in the Rngie  
of the superior Portion' thereof, 'where *Heister* observed a con-  
siderable Orifice, and a Canal proportioned tor that"Orifice,  
which he could easily inflate with Air. This is certainly the  
best way of beginning these Kinds of Inquines, especially if  
the Pipe be held at fnst only Very near the Pars, without en-  
deavouring to force it in. To immerge rhe Parts in clear Water,  
is, likewise, a very good way to discover small Orifices'by the  
Help of a Microscope. Small Ducts, of the fame. Kind, with-  
what I have now mentioned,, may he supposed to' lie along the  
middle Line, or Raphe, of the Arch of the Palate, and- along;,  
the alveolary Edge, because of some small Tubercles, or Points,  
- which appear there. ‘ -

This Membrane, together with that of the posterior- Nares,  
forms, by an uninterrupted Continuation, the anterior and poste-  
rior Surface of. the soft Portion, or Septum-Palad 4-so that the  
muscular Fasciculi of this Portion lie in the Duplicature oft a

glandulous Membrane. ; The Muscles Composed of theso Fas-  
ciculi shall he presently described. '' . - - - -sisi':'

The Septum, which Inaylikewise be called *Vilum,* or *sialvula  
Palati,* terminates helow by a loose floating Edge, representing  
an Arch situated transverfly above the Basis or Root of the  
Tongue. The highest Portion, or Top, of this Arch, sustains  
a small,Toft, and inregularly conical glandulotis Body, fixed by  
its Basis to the Arch, and its Apex hanging down withoutadt.  
hering to any thing, winch is called ifeisir. cr -  
’-"On each Side of the Uvula there-are two muscular haff  
Arches, call'd *Columnee Septi Palaric* They-are all Joined to  
the Uvula by their upper. Extremities, and disposed-’ in such ed  
thanner; as that the dower Extremities of the two, which he  
on the same Side, areat a little Distance from each others arid  
so as that one half Arch is anterior, the other posterior, ahjoby  
long triangular Space heing lest between them, theAper-df  
which is turned toward the Basis Of the Uvula. - -  
~ The two half Arches on one Side, thy joining the like half  
Arches.on the other Side; form the entire Arch of the Edge  
os the Septum. The posterior half Arches run by their tippet  
Extremities, more directly toward the Uvula than the anterior.  
The anterior half Arches have a Continuation with the Sides os  
the Basis of the Tongue,-and- the posterior with the Sides of  
the Pharynx. At the lower Part of the Space left between rhe  
lateral half A rches on the same Side, two Glands are situated,  
termed*Amygdalaei* utCa- i - - - -rfsif ... -

' The half Arches are principally made up of several fiat fleshy  
Portions, almost in she Tame manner) with the Body of the  
Septum. The Membrane which covers them is thinner than,  
the other Parts Of it towards the Palate, Pharynx, arid Tongue.  
Each Portion ssa distinct Muscle,- the greatest Part oss which  
terminates in one Extremity in the Substance of the Septum',  
and of;the half Arches; and by the other Extremity, in Parts  
different from thesessE'0 ι

'J As Anatomists nsedformerly to ascribe all these Muscles, as  
sar as they knew them; th the Uvula, without any regard to  
the Septum; they term’d them in general; either *Pterystapsqu  
lini,* or *Pcri-staphylsm.v.* The last Part of these two compound  
Words expresses the Uvula; the first Part of the first’Word  
is an Abridgment of *Pterygoides,* and expressas the Insertion of  
these Muscles; but the first Part of the second Word fignifies  
noinore then *round, CAndbout. . '* ι ν-

- I should be very glad to make use of the Term *Pcrsestaphylsu  
nus, ias-u* generaLDenomination for the Muscles belonging to  
the-Septum ; and then so add the other Terms, of winch these  
Names have been made up by modern Writers. But, lest' I  
should be thought to affect' a Language different from theoom-  
mon, I shall retain The ordinary Names, only defining the  
Reader to take notice,, that, by the Term *Staphylini,* I do nor  
mean precisely the Uvula, but only the Parts round it. If we  
could be allow'd to-form Names of *Greek* and *Latin* Words  
compounded Together, we might, for Example, say,- *Glesset-s  
palatinus,* instead of *Clesse-siaphylirms.* I shall call the Muscles  
that go to the Uvula, simply. *Staphylini, or Epistaphylini,*Because that Part resembles assmall Bunch of Grapes, according  
to'the Signification of the *Greek* Word. From what has been  
said; I name these Muscles in the following Manner: '1 z

*" : Glesse-staphyliisi. / - , ? ’ - ‘*

*- Pharyngarstaphylinii - -* Χ.Α .. . ... . ,

*Thyro-staphylinio - ...so.... - . ,2.*

*Dterygo-staphylini.*

*‘ SpFeaosealpingo-staphylini,* cominoaly called *Peri-staphpri  
‘lini Exterar. - - ‘* τ . .

*Pterygo-stapfisiini Sapcriores.*

*-o*,'. i *Prgrygsistapdurscmaj. Inferiores-. - ; : -*

*Pteisigoflalpingp.staphylini,* commonly called *sitery-stasilop^  
su 'su lint internet '* S

*- - Seaphstini Jive Epistaphylinii - - -*

The Glosso-staphylini are two small Muscles, fixed lon'ch in  
the lower and lateral Part of the BasiS-os the Tongue-; whence  
they inn up obliquely backward, along the anterior half Arches  
ofithe Septum Palati; and- terminate insensibly on each Side  
near the Uvula; some os their Fibres hieing spread through the  
Septum . The Thickness of the anterior halfArches is principally  
produced by these two Mttscles. . \*

ThePharyngo-staphylini are likewise two small Muscles, each  
of them being fixed by one Extremity to the lateral Part of the  
Musciili Thyro-pharyngxi, as if they were Portions detached  
from these Muscles.- Thence they run up obliquely forward  
along the two posterior half Arches *of the* Septum, and termi-  
nate in the Septum above the Uvula; where they meet- together,'  
and seem to form an entire Arch by the Union os their Fibres.  
The Thickness of the two posterior halsArches is produced by  
theseMufclesr ‘ ' ‘

. The Thyro-ftaphvlmi are two small Mufcles, which sccom-  
pany the Pharyngo-staphylini very closely, through their whose  
Course, -except that their posterior Extremities are fixed in the  
Thyroide Cartilages near the other Mufcles. They likewise  
contribute to the Thickness of the posterior half Arches, and  
arc inserted in the Septum in the fame manner with the sor-  
met. These two Pairs of Mufcles may he made one Pais, and  
may he easted *Tbno-quiaryngaastapbylini. ' - . :*

The Spheno-falpingcv-staphylini are each fixed by one Fhisrer  
mity, partly to the Sphenoidal Side *of* the bony Portion of the  
*Eustachian* Tube, partly to the nearest soft Portion of the same  
Tube. Thence it runs toward the external Wing of the Apo  
phvsis Pterygoides, into which one Portion- of mis Mu fele is  
inserted. The other Portion runs to the End of the Wing,  
and turns round *to*the forked Extremity thereof, as over a  
Tully;.and is afterwardsinserted in the Septum Palati, near the  
Uvula. . ' . .4. \_ .. .so:-..

*\ I* look upon these - two Portions as two distindl Musoles, one  
Of which, ending in the Wing, seems only to serve sor the Di-  
latation of the *Tuba Eastacbiona.* The other Portion is a true  
Spheno-staphylinus, and, as it has likewise an Insertion, yr the  
’Tubes it may he termed *Spheno-falpiagoestaphyHnus,* or *Sta.  
'psosmut Externus.* This is the Mofcle commonly called *plum.  
foaphylinus Externus.* τ ' .. . ..... ......

.. The Pterygo-staphylinus Superior, is only the external For-  
non of the Muscle last described -, and this Name may, also,  
he givemit, hecause it has a sinall Insertion, ip the under Part of  
the Apophysis pterygoides, besides that rn the sphenoidal Part  
of the heny Portion of the Tube. The-Pterygo-staphylinus  
Insetior; on each Side, is a small Mufcle inserted hy one Extre-  
miryintheUncusptcngoidieus; and, by the other, in the Septum  
near the Uvula. This Observation we owe to MI. *Hsisteyr.-*; - The; Petro-lalpingo-staphylini, or Salpingo-staphylini interni,  
are those which are commonly call’d *Peri-sciapsolini Inierni.* Each  
Muscle infixed by one Extremity, partly, to the inner Side of  
she bony Portion of the *Eustachian* Tube, or that next the  
Apophysis petrosa ; partly along the cartilaginous Portion of  
ihe saineTuhe. Thence it passes a little Way under the soft  
membranous Part, and toward what I called *The half Pad of  
the Tubes,* and then, turning toward the Septum, is fixedin the  
Edge, and partly rn the upper Side thereof.., . . . -. . -

The Staphylini, or Epistaphyhni, are μνο small fleshy Ropes,  
Closely united together, as if they made but one Muscle; but  
In some Subjects they are distinguished bya very fine white  
Line.; They are fixed by one Extremity in the common Peins  
of the posterior Edges of the Ossa Palati, and from thence run  
downward and backward along the Middle of rhe Septum, and  
likewise along the Middle of almost rhe whole Uvula. , These  
Musclonhaye been term’d *Aeygos Morgagni's,* from the Difco-;  
verer ; het he considered them as one Muscle. The Pterygo-  
staphylini Inferiores are of rhe same Kind, and might be term-  
***eas*** *Staphylini,* or *Episiophylini Laterales,* and these last *Modii.*\_. The Septum Palati ferves to conduit the lachrymal Lymph,  
and thatwhich is continually collected on the Arch of the Pad  
late,-into the Pharynx.'. It serves for a Valve to hinder wher  
rye swallow, and especially what we drink, from returning by  
the Nares.: The Ufesof. the different Muscles of the Septum  
are not as yet sufficiently known, nor the different Motions of  
which it is capable, as may he observed by looking for forne time  
into the Mouth of an healthy Person wide-open’d. *fVinstsw.*

. Of **ULcERs** of **THE PALATE.**

.-- These Ulcers are of fo malignant a Nature, that sometimes  
they not only confume the soft Parts, hut corrode the Bones,  
and extend themselves even to the Nose. The Voice of the  
Patient becomes not only alter’d and broken, but wherever he  
drinks is immediately discharged by the Nose with very great  
Uiiofnesi. Thefe Ulcers proceed from a fcorbudc Acrimony,  
or a Venereal Infection, in the Bland ; and, if the Cause is not  
speedily removed, not only the Palate, but, likewise, the Nose,  
will heina miserable manner destroy’d:. . .. —

The first Intention of Cure, therefore, must he either to idle\*  
Viate, or entirely remove, the Acrimony of the Blond, or the-  
Venereal Malignity, by proper internal Medicine5- If the Pa"  
late is not yet perforated, or confirm’d by the Caries, let at he  
cleansed with frequent: Gargarisins, Ointments, and Injections.  
For this Purpose, first, make a Decoction of Agrimony, St.  
John’s-wort, ladies-mantle, and the like vulnerary Herbs;\*  
then mix it with Honey of Rofes, or, if more powerful De-  
tergents.are necessary, with Unguentum AEgyptiacum, or  
Fusoum. The Honey that swims a-top of the AEgyptiacum,  
and, *also,\_Falleplars* Alum-water, are excellent Detergents,  
even when.the Caries ha, affected the Bones. As often as the  
Ulcer .is thus cleansed, it win not be improper soon aster to  
apply to the ulcerated Pary with Tint, ot a Pencil, Honey of  
Rotes, Oil of Myrrh *per Deliquiam,* Elixis Proprietatis, or.  
*Peruvian* Balsam.

If the Caries has already seized the Bones, the morbid Part  
may be separated from the sound, by the Remedies already re.  
commended, especially if the Part he carefully anointed with  
the Oil of Cloves, or with Honey of Rofes acidulated with.  
Spirit of Vitriol, the internal Medicines heing constantly con-'  
tinuedi But, when these do not suecced, the actisal Cautery  
ought to he gently applyiddin .the morbid Bone, after having  
carefully cleansed the Ulcer, with dry Lint, and secured the  
Tongue‘from Injury, by covering it with wet Linen Cloths,  
-and-applying the Speculum Oris. After the Cauterization S  
completed, contioue the Application of balsamic Remedies, till  
the Bone is again covered-.with Flesh, and the Ulcer entirely  
cured. But those Perforations, which penetrate through the  
Palate to theiNose, can never again he naturally closed. .

.. ... s . .' .7. 1« si ίι.-η\* . . . ' . *is.t*

**THE METHOD OF STOFPINC PERFORATIONS THRoUGn**-: imi-i... **-THR PAfrATE.TO *THR* NOSE. . . .**

" When by these Perforations the Voice is injured, and Li-  
quids are discharged fay the .Nose, as Nature cannot stop them  
up by'a hew Supply dr Bime'add Flesh,' wemust have recourse  
to Art.' A .Plate, therefore, of Gold, or Silver; must be adapt-  
fed to the Perforation, heiiing a Tube or. Handle with Holes  
(see *Tab.* XXXXIL Hy.4.5 .').Ἀ Piece of Sponge must hi fix’d  
to the End.of this Handle, which, heing inserted in the Perse-  
ration,' prevents the Plate.from falling down from the Palate;  
by which means the natural Voice of the Patient will not only  
be restored, het likewise tho Power of Deglutition, in the saine  
manner as” ΐί the Palate was enure. However, he should the  
Provided with two of thefe Instruments, that they may. he  
changed, .and the Sponge -washed in Water every Day, lest  
the'Huinostrs at trailed by it should putrefy, and grow fetid, 'I  
once, saw a large Perforation, of the Palate,' occasioned by'2.  
leaden. Bullet; in an Officer, which was remedied in this man-  
'neri *Hciseerso Chirurg.- , . 2.*

PALE, πάλη. Besides ’Its'common Meaning, which is Cop  
luctstion, whence theWord *Palaestra,* a Place for gymnastic Ex-  
cresses) It signifies, also, the fame as *Paepale,* the finest of  
Flout. *Hippec. Lib st. et i. in Marb. 'Mal' '*

PALEARi“The.same as CA2.L.SON ; which fee. ‘ \_.

‘ PALEGA-PAIANELL See **PAIANELI. '**

PALIMBOLOS, παλίμβολος, from παυν,'an Adverb, rm,  
plyingRecourse, or Repetition; and βάνλω. to attack or *seize,  
in Hipricrates, 6 Epid. Serf s 6. Apla* I *6.* is an Epithet ap-.  
plied to such Diseases as are of a mutable and fluctuating Na-‘  
tore, or easily degenerate into others j or, as *Galen* understands  
the Word, which flatter the Patient with Hopes of Relief,  
but’ retain S secret Malignity. *' Foestus.ss' suet- ' .* τί

PALIMPISSA, παλίμπῖσσα, from πἀκόν; importing Repe-  
tition,midπισσα. Pitch, is a Name, as *Diascarides* fays, *Libis.  
Cap. gyl* given by fome to dry Pitch, because it is prepared of  
Pitch twice heiled. -. i . . ' 'Λ

PALINCOTOS, 'άαλίγκβτος, from πάλιν, again, and κὄτος,  
a Term irnpottioga great Uneasiness in the Mind, excited by  
Anger min’d with Indignation, is an *Ionic,* and highly poetical.  
Epithet, frequently apply’d by *Hippocrates* to a Disease, which;  
contrary to Hope, returns upon the Patient with renew’d Vio-  
lence and Malignity. Foesius. \_ .

PALINDROMIA, ταλάνδρομία, from πάλιν, again, and:δρέμω, to rain, is a Term used to express the preternatural Re.l.- '  
course, or Regurgitation; os the peccant Humours to the inner  
and more noble Parts. The Verb παλινδρομέω. from whence  
theWord is immediately derived, is often used by *Hippocrates*in the Sense before given!" Foestus.

' PALINGENESIA, παλιγγενησία, (from πάλιν, again, and  
γενησία, or γένησις. Generation) Regeneration, is a Word by  
which the Chemists have presum’d to express the Revirescence; .  
or returning Greenness ofdry Plants, by virtue of someMercu-.  
rial Water. *Theat. Chym.* ί ' ’

PALINIDRYSIS, παλινίδρυσις. from πάλιν, again, and  
ίδρυμαι. to be placed, oF settled, is a Resettlement, and'a’  
Word used by *Hippocrates, Lib. de Hamsr.* to express the Sub-  
siding again, and Resettlement,of those Humours which before'  
were elevated s and opposed to *Meteerifmus, prisusiapri, Ex-*al ration. *Foestus. ........*

PALINOPTOS, παλίνοπτος, from’ πάλιν," again, and  
όσττομαι, to see, is expounded, in *Galen’s Exegeses,* averse, or  
turned from the Sun.

PALIRRHCEA, παλίῤῥίια, from πάλιν, again, and ῥέων to"  
flow, in *Aretaus de Cur. Moria Acict. Libi ii. Cap.* 4. is the  
Reflux, or retrograde Course, of the Humours, as in the Cho- ’  
lera Morbus, iceder Elect Vomitings. '

PALIURUS- . . .. . . . . - ‘i , '

. The Charactsrs are; ‘ ‘ '

. It has long and very sharp Spines, disposed in regular Order,  
Tine Calyx is monophyllous and pentaphylloidal; rhe Flower’

rosaceous, pentapetalons, and furnished with five Stamina.  
The Ovary in the Bottom of the Calyx becomes a Fruit, re-  
sembling a Bonnet, or Target, and surrounding another almost  
globular and tricapfular Fruit, containing in each Capsula, or  
.Cell, one round Seed.

*Boerhaave* mentions but one Sort of *Paliurus*; which is, '  
: Paliurus Dodonaei. *Tourn. Inst.* 6I6. *Boerh. Ind. A. y.* 236.  
*Paliurus.* Ossie. Get. II53. Ernac. I336. Rail Hist. 2.  
I7o8. *Paliurus sive Rhamnus tortius Dioscoridis.* Park. Farad.  
\_6o7. *Rhamnus sive Paliurus folio Jujubino.* J. B. 3I. *Rham-  
nus solio subrotundo fructu compresse.* C. Β. R 477. *Pallo-  
urus sive Rhamnus tertius Dioscoridis.* Park. Theat. I006.  
CHRIST'S THORN. .

We are very much inclin'd to believe with *J. Bauhine,* that  
this Plant is the *Paliurus* os *Theophrastus,* and the same with  
whar *Dios.corides* in one Chapter makes a third Species of  
*.Nharnnus,* and, in another, the *Paliurus.* It grows about ζᾶ-  
*orona, Bergarnum,* and other Parts of *Italy,* and about *Montpe-  
lier* in *France.* It delights in open, plain, and uncultivated  
Places, and flowers in *May* and *June,* the Fruit is ripe in  
Autumn, and adheres to the Tree all the Winter. It is called  
*Christs, Thorn,* hecause, as some imagine, our Saviour’s Crown  
**of** ThernS was composed os it; and, indeed, you shall hardly  
find any Species os Rhamnus, or other Shrub, arm'd with  
sharper or stiffer Spines, or more dangerous to the Touch:  
Whence quick-set Hedges were usually planted of it, as being  
a most commodious Fence against the Incursions os Men or  
Beasts.

The Leaves and Root of the Paliurus are astringent, stop a  
Looseness, and digest and cure Tubercles; and the Fruit is  
so powerfully inciding, as to diminish the Stone in the.Bladder,  
and promote Excretions from the Breast and Lungs. The Seeds  
bruised are commended against the Cough, and the Physicians  
of *Montpelier* prescribe their Use in Disorders from Sand and  
Gravel. *Rail Hi Ρ.*

. PALLAX. A Name given by some Chymists to an imagi-  
nary factitious Stone, composedof the Heaven and earth, of the  
Moon, with an equal Weight of the Sun. *Theat. Chym.*

PALLIATIO. A Palliation, physicians call it a *Palliation,*or .a *palliative Cure,* when in desperate and incurable Diseases,  
after predicting the fatal Event, they prescribe some Remedies  
for mitigating the Pain, or some other urgent Syptoms, as in  
ulcerated Cancers, or cancerous Fistulas, and the like.  
*Castellus.* ' ' ί

PALLIUM PURPUREUM, a purple Cloak, is a Title  
bestow’d by *Basil Valentine* on a certain Solar Powder, pre-  
pared os an Amalgarna os Gold and Mercury put into a Retort,  
where the Mercury being.separated, what remains is calcined  
with Sulphur, and turned a purple Colour. *Castellus. .*

. PALMA. ... ' . . so .

The Characters are; . '

The Fruit, under an eatable Pulp, has an hard stony Nucleus,  
like the Stone of a Plum. =

*Boerhaave* mentions nine Species of *Palmay* which are,

**I.** Palma major, *C. B. P.* 506. *Boerh. Ind. A.* 2. Ifin.

*Palnea.* Gen 1333. Emae. I5I7. Ji B. i. 35I. Rali Hist.

**2.** I 352. *Palma vulgaris.* Park. Theat. I545. *Indic Ma-  
haindi.* Herm. Musi Zeyh 69., THE PALM, or DATE-  
TREE. τ

The Palm-tree grows in *Barbary, Egypt,* and *Syria,* and  
other het Countries, being a large Tree, having a rough scaly  
Bark. The Leaves, which all grow at the Top, are . large and  
. wrinkled, made of divers stiff, nervous, \_hard, single Leaves,  
about the Breadth of a Reed, set together like a Fan. The  
-Flowers grow among the lower Leaves, in a long Skin, or  
Sheath, which, opening in the middle, shews a great Number  
**of** three-leaved white I lowers, hangiilg on long Foot-stalks,  
which are succeeded by the Fruit or Dates. The Date is a  
round longish fleshy Fruit, of a yellow Colour, but frequentiy  
redish on one Side, of a pleasant sweet, mucilaginous Taste,  
inclosing in a thin white Skin an hard cylindrical Stope, having  
a Chink, or Furrow, running its whole Length. *Miller's  
Bot. Off. .si- . - -fr.*

. The Vagina, or Sheath, which incloses the Flowers and  
Rudiments os the Fruits, was called by the antient Writers  
*Elate* and *Spaiha ,* and that tender arid medullary Substance,’  
which grows on the Top of the Palm-tree, called by *Theophrastus*ὲγκέφαλος, *(Bucephalus)* the Brain, and by *Dioscorides,* impro-  
perly, ἐγκάρδιον πρέμι’ου, ( *Encardeum Premnu) the Heart and  
Marrow ofthe Trunk,* is nothing but a large Bud, producing, as  
*Theophrastus* himself says, both Leaves and Fruit ; sis the Tree  
he deprived of this Part, it is rendered barren, and, in a short -  
time, perishes. It appears, in many Places of .the antient  
Writers, that this Part is eatable; and *Xenophon,* in his second  
Book ofthe expedition of *Cyrus,* says, that the Soldiers, in such  
**a** Place, first fed on the Brain of Palm-trees, which allwither'd  
**after** bring deprived of it; *Galen* also relates, that some, Iather

than starve, used to eat it 5 *ntiQDiphilus Siphnius, ihAtherlumus,*says, that it causes a Plethora, affords too much Nourishment,  
oppresses the Stomach, is very difficult of Distribution, excites '  
Thirst, and binds the Belly. *Co Bauhine* telis us,, that the  
*Egyptians* in *Alexandria* seed on it, and even eat it raw ; and  
that the *Egyptian* Peasants search out barren Palm-trees, in  
order to cut off their Tops, and take out this Pith, or medul-.  
lary Substance, and sell it. . ;

Dates, or the Fruit of the Palm-tree, when thoroughly ripe,  
and not too pinguious,.are grateful to the Stomach, highly  
nutritive, and generally render those who use them, . fat ;  
but they are of difficult Digestion, and most of the antient  
Physicians agree, that they excited Pains of the Head : But  
*Arelceus* alone asserted, that all sweet Meats were prejudicial to  
the Stomach, except Dates, Figs, and Grapes.

The Antients, by infusing Dates in Water, prepared a  
Wine, the Method of making which is delivered by *Diose  
corides* ; according to whom, the Date is sour and astringent,  
and consequently proper sor stopping Fluxes, and immoderate  
DischargesOs the Menses, if drank in austere Wine. It, also,  
stops Haemorrhages, and conglutinates Wounds, if the Parts  
affected are anointed with it. Recent Dates are of a more  
astringent Quality, than such as are dry ; hut they produce Head-  
achs, and, when eaten too copiousty among Aliments, intoxicate  
the Persons who use them. Dry Dates eaten afford Relief to  
those who labour under Spittings of Blood, Pains of rhe  
Stomach, and Dysenteries; when triturated with Quinces, and  
the Ceratum Oenanthinum, and used by way of Ointment,  
they are beneficial in Disorders of the Bladder. The Palmae  
Caryotae, if eaten, remove Asperities of the Fauces. Α De-  
coction of *Theban* Dates, if drank, allays burning Fevers ;  
and, if taken with old Hydrornel, restores the Strength. This  
Species of Dates, also, produce the same Effect, when used as  
an Aliment.’ A Wine possessed of the same Virtues is, also,  
prepared from'.them. Decoctions of them, by themselves,  
either drank, or used by way of Gargarism, are highly  
astringent, τ

The Kernels of Dates, bunt'd in a new earthen Vessel, and  
extinguished, and washed in Wine, supply the Place of Putty,  
sor adorning the Eye-lids. They are of an astringent Quality 5  
brace up the Pores os the Skin ; are good against Pustules of  
the -Eyes, Staphylomata, and shedding the Hairs os the Eye-  
brows. In Conjunction with Wine, they repress fungous Flesh,  
and bring Ulcers to a Cicatrix. - - . "

Apothecaries, ip preparing then Ointments, use the Spatha  
of the Palm-tree. The best Species of this Spatha is fragrant,  
astringent, weighty, close, and internally pinguious. It is of  
an astringent Quality,-stops spreading Ulcers, and strengthens  
relaxed Joints, is triturated, and mixed with Malagmas and  
Cataplasms: When mixed wish proper Cataplasms, 'tis, also,  
beneficial in Disorders os she Praecordia, Weakness of the  
Stomach, and Diseases os the Liver.

A Decoction of it, frequently rubhed on the Hairs, renders  
them black; and, when drank, relieves Disorders of the Kidneys,  
Bladder, and otherViscera. It, also, stops Fluxes, the Menses,  
and Haemorrhages of ithe Uterus. A Decoction os it, whilst  
as yet tender, with Refin and Wax, cures the Itch, is ap-  
plied to the Parts affected, sor twenty Days. - The Fruit,  
also, contained within it, called *Elate* and *Borasesus,* pro-'  
duces the same Effects, and is a proper Ingredient in Oint-  
ments. . .... i \* . . - ' ’ .

The Virtues os the Palm-tree, and its several Parts, are  
described by *Pliny, Galen,* and others of the Antients, and ..  
*J. Bauhine, Hist. Lib.* 3. Cain. I59. . . -

Among the Moderns, *Prosper Alpinus* enumerates the .Me-  
dicinal Uses os the Fruit os this Tree, in the following man-  
ner: In the Fruit, says he, there are three Things princi-  
pally used in Medicine; that is, the Spathe, the Powder con-  
rained in the Spatha, and the Dates themselves . The Spatha is  
used both in Powder and Decoctions. The Powder, taken in-  
ternally, in highly henesicial in stopping Diarrhoeas, Lieuteries,  
and Dysenteries, as, also, all other Discharges os Blood, or other  
Humours, especially the Hepatic Flux, the Haemorrhoids, the  
Menses, and a Spitting os Blood. This Powder is, also, used by  
the *Egyptians* in stopping Spreading Ulcers,: removing , a Re-  
laxation of the Uvula, and fixing the Teeth, when loose. They,  
also, use the Decoction sor all the same Purposes; but often mix  
the Powder within It, also, surprisingly strengthens such Joints  
as are weak, and subject to Defluxions. The white Powder  
found in its proper Covering in the Spring, when the Palm-  
tree begins to flourish,, when mixed with Sugar, is by **the***Egyptians* Very frequently used against Hoarsness, Coughs, and  
Inflammations os the-Eyes.: This Powder is, also, sweet, and  
somewhat astringent ; for which Reason 'tis frequently used by  
the Women, sor stopping immoderate Discharges os the Messes,  
and procuring a Retention of the Foetus. Unripe Dates,  
both used imAliments and Pecoctions, are by them, also, used

against Spittings of Blond, and for stopping all Evacuations  
of Blood, Lienteries, Diarrhoeas, Dysenteries, Vomitings of  
Blood, and Haemorrhoids, as, also, for curing simple Ulcers and  
Wounds.. For the Cure of these Disorders, they, also, frequentiy  
use a Syrup prepared of unripe Dates. They, also, ufe the  
Dates when perfectly ripe ; at which time they are highly sweet,  
and somewhat astringent ; for which Reason they are frequentiy  
used in Hoarshess, Coughs, Dyspnoeas, Pleurisies, and Peripneu-  
monies. A Decoction of them is, also, frequentiy used for  
promoting the Eruption os the Small-pox. *Pros.p. Alpini Raii  
Hist. Plant.*

2. Palma major, Dactylifera, folio stahelliformi, pedunculo,  
ad latera durissimis, magnisque, spinis armato. *Carnaiba,* I.  
*Pisem.* I26.

3. Palma, humilis, Dactylifera, radice repenti, sobolifera,  
folio flahellisormi, pedunculo spinoso. *Bocrh. Ind. A.* 2. I 69.  
*Chamarhiphes.* Offic. *Palma minor.* C. B. P. 5O6. *Palma  
humilis Hispanica sipinosu et nonfpinos.a.J.B.* I. 37o. Raii Hist.  
2. I364. *Palma humilis sive Chamarrhiphes vel Palmites.*Park. Theat. I545. *Palmites sive Chamarrhiphes.* Ger. I22e.  
Emac. I519. THE DWARF PALM.

The Fruit of this Species is of an astringent Quality, and  
for that Reason exhibited against all FluxeS. *Raii Hist. Plant,*

4. Palma, humilis, Dactylifera, radice repentissims, sobo-  
liserd ; folio flahellisormi, pedunculo vix spinoso.

5. Palma, Chamaerops; Plinih *Lugd.* 36o. *Palma, Cha-  
marops, Plinii, sive Charnarophes, fpinosts foliis.* Paris, Theat.  
I546.

6. Palma, soliis longissimis, pendulis, absque ullo pedunculo  
**ex** caudice glabro enatis. See **DRACONIS SANGUIS.**

7. Palma,Guineensis, vinifera. *Belgis Christiaan Wiin Boom,  
et Krissea Boom.* Bofman. *An Palma vinifera.* Lugd. I834.  
*'Palma, vinifera, Theveti.* C. B. P. 5O7.

8. Palma, Japonica, fpinosis pediculis, Polypodii folio..  
*Bocrh. Ind. A.* 2. I7O. *Sagate.* Offic. *Palma Indica caudice in  
annulos protuberante distincto, fructu prunisiormi.* Raii Hlst. 2.  
I36O. *Palma referens Arbor farinifcra.* C. Β. P. 5og. *Arbor  
farirsisera.* Parie. Theat. I646. *deagu seu Arbor fariniifera.*Jons. Dendr. I44. *Toddaepanna, seu Monta-panna.* Herm. 3.  
9. Tab. XIII. &c. Commel. Flor. Mal. 264. THE SAGO-  
TREE, INDIAN BREAD, or LIBBY-TREE.

The Pith of these Trees; heing well beat in a Mortar with  
Water, forms an emulsion, the Faecula of which, dried, is Sago.  
It is a very kindly and nourishing Fond, never fermenting in  
the Stomach, and very proper in Hectic Fevers. It is very  
much used in *England. Geoffrey. -*

The Inhabitants of *Malabar* eat the Fruit of this Tree with  
Sugar.; otherwise it renders them costive.- The Juice expressed  
from the recent Leaves, andjexhibited, allays racking PainS of  
the Intestines, mitigates the preternatural Heat of the Stomach,  
and cures a Vomiting of bloody Matter. The Cone which  
bears the Fruit, when bruised, reduced to the Form of a Cata-  
plasm, and applied to the Region of the Loins, removes  
nephritic PainS, and checks an involuntary Effusion of Seed in  
Gonorrhoeas. A Decoction of its tender Fruit with Water  
excites a Vomiting, and excellentiy cleanses the Stomach. The  
Gum of the Tree, taken internally, resists ch Poisons; and,  
when mixed with Hens Dung, surprisingly cures the Bites of.  
Vipers, if applied to the Part affected. The Inhabitants of  
*Jupan,* of the Trunk of this Tree, make a kind of Meal ;  
of which they prepare a Species of Bread, by them called *Savate.  
Raii Hast. Plant.*

9. Palms, Indica,'coccigera, angulosa. *Co Β. P.* 5o8. *Bocrh.  
Ina. A.* 2. I7o. *Coccus.* Offic. *Palma Indica nucts.era Coccys  
dicta.* Raii Hist. 2. I3S6. *Palma nucifera Arbor.* J. B. I. 375.  
*Palma coccis.era, seu Nux Indica, Indis Lubi.* Camel Syllab.  
43. *Palma sive Nux Indica, vulgaris ferens Coccos.* Park.  
Theat. I596. *Nuss Indica Arbor.* Get. 1338. Emac. I522.  
*Cocceira Indica.* Pis. 63. *{Ed.* I648.) *Tnaja-Guacuiba, vulgo  
Coccos.* Ejufd. I3O. (1658). *Inaya-guacuiba, euyus Fructus  
Jnaja-guaca.* Marg. I38. *Tonga.* Hort. Mal. I. p. i. Tab. j.  
II. HL IV. *Polgaha.* Herm. Musi Zeyh 5O. THE COCO,  
or COCKER-NUT-TREE.

From this Tree is extracted a Liquor, by the *Indians* called  
*Suri,* which, when drank, intoxicates, like Wine. It is of a  
gratefid Taste, resembling that os a Mixture of sweet, saline,  
and acid Substances : When 'tis newly extracted, ’tis pretty  
sweet, but, in Process of Time, becomes more acid, and is of  
a whitish, somewhat green, or pale Colour. From this Liquor  
is distiled a Water, or Spirit, winch burns in the Fire. There  
is, also, a Vinegar, and a Species of Sugar, by the Inhabitants  
called *Jagra,* prepared from it. The Method of extracting  
this Liquor is accurately described by the Authors of the  
*Hiortus Malabaricus.* They make an Incision in the Top  
os the Capsule, which bears the Flowers or Fruit, ‘and  
which they call the Breast of the Tree, and hang a Vestel to  
it. About four inches below the Top of the Capsule, they

make an oblique Incision in the Bark, which they raise by way  
of *Beard*,as they call it, over which the Suri may drop into '  
**rhe Vestel.**

In the.Morning and Evening, and sometimes, also, in the  
middle of the Day, they remove the Vesseis with .the Suri.  
That obtained in the Morning is sweet, that in the Evening  
somewhat acid, and that obtained neat Day acescent; but that  
**on the** third Day, entirely acid, without any Sweetness at all.  
In order to make Vinegar of the Suri, they put the Vesseis, in  
which it -is received, among Calx, for fifteen Days, by which  
**a** Violent Fermentation heingexcited, much Froth thrown up,  
and a whitish Matter subsiding to the Bottom, the Suri is  
changed into Vinegar.

The Species of Sugar called *Jagra* is prepared thus : They  
put into the Pots a sufficient Quantity of Calx, to tinge the  
Suri distilled into them of a redish Colour ; then they boil this  
Liquor, continually stirring it with a Spoon, till it is inspissated.  
Then a red Sugar is produced, which they render white by  
reiterated Dissolutions and Boilings.

The exterior Covering of the Nut is at first said to be eatable,  
of a pretty sweet Taste, good *for* corroborating the Stomach,  
stopping Diarrhoeas, and curing Surfeits.

The Liquor, or Wine of Suri, is said to he highly bene-  
sicial to phthisical Patients, and those who labour under any  
Disorder *os* the Kidneys, or a Difficulty of discharging their  
Urine. From the bruised Kerneis is expressed a Milk with-  
out.the Assistance of the Fire, eight Ounces os which drank  
every Morning, with the Addition os a little Sals, are highly  
efficacious in killing Worms, especially in Children.

Upon Water boiled with the Shavings of these Kernels there  
floats a sweet liquid and transparent Oil, not unlike that of  
sweet Almonds. When six or eight Ounces of this Oil, with  
**an** Addition os Water, in which Tamarinds have been steeped,  
are drank, they gently cleanse the Stomach and Intestines,  
evacuating principally melancholic And pi tuitous Humours;  
whereas the Kernel itself is said to render Patients costive ; but  
this Oil must he used when recent. It is highly heneficial in  
Wounds ; for it not only stops the Effusion of Blood, hut, also,  
washes away the Sanies, mitigates the Pain; and at last induces  
a Cicatrix. From the small Fragments of the Kernels, is  
extracted an Oil fit for burning in Lamps, preparing Rice,  
relaxing the contracted Nerves, and killing Worms.

The Liquor contained in the Kernel is proper for extinguish-  
ing Thirst and Fevers, for curing and cleansing the Eyes, and  
for washing the Skins of Women. It, also, purifies the Blood ;  
cleanses the Stomach, and urinary Passages; and removes Dis-  
orders of the Breast. It is of a grateful Taste, affords much  
Nourishment, and is an excellent Drink in biliary Fevers. .  
*Hernandez. Raii Hist. Plant.*

Besides the foregoing Species of *Palma, Dale* mentions **the**following Sorts.

I. *Palma oleosa.* Offic. *Palma foliorum pediculis, fructu  
prunisiormi, lateo, oleosc.* Cat. Jamaic. 175. Hist. 2. II3i  
Raii Dendr. I. *Arbor exoticafructu Dactylis simili.* C. B. R.  
508. *Palma Guinea.* J. B. 1.364. *Nucula Indica racemifer.*Germ. Emac. I554. Path. Theat» I596. THE PALM-  
OIL-TREE.

This is a kind of Palm-tree, which grows upon the Coast of .  
*Guiney*; from whose statish Fruit, about the Size of a small  
Plum, covered over with a fibrous Coat, they express the Palm-  
oil, which, when fresh, is of an Orange-colour, aS thick as  
Butter, of a pleasant, soft, sweet Scent, of little Taste.

The Natives ufe this Oil with their Fond, instead of Fat,  
or Butter: With us it is only used outwardly, being of **a**strengthening Nature, good fur all kinds of Pains, and Weak-  
ness of the Nerves, Cramps in the Limbs, and for Strains and  
Bruises. *Miller\*s Bot. Oast.*

This Tree grows Ipontaneoufly in *Guiney.* The only Pare  
of it ufed is its Oil, or rather a thick Ointment of an Orange-  
Colour, and fragrant Smell, obtain'd from the Fruit in the sol-  
lowing manner: To the Pulp taken out os the Kernels, they  
add a large Quantity of Boiling Water. Then they for a long  
time agitate the Pulp in a Kettle over the Fire, fill it is inti-  
mately mixed. Then taking the Kettle off the Fire, they let  
the Matter stand, till its more sordid Parts subside to the Bottom-  
Then they shim off the Oil floating on the Surface of the  
Water; and, when they have taken all the Portion then stoat-  
ing on it off, they repeat the same Operation by pouring boiling  
Water on it again. This Oil is best when recent, not rancid,  
of an Orange-colour, a fragrant Smell, and of the Consistence  
of Butter. Externally used, it is anodyne, strengthens the  
Nerves, allays arthritic Pains, removes Weariness, and reBeves  
contracted Parts. *Dale.*

**2.** *Palma coocifera sigura Clumaii.* **See Coccvs DR MAL..  
DIVA.**

**3.** *Palma Haira.* **See EBENUS .ΕΤΗΙΟΡΙΟΛ.**

**.4.** *Palma Arecisera.* **See ARECA.**

*ζ. Palma Sanguinein Draconis fundens altera.* See DRA-  
corns **SANGUIS.**

6. *Palma silvestris BdeUifera.* Kempin Amcessi Exot. 668.  
THE BDELLIUM-PALM.

Tins is the Palina Nucifera, folio Flaheniformi. *Kempherus*imagined, that it was the Bdellifera Chamseriphes of *Serapion.  
Dale.*

Beside thesseregoing Species of *Palata, Ray* takes notice of  
the following?'7

I. *Palma vinifera Themati.* J. Β. Co Β. This is a tall,  
beautiful, ever-green Tree, bearing small austere and acid Dates,  
which are scarce eatable. The wild *Ethiepians* here the Trunk  
two Feet from the Ground, and thence extract a Liquor of a  
Very sweet Taste, and of *Anyouin* Wine: This they keep in  
earthen Veffeis, and call it *Mignol*; and, the better to preserve  
it from Corruption, they season it with some Salt, otherwise it  
easily turns sour: It is of an excellent Flavour, and Very pro-  
per to quench Thirst. The antient *Egyptians* sprinkled the  
Bodies of the Dead three or four times with this Juice; before  
they embalmed them,in order th preserve them the more secure-  
ly from Putrefaction. This Species of Palm-tree grows plen-  
tifully at *Cape Ford. \_*

2. *Palma Juvanensirlongijsimo Folio.* C. B. *Palmee Indicar  
Genus Lantor dictum.* J. B. This bears a small Fruit, of the  
Bigness of a Cherry, of an Orange colour, and containing  
a Kernel, which they call CUcoS. Of this Fruit they make  
a Very fine Oil, of an Orange-colout, pleasant to the Taste,  
and Very wholsome to those who are us'd to it.

3. *Pindoba Drasiliensibus.* Marggr. *Pindoua.* Pison. *Indict  
Brasilianis, Palma Brasiliensis cortice glabro. Fructu Ovi galli-  
nacei Magnitudine et Figura.* Of the Saffron-colour\*d Pulp  
of the Fruit they make an Oil of the same Colour, which is  
us'd in Lamps; and from the Kernel they express a Very limpid'  
Oil;which,while fresh,is good to season Food ; and, when stale,  
serves to burn. They are both of a cold Quality, and what is  
expressed from the Kerneis serves instead of Oil of Roses. The  
Leaves serve to cover the Houses, - and of the same they make  
Mats, Baskets, and other Things; from the Top of the Tree  
distils a pellucid, sweet-scented, and Very beautiful Gum,  
which sometimes serves instead of Gum Arabic: In the same  
Topis contained a medullary Substance, of a whitish Colour,  
tasting like a recent Walnut, and affording Very good Nutri-  
ment, is eaten with Bread and Salt.

4. *Palma Brasiliensis quinta flea Tucurn Pif did.* Pal. Brasil.  
*aculeata. Fructu Pruni Damasceni Magnitudine et Figura.*The Trunk, Branches, and Leaves, ure prickly ; the Wood  
\ black, and extremely hard, and us'd by the Natives to sharpen  
their Arrows; its Fruits are produced two or three hundred  
or more in a Cluster ; Swine and Monkeys feed upon them,  
and a Very limpid Oil is expressed from them, which serves  
Io the same Uses, as that from the Nuts of the *Pindovs,* and  
is Very much esteemed. The Fruit is blackish on the Outside,  
and contains a Kernel which is not ill-tasted, especially when  
new: From the filamentary Substance the *Brasilians* spin a  
very fine and strong Thread, Very like red Silk.

5. *Palma Brasiliensis septima Jeu Ague Piscni. Palma Brasil,  
uinifcra. Foliis ciencreis.* It bears its Fruit in Clusters of the  
Sine ossa moderate Plum, yellow when ripe, of a very sweet  
Taste, and containing a white and Very delicious Kernes; froth  
which the Inhabitants prepare a Wine. The Negroes call this  
Tree, in their own Tongue, *Catole.*

6. *Palma Brasiliensis octaua Iraiba dicta.* Pisonis. *Pal. Brus.  
siarinisiera, an Tri Lcrii ; id est, Palma Americana Fructu  
racemose.* C. B. In the Branches about the Top of the Tree is  
"contained a Very white medullary Substance, which, boiled with  
Flesh or Oil, is esteemed good Food ; they yield also an harder  
and white Substance, which they bruise, and make up into  
Dumps like Dough, of which Cakes are made of no ungrate-  
ful Taste; and of the Juice they prepare a Very sweet and  
pleasant Spoonmeat. The Fruits are sweet and savoury, and  
.serve to satisfy the Hunger of these who travel through these  
Woods, and Vast Deserts.

7. *Palma nobilis seu regulis Joamaicensis et Barbadensis.  
Palmoste Franc, et Rochefort.* THE CABBAGE-TREE,  
or PALMETO ROYAL.; This is avast tall strait Tree,  
growing sometimes to the Height of two hundred and fifty,  
.or three hundred Feet. The Top of the Trunk con-  
tains a white. Very tender and savoury medullary Substance,  
which, eaten raw, tastes like a Walnut ; but, boiled and pickled  
with the Multitude of tender and white Leaves, which cover  
and involve it on all Sides, is reckon'd one of the finest Dishes  
that is prepared in the *Leeward Islands.* The *French,* and our  
People too, call this medullary Substance, with the Leaves  
which involve it, *Chau de Palmiste,* that is, the Cabbage of  
the Palm-tree, hecause they hell it in their Broth, instead of  
Cabbage, and other Herbs. On the Very Top of the Trunk  
grows the Involucrum, or Sheath, of the Flower and Fruits

called *Spatha.* The Fruits are round, and about the Sine of an  
Hen's Egg. 'si .

- 8. *Urucuri-iba.* Marggr. & Pison. *Palma Prasiliensts farinsu  
flora. Fructu Pruni, Capulae insidentes* Of the Fruit is prepared  
an Oil, which is Very medicinal, and particularly against the  
Punctures os the Ray-fish ; nor do I think there is a better Re-  
medy against that. Misfortune.

9. *Palma Brasiliensis nona Miriti dicta Pisonis.* It bears a  
single Fruit, winch is eatable and sweet, and of the Size of an  
Hen's Egg. . - . ' . ..

Io. *Palma Brasiliensis decitna Meraiaiba dicta Pisoni.* Its  
Fruit is of the Size of a Pigeon's Egg, eatable and savoury  
enough. .

II. *Jocara et fucoara Brasiliensibus.* Marcgrav. *Giocara*Pisoni. *Palma coccts.cra luminor Brasiliensis.* This, has nothing  
singular, but in its very small Fruit growing in Clusters, and  
of the Figure of the Cocossut.

**I2.** *Katou-Indel.* **H. M.** *Palma silvestris Malabarica. Folio  
acuto. Fructu Pruni Facie.* D. Commelin. See KAToU-  
**INDEL.**

I 3. *Palma Facie cuctofcra. J.* Β. *Palma cujus Fructus  
Cues.* C. B. . .

The *Cuciophoron,* κυκιόφορον; of *Theophrastus.,* is different  
from the Palm-tree'; for the Palm-tree rises Up With one single  
and individual Trunk, but the other, after it is somewhat  
grown, becomes bifid, and each Member is again subdivided  
into other Branches: The Fruit is as big as a Man’s Fist, round  
and oblong, of a yellowish Colour, and of a sweet and very  
grateful Taste, not cluster'd, like that of the Palm-tree, with,  
other Characters, which shew that the cucioserous Tree of  
*Theophrastus* is not a Species of *Palma* ; but, because all Bota-  
nists reser it thither, we, in Compliance with them, have re-  
duc'd it under the Genus of Palm-trees. The *Nux Irtdica  
minor* os *Cordus,* which answers to tho *Cues* of *Theophrastus*in all things but the .Size and Shape, seems to me to agree with  
the Coco-nut. I find no Description of the *Arbor cuciophore,*among the Moderns; but the Fruit shews it to be a Species of  
*Indian* Palm-tree, and particularly of the *coocifera angulosu.  
C. B. " .*

I4. *Palma Indica Folio bicoinposito. Fructu racemose,  
Schunda-pana.* H.M. The distinguishing Character of this Tree  
seems to be the Leaves growing by Pairs,and across each other.

15. *Palma vinifera Fructu ex Arboris Trunco sipinos.o.* C. B.  
The Fruit of this Tree hangs from the Trunk, after the man-  
ner of Pine-nuts and Ananas, whereas in other Palm-trees  
they proceed from the Head of the Trunk, and are included  
in a *Spatha. -*

- The three following Species are reduc’d by *Ray,* together  
with the *Caranaiba,* which may be found under its proper  
Article, to a subordinate Genus of *Palma,* distinguished by its  
pliable Fan-shaped Leaves.

I 6. *Palma coccistera. Folio plicatili Flabelliformi Faemina  
Carirnpana.* H. M. *Palmeira brava Paernina Lusitanis.* The  
Female cocciferous *Palma* with the pliant .Fan-stIaped Leaf. .

17. *Palma caccifer Fol'to Flabelliformi mas, Ampana.* Η. M.  
*Lusitani Palmeiro bravo macho.* The Male cocdiserous Palma  
with the pliant Fan-shaped Leaf.

I8. *Palma montana Folio plicatili Flabelliformi maxima,  
semel tantum frugifera, Codda-panna, sive Palma montana  
Malabar lea.* H. M. *Cingalensibus Talagas lgr Talagaiia, et  
Talipot. An Palmam referens Arbor farinifera.* C. B ? The  
Mountain Palm-tree, with the pliable Fan-shaped Leaf of the  
largest Size; The Leaves of this Tree are said by Captain  
*Knox,* who lived twenty Years a Captive in the lstand of *Ceylon,*to be very tenacious, and soft like Parchment; and, tho' large  
enough,when extended, to cover twenty Men, yet to he pliable  
like a Fan, to such a Degree as to be contracted and reduced  
to no bigger Sire than that of a Man's Arm, and besides to  
be extremely light, so as, when divided into Parts, to be easily  
oarry'd in the Hand.

*her. Palma humilis sipinos.a, Atitara Brasiliensibus dicta..*Marcgrav. The prickly D wars Palm-tree.

2o. *Palma Manicam Hippocraticarn rifercns.* C. B. *Palma  
succisura.* Clus. The Dwarf Palm-tree resembling *Hippocraters*Sleeve. These two last are in *Ray* the second and third Species  
of the *Palma humilis.,* or Dwarf Palm-tree. The first of them  
you have finder the Title *Palma humilis. Pan Hi P.*

- To make Palrn-wine, take ripe common Dates, and put  
them into a Vestel, lwhich has an Hole bored at the Bottom,  
and stopped with a pitch'd Reed, bound about with Linen, to  
cover the Hole. Then, to ten Choenices of Dates, pour three  
Congii of Water [See the Articles CHoENIx and CoNeiUsj :  
if you would not have your Wine Very sweet, pour on five  
‘Congii of Water on your Dates, and let them alone to mace-  
rate for ten Days. On the eleventh Day, take off the Linen  
Cloth froth the Reed ; and,receiving the thick and sweet Wine  
in proper Veflels, set it aside for Use.

This Wine is pleasant, but noxious to the Head ; it is good  
for Defluxions because of its astringent Quality, and is for **the**same Reason proper in Disorders of the Stomach, the Coeliac  
Passion, and an Hxmoptoe. Some add the like Quantity of  
Water a second time, and so draw it off: They do the same  
the third, fourth, and fifth time, but no more; for afterwards  
It grows sour. *Dioscorides, Lib.* 5. *Cap.* 40.

**' PALMA signifies, also, the Palm of the Hand.’**

*Palmaepinus feu conifera.* The Name of a large Tree, resem-  
bling both a Palm, and a Pine.

PALMARIS MUSCULUS. The antient Anatomists men-  
tion but one Muscle helonging to the Palm, the *Palmaris  
longus*; but *Fallopius* describes the *Palmaris brevis,* commu-  
nicated by *Joannes Baptista Cannanus,* an eminent Anatomist,  
his Cotemporary; and was *fail* published by *Viduerda,* in his  
Anatomy written in *Spanijh.*

The *Palmans Longus,* otherwise called *Ulnaris Gracilis,* is a  
small Muscle, lying hetween the *Os Humeri* and the Corpus,  
on the inside of the sore Arm, .its Bodyheing small and  
Ilender, its Tendon Very long and sat.

It is fixed by its fleshy Portion in **the** small Crista of **the**inner Condyle ofthe *Os Humeri,* sometimes closely united to the  
*Ulnaris Internus.* From thence it runs down fleshy for some  
Space, turning a little obliquely towards the middle of the  
fore Arm, and ends in a long narrow thin Tendon.

This Tendon passes down the middle of the fore Arm, over  
all the other Muscles, to which it slightly adheres; and, ad-  
vancing over the large internal annular or transverse Liga-  
ment of the Carpus, is inserted in the Surface thereof, send-  
ing off some radiated Filaments to the *Aponeurosis Palmaris.*

I have found this Muscle fixed to the Condyle of the *Os  
-Humeri,* by a Tendon about a FingeP S-b read th In Length, to  
which the fleshy Body was joined toward the Middle of the  
fore Arm.

I have also seen the inferior Tendon inserted in the *Os  
Scaphoides os* the Carpus, without communicating with **the**large annular Ligament ; and I have seen the *Aponeurosis Pal.,  
maris* arise from this Ligament; from all which it may be  
reasonably concluded, that that *Aponeurosis* has no essential  
Dependence on this Muscle.

Sometimes this Muscle appears to be only a Production from  
the *Ulnaris Internus.*

The *Palmaris brrvis,* otherwise called *Palmaris cutaneus,*is a small thin Plane of fleshy Fibres, situated transversely, or  
more or less obliquely, under the Skin of the large Eminence  
of the Palm of the Hand, between the Carpus and the littie  
Finger ; its Fibres adhering to **the** Skin, and being, **in some**measure, interwoven with the *Membrana adiposo.*

These Fibres are fixed along the Edge of the *Aponeurosts  
Palmaris* from the large Ligament of the Carpus toward the littie  
Finger; and they run in for some Space on the Plane of the  
*Aponeurosis*; but without any Connection with the Bones of  
the Metacarpus. Near the *Aponeurosis* these Fibres are more or  
less tendinous, and some of them often cross each other. They  
are sometimes so thin and pale, aS hardly to be sensible ; and,  
in some Subjects, this Muscle seems to he divided into several  
Parts.

The *Ulnaris Gracilis* seems to he an Assistant to the *Ulnaris*and *Radialis Interni,* in hending the Wrist; and it seems, also,  
particularly to assist the *Radialis Internus* **in the** Motion of  
Pronation.. *Warsaw. '*

PALMATA. A Name for several Spectes of **ORCHIS.**

PALMOS, ρὶαλμός. A Palpitation. See **PALPITATIO..**

PALMULA. A Date. *Palmula* is, also, a Name for the  
broad and flat End os a Rib. *Blancard.*

PALPEBRAL The eye-lids.

PALPITATIO, Palpitation, is a Disease affecting the  
Heart, in\* which it labours under a sort of Concussion, and  
trembles and palpitates. The *Greeks* call this Disorder παλμὸς  
τῆς καρδίας, " a Vibration or Trembling, of the Heart;” and  
we- (the *Latins) Palpitatio,* a Palpitation: The Arteries  
throughout the Body are affected with a Vehement Pulsation,  
and sometimes are, also, dilated ; especially those above **the**Clavicles. The Disease frequentiy intermits, especially whilst  
the Body enjoys Rest; but aster immoderate Exercise, drink-  
ing strong Wines, Indulgence in Venery, hot Bathing, ora  
Fit of Anger, returns upon the Patient. If a Palpitation of  
**the** Heart continues long, it threatens sudden Death; it is  
as much to he dreaded, is it often seizes the Patient, and that  
aster the Solution, or going off, of other Distempers ; and  
comes attended with a great Nausea and Vomiting, and is not  
at all alleviated thereby. Those on whom this Disease recurs  
after some Months, or even after a Year, never arrive at old  
Age, all dying either os acute Fevers, or suddenly of a Syn-  
cope. It is most incident to Persons whe are hetween forty  
and fifty Years of Age, and to such as are molested with  
melancholy FlatuositieS,. or **a** Tumor of the Spleen from

black Bile. A Palpitation of [the Heart precedes a Syncope,  
and often degenerates into it. “ *Lomrnii Mede Obs. '*

Some spasmodic and convulsive Disorders affect the whole  
nervous System, and destroy almost all the Functions os the  
Body, whilst others are confin’d to particular Parts, which  
they frequentiy exagitate with terrible Violence. Of this latter  
kind is the Palpitation of the Heart; which may be defin’d, A  
violent Twitching, er Convulsion, of the Heart, which is Ἀ  
muscular Substance; or a Removal of it froth its natural  
Place; arising from an impetuous Influxos the fine nervous Fluid  
into the cardiac Nerves, and a too copious Impulso os the Blood  
.into the Right Ventricle of the Heart ; or from an Acrimony  
of the Humours ; or from some other Cause.

That this Definition is just, will appear from what is aster-  
wards to he said ; but it is to he observ'd, that it is only ap-  
plicable to a morbid and uneasy Palpitation of the Heart,  
which is frequently chronical, and which differs from a Tre-  
mor, or flight Palpitation, of the Heart, which happens in  
found Persons, and is soon remov'd; for a Tremor of the  
Heart arises from a quick Influx of the nervous Fluid into those  
.nervous Fibres, which, in the same Direction with the Vessels,  
especially the Coronary Arteries, surround the external Surface  
*of* the Heart, or from a too stow Influx of that Fluid into  
some Ramifications : Hence *Lower,* in his Treatise *de Corde,  
Cap. u.* observ'd that the Heart of a Dog, upon tying the  
Eighth Pair, was immediately seiz’d with a Tremor. Hence,  
also, the Reason is obvious, why this Tremor is observ'd to  
happen partly after Violent Commotions of Mind, and an er-  
cessive Use of Venery ; and partiy why it succeeds a Loss of  
Strength, and sometimes prognosticates Deliquiums, some-  
times accompanies malignant Fevers, sometimes succeeds large  
Haemorrhages, and sometimes afflicts those who are just about to  
die. There is, also, a more frequent Palpitation or Motion of  
the Heart, which happens in those who run fast, jump, play  
at Ball, use the hot Baths, indulge themselves in excessive Joy,  
or discompose and ruffle themselves by exorbitant Passions; and  
this Species os Palpitation is no more than a quick and speedy  
Systole os the Heart and Arteries, arising from too great a  
Commotion, and too expeditious 'a Circulation, of the Humours  
through the Cavities of the Heart. This quick Systole of the  
Heart,when free from an Hardness of the Pulse, is distinguished  
from a febrile Pulse, which is hard and frequent. A Palpitation  
of the Heart ought, also. Io be distinguished from that which is  
sometimes perceived, . especially in Women, about the last  
Months of Gestation, in the epigastric Region of the Abdomen,  
and which is nothing but too. great a Repletion and Pulsation  
of the Arteries, situated there, especially of the Coeliac Arteries,  
by means of too large a Quantity os Blood, which cannot  
quickly enough return tbrough the . splenic Veins. This  
Species os Palpitation is most commodiouily cured by Vene-  
section; and an Instance of it is sound *iRA. 'N. C. Dec. i.*An. 6. But of these we do nor treat, since we only consider  
such as frequentiy, and without any evident or external Cause,  
.seizes the Patient, and is performed with so great a Contraction  
and Agitation os the Heart,, that it is moved out os its natural  
Seat, and either forced more to the Leftside, or thrust so  
Violently against the Ribs, Sternum, and Praecordia, that the  
Pulsation raises the external Integuments, and may be, some-  
times, perceived without theCloaths, according to *Forestus,* in  
*Obs. Lib.* I7. *Obs.* IO. and *Christophorus a-Vega,* in *Lib.* 3.  
*de Art. Med. Cap.* S. *Rivinus,* also, in his Treatise *de Palpi-  
tatione Cordis, Sect.* **I** 3. informs ns, that, in a Patient labour-  
ing under a Palpitation of the Heart, he found a red Spot in  
that Part os the Breast ; where, upon applying his Hand, he  
found the Pulsation ; and that, in another Patient, he sound a  
Callus in the same Part.

In the historical Description os this Disorder, there are some  
Circumstances, which deserve a particular Consideration. Those,  
then, are more subject to this Disorder then others, who are of  
firm Habits, sanguine melancholy Temperaments, delicate  
Minds, such aS are subject to Frights, young Persons who  
abound in Blood and Juices ; those whose Evacuations of  
Blood, whether artificial or natural, are suppressed or neglected ;  
and especially Women whose Menses are not duly discharged,  
or who have Haemorrhages of the Nose suppressed. Hence  
*Ballonius, in Lib.* I. *Consii.* uses these Words : " As in  
young Men entering into a State of Puberty, and ac-  
" customed to frequent Haemorrhages, a Palpitation os the  
" Heart may happen, is these Haemorrhages are suppressed, so  
" it may also happen to young Women, in whom the Menses  
" have not aS-yet begun to flow, because in this Case the  
" Blond regurgitates to the superior Parts.” The Palpitation  
is sometimes more gentle, and sometimes more Violent ; some-  
times shorter, and sometimes longer ; sometimes it attacks the  
miserable Patients when afleep, so as to awake them suddenly ;  
sometimes it, also, seizes them by Day, and is often increased  
aster eating; sometimes Violent Anxieties of the Praecordia

precede thin Palpitation, and under the immediate **Paroxysm  
the** Breathing is quick and difficult : It is sometimes accom-  
panied with a Tremor of the Heart.; and what is particularly  
remarkable is, that tho' the Pulse is intermitting, it does not,  
nevertheless, correspond to the Motion of the Heart ; but is  
languid and diminished. Besides, according to *Timaeus a  
QuldenH.es, in Episi.* 23. the Pulse is not at all tO be perceived  
in the Wrist. Under a Violent Paroxysm, a great Uneasiness  
is perceived in the Region of the Praecordia, on account of the  
Disorder produced in the Diaphragm, by the Force, and palpi-  
tating Motion; of the Phrenic Nerve, situated about the Left  
Side of the Heart. A considerable Languor of the Body, and a  
Tremor of the Joints, remain after the Palpitation is over.

As for the Causes and Seat of the Disorder, the formal Cause ‘  
is always so Violent a Contraction and Convulsion of the Heart,  
that it is moved out of its natural State ; but the material and .  
proximate Cause is a certain Stagnation os the Blood, espe-  
cially in the Right Ventricle of the Heart, and a too great Con-  
gestion of it to the same Part; on account of which there  
happens an impetuous Influx os the nervous Kind into the  
Cardiac Nerves and Fibres of the Heart, and a preternatural  
Contraction of them. But, that these Things may be the better  
understood, we shall premise something concerning theStructure  
of the Heart.

First, then, *Johannes Maria Lancesi,* in his Treatise *de Motu  
Cordis et Aneuris.matibus,* contrary to the Opinion of most Phy-  
sicians, who think that the Nerves of the Heart are Very small,  
and hardly considerable, has shewn, from accurate anatomical  
Researches, that Very considerable and nuherous Nerves are.  
communicated to the Muscles of the Heart , for, in each Side,  
the Right as well as Left, there are five Pairs os Nerves to be  
sound ; the first os which, called the *Par Vagum,* arising in the  
Brain, between the Nates and Testes, is propagated among  
the small Ramifications os the Carotid Arteries, and,’ in the same  
Direction with the Vena Cava, is convey'd to the Peri-  
cardium ; and, spreading its smalIRamifidations to the Auricles  
and Arteries, terminates in the Rete Nervosum, to be sound  
between the Aorta and Pulmonary Artery in the posterior Basis  
os the Heart. The second, called the Superior intercostal Pair,  
arises from the same Origin with the former; and, being sent  
from the Head through the Perforation os the Os Petrosum,  
descends above the Aorta; and, dividing itself into three Rami-  
fications, communicates one to the external Part os the Heart,  
and the other two to what is commonly called the Reticular  
Contexture. The third, called the Vertebral Pair, arising within  
the Brain near the tenth Pair,and running off with the Vertebral  
Artery, proceeds through the bony Canal ;imd, going out about'  
**the** seventh Vertebra os the Neck, is inserted in Various Parts  
of the Heart, and fr at last distributed to the Rete Nervosum.  
The fourth, called the Inferior Intercostal Pair, arises from the  
Spinal Marrow, hetweenthe third and fourth Vertebra of -the  
Neck; and, sending off some Ramifications to the Auricles, and  
both Veins, often concurs in the Formation os the Plexus Ner-  
vosuS. The fifth, called the Phrenic Pair, arising froth the last  
Vertebra of the Neck, and first of the'Backf distributes Nerves  
to the Auricles and Ventricles, and spreads through the Plexus  
Nervosus, from which numberless Ramifications are distributed  
through the whole Substance of the Heart.- Hence we learn,  
why the Heart is possessed of a Degree of Strength superior to  
that of all the other Muscles of theBody; as also, why, when  
one Nerve is tied, the Heart, by reason of the irregular Influx  
os the nervous Fluid into the other Pairs, trembles 7 and why  
its Motionis not totally interrupted. 'Tis, also, to be observed,  
that three Pairs os these Nerves form Ganglions, of which the  
other two are free. ' By these last, the regular and natural Mo-  
eion of the Heart is performed ; and, by the three former,, its  
Violent and irregular Motions succeeding the Passions os-the'  
Mind. Hence the Reason is obvious, why the Passions of the  
Mind are so powerful in altering the Motion of the Heart.  
'Tis,also, to be observed, that the VenaCaVa is furnished with  
more Nerves than the other Vessels; because it stands in need  
of a great Degree of Strength, in order to return the Blond of  
wholeBody. - *.r - .*

Tis, also, to he observed,that the Heart is a Muscle; or rather  
**a** Congeries of Muscles; for, as Anatomy informs us,- that **it**is formed of numberless Fibres, and fleshy Columns, so 'tis cer-  
tain, that each, of these is compounded of numberless other  
small Fibres, every one of which, as it is a Congeries of the  
smallest Fibres, deserves the Name of a Mufcle, especially since  
**each is** covered with a very fine Membrane, prepared os a Con-  
**texture** of the nervous Fibres and Arteries.' Hence it follows,  
that the Heart, heth internally and externally, is highly nervous,  
sensible, and capable of heing vellicated to' a Contraction by  
every thing lodged in it. Besides, the Heart is a disengaged  
Muscle, suspended by four large Veffeis; for which Reason it  
may, by preternatural Commotions, be drawn to any Side, and  
removed from its natural Seat. The Ufe of the Heart is to  
**promote the** Circulation of **the** Blood through the whole Body,

concernihgwhich we shall observe the following Circumstance-,  
as most necessary for our Purpose. The Blood from all Parts  
of the Body is, by means of Veins, winch are at first small,  
and then larger, conveyin into the Vena Cava, and enters itS  
large Sinus, which it forms near the Right Auricle of the.  
Heart; and, heingconvey'd thence, enters into the said Auricle,  
as heing an hollow Muscle at that time dilated; theChyle, at the  
same time, from the Subclavian Vein, enters the same Auricle  
by means of the Vena Cava Descendens. This Auricle, there-  
fore, heing full os Humours, is solicited to a Contraction ; by  
which it forces the Blood into the Right Ventricle os the Heart,  
which is either totally relaxed, or, according to *Lancisi,* in  
the End of its Diastole, and Beginning of its Systole; but the  
Right Ventricle, in consequence os its nervous Structure, is, by  
the large Quantity of Blood contained in it, stimulated to a  
strong Constriction, and forces the Blood into the pulmonary  
Artery every-where distributed through the Lungs; the Re- .  
turn of the Blood into the Auricle being prevented by **the**Tricuspid Valves. Hence, the Passages being every-where free,  
it is convey'd to the pulmonary Vein, and is, in the samemanner,  
received by the Lest Ventricle *os* the Heart; from which it in  
convey'd, through the Aorta, to all . the Parts of the Body.  
When the Blood is expressed from the Heart, its emptyVentricies  
are restored to their natural State, which is the Diastole ; and, ”  
as soon aS they are again filled with Blond, they are again neces-"  
sarily contracted. Thus the Systole and Diastole os the Heart  
last aS long aS Lise, whicli consists in an entire and perfect Cir-  
culation of the Humours.

From what has been said, 'tis obvious, that to the natural.  
Motion os the Heart there are requisite, first, a just Pro-  
portion between the Fluid to he moved and the solid Part, that  
thus only such a Quantity of the former may he convey'd, as  
is capable os heing surmounted by the natural Force of the  
Heart: Secondly, a just Temperature, and natural Mixture, os  
the Fluids -. Thirdly, a due Strength of the Heart, and eon-  
.sequentiy a sufficient Influx of the nervous Fluid, and of **the**arterial spirituous Liquor: Fourthly, a right Disposition of the  
Ducts and Veffeis which convey and return the Blood to and  
from the Veffeis os the Heart, and a Freedom of their Cavities  
from all preternatural Obstructions. If these are not in a natural -  
State, they alter the "Motion of the Heart in Various Manners. ' ’  
But since we only treat of a Violent Palpstation os the Heart,  
in order to distinguish it from other Motions of the Heart, we  
are to observe, that it is always requisite, first, that something  
offensive he lodged in the Right Ventricle of the Heart I  
Secondly, that, in consequence of this, there should he a greater  
and more impetuous Influx of the nervous Fluid into the Cardiac  
Nerves : And, thirdly, that, in consequence os this, there  
should succeed a preternaturally great and Violent Suhfultus,  
and Contractiones the Heart, which,\*being often and quickly  
continued, does not cease till the foreign impediment is re-  
moved : Fourthly, that, by so Violent an Agitation, the Heart  
should be moved out of its natural Seat, because it is disengaged  
and pendulous : Fifthly, that it should frequently be protruded  
principally to the Left Side, because the Impulse happens from  
the Right to the lest Side : And, sixthly, that the Progress  
of the Humours through, the Arteries should be irregular,  
and sometimes absolutely cease for some Minutes. Hence, in  
the Wrift, the Pulse is generally perceived intermittent, weak,  
small, or absolutely none at all. DeliquiumS, also, frequently  
accompany this Disorder.

We now come to inquire into the mediate Causes of a Pal-  
pitation of the Heart; sor which Purpose we shall first inquire  
into the Phenomena which present themselves upon laying  
open the Carcases of those.who have died of this Disorder. We  
shall not mention the Polypuses, the Stones, and other preter-  
natural Substances found in Hearts, and the Cavities of the  
Veffeis, fince these Facts are sufficiently attested by Authors:  
Nor shell’ we mention the preternatural Quantity of Water  
tinged with Blond in the Pericardium after Death, which we  
shall afterwards account for; but we shall only specify what  
kind Os Constitution of the Heart haS been found upon diss  
secting such Patients : Thus, in *A. N. Co Dec.* 2. *An.* 9. *Obs.*44. we are told, that, upon opening such a Carease, the Heart  
appeared preternaturally large ; its Right Ventricle dilated, and  
filled with a Very black Blood ; the Arteries collapsed, and the  
Vena Cava Ascendens elevated into a Very large Tumor. The  
same is evinced by *JPillis, in T.r. de Medicament. Opcr. Sect. si.  
Cap.* 3. where, hesides the Infarction *of* the Right Ventricle,  
and Auricle Of the Heart, the Lungs were also insarcted with  
a black, stagnant, and extraVassted Blond, *fob. Cousin, in Nov.  
Asthmat. Hist.* 3. informs, us, that he had found some Hearts aS  
*large* as that of an Ox.

Upon investigating, therefore, the mediate Causes which  
contribute to produce a Palpitation of the Heart, we find that  
they are either lodged in and about the Heart, or in remote and  
distant Parts : Among the former Class, the most frequent and  
considerable are polypous Concretions- which are always fibrous

**2nd** membranous, generated principally in **the** Ventricles and -  
Auricles of the Heart, then reaching into the Veins, and  
thence, frequentiy, forced into the Arteries. Where these  
Concretions produce a Palpitation of the Heart, we generally .  
find these Signs : The Palpitation is immediately increased aster  
violent **Exercise,** going up Stairs, or the {lightest Commotion  
**os the** Blood. There **is a** great Anxiety about the Praecordia,  
accompanied with a weak, unequal, and sometimes a plainly  
intermitting Pulse ; the Patient breathes with so much Dihe  
ficulty, that there is often Danger of Suffocation, the Dis-  
order is, also, frequently accompanied withDeliquiums, continues  
long, and yields to no Medicines. Such a Concretion, when  
lodged in the Cavities of the Heart, according to its Various  
Situation, admits sometimes more, and sometimes less, of **the**Blood, convey'd through the Vena Cava. Hence, according  
**as the** Quantity of Blood is greater or less, the Pulse is some-  
times thong, and at other times weak and obscure. When  
such a Polypus remains immoveable in the Place to which it  
adheres, we observe no Palpitation ; but if, when separated  
from the Part where it was first formed, it fluctuates freely in  
the Ventricles of the Stomach, hence it may possibly he con-  
veyed, along with the Blond, into some wide Blood-Vessel,  
where, being firmly impacted, it totally doses it up, and hinders  
the Progress *os* the Blond, till it is again resolved ; then the  
Pulse is not only intermittent and silent ; but, also, the Vessels  
heing thus obstructed, and the perpetual Affiux continuing to  
the Right Ventricle of the Heart, the Blood stagnates there,  
distendsit, and thus stimulates the Heart to a Violent Concussion,  
or Palpitation, which does not cease, till a free Circulation of  
the Blond is again restored.

Hence, in those who die of a Palpitation of the Heart,  
arising from a Polypus, the Right Ventricle and Auricle of **the**Heart, together with the Vena Cava, are found strangely di-,  
lated by the Blond stagnating within them. See *Me N. C.  
Dec.* 2. *An.* 6. *Obsc.* 233. and *Act. Berol. Dee.* 2. *Fol.* 7.

A Palpitation of the Heart, also, frequentiy arises from some  
Fault of the Fluids; especially when their Bulk is so great, as to  
render them superior to the Force of the Solids; for, when **the**

- Humours are redundant, not only the Vefleis in which they are  
contained, but, also, more especially, the Ventricles os **the**Heart, when these Humours are thrown into Violent Com-  
motions, or, by Spasms, carried impetuousty, and in too large  
a Quantity, to the superior Parts, must be distended, relaxed,  
and stimulated to a Palpitation. In such a Case, the Counte-  
**nance** is red and florid, the Vessels turgid with Blood, and **the**Pulse large. This Species os the Disorder is principally incident  
to young Persons of sanguineous Constitutions, who, when  
young, were subject to large Haemorrhages os the Nose; upon  
the Cessation os which, they perceive Compressions, and Un-  
**eafiness** of the Breast. The same Misfortune is, also, fre-  
quently observed to happen to those, who, at the stated Times,  
neglect their usual EVacuationS of Blood. Hence we can  
account for the Instances of those, whe, at stated Times os  
the Year, prevent a recurring Palpitation of the Heat by Vene-  
section alone: An Example of this **we have in** *Zacutus Lust-,  
tanus, M. P.Hi Lib.* 2. Hist. 39. The same is, also, asserted by  
*Stalpart Pander IViel,* who, in *Obser. Rarior. Cent.* **I.** *Obs.* 36.  
gives us a Case, from *Galen, of* a certain young Man, who,  
being, for three Years successively, afflicted with a Palpitation  
of the Heart, always felt Relief from Venesection; but, on the  
fourth and subsequent Years, totally preserved himself from in  
by seasonable Venesection.

But it more frequentiy happens, that a Palpitation of the  
Heart is induced by too large a Congestion of Blond, and Viscid  
Serum in it ; for 'tis to be observed, that thick and Viscid Hu-  
mours are, in their Circulation, first of all, stopt in **the**Liver ; then, stagnating in the Viscera of the lower Abdomen,  
and the nerveo-membranous Parts, they stimulate them to  
spasmodic Strictures. When the Abdomen is constricted, **the**Blood is more copiously forced to the Praecordia, and from the  
Vena Portae the-blackest Blood is forced thro' the Vena Cava  
into the RightVentricle of the Heart, in such a Quantity, that  
the natural Systole is hardly sufficient for propelling it; but a  
Blond *so* thick and viscid frequentiy leaves in the Heart a  
stagnant Portion, to the expulsion of which the Palpitation is  
often opposed. Hence the first Rudiments of a Polypus are  
almost always laid. I And hence a Reason may he given, why  
hypochondriac, scorbutic, and cachectic Patients labour under a  
Palpitation of the Heart, as one of their most troublesome  
Symptoms ; as, also, why young Giris, on account ofthe great  
Compression of their Abdomen by their Stays, are greatly sub-  
ject to this Disorder. Hence 'tis, also, obvious, why Men, by a  
Suppression of the Haemorrhoids, are afflicted with this terrible  
Symptom ; and why cacochymic Girls, about the first Eruption  
of their Menses, when they are not duty evacuated, as, also,  
W omen,wheseAge renders them incapable of fuch anEvacuation,

are-much subject to this Disorder, under which they generally .  
labour about the more remarkable Changes of the Moon. Tn  
this Case, where the vital Juices are thick, a Palpitation of  
tne Heart is a familiar Symptom to those who labour under a  
flatulent or nephritic Colic; for, whilst the Flatulencies and  
Spasms compress and distend the Vefleis of the lower Abdomen, .  
*and,* by that means, force the Blood jn a greater Quantity to  
the Praecordia, the Reason is obvious, why a Palpitation os the-Heart should thence be produced.

A Palpitation of the Heart is, also, frequentiy produced by a  
certain subtile acrid and caustic Matter, which, not only acting  
on the Precordial and Cardiac Nerves, renders Respiration dif-  
ficult; bus, also, heing carried along with the Mass of Hu-  
mours to the Heart, and its dilated Coronary Vesseis, adhering  
to the nervous and fleshy Fibres, it, by vellicating them, dis-  
poses them to Violent concuflory Motions. Thus, there are  
numherless Instances of Persons who have heen seized with a  
Palpitation of the Heart, in consequence of an Itch, or Purple  
Fever, either repelled, not sufficientiy appearing, or receding;  
as, also, other exanthematous Disorders preposteroufly repelled,  
or Ulcers too soon consolidated. The same Observation holda  
equally true, with respect to the arthritic or gouty Matter, when  
forced inwards. *Simon Pauli,* in *ssuadripart. Bolan.* gives us  
a remarkable Instance of a Violent Palpitation of the Heart,  
produced by a Suppression of aFcetor of the Feet: Os this  
kind are, also, the Instances of Persons who have fallen,  
into this Disorder by fetid and poisonous Vapours. Thus  
*Godafredus Schulizius, Tr. de Natter. Tinct. Bedoard. Cap.* 5.  
informs us, that this Disorder was produced by the Fumes of  
Antimony receivd^into the Lungs.

This Disorder may not only he induced by these Faults os  
the Humours, hut, also, by a Defect of Blood ; as we find  
from many Instances. Thus 'tis certain from Experience, that  
not only Tremors, but, also, genuine Palpitations, of the Heart  
have heen produced aster large Discharges of Blood, whether from  
the Uterus in Abortions, or Child-birth, or by the Menses, or  
by a Spitting of Blood from the Lungs, or from any other Parts,  
of the Body; for, as, in order duly to perform the Systole and  
Diastole, a due Influx of the nervous Fluid, and arterial Bleed,  
into the Heart, and its Vesseis, is requisite ; so when, in these  
Cases, his Influx is lessen'd, the Strength of the Heart is weaken'd,  
and its Contraction rendered insufficient. Hence, by the Blood  
rushing in. Grumes and Coagulums are gradually left in the  
Cavities os the Heart; and, being accumulated, not only hinder  
the free Circulation of the Blood, the Cause of Deliquiurns,  
so frequent in these Disorders, but, also, stimulate the Heart  
to that Commotion commonly called Palpitation. But, in this  
**Case, the** Disorder is found flight, tho' frequentiy recurring.

. Among the Causes of this Disorder, the most considerable  
are immoderate Perturbations of Mind, which operate in Various  
Manners, since some of them throw the Humours into brisk  
Commotions, and force them from the interior Parts to the  
Surface of the Body, such as Anger, and Joy ; whilst others,  
constricting the exterior Parts, rather force the Humours in-  
wards, such as Fear, Terror, and Grief. Thus, according to  
Experience, and the Observation of *Gabelcoverus,* in *Cent. An  
Curat.* 84. Anger, and profuse Joy, rarely induce a true Palpi-  
‘ ration of the Heart, but only such a Motion as consists in a  
quick Systole and Diastole os the Heart and Arteries, and is  
widely different from. a true Palpitation. Fear will frequentiy  
produce a Tremor of the Heart, and may, also, he the Cause  
of a Palpitation, according to *Baglivi, in Prax. Med. Lib.* 2.  
But 'tis certain from daily Experience, that Dread, or Terror,  
is Very powerful in exciting.a Palpitation of **the.** Heart; **the**Reason of winch feems to be this. That, whilst the Force of  
Terror is such, that, constricting the external Parts, it forces  
the Humours to the internal Parts ; these rush more copioufly  
to the Heart, which they distend beyond its natural Degree of  
Dilatation and Force, to a preternatural Resistance, which  
produces a Palpitation. I have, also, .frequently observed,  
that hypochondriac Men, and thofe of weak nervous Systems,,  
were seized with a Palpitation of the Heart after intense Me-  
dilation, a previous Refrigeration of the Extremities, and **a**Vertigo. HystericWomen are, also, afflicted with a Palpitation  
of the Heart, upon the Smell os Perfumes.

Among the *more* remoteCauses of a Palpitation os the Heart,  
are flatulent Aliments, especially when eaten by those os a  
weak and languid Digestion, fuch aS hypochondriac Patients are;  
for such leguminous and oleraceouS Aliments leave a mucous.  
Lentor in the Stomach and Intestines ; the Vapours arising  
from which not only distend the Intestines, and thus hinder-  
the free Circulation of the Blond through the Vefleis of the  
Abdomen ; but, also, by expanding the Stomach, hinder the.  
due Descent of the Diaphragm, and the Course of the Blood  
through the Lungs, and retard its Motion through the Cavities  
of; the Heart, Thus *Malpighi, in Episi. ad Borellium,*

informs us of himself, that he had been frequently afflicted  
with Violent Palpitations of the Heart, by eating leguminous  
Substances. Hence, also, the Reason is obvious, why hypo-,  
chondriac Patients are principally affiicted with a Palpitation of  
the Heart after eating, and why many of the Antients placed  
the Cause of this Disorder in Flatulencies: So that *Hippocrates,  
in Lib.* 2. *Epidem. Sect.* 5. affirmed, that all Palpitations ef  
the Heart were accompanied with Flatulencies. Nor, among  
the accidental Causes of this Disorder, are we to overlook the  
Strictures os the lower Abdomen, Thighs, and Legs, and too  
tight Clothes ; fince these, by forcing the Humours upwards,  
contribute to the Production of this Disorder, in those who  
are preViousty disposed to is, as *Gabeicoverus, in Cent.* 3.  
*Curat.* I I 4. informs us ; and *Forostus* gives us a memorable  
Instance of one, who, falling asieep about Noon, with his  
Garters too tight, was seized with a Palpitation of the Heart;  
which was forthwith removed, upon loosing his Garters. In  
these, who from too great a Thickness of Blood, or polypous  
Concretions, are subject to Palpitations of the Heart, nothing  
more contributes to recal the Disorder, than all Commotions of  
the Humours, whether produced by Violent Passions of the  
Mind, or hot Aliments and Liquors; an Instance of which,  
produced by Aliments too high-seasossd with Spice, is found in  
*. M. N. Co Decad.* I. An. 3. *Obs.* I34. or by Violent Motion  
of the Body, winch is always observed to be injurious to such  
Patients.

Before we leave the Pathological Consideration of this Diss  
order, we shall briefly deliver our Sentiments concerning the  
Water of the Pericardium. 'Tis, therefore. Certain from many  
Observations, that, in those who have died of a Palpitation of  
the Heart, a large Collection of Water has been sound in the  
Pericardium : This is evinced by Various Instances, to be

found in *Carolus Pifo,de Morbis a scrofa Colluvie; Olaus Bor-.  
richius, in Act. Haffn. Hollerius, in Schol. Lib. i. Cap.* 39.  
*T.ulpius, Lib.* 4. *Cap.* 2O. *Femelius, Lib. 5. Pathol. Cap.* I2.  
Many Physicians have, also, assigned this Water in the Pericar-  
dium, for the Cause of the Palpitation ; but I am rather of  
Opinion, with *Lower, in Tr. de Corde, Cap.* 2. that it is the  
Effect of the Palpitation; for, as 'tis certain from many Ob-  
servations, that the Blond, when stagnating in any Part, de-  
posits its more serous and subtile Portion, as in the Brain,  
the Intestines, the Uterus, and the Bladder ; so 'tis equally  
Certain, that Bleed stagnating in the Ventricles and Auricles  
of the Heart, and put into Violent Commotions, deposits its  
inore subtile Part, winch is extravasated into the Pericardium.  
Hence we observe, that not only a Dropsy of the Pericardium,  
but, also, of the Breast, is generated, and succeeds the Palpi-  
’ ration of the Heart.

As sor the Prognostic of this Disorder, *Galen,* in his Treatise  
*de Locis affectis,* informs us. That." those, who in Youth, or  
" the Declension of Age, were seized with a violent Palpita-  
" tion of the Heart, rarely live long, but die soon.” And,  
*Avicena, Fen.* 3. *Primi L. Doct..§. Cap. i.* has these Words:  
"‘ The Person who is often afflicted with a Tremor of the  
" Heart, ought to dread a sudden Death ; hecause, as this  
" Symptom affects a principal.Part, it is easily changed into a  
" Syncope, which terminates in Death." Nor is this Dis-  
order he neglected, from whatever Couse it proceeds; for it  
often to terminates in a mortal Suffocation or Syncope, if  
the Heart is so distended beyond the Sphere of its Elasticity,  
that it cannot again contract itself. It is, also, easily converted  
into a dangerous Haemoptysis, a Phthisis, a Cachexy, a con-  
vulsive Asthma, a Dropsy os the Breast, and an Anasarca.  
An unlucky Termination is to be dreaded, if the Palpitation is  
frequent, large, and accompanied with a Difficulty of Breathing,  
Deliquiums, and an unequal Pulse. In general, both in making  
the Prognostic, and accomplishing the Cure os this Disorder, the  
Physician must carefully observe, whether the Palpitation is  
idiopathic, or has its Cause within the Hears, or, at least; the  
adjacentVeffels ; or whether it is symptomatic, or appears as a  
Symptom of spasmodic, convulsive, hysteric, and hypochondriac  
Disorders.. The former can hardly be cured, whereas the latter  
totally ceases when the primary Disorder is removed.

**THE CURE.’**

The more inveterate a Palpitation os the Heart is, the more  
difficult it is to be cured ; for, if the Fibres of the Heart are  
often preternaturally vellicated and distended, they are at last  
fo weakened, that the Disorder becomes habitual, and is ex-  
cited by the (lightest Cause: So that, if the Beginnings of any  
Disorder are to be seasonably check'd, much more ought the  
Rudiments of this to be opposed ; because, tiro' in the Infancy  
ins the Disorder a perfect Cure may be obtained, yet when it is  
inveterate, and especially when it is of the idiopathic Kind,  
A palliative Cute can only be hoped fur. The Intentions of  
Cute, to he pursued, are :

First, By proper Methods to allay the preternatural Coin-  
motions or the nervous Parts and Fibres of the Heart and  
Vessels. ‘

Secondly, To hinder the Stagnation of the Blood about the  
Heart and Lungs, by deriving its Assiuk to these Parts else-  
where, and rendering the Circulation more free. And,

Thirdly, Ont of the Paroxysm to remove the Causes which  
excite the Disorder, .δ᾽

As for the Paroxysms, a rational Physician is to inquire what  
occasional Couse has contributed to induce them: When, for «  
Instance, he is ascertained, that it proceeds froth an Ebullition  
of the Humours, the most Valuable Medicines are fuch as  
correct this Ebullition, and, at the same time, allay the prefer-  
natural Motions of the solid Parts. This Intention is hest  
answered by the antispasmodic Powders prepared of Crabs-  
eyes, diaphoretic Antimony, depurated Nitre, Cinnabar, Am.^  
ber, the Tooth of the Sea-horse philosophically prepared, Harts-  
horn prepared without Fire, and a small Quantity of the Ex-  
tract of Castor : The precipitating Powders, also, either alone,  
or in Conjunction with the anodyne mineral Liquor, ex-  
hibited in a Draught of cold Water, is highly heneficial in ‘  
Correcting the Orgasm os the Humours. When the Palpitation  
proceeds from- Flatulencies os the Intestines, or when the  
Patient is costive, the Skin dry, and the Feet cold, besides  
the above-mentioned internal Medicines, we are, also, to use  
external Remedies ; and especially the Flatulencies and Faeces  
are to he eliminated by the Anus; by means of oleous and  
gentiy carminative Clysters. The Feet must also be immersed  
in limpid Water, but with this Caution, that, if they are exces-  
lively cold, they are preVtoufly to be rubbed with warm Cloths..  
When Violent Haemorrhages have preceded a Palpitation, and  
the Patient is excessively weak, and subject to frequent Deliqui-  
ums, to the.temperating Medicines, already mentioned, we are  
to add Analeptics ; such as Mixtures prepared of the Waters  
of Lily of the Valley, and Turkish Baum, Cinnamon-water  
prepared without Wine, Black-cherry-water, the Pulvis Mar-  
chionis, Crabs-eyes, the anodyne mineral Liquor, and some  
analeptic Syrup, such as that of the four cordial Flowers.  
The Essence of Amber is, also, of an excellent analeptic and  
corroborative Virtue in this Case. Nor, in the Cure of Pal-  
pitations of the Heart, are we to neglect the Use of external  
Remedies; among which are discutient and balsamic Fomen-  
tations, and Bags applied to the Praecordia, and Pit of the  
Stomach : These may he prepared of Rosemary, Mint, Baum,  
the Flowers of *Raman* Chamomile, and other Ingredients ;  
which are to be sprinkled with Vinous Baum-water. *Forostus*highly commends green Baum with Borrage warmed, and ap-  
plied with Rose-water, and a little Vinegar. This Intention  
is, also, answered by anointing the Praecordia with the Balsam  
Of Life. If there is a Redundance of Blood, and Venesection  
has for a long time been neglected, and *if the Disorder* will  
yield to none of the above-mentioned Remedies, nothing re-  
mains but to open a Vein in the Foot; or, if other Circum-  
stances permit, in the superior Parts of the Body ; in which  
Case, a sufficient Quantity of Blood is to be taken away; for,  
by this means, the Praecordia are freed from the preternatural  
Load of Humours, and a due Equilibrium is restored between  
the solid and fluid Parts. Thus *Horstius, in Lib.* 3. *Obs. l(ji*affirms, that Venesection proved surprifingly beneficial in the  
Paroxysm os a Palpitation. Some Persons, by inclining the  
Right Side to the Earth, can alleviate, and eVen totalsy remove,  
the Paroxysms of this Disorder, instances of this I have fre-  
quentiy seen, and a memorable one is found in *A. N. Co Des.*

I. An. 2. The Reason of this is sufficiently obvious; for, by  
this1 incurvated Posture of the Body, the too quick Afflux of  
the Blood through the Vena CaVa Descendens is intercepted.

Out of the Paroxysm, the whole Intention of Cure consists  
in removing, or, at least, diminishing, the Causes which foment  
and support the Distemper. For this Purpose, the Physician is  
diligently to guard against an Increase of the Humours, except  
when the Disease derives its Origin from a Defect of Blood j  
for by this means we not only prevent a Redundance and Spissi-  
tude of the Humours, but, also, retard the Growth of Polypuses,  
if they, are already formed. This End is most effectually  
answered by Venesection, which not only affords signal Relief  
in the Paroxysm, but is, also, highly beneficial in preventing fresh  
Returns of the Disorder. Hence *Galen,* in *Lib.* 5. *de Locis  
affectis. Cap. 2.* does not hesitate to affirm, that all Patients  
who labour under a Palpitation of the Heart, may be cured by  
Venesection, and the Use of attenuating Aliments and Medi-  
cines. This same Opinion is espoused by *Antonius ab Altomari,  
Cap.* 45. *Capivacius, Lib. Ί. Pract. Cap.* 8. *Victor Trinca-.  
vetius, inP reelect. de Compos. Medicament, et Cap. de Palpitatione  
Cordis’, Stalpart Pander \Wiel, Obs. Farior. Cent.* I. *Obs.* 36.  
*Tacutus Lusitanus, M. P.Hi Lib. 2. Hist.* 3g. and *yerzasua,  
Obs.* 9o. These Measures are not 'only the most effectual in  
Palpitations Of the Heart arising from a Redundance, or Spissi-

**tnde,** of **the** Blood, het almost the only Means which **can**afford Relief to those afflicted with polypous Concretions in  
the Heart.

Bendes, stranger Attempts are, also, to he made for the  
Removal of the Causes ; sor answering which Intention, if the  
Palpitation is symptomatic, wears, in the Cure, to direct our  
Views to the primary Disorder. Is this is os the hypochondriac  
Kind, the same Measures are to he taken with those recom-  
mended under the Article HYPocHoNDRIAcA PAssIo; but a  
particular Regard is to he had to the Thickness of the Humours,  
which, as it says a Foundation sor polypous Concretions, so it  
requires the same Method of Cure ; only with this Difference,  
that, in a simple Spissitude of the Humours, the Disorder is  
to he totally removed ; whereas in Polypuses it is only to be  
removed, in order to prevent greater Dangers. But, in both  
Cases, it is the principal Intention osCure, both by Aliments and  
Medicines, to preserve the due Fluidity of the Humours, and 2  
regular Evacuation of the salutary Excretions. For this Puril  
Jose we are to prescrihe aperient, attenuating, and resolvent  
n fusions and Decoctions, and thin Broths prepared with the  
Roors of Succory and Grass, and the Herb Chervil. *Rhndius,  
in Lib. 2. Obs.* 40. in such a Palpitation os the Heart, which  
he calls melancholic, recommends Whey. But the Virtues of  
all other Medicines are surpassed by mineral Waters, especially  
the *Caroline* Springs, which excellently attenuate and resolve  
think, coagulated, and viscid Humours, carry off the impure  
Juices by Excretion, and happily remove Infarctions *of* the  
Viscera. And I know some Patients, who, heing afflicted with  
a Palpitation of the Heart, seemed to have polypous Concre-  
tions in it, and who, by the annual Use of Venesection, and  
the *Caroline* Springs, have preserved themselves alive for many  
Years.

When a Palpitation of the Heart derives its Origin from a  
Retention of the Menses or Haemorrhoids, it is expedient to  
reduce these Excretions to Order ; which is done by tempera-  
ting, antispasmodic, diluting, and gently laxative Medicines, by  
Venesection, by bathing the Feet, by Baths, het Springs, and  
other Things adapted to the various Circumstances os the  
Patient. But is Ulcers, the Itch, an arthritic Matter, or  
other exanthematous Disorders, are repelled, aster evacuating **the**Sordes lodged in the Primae Viae by gentle Laxatives, we are  
to sheath up the acrid subtile Matter distributed through the  
Mass of Blood, dispose it sor an Evacuation, and then eliminate  
it through tlte cutaneous Pores : Which Intention is excel-  
Jentry’ answered' by Absorbents, and fixed Diaphoretics, or  
acidulated Medicines, such as the Mixtura Simplex, with the  
anodyne Liquor ; first alone, and then with the Spiritus  
Bezoardicus Busse, or the succinated Spirit of Hartshorn. This  
. Intention is, also, answered by warm Infusions, to be drank in  
the Morning, in Bed ; using, at the same time, a diaphoretic  
and temperate Regimen ; but when the Disorder consists in  
the Heart, and its preternatural Constitution, fuch as. a bony  
Hardness, Excrescences, or Abscesses, the Art os Physic is ab-  
solutely of no Use. However, the most proper Measures to he  
taken, in order to satisfy the Patient, are those recommended  
*inPo’ypuses.*

The most effectual Method of preventing this Disorder con-  
sifts in a careful avoiding its occasional Causes, and a right  
Use of the Non-naturals: For which Reason, thofe who seem  
to he afflicted with Polypuses, are to he advised to avoid all,, and  
especially Violent, Motions of the Body; lest, by this means,  
the Humours heing thrown into a Commotion, the fibrous Con-  
cretions should perhaps he torn away, and, by fluctuating freely  
in the Veffeis, produce a speedy and fatal Event; as *Gabel-  
coverus,* in *Cent.* 3. *Curat.* I I4. observes ; who, also, advises  
that loose Clothes should he used, especially by Women, for  
the Abdomen, Thighs, and Legs. *Crato,* in *Lib.* 5. *ConsiL  
12.* uses these Words : " Tight Clothes about the Abdomen  
" are to he condemn'd; the Stomach and Breast are to be well  
" defended from the cold Ain Nor is it safe to remain in a  
" cold Air, for any time; theNight Air is, also, to he avoided;  
" and, when the Palpitation begins, a Clyster is to be suddenly  
" applied, and the Hands and Feet to he rubbed.'\* The Ali-  
ments and Drink must also he of an attenuating Nature, and  
every Species of flatulent Food is carefully to he avoided : But,  
in a particular manner, the Patient is to guard against the  
Passions of the Mind, especially Anger and Terror, as also,  
from Venereal Pleasures, and too pensive a State os Mind ;  
fince these Things are, in their own Nature, capable os pro-  
ducing a Palpitation. And, lastly. Care is to he taken, that  
the Excretions of the Body be preserved in due Order ; so that  
the Faeces he duly eliminated, and the Perspiration kept free.

**. .. CAUTIONS.**

In Palpitations of the Heart some Authors greatly extol  
Opiates ; but in this Disorder we are to take care not to  
exhibit vaporous and strong Narcotics, such aS Opiates are.

especially when not sufficiently corrected; fince these, especially  
when exhibited to Patients exhausted by large Haemorrhages, are  
so sar from relieving the Patient, that they rather render the  
Disorder worse; but iu hystericWomen, where the Paroxsyms  
are accompanied with a Palpitation of the Heart, we, with  
great Advantage, apply to their Nostriis Vaporous fetid Sub\*  
stances, such as Castor, Asa-fetida, and burnt Feathers.  
On the contrary, in these Cases, we are to abstain from  
Perfumes, fince these not only increase, hut recal the  
Disorder.

As in all spasmodic Disorders, it is an infallible Rale to use  
Venesection in the Feet, and bathe them ; so 'tis to he observed,  
that these are not to he used, is the Feet are cold, fince by this  
means the Disorder is increased. This Cantion is, with equal  
Care, to he observed in Palpitations of the Heart. The Hu-  
mours are rather, by Fomentations and Frictions, to he derived  
to the Feet; and then Bathing and Venesection may he used.  
\* When a Palpitation arises from a Penury of the Humours,  
in consequence of Haemorrhages, Analeptics, and such Things  
as restore Strength, are to he used; only they ought not to he  
os too het a Nature, lest they should induce Orgasms. This  
Intention is most commodioufly answered by Essence *of* Amber  
mixed with the anodyne Liquor. The Patient is, also, to he  
relieved with nutritive Aliments, Preparations os Milk, and  
such Emulsions as quickly generate Blood. And, that the Di-  
gestion may he render'd the keener, we are to the other Medi-  
cines to add fuch aS corroborate the Tone of the Stomach, such  
as the ElixirViseerale Balsam icum. In a chronical Palpitation of  
the Heart we recommend a Change of Air and Placed

In Palpitations of the Heart we are carefully to avoid drastic  
Purgatives and Emetics, such Things as throw the Humours  
intoa Commotion, aS, also, too aromatic and acrid Substances;  
fince these throw the Humours into too great Commotions, and  
induce Spasms of the Stomach, which are immediately sue-  
ceeded by an Afflux of the Humours to the Pnecordia. As  
Baths of sweet Water may possibly throw the Humours into  
Commotions, so they are very cautioufly to be used, and can  
only prove beneficial when used Very tepid, and when the  
Paroxysm is remitting. On the contrary, mild Diaphoretics  
are principally to he used when exanthematous Disorders, are  
repelled ; since these, by provoking a gentie Diaphoresis, expel  
the peccant Matter, and recal the Efflorescence to the Surface  
of the Body,

When a Palpitation of the Heart arises from a considerable  
Plethora, and the Face appears pretty turgid with Blood, it is  
sometimes expedient to. take a sufficient Quantity os Blood  
from the Jugular Vein ; but, lest there should he Too great an  
Afflux of Humours to the superior Parts, 'tis expedient, both  
hefore, and in the Very Time os the Operation, to use pretty  
warm Foot-baths. Sometimes 'tis, also, necessary, previoufly  
to open a Vein in the Foos, and then to open the Jugular  
Vein. *Hostman.*

*Actuarius* telis us, that a Palpitation of the Heart may he  
caused by too great an Heat Or Plenitude of the Blood ; or by  
Vapours. If it proceeds from the first, the Pulse will he un-  
equal; but there is no Necessity, that it should he so in the  
latter Case: What he says of the inequality of the Pulse, we  
find often, by Experience, to he true. And it is not only a  
Forerunner of a Palpitation, but often of a Syncope, and  
sudden Death; and indicates some Obstruction about the  
Heart ; as *Galen* prognosticated in the Case of *Antipater* **the**Physician, who died soon aster in this manner. The Pulse is  
Xnot only unequal, as to Time and Strength, but, frequently,  
intermitting. In a Fit of Very strong Palpitation, the Distance  
hetween the Pulsations is greater; and the longer the Interval,  
the more Violent they are. This is the Case in great Fulncss  
of Blood : Hence *Galen* observes, that, upon this Account,  
thofe are most subject to Palpitations, in whom the Hje-  
morrhoids, or Menses, are suppressed. A Palpitation may,  
also, be owing, either to an excessive Rarefaction, or too great  
Cohesion, of the Particles os the Blood, or to any large Quan-  
tities of Wind, which oppress and distend the Chest, or the  
lower Belly. A Palpitation is a familiar Symptom in hypo-  
chondriac and hysteric People:. And *Hollerius* describes a Case  
relating to this Disease, where the Pericardium was swelled  
with Wind alone, to *a* vast Dimension. For the Cure,. *Actua-  
rius* days the greatest Stress upon Bleeding and Purging; which  
last is first mentioned by *Actuarius.* Alteratives must, also, he  
adapted to the Cause os the Complaint and Constitution of  
the Patient. *Pise* recommends hath this, and Bleeding. *Salius*seems to he in the right, when he advises Bleeding, whether  
there is a Plenitude or not.

In symptomatica] Palpitations, which **arise** from **the**Menses, or Haemorrhoids suppressed, as soon aS ever Na-  
ture recovers her usual Course, this Disorder os **the**Heart goes off. Even the sudden Eruption of the latter,  
where it has not been habitual, seldom sails of removing

tins - Complaint. When an Excess of Water in the Pericar-  
dium causes a Palpitation, Bleeding and Purging are ineffectual;  
but how an hot Loaf, a warm Electuary, or an aromatic Bag,  
should discuss or waste this Water, is not conceivable. This  
*Sermertus* proposes ; nor is it Comprehensible, how blistering  
upon the Sternum, whch some advise, should draw off this  
Water.

The Cure of an original Palpitation has heen omitted by  
most os our Writers in Physic, who have generally directed  
all their Rules of Practice to those of the sympathetic Kind  
only.

*Galen* advised Bleeding, universally, in Palpitations ; and it  
is a remarkable Case he gives of one, who, every Spring, was  
seized with a Violent Palpitation: Bleeding every Spring three  
Years successively in the Fit, took it off, which the Patient  
observing the fourth Year, he prevented the Fit by Bleeding  
earlier, and had the like Success sor several Years aster.  
*FreindIs Hist. Phys.*

In a Palpitation of the Heart arising from a Perturbation of  
the Spirits, *Boerhaave* commends the Water of Baum, made  
by repeated Cohobations.

*Of* **PALPITATIONS,** *and what they portend in Diseases.*

By *Palpitation,* properly so called, *Galen,* and other *Greek*Physicians, aS we are inform'd by *Galen* himself, *de Symptom.  
Cause Lib.* 2. *Cap.* 2. understand a depraved kind os Motion,  
and not the Pulsation os the Arteries, which, however, was the  
Sense that some Antients affix'd to the Word, as the same Au-  
thor assures us, in 3 *Prorrhet.* T. 52. where he, also, defines  
*Palpitation* to be *a preternatural Dilatation and Distention of  
some Part.* And, *Lib. de Trim. Convulsi, et Palpit. Cap.* 5.  
he telis us, that Palpitation is a kind os Distention, and Subii-  
' dence, which either affects the whole' Body, as was observed  
by *Hippocrates,* 3 *Epid. Aligr.* 4. in the phrenetic Patient, or  
only one Part, or many Parts together. Palpitations, for In-  
stance, are generated, or excited, as *Galen,* in the above-died  
Book, observes, in some Part os the Belly, Hypochondrium,  
Heart, or other Regions of the Body ; and, indeed, in every  
Part thereof, which will admit of Dilatation; but especially in  
the Skin, or Place between the Skin and Flesh. And this Kind  
of Affection is more incident to the Muscles, from the Wide-  
ness os their Passages, which disposes them for the Reception'  
of gross Flatulencies, which are the Cause of Palpitations.  
That Palpitations are excited by a gross Vapour, obstructed in  
its Passage, we are taught by *Galen,* in the Place just cited,  
where he says, " The Cause of Palpitations I take to be a gross  
" and Vaporous Spirit, obstructed in its Pastage ; and this Spirit,  
. " I lay, must be collected into no Very small Cavity, that the  
" Part may have a sensible Distention. " And, to the same  
Purpose, in I *Prorrhet. T.* 29. he says, that Palpitation pro-\*  
ceeds from a flatulent Spirit; and that Flatulencies are gene-  
rated by gross and crude Humours ; and that those Flatulencies  
and Humours are collected on account of the Coldness of the  
Parts. That the Heart and Stomach are frequentiy affected with  
Palpitations from the Stimulations of bilious and highly putrid  
Humours, and, also,-from poisonous Vapous infesting the  
Mouth of the Stomach, -and especially the Heart, appears from  
the same Author, *Lib. de Trem. Couvuls. et Palpit.* above-  
cited. Some make this Affection to be the same with *Cardi-  
algia,* and *Cardiaca Passio*; but Palpitation is a different Dis-  
order.

These things being premised, let us come to the Prognostics :  
And here, first of all, it seems Matter of Inquiry,. whether in  
acute Diseases there can be observed any Palpitation at all, from  
which we may predict-a Recovery. . It is really a Very doubtful  
**Case, fince the** flight Palpitations of some Parts portend nothing  
certain of themselves, tho' they are sometimes critically excited  
after the fame Manner as a Vertigo, Pains, Anxieties, and the  
like critical Symptoms; are excited before the general and criti-  
**cal** Perturbation. Palpitations, then, sometimes appear as critical,  
and are easily distinguished as such, by the Signs of a future  
Crisis. Of these we read, I *Prorrhet.* 36. where it is said,  
that " Palpitating or throbbing Pains about the Navel' have  
" something in them predictive of a Delirium; but a Vehe-  
" ment and plentiful Spirit, with a Distention of the Parts, is  
" observed near a Crisis. " And, in the same Treatise, T. I44.  
" Palpitations about the Belly, with an oblong swelling Ten-  
" sion of the Hypochondrium, foreshew an Haemorrhage with  
" a Shivering." Hence it appears, that there are some salu-  
tary critical Palpitations. These excepted, all Palpitations in  
Diseases are bad, and not only in acute Disorders, but are even

to he dreaded when attended with no other Indisposition, espe-  
cially such as affect the Heart and Stomach; but most os all  
in the *Cardiaca Passes,* which proceeds from poisonous Humours  
and Vapours, and ends in a Syncope. To this last Kind os  
Palpitations, perhaps, *Hippocrates* had a respect, 2 *Aph.* 4r.  
where we read, that " They who are frequentiy and strongly,  
" without manifest Cause, seined with fainting Fits, die su’d-  
" denly;" as he, for Instance, who, as *Galen* says, while  
he was in his fainting Fit, was affected .with a Violent Palpita-  
tion of the Heart. In short, all strong Palpitations; which fre- .  
quently affect the Heart, and are attended with Fainting from  
no manifest Caufe, prove mortal in a short time, according to  
*Galen, de Loc. aspect. Lib.* 5. *Cap.* 2. nor can those who are  
affected with this Symptom live many Years.

We shall proceed to observe, that, in acute Diseases, all Palpi-  
tations, critical ones excepted, are bad, and, most os all, thofe  
which are perpetual, and infest the whole Body, or any one'os  
the principal Viscera, or several of them together; and sor  
this Reason, because they indicate a Refrigeration of the natu-  
ral Heat, as being occasioned by a Refrigeration, according to  
*Galen, in* I *Prorrhet.* Now all Refrigerations in hot and dry  
Diseases are Very much to be dreaded; whence a Coma, or  
Lethargy, succeeding a Phrensy, prove mortal. Os this Na-  
ture were the Palpitations which *Hippocrates* observ'd in many  
os his dying Patients, as we read in the *Epidemics,* particularly.  
*Lib.* I. */star.* 2. in *Silenus,* of whom we read, that, "From

the Beginning to the End, he had a great and rare Respira-  
" tion, with a perpetual Palpitation of the Hypochondrium.''

Palpitations in all Parts of the Body are Very bad, as indi-  
eating a very great Diminution of the natural Heat. Under  
these universal Palpitations, the Patient is in Danger of dying  
speechless, as we find it hinted by way of Query, I *Prorrhet.*3o. on which Place *Galen* commenting, says, " Is Palpita-  
" tion affect the whole Body, it is Very possible, that the Pa-  
" tient may lose his Voice, before he expires, on account of  
" Refrigeration, the Muscles of the Larynx being deprived of  
" Motion, or the Nerves which serve them being no longer  
" able to perform their Function. " Of these Kinds of Palpi-  
tations it is, perhaps, that *Hippocrates* speaks, i *Epid. AEgr.* 4.  
as affecting the Wise os *Plulinus,* when he says, " About the  
" fourteenth Day she was affected with Palpitations, and her  
" whole Body was pain’d [as is he had said, she had pal-  
" pirating Pains over all her Body] , she talked much \* ; and,  
" for some little time, she had the Use of her Reason, but was  
" soon delirious again; about the seventeenth Day she lost her  
" Voice, and died on the twentieth. '\* And, more clearsy to  
the Purpose, he says os the phrenetic Patient, 3 *Epid. Algr.*4. " The Day after he was taken, in the Morning, he lost  
" his Voice, had an high Fever, sweated, had no Intermission,  
" was affected with Palpitations all over his Body,, and at  
" Night with Convulsions ; on the third Day, all the Sym-  
" ptoms were exasperated; and, on the. fourth Day, he died."

From the Premises it appears, that, in acute Diseases, all  
Palpitations, which for a considerable Time, and in an high De-  
gree, affect the whole Body, are Very bad and mortal ; and that  
os Palpitations, which-affect only some Parts, those which are  
observ'd in the Region os the Heart, are, in such.a Case, no  
less fatal; since, under a Disorder of so Very hot a Nature,  
they indicate a Refrigeration, which in acute Diseases is always  
a Proof, that the natural Heat is, in a manner, extinguished.  
This, perhaps, was the Case os the young Man os *Meliboea,*3 *Epid AE.gr.* 16. os whom *Hippocrates* says, " Thar he la-  
" bour'd under a continual Palpitation of the Heart, which never  
" left him; and that his Urine was oily." All Palpitations,  
therefore, critical ones excepted, in acute Diseases, are bad ;  
but those in particular, which for a considerable time affect the  
whole Body, or some one of the principal Viscera, are perni-  
cious to the last Degree. But the perpetual Malignity of those  
Palpitations is confirm'd by other bad Signs, such as those which  
indicate the crude State os the Distemper, or portend a fatal  
Event, as it happen’d in the ahoVe-mention'd Cases of *Selinus,*the Wife of *Philinus,* the phrenetic Patient, and the young  
Man of *Melibcea,* where those Palpitations appear'd in a crude  
State of the Disease, and attended with other mortal Signs.

PALTIFERA ARBOR. *De Laet.* A large Tree, which  
grows in *America,* bearing a Fruit like a Pear, which the *Pe-  
ruvians* call *Palta*; and which is preserved with Sugar, and  
given to the Sick ; I suppose, as a Cooler.

PALUDAPIUM. See APIUM.

’ PALUMBUS. Offic. Scbred. 5. 3I2. Schw. A. 3I3.  
Bellon, des Oyse. 3O8. Gefn. de AVib. 272. Jons, de AVib.  
63. *Palumbus torquatus.* Will. Ornith. I 35. Raii Ornith.

' ♦ in the *Geneva* Edition, Fol. I657, we read, παλμοἰ δ'; 7ῦ σώματος, λόγοι πβλλβἰ, &ς. » She had Palpitations over all  
" her Body, talked much. *etc. ” - .*

IB5. Ejuso. Synop. A. 62. Cnarit. Exer. 85. *Palumius  
mayor /eu torquatus.* Aldrov. Ornith. 2. Anbn Mer.Pin.I75. ι  
THE RING-DOVE. '

It is an Inhabitant of the Woods ; the Virtues are much the  
fame with those of the common Pigeon, or Dove ; the burnt j  
Feathers are said to cure the Jaundice, and to be good for the ;  
Stone and Dysury. *Dale* from *Schroder.*

PAMPATHES. The Name of a Plaister described *by  
Paulus AEginela, L. y. C.* I7.

PAMPHILION. The Name of a Plaister described by  
*Galen, de Comp. AL. p. G. L.* I. *C. ty.* and *L.* 3. *C.* I4.

PAMPINIFORME CORPUS. The Veins and Arteries  
of the Testicles, included in a common Coat, which are curled  
and knotty, resembling the Tendrils of Vines.

PA?/PINUS. A Leas, or Tendril, of a Vine.

PANACEA, παιάκεια, from πάν, the Neuter os πἄς, all,  
and ἄκος, a Remedy. A pompous Title os many Remedies both  
among the Antients and Moderns: Thus the *Arcanum Dupli-  
catum* is call'd *Panacea Duplicata.* Many Preparations os An.  
simony are, also, called by this Name. Thus, besides that  
given by this Title, under the Article ANT 1ΜON1UM, there  
are two others, one os which is thus prepared :

Take of Antimony, six Ounces; Nitre, ten Ounces;  
common Salt, one Ounce and an half; and of Charcoal,  
one Ounce. Let them all be made into a fine Powder,  
and well mixed, and be put into a red-hot Crucible, by  
half a Spoonful at a time : Continue the Fire a quarter of  
.an Hour aster. Then either put it into a Cone, or let it  
cool in the Crucible ; and there will be three Substances,  
as, in the Bottom, a little Regulus ; above that, a com-  
pact Matter, something like the Liver os Antimony ; and,  
upon the Sursace, a more spongy Mass. Separate them  
from one another, and put by the Regulus: Powder **the**other two, and wash them apart, till they have no Taste  
os the Salts: Dry them gently, and keep for Use.

The uppermost Substance is counted the best, and is of a  
sine golden Colour,, when wash’d ; firn middle Substance is not  
os so pleasant a Colour, and works more churlishly. The  
Regulus is equal to the Regulus of Antimony. The Operation  
is emetic and cathartic ; and it is given in the Pox, Gout,  
Dropsy, Scurvy, and all obstinate chronic Cases. The Dose is  
from two to five or six Grains. This is rhe Basis of Mr. *Loch..  
yeofs* Pills, which have so long heen a celebrated Purge. Is ten  
Grains of the finer Sort of this Panacea be mixed with white  
Sugar-candy, one Ounce, in a fine Powder, and made up into  
a Mass, with the Mucilage os Gum Tragacanth, it may be  
divided into an hundred small Pills; os which one, two, or  
three, may be taken at a time, and they will gentiy work by  
Vomit and Stool.

The other antimonial Panacea is thus prepared :

Take of Antimony, sour Ounces; grind it to a most sub-,  
tile Powder; put it into a Matrass ; and pour upon it one  
Pound os strong capital Lees ’ of the Soap-boilers, Set  
them to digest on warm Sand for sour or five Days, and  
shake them often; then add some warm Fountain-water;  
shake it well about ; let it stand for two or three Seconds  
of Time, and pour it off into a clean Pan , repeat that  
Ablution, till all the brown Powder is separated from that  
which appears like Crude Antimony; to which put more  
-capital Lees, and proceed in all things aS before, till all the  
Antimony is brought into a subtile brown Powder; which

' wash well from its Salts, dry it, and keep for Use.l " .

\* This is not distinguishable from the *Russells* Powder Jo its  
Operation ; and as the present State of the Fluids is,. It proves  
either emetic, cathartic, diaphoretic, or diuretic. Its Dose is  
from five to thirty Grains.

There are, also, several mercurial *Panaceas.*

PANALETHES. The Name os a Plaister described by  
*Aetius, Totrab. An Scrm. %. Cap.* **I3.** i

PANARITIUM. A Whitioe. See **PARONYCHIA. .. .**PAN ATA, *or* PANATELIA; Panada.

PANAX ASCLEPIUM. A Name for the *Ferula; minor  
.ad singulos nodes umbellifera. r \_ . . .. \**

**PANAx CHiRONIUM.** A Name for the *Helianthemurn,  
vulgare, store lateo.* ‘ τ : su '' "so

**PANAX COLONI.** A Name for the *Galeopsis, palustris'.  
Betonica folio ; flore variegato. . ..*

**’ PANAx HERcULEUM.** A Name for the *Pastinaca ; Olu-  
satri folio. -\**

PANCALA AUREA. The Name of an Antidote de-  
scribed by *N. Myrepsus, Sect.* I. *C.* 44j.

“ PANCARPIA, παγκαρπόα. The Name os a sort of Cake,

much used at *Alexandria,* which was covered with Paper, in  
order to make it keep the longer.

PANCASEOLUS. A Name sor the **BULBocASTANUM.**PANCHRESTOS. A pompous Name for several *Collyria,*mentioned by *Galen, 2nd Paulus Aigineta.* It imports. Good  
against every thing.

PANCHRYSOS is, also, an Epithet for some Collyris,  
importing, all golden.

PANCIIYMAGOGUM, παγχυμαγωγέν, from πῶς, all;  
χυμὸς. Humour; and ἄγω, to bring away. The Name of  
some cathartic Extracts, which have the Reputation os purg-  
ing off all Kinds of Humours. The most celebrated of which  
are that of *Crollius,* and that of *Hartman.*

The *Extractum Panchymagogurn* of *Crollius* is thus pre-  
pared:

Take of the Pulp of Coloquin’ida, one Ounce and an half;  
of the Ingredients which compose the *Pulvis Diarrhodan  
Abbatis,* good Agaric, of each one Ounce; os black Hel-  
lebore, two Ounces. Powder them all grofly, and put  
them into a Matrass; pour upon them Rain-water distil-  
led, four Fingers above the Mixture ; stop the Matrass  
close, and set it in Digestion in hot Sand, or in Horse-  
dung, three or sour Days, and shake the Veffeis every  
now-and-then. Aster this, pass your Infusion through a  
Cloth - Pour upon the Residence a like Quantity of the  
fame Liquor; let it infuse as before; then strain and ex-  
press it strongly; mix your Infusions; and let them settle,  
until they become clear, decant them, and evaporate the  
Liquor in an earthen Pan, in a Sand-heat, with a little  
Fine, to the Consistence of a Syrup; then mix with them  
os Rofin os Scammontr, half an Ounce *} os* Extract of  
Aloes, two Ounces: evaporate the Whole to the Con-  
fistence of an Extract: You will have four Ounces os it.

This is much recommended by some in hypochondriacal and  
maniacal Affections, to be frequently repeated from one Scru-  
ple to two in Pills; tho’ I believe it is not ready made in the  
Shops.

The *Panchymagogurn* of *Hartman* is thus prepared:  
♦

Take of Sena-leaves, two Ounces ; of the best Rhubarb,  
one Ounce and an half ; Root of black Hellebore, one  
Ounce ; white resinous Turpeth, Polypody os the Oak,  
Trochisci Alhandal, and Troches of Agaric, of each half  
, an. Ounce; of the internal Part of the Seeds of Cartha-  
mus, and of the best red Myrrh, each three Drams; os.  
the *Species Aromatica Caryophyllata,* and of the *Species.*

*' Diambra,* each one Dram; and of Citron-peel, one  
Dram.

Aster .these Ingredients are cut and bruised, make an Ex-  
tract of them with Spirit of Wins, and Cinnamon-water,  
each a Pint and an half; then express the Liquor; then  
let another Extract be made from the Faeces, with weak  
Cinnamon-water alone ; and strain it off. To this Ex-  
tract,'add three Ounces os the Extract of Aloes, pre-  
pared with Water os Betony, or Male Speedwell. Mix  
. . all together, and Jnlpiflate to a due Consistence, adding ten

-.: Grains of the Od of Cloves.

The Dose is from half a Scruple to a Scruple and an half.

*Hartman in Crollium. \_ Schrnd. Pharmacop. s ..p*

PANCO ENOS, ὸτάγκοινος, from πᾶν, all, and κοινὸς,  
common. . The same as *Epidemus,* Epidemical. .

PANCRATIANUT.ralsVIS. The Name of a Powder''  
described by *Marcellus Empiricus, Cap. 2s. -* - μἄκ:-;-.

PANCRATIUM. A Name for the *Scilla vulgaris, ora...  
dice rubra:* **PANCRATIUM** was the Name, of an Exercise  
which was used by the Antients, and consisted of a Mixture of  
Wrestling and Boxing. . . . . . . .'

PANCREAS. The *Pancreas* is a long stat Gland,, .of  
that Kind which Anatomists call conglomerate, situated, under  
the Stomach between the Liver and the Spleen. ItSFigureresem.-  
bles that of a Dogis Tongue, and it is divided into two Sides,-  
one superior, the other inferior ; two Edges, one anterior,: the.  
other posterior ; and two Extremities, one large, which repre«  
fents the Basis of a Tongue, and one small, and a little rounded,,  
like the Point of a Tongue. si..

The Pancreas is situated transverfly under the Stomach, .  
in the Duplicature of the posterior Portion os the Mesocolons  
The large Extremity is connected to the first Incurvation of  
the Duodenum, and from thence it passes before the rest of  
thatTntestine, all the Way to its last Incurvation; in that a  
great Part of the Duodenum lies between the Pancreas, and

the Vertebrae of the Back.. The small Extremity iS fixed to  
**the** Omentum, near the Spleen.

The Pancreas is composed os a great Number os soft gain-  
dular Molecules, combined in such a Manner, as to exhibit  
the Appearance os one uniform Mass on rhe Outside, the  
Sursace os which is rendered uneven, only by numerous small  
Convexities more or less flatted. When these Molecules are  
separated a little from each other, wo find, along the Middle  
os the Breadth os the Pancreas, a particular Duct, in which  
several smaller Ducts terminate laterally on each Side, like  
small Branches in a Stem. 4. .

Tins Canal, named *Ductus Pancreaticus,* or *Ductus Vir-  
fungi,* from the Discoverer of it in the human Body, is very  
thin, white, and almost transparent; and the Extremity of the  
Trunk opens commonly into the Extremity of the Ductus  
Cholidochus. From thence it diminishes gradually, and termi-  
nates in a Point, next the Spleen. The small lateral Branches  
are, likewise, pretty large near the Trunk, and very small to-  
ward the Edges of the Pancreas, all of them lying in the same  
Plane, like the Branches of the common Filix, or Fern.

The Pancreatic-Duct is sometimes double in Man, one lying  
above the other. It is not always os an equal Length, and  
sometimes runs in a winding Course, but always in the same  
Plane; and it is nearer the lower than the upper Side of the  
’ Pancreas. It pierces the Coats of the Duodenum, -and opens  
into the Ductus Cholidochus, commonly a little above the pro-  
minent Point of the Orifice of that Canal; and sometimes it  
opens immediately into the Duodenum.

In Man I observed, that where tire great Extremity os the  
Pancreas is connected to the Curvature os the Duodenum, it  
sends out an Elongation, which adheres Very closely to the fol-  
lowing Portion os the Intestine ; and, upon a careful Exami-  
nation, I found a particular Pancreatic Duct, ramified like the  
large one, which ran toward and intersected this great Duct,  
into the Extremity os which it opened, aster having perso-  
rated the Duodenum. Tinis Portion I term Pancreas Minus,  
and it sometimes opens separately into the Duodenum, in  
which we, likewise, observe several small Holes round the Ductus  
Cholidochus, which answer to the Pancreas. ' .

The Arteries of the Pancreas come from the Pylorica Duo-  
denalis, and principally from the Splenica, which adheres very  
closely to the whole lower Sideosthe Pancreas near the Posterior  
Edge; and it sends off in its Passage a great many Ramifications,  
named Arteriae Pancreaticae ;'which go off from each Side, more  
Or less transVerfly. It receives alfo some final! Ramifications from  
the Gastrica major, and Mesenterica superior. -

The pancreatic - Veins are Branches of the Splenica, one of  
the principal Branches of the Vena Portae major, or Ventralis.  
This Vena Splenica runs likewise along the lower Side of the  
Pancreas, near the Edge, in a shallow Depression, formed in  
the Substance of the Gland. These Veins answer to the Ar-  
aeries of the fame Name, and there are likewise other small  
**. V**eins, corresponding to the small Arteries, which are Pro-  
auctions os tire great Mesaraica, *etc:*

: The Nerves'of the Pancreas come partiy from the Plexus  
Hepaticus, partly from the Plexus Splenicus, and partly from  
the Plexus Mesentericus superior ; and it likewise receives some  
from the flat Ganglion, or plexisorm Intertexture, spoken to  
under the Article NERvUS, and mentioned by the Name *of*the transverse Rope. ' - — - 'y- s ... -- .-'si -si - si'. -

The pancreatic Duct is not only double in some Subjects,  
as has been said, but the collateral Branches have. Commu-  
nications in - form of Islands, in several Places within the Body  
Of the Pancreas.- See-HEPAR: *Winsious. si si -si*

The Pancreas, by means of its glandular Structure, secretes,  
'from the Coeliac Arteries, -an Humour into *one- common*Duct, which terminates in the Duodenum, into which it dis-  
charges all the Quantity os Lymph secreted. ’

This pancreatin-Juice is almost insipid, or but- gently sale\*  
line, limpid, continually secreted in large Quantities-by the  
.Motion, Pressure,Warmth, and Contiguityofthe Heart; but  
jtis most copiously discharged, when during Digestion the Sto-  
inach is turgid. It is neither acid nor alcaline,1 but bears a  
great Resemblance to the Saliva, not only with respect to its  
Origin, but also with respect to its Qualities, and the Vessels  
-subservient to its Generation. In those who are alive, this  
Juice is mixed and incorporated with the Bile; and, being  
lodged in the same common Duct, produces no Marks of any  
intestine Motion, but is equally mixed with it, or is discharged  
alone, and by itself, into the empty Intestines. Hence the Uses  
of the pancreatic Juice, when mixed and incorporated with  
the Chyle, the Faeces, the Bile, and the Mucus, are to dilute  
the thick Parts of the Fluids, to produce a due Mixture of  
them, to render the Chyle capable of mixing with, the Blond,  
to fit it for its Passage thro' the Lacteals, to correct the acri-  
monious Parts Of the Fluids, to correct the Viscidity and

Bitterness, and to change the Colour *os* the Bile, and to mix It'  
intimately with the Blood, to serve as a proper Menstruum, or  
Vehicle, so to change the Tastes, Smelis, and Qualities of  
Aliments, as that they assume nearly the same Nature ; and,  
lastly, to go and return, and consequently answer all these  
Ends, with the utmost Expedition. *Bosrhaav. Instil.*

The antient Anatomists denied, that the Pancreas lrad any  
Kind of Action ; and asserted, that it served to support the  
Vesseis, and prevent their Rupture ; and that it was a kind  
of Pillow or Cushion to the Stomach, to prevent its being  
hurt by the Vertebrae,-when it was too full: But more mo-  
dern Anatomists have ascrib'd a Very considerable Action to it,  
which is that above specisy'd. The Pancreas is subject to Dis-  
eases capable of greatly injuring the whole Body : But, like  
the Mesentery, it is in a peculiar manner subject to Ob-  
structions and Tumors, like other glandulous Bedies.

*Riolanus* observed a Scirrhus of the Pancreas in the cele-  
brated Historian *Augustus Thuanus,* who, during sour Years  
hesore his Death, among other Symptoms, perceiv'd a conti-  
nual Sense of Weight about the Region of his Stomach, cfpe-  
cially when he stood or walk'd hut his Hypochondria were,  
neither hard nor tumid. Upon laying ooen his Body, his Pan-  
creas was found aS large as his Liver, entirely scirrhous, and  
full of a large Number of Globules resembling a Pigeon'S  
Egg. - .

But, aS the Pancreas is covered by the Stomach,' the Tu-  
mors of it are with Difficulty discovered by the Touch ; and  
this is the Reason why such Tumors are scarcely ever men-:  
tion'd by practical Authors, and even such os them as are  
mention'd have not been discover’d till after the Death of the  
Patients. But the Presence os Tumors in the Pancreas may  
he pretty probably guess’d at, from tlie Symptoms mention’d  
by *Riolanus* in *Thuanus* ; if, for Instance, there is a Sense of  
Weight in the Region of the Stomach, without any Tumor or  
Hardness in the Hypochondria, whilst, at the fame time, there  
are other Marks of latent Obstructions, fuch aS those men-  
tion'd under the Articles HEPAR, LIEN, and MESENTE-  
**RIUM.** To these Signs we may, also, add a Pain, and other  
Disorders, os the Stomach, by reason os its Contiguity to the  
Part affected ; and a Difficulty ofBreathing, in consequence of  
a Compression of the Diaphragm. By these Signs I pro-  
gnosticated,, that a certain Gentleman of Distinction labour'd  
under a Schrhus os the Pancreas ; nor was I deceiv’d ; for, as  
the Patient was Very lean, by pressing with my Hand near  
the Side of the Stomach,.! perceiv'd a certain Hardness,  
which, when compress'd with the Fingers, excited an in tele-  
rable Pain.1 -And I have observ’d, that these Tumors os the  
Pancreas, are most generally incident to scorbutic Patients,  
fince in them a Difficulty of Breathing, an Oppression . and  
Sense of Weight in the Region of the Stomach, are for the  
most part observ’d; and these are, by *Eugalenus, Sen-  
nertus,* and others, propos'd as the pathognomic’Signs, of **a**Scurvy. . ’ :

Practical Authors furnish us with some Instances oscAb-  
scesses in the Pancreas, which, however, were not discover’d  
till aster the Death of the Patients r But such Abscesses may  
be, in a great Measure; guess'd at from the Symptoms of the  
Patients, some of which are the same with those accompa-  
-rising a Scirrhus of1 the Pancreas; but to these Signs may be  
added, a flow Fever,’the almost inseparable Concomitant of  
internal Abscesses; long-protracted Watchings, short Sleeps ;  
and after them. Weariness, Paintings, and. cold Sweats.

The Cure of Obstructions, Scirrhuses, and Abscesses of the  
Pancreas, is the same: with the Cure of those Misfortunes in  
the Liver,i Spleen, andMesentery. SeeHEyAR, LIEN, and ME-  
**-SENTERIUM.** *stiver, prax. Med: Lib.* 13. *Cap.* a.' Y

Lithe Patient has a Tumor under - The Region of the Sto-  
mach, that is indolent, aud it is attended with an obstinate  
Costiveness, we may he sure there is a Scirrhus os the Pancreas;  
especially, if any os the Causes os a Scirrhus have preceded.  
The pancreatic Juice dilutes the Faeces, and perhaps stimu-  
lates the Intestines, in some measure, to an Expulsion'os their  
Contents ; therefore, when there is a Defect of this, the Pa-  
Lent-must be costive; . -

When a Person has a Cancer in the Pancreas, when fasting,  
he will feel a great.'Weight under the Stomach ; aster eating lie  
is in extreme Pain, but more so, is he Vomits; he will have  
a Diarrhoea, and then sail into an Atrophy, and die.

A copious Use os Cherries, perfectly ripe, is Very much re-  
commended in a Scirrhus os the 'Pancreas; and they are  
'preferable to Currants, which, have something acrimonious  
in them, and are prejudicial to hysterical Womens  
: PANCRENE. A Name for the **PANCREAS.**

PANDALEON. This is a Medicine appropriated to Disor-  
desa of the Breast and Lungs, invented hy the *Arabians’,* and  
later Physicians; consisting os grateful Ingredients, answering

the same End with a Unctus, but different from it in Form,  
in which it agrees with Troches ; from which, however, it  
xliffers »n this, that Troches are made in a certain Figure,  
whereas the *Pandaleon,* after the Sugar is duly boil’d, and the  
-Ingredients sufficiently mix'd, is pour’d into a Box, and he-  
comes indurated ; and a sufficient Quantity of it is to he taken,  
either in a Spoon, or on the Point os a Knife.

The *Pandalcon,* therefore, is a solid Medicine like a Cake,  
-receiving its Form from the Box into which it is pour'd ; con-  
fisting or Powders, pectoral Conserves, and Lozenges of Sugar,  
and answering the same Ends with a Linctus. *Morelli Ide.,  
.thnd. preeserib. Form. Reined.*

PANDALITIUM. The same as PARoNyCHIA.

PAN DEMIUS. .Epidemical

PANDlCULATsO. Pandiculation, or Stretching. See  
OsciTATIo.

PANDI PAVED A Name sor the *Mornordica; Zcyla-  
laiiica ; pampinea fronde; fructu longiori.*

PANEM-PALKA. A spurious Species of Nutmeg-tree.

PANJA-PAN JALA. H. M. The Name os a Very tall  
Tree, which grows in -great Plenty in *Malabar,* producing  
a kind os Cotton.

The Flowers, and tender Fruits, boiled, and reduced to the  
Term os a Cataplasm, are apply'd to the Crown os the Head,  
.as a Remedy for the Head-ach and Vertigo. *Raii Hi P.* I899.

PANICULA. A Panicle. See the Explication of Terms  
under the Article BOTANY.

*Panicula* is, also, a Diminutive os PANUS. A Species of  
T ubercles

PANICUM.

The Characters are.;

The Spike consists os innumerable thick Seeds disposed in  
-lesser Spikes, so as to appear like a Cluster.

*Boerhaave* mentions nine Species os *Panicum* ; which are,  
I. Panicum Germanicum ; sive Panicula minore. *C.Β.Ρ.*

*Theat.* 516. *Raii Hast.* 2. 1247. *Tourn. Inst.* 515. *Boerh.  
Ind. A. 2.* I58. *Padicum.*- Ossie. *Panicumseylvestre.* Ger. 7g.  
*Panicum arulgcereA* Ger. emac. 85. *Panicum album vulgare.*Park. Theat. 1139. PANIC.

This is a Grain rarely seen in *England,* it grows to he as  
tall aS Wheat, with much broader Leaves, and firmer, thicker  
Stalks, bearing an Ear, or Spike, sour or five Inches long,  
and above an Inch broad, composed ofa great Number os loose,  
thairy lesser Spikes, full os small round Seed, less than - Millet.,  
-and not so shining ; it is sown in divers Parte of *Germany.*

Panic is reckoned to be drying and binding, and good, for  
chose who are troubled with Spitting of Blood, and fur-all Sorts  
of Fluxes. *Mellen's Bot. Off.*

*Panicuru,* called by the Greeks ἔλυμος *(Elymusp* and μελίνη,  
*(Meline}* has its Name, as *Pliny* says, *Lib.* I8. *Cap.* 7. *a Pa-  
rticula,* from its Panicle. - -

In Taste, Qualities, and Virtues, it answers to Millet, and  
‘may be used instead thereof, in Food, Bread, and Medicine ;  
whence it is in much Request, aS *Clusius* fays, throughout  
*-Germany, Hungary,* and *Bohemia*; for it makes Part os their  
Aliment, and Puddings are prepared os its husked Seed, which  
have no ill Taste. But *C. Bauhine* says, after the Antients,  
that it is os bad Juice, difficult os Digestion, generates Flatu-  
lencies, binds the Belly, and is of a drying and refrigerating  
Quality ; for which Reasons Millet is preferable to it on all  
Accounts. Milk mixed with it, in Puddings, has been sound  
salutary’, aS removing, or at least diminishing, the aforesaid ln-  
-conveniences. A Pudding, or Ptisan, prepared os it with  
Milk, is commended for Pains of the Head .proceeding from  
Bile, sor an Hamoptoe, and nocturnal Pollutions. *Galen* says,  
that it is os some Efficacy, as is also Millet, in Fluxes os. the  
Belly: For this Purpose,. *PUny* telis us, it must he boiled in  
Goats-milk, and taken twice a Day; and, being so used, it  
cures also the Gripes : Externally apply'd, in form of a Cata-  
plasm, it dries and refrigerates. *Raii Hi P.* I248.-.

The Plant is aperitive, and, boiled, like Rice, in Milk, is  
good to correct the Acrimony of the Humours. *Hist. Plant,  
adscript. Boerhaau.*

2. Panicum, Italicum ; ssVe Panicula majore. *Co B. P.* 27.  
*Theat.* 5I9. ...... .

3. Gramen, Paniceum; Spica divisa.*: C. B. P.* 8. *Theat.*I36. *Panicum Herbariorum, silvestre.* Lob. Ic. 42.

4. Gramen, Paniceum; sive Panicum .sylVestre ; aristis  
armatum. *C. B. P.* 8. *Theat.* I37. *M. Hi* I. 189. .

5. Gramen, Paniceum . Panicula simplici; 'ελυμάγρωστις,  
*Co B. P.* S. *Theat.* I38. *Me H. v.* I89. *Panicum siylvestrae  
dictum, et Dens Caninus.* 1. L B. 2. 443.

6. Gramen, Paniceum ; spicis nigris, *C. B. P.* 8. *Theat.*140- - su su\ . sesu

*J.* Gramen, AlopeeuroIdes; spica rotundiore, *Co B. P.* 4  
*Treat.* 56. See ALoPECURos, τ 4

8. Gramen, AlopeCuroIdes major; spica longiore. *C.B.P.An  
Theat.* 58.

9. Gramen, Alopecurordes ; aquaticum, geniculatum. *Boer.  
Ind. alt. Plant. Pol.* 2- p. 158.

PANIS. Bread. This is a Preparation of Grain, not only  
useful as an Aliment, but, also, a Medicine highly proper in  
many Cases. Thus *Hippocrates,* in his Book *de sulubri  
Diala,* advises Persons accustomed to a laborious Lise,  
when seiz’d with Fluxes, in which the Excrements dis-  
charg'd resemble crude Aliments, to eat toasted Rye-bread  
soak’d in Wine. 'Tis sussicientiy known from Experience,  
that Bread made os fine Flour, when toasted and soak'd in  
generous Wine, with the Addition of a little Cinnamon or  
Sugar, is a Medicine os the greatest Power and Efficacy, in  
restoring lost and impair'd Strength. This is an Analeptic of  
all others the most proper and beneficial sor those, who, in  
consequence of uncommon Fatigue, or Violent Haemorrhages  
from Wounds, require a speedy and seasonable Recruit of  
their Strength. For this Reason, the Prophet *David, in*Psalm toed Ver. 5. tells us, that WinechearS the Heart of  
Man, and Bread supports it. *Henr 'tcus ab Hecr,* in *Obs.* I 8.  
informs us, that by the Use of these two powerful Ana-  
leptics, Bread and Wine, he restor'd a certain Man to his usual  
Strength, aster he had by immoderate Venery brought him-  
self to the Very Brink os the Grave; whereas, if, according to  
the Advice of another Physician, he had used Venesection, he  
had certainly fallen a Sacrifice to that preposterous Piece of  
Practice. *Bocrhaave,* in his *Materia Medica,* in Fevers and  
other Disorders, highly extols the analeptic Virtues of a De-  
coction os Bread, which he orders to be prepar’d in the fol-  
lowing Manner.

Take of wheaten Bread, sufficiently fermented, with the  
Bran, eight Ounces, and of pure Spring-water, three  
Pints : Boil for an Hour, in a new earthen Vessel dope  
stopt. Then strain it thro' a Sieve ; and to each Pint os  
the strain'd Decoction, add half an Ounce of Citron-  
juice; distfl'd Cinnamon-water, two Drams; of Rhe-  
nish Wine, sour Ounces ; and os Sugar, a Quantity suf-  
ficient to render it palatable.

*Reusuerus,* in his Observations, gives us a memorable In-  
stance os a Woman, who, after having her Lise several times  
endanger'd by Abortion, at last, about the Middle os her  
Gestation, began every Morning, upon an empty Stomach, to  
eat a small Piece of Bread soak'd in Malmsey Wine ; by which  
means Abortion was happily prevented. *Vilsehius,* also, informs  
uS, that, astera certain Woman had, notwithstanding the most  
proper Medicines, suffer’d Abortion seven times, he pre-  
vented the like Misfortune, by Bread and Malmsey Wine used  
in the same Manner aS in the former Case. I have often ob-  
serv'd, that butter'd Toast used for Breakfast, by correcting  
the Violent Acid in the Primae Vise, removes Uneasiness os the  
Praecordia, Vertigoes, Head-achs, and Falnmess. I can also,  
from Experience, justly recommend the same Breakfast in  
epidemic, morbid Constitutions of the Weather, in which the  
Atmosphere is impregnated with Effluvia and Exhalations of  
a noxious Quality.

AS Bread, taken internally, is of an highly cordial and ana-  
; leptic Quality ; so, when .externally used, it also prroduces fur-  
prising Effects. Thus *Diogenes Laertius,* in *Lib. de Vit.  
Philoseph.* informs us, that the incomparable *Democritus,* when  
very .old,, and perceiving his Death fast appoaching, at his  
Sisteris Request, protracted his Lise for three Days, by mo  
other means, than the Smell os recent Bread. This Doctrine  
is, also, confirm'd by *Laureatius Juubertus,* who informs us,  
that Persons are recover’d from Deliquiums, by applying Bread  
to their Nostrils. I have, also, sound from Experience, that  
Bread bak'd with Caraway-seeds, when cut up, and applied to  
the Ears, as soon aS 'tis taken-out os the Oven, is an excel.-  
lent Remedy for Deafness. .This is, also, confirm'd by *River***rim,‘in** *Erax. Med. Lib. y,. Cap. 1.* And *Hicronymus Reu-  
fnerussait Obsc Med.* 55. informs us, that *Henry* Count of  
*Stolberg,* when render'd deas by the Noise os Cannons, was  
greatly reliev’d by applying to.his Ears, every Morning, recent  
Bread bak’d with Juniper-berries. The outer Crust os houshold  
Bread, cut round, moderately excavated, and sprinkled with  
good tepid .Wine.Vinegar, with an Addition of Cloves and  
Nutmegs, applied to the Abdomen, immediately stops Vo-  
minings and Fluxes attended with Gripes. Besides, in order th  
prevent Abortion, there is hardly any more efficacious Medi-  
cine, than toasted Bread soak'd in generous Wine, with an  
Addition os aromatic Substances apply'd to the Navel. Hissse  
*man de -Renteds Dcmest. Praestantia.*

**PANIS CUcULI, in Botany, is the ACEToSELLA.**

**PANsa PORCINUS iS the CYCLAMEN. - .**

- PANITSJICA- The same as JANIPABA.

. PANNICULUS ADIPOSUS. See. CELLULOSA MEM-  
BRANA. . - ,.

PANNICULUS CARNOSUS This is thus descrihed by  
*Drake.*

' Immediately under the Fat lies the *Panniculus Carnosus,*which consists os a double Membrane, the upper of which  
makes the *Membrana Adipose ;* the under, which is, also,  
call’d *Membrana Musculorum Communis,* or *Musculoso,* is, in  
some Places, interwoven with pretty thick muscular Fibres,  
which - are suppos'd to- contract and corrugate the Skin ; tho'  
this Action of it is Visible no-where in an human Body, except  
on the Forehead, or, in some, the whele Scalp. It is spread  
all over the Body, but Very unequally in point of Thickness ;  
and has its Arteries, Veins, and Nerves, from those of the sub-  
jacent Parts. '

- . The particular Use of it is to support, and be, as is were,  
a Basis to the Globules of Fat. It serves, in general, as all  
other Membranes do, towrap, defend, and connect the Parts  
together. Its different Names, taken either from -the Structure,  
or the Situation, have occasion'd some to multiply it, tho'  
through Mistake only. - 'ἐν : - h

~ But *lVinsiow* denies-the Existence of the *Panniculus Carno-  
sus.* Besides the *Cuticula, Cutis,* and *Membrana Adipose,* the  
Antients, says he, reckon’d two others, the *Panniculus Car.,  
nosus,* and *Membrana Communis Musculorum. ;*

. The *Panniculus Carnosus* is found in Quadrupeds, but not  
in Men, whose cutaneous Muscles are in a Very small Num-  
ber, and most of them of a Very small Extent, except that,  
which I call *Musculus Cutaneus* in particular; but even that  
.Muscle cannot, in any tolerable Sense, be reckon'd 4 -com-  
mon integument. - κί I. .

There is no common Membrane of the Muscles, which  
covers the Body like an Integument ; it being no more than  
particular Expansions Of the Membranes os some Muscles,  
or aponeurotic Expansions from other Muscles.

- The Elongations os the Lamina of the *Membrana Adipose,  
er Cellularis,* may also haVe given Rise to this Mistake, espe-  
cially in such Places, where this Membrane is closely united  
to the proper Membrane of the Mufcles. *Winsilow.*

- PANNUS. Besides the common Signification of this Word,  
which is Woollen Cloth, it imports a Disorder of tile Eye,  
(see OcULUS) and, also, a Spot, or Mark, upon the Skin,  
either arising from a Venereal, or any other Cause. *Castellus.*

PAN OCHIjE. Bubos in the Groin. *Fallopius.*

- PANTAGATHOS ANTIDOTUS. The Name of an  
Antidote describ'd by *Nicolaus Myreps.us, Sect.* I. *Cap. says,*and 273. It imports. Good sor every thing.

PANTAGOGUS; from πἄν, all; and ἄγω, to bring  
away. A Medicine which, brings away all Sorts of Humours.

PANTHeaE. Pensile Beds. .

. PANTHERA. See PARDUS.

- PANTICES. The Intestines. *Castellus.*

. PANTOUNUS PASTILLUS. The Name os a Pastil,  
or Troche, describ'd by *Nicolaus Myreps.us, Sect.* 42. *C.* 156.

PANTOLMIUS. The Name of a Troche, in *Paulus  
AEgineta, L. J.* C. .12. . l

PANUS, PANIS, PANICULA, and RANULA, all im-  
port a sort of crude Bile.

PANYGRON. The Name of assort of Ointment, de-  
scrib'd by *Oribafius, de Locis affertis, L. An* I2I.

.PAPAVER.

The Characters are ; .......

The Leaves are alternate; the Calyx is biphyllous and ca-  
ducous-. The Flower is rosaceous, tetrapetalous, surrounding,  
the Base of the Ovary, and furnished, with Very numerous  
Stamina: The Fruit is OVal, and cover'd with its own Tube,  
(which is os a Very singular Figure, being a radiated Lid)  
and divided by a thin Membrane, into as many Capsules, or  
Cells, as there are Radii in the Lid : The Seeds are minute,  
numerous, and adhere to the Membranes which form the Par-  
titions, as to their Placentae.

*Boerhaave* mentions thirty-sour Species of *Papauer* ; which  
are,

i. Papaver; hortense ; semine albo ; sativum Dioscoridis;  
album Plinio. *Co B. P.* I7O. *Fail Hist. i.* 853. *Tourn.  
Inst. lzysp. Boerh. Ind. A.* 279. *Papaver album.* Ossic. *Pa-  
paver fativurn album.* Ger. 296. Emac. 369. *Papaver sim.,  
plex album scaiivum.* Park. Theat. 365. *Papaver stativum.*J. B. 3. 39o. WHITE POPPY.

The white Poppy, which is cultivated for medicinal Uses,  
has many large and long whitish-green Leaves, Very much torn,  
and cut in about the edges. The Stalk is smooth and round,  
growing tothe five or six Feet high, having the leaves which  
grow on it shorter and broader, and somewhat encompassing it:  
Towards the Top, it is divided into three or sour Branches,

having at the end of each a round Head, hanging down at  
first; but, as the Flower comes on to open, it grows erect. The  
Flower consists of sour large white Leaves, inclosed in a Con-  
pie os green, skinny Huiks, which soon drop off, when the  
Flower opens. When the Flowers are fallen, which soon hep-  
pens, the Seed-Vessel grows to a great Bigness, being frequently  
as big as a large Orange, round, and having a denticillated  
Crown on the Head : It is divided into several membranous  
Partitions, to the Sides of which grow the small white - Seed.  
The whole Plant is full os a bitter Milk, of a strong; virose,  
unpleasant Smell; it is sown in Fields and Gardens, and flowers  
in *fune,* and the Heads are fit to be gathered at the End of  
*July.* From these Heads the Opium is produced, whereofthe  
best comes from *Turly;* there being Vast Quantities *of these*Poppies sown in the Fields of *Natalia.* See OPIUM-

Of the dry Poppy-heads, infused and boiled in Water, is  
made the Syrupus e Meconio, or Diacodium. -

The Seeds are much used in Emulsions, being cooling and  
good in Fevers, and inflammatory Distempers ; as, likewise, for  
the Strangury, and Heat os Urine. *Matter's Bet. Oss'. : .*

The distilled Water of Poppy, and itS Oil, but especially  
Opium, are narcotic and anodyne ; TheseQualitieS proceed not  
from its Coldness, as some will have it; sor its bitter Taste,  
rank Smell, Inflammability, and exulcerating Effects, evince  
the contrary; but from some other Property as yet unknown.  
It is, however, of excellent Service in the Diarrhoea, Dysen-  
tery, Catarrhs, and Coughs, and other Disorders; tho' it is to  
be ufed with the greatest Caution. For the most severe Pain  
of an Ophthalmy, *Sennertus* prescribes, as an effectual Remedy,  
an Emulsion os the Seeds ofPoppy, with Milk, Water of Let-  
tuce, and Decoction of Fenugreek. *Raii Hi P. .*

2. Papaver ; hortense; semine albo; flore leviter purpureos  
*Co B. P.* 170.

3. Papaver; hortense; semine albo, flore cinereo, ungue  
purpureo. *C. B. P.* I7o. . .t .

4. Papaver; hortense; semine albo ; flore candido, rubris  
maculis infecto. *C. B. P.* I7o. ί

5. Papaver; hortense; semine nigro; sylvestre Dioscoridis,  
nigrum Plinio. *C. B.. P.* I7O. *Euii Hisp.* I. 853.- *Tourn.  
Instit.* 237. *Boerh. Lnd.. A. 'priest. Papauer nigrum.* Offic.  
*Papaver stativum nigrum.* Ger. Emac. 37o.' *Papaver suctuum  
simplex nigrum.* Park. Theat. 366. BLACK POPPY.

This Poppy does not grow so tall as the white; but, in  
other respects, is much like it. The principal Difference is  
in the Flower, which, in this, is of a purple Colour, with a  
black Bottom; and in the Heads, which are much less than  
the white,, and contain a black Seed. The Roots, both of  
this and that, are sticky, and perish when the Seed is ripe;  
it is sown in Gardens, and flowers in *fund.*

. The Heads are now rarely used, being left out of theSyru-  
pus e Meconio, in the last Edition of the Dispensatory: But  
the Leaves are put into cooling Ointments, heing accounted  
good for Burns and Inflammations, and hot Swellings, and are

- an Ingredient in the Unguentum Populeum. *Millers, Bet. Os.su*. 6. Papaver; flore pleno, rubrum. *Hi East. Abst.* O. I2.

F . 7. *Fig.* I.

. 7. Papaver ; flore multiplicato, incarnato. *Hi East. AEst. ,*o. I2. *P.* S. *Fig.* I.

. 8. Papaver; flore multiplici, purpurascente. *Hi East. AEst.*ο. *12. F.* 9. *Fig.* 2- . ’

9. Papaver; laciniatnm, rubrum, unguibus purpureis. Ho  
*East. AEst.* O. I 2. *P* 9. *Fig.* 2.

Io. Papaver ; laciniarum, rubrum, unguibus albis. *Fi. East.*AEst. o. 12. *F.* 9. *Fig.* 2.

II. Papaver ; multiplex, album, oris rubicundis. *H. East.*AEst. o. I2. *F.* IO. *Fig.* 2.

I 2. Papaver ; flore miniato, pleno. *Hi East. AEst.* o’ 12.  
*F.* Io. *Fig.* 2.

I3. Papaver ; flore pleno, argentei Coloris. *Hi East. AEst.-*o. I2. *F.* Io. *Fig. L.*

. Ia. Papaver; flore pleno, album. *C. Β. P.* i7i.

I5. Papaver; flore pleno. Violaceo. *C. B. P.* I7I.

- I6. PapaVer; flore pleno, eleganter striato, laciniam.. Hy  
*Edenb.*

The Characters of the following fingle Species are;

A Very large Capsule and Flower, and a Very hairy, indented,  
and dark-green Leas.

I 7. Papaver; Orientale; hirsutissimum ; flore magno.  
*T. Cor. scyfe.*

The Characters of the following fourteen Species are, a lesser  
Capsule and Flower, and dark-green Leaves, with deeper Jags.

IS. Papaver; erraticum; mains; ῥοιὰςDioscoridi, Plinio,  
Theophrasto. *C. B. P. Vi0- Tourn. Last.* 238. *Boerh. Ind.  
A.* 279. *Papaver rubrum. Rhoeas et erraticum.* Ossic. τστὴ.  
*ucr, Rheeas.* Ger. ^99\* Emac. 377. Raii Hist. i. 855. /in-  
*paver erraticum Rhtaeas, sia: fylvestre.* Park. Theat. 367\*  
*Papaver erraticum rubrum campestre.* J. B. 3. 395. *Papa-.*

***Tor*** *lacintaio folio, capitulo breviore, glabro, annuum, Rhoeas  
dictum.* Raii Synop. 4. 208. RED POPPY, or CORN-  
ROSE. °- E . . . .

The Leaves of this Poppy are Very rough and hairy, di-  
vided into seven or nine narrow indented Sections, that at  
the End being the largest: The Stalk is rough and branched,  
heset with the like Leaves; having on the Tops of the  
Branches large four-leav'd scarlet Flowers, with a black Spot  
On the Bottom of each Leas. The Head is but small, co-  
vered with a denticillated Cap, or Crown, containing Very  
sinall brown Seed. The Stalks and Leaves are of a yellowish-  
bitter Juice, , of a strong Smell, but .not so virose as the two  
former ; it grows everye where among the Corn, and flowers  
*in June* and *July. ...... .. , .*

The Flowers of this Poppy ate of a cooling, anodyne Na-.  
ture,.and useful in all inflammatory Fevers, particularly, the  
Pleurisy and Angina : .They are, in some’ measure, hypnotic,  
and causing Rest ; .and may he given when the Preparations os  
of the sormer may not be ventured on They are a noted  
Remedy against Surfeits, especially the. Infusion of them in  
Brandy, or the Tinctura Papaveris Officinarum.

- Officinal Preparations from the Ted Poppy are the simple  
Water; the Syrup, and Conserve of the Flowers, and . the  
Tincture. *Miller\*s Bot. Osse . ....*

. The Flower of this Plant, which is. the principal Part used  
in Physic, is glutinous, .and gives much fuch a saint-red Co-,  
sourIo the blue Paper,, as the Solution of Opium, by which  
it seems the SaltOfthe.one is analagous to that of the other ;  
hut, in. Opium, this Salt (which seems pretty near to Sal Ain-  
moniac) .is mixed with a great deal: of fetid Oil; whereas, in  
the red Poppy, the Proportion of the Oil is much less than  
that ofthe Viscous Phlegm. Thus the Flowers of this Plant  
are emollient, and good for Expectoration in Defluxions of the  
Breast, in.Rheums,and in a dry Cough...They stanch Blood,  
and are gentiy sudorific. The distilled red Poppy-flower Wa-  
ter is: prescrib'd, from three to six Ounces : The Tincture is  
given by Glass-fuls, sor Defluxions of the Breast. This Tin-:  
cture is impregnated sometimes with three or four Infusions,  
in each Quart of which is dissolved one Ounce of Sugar-candy’..  
The following Ptisan is Very good for a .dry Cough : Boil  
three Ounces os Bugloss-root, and as much of that os Dogis-  
grass, in two Quarts of Water ; pour the Decoction, boiling,  
upon one Ounce of red Poppy-flowers, and three Heads of  
white. Poppy, cut small, and put up in a small Bag, so that  
they, may be squeez’d :-The dried Flowers of the red Poppy  
are drank in the Manner, of Tea; there is, also, a Conserve  
and a Syrup prepared of them. . *Martyns, Tournes.ort. ...*

Some apply the Herb to the Region of the LiVer, in order  
to stop an Haemorrhage from the Nose; and the fame Virtue  
is ascrihed to the Root. The Decoction of the middle Bark,  
or Rind of the Sambucus, or ebulus, with:the Syrup os Poppy,  
is a most effectual Sudorific ; where we may observe, that:  
Narcotics, added to Diapheretics, or Diuretics, are of extraor-  
dinary. Efficacy in provoking Sweat. *Rail Hist.*

. 19. Papaver; erraticum; majus; foliis florum Variegatis.  
*Hi R. Par.*

. 20.. Papaver; erraticum; majus; florealhe. *C. Β. P.* I71.  
21. Papaver; erraticum; majus; flore cameo. *Hi Edinb.*

. ’ 22. .Papaver; erraticum; majus; florum unguibus albis.  
*Hi 'Edinb.*

Ἄ 3.. Papaver; erraticum; flore pleno. *CoB.P. lyl.*24. Papaver; erraticum ; flore pleno miniato. *Hi R. Par.*

. 25. Papaver ; erraticum ;. flore pleno igneo. *Hi R. Par.*

26. Papaver; erraticum; flore pleno igneo, marginibus  
candidis. . .

27. Papaver; erraticum ; flore pleno purpurascente. *HiR.  
Par. .?*

28» Papaver; erraticum; flore pleno phoeniceo, unguibus  
albis.. . . \_ ...‘

. 29. Papaver; erraticum; minus. *C.lB. P.* I7I. .

3o. Papaver; erraticum; Pyrenaicumflavo flore. *Co B.*

*P.* **I7I.** *Prodr. eyl.l . :*

.31. Papaver; Orientale; tenuiter incisum ad caulem flo-  
ridum. *T. Cor.* 17. . 4.

The Characters of the three following, and last Species are,  
small. Very finely jagged, and dark-green Capsule Finwers, and  
Leaves.

. 32.. Papaver; erraticum ; capite oblongo, hispido. T. 238.  
*Argemone, capitulo breviori.* C. Β. P. I72.

\*. 33. Papaver; erraticum; capite longiore, hispido. T. 238.  
*Argentine, capitulo longiori.*

, 34. Papaver ; erraticum; capite longissimo, glabro- . *Tourn.  
Insi.* 238. - *Borrio. Ind. A.* 280. *Argemone.* Ossic. *Argemone  
capitulo longiore, glabra.* Raii Hist. I. 856. *Papaver lacie,  
niato solio, capitula longiore, glabro; seu, Argemone,- capitula  
longiore glabro.* Raii Synop. 3. . 309. LONG-HEADED  
POPPY-... \_ .

It grows by the Sides of Ditches, flowers in *fune,* and the  
Leaves and Juice are used, in Medicine. A Cataplasm os the  
Leaves, as *Dioscorides* says, absterges the Albugo, and Films  
in the Eye, and mitigates InflamationS.

The Plant, says *Dale,* which I here exhibit sor *Argemone,*comes nearest to, if it be not the Very same with, the *Argemone*of *Dioscorides,* whose Description os it is as follows: *Arge-  
mone,* lays he, has, in the Whole, the Appearance ofthe wild  
Poppy; but has Leaves dike those of *Anemone,* divided ; a red  
Flower; an Head like that, of: the red Poppy, hut more ob-  
long and wide at the Top I a round Root; and yields a Saffron-  
colour'd acrimonious Juice... *Dioscorides, Lib.* 2. *Cap.* 208.

The Name *Papaver* ..is from *Pappa* ; that is. *Pap*; because,  
in former Times, Nurses mixed this Plant; with their Chil-  
drens Pap-meat, aS a Remedy against, the Pain of the Colic.

The Plant deserves the highest Commendations, if jt.be  
rightly used. . The Garden Papavers, tasted)in hot Weather,'  
while they are in .their full Vigour, hevea very aromatic Sa-  
vour; the Juice, is very aperitive; and the .Bitterness os its  
Taste, which exceeds that of; Bile itself, is not easily remov'd  
from the Palate,. All theParts of. this Plant, is gathered jin an  
hot Season, send forth a Very strong Smell, which flies to the  
Head, and induces Sleep, by their Volatile Mucus, in Con-  
junction with something os Acrimony and Bitterness. Poppies  
are ail gently, discussent; moderately incraffating, lenient,, dery  
mulcent, and narcotic ; for which Reasons they are proper in  
Catarrhs proceeding from an acrid Lymph;, sor a Cough,  
Hoarseness, Spitting os Blood, Head-ach,. excessive.. Haemor-  
rhages, an immoderate Flux of. the Menses, and the flatulent  
Colin.... The Head os this Plant consists os two Partsthe  
Head., which gives the Taste ; and the .Seeds,: which are os a. very  
mild Nature, and oily, but induce no Sleep. . The Oil os **the**heed tastes like Oil os sweet Almonds, and. has the same Vir-  
tues Hence in *Germany,* and other Countries, they are put in  
Cakes,.which are Very well tasted. What is just now said,. is  
to be understood os the sixteen first Species. Some Physicians  
have been surprised at my prescribing sour Ounces of Poppy-  
seeds, and said, they weretenough to make a . Person sleep to  
Death.; but they were, afraid without Reason,.for.the Seeds  
have the Taste os Almonds,, and are endued with the same  
Virtues. The twelfth. Species only is perennial but, tho' it he  
very full of Milk, it affords no .Opium. Those from the  
twelfth to the thirty-first, inclusive, are not Very soporific; and  
the three last are not soporiserouS at all. The Leaves os the.  
Garden Poppies, bruised with Salt, or boiled,, and made into a  
Cataplasm, and apply’d ..to Places afflicted with a Pain or In-  
flammation, .mitigate the same, and are remarkably aperient *i*whence they are proper in the Rheumatism, Gout, and Scia-  
tica. Os the Seeds are prepared Decoctions and Emulsions,  
which have, nothing os a soporific Virtue, but are only de-  
mulcent. The Heads, when in a good State of Maturity, and  
without their Seeds, boiled in. Milk, and taken to the Weight  
of an Ounce or two, very gentiy induce to steep. Two Ounces  
of the Heads are equivalent to one Grain Of Opium. Hist.  
*Plant, adscript. Boerhaau.*

**A METHOD OF PREPARING THE EXTRACT . AND  
SYRUP OF POPPIES. . ί**

That this *Britisu* Opium may be got to .the greatest Ad-  
vantage, both .as to Quantity and Quality, the Culture and Ma-  
nagement os the Poppies are to be taken care os. . What I have  
found most successful, is to trench a Spot of new rich Ground,  
where Poppies had not grown the preceding Year ; for, if they  
are continued several Years on the same Ground, they dege-  
nerate; and, chufing the ripest and whitest Seed of the great  
single-flowered *Turfy* Poppy, I sow it *\u March, very thin*and superficially, in Drills at two Feet Distance each, to al-  
low room sor Weeding. .As soon as the young Plants spring  
up, I take most of them away, leaving only the strongest  
most thriving Plants, at about a Foot distant from each  
other. When the Heads of these come to. their full Growth,  
but before they are ripe, I chuse a calm, warm, .and Sun-shine  
Day to cut them off, at an Inch or less Distance from the  
Topos the Stalk, going-backwards from the End, at which  
I begin the Lopping, to the other End.. The Deign of this  
Caution is, to save the milky Liquor, which rises to the cut  
Part of the Stalk, from being spilt by the Motion which **the**Wind or my Cloaths would make, and that the Heat of the  
Sun may make it thicken, soon. What Heads are small, and  
with the Appearance os growing larger, are left to be cut af-  
terwards. All the Heads are put into a Basket as they are  
taken off, and are allowed to fie there together for about two  
or three Days, till the Drops ofLiquor, winch runs out of them,  
thicken, and thereby are saved; after winch they may he  
spread out on a Floor, or.bang’d up on Strings to dry. Two  
Or three Days after, I, in the same Manner, lop off such other

Heads of the Poppies, as are become large enough; and, at the  
same time, cut off Pieces of two or . three Inches Length from  
the Stalks os those formerly cut.This cutting os Heads and  
Pieces os Stalks I perform every second or third Day, till I ob-  
serve no more Juice rife in the. Stalks, keeping-them always  
in a Basket some Days, and drying them afterwards aS the first  
Heads were, that ali the Juice .may.he saved ; only.preserving  
some sew of the best-grown Heads, and allowing them to ripen  
fully, that I may have Shed sor sowing next Year. -,

*The* dried Heads and Stalks being cut and bruised, I infuse  
them some Hours in helling-hot.Water, .and then; boil them  
three or. four Hours ; after which, I. strain the. Liquor.strongly  
out, and allow it Io depurate, by. the *grosser.* Partsssuhsiding, for  
a Day or two. The clear Liquor, which is poured .off, 1 clae  
rify with Whites of Eggs, and boil in the common:. Way of  
malting Extracts, till jt comes .to the. Consistence of'Honey.  
Some of it I keep in this Form; but I put. the greater Part  
near to a Fire, or in a Sand-heat, till ir becomes -.as.th ink. as the  
Extract of Opium, taking.great, cate, that it shasse contract no  
Empyrenma. Out os five or six Pounds of the dried..Heads,  
and.CuttingS-of the Stalks, I have shad a Pound ofthe. Ex tract,  
which is os much less Price than Opium. 00

... -The Dose ofthis Extract must he double to:that.ch7imry  
Opinm, .to answer the same Intentions, which it does, with-  
out inclining Patients to those Ravings, or giving, them the  
Nausea or Giddiness, whichchminon Opium .does.: „-This T at-  
tribute to the grosser Vifcous Parts, being separated fry subsiding,  
and with the Whites os the Eggs. .: - *s: L'.y .:. :*

: I prefer thessyrnpof Poppies :made with this Extract, to  
any made in the common Wayl; . .sor,..besides that I can jnake  
it with muchlesSTronble than The Common Syrup,: and there-  
sore prepare,it fresh-more , frequently than Apothecaries will in-  
cline to make the coininon *Syr* up, :so that mine has :no Chance.  
Of turning .four,.-or. .of. candying; mine has, other. Advan-  
tages: For it does not ferment, aS the other does, when moved,  
or in a warm Place; and what .principally makes me. prefer it  
is, that I am: certain Io have it always of the same Strength ;  
whereas the Dose; of the other mustthc. very uncertain, fince  
different Poppies have very different Proportions of the nar-i  
eotic Juice. /.et . *squi i* . ῖ. I  
tin preparing the Syrnp with this Extract, I mixsach a Pro-  
portion, as that. , am Ounce of the Syrup shall contain two  
Grains of the Extract, equal to a Grain of common *Turky*Opium. .6. tat’ tio \*. ι ..ii . - : :. 2. .

That Part of the Decoction, which I mentioned to be pre-  
serv’d in the Consistence of Honey, is nearly half so powerful  
as the Extract ; and is kept to save the Trouble and . Time of  
dissolving Opium, .or the Extract, when prescribed in Electua-  
ries. Liniments, PlaisterS, and the like, where the Opium re-  
quires to be intimately and equally mixed with the other In-  
gredients of the Composition. *Medical Essays.*

**f.PAPAVER CORNICULATUM, i** A Name for several Sorts  
of **GLAUCIUM. .: . . . : '**

**.PAPAVER HERACLEUM.** A Name *iD Boerhaave Jus* the  
*Cyanus; Segetum ; store cceruleo. . - . '*

**-PAPAVER SPUMEUM.** A Name for **the** *Lychnis ’,, sol-*

*Vestris b quae Been, album vulgo,* **.See BEHEN ALBUM.**.-PAPAYA. .

- The Characters are ;

. The Trunk is simple, or without Branches, and only shoots  
forth Pedicles for Leaves, winch are jagged like those of the  
*Ricinus.* The Flower is male, naked, tubulated, .and multi-  
fid, consisting of five inng narrow . Segments, which are ex-  
panded in **the** Form or a Star : This Flower is furnished with  
R Multitude of Stamina, and grows?ort a separate male Plant.

On another Plant, which is female, the End of the Pedicle  
opens into a small,, dentated Calyx, on .which grows the Re-  
semblance os a pentapetalous Flower (if it ought not rather to  
be called a Pericarpinm) destitute of Stamina.. In the Bottom  
of this Flower, or Pericarpinm, as seated the Ovary, furnished  
with a quinquefid open Tube, (the Segments.evolved into fo-  
liaceous Fimbriae) which becomes, a carnous, striated Fruit, like  
that of the Melon, with a thick Rind, and a Pulp ever.y-where  
abounding with striated Seeds, covered with an Involucrum.

*Boerhaave* mentions two Species of *Papaya so* which are,.

. r. Papaya; fructu Meinpeponis effigie. *Plum.* 659. *Pa..  
payamaram.* H. Mal. I. 23. *Platanus,, fecunda, seu Arbor,  
Platani Jolla, frudhtPeponis magniittdine eduli.* C. Β. P. 43i.  
*Papaye Peruvians.* J.-P. I. *lay.' Mamcorafcernina.* Park.  
Theat. I6.ro. Rais Hist. 2. I37o. THE FEMALE PAPA-  
TREE.

Some eat the Fruita raw ; but those of a more delicate Taste  
eat them prepared with Sugar- They strengthen the Stomach,  
and promote Concoction. *Raii Hi P.*

- 2. Papaya; *mas. Mamara ;* mas. Park. Theat. I649. Raii  
Hist. 2. I37o. THE MALE PAPA-TREE. *Boerh. Ind.  
alt. Plant. Pol. 2..*

PAPAYAMARUM. A Name for the *Papaya ; fructu  
AAelopeponis'effigie.*

. PAPILIO. A Butterfly.. Hence -.certain. Flowers are call’d  
Papilionaceous ; because,in some measure, they resemble a  
Butterfly, with its Wings expanded. They .always consist os  
these sour Parts ; *Crt Vexillum,* or Standard, which is a large  
erect .Segment, or Petal; the Alse, or two Wings,, which  
compose the Sides ; and the Carina,.-or Reel, which is a con-  
eave'Petal, or Segment,-.resembling the dower Purr os sa  
Boat; this Keel is.sometimes entire, and sometimes It consists  
os two Petals, or Segments; adhering pretty closely together c  
OTthiS.Trihe are Peas, Beans, Kidney-beans, Vetches, at.d  
other leguminous Plants, *uriMillePs Dictionary, Fol.* I. υ . ':  
ἐν PAPILLA. The Nipple of the Breast. See MAMMA.  
*Peyer*Scalis the Intestinal Glands by the NameofPAPILLAE.'.

I In .the Skin there as: an infinite Number. *N .Papillaespyrar  
midalest* They are.the Enas of all theNeryes of the Skin, each  
os which are inclosed in two or three Covers of a pyramidal  
Figure, and these Covers .are each above, another. They may  
he; easily seen and. separated, .in the Skin of an Elephant,- and  
im. the.Skin of the . Feet Of several other Animals. . *Eessils  
Anatqmy.' -.Nets ...* s.

\_ PAPILLARE OS. The Gr *Ssehenoides. \_* . ...... c  
.... PAPILLARES PROCESSUS are the Extremities of the  
Olfactory Nerves, inserted into the mucous Membrane of the  
Nose- et.: .... ? *in s.: ss ... -st:: -*

*„ PAPIO, or PAVIO. A large* Species of Monkey, which  
isTound in *Ethiopia-,* the Fat *os* which is said to he resolvent.  
*Lemery des Drogues. .* . ..i'.

\_ PAPPA. Pasteboard. *Heister. ' Chirurg... .*

PAPPUS. The Down ofthe Seeds os Plants. Hence Plants,  
whose Seeds, when ripe, are furnish'd with Down, are call'd  
*Pappose, Aor Papposcent. . . sci' s.gul-*

.\_ PAPULA...A Pimple,;or ulcerous Tuhercle.

PAPYRUS. Ossie. *Papyrus Nilotica.* A..B. I. 506. Ger.  
37: Emac. 4O. Raii-Hist..2.- I 302. *Papyrus Nilotica Alpina.*Perd *Abgyptiis dicta* ; Biblos *Syriaca quorundarn.* Chab. I95.  
*Papyrus Nilotica sive AEgyptiaca.* C. B.P, 19. Theat. 334.  
*Papyrus Antiquorum -Ntlapica.* Park. Theat. I207. *Cyperus  
Niioticus -vel Syriacus, maximus papyraceus.* Hist. Oxon. . 3.  
239. THE PAPER-TREE.. - ... ... - .

Of the *Papyrus,* in antient Times, was made Paper for the  
Use of.-Writing; the Way of Preparation; may be sourtd in  
*Pliny, Lib.* I3. The *Papyrus,* also,-hefore the Discovery os  
Fruits, was the Food of. the *Egyptians:* On this they fed both  
raw, boil’d, and roasted, chewing it in their Mouths, **and**swallowing the Juice ; but spitting out the rest. Of the Pa-  
pyrus they made Furniture for their Beds, Sails for their Ship-  
ping. Utensils sor their Houses, and ShoeSToT their Priests ; and,  
of its Flowers, they made Garlands to crown their Gods; and  
the Root served sor the same Purposes as Weed, Thein Sur...  
geons, as we are informed, by *Prosper Alpinus,* now use the  
medullary Substance of the Leaves, to dilate the Mouths of  
Ulcers: The Trunk, burnt to Ashes, cures recent Ulcers, and  
prevents the Increase of Malignity in others, being sprinkled  
thereon ; and the distilled Water of the recent Trunk is Very  
effectual against Cataracts, and Dimness os Sight. *Raii Hist.*

*Plant.* καὶ / S.’'.

PAR, when applied to Days, imports even. See ARTioS.  
When used in Prescriptions, it signifies, *a Pari,* or Tino. Some  
Medicines are call'd *sine. Pari,* without an Equal, on account  
of their supposed Virtues, Ί . . „

PARA, παρά, a Preposition Of much Use and Signifi-  
caney in medicinal Terms, which are compounded, wherein it  
generally destroys or diminishes the. Force of the simple  
Word, or implies some: Deficiency, or Degeneracy from a  
State, os Integrity, tho' still with a Reserve os some Measure of  
Goodness. Instances IO thin Purpose wifi appear in some  
following Articles.

. PARABOLANI. **A** Name given to those who attended  
the Necessities Of the Sick in the Hospitals established by **the**first Christian Emperors : The most natural Derivation of. the  
Word, ’is, from παράβολος,. *Parabolos,* signifying *bold, hard,  
venturous ^* because those poor People exposed their Lives and  
Health in attending the Sick, especially when they laboured  
under contagious Durempefs./\_ . ..

*Godefridus* supposed the *Parabolani* to he some of the  
Clergy,, or Ecclesiastics ; because there is mention made os  
that Office in the Code, under the Tide *de Episcopis et Clericis y*Perhaps some Ecclesiastics had taken upon them such an Em-  
ployment; but it is probable, they were not the only Persons;  
It is possible, also, as some learned Men have thought, that  
those who entered into that Order, did it in consequence of  
some Vow, or from a Principle of Religion. But the Reason  
why the *Parabolani* are mentioned in the Cede, under the Tiste  
abovesaid, is, because the Election of these People depended  
upon the Bishops. The Number of *Parabolani* sor the City  
of

**of***Alexandria* was regulated at six hundred, aS may he infer'd  
from the Law in the Code, winch, also, obliges them to he upon  
continual Duly near the Sick, or in the Hospitals, whence  
they were never to depart, in order to he present at the Shews  
to which all the People were invited, or to go to the Palace to  
hear Causes tried, which was permitted to all Sorts.

- Further, it appears by the proper Terms in which the Laws  
speak os the *Parabolani,* that the Word was in Use, and the  
Office established, before the Laws were made ; so that the  
Emperors *Theodosius* and *fnstinian* seem to have done no more  
than regulate the Manner of Elections, the Number, and the  
Office os those People, whoseName might be Very antient, tho'  
the Regulation concerning that Office might he new.

. Another thing worthy Observation is the gross Mistake of  
those who took the *Parabolani* to be Physicians, properly so  
called. What gave Occasion to this Error, is the Word  
*curare,* in the Laws where mention is made of the Bufiness  
about winch they are employ'd, which signifies as well to *cure,*aS *to take care of*; but it is evident, that the Word in that  
Place can only he taken in the latter Sense, and that *Curare  
Debilium aegra Corpora,* which are the Very Words of the Law,  
mean no more than to take care of the weak and infirm Bedies  
os the Diseased. To this may he added, that *if* the *Para-  
bolani* had heen Physicians of the Hospitals, their Elections  
would not have depended on the-Bishops and Priestas The  
*Archiatri,* or principal Physicians, of the great Cities would  
have been the Persons concerned in chusing them ; because  
these *Archiatri* were themselves obliged to Visit the Poor. *Le  
Clerc,Histoire de la Medicine. -*

PARABOLICUS IGNIS. The Heat of the Sun, col-  
lected by means os a concave Mirror. *Collect. Chym. Leidens.  
Prolegorn. Cap,* **2**

PARACELSUS. The Name of a celebrated Physician and  
Chymist, an Abstract of whose Life and Doctrine we have  
given in the Preface.

. PARACENTESIS, κύ^κἐὑτησις, from mithposssu, to make  
a Perforation.- The Name of a chirurgical Operation, which  
consists in making a Perforation in the Abdomen, in aDropsy,  
in order to evacuate the Water in an *Ascites.* See Hr-  
**DROPS.** The Perforation of the Breast, in order to let out  
extravasated Blood, Water, or Pus, is, also, called *Paracentesis  
Pectoris.*

PARACM ASTI COS, ς^μκμαστικός. Declining. **See  
ACMASTICUs.**

- PARACME, from ‘sasu, and ἄκμἤ, which see.  
The Decline, used generally with respect to a Disease, or  
the Age of a Person.

PARACOE, π^μκοή. Dulness os Hearing.

.: PARACOLLeTICOS, π^μκολλητικος. Agglutinating.

- PARACOPE, ιά^μκοπῆ, from ιά^μκόπτω, to be delirious.  
In *Hippocrates,* it imports a flight Delirium, or any Alienation  
of Mind.

- PARACRUSIS, παράκρουσις, from παρακρήω, to be a little  
delirious. This imports much the fame as *Paracepe.* Hence  
the Adjective, αί^μκεκστικὸς, somewhat delirious.

PARACYNANCHE. A Species of Quinsey. SeeANGINA.

. PARADISI GRANA. See **CARDAMOMUM.**

PARAGOGE, ιώ^μγωγἤ, from ΗαραἼ importing near to,  
and ἄγω, to bring. An Approximation Or Reduction of the  
Bones.

PARALAMPSIS, παράλαμψις. A Cicatrix in the transpa-  
Tent Part of the *Cornea* of the Eye; from ςπαραλἀμπω, to  
shine a little.

PARALIUS. A Species of *Tithymalus,* mentioned by  
*Dioseorides, L.* 4. *C.* I65.

- PARALLAXIS, παράλλαξις, from παραλλἀονω, to change  
mutually. A mutual Change in the Situation of the PartS of a  
broken Bone, as when the two Fragments flip to the Sides of  
each other. See **FRACTURA.**

PARALLELA. A sort of Scurf, or Leprosy, affecting  
only the Palms of the Hands. It is a Symptom of the Venereal  
Disease. *Castellus* from *Forestus.*

PARALOPHIA, from τιιίὸ, near, and λοφία, the Emi-  
nence of the Back, is the lower and lateral Part of the Neck,  
according to *Keil.*

.PARALYSIS from'ταραλήω, to dissolve, or weaken. **A**Palsy.

Among the Diseases arising from the Want of a due Tone  
of theViscera, and solid Parts, none are more considerable than  
such aS affect the Head, and Parts situated therein : And, os  
these, the most important are, those Resolutions of the Nerves,  
commonly, by Physicians, called an Apoplexy, an Hemiplexy,  
and a Palsy; which three Disorders are so nearly connected,  
that we shall consider them in one joint View.

That all these Disorders affect Sensation and Motion, the  
primary Organs of which are, the Nerves, and the nervous  
and membranous Parts formed of them, is universally allowed.

Now a Nerve is composed of tender Ducts, which convey an  
highly subtile Fluid, and are covered with a Membrane arifing  
from the Meninges of the Brain. This Membrane, which  
surrounds them, is furnished with all kinds os Veffeis, those of  
the lymphatic Kind not excepted ; sor which Reason it is ca-  
pable of heing inflamed, and rendred tumid, according to  
*Boerhaave, in Prax. Med.* and *Bartholomaus de Moor. Pathol.  
Cerebr. Cap.* Io. .

What Cause communicates Sensation and Motion to the  
Body, by means of the Nerves,, is much disputed ; but, in my  
Opinion, it can he no other than an highly subtile and lymphatic-  
Fluid, impregnated with a pure aereal, ethereal, and elastin  
Substance ; which, being secreted within the small Ducts of  
the Brain,Cerebellum, and spinal Marrow, is convey'd not only  
into the small Tubes of the nervous Fibres; but, also, from these ‘  
to theNerves themselves; and, at last, to all the nervous PartS of  
the Body. This Fluid, when convey'd in a due Quantity, and  
with a proper Impetus, to the Nerves, and nervous Mem-  
branes, produces a certain Tension thereof; and, when this-  
Tension is in its due State, Sensation and Motion are rightly-  
performed thro' the whole Body ; and the Nerves themselves.  
are said to be poflested of their natural Tone and Elasticity."  
The Nerves are said to he robust, when their most minute  
constituent Particles cohere in such a manner,, chat they are  
capable of surmounting the natural, or perhaps, a somewhat  
greater Force of the Fluids ;-.but if, in consequence os a too  
lax Cohesion, they are overcome by this Force, the nervous  
System is said to he weak. A

A Nerve naturally tense is always full of its proper Fluid:  
Hence, when its most remote Extremity is but gentiy touch'd,  
according to the Laws of Hydraulics, it, with am incredible  
Celerity, conveys the Motion impressed upon it to the Brain,  
and Common Sentory, just as a small Tube full of Water, and-'  
covered at each End with a Piece of Bladder,. has the Motion’  
of its contained Fluid instantaneoufly convey'd to one End,  
upon pressing the other with the Finger. This is, properly,  
what we call Sensation. The Instruments of Voluntary Motion  
are the Muscles, which are composed of nervous, tendinous, and  
fleshy Fibres, eVery-where interwoven with nervous Fibrils,  
and which perform their Offices in the following manner :ι  
The nervous, tendinous, and fleshy Fibres ought to he so  
stretched and filled with Lymph, as in some measure, to retard:  
the Bloothpassing thro' the Muscle. And the Blood, thus stop-  
ping, inflates the Belly of the Muscle ; and this becoming  
turgid, the Muscle is "shortened, and its Extremity, together  
with the moveable Parts adhering to it, are down towards  
its Origin. Hence, when the Muscle is in Action, it is harder,  
and, as, it were, resists theTouch. Hence we infer,that, in.  
order to Motion, a greater Force, and more copious influx,  
of the nervous Fluid are requisite, than to Sensation.

From what has been said, 'tis certain, that, bya Diminution  
ofthe Influx of the nervous Fluid into theNerves, their Action,  
both as to Motion and Sensation, must he either totally abolish’d,.  
or, at least, in a great measure, hinder'd. From this Cause  
arise the Disorders comprehended under the common Name os.  
a Resolution of the Nerves ; by which we understand an in-  
ability of performing Motion and Sensation, arising from a  
diminished influx of the nervous Fluid into the Nerves. Os this  
there are Various Degrees, of which we shall consider two, as  
the most general; for either the Voluntary Motions, the animal  
Actions, and the Use Of Reason, are destroy'd, and the Patient  
drops down, as thunderstruck ; or, the Causes and Reason re-  
maining entire, the Voluntary Motions, and animal Actions, or  
at least the Sense of Touch, become languid, or are totally  
destroy'd : In the former Case, the Patient is apoplectic ; and,.  
in the latter, paralytic.

Of Apoplexies, there are three Degrees, the highest, and.  
universally mortal Degree of which is, when, together with  
the Senses, and all the animal Motions, all the Vital Actions of.  
the Body are at once destroy'd. See APOPLEXIA. Another  
Degree of this Disorder removes the Use of the Senses, Vo-  
luntary Motions, and Reason ; but does not destroy the vital  
Actions, nor always terminate in Death; but is generally  
converted into an Hemiplegy. The third and flighted: De-:  
gree of this Disorder, winch we call a spasmodic Apoplexy,  
discovers itself by the same Signs with the second ; only it is  
removed in a shorter time, and does not so often degenerate  
into paralytic Disorders. And this (lighter Degree of an Apo-  
plexy we shall principally here consider.

This Species, therefore, of Apoplexy discovers itself by these  
Marks : It is, sor a considerable time, preceded by a Weakness  
of the Senses, especially the Sight and Hearing; a Vertigo, a  
Listlesihess of the Joints, a Tremor, a Torpor of the animal  
Actions, and, generally, hypochondriac and hysteric Disorders..  
During this State, the Patient, being suddenly and unexpectedly  
deprived of his Reason, all hia Senses, and animal Motions, drops  
down; his Feet, and inferior Limbs, are cold, his Skin drv

find spasmodically constricted, his Face and Eyes red and  
turgid with Blood, and his Pulse strong and quick. Patients  
labouring under such a Paroxysm for some Hours either  
spontaneoufly Vomit up a large Quantity os Viscid Sordes, or  
have their whole Bedies covered with a Sweat; after which they  
return to themselves, and recover, their Reason, Senses, and a  
Power os Motion. Many inform us, that under such a  
Paroxysin their Fauces have heen constricted, a Power of  
Deglutition destroy’d, and their Breasts, asitwere, confined with  
Cords: Such a Paroxysm, unless cured; returns frequentiy,  
and at last terminates in a satai Haemorrhage os the Brain.

On the contrary, an Herniplegy is, when the Reason and  
Vital Motions remaining, the Power of Voluntary Motion, or  
with it, the Senfe os Touch, is weakened. That such an  
Hemiplegy, or Palsy, is universal, or affects the whole Body,  
I deny, unless perhaps under an Apoplexy: Nor do I believe,  
that a Paraplegy can affect the whole Body, the Head remain-  
ing unaffected; at least, such a Disorder never occur'd to me in  
Practice ; sor every Palsy rather affects the Whole of one  
Side of the Body, and deprives it of Sensation, or is only con-  
fined to one particular Part. It is called an Hemiplegy, when  
the Half of the Head and Face is paralytic ; and, in the other  
Case, it is. called a Palsy of either Side; and, in the last Case,  
it is called a particular Palfy ; which is either genuine, or  
spurious *: The former* has its Seat sometimes in the superior,  
sometimes in the middle, and sometimes in the inferior Parts of

the Spinal Marrow ; in some measure, deprives the Patient both .  
os a Power of Sensation, and Motion ; and arises from a Trans-  
lation of the Humours to the Nerves, which are compressed  
by them.

An Hemiplegy either succeeds an apoplectic Fit, or  
happens without it; and begins with a Refrigeration os the Side  
to be affected, and a preceding Vertigo; and gradually ter-  
minates in an Abolition of Sensation and Motion. The sound  
Side is often racked with spasmodic and convulsive Motions ; the  
Mouth is frequently distorted, like that os a Dog; and as the  
Disorder proceeds, the Functions of the Mind, and especially  
the Memory, begin to be weakened. According to *Caelius Aure-  
lianus, 'tn Chron. Lib. τ.. Cap.* I. a particular Palsy is preceded  
by a Sensation of Weight in the Part about Io suffer, , a flow  
Motion accompanied with Stupor, Paleness, and Torpor ; the  
Part affected is lax, flaccid, soft, and cold to the Touch, aS it  
is affected with an Atrophy, or an oedematous Tumor. But  
we are by no means to confound that Inability os Voluntary  
Motion, which accompanies a Palsy, with that which is  
sometimes joined with rheumatic and arthritic Disorders ; for  
we often find this last Inability accompanied with Spasms and  
Convulsions, Symptoms quite foreign to paralytic. Ladis-  
positions. ;. . .

A particular Palfy affects various Parts;, for sometimes the  
inferior Limbs, together with the Parts of the Abdomen,  
' are deprived of Motion, and sometimes both os Motion and Sen-  
fation, whilst the Parts above the Diaphragm remain entire’; then  
the Urine and Faeces are discharged involuntarily, after which an  
cedematous Tumor, a flow Fever, .and, at last. Death, succeed ;  
sometimes the Arms and Hands are afflicted with a Palsy; which,  
if spurious, or happening aster a Colic, is called a Palsy arising  
from the Colic; but, when it arises from other Causes, it is call'd  
a Palsy of the Hands r There is, also, a Palsy of the' Eye-lids,  
in which Case they cannot be separated, and these is an in-  
voluntary Discharge of the Tears A Palsy of. the Tongue as  
called APHONIA ; which see. When the Pharynx .is affected  
with a Palsy,: ail Deglutition is destroy'd; and this Species  
Palsy is different from Spasms of the Pharynx. In dying Per-  
sons, the Oesophagus, Stomach and Intestines, become para-  
lytic; and, in this Case, everything swallowed, especially  
Liquors, descend with a kind of Noife and Rumblings *..Ps.* Palsy  
.os the Sphincter Ani discovers itself by a Falling down osethe  
Intestinum Rectum, and an involuntary Discharge of the  
Faeces ; that of the. urinary Bladder, by an involuntary .Eva-  
citation of the Urine; that of the. spermatic: Vessels,by.a  
perpetual Effusion of the Semen ; and that of the.Muscles of  
the Penis,hy the want of a due Erection. *Caelius Aurelianus,* in  
*Chron. Lib. L. Cap.* I. informs us, that *Heraphilus,* among the  
Antients, mentioned a Palsy of the Heart, succeeded, by sudden  
Death, without any evident Causes. And, among, the  
Moderns, *Boerhaave, iBPrax. Med. P. ζ.* affirms, That the  
same may happen. . . ' *. s* . -ἐ.τ.Τ.π.

That the proximate and formal Cause of these; Disorders  
consists in a more or less intercepted Influx of the nervous .Fluid  
into the Nerves, is sufficiently obvious from-what has been al-  
ready said : Hence, also, appears .the Reasons why some Palsies  
are legitimate, and others spurious; sor the latter happens more  
readily than the former, because an Abolition os Sensation sop,  
poses an almost total Defect os the nervous Pluid,^ whereas an  
Inability os Motion is produced by .a-diminish'd Influx of this  
Fluid into theNerves. 'Tis, therefore, necefiary we should care-

sully investigate the several Causes capable ths retarding such an  
Influx: Many Physicians have accused an Obstruction of the  
Nerves; but that this Opinion is salse, is evident not only from  
the Smalness of the Nerves, but, also, from the Subtilty of  
the Fluid they contain, as *Bartholomaeus de Moor, in Path. Cars  
Cap. 10.* has demonstrated at large. But the true Cause is  
rather a Solution os Continuity in the Nerves, as in Wounds,  
and Violent Contusions, or a Compression of the Nerves, or  
their Origins, by any thing preternaturally acting upon them;  
But as all Palsies proceed from this common Cause, winch,  
however, produces different effects, we must inquire, to what  
this Diversity is owing.

That this, therefore, is to he accounted *for* from the Diversity  
of the Parts affected, is obvious, not only from Reason, but,  
also, from the anatomical Dissections os those who have died  
of these Diseases; for all who have made Observations of this  
Kind, such as *IVillis, Bonetus,* and *lVipfer,* have universally  
observ'd, that, in Persons who died of an Apoplexy, the Cause  
of the Disease was lodged in the Brain, and its Ventricles, as,  
also, in the Cerebellum. *Brunnerus, in A. N. C. An.* I. *Decade*3. *Obs.* I53. et I 54. gwe5 ns two celebrated Histories of Apo-  
plexies, which prov'd mortal, the one proceeding from a Dropsy  
os the Brain, and the other from Blood extravasated in it. On  
the contrary, the same Authors inform us, that in hemiplectic  
Patients, one Side of the Origin of the spinal Marrow is found  
overflowed with extravasated Serum, or compressed by Tumors.  
*Bonetus, in Sepulchr. Lib.* I. *Sect.* I5. gives us Instances of the  
Extravasation os Serum in these Parts. And *Wepfer, in Aucta-  
rio, Hist.* I4. and *Brunnerus,* in the Work already quoted,  
*Obs.* 154. inform us, that they saw encysted Tumors there.  
'Tis needless, in Confirmation of this Doctrine, to mention  
Abscesses, Wounds, and Ulcers, which, by affecting the spinal  
Marrow, have produced an Hemiplegy ; and, by penetrating  
into the Brain, an Apoplexy. Besides, if from Anatomy, we  
find, that the Nerves destin’d for the vital Functions arife  
from the Cerebellum, those subservient to the Senses from the Base  
os the Brain, and those subservient to the Voluntary Motions,  
and the Sense os Touch, principally from the spinal Marrow,,  
we may readily infer, that, in all Apoplexies, the Cause com-  
pressing the Nerves is within the Brain; but in a Palsy, with-  
in the spinal Marrow; and particularly that, in an Hemiplegy,  
it is lodged about one Side of the Origin of the spinal Mar-  
row. .

But, among the Causes which produce a Compression of the  
Nerves in .the Brain, and intercept the Influx of the highly  
subtile and moveable nervous Fluid into them, the most con-  
siderable is generally a Stagnation of the Blond in the Veffeis of  
the Membranes of the Brain : And this Stagnation arises from  
a retarded Motion of the Blood through the Veins, and Venous  
Sinuses, and its flow Return to the Heart; for, when the Blood  
is convey'd to the Head with a greater Impetus and Effort than  
that it can be received into the Veins, on account of the too  
great Distention and Expansion of the Veffeis it becomes stag-  
nant.; and this principally happens inplethoric, hypochondriac,  
nephritic, and hysteric Patients, on account of the Violent  
Spasms *os the* inferior Parts. . Sometimes a gentle Species of  
Apoplexy, call’d. *Spasmodic,* is produced by this Means, because  
in this, when the Spasms remit, the Mass of Blood is derived to  
the inferior Parts, and .the free Circulation of the Humours  
through the Vessels is restored, the Force of the Disease gene-  
rally forthwith remits.. And this principally happens when a  
Vein is seasonably open'd, and the Body render'd soluble by a  
Clyster. Under such a Paroxysm,, the Face is generally red,  
the Pulse quick and Tull, Motion and Sensation are abolished,  
and sometimes the whole Body is covered .with a profuse *Sweat.*\_ But if this Stagnation continues long, and happens in Pa-  
tients who abound with Serum, the thinner serous Juices are  
gradually secreted through the Pores of the preternaturally.ex-.  
panded Vessels, act upon the Nerves, and compress them. If  
this happens in the Base of. the Brain, an Apoplexy is produced.  
The other Degree of an Apoplexy,, produced by a Conveyance  
of Serum to either of the. Crura of the Medulia Spinalis, ’gengni  
rallyjeavesan Herniplegy after It. This Disorder is from the:  
sameCause generated without. any previous Apoplexy, is the  
Serum, separating from: the. stagnant Bloed immedlately sass  
upon the.spinal Marrow. Such an Hemiplegy is called *Serous,:*and principally seizes pitoitous, sanguine, and phlegmatic Per-  
sons.- Under it, the Pulse is languid and weak, the Face pale, I  
and the Patient afflicted, with a kind of Drowsiness, and Tor-:  
por of the Senses. Physicians, and, among the rest, *Cceliut  
Aurelianus, in Chron. Lib...* 2. *Cap.* I. havejustly observed, that  
it is most familiar to old Persons, especially in the Autumn and  
Winter.

Among the more remote Causes, which, according to the.  
Diversity of Constitutions, produce sometimes a serous, and .  
sometimes a bloody Hemiplegy, the most., considerable .is too.,  
large a Quantity of Blood in active Persons, and such as have

the Misfortune of a lax and spongious Habit of Body. This  
Redundance of Blood is the more ready to induce these Disor-  
ders, the more the Humours are put into a Commotion; for  
these, when in too violent an Ebussition, too much expand the  
tender Vessels of the Brain, and are sometimes absolutely ex-  
trava sated. Hence 'tis easy to assign a Reason, why plethoric  
Patients are suddenly *seized* with these Disorders after an im-  
moderate Use of Venery, liberal drinking of het Wine, the  
**Use** os too hot Baths, violent Exercise in an het Air, or expo-  
sing themselves to the Sun, as we are told by *Prosper Mar-  
tianus* in his Comment; as, also, why these Disorders are  
brought on by violent Commotions os Mind, and Surfeits,  
especially is the Body is exposed to Cold . And I myself know  
Instances of Persons, who, after drinking too copioufly of  
Wine or Ale, and exposing themselves to the Cold, have sud-  
denly died of Apoplexies.

Besides, a Redundance of Blood contributes to bring on  
t Palsies, when the Blood, by Spasms of the inferior Parts, pro-  
duoed by any Cause, is forced to the superior Parts, and espe-  
cially the Head, and there stagnates. . Hence we are to account  
for a spasmodic Apoplexy, and a sanguineous Hemiplegy,  
which happen to hypochondriac and hysteric Patients; a me-  
morable Instance os which is found in *Fred. Hoffman. Consult.  
Med.* For this Reason 'tis, also, often observed in Practice,  
that the Menses, and haemorrhoidal Discharge, when not duly  
Carried on, contribute much to the Production of Palsies. Pa-  
ralytic Disorders scarce eVer sail to he excited by a sodden  
Stopping of any Evacuation of Blood, when actually flowing ; so  
that they are Very often brought on under the Menses, Hae-  
morrhoids, and Lochia, by violent Frights, excessive Cold,  
and the preposterous Use of Astringents, Repellents, and Opi-  
ates.

Thus the Blood by its Stagnation produces Palsies and Apo-  
plexies, though, for the most part, of the sanguineous and  
transitory Kind ; but, in Process of Time, serous and longer  
protracted Palsies and Apoplexies But these are immediately  
produced by a serous Colluvies, too copioufly congested in the  
Head, and acting on the Origins of the Nerves. Hence 'tis  
certain from Experience, that Violent Palsies are produced by  
suddenly checking and suppressing serous Excretions, critical  
Sweats, insensible Transpiration, an immoderate Discharge of  
the Saliva, whether spontaneous, or excited by Mercurials,  
serous Discharges from the Ears, Eyes, and Nostrils, inveterate  
Ulcers, Fontanels, and'a fetid Discharge from the Feet. For  
this Reason Infants, otherwise free from such Misfortunes, are  
subjected to paralytic Disorders . Thus an Instance of a Palsy  
produced in a Boy of two Years old, by a Suppression of Tran-  
spiration, is found in *Fred. Hoffman, Consult. Med. Sect.* I.  
*Cap.* 26. For the fame Reason, long Walking, or continuing  
in cold and moist Places, contributes to the Production of Pal.  
fieS. Memorable Instances of this are found in *Forestus, Lib.*io. *Obs.* 83. os' 84. To this, also, belongs that memorable  
Case in *A. N. C. Decad.* 5. *An.* 7. et 8. *Obs.* 2O3. where  
we have an Account of a Man os Seventy, who, after a Deaf-  
ness suddenly ceafing, was seized with an Apoplexy of the Right  
Side; which was only owing to a Tranflation of the Serum the  
first Cause of the Deafness, to the spinal Marrow of the Right-  
Side.

**These** Disorders will he **the** more terrible, if **the** Serum  
conveyed to the Head is acrid, scorbutic, and preposterously  
reoal'd from the Joints and Skin by repellent and sulphu-  
reous Ointments: Hence there are various Instances of  
Achors, Crusta Lacteas, Tineas, Itches, and Purple Fevers,  
which, when repel'd,. have been immediately succeeded by  
Palsies : The fame holds true with respect to arthritic, gouty,  
and rheumatic Disorders, which, as is sufficiently known, are-  
supported and cherished by an acrid Serum lodged, about the  
membranous Parts *of* **the** Joints ; *for if* this Serum is.eitherby  
Opiates,, or Astringents, ufed to alleviate the Pain, repelled,  
or if it. recedes through a natural Imbecillity, it proves the  
Cause of the most obstinate Palsies. Thus an Instance of an  
Hemiplegy, arising.from a rheumatic and arthritic Disorder, is  
found in *Fred. Hofsenan. Consult. Med. Case* 2I. To this Class  
evidently helongs the scorbutic Palsy, which is always spurious,  
and derives its Origin from an acrid scorbutic Serum stagnating  
about the Beginnings of Nerves, and compressing them. Such,  
also, is the Nature os Mercurials, that, when preposteroufly used  
in weak and impure Habits, in order to promote a Salivation,  
they induce Palsies ; for Mercury, when mixed with the **saline**and excrementifious Particles of the Body, acquires a strongly  
' stimulating Quality, by which it principally acts on the nerveo-  
fibrous Substance. of the Glands, and. excites a greater Afflux  
of the saliVal and lymphatic Humours. If the Discharge os  
these from the Mouth is by any Cause suddenly stops, it easily  
happens, that, whilst the Afflux continues, these Juices are too  
copioufly Convey'd to the Origins of the spinal Marrow, and

the Nerves themselves, where by stagnating, and compressing  
them, they hinder the Influx of **the** nervous Fluid into them.

Spasms of the Membranes surrounding the Brain, and spinal  
Marrow, also, frequently say a Foundation for hemiplectic and  
apoplectic Disorders : The Reason of which is no. other than  
this, that the nervous Membranes, agitated by so Violent Mo-  
tions, are weaken'd, relaxed, and render'd incapable of hinder-  
ing the Juices winch enter them, however lymphatic and thin,  
from stagnating in the Vessels of the Membranes, and com-  
pressing the medullary Substance. Hence Experience informs  
us, that an Epilepsy is frequently succeeded by an Hemiplegy,  
which, if fetal, always terminates in an Apoplexy. And what '  
should he the Cause, that a great Fit of Anger is sometimes suc-  
Ceeded by paralytic Affections, but that, by means of this vio-  
lent Passion, there is a stronger Constriction of the Nerves and  
Veffeis, producing that Stagnation of the Humours, which is  
so subject to intercept the Influx of the nervous Fluid?

All these Causes exert their pernicious Force with the greater  
Ease and Certainty, if they meet with a Flaccidnefs of the  
Brain, and a Debility os the nervous Frame: For, if the ner-  
vous Parts are too lax, they are the less able to resist an Inunda-  
tion of Humours; bur, on the contrary, are in a furprifing  
manner disposed for their Stagnation and Extravasation. A  
Weakness of the Nerves may he known from antecedent  
Causes, such aS Old-age, a sanguine Temperament, and from  
thence a lax, soft, and spongy Habit os Body; a sedentary and  
idle Lise; too scanty an Use of Liquors, or too great an Indul-  
gence of thick hope Malt Liquor, or Wine; rich and plentiful .  
Feeding, too much-Sleep, aS well as immoderate Wakefulness,  
much Study and Meditation, Indulgence in Venereal Pleasures,  
Sorrow and Griefof song Continuance, an Habitation in cold and  
moist Places, and a wintry Season. Bodies thus weaken'd, are by  
the flightest Cause, and what seems not worth Attention, dis-  
posed To Palsies and Apoplexies; as it happen'd, for Instance, to  
a certain Person, who, aster drinking the *Selteran* Waters,  
tho' in a regular Manner, and with a Body well prepared, ’was  
seized with an apoplectic Fit, which left behind it a spurious  
Palsy.

Having premised these things relating to an Hemiplegy, we  
are now to treat of the particular Species os a Palsy. And  
here, those which deserve our chief Attention are, such as  
affect the lower Parts of the Body, or only the Legs and Feet,  
or the Abdomen, and all the Parts seated below theDiaphragm,  
the Parts above it remaining sound and unaffected. In the latter  
Case, the Cause is lodged in the spinal Marrow, about the first  
Vertebrae of the Loins, as is sufficiently demonstrated by the  
Dissections os the two Patients who died of this Disorder, and -  
the Accounts os which we have in *A. N. C. Vil.* 2. *Obs.* 5s,  
et I 2o. in one of these Patients the spinal Marrow, about, the ’  
first Vertebrae of the Loins, was shatter'd and dissolv'd *for more*than half its Thickness. In the other, the spinal Marrow, thro'  
the whole inferior Part of the Spine, was so flaccid, and destitute  
*of* Juice, that there was a considerable Interstice hetween it  
and the Bone. This Disorder arises either, first, from external  
Violent Causes, such as Fractures, Laxations, or Wounds of  
the Spine, at the same time affecting the Marrow ; two Cases  
. os which Kind are found in *A. N. Co Cent.* Io. *Obs.* 8. et  
*Dec.* I. *An.* 3. *Obs.* 66. or, secondly, from internal Causes,  
and especially rheumatic, or convulsive Disorders of the Back ;  
as is obvious from the memorable Case before quoted from  
*A. N. Co Pol.* 2. *Obs. 102.*

Sometimes the Couse is, lodged within the OS Sacnrm ; in  
which Case the Disorder discovers itself by an Inability of Walk-  
ing, and a Palsy of the Legs and Feet. This Species of **the**Disorder is sometimes hereditary, and depends upon a preterna-  
tural State of the Marrow contained within the OS Sacrum:  
Instances of this Kind arising from original Tumors within the  
OS Sacrum, which afterwards became exulcerated, and proved-  
mortal, may he seen in *Hist. Morb. Wratifl. Am.* I7OI.  
The same happens after acute and intermitting Fevers, which  
terminate ill, if the Patient uses a bad Regimen, or indulges  
himself in Passion. And, in these Cases, the Cause os the  
Misfortune is a peccant Serum, by Tranflation convey'd to the  
Marrow of .the Os Sacrum. . The same Disorder is incident to  
Women after difficult Labours, Abortions, and Retentions of  
the Lochia; nor does it proceed from any other Cause, than  
Blond too copioufly convey’d by the Spasms to the Os Sacrum,-  
there becoming stagnant, and, unless Relief is seasonably afford-  
ed, suffering its serous Pari to he secreted through the sinall  
Pores of theVeffels. - « .

- There is a remarkable Species of Palsy incident to the Antis,  
which, when it succeeds a Colic, unseasonably cheek’d by Ano-  
dynes and Opiates, is called *a Paresis arising from the Colic.*The Cause of it is a peccant and acrid Serum, by a Tranfia-"  
tion convey'd to the nervous Parts of the Arms, and especially  
those os **the** Carpus. Thus, in *A. N. C. Decad.* 3. *An. y.*

*Append, ad Obs.* 3c8. we haVe a memorable Instance os such a  
Palsy succeeding a Colic stopt by Opiates; And in the same  
Work, An. 4. *Obs.* 30. we have an Account of a Palsy sue-  
ceeding a Colic, produced by drinking Wine edulcorated by  
Litharge. This Disorder is Very familiar to those who work  
in Lead Mines, who after a Violent Colic, accompany'd with  
an obstinate Costiveness, induced by the unfriendly Steams,  
fall into a Palsy os the Arms. This Disorder may, also, arise  
from other Causes, and sometimes proceeds from a scorbutic  
State os the Humours; an Instance os which -is sound in  
*A. N. C. Decade* I. An. 3. *Obs.* 334. Sometimes the Cause  
**os** this Disorder is lodged within the Vertebrae of the Neck, and  
fiIperior Vertebrae os the Back, from which the Nerves are dis-  
aributed to the Arms. A Case of this Kind, arising from a  
Blow os a Stone on the Neck, is described by *Forest us. Lib.'*IO. *Obs.* 95. This Disorder, also, sometimes succeeds a  
. Dropsy of the Breast, as *Carolus Pise,* in *Tr. de Morb. ex  
fcrofa Colluvie, Sect.* 3. *Cap.* 7. observes; in which Case the  
Cause is Lymph, stagnating within the small Veffeis distributed  
through the Membrane os the Nerves, by reason of its ob-  
structed Motion to the Thoracic Duct, and compressing the  
Nerves. . . . - :

As for the Prognostic of paralytic Disorders, ’tis to be obi.  
served, that a spasmodic Apoplexy, and a sanguineous Henri-  
plegy, are easily cured ; but, unless prevents by proper Mea-  
sures, frequently return, and, at last, terminate in an Hiemor-  
' rhage os the Brain. The other Species of Palsies, and a serous  
Hemiplegy, do not suddenly prove mortal. But the Cure is  
more difficult and intricate, the more the internal or external  
Senses are injured; and these Disorders frequently afflict the  
Patients during the whole remaining Parts of their Lives.  
When Infants are seized with Palsies, we sometimes observe,  
that they are freed from them about the Years of Puherty;  
hut such a lucky Change rarely or never happens in Adults.  
An Hemiplegy of the Left Side isinore dangerous than one of  
the Right, by reason.of the Aorta, and its more numerous Ra-  
inisications in the former than in the latter. If the Part affect-  
**ed is as** yet painful, capable of Sensation, not too cold, nor  
extenuated, there are some Hopes of a Recovery, which is still  
the more to he expected, if there is a Sensation of Formication  
and Puncture in it. A Palsy of the Abdomen, and inferior  
Limbs, is generally mortal, and frequency accompanied with a  
Gangrene of the affected Parts. . Paralytic Disorders, of all  
Kinds, are more easily cured in the Spring and Summer, than  
in the Autumn and Winter.

A Fever succeeding a Palsy is said to cure it ; but this is  
rather to be understood of an artificial, than a natural. Fever;  
and rather holds good with respect to a serous, than a sangui-  
neons Palsy , for, if there is a natural Fever, it must either be  
continual, which is always dangerous ; or intermittent; which  
hardly removes the Disorder: But, by an artificial Fever, we  
mean an increased Motion of the Heart and Arteries artist \*  
Cially excited; by winch means the Circulation os the Blood is  
render'd briiker, and the Juices stagnating about the NerVes,  
and their Origins, discussed, and, as it were, resorb'd. Such  
an artificial Fever is brought on by Medicines somewhat hot and  
acrid, by nervous and Volatile Substances, by Violent Exercise,  
especially in the Heat of the Sun, and by Bathe, especially  
those of *Laughstad,* and the *Caroline* Springs. But these must  
-by no means be used in a sanguineous Palsy, already attended  
with a febrile Motion; but only in serous Palsies, where the  
Circulation of the Humours is languid.

In the Cure of paralytic and apoplectic Disorders, there are  
two Intentions to he principally Pursued. The former is to re-  
move the proximate, as well as the remote Causes, which con-  
tribute to intercept the Influx of the nervous Fluid into **the**Nerves. The second is to strengthen and corroborate the Part  
affected, and whole nervous System, so as to restore them to their  
former and natural Tone. 'Tis of great Importance to know;  
whether the Disorder is recent, or confirm'd; because, in these  
different States, different Methods of Cure are to be pursued.

If, when the Physician is call'd immediately after the Inva-  
sion of the Disorder, he finds the Pulse quick, and the Face  
red, there is no more present and efficacious Method of **re-**moving the Cause of the Disorder, which is a Stagnation of  
the Bleed in the Head, than Venesection, which is forthwith  
to he used, either in the Arrn-or Neck, making a pretty large  
Incision, .that the Blood may flow in a large Stream ; or; if  
the Patient is plethoric, **a** Vein is first to he open'd in the Foot,  
lest, a Vent heing given no the Blond in the superior Parts, the  
Humours should by that means stow more copioully from the.  
inferior Parts to them. Then the Venesection is to he repeat-  
ed, either in the Arm, or Jugular Veins. It is sometimes re-  
quisite, that this Venesection should he twice, or Oftener, **re-**peated in a pretty large Quantity.

**Then, in order to make a Revulsion Of the stagnant Humours,  
somewhat acrid and stimulating Clysters, composed of the ner-**

vous Herbs, Rhe, : Marjoram, savory. Thyme, Mother of  
Thyme, Flowers os Lilies oftheValley, Oil os Chamomile,  
and, for the sake of the greater Stimulus, a proper Quantity of  
Sal Geminas, Sal Ammoniac, or human Urine, are to be in-  
jected as often as the State of the Patient requires. Bathing  
the Feet, also, pretty deep in warm Water impregnated with  
the nervous Herbs, and the Flowers of Chamomile, the Tops  
of Yarrow, arid Pot ash, is of singular Service in these Dis-  
orders./ .. . - z \* . . .

, Aster Venesection, Spasms os the internal Parts, and, as it  
.were, a febrile Ebullition of the Humours, sometimes remain ;  
for alleviating which, we are to use fixed, Diaphoretics, in  
Conjunction with precipitating and nitrous Substances, such as  
the Powders of diaphoretic Antimony, Crahs-eyes, Mother of  
pearl. Cinnabar, Nitre, and Amher, exhibited in Water of  
Lilies of the Valley, or in the Water prepared of the Flowers of  
the Lime-tree; to which may he, also, added a proper Quantity  
Of the Syrup of Citron-juice : For by such Medicines Tran-  
spiration is assisted; by which means we often find apoplectic  
and paralytic Paroxysms terminated.- Nor in alleviating **the**Spasms of the internal Parts is there any Medicine‘more essica-  
Clous, than a proper Quantity of the anodyne mineral Liquor  
'mixed with the bezoardic Liquor, or the Volatile Spirit ofTartar;  
which Medicine ought to he given alternately with the above-  
mentioned Powders, andoxhibited twice a Day. The Patient  
is, also, to abstain from all Malt Liquors, and only use De-  
coctions, pure Spring-water, or *Selteran* Water; mixed with **a**little Wine.

By a seasonable Exhibition of these Things, such Disorders,  
if recent, and as yet only supported by.a Stagnation of the  
Blood, may be soon remov'd. But when there already seems

Io he a Secretion of the Serum, the sole Intention ought to her  
to discuss and derive it to. other Parts. And in this Caso, if  
the Patient is, aS it were, lethargic, and snores, I with great  
Success use and exhibit an Emetic in a diluted Form, mined  
with Analeptics; by which means the Vital Motions are roused,  
and the Patient restored to the Exercise of his Senses and Reason.

I generally use the following Formula; - -

-Take of theArous Water of Lilies Of the Valley, of **the**Waters os4.1 me -tree -flowers. Primroses, Cinnamon,,  
and distilled Vinegar, each two Ounces; of the succi-  
nated Spirit of Hartshorn; one Dram ; of diaphoretic  
Antimony; Cinnabar, and Crabs-eyes, each half a Dram;  
of emetic Tartar, two Grains; and of the Syrup os  
Orange-bark, two Drams. Make into a Mixture; two  
Spoonfuls of which are to he taken every other Hour.

Then, in order to discuss the stagnant Serum, volatile ari-  
nous Substances, applied to the Nostriis, are of fingular Service  
Of this Class the most considerable is. Spirit of Sal Ammoniac  
prepared with Quick-lime, and mixed with Oil of Marjoram\*,  
or Rue. Sternutatories, especially of the nervous Kind, are,1also, beneficial in such Cases, fince they not only convey Mo-  
tion to the NerVes, but, also; eliminate the serous Matter by  
the Nostriis. The following inay serve as A Formula for tins  
Purpose:

Take of Marjoram, and Flowers os Lilies of the Valley, each  
two Drams ; of *Syrian* Marum, Flowers of benjamin, and  
Cloves, each half a Drain; and of powdered Castor, ted  
Grains : Mix together for a Powder, to be used instead  
of Snuff.

In obstinate paralytic Disorders, in order to derive the stag-  
riant Serum, nothing is inore efficacious, than actual Cauteries  
applied between the second and third, or third and fourth Ver-  
tebrae os the Neck I And this Method was not only highly ap-  
proved of by the Antients, but is; also, recommended by the  
Moderns, especially *Emdtolius,* in *iF’arscvia physice illustraturis*But; in our more delicate Age, we generally substitute, in the  
room of this a p par entry cruel Method, Setons in the Nape of  
the Neck ; or, if the Patient is disgusted at these, Vesicatories-  
may he applied to-the Nape of the-Neck, or the Feet ; which  
last are in delicate Patients to be prefer'd to the former, since;-  
by Vesicatories applied to the Nape os the Neck, it has heen  
found, that convulsive Motions of some Part hesore not affect-  
ed have, been excited.

If .the Disorder is Inveterate, besides the above-mentioned  
Remedies, properEvacuants are to be called in, in order to  
make a Revulsion of the Humours from the Head. And these  
Evacuants must he balsamic Purgatives, the most considerable  
of which **are** the Pilis prepared of the Extract of Colotjuintida,  
Aloes,black Hellebore, ResindfLadanum, Aloes-wood, Flowers  
ofBenjamin, Salt os Amber, Myrrh, andPariminn Balsam; each  
one Scruple; of Mercurius Dulcis, half a Dram; of Cam-  
**phire, and volatile Salt of Hartshorn, each four Grains-: Let**

twenty-four Pills he form’d out of each Scruple, and let fourteen  
of these Pilis he exhibited sor a Eioso. Among diaphoretic Medi-  
eines the most proper are, the succinated Spirit of Hartshorn,  
**the** anodyne mineral Liquor, with an Addition of a proper  
Quantity of the Essence of Castor, and Decoctions prepared  
inf Guaiacum, Sassafras, Saunders, and *China* Root. Nor, in  
serous Disorders os the Head, can we enough commend the  
Virtue os diuretic Medicines, especially of the succinated Kind,  
the most considerable os which is Essence os Amber, with acrid  
Tincture of Antimony.

They who have *for* 4 longtime laboured under paralytic  
Disorders, and are at the same time inflicted with a Weakness  
of the nervous System, ought to he treated with corroborative  
Medicines, and have a proper Regimen prescribed them. For  
this Purpose, one Part os the urinous Spirit of Sal Ammoniac,  
mixed with three Parts os Water, is a Medicine highly effica-  
cious. A nervous Mixture may be, also, prepared os the Es-  
sences ds red Gentian, and Cascarilla, bark, acrid Tincture of  
Antimony, the anodyne mineral Liquor, and the Oiis of  
Macc or Cinnamon. And this Medicine may be exhibited in  
an Infusion' os Baum prepared with Citron-peel. They who  
are afflicted with a languid Appetite, and aWeakness oftheSto-  
mach, receive great Benefit from the Elixir Viscerale, or an  
Electuary prepared of *tbe Peruvian* Bark, and that of Cascarilla.  
To old Persons nothing is more beneficial than a sew Drops of  
**the** Balsam of Lise, exhibited in the Morning in an Infusion of  
Baum.

Various external Medicines are recommended for recoVering  
Sensation and Motion. In the Days of Antiquity, strong  
Frictions of the Part affected, with rough Cloths, were greatly  
extol'd; or, if Sensation was destroy'd, they used either to  
irritate the Skin with Netties, or, previoufly using Friction with  
**a** Squill cut through the Middle, they applied Cupping-glasses  
without Scarification. It is, also, os fingular Sendee to anoint  
the paralytic Parts with Spirit of Sal Ammoniac, and campho-  
rated Spirit of Wine. Excellent effects are produced by old  
*Nhcntsu* Wine digested.in a gentie Heat with Rosemary, **the**Flowers of common Chamomile, Spike and Cloves, and with  
folded Linen Cloths applied to the Spina, Dorsi, the Os Sacrum,  
and the Joints. After Baths, or Frictionsaeea is beneficial to  
apply to these Parts nervous Liniments cWpofed of human  
Fat, Galbanum, Turpentine, Balsam ofCopivi, *PenrvianBgisu*fam, and the expressed Oils os Lavender, Juniper, Marjoram,  
Rue, Rosemary, Amber, and Nutmegs ; for distil'd Oils alone  
are improperly used, because by drying and indurating the  
Nerves too much, they do more harm than good The Head  
is to her covered with discutient and corroborating Caps T apo.,  
plectic Balsams are to be apphed to the Temples; het these  
must not be of too.agreeable a Flavour. The Head must he  
shav’d, and Powder of Amber sprinkled upon it. The hinder  
. Part os the Head is, also, with great Advantage wash’d with  
spirituous Liquors prepared *of* the Volatile Spirit os Hartshorn,,  
Spirit os Worms, the *Aqua Anhaltina,* the Essence of *Peruvian*Balsam, the Essence os Castor, and the Oiis of Nutmegs and  
Cloves. : . ... .

In paralytic Disorders Bathe are had recourse to ut the last,  
and most important Medicine. Among these the most con-  
fiderable are the hot Baths moderately used, among which the  
most celebrated are these os *Toeplitx, Emsen, IVisbaden, Aix la  
Cbapelle* ; and *Misma,* those of *Wolkenstein,* which are to  
be used when the Disorder is inveterate; but those of *Laugh-  
stad,* on account of their, chalybeate astringent Principle, are  
only proper in a recent Palsy, or one~ already subdued, and  
which only discovers itself by a Weakness os Motion: But  
the Virtues of these are surpassed by Baths artificially prepared,  
the most efficacious, os. which is,: that made with the Scoriae  
**of** Metals. Next Io these are the Baths prepared os nervous  
Herbs, and Ants. For this Purpose, the .most commodious  
Herbs are Mother of Thyme, Ironwort, Southern-wood, On.  
ganuni. Mint, Hyssop, Rosemary, Marjoram, and Chamo-  
mile-flowers; which, .wrapt up in a Pag, and boiled in a small  
Lixivium, are to be immersed in tepid Water, and the Parts:  
affected are to he fomented with them. Among liniments,, the;  
most efficacious is that prepared of *Fenice* Soap, and camphorated.  
Spirit os Wine, with an Addition os the Essences of Gaiba-.  
nium and Bdellium.. ς .; ; .... 4. - .Ἄ

- In paralytic Disorders arising from a Redundance oT Blond,  
Venesection, especially in the Beginning, is of great\* Service..  
The Antients, and among the rest, *Archigenes,* according Jo  
*Artiaso Celsus, Caelius Aurelianus,* and *Areiaus,* affirm,, that  
the Practice of letting of Bloed immediately, was authorized  
by a Tract , os faithful and constant Experience. ButVenher  
section is injurious inan inveterate serous Palsy where the Strengths  
is impaired, and the Appetite languid. For this Reason *Ballor  
essus, in Lib.* 6. advises not to open a Vein in Palsies, where a.  
cold Humour is in Motion-.and confirms the Disadvantages .of  
such a Practice by an. Example. *Tratiian* affirms, thafejnIhe-

Cure os a Palsy's Venesection is never to he used, unless when  
a manifest Redundance of Blood appears. A Vein is not to he  
open'd in the Feet, if they are cold, and spasmodically con-  
stricted. Men who have fallen into a Palsy from a retarded or  
suppressed hemorrhoidal Difcharge, after Venesection, may  
with great Advantage have Leeches applied to the Anus. And  
in the *A. N. G. Vol.* 3. *Append,* we have an Instance of an  
Hemiplegy speedily cur'd by applying Leeches behind the Ears,  
and Vesicatories to the Calves os the Legs.

These who, by paralytic Disorders, have their Heads greatly  
weaken'd, and their internal Senses, especially, their Memories,  
injur'd, ought to abstain from an incautious internal Use both  
of the hot and cold mineral Waters ; sor these Waters pass  
slowly through the too much relaxed minute Veffeis of the  
Head, and lay a Foundation for a greater Stagnation of the  
serous Humours. Nor have I sound the Aciduke mixed with  
Wine, sorordinary Drink, salutary, because the Head is too  
much silled with the spirituous Vapour. But if the Patient is  
young, and the Disorder has arofe from the hypochondriac Pas-  
sion, the more temperate os the *Caroline* Springs, or even cold  
Mineral Waters warm'd, may he used : But when the Patient  
drinks these Waters, which ought to be used in a smalFQuan-  
tity, he ought to guard against Cold, Grief, and Fatigue os  
Mind ; he is not to indulge himself in too much Sleep, but  
carefully to use Bftercise, and nervous and balsamic Medicines.  
In general, 'tis to be observed, that the drinking of these Wa-  
ters is far more proper when the Disorder is in its Decline, than  
when in its Vigour.

Artificial Baths prepared of Ants, and nervous Herbs, are **the**more efficacious, the lighter and finer the Water of which they  
consist, is. For this Reason, the best.is thought Rain-water ;  
or, if that cannot be had. Water is to he taken from a River  
aster a large Fall of Rain. But all artificial Waters are fur- -  
pasted by those of *Toepliix,* which, in Lightness, surpass Rain-  
water, and by their discutient, and diaphoretic Virtue, restore  
the Tone and Strength os the affected Parts. We, also, know  
from experience, that suffering **these** Waters to drop on the  
Beginning of the spinal Marrow has frequentiy been os fingular.  
Service in dissolving the stagnant Humours.

For paralytic Disorders, especially of the inveterate Kind,  
cold and gentiy astringent Baths are deservedly recommended ;  
as, also, Fomentations, prepared os the Roots of the greater  
Confound boil'd in Water. In this Case may be used chaly-.  
beate medicinal Springs, such aS those of *Fregenwalden,* .those  
of *Laughstad,* and those prepared of the Scoriae of Me-  
tais: But they must be applied only tepid; otherwise, by throw-  
ing the Mass of Blood and Humours into too great Commo-  
tions,1 .they excite Anxieties, Cephalalgias, and Palpitations of  
the Heart. These Waters, by exciting an artificial Fever,  
augment the Disease, since, by constricting the exterior Parts of  
the Body, they render the Motion of the Blood and Humours  
greater to the internal Parts, and especially to the Heart, **and'**large Vessels, which-surround it. Hence the Systole *os* **the**Heart and Arteries is render'd quicker and stronger; and, con-  
sequentiy, the Circulation os the Humours through the minute  
Veffeis, briiker. Hence it may easily happen, that Ob-  
structions are removed. Viscid Juices resolved, and Stagnations  
discussed. But these Bathe are not to he used by Persons tur-  
gid with Blood, such as labour under a Dyscrasy of the Hu-  
mours,- or those afflicted with a Weakness of the solid Parts,  
such as old Persons. . . .

Washing the Head, in paralytic Disorders, is os singular Ser-  
Vice, especially in those-accustomed to it; but they who are  
not accustomed to it, are to begin with a Lixivium which is,  
not Very acrid, and has nervous Herbs boil'd in st. Then let.  
the Root of Asarabacca,. and the Herb Rosemary, be inclosed-  
in a Bag, and boil'd in the Lixivium. But these Medicines are:  
not to be used, till the Patient is previoufly purged. .... '.s

In a scorbutic Palsy, which is generally of a particular and:  
spurious Nature, little Good is done by external Remedies; Jo.  
is rather expedient by diluting Decoctions and Infusions, both.  
hot and cold, used as ordinary Drink, to correct the Acrimony  
of the Humours, and subdue It thy antiscorbutic Specifics, of  
winch the most considerable are Earth-worms, either in Powder,,  
or their Juice exhibited in Whey., Then the grosser Parts of  
the Sordes are m be; eliminated thy Stool, by laxative Prepara-  
tions os Manna and Rhubarb. But the more subtile Parts os.  
the Sordes, fluctuating in the Blond, are to be. carried through  
the cutaneous Pores, by means os the diaphoretic Powders ; for  
unless the whole Mass os: Humours he purged, there can he no  
perfect Cure: ;.ss . . - . . ?

. A Palsy \oTthe Eye-lids is produced by a Translation or/  
Stagnation: of the Humours ; and, unless soon removed, be-  
comes incurable. Γ have observ'd, that the.mod effectual Me-  
thod os removing this Disorder was to anoint the Eye-lids,  
Moming and Evening with the Balsamum Vine .warm, or with\*  
Oil os Cinnamon and doves, mixed with: some pinguious Sstb-X

**stance. Neither are we to neglect the Derivation and Era-**cuation of the peccant Serum, which may he obtained by Lax-  
atives, Diuretics, and Vesicatories. Hence, in *Ac N. C. Vol.* I.  
*Gbse* I4O. we have an Account of fuch a Palsy of the Eye-  
lids, happening after the Mealies, cured by Vesica tones.

A Palsy arising from a Colic requires such Medicines, as by  
Transpiration eliminate the peccant Serum from the Blood.  
Externally, singular Service is done by the Skins of newly kill’d  
Animals applied hot to the Parts affectsd; which may be, also,  
rubbed with an Ounce of human Fat, mined with a Dram of  
the Oil of Cloves, in this Disorder great Service is, also,  
sometimes done by the Application of blind Cupping-glasses,  
by which we have an Instance of fuch a Palsy cured in Ac Hi. C.  
*Decad.* I. *An.* 3. *Cbsc* 308.

In paralytio Disorders a serene and temperate Air is of great  
Use: Hence *Caelius Aurelianus, in Lib.* 2. *Cap.* I. *Chron,* orders  
the Patient to he laid in a sight Place, so that the Chamber must  
be neither too hot, nor too cold, but temperate. The Aliment  
ought, also, th he light, and of eafy Digestion, especially in the  
Beginning, when the Pally is, for the most part, an acute Dis-  
order, and the Force of the Stomach always languid. Nor are  
Wines, or Malt Liquors, of any Kind, to he used, especially in  
the Beginning: But, when the Disease is of a longer Standing  
a fuller Diet may be allowed.

For washing the paralytio Parts when dry, or assecied with  
Sin Atrophy, we are by no means to ufe Spirit of Sal Ammo.  
Diac, which is rather to be used when the Parts are fwell’d ., in  
which Case it is, also, expedient to inclose the tumid Parts in  
a sinall Sack, filled with the following Species:

Take of Bran and Millet, each four Handfuls : Mix them  
in any Kettle, or proper Vessel ; dry them over a gentle  
Fire; put them in the Bag, which is to he applied warm  
to the Part asse&ed, when the Patient goes to Bed.

Violent Disorders of the Head, such as Lethargies, Apo-  
plexies, and Hemiplegies, are very familiar to old Persons, and  
almost incurable. For the fake of Prevention, therefore, it  
is expedient, they should carefully abstain from all those things,  
which can weaken the nervous System, or render the'Circula-  
tion of the Blond through the Head flower ; and particularly  
from Cold, especially when the Body is disposed to sweat, from  
.liberal drinking of spirituous Wine, from Grief, from Terror,  
and from the Intermission of usual Venesection. Old Persons  
-ought, also, to abstain from the excessive Use of Tobacco, vapo-  
rous Preparations of Wormwood, thick Ale, and a moist and  
vapid Air. That in old Persons these Disorders are rarely cured,  
is, in my Opinion, owing to this, that their Blond abounds  
with a pituitous and glutinous Humour, which greatly contri-  
butes to hinder the Regress of the Blond through: the small  
Veins, and venous Sinuses of the Brain, the former of which  
.it obstructs by its Viscidity. But ’tis no easy Task to remove  
those Obstructions, which are deep-seated in the Vesseis of the  
Train. . ..... . .. . . '

. Paralytic Patients, when aheunding with Fat, and a Re-  
wundance of peccant Humours, are not easily restored to Health  
and Strength, uuless they use a drying Regimen, which con-  
.sists in abstaining from Broths, boiled Meat, and moist Substances;  
in using little Drink, especially ofthe thick Kind. They are  
only to use a sinall Quantity of the Decoction prepared of  
*China* Root, Shavings of yellow Saunders, Sasafras, and Raisins.  
They may, also, drink a moderate Quantity of generous Wine,  
‘ They must eat no Flesh, but what is roasted ., and may he  
allowed stoned Raisins. The Body, and its various Members,  
ought, also, to he carefully exerdfed. *Hoffman.*

A Pally is such a lax State of the Muscles, as is sufficient to  
produce an Immobility not to be surmounted by any vo-  
luntary or vital Efforts. In this Disorder Sensation is some-  
times absolutely destroy’d ; at other nines, a small Degree of  
. it, accompanied with aStupor, and, as it were, a slight punctory  
. Pain, remains.

The most immediate Cause of this Disorder is always found  
. to be an intercepted Influx of the nervous Fluid from the Brain,  
Or of the arterial Blood into the paralytio Muscle.

This Disorder 'may therefore arise,

I. From every Cause capable ofproducing an Apoplexy ;

2. From every Circumstance whichtenders the Nerves un-  
. sit for transmitting the animal Spirits ; and, ’ :

3. From every Circumstance which binders the Ingress of  
the arterial Blond into the Muscle. Hence we understand the  
respective Natures of a Paraplegy, an Hemiplegy, and a Palfy  
of a particular Part.

A Palfy may therefore be produced by an Apoplexy ; a  
flight Parapoplexy ; an Epllepsy ; Convulsions ; intense and long-  
protracted Pain ; a Retention of any of the usual Evacuations,  
attended with a subsequent Vertigo, fuch as, a Suppression of  
the hiemorrhoidal and menstrual Discharges, the stopping of

Abscessis and Fistulas; the Retention of.the Faeces, ITtiohy  
and Saliva. This Disordered also, produced byTranflations of ’  
any morbid Matter, either in acute or chronical Diseases hy ’  
whatever injures the Nerves, either hy Obstruction, Solution,  
Compression, Ligature, Distortion, Distraction,, or Constri- ’  
ction : Hence a Pally may he produc’d by gains Humours, \*  
.Wounds, Erosions, Abscesses, Gangrenes, inflammatoryTu-  
mors in the integuments of the nervous Medulia, in **the**Ganglions, and the Nerves themselves; by serous, purulent,jichorous, and scirrhous Tumors j by strong and tight Liga-  
tures; by Fraclures, Luxations. highly astringent Aliments,  
Medicines, and Poisons. Hence a Palsy may he generated by  
excessive Cold, intense Heat, a cold and moist State of the  
Air, the continual and excessive Use of warm Water, and **the**Steams of Antimony, Arsenin, recent Laine, Mercury,' and;  
other Poisons. - - ' ~ ' " ‘"

The immediate and remoto Causes already enumerated, and  
concurring to the Generation of a Palsy, produce various Ef-  
fects, according to the different Seats where they reside ac-  
cording to their different Strength; according to the Diversity  
of the Part affectsd, as it is more or lest, mord mediately or more  
immediately, necessary to Lise ; for, from these Circumstances,  
the Disorder may he reckoned more or lest mortal, curable or  
incurable.

Α Palfy of the Heart, Lungs, Muscles subservient to Re-:  
spiration, and the Throat, soon proves mortal .. A Palsy of the  
Stomach, Intestines, and Bladder, arising from internal Causes,  
is highly dangerous : A Pally of the Muscles of the Face is bad,  
and easily convertible into an Apoplexy,; A Paraplegy is highly  
dangerous, prognosticates an Apoplexy, and, when the letter  
happens, the former proves mortalAn Hemiplegy is bad,  
partakes of the Nature ofa Paraplegy, and, consequently proves  
mortal, when an Apoplexy happens: A Palsy, accompanied  
with Coldness, Insensibility, and Atrophy of the Part, is bad, and  
rarely curable: A Pally, accompanied with violent Convul-  
sions, and an intense Heat of the opposite Part, is bad rf bur,  
from the Symptoms opposite to these, ‘tis known whet Palsies  
are curable and less dangerous ; as, also,- whet in this Disor-  
der are the Causes of so sudden Deaths, which happen without  
any previous Sign, or almost any concomitant Symptom. ;

The Physician who applies what has been said to all the  
Muscles, whatever their Functions are, will understand the  
Causes, and know the Diagnostics and Prognostics, of an al-  
most infinite Number of surprising, and, otherwise, unaccounta-  
hie Diseases. «

Nature cures a Palfy, by attenuating and dissipating the mors  
hid Matter, by a bad Crisis deposited in the exterior Parts of  
the Brain, its Ventricles, about the Medulia oblongata, the  
Medulla fpinalis, and the Egress of the Nerves from the Marr  
row, by resolving the impacted Matter by a violent superven-  
ing Fever, by moving the impacted Matter by a convulsive  
Tremor of the Part, and by eliminating this Matter by i  
copious and long-protractsd Diarrhoea. \_

The Cure requires a Removal of those Causes which binder  
the Functions of the Nerves and Arteries.; and then a Re-  
stitution of the free Circulation of the Fluids.

The Causes hindering the Functions of the Nerves and Ar-  
teries are «moved by various Methods, easily appllcable to  
thesis Causes previouily known. .... .

If the internal Cause of. a Pally is a gross and stagnant  
Matter, fuch Medicines must be used, as are capable of . pro-  
ducing those Circumstances, by which Nature cores this Dis-  
order. - - -

**The Cute** of a Pally is to **be** attempted,

**I.** By attenuating and dissipating 'Medicines ; such as aro-  
matrc, cephalic, nervous, and uterine Vegetables, the express’d  
Juices, Infusions, Decoctions, Spirits, or Preserves of which  
may be used: By fixt Salts obtained from thefe, by Calcina-  
tion; by volatile Salts obtained from them, by Destination dr  
Putrefaction: By Oiis obtained from these, by Expression,  
‘ Coction, Infusion, and Destination; By saponaceous Substances  
artificially prepar’d of a Combination of these : By the strong-  
scented Parts of Animals, arid the Juices, Spirits, Oiis, Salts  
and Tinctiires of insects: By fossile Salts,- metallic - Crystals,  
and fuch Compositions as principally consist of there Substances :  
By all these so judiciousty mix'd, as thet they shall mutually  
assist each other: By. these means the Attenuation and Dissipa-  
tion of the Matter, together with a febrile Heat, are obtain’d.

2. The Cute is to be pursued by strong Stimulants, and such  
Substances, as, by exciting a nervous, tremulous, and convulsive  
Motion, powerfully dissipate the impacted Matter; Of this  
Kind, the most considerable are strong Sternutatories and Eme-  
tics, especially when frequently repeated-.

3. The Cure is to be attempted hy; hot, resolvent, aroma-  
tic, or fossil and acrid, metallic, mercurial and antimonial  
Purges; and coofequently strong Hydragogues exhibited in large  
Doles, and for several Days successively repeated; by which

means a copious, and sometimes a long-protracted Diarrhoea  
may he excited. ' .

*An By* fisting the Vesieis of the Body with large .Quantities  
of - attenuating Liquors ; and then exciting a greater Degree of  
Motion and Sweat, by means of the Steam or Vapour of  
kindled Spirits. . ' .

. Hot, dry, external Frictions to a Redness of the Part, or  
Frictions with penetrating and stimulating animal or vegetable  
Spirits, or with nervous Oiis, Liniments, Balsams, and Oint-  
ments, are beneficial in the Cure of this Disorder. Vapour-  
-baths, and Immersions ; acrid, aromatic and attractive Plain  
’sters; Cuppings; Scarifications; Vesicatories; Fustigationsy  
and such Things as excite Pain, and a gentle Inflammation, as'  
Nettles,' are also serviceable in the Cure of a Palsy. Formulae  
sor this Purpose are these' following.

Take of Mastich, Olibanumjand Amher, each half an Ounce ;  
min up .into a Powder: Let half a Dram os this he  
sprinkled on live Coals, and when the Steam arising is  
receiv'd into an hot and dry Linen Cloth, let the Parts  
affected he strongly rubbed with is.

Take of the Spirit of Lavender, three Ounces ; of Sal Am-  
. - moniac, two Drams ; of the Tincture of Castor, sour

Drams; and *of* distipd Lavender-water, six Ounces: Make  
into a Mixture, with which the Parts affected are to he  
rub'd. ...

Take *Of* Ciimin-plaister, Melilot-plaister, and pure Galba-  
- num, each one Ounce ; and of the Oil of Castor, half ah

Ounce : Make into a Plaister, to he applied upon Leather'  
to the Part affected, after previous Friction.

. Take of .the Oiis, by Infusion, of Wormwood, Dill, Cha-  
momile, Nep, Rue, sweet Trefoil, .Castor, Saffron, Or-  
**ris,** earth-worms. Spikenard, and Earth, each one Dram ;  
and ofthe Unguentum Agrippae,, the Unguentum. Ar-  
tanitai, the Unguentum Martiatum, and the Unguen-  
tum. Nervinum, each six Drams : Make up into'a Lini-  
ment, to he applied to the Parts affected;

- Acrid Plaisters are the Cumin-plaister, tho Galbanum-plai-  
ster, the Melilot-plaister, and some others, ss.

But we are above all things to take care, that all these **Re-**Inftdies may, if possible, be applied, to the Seat of the Causes,  
when detected. Now the Part affected, **the** various .'Parts la-  
bouring under the same Disorder, a Knowledge of the Muscles  
mid Nerves, of their Unions, Origins, .ap’d Distributions, and  
**a** Knowledge of the Functions depending on each of these,  
.when compared with each other, clearly indicate and . point out  
**the** latent Seat of **the** Disorder. *Boerhaave Aphorism. .* ς

**. ; A PALSY IN THE IRIs.**

The excessive Contraction and Dllaiation of the Tris are oc-  
Xasioned by a sort os Palsy in its Muscles, . The Dilatation pro-  
joeeds from a Palsy os the circular Muscle j the Contraction, is  
caused by a Palsy iff the radial Muscle, The general Cause  
**of these** Palsies must he deduced froth **an** Obstruction jn **the**.NerveS os theChoroides ; which, by their Communicationwith  
Ihe Nerved of these Muscles, produce their Motion. It happens,  
tho' seldom,' that the Pupil is almost deprived os any Motion,ei-  
ther of Contraction orDilatation while the Sighs, tho'wedk, still  
.remains.- In this Case, 'tis to be observ'd there is a Palsyin thener.  
iVous Filaments of the Iris; and that the impression *pf the ..Ob-  
ject* is convey'd to thejOptic Nerve, by means of its close Union  
-with the.Choroides,,. 7 J have always reinatked, .’that. the Palsy  
**.-ofthe**Choroides is attended with that’of the Iris; and That the  
Palsy of the nervous. Tibriis of the Tris does not damage the  
-S Choroides, tho' it weakens the Sight ; which seems to*' be , he-*.casioned from the too great Dilatationsor Contraction of the  
-Pupil, which, bysidmitting.either too many or toe few Rays,  
renders the Sight imperfecti **I i 4**

,. A PALAT E THE UPPER EyE-Liher

. The upper Eye-lid I. becomes paralytic, when It in drawn  
-down, and cannot be raised ; or.when it.is raised, and canriot  
be brought down. In the first Cose, the Elevator Muscle.. is  
affected ; in the second, the Orbicular, or Depriniens. This  
-rPalsy.is either perfect,, or imperfect: Tris said to he perfect,  
when the Eye-lid is almost destitute of Motion ; and imperfect,

\_ when, the Eye-lid has some^Motion'r. This last Sort has several  
'. Degrees, which differ only in their having more or less MO-

When the Eye-lid remains always open, 2nd without  
LLvtion, it is what the Antients called the Hare's Eye,

In the Palsy in general, both Sense and'Motion are ofte»’  
lost ; but, in this sort of Palsy, the Defect is in the Motion;  
whilst the Sense is nor injured, or, at least,, very seldom. . .

AS Palsies are generalsy the Effects of an Apoplexy, thin  
may he called a sort of flight or insensible Apoplexy. The  
Matter which causes it is thrown upon,, obstructs, and com-  
presses **the** Nerves, that supply **the** Fibres which move the Eye-  
lids. Purgatives, and all Remedies used for the Palsy in ge-  
neral, are proper in **the** present Case. The hot mineral Wa-  
ters, the Success of which we daily experience, are equally be-  
neficial in this Palsy. I have cured several of this Disease by  
Purges, Sudorifics, and, above all other Remedies, with Viper-  
broths. '.

The following Fumigation receiv'd in the Eye, and the  
neighbouring Parts, may he used. It is made os Rosemary,  
Thyme, Sage," and Wine boiled in a Coffee-pot: Let the Put  
he covered with a Funnel ὅ the broader Part os the Funnel must  
fit the Coffee-pot exactly : Let the Eye be placed hesore the  
Steam, which comes out of the End os the Funnel, as from a  
littie Chimney; this must be done Night and Morning, sor  
about a Quarter of an Hour. It is os the same Efficacy, as  
the pumping os het mineral Waters on paralytic Parts: Care  
must be had toplace the Eye at a due Distance; to support the  
Heat.. The following Method must be used at the same timer  
Takea little pewter Pan, that will cover the Eye-lid, with a  
Pipe at its Bottom in the Form of an Handle, about *sour* Fin-  
*gers* in Length. Let this Pipe be filled with Spirits of Wine  
distilled' several times on Cloves, Lavender; Origanum, and  
Thyme r Afterwards-lay the Pan on the Eye; and heat the  
Handle .with .your Hand. The Spirit thus rarefied hears on  
the Part, and there excites the animal Spirits in the moving  
Fibres. Care must be had to repeat this three Times a' Day-  
Several have heen cured by these Means, especially when the  
Disease has nor been inveterate. 7

The Eye-lids are likewise, attacked with a quick, involuntary  
Motion, or Vibration, winch I take to he a convulsive Motion  
of the Eye-lids. When this Accident happens seldom, it is  
os no Consequence, and is cured by rubbing the Palm of the  
Hand with *Hungary* Water, and applying it afterwards to.  
he Part, sor some Moments; three times a Day.

This convulsive Motion degenerates, sometimes, to a total  
Convulsion of the Eye-lid; then the Eye-lid remains shot  
about a Minute, and is afterwards raised ; this happens often  
in the Day: During the Time of this Convulsion,, the Fibres  
of the orbicular Muscle, which it affects, thecome stiff and  
tense. It may be compared" to that Sort of. Convulsion coin-  
monly called the Cramp, which seizes the Leg in the Night, .  
'and continues some time before the Position os the Leg can  
be altered. The Cause os this Convulsion must be deduced  
from the irregular Motion of the animal Spirits, which,‘flow-  
Ing wlrlrtoo great Rapidity intO the Fibres of the orbicular  
Muscle, obstruct, sor a short time, the Action of the Musch-  
lusattollens. ' ' - - . ... -- . ..

S. This Conyulfion may he instantaneouily removed, either by  
nibbing the /Hand round the Orbit and the Eye-lids, or making  
the Persons sneeze in the Time of the Fit. δ᾽. J

Although either 'of these Methods give immediate Ease, **yet**.they do not prevent the Return of the Convulsion ; for which  
.Reason proper Remedies, both internal and external, must her  
'employed, as Bleeding, Purges, and Antiepileptics; such are,  
'Piony-rooss and Seed, a Decoction of the sudorific Roots and  
'Woods, The Miselto ofthe Oak, Cinnabar Of Antimony,  
The Volatile .Salts, and the like. ’.Among all these Remedies,  
T have inot found a more efficacious one;'than the sublimed .  
. Flowers of Sal Ammoniac, mixed with the Caput Mortuum os  
.Oil os Vitriol; they must the washed in common Water to  
/carry *off* their Salts, and afterwards they mint he dried ; **three**

Grains of them “must he Taken every Morning in the Confectio  
Hyacinthi. This Medicine commonly removes the FitS .of  
'the'Convttlsion before'the eighth Day. "As to external Reine-  
dies, let the upper Part of the Eye-lias he rubbed withan Oint-  
ment shade os the Oil of Earth-worms, mixed with'some  
Drops of Sal Volatile oleosiim, or compound Baum-water. - The  
distilled Water os Elder-flowers is, likewise. Very beneficial in  
the Convulsion and Palsy os the Eye-lid.

When the Eye-lid remains shutsand cannot be raised, there  
is an Operation which takes off Part os the Skin of that - Eye-  
lid. When the Wound is healed, and the. Skin is less ex-  
tended,’ the Musculus attollens os that Eye-lid recovers its  
Motion, the Disease is cured, and the Person opens and shots  
his Eye-lid at Pleasure. *"St. Trees.*

. PARAMERIA, παραμήρια. The internal Parts of**‘the**Thighs. ..... ‘ - \*

PARAMESOS, π'άραμεσος. The Ring-finger; that which .  
is next to the Littie-fingers -

**PARANOEAs παρἀίειαγ from παρανοέω, to he delirious.  
A** Delirium, or Alienation of Mind.

PARAPAR. Clim A sort of *Indian* Kidney-Bean. *Raise  
Hist. Plant. . ' ' ,* . I I

PARAPECHYON, παραπόχυον. The *Radius,* a Bond  
of the Arm. . - . - . :

PARAPHIMOSIS.^ . si . /

When the Prepuce is either naturally so short; or so swelled  
and contracted, that it cannot he drawn over the Glans, a Dis-  
order is produced, called by the *Greeks* Paraphimosis. By this  
Stricture os the Prepuce, the Circulation of the Blood in the  
Glans is generally so much obstructed; that not only a Tumoc-  
of the Glans is occasioned, with Violent Inflammation, and most  
acute Pains,, but a Sphacelus is induced, and the Penis must-  
he subjected to Incision. Those are most affected with thia  
Diforder, who have naturally a Prepuce too narrow, and who  
exert themselves too Vigorousiy in Coition, especially with Vir-  
gins, in whom the Vagina is strait. Young Husbands are  
sometimes egregiously mistaken, when, after the Embraces of a  
new Spouse, they find themselves affected by this Disorder ; and  
therefore imagine her to have been unchaste and infected, while  
the real Cause was, the natural Stricture of Virginity. Some-  
times those Youths, or Boys, are affected by this Disorder,  
who, having a Very tight Prepuce, lasciVioufly draw it back,  
while tho Penis is in a State of Fisccidity; by which means,  
an Erection being occasioned, the Glans becomes tumid, and  
the Prepuce cannot be returned. Thus have I seen a surprising  
Tumor os the Prepuce occasioned behind the Glans. Nor is  
into he denied, that those are, sometimes, liable to a Paraphi-  
InosiS, who. have engaged in impure embraces ; for while the  
Penis, And interior Skin, are infected and corroded by the Viru-  
lent Matter, the Prepuce may Very readily be attacked with  
**an** Inflammation, Tumor, and those other Disorders hesore-  
mentioned. ..; . - . . ;.

The Cure of a Paraphimosis principally consists in reducing  
the Prepuce so, that the naked Glans may again he covered ;  
for such a Reduction is immediately followed by a Remission  
**of** the Pain, and. other Symptoms. Meanwhile, because a Vio-  
lent Inflammation seizes the tumid Part of the Penis, which  
renders the Return of the Prepuce difficult, and often impose  
. fible, is will not he improper to apply to the *Penis* digestive and  
emollient Fomentations or Cataplasms,, or warm Wine, or  
Camphorated Spirits os Wine; is, upon renewing the, Appli-  
cation, no Erection appears, the Prepuce may be attempted  
to be drawn over the Glans ; which being effected, all the other  
Symptoms immediately Vanish. But because Wine, and cam-  
phorated Spirit of Wine, by their acrimonious Quality,.and the  
emollient Cataplasms by their emollient Power, produce a Flux  
**of** the Blood Towards the morbid Part, and, consequently,' in-  
crease the Distention os the tumefied Penis, some prefer .the  
Application of cold Wafer ; sor, when the Penis is immerged  
in the Water,.and when it is plentifully .sprinkled on, or ; ap-  
plied by Compresses to the Abdomen Or Scrotum, and if,. at  
the same time, copious Bleeding he used, the Tumor; and  
Erection generally soon subside. The Penis, thus becoming  
flaccid, should he lubricated with the Oil Of Olives, ' or with  
Butter: Then set the Surgeon take the Penis between his store  
find middle Fingers of both Hands, .and with his Thumbs  
.strongly repress .the naked Glans, while the Prepuce is, at .the  
Tame time powerfully drawn forwards with .his Fingers, till  
the naked Glans be again covered. . Dutino this .Operation,  
the Patient is obliged to suffer excruciating Pain, and hernakas  
miserable Outcries ; which, however, .the Surgeon should - en-  
tirely di (regard, or, as *Celsus* advises, dispatch .his Business the  
Tooner, upon which all Complaint ceases; sor, aster returning  
the Prepuce, littie or nothing else is required for completing  
**the** Cure. If the Penis is affected with a'ishght Inflammation,  
where these is little Virulency, it generally suffices to bathe Jo  
in warm Water. . . ἐν' ’ ’ '

Bur if the tumefied Penis, by reason of the violent Inffam-  
mati0n,or long. Continuance of the. Disease, tends i towards a  
"Gangrene, it will he most proper, first, i to .bleed in; .thmiArm,  
and afterwards, in the superior -Part offthe Peins, : till At. be-  
comes flaccid ; then the Prepuce may he returned aS. before di-  
rected, and the Bleeding stopt. *Petit* used a different Method  
In curing the Paraphimosis. He cothprefied the tumefied .Coans  
with a narrow perforated Bandage, and, .extending the Prepuce,  
he again brought it.Over the Glans. ..Sometimes the "Prepuce  
is so distended with the serous Part Josethe Blood, .that, itrap\*  
pears like a Blister produced by .a Burn,-or a Vesicatory:.and  
the contained Humour is .'conspicuous th the:Eye, Inthch: ob-  
structing the Reduction of the Prepuce over the Glans. -It  
’this Case, the distended Skin should he-opened within, Knife,  
.or a Lancet: Thus the Serum being .discharged, the Wounc  
must he cleansed with warm Wine, and the Skin may beagair  
stretched over the Glans. In order to prevent the wounded  
«Skin from growing to the Glans, the. Patient,.as ostinhisasthe

shakes Water, should retain it a little, between the PinpnTe and  
the Glans ; he should likewise frequently draw the. Skin thaoke.  
ward and\* forward,. till all Danger'of its Cohesion with, then  
Glans disappear.- The seine Intention may, also, be answered,,  
by often injecting warm Spirit os Wine hetween the interior  
Skin of the Prepuce, and the Glans ὁ or by interposing soffi\*  
Lint, between, the Glans and the’Skins so the Prepuce.already  
adheres to the Glans, they shossid he forthwith separated by \*  
Tooth-picker, a blunt Lancet, ora Knife armed with a Ittite  
ton ; hut particular Caution .must'he used' to avoid wounding,  
the Glans, which would occasion a large Haemorrhage. The  
Prepuce - and Glans, being thus discharged, their reuniting  
must he prevented, by the Methods above directed. The Skid

. and Glans ought to he the.more carefully kept, asunder, while  
they are so; hecause, :is once they are firmly united-, they  
cannot he separated without the greatest Difficulty.’ Aster.**the**Operation, the Penis should he bound up to the Belly, lest, by .  
its hanging downward, .the. Afflux os the Blood being easier,  
an Inflammation and Tumor might he induced. I have some-  
times seen the Prepuce,faster it has been drawn hack over **the**Glans, affected with a linge hard Tumor, which could by **no**means be discussed. ' - .

When all’ these Remedies prove ineffectual. *Petit* directs **the**following Method : Introduce a small, crooked Knife be-  
tween the Penis and Prepuce, with its Edge turned' upwards  
towards the Prepuce, fill:the swelledconstricted Part os the  
Skin canthe Convenientiy divided by in. Is the Prepuce, be  
- constricted and tumefied in more Places, as th two, three, **or**sour, dike so many Rings, the .Operation most he aS osten re-  
peated, asthe Nature *of* the Disorder requires. All the con-  
stricted Farts of the Prepuce heing .thus divided, the PeniS  
must be fomented and wash'd .with warm Wine; and, the Pre-  
puce being drawn over the Glans, the Part must he carefully  
bound up, and healed as hesore. *Hiister ’ Chirurg.*

PARAPHORA, παρμφοράί from παραφέρω, to deprave. **A**flight Delirium, or a Delirium in general.

J PARAPHRENITIS. An Inflaurmation of the Diaphragm,  
or Paris adjacent.

If a Disease similar to the Pleurisy seizes that Part of **the**Pleura which surrounds .the Diaphragm, or affects the Dia-  
phragm itself,' a terrible. SpecieS of Disorder, call’d *Para phre-  
nitis,* in produced. ....."

ThiEDisease is far more frequent than is commonly believ’d,.  
-since,, when present, it either remains undiscover'd, is he-  
glected, or treated as if it was another Disorder.

*- frstarapheenifis* jo rknown .from an highly acute imd Conti-  
.nual Fever ; an inflammatory Pain of the Part affected, by-  
tolerable.on account of the nervous Membranes. This Pash  
Js greatly augmented during inspiration, Cotighing, Sneezing,  
Repletion os the Stomach, a Nausea, Vomjting,ond a Compres-  
sion of the Abdomen in discharging the Faeces, or the Urine.  
Hence the Disorder is accompanied with an erect, small, quick,  
.and suffocating Respiration,, performed only by the Action of  
rhe Thorax, the Abdomen Teinaining at Rest ; .with a perpe-  
Yuaf Delirium ; a Revulsion ofthe Hypochondria, inwards and  
.upwards ; the Rises Sardoniut I CohVulfiQIis ; Madness1; and  
.in Gangrened si μά si'st 'δ᾽ si . .. .ἐζ' ;

h. *NTsarapheemiiis* herrjtiinates Jnthe sameinanner within PJeut.  
risy ;; hut, Jo consequence os the greatand .continual\* Motion  
osithe Tart affected, its ..Necessity to Iiise,tarid .the Teufiorf  
of the, nervous Membranes, all the SyinptomS are quicker, and.  
rmoressatah. ..Hence arises .a purulent .Asches,’ "si

Hence..the CureOfed:*Pdresphrenitis* requires the same Ed-  
jstinctionS and Cautions.whh. that .ofin Pleurisy, and'almost.  
.thaisameSemedies, inch .only i excepted, as \_ the Situation of the  
Tart affected cannot admit Oss Emollient Clysters, in consd-  
.quence..of.their .acting:.on .the Parts pext.to that affected, are  
often beneficial. δ᾽ί ψ ὓ Τ ./ ’. I’ \*

But when the Diaphragm, preyiotifly inflam'd, comes to **a**Suppuration; and the Ahseess,. breaking,.discharges its Pus into  
the Coaity Of the Abdomen,. the Pus is There collected, don-  
, gested, and putrefied, produces a .Tumor, .a Corrosion of **the**vishers,ra Violent Tahesprand, atlast, Heaths j ’

. This Species *Gs.Paraphratitis,* tho' known,, in yet absolutely  
incurable. *Bcerh. Aphorism.. ’.ἐν* ‘ \ Δ

PARAPHROSYNE,\* παραφρόσὑνη, from .φαρμφρονέω, to per  
deliriousZ' A.IJolitinmj- .oJr AheIJarioh: of.Msqd, ' ' :. 'τ

PARAPLEGIA, ςπαραπληγία, from *orecgul,* importino- some-  
whatmjutinuS 7and πὸήσσμ,ψο strike, EParaplegy, or Palsy  
.of. all the Parts .below the NCcls, aainutherwspnderstood; byt  
*in Hippocrates'* it seems to import a -Paify os aqy Taiimular  
; Pars, in .consequence: ofosimAToplexy, psi Epilepsy. See APo-  
7**RI.TXIA,.and PARALYSIS.** I' : ‘ \*

' PARARMA,-.^sq^ffm TheLin.ns Clpth. *Galen, in  
Hippocrat. Ae Arie. /” \*’ ~ .*

.4 AAA^Tst^^faar παραίρθρρμα. flight Luxation.

**PARARRHY rPLMOS, παρἀῤῥυθμος. An** Epithet for a  
pulse which is not suitable to the Age or Nature of a Person.

PARAS CHIDES, παρασχίδες, from παρασχίζω, to cleave.  
The Fragments, or Splinters, of fissur'd Bones. *Hippocrates9  
de Fract.*

PARASEISMA, πορἀσεισμα. A Concussion of the Body\*  
**esteem'd** a Species of Exercise. *Hippocrates de Dienta, L.* 2.

PARASITICAL PLANTS are such as are produced out  
**of the** Trunk or Branches os other Plants, from whence they  
receive their Nourishment, and will not grow upon the Ground,  
as the Miselto and others.

PARASPHAGIS, παρασφαγός. The Part of the Neck Con-  
tiguous to the Clavicles.

PARASTAT *IE, cretastadaeu.* This, in *Hippocrates,* signi-  
stes the *Epididymis.* But *Hcrophilus,* and, after him, *Galen,*call’d these the *Visricofe Parastata,* in order to distinguish them  
from the *Glandulose Parastata,* now call'd PROsTATA. The  
Word is’ deriv'd from παριστημι, to he situated near.

. PARASTREMMA, παῥαστρεμμα, from παραστρέφω,ΐο distort,  
or pervert. A Perversion, or Convulsive Distortion, of the  
Mouth, or any Part of the Face, *Hippocrates, Prorrhet. L.* 2.

PARASYNANCHE. A Species of Qtimsey. See AN-  
**GINA.**

**PARATHENAR.**

**PARATHENAR MAJOR.**

This is a pretty long Muscle forming Part of **the** outer  
Edge of the Sole of the Foot. It is commonly termed *Hy-  
pothenar,* but very improperly, according to the Signification  
of that Word.

It is fix’d backwards, by a fleshy Body, to the outer Part of  
the lower Sde of **the** *Os Calcii,* from the small posterior  
external Tuberosity, all the Way to the anterior Tuberosity.  
There it joins **the** *Metatarsus,* and, at the Basis of the fifth  
Metatarsal Bone, separates from it again, and forms a Tendon,  
which is inserted in **the** Outside of the first Phalanx of **the**littie Toe, near its Basis, and near the Insertion of **the** *Para.,  
thenar minor.*

**PARATHENAR MINOR.**

Tins is a fleshy Muscle fixed along the posterior Half of the  
outer and lower Side of the fifth Bone of the Metatarsus. It  
terminates under the Head of the Bone, in a Tendon which is  
inserted in the lower Part of the Basis, os the fust Phalanx of  
**the** little Toe. {

The tendinous Insertion of this Mufcle is Very closely united  
**to** the cartilaginous Ligament of this Part. The same thing  
is to he observed, concerning the other Muscles, which go to  
the lower Parts of the Basis of the first and second Phalanges  
**of** the Toes. In aged Persons, some Parts of these Ligaments  
‘are often turned to Bone, and thereby form these bony Por-  
tions, which are taken for distinct Sefamoide Bones.

The *Parathenar mayor* serves, particularly, to separate **the**little Toe from the rest; and the *Parathenar minor* bends **the**first Phalanx of that Toe. Both these Muscles seem to he too  
large and strong *for the necessary* Motions of so small a Part  
on so weak a Joint: But as the little Toe makes a Part of  
the outer Edge of the Sole inf the Foot, which is Very much  
exposed to external Violence when we walk bare-footed, and  
no Part of it so much exposed as the littie Toe, Very powerful  
'Muscles were necessary to strengthen it on these Occasions.

Besides the two Uses already mention'd, the great and small  
*Parathenar* may have another, in which they .may, also, be as-  
sisted by the *Thenar,* and that is, to bend the Sole of the Foot  
according to its Breadth, which Action is very requisite in  
walking A Tip-toe, in going up a Ladder, and in climbing ; on  
which Account, the two *Parathenars* deserve the Name of the  
Tiler’S Muscles, much. hetter than the *T.ranfuerfalii Pedis.  
IVin/low.* ' ’ ς

’ PARDALIANCHES. The *Aconitum Pardalianches* Is,  
According to *Boerhaave,* a Name for the *Ranunculus, folio  
Cyclaminis ; radice Asphodeli, mayor. . .*

PARDUS. Ossic. Jonsi de Quad. 8 I. Aldrov. de Quad.  
Digit. 64. Charlt. 14. *Pantherus, Pardalis, Pardus, Leopar-  
dus.* Gefn. de Quad. Dixit. 824. *Pardalis.* Rali Synop. A.  
Ἀ66. THE LEOPARD. 4 . Ἀ.

The Fat is esteemed one of the best Cosmetics. *Diofcorides.*

PAREAS. The Name of a Serpent said to be found in  
*Syria,* some of which are of the Colour of Brass ; others,  
blackish. The Bite is not mortal, but only excites an Inflam-  
\* mation. *Castellus* from *Forestus. - : '*

PAREDRIA, παρεδρἐν, from παρὰ, importing nearand  
εδρα, a Seat. An Association,. Vehemence, or Assiduity (of  
’ a Disorder, or Disorders.) *Hippocrates Preecept.*

PAREGORICUS, παρηγνρικός, from παρηγορέω; to console,  
or mitigate. Mitigating, lenient st" an Epithet for Medicines  
"which relieve Pain.

- PAREIRA BRAVA. Ossic. Mont. Exot. 7. Dale Differf..  
Med. Cod. Med. 89. Chomel. 26r. *Caapeba,Pareira, Brava.'*Lochn. Sched. p. 29. *Caapeba Brasiliensibusso* Worm. Muse  
158. *Caapeba.* Pisi I. 94. *Caapeba five Coirvolvulus Colubris."  
nus.* Ejusd. 2. 3I2. *Caapeba Brasiliensibus, Lusitanis.* Erva de  
Nosta Sennora, *aut* Cipo de Cobras. Marog.. 25- Rain, et Erva'  
**de** Nosta Sennora.. Worm. Mus. I 57. . *Convolvulus Brasili-  
anus store octopetalo monococcus.* Raii Hist. 2. I33I. *Pareyra,  
Ambutua, Butua overa Bruttia.* Ind. Med. go. *Butua over a  
Brutua, Pianta Indiana.* Zan. Hist. 59. *Butua site Partira  
Brava Lusitanica.* Geoff. Tract. 286. *Pareira Braua.* Chom.  
WILD VINE.

This Root is commonly about the Bigness of the littie  
Finger; tho' sometimes larger. It is of a brown Colour,  
wrinkled both ways on the Surface; but its inner Substance is  
fibrous, like the *Thymelaa. Zanoni* fays, that, when cut trans-  
verfly, it represents the Sun, and its Rays; but this Conceit  
is without Foundation. It is of a sweetish Taste, with a dis-  
agreeable Mixture of Bitter, and without any Smell. Authors  
pretend that this Root comes from *Brasis., for* this Reason,  
because we get it from the *Portuguese :* But it is much more  
probable, that it is of *East-India* Growth ; for a Surgeon sent  
it from *Surat* to M. *de Jusifteu,* by the Name of *Boutua* Root ;  
and wrote, that it grew along the Coast of *Malabar. ': '*

This Root is much celebrated by the *Portuguese,* aS an Ale-'  
xipharmic, and an Antidote against all poisonous Plants. It is,  
undoubtedly, a Very good Diuretic, and very proper in Ne-  
phritic Colics. . .

The Way of using it is. Boil about a Quarter of an Ounce,  
scraped or rasped, in two or three Pints of Water, till reduced  
to a Pint; of which the Patient is to drink a Glass every half  
Hour, in a warm Bath, his Body being before prepared by  
Bleeding and Clysters.

A small. Quantity of the Syrup of the Five opening Roots  
may be added to the Decoction; and, by this Method alone,  
*Geoffrey* the elder cured the great *Abbe Bignon* of a Stone-  
colic, and made him void a Very large Stone. When given in  
a large Dose, it heats considerably. It seems to act by dis-  
solving the flimy Matter contained in the Kidneys and Blad-  
der ; and has been given with great Success, mixed with Balsam  
ofCapivi, in Gonorrhoeas, after sufficient Evacuations.- Dre  
Decoction already mentioned has ,alfo, doneWonders in hepatic  
Colics, arising from an Obstruction of the Orifice os the Gall-  
bladder, a Glass being drank every three Hours, to the. Quan-  
tity of a Quart. The *Portuguese* use this Root powder'd,  
for Qttinseys and Diseases os the Thorax. *Geoffroy. '*

There is, also, another Sort os *Pareira Braua* ; which *Dale*thus distinguishes: ’

*Pareira Brava alba.* Geoff Tract. 287. *Partira Spar  
cies secunda.* Lochn. Sched. 32. THE WHITE WILD  
VINE. — '

This is said to come from *Brasil.* It is more woody than  
the former, composed os Fibres, os which some are longitu-  
dinal, the rest orbicular. The Bark of this Root is white,  
but the Substance within yellow, like Liquorice. *Geoffroy.*

PARENCEPHALI6. The *Cerebellum.*

PARENCHYMA, παρέγχυμα, from παρεγχκτα, to pour  
into. A Term introduc'd, as is said, by *Erasifiratus,* irn-  
porting all that Substance, which is contained in the Inter-  
stices betwixt the Blood-vessels os the Viscera, which he ima-  
gin'd to he extravasated and concreted Blood. The Moderns,  
having discover'd all the Viscera to be vasculary and gland ulous,  
have rejected this Tenn, together with the Doctrine.

PARESIS, πἀρεσις, according to the Definition of *Areteeuse  
Chron.* X. I. *Co J.* is a Palsy of the Bladder, when theDrine  
is either suppress'd, or discharg'd involuntarily.

PARIETALIA OSSA. The Temporal Bones. See Cher  
**PUT.**

PARIETARIA.. . -

The Characters are, .....

The Flower is male, tetrapetaloidal, stellated, furnished with  
four Stamina, and with Testiculi, having a small Apex in the  
Centre without an Ovary. The Flower is female, consisting  
of a foliaceous, trifoliated Calyx, in whose Centre is a conoi-  
dal Ovary, furnished with a fimbriated Tube in another Pisce  
of the Plant. The Flofcules and Ovaries are closely collected  
in thick Nodes to the Stalks. /

*Boerhaave* mentions two Species of *Parietaria* ; which are,  
**i.** Parietaria; Officinarum, & Dioscoridis. *C. Β. P.* I2r-

*Tourn. Inst.* 509. *Bocrh. Ind. A.* 2. 92. *Helxine, Parley  
taria.* Ossic. *Parietaria.* Ger. 26I. Emac. 33I. J. Βοῦ T.  
9y6. Raii Hist. I. 2Ο6. Synop. 66. *Parietaria vulgaris.*Park. 436.- PELLITORY OF THE WALL.

PellitorY of the .Wall has several smooth, redish, succulent  
‘ Stalks, half a Foot or a Foot high, with roundish, sharp-pointed  
‘Leaves, set on alternately upon long Foot-stalks, of a Deep-  
\* green-above, and lighter underneatht -The Flowers are small

and staminons, redish hesore their Opening, white afterwards,  
growing among the Leaves all along the Sulks ; it grows upon  
old Walls, flowering in *May.* The whele Herb is used.

- It is cooling, opening,, and cleansing, abounding in nitro-sul-  
phureous Salt, and is accounted Very good for the Stone, Gra-  
Vel, Stoppage and Heat of Urine; and sor these Purposes **the**Juice, or Decoction,: is given in Draughts, or in Glysters;  
**lute** commend the same sot Coughs. *Miller1 s Bot. Os.fi.*

By the chymical Analysis, Fellitory yields a great deal of Oil,  
a great deal of fix'd Salt, and Earth, and several Liquors, os  
which some are acrid, and the rest acid ; As for the volatile  
Salt, one obtains none that is concrete from this Plant; but it  
yields an urinous Spirit.

*' Dioscorides* affirms; that it lenities and resolves, and is good  
io stop Tetters, and spreading Ulcers : They applied it, in  
**his** Time, to the Parts affected with the Gout; they gave the  
Juice to drink in an old Cough, made a Gargarism of it for  
**the** Diseases os the Throat ; and injected it into the Ears to ap-  
pease their Pain. *Casulpinus* fays, it provokes Urine, and opens  
the Kidneys; *Tragus* Very much commends the Decoction, to  
remove Obstructions of the lower Belly. Take, according  
to him, Pellitory os the Wall and Water-cress leaves bruifed ;  
add a sufficient Quantity os Wine; mix, and put them in a Fry-  
ing-pan; apply them in Form of a Cataplasm, moderately hot,  
to the lower Belly, sor Suppression of Urine, *Dodonaeus* only  
makes a Cataplasm of the Leaves, and Oil os sweet Almonds.  
*Hildanus* uses Oil os Scorpions, instead of Oil of sweet Almonds,  
*Tragus* makes another Cataplasm for Contusions, frying it with  
Bean-meal, Mallows, Wheat-bran, Oil, and Wine. *Canterd-  
rius* prescribes it bruised with Vinegar, and applied hot to. the  
Testes, in case of Ruptures. *Aurelius Victor* says, that *Con-  
stantine* gave the Name of this Plant to the Emperor *Trajan;*because his Statues and inscriptions were on all the Walls of  
*'Pome,* like Pellitory. - It is now tlsed in all detersive and lent-  
five Decoctions, and Semicupiums, The Syrupof Pellitory gives  
great Relief to hydropic Persons. *Martfoes Toiernes.orf.*

*Parietaria* absterges, and is somewhat astringent and cooling 5  
it is seldom used internally; yet some commend it *sot* the Cough:  
Externally, it is of Service in Tumors, Erysipelas, and Ambu-  
lions; and, heing flightly bruised and apply’d, it is said to be  
very effectual for the Cure of recent Wounds, The Powder  
of the dry’d Herb, taken'in Honey, or drank in Beer, or Pos-  
fet-drink, is an excellent and approved Remedy for an - inve-  
terate Cough, and Consumption of the Lungs; and was usually  
prescribed by the Antients for the Cough and Asthma. The  
Decoction in Wine, or Hydromel, is conducive to the same  
Purposes; but the Powder is more effectual. This Plant affords  
a nitro-fulphureous Salt, aS well as Borage and Bugloss. That it  
abounds with nitrons Sals, is evident from itsdetersory Virtue.

\* It is called *Parietaria,* and *Muralis,* from *Paries,* or *Murus,*a Wall, hecause it grows on Walls : *Helxine,* from ἔλκω, ελξω  
*tyelco, helxo)* to draw or attract; because its rough Leaves and  
Seeds draw and tenacioufly adhere to Cloaths: *Perdicium,* from  
*Perdice,* a Partridge, because Partridges usually feed on it: Vi-  
*triaria* and *Urceolaris,* because, by its *Muceusuesc,* it is of Ser-  
vice for scouring and cleansing Pots, and Glasses. *Raii Hi P.*. 2. Parietaria minor; Ocymi. *C. B. P.* I2I. *Bocrh. Ind.  
alt. Plance Fol.* 2.

PARILI. H. M. The Name os a tali Tree, which grows  
*in Malabar. ; \_ -*

The Root and Leaves are said to correct a melancholy.  
Disposition of the Blood; and to temperate acid and salt Hu-  
mours.' Of the Leaves, together with the Leaves of the *Ca~  
retti,* boiled in the lacteous juice of the Coco-nut, a Potion is  
prepared, which mitigates the Pains of the Piles, either inter-  
**Bal,** or external.

PARIS HERBA. See **HEREA PARIS. .**

- PARISTHMIA; παρίσθμια. The Tonfiis ; or Disorders of  
the Tonsils. See ToNsILLAE. -

PARITI, or TALI-PARITL A Species os *Alcea,* which  
grows in *Malabar,* the Flowers of which, bruised in Milk, are  
put into the Ears, as a Remedy for Pains of the Head.

PARKINSONIA- .

" The Characters are ; her

IthathapolypetalouS, anomalous Slower, consisting of five  
dissimilar Leaves, from whose Cup arises the Pointal, which  
afterwards becomes a rough jointed Point; each Knot Or Joint  
containing one Kidney-shaped Seed. ... .

*: Millen* mentions but one Species os this Plant ; which is,  
*Parkinsmia aculeata, foliis minutis, uni castes adnexis.* Plum,  
Nov.- Gen. -

This Plant was discovered by Father *Plumicr, in America,*who gave it this Name, in Honour to the Name of Mr. *John  
Parkinson,* who published an universal History of Plants, in *Engs,  
list,* in theYear I64O.

It is very common in the *Spanisu Wesi-Indies*; but, of late  
Years, it has been-introduc’d into -the *English* **Settlements in**

*America,* for the Beauty and Sweetness of its Flowers. This,  
in the Countries where it grows, naturally rises to be a Tree  
of twenty Feetfiigh, or more ; and bears long slender Branches  
of yellow Flowers, which hang down aster the same maimer  
as the *Laburnum. MUlrtis Dictionary.*

-I PARNASSIA.

The Characters are ; ..

The Leaves are roundish, and disposed m a Circle ; the Ca\*  
lyx is pentaphylloidal; the Flower rosaceous, one on *a* Stalk,  
consisting of greater and smaller fimbriated Petals. The Ovary  
becomes a small conoidal Fruit, opening into three or sour Keel-  
shaped Celis, full of Ininute Seeds. ( ....

*Boerhaave* mentions but one Sortos*Parnassia* ; winch is the  
Parnassia ; palustris & Vulgaris. *To urn. Inst.* 246. *Bocrh.*

*Ind A.* 243. *Rati Synop.* 3. 355. *Hepatica alba.* Ossie.  
*Gramen Parnasse.* Ger. Emac. S40. Raii Hist. 2. I049.  
*Gramen Parnasse vulgare.* Park. Theat. 429. *Grdmen Parr  
nassi, sure albo simplici. Q.* B. R 309. *Gramen Parnassi  
Dodonao, quibus.dam Hepaticusflos.* J. B. 737. *Castus humilio  
palustris. Hedera folio, fieofoliata nostras.* Piuk. Almag. I08.  
*Pyrola rotundifolia palustris nostras flore unice ampliore.* Hist.  
Oxon. 3. 505. GRASS OF PARNASSUS.

It grows in putrid and marshy Pisces, and flowers in *August* β  
The Parts used in Medicine are the Root, Herb, and Seed.

The Juice of the Leaves, and Decoction of the Root, are  
. most approv'd Medicines for the'Eyes. The Seed is a powerful  
Provocative of Urine, and stops a Looseness and Vomiting.  
*Dioscorides.* It strengthens the Liver, and frees it from Ob-  
structions. *Chal.* It is Vulnerary and astringent, and is said to  
be effectual in stopping Haemorrhages. *Hist. Plant, adscript.  
Bcerhaav.*

PA ROCHET eusls, παροχέτευσις, from παρὰ, and ὸχε-  
τεήω, of όχετὸς, a Canal, or .Duct, Derivation, is used by *Hippo-  
crates* to signify a Derivation of. the Humours from one Part,  
in order to evacuate them by another not far distant. The Laws  
of Derivation, in *Hippocrates, Lib. de Humoribus,* are thus ex?  
press'd *: n^oysui’jaii* ἐς κεφαλὴν, ἐς τὰπλάγιά, η μάλιστα ῥέπει?  
" Derivation is made to the Head, to the Sides, and where  
" there is the greatest Tendency." Or, otherwise, 6 *Epid.  
Sect.* 2. *Aph.* 5. παροχετεήειν ὑπείξαντα ςέντισπἀρ ἀυτίκα,  
ἀντετεένοντα υπειξαμ " Derivation is to be used, when you have  
" done something immediately towards a Revulsion, and Re-  
" nitences are to he subdued (or mollified)." *Galen* Very well  
explains *Derivation,* in his Comment on these Words: " *Hip-  
" pocrates,* says he, uses the Word *Parocheteasis,* Derivation,  
" when an Humour requires to be evacuated, and does not take  
" its Course the Way which it ought to do, nor yet Very re-  
" mote from the proper Passage, nor to the most contrary  
" Place; for Instance, when the Urine tends to EVacuatiori  
" through the diseased Kidneys and Bladder, it may be best, in  
" that Cose, to make a Derivation of it by the Intestines, in  
" the same Manner as when the Course of the Humours is  
" directed towards the Intestines, if the Intestines are Vitiated,  
" a Derivation is to be made by the urinary Passages. Thus,  
" in Women, *Derivation* is to be made, sometimes, to the  
" Uterus, or the contrary; sometimes a Derivation is to be  
" made of an uterine Flux towards the urinary Passage, of  
" the Intestines." And, *Lib.* I. *ad Glauc.* he says, " While  
" the Humours are in a stowing State, *Revulsion, ddliaoraaii',*" aS *Hippocrates* calls it, is the proper Remedy; but, when  
“ they are fettled and fixed on some particular *Palis, Deri-  
" nation* is to be attempted. \*\* .

PARODONTIDES, from παρὰ, frequentiy signifying, in  
Composition, the same as the Latin, *praetor,* by, nigh to, by  
the Side of, and όδοῦς. Tooth. The same as **PARULIDEs ;**'which lee.

’ PARONYCHIA, in Surgery, is a Whitloe.

' By a *Paronychia,* or Whitloe, is meant an intense, corroding  
Pain which affects the Phalanges, and especially the Ends of the  
Fingers, and which is attended with a Violent Pulsation, and pre-  
ternatural Heat; The Fingers are, for the most part, tumefied ; ‘  
and sometimes there is no Tumor, when the Disorder lies  
deep, or about the Bone; Sometimes these Pains extend to  
the Cubitus, or Shoulder; hecause of the Connection between  
the Fingers and those Parts by the Flexor Muscles: Sometimes  
the Pain is gentle or moderate; and sometimes the Pain is so  
Violent and intolerable, that the Patient is obliged to pass both  
Day and Night without any Sleep, in .a miserable Con-  
dition : Nor is it altogether unusual, to see those of more  
delicate Constitutions so.tormented with the Pain of aWhitloe,  
that a Fever, Faintings, Convulsions, great Heat and Deli-  
riums, with a Violent inflammation of the Arm, an Abscess,  
or Spacelus, are induced; and,unless timely Assistance intervene,.  
Lise itself is endangered.

ς AS, therefore, the Paronychia is more mild, or more violent,  
according to the different Parts affected by it, several Species of  
it. have been constituted by Surgeons» *Garensteot* reckons

sour, and *Goney* five; bur I can see no Reason sor making  
more than three. I. When the Disorder arises in the Skin  
or Fas, in the bach, or sore Part of the Finger, or even under  
or near the Nail ; in this Case, the Pain may he severe, but  
the Symptoms are usually not malignant. 2. When the Pen  
riosteum is attacked, inflamed, or corroded ; and then the Pa-  
tient is tormented with most Violent Pains, which, however,  
are more or less intense, as that tender Membrane is more or  
less affected. 3. The most malignant Species is, when the  
nervous Coats of the Flexor Tendons os the Fingers, or **the**Nerves near them, are seiz'd with this Disease ; for then it is  
attended with the most excruciating Pains, the most malignant  
Symptoms, and the Patient is every way disordered.

The immediate Cause of a Paronychia appears to me to he,  
an Inspissation os stagnated Blood, whence proceeds an Infiam-  
mation os the adjacent Parts ; and this is evident from the  
Heat and Pulsation of the Part affected. This Inspissation may  
he produced, partly by internal Causes, as a Crudity and Acri-  
mony of the Bloed; and, partly, by Various external Causes,  
as the Prick of a Pin, a Thom, or a Splinter, or by a. Contu-  
sion or Bruise, and other like Accidents : So that a Parony-  
chia is more or less dangerous and troublesome, in proportion  
Io the Degree of the Wound or Inflammation, or the Sen-  
sibility of the morbid Part. Some Physicians have asserted, that  
in Fingers thus affected Worms have heen observed, to which  
they ascribed the Cause of the Disorder; and, perhaps, upon this  
Account, the *Germans* named it the Worms in the Fingers.

**in the** Beginning of the first Species, the affected Part os the  
Pinger swells, with 4 flight Hardness, but little or no Pain.  
Afterwards Redness, with Inflammation and Pain, appears,  
which are gradually succeeded by the Symptoms already men-  
tion'd : But, tho' the Tumor wonderfully increases,’ the Pain  
and other Mischiefs seldom become intolerable in this Species,  
or extend themselves beyond the affected Finger, as in the other  
Rinds. In this Sort, the peccant Matter is fo far from heing  
lodged deep, that it is often perceptible to the Eye: But the  
nearer the Inflammation reaches to the Periosteum, or Tendons  
**of** the Fingers, the more intense are the Pains, so aS, sometimes,  
to affect the whole Arm ; and in lax, delicate Constitutions,  
- induce almost continual Watchings

The second Species of Paronychia may. he distinguish'd from  
\* the first, by the intense Pain, either in the End of the Finger,  
or over its whole Extent, accompanied with great Heat, 2 Fe-  
yer. Watchings, Convulsions, and sometimes with a Delirium.  
The Tumor and Inflammation scarcely appear outwardly, nor  
does the Pain reach the Wrist.

The third Sort of Paronychia may he known by the follow-  
ing Symptoms. There is either no Tumor about the End of  
the Finger, or it is Very small; especially *if the Inflammation*affects the interior Coat or Vagina of the Tendon, more  
than the exterior. Here the Pain is so intense and intolerable,  
that the Patient is in extreme Agonies: Nor is the Finger  
only affected, but the whole Hand and Carpus; especially that  
Part of the Hand near the Carpus, under the transverse Liga-  
ment os the Hand. The Pain even extends over the Arm,  
to the internal Part of the Elbow, where the Flexor Muscles  
**of** the Fingers have their Origin ; and is sometimes propagated  
to the Top of the *Humerus,,* inducing almost continual Watch-  
Ings, with a Fever and Convulsions.

If the corrupted Matter is lodged in the Coat of theTendon,  
Its hard and compact Substance makes little or no Swelling upon  
the Fingers, excepting towards the Joints, where it is but mo-  
derate. The Hand is more swelled than (the Fingers, but its  
Pain is milder; and sometimes the Arm has become so sur-  
prisingly tumid, that *Garengeot* says, he has seen it as large as  
the Thigh.

The Paronychia terminates variousiy, according to its differ-  
ent Degrees and Symptoms, in the first Species, there is ge-  
nerally hide Danger : Is the Parts about the Nail he affected,  
the Nail generally separates from the Finger, occasioning much  
Pain to the Patient ; tho' sometimes only that Half of **the**Nall comes away, which is nearest th the Whitloe. But *if***the** morbid Matter is lodged under the Nail, or extends itself  
towards a Tendon, the Patient is tormented with Very intense  
Painsss In the Paronychia *of* the second Kind, **the** Pains and  
other Mischiess are so Violent, that, as some affirm, the life of  
the Patient is sometimes endangered ; tho’ I have seldom seen  
the Disorder increased to such a Degree. Sometimes, after the  
Inflammation and Suppuration, I have seen the Bone attacked  
with a Caries ; and, if this happens in the last Joint, it will  
be more likely to come away entire, as being Very small, than  
that the carious Part should separate from the sound. But the third  
Species os Whitloe is **the** most dangerous, and **the** most malig-  
nant. If, in this Case, an Abscessor Gangrene happens, **the**Pains are so excruciating, and attended with a Fever, Tumor,  
and Inflammation of the Arm, and other pernicious Conco-  
"mitants, that, .unless timely Assistance he administer'd, a mise-

rable End may he put to the Patient’S Life. Is an Abscess  
should he formed in the Arm, near the Musculus Quadratus of  
the Rad ips, under the annular Ligament, *Garengeot* is os Opt-  
ninn, that, without Incision, the Case ought to he deem'd in-  
Curable ; and, even then, the Patient may be in danger os losing  
the Use of the morbid Finger, notwithstanding the most pru-  
dent Treatment; and then the inevitable Consequences of **the**Disorder are often, by rhe Ignorant or Malevolent, imputed **to**the Negligence or Umkil fulness of the Surgeon.

With regard to the Cure of a Paronychia, *Garengeot,* with-  
out mentioning any other Remedy, directly proposes Incision.  
But I think it more prudent, aS in other Diseases, according to  
.the Advice os *Hippocrates, (Sect.* 8. *Aphor.* 6.) fust to try the  
Effects of Medicine, hesore I assume the Knife, so much  
dreaded by the Patient. In this Practice, I am confirmed by  
Experience, not only in other Diseases os this Kind, but even  
in the Paronychia itself, when I have exhibited Medicines  
proper for digesting the inspissated, stagnant Bloed, and sor  
mitigating the inflammation. For this Purpose, let the Pa-  
tient often held this Finger, for some Hours at a time, in **the**best Spirit of Wine, or camphorated Spirit, mixed with a little  
*Venice* Treacle. A Decoction of Garlick in Milk, or os ad.  
Handful *of* Sabine and Germander, may answer the same  
Intention ; in which warm Liquor the Finger .should he  
constantiy immerged, or fomented Very frequentiv with it.  
The Academy os Sciences at *Parti,* in their Memoirs for  
1707. have advised to dip the morbid Finger often in  
boiling Water, for a small Space of Time. Others pre-  
scrihe a Plainer of Asa-soetida, thick spread on Linen, to  
he apply'd to **the** Part. Others recommend, from Experience,  
the thin, white Membrane between the Shell and Substance  
of a boiled Egg, to he apply'd like a Plainer. *Riverius* says,  
that a Whitloe may he easily cured, by a frequent Intrusion of  
the diseased Finger into the Ear of a Cot. Is, during the Use \*  
of these Remedies, the Fever and Inflammation are Violent,  
proper internal Medicines, and Bleeding, ought not to be neg-  
lected. lf by any of these Means the Patient finds Relief, he  
should persist in the Use of them till the Finger he without  
Pain, and perfectly recovered : But if these Remedies operate  
but flowly, or have no Effect, so that a Suppuration seems to  
he advancing. Recourse must he had to Incision, asshe safest  
Remedy. Meanwhile, aS the Patients are apprehensive *os in-*Cision, hecause of the great Pain it produces, it will not he  
improper, in the first or milder Species of the Paronychia, to  
apply a Plainer of. Diachylon cum Gumrnis, or, the like, **sor**ripening the Suppuration, till the Situation of the morbid Mat-  
ter hecomeS more conspicuous, and the Operation may he per-  
formed with less Pain. But in the two other severer Species of  
this Disorder, the least Delay is dangerous ; hecause the Pe-  
riosteum, and small Bones, are soon corroded by the malignant  
Matter, which may induce more intense Pains, larger Abscesses,  
**a** Caries, or a Gangrene of the whole Arm, and, probably,  
the Death of the Patient.

For the easier Cure of a Paronychia, its Species should *Rrft*be considered: If it be of the mild, or first Kind, and has not  
penetrated deep, the Cure may, without Difficulty, he obtained..  
As foon as the purulent Matter becomes prominent, like a  
Tubercle, or Blister, let the Surgeon place a Finger on each  
Side of the affected Part; and, stretching the Skin, by drawing  
it, on heth Sides, from the Whitloe, make the incision: Thus  
will the Matter he discharged, and the Finger will generally  
heal fpontaneoufly. *Hildanus, in Cont.* I. *Obs. gy.* gives the  
following safe and ready Method of curing a Paronychia, which  
he had frequently tried with Success. He first fermented the  
Finger, several times, with Ihe Decoction of the Flowers of  
the Chamomile, and Melilot, and Fenugreek, and Quince-seeds,  
helled in CowS-milk ; then he gradually cut off the Surface of  
Skin, where the Pam was. The Skin being thus removed,  
some red Specks appeared, in which, upon Incision, he found  
one or two small Drops os a red Water ; and, this being dip-  
charged, he applied a Linen Cloth moistened with a Solution of  
*Venice* Treacle in Brandy ; the Pain immediately ceased ; and,  
next Day, the Finger was found.

If the Disorder is seated near fee Roots of the Nail, be-  
neath it, or at either of its Sides, the Whole, or Part of the  
Nail, is generally lost. If the purulent Matter is concealed  
under the Nail, is affects the adjacent Parts with Inflammation,  
find most intense Pains. In this. Case, *Solingen,* with other  
Surgeons, advises, first, to remove that Part of the Nall,  
under which the morbific Matter stagnates, either by extir-  
pating it intiresy, or by making an Incision in it ; and, having  
expressed the Matter, the Wound may be easily healed, by the  
Application of Lint moistened with Spirit of Wine, or Lime-  
water.

If the peccant Matter lie deeper under the Skin, it must,  
also, he discharged by Incision, without Delay ; for otherwise  
it would, probably, rather affect and consume the subinentBons,

fern burst the external Skin, which is generally both thicker and  
harder than in other Parts. If the Patient is unwilling to undergo  
-the Operation, the Danger to which he exposes himself, should  
he remonstrated to him, and the Surgeon should he cleared  
from the Blame that may arise from the Consequences. In  
the mean time, in order to ripen the collected Matter, and  
bring it to Suppuration, apply to the Part a Piaster of Dia-  
chylon with the Gums. If, by this Methin, the external  
Skin bursts, the Orifice must he immediately widened, if it  
he too narrow; and the Wound may bo deterged by some  
digestive Ointment, or the Liniment of *Arcaus* warmed, and  
mixed with Spirit os Wine ; and then apply' ths before-mentioned  
Plainer with a proper Bandage ; but, if the Patient he willing  
to submit to a chirurgical Operation, it is ro be thus per-  
formed. Let the morbid Finger be laid on a Table, with the  
affected Part upwards; then let a strong able Assistant firmly  
hold the Hand and Arm of the Patient, lest, being almost uny  
able to sustain the intense Pain, he should suddenly retract hss  
Arm, which, in the Operation, would he extremely detri-  
fnental. Then let the Operator penetrate through the Middle  
of the affected Part, with a strong sharp-pointed Knife, to the  
Very Pone. Thus the Skin and Fat heing said open to the  
Extremity of the Finger, the stagnant Blood, or corrupted  
Matter, may be discharged, though the Quantity be sometimes  
hut sinall, and the Bone will be preserved from Infection.

Ln the second Species of Paronychia, when the Periosteum  
is corroded, and the peccant Matter has penetrated to the Very  
Bone, an Incision should be made for its Discharge, according  
to the preceding Directions ; but particular Care must he  
taken, that the Knife reaches to the Bones Although little,  
and sometimes no Matter, appears to be evacuated, because  
she Quantity is sometimes extremely small; yet, if the Pain

. gradually remits after the Operation, it is a Signal os a speedy  
Cure.

Some Authors advife, always to make the Incision in one of  
the Sides of the Finger, and never in the fore or back Part of  
the last Bone, to avoid wounding the Tendons : But this is an  
unnecessary Caution ; partly, hecause it is plain, that the  
Tendon reaches no farther than the Beginning os the last Bone  
of the Finger; and, partly, because we learn from Experience,  
that an Incision may be safely made, either in the fore or back  
Part of the Finger. *Garengeot,* however, without offering  
any Reason for his Opinion, advises, that the lateral Method  
of incision should be strictly observed ; he likewise directs,  
that if the Pain does not abate, aster the Operation is per-  
formed upon one Side, it must likewise be performed on the  
other, and upon this Account, hecause the Pain, continuing  
aster the incssion, intimates that the true Seat of this Dis-  
order had not heen laid open. Bus, in my Opinion, the lateral  
Incision should only be used, when .a Tumor appears on the  
Side os the extreme Phalanx of the Finger, or when it arises  
in the second and third Phalanges towards the Hand : On the  
contrary, I think, the Wound is better made in the Middle  
of the Extremity of the Finger, when all that Phalanx is  
affected, or when the morbid Matter indicates its Situation  
there. Besides, it will neither be agreeable to the Inclinatiora  
of the Patient, nor the Reputation of the Surgeon, to make  
two Incisions, when Reason and Experience shew, that one  
may he sufficient.

The Incision heing thus performed, the Blood should not  
only be suffered to stow out; but should, also, be carefully  
expressed. Then let the Wound be filled with dry Lint, over  
which apply, a Diachylon-plaister, and the Compress in the  
. Form os a *Malta* Cross, dipped in warm Spirit of Wine,  
securing the Whole with a proper Bandage. When the  
Dressings are taken *off* next Day, there generally appears a little  
fungous Flesh, which often alarms an unskilful Surgeon, but  
without a Cause; for it is no had Symptom, and may, with-  
Out. Difficulty, he removed by the Scissars, by a corrosive  
Medicine, or by digestive Ointments mixed with a gentle  
Escharotic. The Wound may then he healed, like those in  
which the Bones are affected/with the Essence of Myrrh, or  
Amber, or with *Peruvian* Balsam. If the Bone appears to  
he corroded, the Wound should he silled, and kept open, with  
Lint moistened with the Essence of Myrrh, or of round  
Birthwort, till an Exfoliation of the morbid Part is procured,  
or, which often happens, the Bone comes away entire; for,  
till the first Bone be removed; the Wound cannot he healed.

The third Species of Paronychia, when the malignant  
Matter is lodged in the Vagina or Coat of a Flexor Tendon,  
has rarely occurred to my Observation; *Garengeot* first laid  
down the Method of Cure in the following manner : Tn the  
small Tumor, which; with the intense Pain; generally dis-  
covers the concealed Matter to he lodged at the End of the  
Finger, must he made a longitudinal incision, so as to pene-  
Irate the Vagina of the Tendon. After this Operation, fome  
Lymph will he discharg’d, to the great Ease of the Patient ;

but both the Disorder and Pain, contrary, to all Expectation»  
will soon return. Sometimes the morbid Matter will spontane"  
oufly burst the Coat of the Tendon, and make its Way through  
the external Skin; and.then the State of the Patient is the  
same aS above. Near the Orifice, hy winch the Humour is  
discharged, . appears a. small . Caruncle extremely sensible,  
which is continually moistened by Humours . flowing from  
the Hand to the Fingers. He, therefore, orders a Director  
to he introduced through she external Orifice within .the Coat  
of she Vagina ; and then with a Knife, or Scissars, expedi-  
tiousty to lay open the Flesh lying above the Director ; by  
which means, a thick, inspissated Matter will be discovered  
at the Bottom of the Sinus. If, after this Operation,, the Seat  
of the Disorder is not found, the Director must be again in-  
troduced, and the Operation repeated, till the Sear, appears.  
If the Sinus of the Paronychia is situated in the middle Phalanx of  
the Finger, and the Incision is carried to the Middle of the first  
Joint, *Petit* advises to continue the Incision about a Quarter os  
an Inch into the Hand, In order to remove theStricture which  
that Part of the Tendon, at the Extremity of the Finger, oceaa  
fions, where it is hard, and, aS it were, cartilaginous; but where  
the Tendon continues soft and membranaceous, there is Ho need -  
for continuing the Incision into the Hand.

Is the Disorder extends to the membranous Part of **the**Vagina in the Hand, and proceeds under the transverse and  
annular Ligaments of the Hand to the Arm ; so that the Fat  
upon the *Musculus Quadrdices* of the *Radius* begins to degenerate  
into a purulent Matter, the Director must he gradually and  
gently introduced into the Abscess, towards the transverse  
Ligament, and an Incision must be made into the incumbent  
Flesh, till it reaches that Ligament.; which done, the Patient's  
Hand must be bent to relax the Parts ; and then the Director  
heing convey'd under the Ligament, an Incision must be made'  
into the Skin and Flesh, as iar as the Director can he perceived  
to reach. The Aperture being thus made, and sufficiently  
enlarged, the Tendons and Muscles about the Carpus must be  
with great Caution disengaged, so that the Abscess will gra-  
dually come in View, and sometimes a copious Discharge of  
the purulent Matter will be made. In the next Place, as *Ga-  
rengeot* . informs us, *Thibaut,* late an eminent Surgeon at  
*Paris,* rightly advised, that, aS is usual in making a Seton,  
we should convey a proper Cord through a Passage previously  
marked out by a Probe ; since, by this means, at every fresh -  
Dressing, the Matter, collected in the Ulcer may be com-  
modioufly eliminated, and the Ulcer itself Cleansed, whilst  
the Ligament is preserved entire. But is; by these Mea-  
sures,a Remission of the Pains, 'the Feyer, and Other  
Symptoms, is not obtained; the most proper, and, at the  
same time, the most expeditious Method os. the Relief is, ac-  
cordingto *Petit,* forthwith to raise the Tendon that is most  
affected above the Ligament, and cut it off near to the  
Muscle; by which Method, he asserts, the Pain has inh  
stantiy ceasied, and the Patient heen happily cured; He, also,  
thinks, that the transverse Ligament should he ‘ used in the  
same manner; if it is found to be affected with the purulent  
Matter and Inflammation, so as to excite acute PainS; the  
Success of which Practice is confirmed by the. Instances of  
*Arnaud,* formerly a celerated Surgeon of *Parisi* But, if  
the Probe cannot be readily convey'd under the transe  
verse Ligament, an Incision should be made between the Radial  
Artery, and the Tendons of the Muscles, called Perforatus,  
and Perforans; which heing cautioufly enlarged, the Abscess  
should be searched, and the inclosed peccant Matter dis-  
charged. To recommend this Practice, *Garengeot* relates an  
Instance of a Patient os *Arnaud's,* whose Case was so desperate,  
that the Surgeons judged that the Arm should be amputated,  
for the Preservation of the Patient's Life;. but,- upon *Ar-  
nattests* dividing the transverse Ligament, the Patient was, in a  
sudden and surprising manner, cured. One Caution must he  
particularly observed, that the Hand be not extended during the  
Operation, nor for some time after; for, when the Hand con-  
tinues hent, the divided lagament will more readily unite, and  
the Hand recover its usual Motions: But if the Hand be im-  
prudehtiy extended, the Tendons under the divided Ligaments  
may start out of their Pisces, and the Hand never recover ite'  
proper Motions,-

With regard to the Dressings, if the Vagina of a Tendon  
be opened, lay several oblong Dossils of dry Lint on eacseSide  
Of the Tendon, by compressing of which the Haemorrhage  
may he stopped. But if one of the large Blood-Vessels be cut,  
so that the Bleeding is Very copious, it ought to be stitched up  
with a Crooked Needle and Thread ; for corrosive and styptic  
Medicines, proper Tor suppressing Haemorrhages in other Cases,  
cannot be fafely used here. Warm emollient Cataplasms most  
be applied to the Hand and Arm, and carefully secured by  
the Eighteen-headed Bandage, represented *Top. XXX. Fig. dur*Β B.'The Advantage os this Bandage over the long ones is

lonrcent: because, when it is used, the Dressings may he removed  
at Pleasure, without moving or stretching rhe Parts. To finish  
theDressing completely, theentire Part of the Bondage should  
re applied to the sound Part of the Limb, opposite to the  
Wound , and thus will the Dressings he more effeifrually  
secured he the Heads of the Bandage. *Heisterssturgery.*

PARONYCHIA.

The Characters are;

The Root is perennial, the Calyx shaped like a Baron,  
and divided into five Parts, which are soaped like a Capucin.  
The Hower consists of five Sumina, and the Ovary, which is  
. seated in the Centre of the Calyx, produces a dingle erecti  
Tube, and becomes with rhe Calyx a pentagonal Fruit, pre-  
gnant with a single Seed. The Flowers are furroinded with a  
Multitude of very'thin Sllvcr-colouFd Spangles, disposed in a  
Circle.

*Boerhaave* mentions two Sorts of *Paronychia* ; which are,

I. Paronychia, Hifpanica. *Cluse Hisp.* 478. *Polygonum,  
minus, candicans.* C. B. P. 281.

2. Paronychia, Hispanica, nivea : polyanthos. *Barr. Oof.*A 37. *Pelygermm, mentantem,niveum,Pelyanthos.* Barr. In. 725.  
*Boerh. lnd. alt. Plant. Vol. 2.*

It is called *Paronychia,* from ά^ἀ, *para,* near to, or im-  
porting Resemblance, and *omaj,* a Nad ; because it is of a  
joining. Silver-like Colour, or, probably, from *Paronychia,* a  
malignant Ulcer, affecting the Part Sixain the Nail; but, whe-  
ther this Herb be of any Essedi towards curing that Disease, I  
cannot fay ; only, that it is a remarkably emollient Plant: Hist.  
*Plant, adscript. Boerhaav.*

*Paronychia ratace» folia.* A Name for the *Saxifraga ; verna,  
aranto, humilior.*

PAROPIAE, παροτίαι. The external Angles of the Eyes.

PAROPTESIS, παρίοντησις, from ὸάτάω, to roast. A -  
Provocation of Sweat, by making the Patient approach a File  
of live Coals, or by placing him in a Bagnio, or Stove.

PARORAS1S. An Imbecillity of Sight. ,

PAROTIS, -παρωτὴς, from παρῆς importing near, and οὗς,  
the Ear. One of the salivary Glands. See SALIvA. An  
Inflammation, or Abscess of the parotid Glands, is, also, call’d  
*Parotis.* See ABscssscs.

*Alexander Trallianus* lays down a very goad Rule, in rela-  
tion to a *Paretis* j that is, at first to be fute to bleed, before  
any discussing or drawing Application be made, thet these  
who have been forward in doing this without Bleeding, have  
heen the Instruments of strangling their Patients. And, upon  
the fame Principle, he very justly explodes the Use of strong  
Repellers, and Astringents ; fuch as Solanum, Alum, *etc.*He describes the Medicines which are proper to make these  
Parotids yield to Discussion : An Application which ought  
always to be attempted, where the Case is capable of being  
cured by it, rather than Suppuration r But if, upon this, the  
Tumor does not in the least subside, and the Pain continues,  
all Endeavours, he fays, should he used to bring it to fuppu-  
rate , and ’tis a Sign, that Matter is making, if a Rigor and  
Fever, which were not before, come on unexpectedly, and the  
Pain .increases. And in this he agrees, in the main, with  
*Celsas,* who gives us a very good Distinction to guide our  
Practice in the Point; which is, when the Swelling comes  
originally of itself, without any other Distemper, to try mode-  
rate Repellents first, and Discutients; but where it attends  
or follows upon another Disease, as no Case is more frequent,  
It must then be brought to Maturation, and opened as Icon as  
possible ; for, in this Cafe, the Swelling is critical, and solves  
the Distemper. And *Hippocrates* pronounces those Parotids,  
which succeed long Fevers, mortal, unless they suppurate.  
When there are obstinate, and can’t be ripen’d by external  
Applications, there have been Instances, where Burning has  
brought them to suppurate. And *Severinus, and Valesius* be-  
fore him, have given an Account how they have tried this  
Practice in malignant Parotids, with Success. *Freindis History  
of Phystc.*

There is a Species of Tumors, which arise with Inflammations  
in particular Parts of the Body ; for Instance, ainder the Arm-  
pits, in the Groin, or under the Ears, in the parotid Glands;.  
whence they are called *Parotides,* but, in the other Place,  
*Bubos. \**

Thefe Tumors are either mild, or malignant ; they are said  
to he mild, when they arise spontaneoufly, without any pre-  
ceding contagious or pestilential Disease, as they frequently do  
in growing Children ; and these are generally not dangerous  
Of this kind, also, are those which arise after gentle Fevers,  
bring a critical Translation of the Disease. Thofe Bubos are  
called malignant, which happen in the Pestilence, or Venereal  
Diseafe ; whence they arc denominated Pestilential or Venereal  
-Bubos.

The mild Bubos are produced, like all other Inflammations,  
proceeding from internal Causes, from a Stagnation of the

Blood, inn viseousinspissated State; and they differ from other  
Inflammations only in their Situation, under the Armpits; in  
the Groins, and below the Ears, in pinguious, glandular  
Parts.

The Diagnostic is easy, if we consider, whether they are  
preceded by a venereal or pestilential infection.

The mild,, or lefs dangerous, Species are seldom attended  
with any iH Consequences, as they may either he discussed, or  
brought to a Suppuration ; but a speedy Discussion or Supputa-  
tion of them becomes more, difficult in Persons of an ill Habit ;  
and sometimes, from their Suppuration, procced Fistulas,  
which cannot he easily cured. The Parotides are brought to  
a Suppuration with great Difficulty, the Inguinal Bubos wish  
more Ease, and the Axillary, with very little Trouble

Against those Bubos, which are unaccompanied with any  
other Disease, as in Children, the most effectual Remedies ate  
Purgatives mixed with Mercurius Dulcis, which must he often  
repeated : By there Medicines, rhe glutinous inspissated Blond  
is diseussed, and drawn from the Part affectsdt Other Media  
cines for attenuating the Blood should he, allo, used ; but, if  
the Tumor he attended with a flight Fever, a Physician  
should he consulted, in ofder to treat the Fever with proper  
Medicines. \_

When the Inflammation is very gentle, and a Disoussion.  
maybe expectsd, *sor* this Purpose, digestive Pleisters, as simple  
Diachylon, the Plainer of Sperrna Ceti, Galbanum; Soap; or  
of Frogs with Mercury, may he outwardly applied.

If the Inflammation he more violent, and attended with  
more intense Pains, so that digestive Pleisters are of no Effects  
it must, without Delay, be brought to a Suppuration; and for  
this Purpose apply a Piaister of Diachylon with the Gums.  
But, if the Pain be extremely severe, digestive Cataplastns  
often laid, warm, upon the Part affectsd, wlll not only Initio  
gate the Pain, bur, also, promote a Discussion. These Cata-  
plafins may be made of the Crums of Wheat-bread boiled in  
Milk to a proper Consistence, with the Addition of a little  
Saffron ; or of Meal, with Honey, and fresh Butter, mixed  
over the Fire, to which a little Treacle may he added.

These, and Cataplasms of the like Nature, should he often  
applied to the Tumor, till it appears to be suppurated ; and  
then, without Delay, it must be opened either with a Caustic,  
or a Knife. But, in Incision, great Care must he taken to  
avoid wounding any of the large Blood-vesseis near the Abscess,  
which might occasion a fatal riiemorrhage. After the Abscess  
is opened, it may be treated as directed under the Article  
ABScEssus. A Piaister of Diachylon will he very proper to  
soften and diseuss any remaining Hardness about the Mouth of  
the Ulcer. *Heister.* See **StrppURATIo.**

PAROXYSMUS, παροξυσμὸς, from παροξὑνω, to irritate,  
or render sharp.. A Paroxysm ; Access, or Fit, of a Disease.

PARTHENIASTRUM. Bastard Feverfew:

The Charactsrs are;

It has a radiated difcous Flower, consisting of several Florets,  
which occupy the Disk ; but are barren i The Half-florets,  
which are shaped like an Heart, ate succeeded by black Seeds,  
which are naked, having no Down adhering, to them: To  
which may be added, the Flower-cup is simple, and cut into  
five Parts to the Bottom.

*Moller* mentions two Species ; .

**I.** *Partbeniastrum aertemifia folia, stere albe..* **Aced. Reg.  
Scien.**

2. *Partbeniastrum helenii folio.* Horn Elth.

. The first Sort grows wild, in great Plenty, in the Island of  
*Jamaica,* and in some other Parts of the *English* Settlements in  
the *West-Indies,* where it is called wild Wormwood, and is  
used by the Inhabitants aS a vulnerary Herb.

The fecond Sort grows plentifully in several Parts of the  
*SpanishWost-Indies,* whence the Seeds have heen brought into'  
*. Europe.* They are both annual Plants. *Mister's Dictionary.*

PARTHENIUM. The seme as MATRICARIA;,which  
see. mi

PARTUS. A Birth. See OnsTETRICATIo.

PARVIBIBULUS. See **BRACHYFOTJE.**

PARULIS, παφίλἱς, from *ditiAe,* near, and ουλον, a Gum.  
A Boyl, or Abscess, of the Gums.

A painful Tumor Of the Gums, with Inflammation and  
Swelling of the Cheek, more or less, is sometimes occasioned  
by the Tooth-ach. There Tumors are called, by the *Greeks,  
Parulides. .* They must be treated in the same manner with  
other inflammatory Tumors, by digestive Medicines. If these  
are not effectiral, or if the Disorder be neglectsd, it sometimes  
degenerates into an Abseess, or Fistula. If the Disorder be recent,  
in order to alleviate the Pain, which will not suffer the Patient  
to steep, and to difcuss the Tumor, boil Chamomile, Sage,  
the Flowers of Elder, and the like digestive Herbs ; and let rhe  
Patient often bold, for a considerable time, a little of the  
warmDecperion in his Mouth. Outwardly lei him apply»

Bag silled with the same Herbs, or.alPlaisier of Meliinspor  
simple Diachylon with Camphine; os,if these cannot he readily  
procured, apply a warm Cloth, to defend the Part from the  
Cold, and obtain an easy Resolution , not omitting internally,  
diaphoretic and resolvent Medicines. If. by. these means a Re-  
solution cannot he obtained, recourse must he had to Emollients,  
as Marshmallows, Mallows, Mullein,. .Figs, and the like,  
boiled in Milk, and frequentiy held in the Mouth. TO acce-  
lerate the Maturation, apply half a Fig, roasted upon the  
Coals, to the Tumor, and outwardly an emollient Cataplasm  
upon the Cheek. As soon aS the Softness indicates a Suppura-  
non, an Incision must be made into the Tumor, with all Ex-  
pedition, though the Matter should not be entirely maturated ;  
lest, by its Continuance there, the Bone should he affected and  
corroded ; whence the most malignant Fistulas are often' pro-  
dnced. The Ulcer heing opened, the corrupted Matter must be  
carefully expressed with the Fingers; and then let the Ulcer be  
often cleansed with warm Wine, or a Decoction os Agrimony,  
and St. John's-wort, mixed- with Honey os Roses;, and the  
Wound will heal spontaneoufly. Is the Disorder haspenetrated  
edeep, let the Decoction be injected with-a. Syringe;, find, the  
Liquor heing carefully pressed out, apply a Compress to the  
Bottom of the Ulcer, .which must he secured with a Bandage,  
that itmaybegin to heal from the Bottom. Butif theUlcershould  
degenerate into a Fistula, which is often accompanied with A Ca-  
ries of the Bone, after using the above-mentioffd Injections, a lit.-  
tie of the Oil of Myrrh *per Deliquium,. otcA* the Elixir Proprieta-  
tis, should be instilled-into the Ulcer for deterging and healing is.  
By this Method I have not only cured simple Ulcers of the  
Ginns, but likewise a Fistula- attended -with a Cories of the  
Bone, even after it had continued above a Yean Bus, if none,  
of these Medicines succeed, the Fistula must be laid open by  
Incision, and the Caries, extirpated either by Medicines, the  
Rasp, or the actual Cautery. Sometimes a Fistula may-he *qc~*casioned in the Gums by a corroded Tooth, which are usually  
called *Fistulas of the Teeth,* or *Maxillary Fistulas*; the Tooth,  
therefore, must be first extracted before the Application of  
proper Medicines. The Miscellanea Beroliensia contain some  
particular Observations on the Parulidesr Whence it appears,  
that suppurating Medicines have but little Effect; and that, if  
these Tumors are not quickly laid open by Incision, and the  
Tooth extracted, they degenerate into Fistulas. It is, there-  
sore; a Fetter Method, as we have already directed, to dis-  
charge he Matter early by Incision, although crude, than, by  
delaying it, to endanger a Caries of the Bone. *Schelhammer,*in I692. published an excellent Dissertation *de Epulide et Pa-  
rulide,* very proper to be consulted; See EPULIS. *Heistcri  
Chirurg. - - -*

-PARUS. Offic. Bellon, des Oyse. 369. *Parus mayors*. AldroV. Ornish. Gesil. de Avin. 578. Jonsi de Aviso 86.

Charlt. Exer. 96. Mer. Pin. I78. *Parus carbonarius.* Schw.  
A. 318. *Parus carbonarius mayor.* Schrod. 5. 322.. *Frin-*Er&Tnseu .Parus inamor. Raii Ornith. 240. Ejusd. Synop. A.  
73. Wil. Ornith. I74. THE TITMOUSE. .

~ This Bird is celebrated for its Virtues against the Stone in  
the Kidneys, and colic Pains, if eaten aS Food, or burnt, and  
taken as a Medicine.

. PASIONIS PASTILLUS. The Name of a Pastil, de-  
scribed by *Galen, Oribafius, Aetius,* and *Nicolaus Myreps.us.*

PASMA. The **same aS CATAPASMA. . '**

d PASSA. An Epithet sor Grapes, importing their being  
dried in the Sun. :

PAsSA, in *Paracelsus,* isaWhitloe.

' PA-SSAVANTICUS PULVIS. The. Tide of 4 cathartic  
Powder, described by *Schroder, L.* 2. *Cap. yyo*

PASSER VULGARIS. Offic. Schrod. 5. 322. *Passer:*Gesn. de Avib. 58I. Bellon, des Oyse. 362. *Passer domesti-  
cus.* Aldrov. Ornith- 2. 534. Jons, de Avib. 65. Schw. Ar.  
32I. Met. Pin. 175. Wil. Ornithe I82. Raii Ornith. 249.  
Ejusd. Synop. A. 86. *Passer domesticus vulgaris.* Charlt.  
Exer. 86. THE HOUSE SPARROW.

Because it is a Very salacious-Bird, it is recommended, espe-  
cially the Brain of it, as a Strengthens and Incentive to Ve-  
nery. ' " ' -

**PASSER TROGLODYTES.** Ossie. Schrod. 5. **322.** Aldrov.  
Ornith. 2- 655. Mer. Pin. I77. Gesn. de Avib. 588. Schw.  
A. 324. Jons, de Aviso 82. Bellon, des Oyse. 34T. Will.  
Ornith. I64. Raii Ornith. 229. Ejusd. Synop. A.-So. THE  
’WREN.

The Bird is very much commended for its Virtue in the At-  
trition and Expulsion os the Stone, whether it be taken whole,  
and eaten raw season'd with Salt ; or burnt to Ashes, and so  
exhibited. *Schroder..*

PASSERINA. ' The Name of a Plant, which *Parkias.on*Calls, *Pcesserina, Linarios folio.* Sparrows Toad-flak. Some  
make'it a Species of *Linum*; others of *Lithofpermon.*

.PASSIO. A Passion, Affection, or Disease. Thus there

are theissac Passion, the'Hsysteric Passion, and many other\*  
distinguished by their proper Epithets. - - - . . . ..’

PASSULjE. SeeUVA.-ssl —

PASSU LA TUM. The Form of a Medicine, consisting  
of the Pulp of dry’d Grapes *{Passedur* passed through a Sieve.-

PASSUM,-γλυκύ. Raisin-wine; that is. Wino made\*of  
.dry’d Grapes, or os Grapes .suffer’d to'remain upon the Vine,  
till they are much wither’d-by the Heat of the Sum - ’

PASTA, πάστα. A kind os Aliment, prepared,- according  
to *Hifycheus,* os unsalted--Cheese, fine Flour; and Sesamum.  
It is, also, explain’d, a sort os Gruel, made of bruised Puls,  
mixed with Meal; and. Pottage, thicken'd with Flour.

PASTA REGIA. A Lozenge.

**. PAST A EPIsPAsTICA." The blistering fine Paste.**

Take os Cantharides in Powder, and Wheat-flour, each  
pas muclr as you please ; and os strong; Vinegar, a suffici-  
/τι simo quantity, to thaineinto a fine Paste. . - :

PASTaETUM. A Pasty; a well known Species os Ali-  
Ihentiy-'ced T r . E d as', .

~. PASTILLUS. ’ A Troche, or Pastil;

r The *Pastillus, ex Seminibus* is thus described by *Paulus  
AEpineiarD.su. C.* 12.- '

Take os'the Seeds os-Anise, Bishops-weed, and Fennel, each  
sour Drams; os the Seeds os Smallage, and Henbane;

. and os Opium, each two Drams. Bruise them in Water  
sor Pastils.

PASTINACA.

- The Characters are ; -

The Root is thick, carnous, and succulent; the Leaves are  
large and: broad, and strengthen'd by a thick Rib. The Seed -  
is oval, large, thin, marginated, and casts its Husk.-

*Boerhaave* mentions eight Species of the *Pastinacas,* which are,

I. Pastinaca; sylvestris ; latifolia. *C. B. P. ϊζζ. Raii Hist,*I. 4O9.- *Synop.* 3. 206. *Tourn. Inst.* 319. *Boerh. Ind. A. (An.  
Pastinaca fylvestris Elapiiobosmm.* Ossic. *Pastinaca latifoliasisse  
vostris:* Ger. quoad Descript. 870. Emac. I025. Parin Theat.  
944. *Pastinaca Germanica fylvestrti, quibufdam Elaphoboscum.*J. B.3. I49. *Banciai Offic.* Volck. 320. WILD PARSNEP.

ThewildParsnep is much less than The Garden Parsnep, both  
as-to-the Thickness ofits Roots; and the Height of its Stalks,  
which are not so much branched aS those of the other. The  
Leaves are smaller, hairy; and of a strong Smell. The Flowers are  
small and yellow, growing not only on the Top, but coming  
forth from the ..Sines of the Stalks, at the Setting on os the  
Leaves, and are succeeded by the like Seed . It grows frequent.:  
ly by Hedges, and Way-sides, and flowers in *June.* The  
Root and Seed are used, though but seldom. .

They are said to open Obstructions os the Liver and Spleen ;  
to expel Wind, and help theColic ; to provoke Urine, and the  
Menses ; and to be useful against the Bitings os venomous’  
Creatures. *Millegis Bot. Off. .-so.'- -*

It agrees in'Virtues with the Garden Parsnep; which, as  
*Jo Bauhine* thinks, differs-from it only'in Cultivation.

2. Pastinacasativa ; latifolia. *Ger.* 870. *Emac.* I 025.'  
*East Hist. ‘* I.,416. *Park. Theat. Farad.* 506. *Raii  
Synep.* 3. 206..- *Co Β. P.* I55. *Tourn. Inst.* 319. *Boerh. Ind.  
A.* 67. *Pastinaca.* Offic. *Pastinaca saliva latifolia Ger-  
rndnica luteoflore.* J. Β. 3.. I50, PARSNEP.

The Parsnep is a Root well known to every one, being large,  
running deep into the Earth, not much branched, white in the  
Inside, ossa pleasant sweet Taste; it has many large, winged;  
hairy Leaves, of a dull-green Colour, divided into several tri-,  
partite Sections. The Stalks grow to be five or six Feet high;  
much branched and chanelled, beset with several smaller  
Leaves, which grow at the Divisions; on the Tops grow Um-  
bels of yellow five-leav'd small Flowers; and, after them,,  
come smooth, flat, oval Seed, two growing together, as in  
other umbelliferous Plants: It is planted in Gardens, and flowers  
*in June* and *July.* The Root is only used.

- Parsneps are more used for Food than Medicine, being a  
pleasant nourishing Root, tho' somewhat windy, and thought  
to be Provocatives to Venery. *Miller s Bat. Off.*

It is said, that the Seeds os the wild Parsnep, twice sowed in  
a rich and fat Soil, produce Garden Parsneps, in the same  
manner as Garden Carrots are’ produced from the Seeds of .the  
wild Carrots. *Casulpinus* relates, that an Electuary’ is pro- -  
pared os the Roots with Sugar, which is Very much in Use  
among the Peasants for Women in Child-bed, and Persons  
recovering from Sickness, to renew their Strength; if, also;  
creates an Appetite. That it is of an inciding, attenuating,'  
deterging, and deobstruent Quality, is evident, says fe *Bauhine,^*from the very Taste and Smell. They who pull the Roots in  
Winter, says the same Author, must beware os the *Cicuta,* or

*Ctcuiarsa*; because, while he was at *Mempelgard,* **he saw two**Families, who were almost dead with eating rhe Roots of thefe  
Plants instead of Pariheps; -bur they recover'd by the Help of  
Vomiting, *Theriaea Anaromachi. Pulvis Saxonicus,* and some  
Purgatives. It is an Opinion among our People, hers *Ray,*chat old Parsheps, which have endured Years in the Ground,  
Induce Dehrioushess and Madness ; for which Reason they give  
**them the** Name of MADNEPS, that is to say, MAD PARS-  
-NEPS. *Raii Hist. Pant.*

3. Pastinaca; sylvestris; altiffima. T. 4I9. *Panax costi.,  
num.* C. B. P. I56.

4. Pastinaca ; Olusatri folio. *Bocrh. Ind. A. dur. Panax  
Herculeum.* Ossic. *Panax Heracleum ma jus.* Ger. 850. Emac.  
1003. Raii Hist. I. 4Io. *Panax Pastinacae folio.* .Co B. P.  
156. *Panax Horacleum.* Hist. Oxon. 3. 3I5. *Panax Ho.,  
racleum alterum sive peregrinum Dodonat.* Par in Theat. 948.  
*Pastinaca silvestris altiffima.* Tourn. Inst. 3 I 9. *Spbondylio'  
vel potius Pastinacae Germanicae affinis Panax vel Pseu-  
do-cosius flore luteo. J.* B. 3. I56. HERCULES'S ALL-  
HEAD ... ..

This is a large tall Plant, growing to he two or three Yards  
high» having many large Wings, of a yellowish-green Colour,  
a foot or more long divided **into five** or seven Divisions, **of**longish round-pointed rough Leaves, crenated about the Edges,  
having one Side of the Leas growing lower and deeper toward  
**the** Bottom than the other. The Sulk is hollow, having seve-  
ral Joints beset with the like Leaves; and on the Toproundish  
Umhels, os small yellow sive-leav'd Flowers, each os which  
is succeeded by two broad flat oval Seeds. The Root is large,  
branched, os a yellowish Colour on the Outside, and white with-  
in. This Plant grows naturally in *Syria,* as, also, in *Italy, Sicily,*and the Southern Parts os *France,* though in **these** last Places **it**yields hut-little Gum. See OpoPANAx. *Miller's Bot. Osisi.*

The Roots os this Plant are said, by thofe who import it,  
to be effectual in all cold Affections of the Brain and Nerves,  
for Disorders of the Breast, and tormenting Pains of the Sto-  
mach ; for all Obstructions *of* the Viscera, and Diseases of the  
Kidneys, Bladder, and Womb ;.on which Account, they are of  
Service in inveterate Pains of the Head, Vertigo, Epilepsy,  
Stupor, Lethargy, Convulsions, Palsies, Asthma, Codgb, Jaun-  
dice, and Dropsy : They expel Wind, kill Worms, provoke  
Urine, and the Menses, break the Stone, and promote the Birth.  
The Decoction is given in Clysters, for the Colic and Sciatica.'  
*Raii Hist. Plant.* The *Opopanax* is the concreted juice of this  
Plant; an Account *of* which see in its proper Place.

'' 5. Pastinaca ; folio quasi Libanotidis latifoliae. *Pmax,folio  
glabro, nitente, lato.* Ind. I 6.

. 6. Pastinaca ; semine longissimo. *Panax, folio glabro, usu  
tente, lato, altior.* Ind. I6. . ,

7. Pastinaca ; fylvestris, altiffima. *T.* 319. *Hoc nomine misit  
D. Saluadore, dessert a tertia, foliio majoribus, scabris, aspe-  
ris. - .*

8. Pastinaca; sativa; radice turbinata, *Faill. Bocrh.send,  
alt. Plant. .*

This Plant has its Name *Pastinaca, a Pastu,* from Feeding,  
hecause its Root is much used in Food ; it is, also, .called *Ela..  
phoboscum,* from ἔλαφος, *(Elaptbos)* a Stag, and βόσκω, *(bosco)*to seed, because Deer eat the Herb.

It is a Plant of great Note in Medicine: The Seed hereof,  
with the Seed os the *Daucus,* are Very serviceable in breaking  
the Stone. Hence there was a Very celebrated Physician, who  
?rescribed the Flour of these Seeds, together with the Root of  
dquorice, reduced, also, to a Flour, in Cases which required  
Lithontriptics: It is, also, good for the Pain of the Colic  
proceeding from Phlegm; for the Strangury, Hiccups, and  
Obstructions of the Menses ; it is hurtful in nephritic Disorders  
Proceeding from a cold Cause. The second Species has a Root  
which is eatable, on account of its soft Pulp ; and, hailed in  
Milk, is good for consumptive and lean Persons, heing Very  
nourishing. The third Species is by some taken for the  
Original of the *Opopanax*; its Seeds are not remarkably acrid.  
But the fourth is the true Plant whence the *Opopanax* proceeds ;  
os which I made an Experiment this last Summer, when upon  
making a Wound in it, there flowed out a Juice, which, being  
a littie inspissated in the Sun, had the perfect Smell and Taste

**. os** *Opopanaxi Hist. Plant, adscript. Bocrhaau.*

**PASTINACA AQUATICA.** A Name for the *Slum, latifer  
liurni*

**PASTINACA EcHINoPHORA.** A Name for **the** *Echino-  
pihora; Pastinaca folio.*

**'. PASTINACA SYRIACA.** A Name for the *Tordylium ; Ori-  
entale ; Secaiul Arabum dictum Rauwolsio.*

**PASTINACA TENuIFoLIA.** A Name for several Sorts of  
**DAUCUS.**

**- PASTINACA,** is, also, the Name of a Fish, which issues  
distinguished by Authorsd

*‘ Pajtinuca.* calv. de Aquat. 144. Rondel, de Pifc. I. 33I.

*Pastinaca niarina.* Ossie. Charlt. *Fixer, io.* Aldrov. de- Pise\*  
424. JonsidcPiso- Iq. Gesm de Aquat. 67g. *Pastinaca marina  
davit.* Bellon, de Aquat. 93. *'Pastinaca marina prima RatndeletiL*Raii Ichtlu 6.7. *Pastinaca marina lenis Bellenii.* Ej use. Synop.  
*Pise.* 24. *Aquila Pifers, feu Pastinaca marina.* Mer. Pin. j8c.  
THE POISON-FISH, FIRE, or FIERCe-FLAW..

It is taken in the main Sea; the Parts. of it used in Medi-  
cine are theLiver, and the Prickle, which grows Out of its Tail.  
The Liver is said to he good for the Itch ; and, boiled.in Oil,  
deterges the Lichen and Leprofy; the Prickle, aS *Diofcorides*fays, cures the Tooth-ach, by breaking and expelling the grieved  
Tooth. .

.PATELLA. .The Knee-pan. I .2.

PATETHEISyE, or PATssiTiE UVIE, πατιθεῖσα, or  
πατεταϊ σταφυλαι, Grapes suffered Io remain on the Vines,; till  
they are much wither’d, and dry’d by **the.Sun.. '**

PATHEM A , πά^ιμα.: An Affection, orDisordet. x - .  
.. PATHETICUS... An Epithet of the. fourth Pair of Nerves,  
fo called, because they direct the Eyes to intimate the Passions  
of the Mind. . rr.c-. u-'amluU....

PATHOGNOMONICUS, πκόογνωμοαικκίςὝΓ^.πὸ'ὑος,  
**a** Disorder; and γινῶσκο, to know. An EpitheIshI a Symptom,  
or Concourse of Symptoms, that are inseparable: from, a- Distem-  
per, and are sound in that only,, and no others...se. T  
- . PATHOLO GIA, namchoYiassrom πάθος, a Disorder 7and  
λέγω, to speak, or commemorate.That. Part-Ol - Medieine,  
which explains the Nature of Diseases,. their Causes andSyin-  
ptoms. ..

PATIAS. The same as *Squama AErisi Rulandas. ;.*

PATIENTIA...A Name for **the** *Lapathum, .hortenseb  
folio oblongo-, sive secundum Dioscoridis. : s*

PATIENTIrE MUSCULUS is a Name for the *Libator  
Scapula proprius,* otherwise called *Angularis.*

. PATOR NARIUM. The Sinus, Cavity, or .Chaim of  
**the** Nose. *Scribonius Largus. . ... so* Ἀ.

PATOS, πάτος.. The same aS RH YPOS; which **see.**

PATRIMONIUM. The Genitals are sometimes called by  
this Name. *.Castellus. . - -*

PATURSA. The Venereal Disease. *Castellus.* from .Ess-'  
*lopius. . .:. so. .*

PAVATE. Acostae. Lugd. Cast. Ap. *Arbor Erysipelas  
curans* Lusitanis, *Fafaveli* Canaiin. ‘

This is a Shrub winch grows on the Banks os the Rivers  
*Memgate,* and *Cranganor, in America.*

The *Indians* use its Wood and Rout, asSpecifics against an  
Erysipelas. They reduce them to Powder, and infuse the  
Tame in a Decoction of Rice, till it becomes four; and with  
this Liquor they foment the Erysipelas, and make the Parient  
drink it twice a Day, aster they. have Purged the Stomach.  
They give it, also, to those who labour under burning Fevers, .  
Inflammations os the Liver, and Fiuxea os the *Bessyr Eemery  
des Drogues. . . , v. ἐν*

PAU CIPERUS. An Epithet of Wine, importingthe siime  
*as Oligophorus. . ..... Asu* s

PAVEL. A Name for the *Momordicaso.Teylanica y pam-  
pinea fronde , fructu breviori.* ::. c» .'ου I '

PAVIA. The scarlet-flowering Horse-chestnut. *’a---,* sor  
The Characters are;' .i .» :ς . : '-!

The Leaves are like those os the Horse-chestnut, and con-  
jugated; but so disposed, as to have every consequent Order  
cross the preceding. The End of .the Pedicle becomes .a long  
tubulous red Calyx, os the same Colour with the Flower, with  
**a** Margin divided into six Segments. Within the-Calyx grows  
an anomalous pentapetalous Flower, *so* disposed, as, with its  
five Petals, to resemble a monopetalous bilabiated Flower;  
for the two upper Petals, in .Conjunction, form a kind of Galea,  
the two lateral ones, tile Jaws, and the . under one, the .Beard.  
The Flower incloses eight Stamina, each furnished with ini  
Apex, and the Flowers are disposed in Spikes. The Ovary in  
the Bottom os the Calyx shooting forth a long, cylindrical,, red  
Tube, becomes a tricapsular, tricoccousTruit2. containing glo-  
bular Seed.

*Boerhaave* mentions but one Sort of *Paula* ; which is,  
*Pavia. An Ricinoides, Americana, Castanea folio.* Plum. T.  
656. *Sad mouna Pisonis.* Plukn. Phyt. 56. 4. *Bocrh. Ind. all.  
Plant. . ' .*

The Flowers are like those os Brank-Ursine. Many Au-  
thors will have it to he the *Ricinoides Americana*; but their  
Flowers do not agree. I am unacquainted with the Virtues of  
this Plant ; but it is os an acrimonious Quality, like the *Tithy-  
rnalus. Hist. Plant, adscript. Boerhaav.*

PAULA. The Name .of a Plaister described by *Paulus  
AEgineta, Lib. J. Case.* I 7.

. PAULADADUM. A Name for the *Terra Melitaa,* others  
wise called *Terra Sigillata Sancti Pauli. Dorneus sms, Pau.,  
ladadum* is a Species of Seal'd Earth, which is found in *Italy. \_*

: PAVO. Ostic. Schrod.I. 322. Aldrov.Tymith. 2. 81  
Mer. Pin. I72- Schw. A. 323. Gesn. de Avitu- 393. Jons.:  
de Awh. 37. Chaste Exes. 8c. Will. Omkhi II2. Rail  
Omith. I58-Ejusd. Synop. A. 5I. *Pavus et Pavo.* Bellon,  
des Oyse. 234. THE PEACOCK.

. Wbatis used in Medicine is the whole Bird, theEat,' Gall,  
Dung, Feathers, and Eggs. The Broth of a Peacock, ofpe-  
’ cially if it he fat, is faid'to he *R* Specific against thePleurify *y*the *Fat,* with the Juice of Rue, and Honey, is an excellent  
Medicine for the Colle. The *Gall* cures Dimness of Sight;  
represses Defluxions of the Eyes, and cures the Afperities of  
theEyelids. The *Dung,* dried and pulverized, and the Weight  
of a Dram macerated at Night in Wine, and exhibited for"  
many Days together, has a peculiar Virtue of’curing the-Ver-’-  
tigo and Epilepsy. The *Feathers* are used in Siiffumigation, for  
the Hysterics; and the Eags are prescribed for the Cure of what  
they all the *Erratic Gout. Dale from Schrcderso . - . '*

PAVOIL Besides Fear, the usual Signification, it' some-  
times imports the Itch. *Castellus. ; - - ..ἐν .;*

PAUSIS, παυσις, from παὐω, to cease. A Remission, or-  
**Cessation,** os a Disease.

PAYCO HERBA. *Mrnard.* The Name of a Species of  
*Peruvian* Plantain. - - - - : -

The Powder of it, taken in Wine, is said to remove nephri-  
tic Pains procceding from Flatulencies, or a cold Causeς and  
the Plant itfelf, helled, and applied in Form of a Pleister to the  
Part affectsd, is said to worse the Caine Effectwhich *Mnnardes,*as he affines us, sound to be true by Experience. *Raii Hist.  
Plant. . - , . -*.. PECHEDION, πηχέδιον. The *Perinaum.*

*c* PECHYAGRA, πηχυάγρο. The Gout in the Elbow.  
PECHYS, πηχυς. The Elbow.

- PECHYTYRBE. An Epithet for-the Scurvy. *Castellus*from Fbrestesr. - *. - s.*

- PECTEN. The Pubes. In Zoology, it signifies a Shell-  
fish, called a Scallop. These are esteemed a good Food, anil.  
are recommended as detersive, aperitive, and carminative, and  
are said to increase the seminal Juices. The. Shells agree with  
these of the Oyster in Virtues. : : , /- 'i d

PLcTEN VENERIS. Α Name for the *Scandia ., Cretica .,  
minor.* ShepherdsNeedle, or *Venus’s* Comb. ‘

. PECTINAEUS MUSCULUS. -This is a small flat and:  
pretty long Mufcle, broad at the upper Part, and narrower  
at the lower, situated obliquely between the Os Pubis, and  
upper Part of the Os Femoris. It is commonly a single Muscle ;  
hut! have sometimes found it double. . ..eced

:: It .is fixed above by fleshy Fibres to all the sharp Ridge, or.  
Crista, of the Os Pubis, and to a small Part of the oblong  
Notch, or Depression, on the sore Side of that Crista, in which  
the upper Extremity of this Muscle is lodged.

- Thence it runs down obliquely, towards the little Trochanter,  
under, and a little behind which, it is inserted obliquely by a  
flat Tendon, hetween the superior Insertion of the Vastus In-  
ternus, and inferior Insertion of rhe Triceps Secundus, with  
which it is united. . - z.2. .. -

The Pectinjeus is an Assistant to the Psoas and Iliacus, in  
’ moving heth the Thigh, and the Pelvis. It may, likewise, assist  
in bringing the Thigh inward, or toward the .other, whether it  
he extended, or hent, at the same time. *Wiastow.*

PECTIN ATIO: Combing the stead. This is recom.  
mended by some as an Exercise conducive to Health, and con-  
sidered as a Species of Friction ; it is certainly very useful, not.  
**to** mention that, by cleaning the Head from Scurf .and Dirt, it  
prevents Obstruction of the cutaneous Pores.

PECTORALIS. Peoloral ; an Epithet for Medicines ap-  
propriated to Disorders of the Breast- and Lungs.

The Pedocal Decoction is thus directsd in- the College Dis.  
s penfatory:

Take of stoned Raisins, one Ounce ; of Dadur Is, No. six;  
of fat Figs, No. eight, of Barley cleansed, one Ounce.  
Boil these in three Pints of Spring-water to the Confump-  
μ tion of a third Part; towards the End putting in, of Li-  
quorice-root, half an Ounce; of the Leaves of Maiden-  
hair, Ground-ivy, Scabious, anil Coltssoot, of each one  
Handful." Let them stand in Infusion a quarter of an  
Hour, and then strain out the Liquor. "

**PscTORALIs MAJOR.**

This is a large, thick and fleshy Muscle, covering the fore  
Part of the Breast, from the Sternum, where it is very broad,  
to the Axilla, where it contracts in Its Passage to the Arm. It  
is naturally divided into two Portions,, one superior and small,  
which may he termed *Clavicular*; the other inferior and large,  
which we may call *Thoracic. : „*

The Clavicular Portion- is fixe d by a fleshy insertion in almost  
half the Clavicle next the Sternum, ending under the Iofertion

of the Sterno-mastoidseus. Thence it tuns obliquely down to.  
ward the Axilla, contracting by small Degrees,, and ends in a  
stat Tendon, or tendinous Band. In this Passage, rt herders  
on the anterior Edge of the Deltoides, from which it is distin-  
guished only by a pinguious or cellulous Line, and a small Vein,  
named *Vena Cephalica. ' ..*

- The Thoracic Portion is bread, and, in some measure, ra-  
diated. It is fixed by its anterior Circumference. inthe lateral  
Part of the Outside of the Sternum, in the Outside of the'.  
Cartilages, and in a fmall Part of the Bones of all the true  
Ribs, and of the first, and sometimes of the second, stnall  
Ribs. All these insertions are like fo many Digitations: :

-The Insertions in the Sternum end .by a great Number of  
very short Tendons, which run toward the .Middle of the  
Bone, meetiog, and decussating those from the fame Muscle  
on the other Side.

' The lower Iofenions are most distinctly digitated, and they  
mix with those belonging fo the Regius, and Obliquus Exter-  
mus, of the Abdomen ; there being, likewise, several Fasciculi  
of Fibres common to the Pectoralis, with these Muscles.- This  
'Portion is,'also, fixed to the Rihs by internal fleshy Strata,i  
-covered by the external Insertions, and forming together with  
them the Thickness of the Muscle. - , ...

- - From thence all the fleshy Fibres contrail in Breadth, and  
approach each other in their Passage to the Arm: The supe-  
.riot Fibres.run downward, joining those of the Clavicular Por-  
- tiont those next them run less obliquely; the following, more  
or less transversty; and the inferior run upward in the same  
manner. This whole Portion ends at length in a flat Tendon;  
joined to that ofthe small Portion, and folded heck upon is in  
the following Manner:

'rThe inferior fleshy Fibres of the Thoracic Portion, before  
they reach the Tendon in their Passage to the Arm, are gradu-  
ally turned inward under each other, and then nrn up behind  
the Extremities, of the superior Fibres. By this Turn, the  
lower Part of the Tendon answers to the superior fleshy Fibres,  
the middle Fibres of both to each other, and the upper Part of  
the Tendon to' the lower fleshy Fibres; and so on. Thus the  
Tendons of hath Portions, adhering closely by their flat Sides, \*  
and united at their Edges, form a double tendinous Plane, the  
Fibres crossing each other. The anterior, or external Plane,  
belongs to the Clavicular Portion; the internal, or posterior  
Plane, to the Thoracic Portion.

ιι The Tendon thus formed is inferred according to its Breadth,  
at about one fourth Part of the Length of the Bone from the  
Head, in the osseous Ridge of the great Tuberosity, that is, in  
the outer Edge of the Groove or Chanel, the Cavity of which  
is fines in Conjunction with another Tendon, by a Stratum of  
very thin, shining traofverse Fibres. This insertion lies be-  
tween that of the Tendon to the Deltoides, which it touches,  
and that of the Latiffimus Dorfi, which is on the other Side of  
the Groove:

This Muscle,. .together with the Deltoides, fends off an  
Aponeurosis, which, joining that of the Biceps, is spread over  
the Muscle of the Arm.’ It. partly covers the Peciorajis minor,  
and Serratus major ; and by its broad Tendon it covers transe  
versely the Brachial Chanel, and the Tendon of the Biceps  
lodged.there. Lastly, it forms the anterior Border of the Hol-  
low of the Axilla, as the posterior is formed by the Latissimus  
Dorsi. st ...

The Pectoralis major ferves in general to bring the Arm near  
the Ribs, to prefs it strongly against them, and to carry it to-  
wards the sore Part of. the Thorax: This last Motion may be  
performed without separating the Arm from the Ribs, as when one  
Arm is crossed over the other ; and it may likewise he done with  
the Arm raised, as when the Hand of one Side is hud over the  
Shoulder of the other Side ; and in that Case the.anterior Por-  
tion of the Deltoides may. assist this Muscle in great Efforts.

By means of the Fold in its Tendon, the superior and in-  
serior Portions may aft as two distince Mufcles, that is, one  
may act without the other. The fuperior stessiy Portion, which  
answers to the lower Portion of the Tendon, serves chiefly to  
raise the Arm forward. . ...

The inferior fleshy Portion, which is joined to the upper  
Portion of the Tendon, by its Insertion in the Os Humeri,  
and by.the Connection of that Bone with the Scapula, may  
depress the Shoulder, or keep it from rising, with more or Jest  
Force, much after the same manner as the inferior Portion of  
the Latissimus Dorsi; the inferior Portions of these two Mof.  
cles concurring in. the fame Use;.as when we fupportour-  
selves upon our Hands, or walk with Crutches.;

It is, -likewise, by means of the lower Portion of this Mus-  
cle, that we can suspend rhe whole Body by the Hands grasping  
the Branch of a Tree in climbing, and the like. In this Casc.  
also, the Latissimus Dorsi acts in Concern with the Peoloralis ;  
and ;this Co-operation the Painters and Carvers have taken  
Care to exprefs in Crucifixes.

The inferior Portion of this Muscle cannot perform these two  
Uses, without the Assistance of the Muscles of the Abdomen,  
winch, by pulling the Ribs downward, become, in a manner, a  
Continuation of the Insertion of this Portion. The same thing  
may he observed concerning that Part of the inferior Portion os  
the Latissimus Dorsi, which is inserted in the false Ribs.

The Uses Of the superior Portion of ail the Body of the  
Pectoralis cannot take place without the Co-operation of the  
Muscles, which move the -Scapular on the Trunk, especially  
**the** Senatus major , hecause the Scapula must be securely fixed,  
hefore it can be a Fulcrum for the Os Humeri to move.upon.  
The same thing is to he observed concerning the Deltoides, and  
all the other Muscles which move the Os Humeri on the Sca-  
pula. *iVinstato.*

**PECT0RALIS MINOR.**

. This is a small fleshy Muscle, something of a triangular  
Shape, situated at the superior, lateral, and anterior Part, *of*the Thorax. γ

By its Basis it is inserted in the external Labium of the upper  
Edge of the second, third, fourth, and fifth true Rias, near  
their Union with the Cartilages, by the same Numher of Di-  
gitations, or separate fleshy Portions, because; of the Intervals,  
hetween the Ribs ; and for that Reason it has heen called *Ser.  
ratus minor Anticus.*

- From thence these Portions run up more or less obliquely,  
toward the Shoulder, and form a fleshy Belly, which contracts  
as it pastes before the two first .Ribs; and then, becoming A.,  
short, fiat, and broad Tendon, is inserted in the upper .Part of  
the Apophysis CoracoideS of the Scapula, reaching all the Way  
to the Point of that Process.

This Muscle is covered by the Pectoralis major,, and adheres  
very closely to the external intercostal Muscles, TheDigita-  
tionS commonly taken notice of cover and hide several others,  
by which the Number of Fibres, and Thickness .of this Mus-..  
cle, are increased. Its Tendon unites a little,, at the Apex es  
the Coracoide Apophysis, with the Insertion, of the Cinraco-  
brachialis, and with that of one Portion os the Biceps.

The Pectoralis minor assists the Rhornboides and Angularis,  
as Moderators os the Action of the Trapezius, and Serratus  
major, in turning the Point of the Acromium upward, the  
superior Angle downward, and the inferior. Angle forward.. — .

It is, likewise, an Assistant to the Rbomboides and Angu-.  
laris, in restoring the Scapula.to its natural Situation, when the  
Trapezius and Serratus major cease to act; by drawing down.,;  
ward the Apophysis CoracoideS, in which it is inserted.

It has been reckoned among the Muscles employ'd in Respi-:  
ratinn, by some who imagine, that, in some Cases, the Shoulder  
may be kept so steady, as that this Muscle may. be able to raise  
the Ribs in which it is fixed. But as the Serratus major, which  
must principally be employ'd in keeping the Shoulder in a fixed  
Position, is partly inserted in the same Ribs, and in this Action  
must keep them depressed, it will be impossiblefor the Pecto-

**- ralis** minor to raise them. *Winflaw. - ...*

. PECTUNCULUS. Offic. Schones. Ichth. 55. *Pectun-  
eulus vulgaris, albidus, rotundus, circitor* 26 *Striis majusculis,  
et planioribus donatus.* List. Hist. A. A. I89. *Capite minare,  
rotundiore, et magis aequali margine.* Ejusd. .Hist.. Conch. N.

I7I. *Concha striata altera.* Rondel, de Aquat. 2. 2I. *. Con-  
ena striata altcra Rondeletii.* AldroV. de Exang. 449. *Cori-,  
cba cordis.ormis aquilatcra. umbone cardinum unito striato.* Lang.

Meth. Test. 6o. THE COCKLE. . . : - :

The Fish is esteemed a delicious Food, either raw. Or hell’d.

Of the Shelis calcin’d, and.powder'd, excellent Dentrifices are  
prepared. *Dale.*

PECTUS. The Breast. See THoRAX..

PeDAGiRA. Tartar. *Rulandus. - '*

PEDETHMOS, πηδηθμός. The Beating,, or Pulsation, of  
the Arteries. *Hippocrates. - .*

PEDICULARIS. **See ALEcToRoLoPHUs. - .**

ς PEDICULATIO. The lousy Evil. See **PHTHIRIASIS...**

. PEDICULUS.. Ossic. -Schrod. 5. 345. Aldrov. de Insect.

542. Jons, de Insect. So. Moult. 259. Charlt. Exer. 52.

Met. Pin. 202. THE LOUSE.

Lice are taken hy the Country-people, as a Remedy against  
the jaundice, and an Atrophy. *Schroder,* takes notice of a  
very whimsical Use of. this.insect, which is, to put it into ’the  
Beginning, of the Ijrethra, in order ro excite Urine. -

**PEDICULUS, in Botany,** is the Foot-stalk. See the Ekpli-  
canon ofTerms under theArticle **BOTANY-**

PeDILUVIUM. . .. .

This Word signifies no more than a Bath for the Feet,, which  
may be prepared of the same Ingredients with other Baths ; and,  
as it requires a less Apparatus, is for that Reason frequentiyyised  
as a Succedaneum to them; for a Bath for. the Feet may either  
consist os purelight Water alone ; or, in order to correct the  
Qualities of heavy and hard Waters, a Lixivium, or- Bran of

Wheat, or Chamoritile-stowers, may he added ; or fuch Waters  
may he mixed with Milk. Birt, tho' Baths for. the Feet are  
only immediately applied tn the inferior Parts and Extremities  
of the Body, yet. their. Virtues and . Efficacy diffuse‘themselves  
farther, and alleviate Violent Disorders in remote and distant  
Parts of the Body; for, whilst the Feet are cherished with such *at*warm Liquor, the nervous, tendinous, and muscular Fibres, by .  
the Intertexture of which they are formed, are .relaxed and  
unbended; the Pores andDucts, before constricted,;are enlarged;,  
the Blond has Access to the Parts; and.the Return of the Humours  
from them is rendered free and uninterrupted. By this means,  
the ImpeuS Of the Blood on ptherParts js diverted ; and, in  
the surprising Relief of the Patiens, derived to the inferior Parts..  
Besides, Baths for the Feet, by. their temperate. Heat, .act upon,  
the Blood and Humour, which,during their Use, pass through  
the Vessels. Of the . Feet, render them more thin and diluted,,  
and by that means qualify them for .passing more, expeditinully  
through all the various,Ducts and Parts, of the Body... Hence  
it is, that, if pretty hot Baths for theFeet are used, .they increaser  
the Pulse, and .excite a Sweat' overall the .Badyin. Besides/  
the Consent of the Feet, as being nervous arid tendinous  
Parts, of-an exquisite Sensation,as so. great withlalLthe other  
nervous Parts of the Body, especially these , of .the: Ab-  
domen, that, is the Feet arcsonly .rendered throughly cold,  
a Colic is forthwith produced, the Patient becomes costiveSstbis  
Skin is render'd rough. Perspiration, as intercepted, and-this  
salutary Evacuations from the Lfrerus, andthaernorrhoidal Veins;,  
stopt. For this Reason, 'tis not to be doubted, but.when the.  
Feet are fomented, and their spasmodic Stricture removed by.  
means of a tepid Liquor, the salutary Effect must, .also, he  
propagated to those remote Parts .os the Body, ' with which  
they have so near and immediate *3.* Consent, su.- su.

Baths sorthe Feet are.certainly highly expedienffor the Pur-  
poses of Derivation in those Diseases which arise.from Con-  
gestions of the Humours to. the Head and Breast,, produced by  
Spasms of the inferior Parts,, and, especially of the Hypochon-'  
dria. Among this’ Kind,:besides lethargic Diseases, we may  
reckon almost all. Disorders of the Head, fuch.as Madness,, me-  
lancholy Cephalaeas, Hemicranias, the Clavus Hystericus, Ver-  
tigos. Tooth-ache, Pains of the Eats, a Gutta Rosacea, In-  
flammations, and .Defluxions Os .saline Humours on the Eyes,,  
immoderate Haemorrhages from the Nose, and inng Watch-  
ings.. Of this Kind are, also, some Disorders which affect **the\***Breast, such aS convulsive Asthmas, Dyspnoeas arising from A  
Plethora, palpitations of the Heart, dry Coughs, and Spittings  
of Blood. Besides, Baths for rhe Feet, in consequence of their  
singular Efficacy in relaxing Spasms, are highly beneficial in  
spasmodic and convulsive Disorders, in PainS,- Cardialgias, Co-  
lies, especially os the luemorrhoidal Kind, Gripes produced by  
the Stone, and Inflations of the Stomach', aocompanied with **an.**Uneasiness os the Praecordia. Besides, Baths .for the Feet pro-  
mote the salutary Excretions, hy Perspiration, Urine, and Stool,  
together with those made from the Uterus, and hrentorrheidal  
Veins,, by procuring a free Circulation of the Blood,, attenua--  
ting the Humours, and sollicking them to the Emunctories of  
the Body. Baths for the Feet, also, remove and. prevent Very  
terrible Disorders of the Heathland Breast, especially thofe  
which return.at certain Periods; and I myself, *says Hoffin'and*have known the daily Use of thefe Baths sorthe Feet remove  
the most terrible and obstinate Cephalalgias. Some, also,-in  
intermittent Fevers, advise the Use of these Baths, the’ not  
on the Days of Remission. And. this Piece of Practice is pro-,  
ductive of. very salutary Effects, aS is obvious from *Obf* I44;  
*Decad.* 2. An. 6. *Mtfcell. Nat. Curios,* .where we have ah{  
Account of a Quartan Fever cured by means’sqf Foot-baths,  
and *Eoxak de Salib. Sect.* 12. *Cap.* Io. ’ ι o . - - ' *~ i*

But 'tis to be observed,: that Baths for theIFeet produce sar  
more happy Effects, if, before they are used, the Quantity of  
Blood is lessen'd by Venesection in the FeetI is they are  
used about Bed-time, and the Feet not exposed to the  
Cold aster them, but kept duly warm, till the Patient gets to  
Bed ; by which means the Perspiration, all oyer the Body, is  
increased. But Baths for the Feet must not be used about the  
Trine the Menses are about to flow, or already present, because,  
by diverting the Course of the Blood from the Uterus, and so-  
liciting it to the inferior Parts, this salutary Discharge is either  
stopped, or prevented. On the contrary,-Baths for the Feet,  
used some Days before the.stated. Period sorthe menstrual Dis-  
charge, excellently promote it, especially if, at the same time,  
the Pilulae Becheri, or temperate Emmenagogues, are used.  
We must, also, carefully abstain from astringent, aluminous,  
and-sulphureous Baths, inorder to prevent a Sweating of the  
Feet, discufs oedematous Tumors, cure Ulcers; or remove  
arthritic Pains ; fince by means of such astringent, aluminous,  
and sulphureous Bathe, the virulent Matter is repof’d to the in-  
ternal and more noble Parts. And because the common het  
Spring in the *Caroline* Baths, commonly call’d *Der Prudei. is*

' possessed of ah highly repellent Quality ; fo hashing in it ought SO  
’ he very cautiousiy used in allDisordeIS affecting the Surface os the  
*Body,* and more especially in gouty and arthritic Pains. *Hoffenan.*

PEDION, πεδ'ίον. The Sole os the Foot. .

\* \* PEDORA. The Sordes of the Eyes, Ears; and Feet.  
*Castellus.*

’ PEDRO DEL COBRA. See **COBRA DE CAPELLO.**

**’ PEDRo DEL PORCo- See HYSTRIX.**

PEDUNCULUS. The same as PEDICULUS, with respect  
Io both Significations. : .. .

PEGANELrEON, πηγανέλαιον. Oil of Rue. -  
" - PEGANERON, πηγανηρὸν, according to *Gorraus,* is the  
Name of a Plaister, described by *Artius,* and *Paulus AEgineta,*in which Rue is an Ingredient. . .. . .

\* PEGANIUM. A Name for the *Ruta, solvestrio, minor.*- PEGANON, πἤγανον. Rue. . ? ''  
' PEGE, πηγή. A Fountain. -But the internal Angles of  
the Eyes.are call'd πηγαί. *Pegce. :*

1 - PEGERNUS. Mercury. *Rulandus.*

PELA. A Name for the *Guay cava ; rubra ; aciday Fructie  
croiundiori. - '*

' PELADA. A kind Of *Alepocia,* or shedding of the Hain,  
'from a Venereal Cause. *Castellus* from *Forestus.*

1 - PELAMYS, πελαμύς. The Tunny-fish. See THUNNUs.

.PeLARION, πηλάριον, fromnrnrds. Mud. The Name of  
\*a *Collyrium,* described by *Paulus AEgineta, Lib. η. Cap. 16.*-and os a Plaister, in the same Author, *Lib. y. Cap. ly.* See  
**"EDESSINUM. - -**

‘ PELECANUS. The Pelecan. see **ONOoROT-ALUss.** An  
Tnstrument for drawing Teeth, is, also, called *a Pelecan. .*

**i PELEcANUs.** A Pelecan, or Vessel of Glass, formerly  
utsed in Chymistry, for the Digestion and Circulation of Liquors,  
poured in at their narrow Necks, which were afterwards Her-  
metically seal'd. The Figures of the Pelecans were Various;  
dome were round, and others long. But, at present, we use,  
instead of the Pelecan, two Matrasses, the Neck os one of winch  
'enters into that os the other. *Lemcry Pharmacep. Universe*' PELECINUS. - ’ - -

The ’Characters are;

It is, in all respects, like the *Astragalus,* except that the  
Tod is flat, long, bicapsular, bivalve, and full of Kidney-  
Thaped Seeds.

*Boerhaave* mentions but one Sort of *Pelecinus*; which is,

Pelecinus vulgaris, *T. AsJ. Lunaria, radiata Rubini.* J. B.  
2. 348. *Securidaca peregrina.* Clusi H. 238. *Bocrh. Ind. alt.  
-Plant. Fol. 2.*

There are no Medicinal Virtues ascribed to this Plant at  
present, that I know os

' PELIAS. The Name of a Serpent, mentioned by *Aetius,  
Trtrahib. An Serrn.* I. *C.* 32.

The now quoted Author informs us, that the Symptoms  
-attending the Bites of the *Pelias* were so generally known,  
That no Author before him had described them. Those, how-  
eyes, fays he, who are bit by the *Pelias,* have a Pain and Pu-  
trefaction about the Part affected, which, nevertheless, are not  
. dangerous. They are, also, afflicted with a Dimness of Sight,  
in consequence of a Distribution of the Poison to their Eyes.  
Patients labouring under this Misfortune are cured by the  
Juice of Ptisan, and Oil, exhibited in some proper Liquor,  
by way os Drink ; as, also, by a Decoction of the Oxyla-  
pathum, and the simple Remedies proper in a Jaundice. The  
Eyes of such Patients are to be washed with the Urine of young  
Persons who are Strangers to Venery, both by itself, and when  
inixed with Brine. Their Heads are, also, to be anointed  
.with the same. Then, after purging the Body, their Eyes  
are to he anointed with Opobalsam and Honey, or with some  
Collyrium capable of increasing the Sight, and removing the  
Obstructions of the Vessels; for, by this means, the Poison  
will he discharged along with the Tears. But, if this Practice  
should he succeeded by a Pain of the Eyes, it must be allay'd  
by means of mild CollyriumS, which operate without inducing  
a Stupor of the Parts. See **ELAPS.**

’ PeLICIDE. Boiled Honey. *Rulandus.*

PELIOMA, πελίωμα. A livid Sugillationt  
PELLICULA. A Pellicle, or thin Membrane.

~ PELLIS. A Skin of an Animal. In a Dropsy, or Inflation  
**os** the Uterus, *Rjuerius* directs the Skin of a Sheep just killed,  
and sprinkled with generous Wine, to be applied to the Belly.  
Some of the *French* Writers in Midwifry advise to involve the  
Belly in a warm Sheep-ikin, after a difficult Labour ; and  
the same is an excellent Application, by way of *Fetus,* in ease  
. of inflammatory Pains of any of the Viscera.

PELMA, ατέλμα. The Sole of the Foot, or a sort of Sock  
adapted to the Soin of the Foot, made of Leather, or any  
ether Substance.

PELORIS. The same as *Chama.'*

PELTATIS CARTILAGO. A Name for the Scuti-  
form Cartilage of the *Larynx.*

si PELVIS. A Name for the inferior Pari of the CaVitv os  
*ssae Abdomen.* See ABDOMEN. It is formed by the *Os.su Idea,*and *Ischia,* the *Us ’Sacrum,* and *Os Coccyges,* and rhe *Osin  
Pubis.* See INNOMINATA OSsA.- If the *Pelvis* is too small,  
or too flat and narrow, it is evident, that these Circumstances  
-must occasion a difficult Birth : But *Henricus a Deventcr* says,  
that a too great Wideness of the *Pekyis* is frequently an Ob  
struction to the Birth, and of bad Consequence. By too large  
-a *Pelvis,* says this Anther, I mean one, which, when-com-  
pared with the Foetus,- and the Uterus, is so large, ah without  
-any Pains easily to suffer the Head of the-Infant; together with  
the Uterus, as yet closed up, to fall down to the Lips of the  
Pudenda. In consequence os such a large and capacious-*Pelvis,*the superior Parts of the Uterus are- either not sufficiently, or  
not at all, surrounded.and retain'd. Hence, neither the Head  
of the Foetus, nor the Waters, can,'by the Force and Im-  
pression of Pains, act sufficiently on the Mouth os the Uterus,  
To open it ; so that rhe Pudenda alone must retain the Uterus,  
and hinder it from sailing entirely out of the Body along with  
che Foetus. In a Caso of this kind., the Waters are generally  
perceived to possess a large Space;-'and. their containing Mein-  
brane is sometimes found to protuherate so much without  
-the Lips of the Pudenda, that the Infant seems ready to he  
discharged, and brought into theWorld with them ; and; when  
this Circumstance happens, it is attended with little Danger,  
and renders the Labour easy: But, sometimes, the Mouth of  
the Uterus is thick and hard, whilst, at the same time, tho  
. Vagina is lax. Hence the former is with Difficulty, and the  
latter with Ease, dilated : In which Case the Waters; tho’urot  
-possessing a large Space, are yet discharged from the Body, with  
a great Impetus ; and the Mouth of the Uterus penetrates far  
into the Pudenda. Then the Membrane being broken, not only  
the Head of the Infant appears without the Lips of the Pudenda,  
but, also, the Mouth of the Uterus; and, unless this latter is duly  
retained, it falis so far down, in consequence of the excessive Re-  
laxation of the Vagina and Ligaments, as to pave a Way not only  
for a Falling out os the Vagina, but, also; os the Uterus. For  
this Reason, 'tis the Duty os the Midwife, as soon as possibles to  
replace and retain the Mouth of the Uterus, before it salis down  
so far; for, in thisCase, the Hands of the Midwife must persona  
the Office of theVagina. *Heur. a Deventer Operat. Chirurg.*

**PELVIS AURIUM. The** *Cochlea.* **SeeAURIS. - -**

**- PELVIS CEREBRI is** *gicsCLnfundibulum.* See **CEREBRUM.**PELVIS is, also, a Name for the Cavity oftheKidneys, which  
receives the Urine, and conveys it to the Ureters. See RENEs.  
‘. PEMPHIGODES, or *Pernphingodes, aeesupeycilAps* ἤ πεμ-  
φιγγώδεες Ηυρετοί. Fevers, distinguished by Flatulencies  
and inflations, or a windy Spirit; in which we feel a sort  
of aereal Effluvia passing through the Skin of the Patient; in  
manner of an Exhalation, and striking upon the Touch; This  
is the Sense which *Galen* seems to chuse among Various others;  
which he gives us of the Word πέμφιγγώδης, in his Comment x  
on 6 *Epid. Sect-. It Aph.* I7. where it is used by *Hippocrates,*Sometimes by the Term *Pemphirgodes,* as *Galen* says, is meant,  
a Fever attended with pustulous Eruptions, and; therefore, of  
a pestilential kind sometimes a Fever which seems to strike  
the Touch, like Sparks of Fire, penetrating through the Skin-  
and sometimes a Fever attended with a Delirium, according to  
the Various Significations of the Word πὸμφιγξ, which he there  
gives us. Πεμφιζώδεες πυρετοἰ, in *Galen\**S Exegesis, are ex-  
pounded to be FeVerS in which there is a Redundance of  
Humidities, or Flatulencies. The Author of the *Definitiones  
Medica* telis us; that πεμφιζώεδης ιυυρετός, is a Fever, which,  
by the Intensness of its Heat, excites Pustules in the Mouth ;  
and πέμφιγξ, in *siarinus,* is a Breath, Spirit, and Ray of the  
Sunt Some will have πεμφιζώδης πυρετός; to be a Synochus,  
not of the putrid Kind, but proceeding from a Redundance of  
hot Blood, by its Fervor and Ebullition distending and inflating  
the Veins; and, therefore, it is called, by Practitioners, an  
*Influsive Fever. Foesius. '*

PEMPTJEUS,- πεμπταῖος. An Ague, the Paroxysm of  
which returns every fifth Day.-

PENICILLUS. A Pledges, or Tent.

PENIDIUM SACCHARUM is thus prepar'd. Dissolve.  
Sugar as much as you please, and elarisy it with the White of  
an Egg; then strain and inspissate it gently; or flowly, till  
Seat Bubbles appear: This done, take it off the Fire, till **the**ubbles subside; and then pour itout upon a Board, which has  
been rub'd overwithOil of Almonds j and, when it is somewhat  
harden'd, take it up with your Hook, and with your Hands,  
sprinkled with Starch, speedily reduce it into its proper Form,  
and lay It up for Use. *Schroder.*

PENIS. Having given, under the Article **GENE RATIO,** w  
general Account os this Organ, I shall, in this Place, insert the  
curious Remarks of Mr. *Cowpgr,* relative thereto.

*Regnerus de Graaf,* in his elaborate Treatise of the Organs  
**of** Generation, has accurately, describ'd this Part? and *.Ruys.chsu*

*in* his late Anatomical and Chirurgical Observations, demon-  
strated the Structure of its Glans, which the Former has not so  
well observed; to which I shall add what a strict Inquiry  
on this Subject has given me occasion to discover.

I shall not here repeat those many synonymous Appellations,  
which lascwinuSWitS, or other sedulous Authors, have invented.  
The *Penis* is an Organ contriv'd by the Author os Nature, sor  
the Ejection of the Seed, and Emission of Urine, composed of  
certain spongy and cavernous Bodies, with their Vessels and In-  
teguments, of which in their Order. First, os its external, or  
common containing Parts, as the *Caticula, Cutis,* and *Mem-  
brana Camosu. -so.*

Iri the *Caticula,* we could never observe any considerable Dif-  
ference from that of otherParts, except on the Glans, where  
we find, by the Assistance os a Microscope,, that its exterior  
Surface is Villous or downy.

The true Skin, or Cutis, in this and the Scrotum, is much  
thinner than we find it in other Parts; and both have a pecu-  
liar Disposition os their Blood-Veffeis: The Arteries are called  
**here** *Pudenda,* which, arising from the external Branch of **the**Iliac, and running under the superior Part of the Skin of the  
Penis, divide themselves into many Branches, the larger of  
which are still subdivided, till they hecome capillary ; from  
whose Extremities are continued so many Veins, which, again,  
uniting into larger Branches, pass into those that partly arise  
from the *Corpora Cavernofa Penis*; and, marching under  
the common Integuments, empty themselves into the upper  
Part os that continued from the *Saphena Vein* of the Foot:  
These, for Distinction, we call *Vena Praputii.*

Besides the Blcod-veflels now mention'd, it has Lymphe-  
ducts, which I had first an Opportunity os observing, by injecting  
this Part with prepar'd Mercury ; which confirms the Opinion  
of *Schelhammer,* and the accurate *Nack,* concerning the Origin  
**os** these Ducts: But whether they arise here from that Part of  
the *Canalis Sanguineus* call'd the Artery, or the Vein, did not  
appear from my Experiment ; since I made Injection into both  
Promiscuoufly : I observ'd divers Trunks on each Side, passing  
under the common Integuments accompanying **the** *Pena Pra-  
patii,* which (as I suspect) afterwards empty themselves, like  
those arifing froth the inferior Parts, into the *Glandula Inguir  
stales.* This Contemplation may serve to inform ns, how the  
morbid Matter comes to be convey'd more particularly to those  
Glands in Venereal Cases, and cause those Tumors that fre-  
quently happen on that Occasion, commonly called *Buboes ;*which Conception is the more confirm’d, by observing those  
Phaenomena that are previous to that effect, as Ulcers and In-  
dammations on the Prepuce, and by the too early Use of astrin-  
gent Topics, which probably may inspissate the refluent Lymph,  
and render it unfit to pass through those *Vesicula Glandifer* into  
their exporting Lympheducts ; from which Obstruction hegun,  
**a** Tumor may arise: Hence an Account may be, also, given,  
how soon the Malignity may be sometimes convey’d into the  
Mass os Blood, by the common Passages of the Lymph; and  
**a** Very good Reason offer'd sor the Practice os opening **those**- Tumors before the usual Time os Suppuration.

’ In that Part where the *Praputiurn* is contiguous to the *Ba..  
lanus,* my Very good Friend, that judicious Anatomist Dr. *Tyfon,***has** discover'd certain small Glands, which he calls, from the  
great Scent their separated Liquor emits. *Glandulae Odoriferae t*Their Number is uncertain; in those that have the Praeputium  
longer than ordinary, they are not only more, but, also, larger,  
and separate a greater Quantity of their Juice, which, bring  
lodged there, often grows acrid, and corrodes the Glans. They  
are Very conspicuous in most Quadrupeds, particularly in Dogs  
and Boars, in the latter of which, their separated Liquor is  
Contain'd in a proper Cist, at the Verge of the Praeputium ;  
out of which therein a large Aperture, whereby it is remitted  
again to lubricate the Penis os that Animal

The third common Tegument is the *Membrana Carnoso ;*this Part commonly wanting Fat, for divers Reasons: First, lest  
its Erection into that necessary Stiffness should he thereby hinder-  
**ed :** Secondly, lest it should be too bulkyand, lastly, it would  
have dull'd the Pleasure the Male is affected with in Venereal En-  
Joyments: But whether these Considerations induced the Author  
Os Nature to frame this Part without a *Membrana Adipofa,* does  
not’appear, since itS want of Fat may not unlikely depend on  
its great Alteration from that Flaccidity when it is not erected,  
her that Extension of it when it is. In the formes, tho’ we  
**can** conceive no great Obstacle, why its Adipose Cells should  
not he fupply'd with their Oil, except its too great Laxity  
should retard the influent Blond in its Pastage through its Papil-  
lary Arteries; yet, in the latter, its great Extension-may nor  
unlikely compress them to void their contained Oil; which  
may he the Cause, why the interstices of the Muscles, and other  
Parts most quiescent, are subject to he fill'd with Fat. And  
in thePenis itself in Children, hefore Erection has been frequent,  
I **have** .observ’d its *.Mernbraynt Adiposey&* **he extended with Pati**

but, afterwards, tho\* the Membrane remains, yet the Increase  
of Fat is hinder'd, and therefore we find it commonly without;  
.Yet, in some Subjects, and those adult too, I have found it .  
almost cover'd with Fat ; but what Inconvenience the Party  
suffer'd when living, was pot my Fortune to he acquainted  
with. .

. I come next to take notice os its Ligaments ; first, os that  
called the *Fraenum,* which ties the Prepuce to the lower Part of  
the Glans. This, in some, we have found so short, that we  
have heen obliged to divide it to procure a. complete Erection;  
in others, I have been oblig'd to do the like, where a Cicatrix  
.has been made after large Ulcers on is, winch frequentiy hap-  
pens in Venereal Infections. S χ

The next Ligament which I shall speak of, *I* call *Suspen-  
sorium* : Althrf it has escap'd the Observation of Anatomists,  
yet it is Very conspicuous, and of remarkable Use; os winch  
hereafter, when we Come to give an Account how this Part  
becomes erected. It ariseth from the anterior Part of the *Ossa  
Pubis,* and is fix'd to the upper Part of the *Dorsum Penis,* on each  
Side its great Vein. The rest os the Ligaments are such as com-  
pose its Capsuhe, or divide them as their Septums : These **we**shall mention in treating of its internal or contained Parts ;  
which are, the two *Corpora Cavernosa Penis,* the *Corpus Ca-  
vernosum Urethra,* their *Septums,* Muscles and Veffeis, os which  
as they appear in Dissection. .

First, of the Vessels that carry Blood to it, as, the Ar-  
teries. They arife, sometimes, from the *Rami Iliaci internt ;*at other tithes, from the inferior Parts os the umbilical Arteries:  
Whence an Account may be given, why this Part is less than  
usual, by tying the Umbilical Rope too close to the Belly ; and  
that ryot only from the Retraction of the *Urachus,* but by the  
Constricture attending these Arteries by the great Extension of  
.the Umbilical ones, from which they have their Rise ; whereby  
may be denied that Plenty ofinfluent Blood ; but this we leave  
to suture Observation. AS these Arteries pass towards the Penis,  
they send forth two or three Branches on each Side, the two Inte-  
rior of which run to the *Musculi Directores Penis:* The two  
superior administer Blood to the adjacent Parts, particularly to  
the *Musculi Elevatores Ani,* between which, and **the** *Marsm  
piales Femorum,* these great Trunks pass ; but, marching over  
the Cavernous Bedies os the Penis, they are both subdivided  
into two large Branches, the two inferior of which pass to the  
BulbOf the Cavernous Bodies of the Urethra ; but the two  
superior are both subdivided again, the external running on **the**superior Surface os the Cavernous Bedies os the Penis; **the in-**ternal, entering the Capsulae, pass through the Middle os each  
Cavernous Body ; wherein they divide themselves into innume-  
rable Branches, from whose Capillary Extremities are conti-  
nued so many Veins, in the Canals of which are divers Aper-.  
tures into as many Cells, winch communicate with each other,  
and empty themselves into the larger Venous Ducts running  
on the superior Surface of the Penis, some of which join with  
those of the Prepuce ; others make one large Trunk, which  
we call *Vena ipsius Penis,* marching on the *Dorsum Penis, im-*mediately under the Ligament that ties the *Ossea Pubis* together  
internally,whereby it is compress'd in erection; but, proceeding  
farther on the Prostatae, it is there bifurcated, and enters the  
*Rami Iliaci Interni,* on each Side. The Veins which arise (in  
like manner) from the *Corpus Cavernosum Urethra,* pass from  
its Bulb through **the** *Musculi Acceleratores,* whereby they am  
Compress'd when those Muscles are in Action.

The Nerves that belong to this Part, are derived from **the**Trunk, composed by **the** Coallescion of **the** Third of the *Os  
Sacrum,* and a Branch remitted from the great Crural Nerve **j**which, after their Union, provide Nerves sor Testes, Perinaeum,  
and Muscles of this Part, ascending on the Cavernous Bodies of  
the Penis, and, expanding themselves on its superior Surface, are  
distributed to all its Parts. Its Lympheducts we mention'd in  
describing its external Integuments: Wherefore we proceed,  
**next,** to its Cavernous Bedies.

The *Corpora Cavernoso Penis,* by *De Graaf* called *Nervosa,*by others *Nervea Spongiosa,* are two Capsuhe, or oblong Folli-  
culi, every-where outwardly fenc'd with a thick Membrane,  
by *Vifalius* and *Columbus* suppos'd to be like Ligaments, whose  
external Surface is cover'd with Nerves and Blood-Vessels. They  
sprino with two distinct Originals from the lower Side of the  
*Ossea Pubis ,* whence, stretching forwards,they meet each other,  
leaving an Interstice before their Conjunction, in which the  
Urethra is convey'd, where they leave the *Ossea Pubis*; they  
are each cover’d with a Membrane, and are afterwards joined  
to each other by the Intervention of a *Septum intermedium,*which, the nearer it approaches the Glans, is more diminished ;  
and, before it arrives to the Middle os the Penis, its Fibres  
ascend from the *Urethra* to the *Dorsum Penis* like the Teeth  
of a Comb, as *De Graaf* has well observ'd ; but is not oblite-  
rated, and the two Cavernous Bodies united near the Glans, as  
he would persuade us 5 but, on the Contrary, rather grows

thicker and narrower, as *Ruysch* has well observed.' Tn Issa-  
tion the Wind, I confess, may somtimes pass from the Caver-  
nous Bedies of the Penis to that os the Urethra, which yet  
will not always happen ; which Communication depends on the  
Mediation of their Blood-Vessels, as our inst-tramed Author  
also takes notice. Anatomists differ concerning: the internal  
.Constructure of these Cavernous Bodies r *Visulius* accuses *Galen*for his Inadvertency herein. *Columbus* first observed their Ar-  
teries, which, proceeding strait to their Extremities, disperse  
themselves intO innumerable Branches which escaped the Ob-  
servations of former Anatomists,- as he writes. Dc *Whorton*imagines they are partly composed of glandulous Flesh ; : others  
conceive they are intertext with-divers Nerves, Troth whence  
the Name of *Nervofa* was first imposed on them. *Diemerr  
broeck* supposes they are not a mere Texture of *-N*effeis intri-  
-cately interwoven in the manner of a Net, as *Bauhine, Riolan,*and *Visunpius,* imagine; but their Substance is fibrous, fungous,  
and cavernous, like the Langs, receiving into their hollow  
Interstices Blood and Spirits, from the Vessels that are dispersed  
through their Substance., the inquines! have made inform me,  
that there is a great. Analogy between the Structure of this, and  
that of the Spleen, which *Columbus* also remarks; in both  
'which the Sides of the Veins have large Apertures,' or Celis,  
which most plainly appear in theBulbuSofa Dog’s Penis; but,  
in an human one, they are here much less, and larger in the  
Spleen, and also open into each other: Wherefore, when the  
refluent Blood is stops, the Penis hecomeS equally- distended  
jthereby, and it'is driyen forwards Towards the Glans, when its  
Muscles contract.

. Under these Cavernous Bodies of the Penis lies the Urethra,  
which has also its *Corpus Cavcrnosum,. differing* Very: much in  
Figure from that of the two formes, they being less at each  
End, and largest in the Middle ; whereas this, on the contrary,  
is there least, and largest at its two Extremes neither is its  
proper Tegument so dense. The superior Part of it, lying  
hetween the two Crura os the former, we call, from its Figure,  
*Eulbus,* which is cover'd with the *Mufculus Accelerator Urirta.*It possesses the lower Part of the Urethra, extending itself in  
the Perineum ; and is divided in cutting for the Stone, in which  
Operation Caution ought to be had to its Arteries, which enter  
that Part of the Bulb towards the Anus laterally. - It has, also,  
**a** *Septum intermedium,* (though not hitherto takenmotice of by  
Anatomists) dividing the Right Side of the Bulbus from the  
Lest, which, descending to the End os the bulbous Part, is  
there obliterated. The Office of this Septum, we conceive,  
is to direct the refluent Blood to the exporting Ducts, its two  
**V** eins mentioned before. AS this *Corpus Cavernosum* descends  
On the interior Part of the Urethra, it is lessened ; but, when  
It approaches the Extremities of the two former, it again di-  
lates itself, and covers them, composing that Body which we  
Call *Glans,* or *Balanus,* which *De Graaf* had mistaken for  
fleshy Substance distinct from either. This *Ruysch* has well  
described and figured in his above-mentioned Century of Obser-  
various. Its Colls in the Glans are much less than those of the  
former; but towards its superior Part, or Bulbus, they equal  
them.. Having already described the Muscles of this Part, we  
shall proceed to give an Account how it hecomes erected.

*. Galen,* and the former Anatomists, not knowing the Circula-  
tion of the Blood, or that it past from the Arteries into the  
Veins, were extremely deceived in their Ideas of the Erection  
os the Penis. *Columbus,* who has given an almost complete  
Descriptior) of that grand Work, still conceiveth the Arteries  
Of this Part pour out Spirits with great Force into it, by which  
means it is extended. . *Caspar Bauhine* supposes, in a Venereal  
Appetite, the Blood and Spirits stow into this Part in great  
Plenty; and, being fill'd, like a Gut, with Wind, it begins to  
swell, and grows hard, which he imagines is done by a Sphincter  
Muscle constringing the Neck of the Bladder, and Roots of its  
Cavernous Bodies. *De Graaf* assigns two Kinds of Vessels,  
with its Muscles, for the Performance Of this Office: The  
Nerves, by which the animal Spirits flow into its membranous  
Parts, and render them more rigid and tumid; and the Arte-  
ries carrying Blood to distend the *Corpora Cavernosa*: ‘Tor, as  
" he reasons, we are firmly persuaded the principal Extension  
" of the Penis is from Blood ; first, by injecting Water into  
" its *Corpora Cavernosa,* by its Arteries, in a dead Body, we  
" see it extended to the fame Dimensions as when the Animal  
" was living: Secondly, in firmly tying a Dog'S *Penis in Coitu,*" and afterwards examining is, we find nothing but Blond to  
" distend it." To which may be added, that in Criminals  
which hang long after.Death, this Part becomes erected, the  
Blood in that Position of the Body falling to the inferior Parts:  
And, by inflating the Blood-vessels of a dead Animal, it will  
also erect; winch we first practised in a human Body, by in-  
sorting a Blow-pipe into the *Vina Saphena,* whereby it was  
not only erected, but afforded a Prospect of the external  
disposition of its Blood-Veisels, particularly its Veins, which

**I**

suggested to us a Contrivance in Nature in this Action, which  
has.hitherto escaped the Reflection of Anatomists. *Da Graaf,*pot considering the Use of the adjacent Parts, assigns its  
Erection Io its Muscles 4. imagining that, by the Intumescence  
of their Bellies, they not only compress the *Corpora Cavernoso,*and drive the contained Blood towards the Glans, but likewise  
the Passages through which it ordinarily flows back , which  
latter we cart by no means admit in 'the Cavernous Bodies of the  
Penis itself, since the *Musculi crigentes site,* so remote from their  
.great Vein. . Our Hypothesis, sounded upon the Observation  
above-mentioned, and compared with the Structure and Situ-  
ation os its Parts, is aS follows: . .The Penis is approximated to  
*ALE Ossea Pubis,* when those Muscles act, by means of th e Li-  
*igamenturn Suspensorium* ;. whereby the Blood is not only driven  
forward towards the Glans in greater Plenty, and its Veins  
distended; hut their great Trunks, running over the *Dorsum Pe-*miry: are compress'd aS they march close under the *Ligamen-  
tum Transiversum* ofthe *Ossea Pubis.* The like cannot happen in  
.the Cavernous Body of. the *Urethra,* since there is’no Bone  
-whose Position can have that effect upon its Veins, as theDffm  
*Pubis* hare upon those of the Penis itself ; Wherefore theAiuse  
*souli Accelenatores,* compressing those os its Bulb, do that Office:  
Hence it happens, in an imperfect Erection,. the Glans is not  
equally extended with the Penis itself, and, at other times, is  
doonest relax'd ; but, when Muscles act, the Blond contained in  
the Bulb is driven forwards towards the-GlanS, whereby it he-  
comes more extended : So in a Piece of Gut, which if fill'd  
with Water, or Wind, and either End compress'd, the opposite  
being tied, we shall see it strut out, and be more distended, as  
*De* instances after *Caspar Bauhine.* The Blood ,thus bin- .  
der’d in its Return, distends the Cavernous Bedies, .which is  
thereby erected ; the Arteries which before were flaccid, having  
then their Trunks also extended, do more plentifully import  
Blood into this Part: - But since it is absolutely necessary some  
Part os the detained Blood should be still passing off; lest it .he-  
come grumouS, and unfit sor a Reflux ; to this End, the *Fence  
-Praeputii* are joined to those of the Penis itself, as above noted;  
and are placed under the Skin only ; and, running over the *Ofsia  
Pubis,* carry off Part os the impel'd Blood to give way to a fresh  
Supply from the Arteries; and preserve the Circulation unin-.  
Ierrupted. I remember, once, in an obstinate Priapisma, which'  
would not yield to ordinary repeated Phlebotomy, I opened the  
Vein of the Penis itself, not without the expected Success, it  
immediately losing its troublesome Rigidity, by which I was  
confirm'd in mv Conjecture. ’ - ’’ *: s . .*

. - This elegant Contrivance in disposing these exporting, fan-  
guiserous Dudin, that some are liable to be comprest, while  
others remain altogether free, is not only observable in the Pe-  
rns of Men, and Clitoris of Women, but in that of all Ani-  
mals which have hitherto sell under our Examination, as well  
as in the Pudenda os all Females ; and is, indeed, an Artifice  
that deserves our Admiration. \* ’ -

PENNA. A Feather. It, also, signifies a submarine Plant,  
which grows upon the Rocks, resembling a Bird's Wing. It is  
call’d, likewise. *Mentula Alatas*

. PENO-ABSOU. An *American* Tree, the Bark os which  
is Very fragrant. The Fruit is about the Size of an Orange,  
and contains six, and sometimes ten Nuts, os the Size of an  
Almond ; which are each furnish'd with a Kernel, or small Al-  
mond, from which an Oil is drawn by Expression. This Fruit  
is poisonous. The Oil is said to cure the Wounds made by  
Arrows, and other Wounds, if apply'd thereto.

PENTADACTYLON. A Name for the *Palma Christi.  
Blancard.*

PeNTAMOERON. The Name of an Ointment describ'd  
by *Aetius, Totrabib.* 3. *Serm.* 4 *C.* 44. It consists of Styrax,  
Mastich, Was, Opobalsamum, and Ointment of Nard. This  
is, also, describ'd by *Paulus AEgineta, L.* 7; *C.* 2d. under the  
Title os *Pentamyron. ‘*

PENTAMYRON. See **PENTAMOERoNi**

PENTANEURON. A Name for the *Plantago ; angusti.,  
folia s, mayor.*

PENTAPHARMACUM. A Medicine consisting os five  
Ingredients. It was, also, the Name of a favorite Aliment of  
the Emperor *Adrian,* aS *AElius Spartianus* informs us, winch  
consisted of the *Sumen,* or Udder of a Sow, a Peacock; Ham,  
a sort of Paste or Cake, and Brawn ; the five Ingredients from  
which *it* acquir'd the Name.

PENTAPHYLLOIDES. -

The Characters are,

It agrees, in every thing, wiith the Cinquefoil, only the Leayea  
are not radiated to one Centre, but rather dispos'd in the Form  
Of Ake, or pennated s and terminate in an odd Lohe.'

*Boerhaave* mentions thine Species of *Pcntaphylloides .* **which**are, φ ’ .-

I. Pentaphylloides; palustre; rubrum. T. 298. *souinque-n  
folium palustre rustrum.* C. B. P. 326.

2. - Pentaphylloides ; majus erectum ; flore luteo 5 ternis sii-  
liis; Fragariz instar hirsutis. *Me IL* 2. I93. *Fragaria, Perior  
taphyUflofructu.* M. H. Bails. .. -

3. Pentaphylloides ; Ulmarise facie.. *M Hi Blaesi ,  
^scinqueselium fragiferum.* Co B. P. 326.

- es Pentaphylloides ; rectum; fruticosam ; Eboracense. Me  
Hi. 2. I93.

. 5. Pentaphylloides ; argenteum; alatum ; seu PotentSla.  
*Tourn. last.* 298. *Boer. Ind. A.* 4I. . *Argentina, Potentesla,  
Aciferina.* Offic. *Argentina.* Ger. 84I. emac. 993. - Rati  
Hish I. 6I7. *Potentilla. C.* B. P. 321. Park. Theat. 593.  
*Potentilla seu Argentina.* J. Β. 2. 3o8. *Pentaphylloides, Arr*

*\* .gentina dicta.* Raii Synop. 3. 456. WILD TANSEY. *Dele.*

This is a low Plant, which never arises up to the Stalk, but  
creeps upon the Ground, emitting Fibres from the Joints, by  
which it. roots in the Earth,and spreads Very much ; the Leaves  
-are made up of several Pinnae set opposite ; each heing about  
an .Inch long, and not half so broad, serrated about the Edges,  
and having several small Pieces among them. like Agrimony,  
cover'd over with a shining silver-colour'd Down : . The  
-Flowers grow at the Joints, on long Foot-stalks, os five yellow  
Leaves like Cinquefoil. The Root is (lender, with many Fibres  
of a dark-brown Colour. It grows in moist barren Places, and  
where Water has stood, all the Winter, flowering in *Map.*

The Leaves only are used, and are accounted restringent and  
Vulnerary ; good to stop all Kinds of Fluxes, and preternatural  
.Evacuations, to dissolve coagulated. Blood, to help those who  
**are.**bruised by Falis: Outwardly, it is used aS a Cosmetic, to  
take off Freckles, Son-burn, Morphew, as, also, in restringent  
-Gargarisms. *Melieses Bet. Oesse.*

This Plant is of an herby Taste, a little saltish, but styptic;  
It gives a Very deep Tincture of Red to the blue Paper ; which  
makes us conjecture, that the acid Part of the natural Salt of  
the Earth, filtrating itself through the Texture of this Plant,  
produces there, with the Earth, a kind of Sale very alumi-  
Ininous, united with a lit tie Sulphur.

All Authors agree, that the wild Tansey is astringent, vulne-  
rary, and detersive. They infuse it a whole Night in Winer  
They drink it after the manner of Tea: They prescribe it in  
Ptisans, and Broths, for the Looseness, Bloody-stux and Hae-  
morrhages. I have seen it have wonderful Effects upon .the  
Whites, especially if seven or eight Cray-fish are added to each  
Decoction of wild Tansey. It abates the Inflammation of the  
Xidneys and Bladder, and tempers the Heat of Urine. Its di-  
stilled Water is good for the Blearedness and Ulcers of the  
Eyes ; for Tanning and Redness of the Face. *Murtyofs  
sTournefort.*

It is moderately refrigerant, but more powerfully astringent,  
drying and binding; whence it is good for an Haemoptoe, Diar-  
rhoea, and other Fluxes of the Belly and Uterus: It is, also,  
an excellent Lithontriptic, and Very serviceable in the Cure of  
"Wounds and Ulcers. Externally, it is much in Use for the  
Tooth-ach, putrid Gums, and for mitigating the Heat in Fe-  
vers ; for which Purpose it is of great Efficacy, being bruised,  
and apply’d to the Soles of the Feet, or to the Wrists. The  
Women in *England* use the distilled Water as a Remedy for  
Itch, Freckles, Sun-burns, and other cutaneous Desolations.  
In *Iorlestesre,* about a Town call’d *Settle,* it is customary for the  
Boys to dig up the Roots, which they call *Moors,* and eat them,  
for they are of a sweet Taste, and as grateful as a Parfnep, as  
I have been credibly assured, says *Ray,* by an Apothecary who  
lived in those Parts. *J. Agricola,* by a remarkable Experiment,  
\* found the Juice of this Herb, with the Powder of the common  
*Colchicum,* to he a Cure for the Disease of the Anus, called the  
*. .Mariscae. Castor Durantes* advises to put it in the Shoes of those  
who labour under a Dysentery, and assures us, that not only  
the Dysentery, but all preternatural Fluxes of the lower Belly,  
aS well as an immoderate Flux of the Menses, and even an  
Haemorrhage, at the Nose may be cur'd by the same Experi-  
ment ; *Sim. Paulus. Hartman* affirms, that this Remedy was  
**effectual in** a Dysentery which had eluded the Prescriptions of  
Physicians: And the same is the celebrated Arcanum of *Petr.  
Porellius, Cent.* i. *Obf.* 12.

Diuretics are sometimes heneficial in Fevers, among which  
*Anserina* is specifically adapted to such a Purpose; and so is  
the Salt of *Anserina,* which I regard as a Specific. *D. Soame*from *Dolaus. Raii HoP.*

6. Pentaphylloides; supinum. T. *B.* 2. 398. *lQuinquesulio  
fragifero affinis.* C. B. P. 326. *Fragaria, vesica.* Ger.

7. Pentaphylloides ; orientale; erectum ; Pimpinelhe folio,  
*Ax.* same. *T. Cor.* 2i. . , ,

..,. S. Pentaphylloides ; Canadensis ; solio Agrimoniae. *Saracen.*q. Pentaphylloides; erectnm. *J. B.* 2. 3olL *Bocrh. Ind.*

*ndt.Trlant. . .*

The fifth Species is most commended, and has its Names  
*Argentina* and *Potentilla* from itS nolhe and potent Effects. It

is endu’d with the Virtues Of the *Pcruuiah* Bark ; for *if* the  
Herb he bruised, and the express'd Juice taken an Hour before  
the Paroxysm of an intermittent Fever, it removes it with one  
or two Doses, if the Disease he of a kindly Sort, as well as the  
Bark. If there be any Malignity in the Fever, it is externally  
apply'd ; if an Ulcer or Wound bleed excessively, heing apply'd  
in the Form of a Cataplasm, it rarely fails os answering the  
Purpose. Internally, it is os Service in all Diseases which con-  
sist in Openings of the Veffeis, and Evacuations of the Liquids ;  
whence it cures the Dysentery, which has its Original from  
Liquids. Outwardly, it is consider'd, also, as an Antiphlo-  
gistic : If any one has his Feet inflamed with too much Walk-  
ing, this Plant, apply'd thereto, cures him. Is infants have their  
Ears oppress'd with Sordes, the Remedy is the bruised Leaves  
of this Herb mix’d with a litfie Ceruss. There is prepar'd a  
Conserve of this Herb, which is well worth the keeping, but  
the distilled Water is of no Use. The Seeds and Root are  
astringent, for which Reason they cure the Diarrhoea and Hae-  
morrhages. A Decoction of the Plant, with River-crabs, is **a**Very good Remedy in the Fluor albus ; and the Seeds have the  
same Effect in an immoderate Flux of the Menses, and an in-  
flammation os the Bladder. *Hist. Plant, adscript. Boerh.*

PENTAPHY LLUM. A Name for several Species of  
*Ldsuinquefoliurn* and *Pentaphylloides.* i

PENTAPHYLLUM PEREGRINUM, A Name for  
the *Sinapisirurn ; Lnsitanicurn , triphyllum ; store rubro; sili-  
quis corniculatis. .*

PENTAPLEURUM. .A Name for the *'Plantagoi angle\*  
stis.olia; mayor.*

PeNTATHETON. The Name of a Plaister describ'd by  
*Oribafius, Synop. L.* 3. . .and mention'd by *Aetius* and *Actus,  
arius. .. ......*

PENTOROBUS. Peony. *Artius, Tetrabib. i. Serm.* I.

PEPASMOS, πεπασμός, or PEPANSIS, πέπανσις. Con\*  
coction. See COCTIO. . .. \* :

. PEPASTICA. Digestive Medicines. *Blaneardo . - .*

PePITAS DEL PERU. The Name of a *Peruvian* Fruit,  
to which I find no Virtues ascrib'd.

PEPLION,. PEPLOS, πέπλιβν, πέπλος, were Medicines  
much of the fame Kind and Quality, and prescrib'd by the  
antient Physicians as Cathartics for evacuating the Body os Bile  
and Phlegm. This is evident from *Diofcorides, Russeus Ephesius*in his Fragment of Cathartics, and *Actuarius,* who says, also,  
that those Medicines, after evacuating black Bile and Phlegm,  
expel Flatulencies, especially such as give Rise to Melancholy ;  
and eVen that they cure Inflations of the Spleen, Uterus, and  
larger Intestines. *Hippocrates* usually prescribes *Peplium* aS a  
Purge for black Bile, which, as *Galen* says, it evacuates, as well  
as black Hellebore, and is more effectual in expelling Flatu-  
lencieS. It is prescribed also, by *Hippocrates,* as a Purge in an  
Erysipelas of the Lungs, and the first Appearance of a Con-  
sumption. The *Peplos,. Lib.* 2. *Epid,* was order'd to he  
taken by *Scopus* assiicted with a Swelling of the Spleen, and **a**great Distention of the Hypochondria, and lower Parts of the  
Belly, from Flatulencies ; and. *Lib. de Saperfoet.* it is recom-  
mended for mollifying the Orifice *of* the Uterus. In 7 *Epid.*the *Peplos* is prescribed under the Name of *Meconium, smapivtor,*as a Purge for Bile and Phlegm, as, also. *Lib. de R. Vi I. A.*And, in the Book *de Mulier. Morbis,* it is recommended under  
the Names of *Mecon, Meconium,* and *Meconis. Peplium,* in  
*Galeofs* Exegesis, is expounded to he the same with what is, alfo,  
called *Peplis,* and wild *Andrachne,* which Names are taken from  
*Diofcorides, Lib. An Cap.* I 69. We find, in the same Exegesis,  
the *Peplos* to be the same with whet is called, also, *Chamas.yce,  
Papaver Spumeum,* and *Meconium,* which *Pliny* also writes.  
*Lib. Cap.* 12. *Erotian* says, that *Peplos* is a kind os  
Herb which some call *Peplion,* and others *Symphytum. Foesius.*

*Hippocrates* used to add *Pepiium* to *black Hellebore,* but it in  
not certain what Kind of Plant it was: Many refer it to the  
*Esc la,* and *Matthiolus* assures us, that there is, at this Day, in  
*Italy,* a Species of *Efula,* which they call *Pepla,* or *Peplos*Because *Hippocrates,* in some Places, gives it the Name of *Me-  
conis, Diofcorides* seems to call it *Papaver spumeum,* thod the  
Marks he there gives Of it leave us at an Uncertainty to what  
Species of the *Papaver* we are to apply the.Name of *Peplion.*It is a Question whether it be not the *Papavcr album* of *Hip-  
pocrates,* because it is reckon'd by him as a Purgative; and  
this, indeed, seems probable, because there is a Species of *Pa-  
paver,* which *Pliny* says is called *Tithymalus. Schultzii Hist.  
Med.*

. PEPLIS. A Name for the *Tithymalus; arrnuus ; erectus ;  
folio oblongo, acuminato.*

PEPLUS. A Name for the *Tithymalus ; rotundis foliis ,ηοη  
crenatis.*

PePLYMENON. The Name of a Cerate mentioned by  
*Celsius, Lib.* 5. *Cap.* 18,

PEPO- . '

The Characters are; ί \_\_

The Flower consists of one Leaf, which is Bell-shap'd, ex-  
panded at the Top, and cut into several Segments; Of these  
Flowers, some are male, and some are female, as in the Cu-  
cumbers and Melons. The female Flowers grow upon the  
Top os the Embryo, which afterwards becomes an oblong, or  
round, fieshy Fruit, having sometimes an hard, rugged, or un-  
even Rind, with Knobs and Furrows; and is often divided into  
three Parts, inclosing flat Seeds, that, are edged, or rimmed  
about, as it were, with a Ring, and fix'd to a spongy Pla-  
centa.

*Boerhaave* mentions fifteen Species of *Pepo* ; none of which  
have any particular Medicinal Virtues ascrib’d to them, except  
the first ; which is,

: Pepo ; oblongus. *Co B. Ps* 3I I. *Raii Hist.* I. 64I. *Tourn.  
Last.* 115. *Boerh. Indo A. 2. su. Pepo.* Offic. Park. Pa-  
rad. 526. *Pepo maximus oblongus.* Ger. 7.73. Emac. 9 I 9.  
COMMON POMPION, or MELON.

‘ The Poinpion takes up a great Compass of Ground, with its  
large, thick, creeping Sulks, furnish'd with large Claspers ; its  
Leaves are Very large and rough, in Shape like those os Melons.  
The Flowers are large, in Shape and Colour like a yellow  
Lily. The Fruit is of a great Bigness, having large, white,  
oval, statish Seed. \* The Pompich is sown in Dunghils, being  
ripe in *September* and *October* ; it is rarely used in Physic.’

The Seed is cooling, and of .the Nature os the Melon, and  
other cold Seeds ; and may serve Very well to make Emulsions.  
*Miller's Bot. Cisse "si-'*

All the Kinds of PompionS are cooling, moistening, allay  
sharp Humours, and quench Thirst.

They ate hard to be digested, weaken the Stomach, and cause  
Wind and Colic.

Pompions contain much Phlegm, a middling Quantity Of  
essential Salt, and a little Oil.

They agree in hot Weather with young, bilious People; hut  
Persons of a cold and -phlegmatic Constitution ought to abstain  
from them.

They usually mix the Pompions with some aromatic Herbs,  
such as Parfley, Onions, Mustard, Pepper, and several other  
sharp and Volatile Things, fit to attenuate the Viscous Phlegm  
of this Fruit in the Stomach. .

The)’ preserve Pompions With Sugar, in order to make them,  
more pleasing to the Taste, and more wholsome. Ln short,  
they rarefy their gross Substance by boiling them well; and be-  
sides, the Sugar, wherewith they are mix’d, gives them a little fort  
of pricking Quality, that makes them less insipid to the Taste,  
and more easy of Digestion. Preserv'd PompionS may be used  
in Distempers of the Breast, in order to allay the Sharpnesses  
that are there. - - .. . .'

' PompionS contain a great many Seeds, which are flat, oblong,  
qbyePd with an hard Rind, that is a little woody, whitish or  
greyish. Under this, there is a small sweet and Very pleasant  
Kernel, which contains a great deal of Oil, that may be easily  
press'd out of it; and is proper to soften the Skin, and make it  
more smooth. *Lernery on Foods.*

PEPTICOS, πεπτικος. Digestive, or promoting Digestion.  
It in used with respect to the Digestion of the Aliments, the  
Concoction os-he Humours, or the Formation os Matter.  
" PEQUEA, or PEKLA. *Pison. I. De Laet.* TIte Name of  
an *Indian* Tree which bears a Fruit' somewhat larger than an  
Orange, the Juice of which is extremely sweet and delicious,  
and esteem’d by the *Europeans* aS good in Disorders of the  
Breast. *Raii Hist. Plant. ♦ ' .*

: PERAGU. Hi Ma The Name of a Shrub, winch grows  
*sh Malabar.* The Root, taken in acid Milk, or Wine, is said  
to be good for a Lientery, the Colic, and Gripes ; and the  
Powder thereof is said to dry up Pustules. The Juice os the  
Leaves, taken internally, kills Worms of the.intestines. *Raii  
Hist: Plant. ' \ '*

PERCA. Offic. Schred. 5. 33I. Rondel, de Pise. 2. I96.

Mer. Pin. I90. *Perca fluviatilis.* Bellon, de Aquae. 295..  
Gesn.de Aquae. 698. Raii Ichth. 291. Ejusd..Synop. Pisc.

**97.** SalV. de Aquat. 296. *Perca mayor.* Charlt. de Pisc. 4I.  
Jons, de Pisc. 47. *Perca fluviatilis major.* Aldrov. de Pisc.

**622.** *Perca mayor* Schones. Ichth. 55. THE PEARCH.

This Fish is. Very frequently found in Rivers; and the only  
Parts of it used for medicinal Purposes, are the Bones found in the  
Bead near the Beginning of the Spina Dorsi, and in the Shops  
called *Lapides Percarum*; winch, in Virtues, agree with the  
other testaceous Powders, and are used in diffoliing the Stone,  
and cleansing the Kidneys. Externally they are, also, used in  
Dentifrices, and for drying Wounds. *Schrod. Dale.*

There are two Sorts os this Fish; the River and Sea-  
Pearch : The latter, in *Latin,* is called *Perca marina,* and is  
of a red-brown,, or blackish Colour; it is smaller than the River  
.Pearch. t They find in near Rocks, where it preys upon smaller:

Fish t- It is hard, like Leather, Viscous, not easy os Djinesticn»  
and ill-tasted, according to *Randelrtius.* They do not bfC. jt forFood, and so we shall say no more of it here. The River  
Pearch is subdivided into two sorts, the great and small one,  
which are both os .them excellent Victuals. You are Io chufe  
those that are sat, well-fed, middle-aged, tender, yet firm and:  
well-tasted ; and they should be such aS are caught in fine clear  
Rivers.

The Pearch is nourishing, produces good Juice, and easily  
digests. ... .

It is pretended, that when this Fish is too fat and old, it  
has an ill Taste, and is hard of Digestion ; they, also, fay  
-the fame thing of that .which breeds in Marshes, and muddy  
Places.

*. Ausonius* reckons tho Petrch of the Number os those Fishes  
that have a delicious Tasto. It may be said, in general, that  
the Pearch has but few gross Humours ; that it produces many \_  
good Effects, and but a few bad ones : And the Reason is, be-  
cause this Fish lives generally, and out of Choice, in pure,  
clear, and rapid Waters, rather than in those that are muddy,  
and run dowry. Moreover, it feeds upon good Food, and is  
very active, which, also, contributes to make it more delicious  
and wholsome. It is nourishing, and affords good Food, be-  
cause it contains many balsamic Parts, and most pure Juice.  
It is, also, easy os Digestion, when middle-aged ; sor then  
\*tis os a middling Consistence : When, on the contrary, 'tis  
too young, or too old, 'tis soft and Viscous, or else hard, like  
Leather. *Lernery on Foods.*

PERCEPIER.

The Characters are;

The Calyx is quadrisid ; the Flower is produced in *tffitAlar*of the Leaves; the Seeds are produced single in each Seed-  
Vessel, which is formed by the Calyx. ,/

*Boerhaave* mentions but one Sort of *Pcreepier* ; whiclris,  
Percepier Anglorum, quibusdam. *J. B.* 3. 74. *Boerh. Ind.*

*A.* 2. 93. *Percepicr.* Offic. *Pcreepier Anglorum.* Ger. Emac.  
I594. Raii Hist. I. 209. Synop. 67. *Polygonum-. Selinoides.*Park. 448. *Chaerephyllo nonnihil similis.* C. B. P.‘ I52. *Alchi-  
milla montana minima.* Tourn. Insta 508. PARSLEY-  
PIERT. δ᾽ς' . .

This in a small low Plant, lying generally upon the Ground,  
whose round hairy Branches are seldom an Hand-breadth long ;  
they are full os small Leaves, set alternately at the Joints, a  
littie hairy, narrowsat the Stalk, and broadest at the Ends, cut  
into three round Sections ; the Flowers, are final, and stami-  
nous, growing in Clusters at the Joints, among the Leaves ;  
they» consist of four Leaves, and are succeeded by small round  
Seeds. The Rootis full of Fibres. TtgrowS nt dry Places, and in  
fallow Fields, as, also, among Corn.

Parfley-piert is not an officinal Plant, and is seldom prescribed  
by Physicians; but the Vulgar have a great Opinion os it, as a  
Breaker or Bringeraway of the Stone and Gravel, and a Pro-  
Voker of Urine; and it is given by them for that Purpose,  
either in Powder, or a Decoction of it-in White-wine.  
*MillerssBat.Cff.*

It is said to be a very speedy, as well as potent Provoker of  
Urine, and to break the Stone : .It is eaten raw, as a Green ;  
and is, also, preserved in Pickle. The distilled Water os this  
Plant, is very useful/ *Raii Hi P.*

PERCEPIOLUM.. : An approved or tried Remedy sor a  
Disease. *Dorn. Dict. Paracels.*

PERDETUM,. in *Paracelsus,* is the .Root of Skirret.

PERDICIUM. f.A Name for *suae Parietaria,* Pellitory of  
the Wall. .

PERDITIO sometimes imports a Miscarriage.

. FERDIN. Offic." Schrod. 5. 323. *Perdix cinerea.* Aldrov.  
Ornith.2. 1400 Jons. de.Avib. 46. Charlt. Exer. 83. Will-  
Ornith. I IS Raii Ornith. 166. Ejusd. Synop. A. 57. *Per-  
dix minor*Ἄ/ίισ. Bellon, des Oyse. 258. THE COMMON  
PARTRIDGE; „ ‘ ...

The Parts os this Animal, nfed for medicinal Purposes, are  
the Flesh,- Marrow,. Blood, Liver, Gall, and the Feathers.  
The Flesh, if eaten, augments the Quantity of Semen and  
Milk,...and proves a Stimulus to Venery.- The Marrow,  
as, also, the Brain,. when drank in some proper Liquor, are  
said to afford Relief to those who labour -under a Jaundice.  
The Gali is, by some, highly extolled in Disorders of the  
Eyes. ' The Blood is used as an Ointment for the Eyes, when  
they are Blood-shot, and in recent Wounds of them. The  
Liver, dried before the Fire,.and reduced to a Powder, stops  
an Epilepsy ; and is accounted an highly efficacious Medicine  
against Fevers, if frequentiy exhibited in Yatrow-water. *Crato.*The Feathers, used by way os Fumigation, and applied to the  
Nostrils, are beneficiarin a Suffocation *of* the Uterus, as, also»  
sor alleviating,, mitigating, and removing: Colics, and. other-  
Pains of a like Nature. *Schrod. Dale. . '*

There are several sorts of Partridges, which Ought to be  
chosen while they are young, tender, well-sed, and of a gooff  
Taste When a Partridge is old, his Flesh is hard, like Lea-  
ther, not easy of Digestion, and disagreeable to the Taste.

The Partridge, in all the Parts of it, contains much Oil,  
and volatile Salt..

- It agrees, in cold Weather, with any Age and Constitution,  
but, more especially, with Persons recovering from Sickness,  
and those who are os a cold and phlegmatic Temper.

The Partridge's Flesh is firm, and full of Viscous Moisture,  
and, for that Reason, 'tis very well tasted, good in Diarrhoeas,  
and sor pituitouS and phlegmatic People. The eating of  
Partridge increases Seed, is very nourishing, and wholsome for  
Persons^recoving from Sickness ; not only because it contains  
many oily and balsamic Parts, that are fit to unite with the  
solid Parts, and to restore them ; but, also, by the Assistance  
received from its volatile Salts, which keep the Liquids in a  
.just Fluidity, and increase the Animal Spirits.

A Partridge ought not to be eaten as soon as it is- killed ;  
hut should, sor some time, be exposed to the Air ; sor by  
that means its Flesh will grow more tender and short. *Lemery  
of Foods. . -*

. PERDIX. Schw. A. 327. Gesn. de Aviso 606. *Perdice  
rsufa.* Mer. Rin. I73. Charlt. Exer. 83. Jons de Avib. 46.  
-Aldrov. Ornith. 2. I 39. Will. Ornith. II9. Raii Omith.  
176. Ejusd. Synop. A. 57. *Perdix major rust.* Bellon, des  
Oyse. 256. THE RED-LEGGED PARTRIDGE.

It agrees in Virtue with the preceding.

There is, besides, another Species os Partridge, called

**PERDIX ALBA,** or LAGOPUS: This isaBird whose Legs  
are hairy, and resemble those of an Hare ; there are two Species  
os.it, one as largeas a Pigeon, cover’d with Feathers as white  
aS Snow, except those of the Tail, which are Variegated with  
some" black Spots : Its Beak and Feet are, also, of - a blackish  
Colour. . *I- : . .*

. The other Species resembles a Quail; but is larger,-and  
covered with Feathers, partly white, and partly of a yellow  
Saffron-colofin . . - . .

. Both Species .are found in the *Alps,* and *Pyrenean* Moun-  
tains, and delight in Snow. They are excellent Food, and  
contain a large Quantity Of Volatile Salt, and Oil. They are,  
also, of a restorative and. corroborating Quality. *Lemery  
des Drogues. ......*

**PERDlx MARINA is the Sole. See SOLEA. '**

. PERDONIUM. Wine medicated with Herbs. *Dorn.Dict.  
Paracels. ... -- ‘ .*

PERELLE. A sort os scaly Earth, brought from *SC Tour  
in Auvergne. Lemery des Drogues. '*

PERESKIA. -

**The Characters are ;**

It hath a Rose-shaped Flower, consisting of several Leaves,  
which are placed orbicularly, whose Cup, afterward, becomes  
**a** soft fleshy globular Fruit, beset with Leaves ; in the middle  
of the Fruit, are many flat roundish Seeds, included in a  
Mucilage. - -

*.Millcr* mentions but one Species of *Perejkia* ; which is,  
Pereikia aculeata, store albo, fructu flavescente. *Plum.  
Nov. Gen.* ... . n

This Plant grows in some Parts of the *Spanish West-Indies,*from whence it was brought to the *Englisu* Settlements in  
*America,* where it is called a Goosherry ; and, by *rest Dutch,*it is called *B Ιαά-apple. Miller's Dictionary, Vil.* 2.

PERETERI ON. The perforating Part of the Trepan.  
PERFOLIATA.

*Boerhaave* mentions three Species of *Perfoliata',* which are,  
. i. Perfoliata, Vulgatissima, five arVensis. *C. B. P-. 'ispy.  
Bocrh. Ind. A. Ju.. Pcrfoliata.* Offic. *Perfoliate vulgaris.* Ger.  
43O. Emac." 536. Raii Hist. I. 470. Park. Theat. 58o.  
*Perfoliata simpliciter dicta, vulgaris, annua.* J. B. 3. 298.  
*Buplenrurn perfoliatum rotunaifolium annuum.* Tourn. Inst. 3χο.  
Rafi Synop. 3. 22 I. THOROW-WAX.

Thorow-waxhas a small, fibrous, sticky Root; from which  
spring smooth, and frequently redish Stalks. The Leaves are  
os a bluish-green Colour, *os* an oval Shape ; smooth, and not  
indented about the Edges ; full of NerVes, which run obliquely  
from the Centre to the Circumference of the Leaf: They are  
perforated by the Stalk, which runs through them, and in  
divided towards the Top into several Branches, at the Ends of  
which grow small Umbels of yellow Flowers, usually five  
together upon one Stalk, with as many small Leaves under  
each Umbel; the three outermost heing the largest: Each  
Flower is succeeded by two oblong-striated Seeds. It grows  
only among the Corn, and flowers in *funa* and *fuly.* The  
whole Plant is used. -

Thorow-wax is reckoned among the vulnerary Plants, and  
is especially serviceable in green Wounds, Bruises, Ruptures,

Contusions, as also, for old Ulcers and Sores, either given in  
Powder, or the Decoction. *Melleofs Bat. Off. - - - -*

It is reckoned among Plants of a consolidating and'eonglu-  
tinating Quality. The Decoction of the Herb in Wine, or  
the Powder of the Leaves, is exhibited for the Cure of internal  
Affections, as Ruptures, or Bruises by Falis. It is much re-  
commended in Hernias, especially *os* Children, and particu-  
larly, according to *Schroder,* an umbilical Hernia, whether  
taken inwardly, or fresh bruised, and applied outwardly, in a  
Cataplasm, with Wine and Flour; in the same-manner it re.,  
solves strumous Swellings. *Schwencnsield* affirms, that it is of  
great Efficacy in Fractures, Hernias, and the Erysipelas;

The following Prescription, says *S. Paullus,* is a sovereign  
consolidating Remedy sor the *Exomphalon,* or Prominence of  
the Navel: Take Perfoliata, Root and all, " one Handful,  
Mouse-ear, Rupturewort, Plaintain, Moss, *Englisu* Acacia, of  
each hah an Handful: Boil them in a sufficient Quantity ofred  
Wine, and apply them to the Place affected. *Raii Hi P.*

*y.* Perfoliata, annua, longioribus foliis, *j. B.* 3. ro8.  
*M. Hi* 3. 290. *Bupleururn pers.oliaturn, longiferiurn, annuurn.*T. 3Ioi . '

3. Perfoliata, montana, latifolia. *Co Β. P. stapy. Bupleururn  
montanum latifolium. T..* 31 o. *Boerh. Ind. ah. Pant. Vol.* I.

PERFORANS MANUS. The Name of a Muscle of  
the Fingers.

This Muscle is Very like the Perforatus, or Sublimis, and it  
is situated much in the same manner ; only it lies lower, and  
is covered by the Perforatus; It is composed os sour Muscles,  
which at first seem to make but one Mass, and afterwards ter-  
inmate in sour Tendons.

The fleshy Portions of the first and largest, and, also, of the  
second, are fixed in the superior Parts of the Ulna, and inter-  
osteons Ligament, down to their Middle; the fleshy Portion  
of the third is joined to the Tendon of the Ulnaris Internus,  
by a sort os. common Aponeurosis; and that of the fourth is  
fixed along the Uina.

- The four Tendons have *often several'small* Collateral Ten-  
dons, sometimes five in Number, united to the Tendons of  
the neighbouring Muscle, as they pass under the large annular  
Ligament of the Carpus; but the Tendons themselves are  
separated from the others by thin Septa, which form a kind  
of particular Rings. Being thus strengthened,' they separate,  
and, running along the Palm of the Hand, in distinct membra-  
nous Vaginae, like those os the Perforatus, by which they are  
covered,they enter the ligamentaryVaginae of the first Phalanges,  
together with the former; and, having passed .through the  
Fissures thereof, and through the ligamentaryVaginae of the  
second Phalanges, they are inserted in the stat inner Side of  
the third, near The Basis.

The ligamentary Vaginae of the second Phalanges appear  
sometimes stronger near the Bases, near the Heads of the Bones.

The Perforans bends particularly the thud Phalanges, in  
which it is inserted ; and by the fame Motion it may likewise  
bend the first and second Phalanges. We may apply to this  
Muscle all that is ssaid concerning the tendinous Septa in the  
Perforatus, and concerning its Action, winch is. sometimes  
common to all the sour subaltern Muscles, sometimes peculiar  
to one or more of them. r . . .

It may, likewise, be esteemed an Assistant to the Ulnaris find  
Radialis Interni, in great Efforts; and these Muscles may re-  
ciprocally be looked upon aS Assistants Io the Perforatus and  
Perforans'. .""' . ' : ‘si si\_ ...

Each of these four Tendons pastes under a distinct annular  
Ligament, as under a Pully; for, having accompanied that'of  
the Perforatus through the great Ligament of the Carpus,.  
through 'the Fures of the Aponeurosis Palmaris, and through  
the ligamentaryVaginae of the first Phalanx, and having  
passed through the Slits of the Perforatas, it leaves thisTendon,  
and continues its Course to the third Phalanx through **the**ligamentary Vagina os the second. .... ''

in its Passage through the Slit of the Perforatus, it is liable  
to no Compression, even in the most Violent'Efforts of that  
Muscle. The reciprocal Contortions os the two fiat Portions'os  
the Fissure, and their crucial Insertion in the Say Side of the third  
Phalanx, hinder the little oblique Grooves, mentioned in the  
Description; from closing, and the two lateral Portions os ’the  
Fissure, from coming together, even aster the Tendon os the  
Perforans'has been removed ; and the more this Part of the  
Tendon is pulled, the more perfectly does the Tiffure form a  
sort of a Chanel with solid Sides, and with the two Ends  
cut obliquely.

Without such an artful Structure as this, the Tendon  
of the Perforans would have been continually exposed .to  
Compressions and Contusions by the Sides of an ordinary  
Fissure; and, without passing through the Tendon'of the  
Perforatus, it could not have been inserted in the. middle

**of the fiat Side of the third Phalanx, hut near one os the**

the-insertionof these two Tendons in the Phalanges, we  
may observe - still a farther Contrivance. This Insertion is  
angular in both, that is, the Extremities of the Tendons are  
not inserted according to their Breadth, in a transverse Line ;  
but the Sides os. theinBreadth make an Angle with the Middle.

**PERFO RAKS PEDIS, SIVE FLEXOR DIGITORUM LoNGUs,**

This is a long Muscle, fleshy above; and tendinous helow;  
lying on the back Side of the Leg, between the Tibia and the  
Flexor Pollicis longus, covered by the Soleus, and covering  
the Tibialis posticus.

It is fixed, above, by fleshy Fibres, to a littie more than the  
Middle third Part of the back Side os theTibia, near its external  
Angle, below the Insertion of the Soleus, and, also, to *a.*kind of Ligament; which runs down from the Middle of  
the Tibia. It afterwards ends in a Tendon, which passes he-  
hind the inner Ancle on one Side, and a little hehind the Tibi-  
alis posticus, in a separate annular Ligament.

From thence it runs under the Sole of the Foot, sendingolf  
a Detachment, by which it communicates with the Flexor  
pollicisdongus. Therein is divided into four small flat Ten-  
.dons, which go to the third Phalanges of the four small Toes,  
in the same manner as the Perforans of the Hands

- ί These sour Tendons agree, likewise, in this, with those of  
the Hand, that they give Insertions to the Lumbricales ; but  
they differ from .them in this, that hesore the Separation they  
are joined, laterally, by an auxiliary fleshy Body, which I name  
*Flexor Digitorum aecesserius.*

**1.** The *Perforatus,* or *Flexor Digitorum brevis,* hinds the second  
phalanges; and the *Perforans,* or *Flexor longus,* the third ; the  
Use of these Muscles being nearly the same with the Perforatus  
and Perforans of the Hand. *Winsiow.*

**-i** PERFORATA. A Name for the **HYPERICUM.**

-' PERFORATIO. Sometimes signifies a *Seton.*. .PERFORATUS: MUSCULUS.

**PER.TORA.T-US MANUS, v-ULGO SUBLIMIS,**

This Muscle is considerably large, lying along the-Inside of  
the fore Arm, fleshy-for the greatest Part near the Articulation  
of the fore Arm with the Os Humeri, and near the Carpus  
terminating in four distinct Portions, which hecome the same  
Number of long small Tendons. .The Name of *Sublimes* has  
' been given to-it; because it Ires almost on the Surface of the  
fore Ann ; and thatof Perforatus, from the Slits found near  
the Extremities of its Tendons, / . .. ..'....

*r* It is commonly made up of four Muscles, closely united by  
their .fleshy Portions, representing there, one large Body of  
Muscles. It is fixed above to the superior internal Parts os the  
Llina.and Radius, (this last Bone being considered in its na-  
tural. Situation) and to that of the interosseous Ligament. A  
little below.theMiddleof the fore, Arm, this large .fleshy Body  
is:.divided into four, distinct Muscles, which, on the lowest  
.Quarter of the sore Arm, -end in four stat Tendons os different  
Sines.' . - 4. . .. - ‘. /..L - nJ

. These four Tendons are inclosed in a common membra-  
nous, or mucilaginous Vagina, which, likewise, - furnishes each  
Tendon .with a .particular thin Vagina, in this manner--they  
advance to-rhezCarpus, and pass under the large annular trans-  
verse Ligament : Beyond this Ligament, they spread again, in  
the .Palm of. the.Hand, still retaining their particular Vagina,  
.and run between the Aponeurosis Palmaris and -Metacarpus,  
.toward ,the Fingers,-separating more -and more by degrees.  
Sometimes .there .are at first onherthree Tendons, one of them  
being afterwards. divided into two, in their Passage to the  
Fingers; sometimes they communicate, by a kind of Detach-  
Inent, with the Tendons of thePerforans. . . - ‘ .;

... Ilaving reached the Heads of the metacarpal-Bones, they  
pass under the sour Arches, or Fraena, formed by the Furcee  
of. the Aponeurosis'- Palmaris, and particular Septa of the great  
.-transverse.Ligament-Of the Palm of the Hand ; and then each  
Tendon, having got beyond the Head of one metacarpal Bone,  
and heyond the Basis of the first Phalanx, enters the ligamen-  
iary Vagins,.and -theflat, or inner Side of that Phalanx ; and  
is inserted in the fiat Side of the second Phalanx, -near its Basis,  
the membranous Vagina accompanying it to-its Insertion.  
The ligarnentary .Vagina is stronger towards the -Basis, than  
towards the Head of the first Phalanx.

. In passing along the Inside of the first Phalanx, the Ten don  
is divided by a long Slit, which gives Passage to a Tendon of  
thePerforans, .find from thence the Names of these two Muscles  
are taken.

**ς Tins** Fissure, or Opening, is contrived in a Very singular  
**-manner: The Tendon** is, first of all, divided in **two** flat Portions,

and earth Portion is contorted on the flat Side of the Phaiahx ;  
so that the Edges, which were nearest, become opposite, and  
the opposite Edges arejoined together all the Way to the ex-  
tremity of the Tendon. By this Contorsion, the Fissure  
seems to form two small oblique Grooves, .which surround the  
-Tendon in opposite Directions 5 one Groove being covered by  
the Tendon, and the other covering it.

This is not all: The two Portions, haying formed this double  
Groove by their mutual Contorsion, are not .united, only by  
simply approaching each Other at their Extremities; for each  
Portion is at that Place again divided into two others, smaller  
and shorter than the former; *so* that, in all, there are four nar-  
row Portions, the two nearest of which erosis each other, and  
join the other two, *so* that from the four narrow ones are form-  
ed two broad Portions anew, which are joined by their Edges,  
and afterwards insorted in the Bone at a small Distance from  
each other. - .so

The Perforatus *serves* to bend the second Pj^langes of all the  
Fingers, except the Thumb; and the particular Muscles, os  
which it is made up, may act separately, by reason of their  
distinct Insertions in these Phalanges. The Union of the fleshy  
Bodies by intermediate tendinous Septa may have several Uses;  
the principal os which is, that these Septa-, being very broad  
and thin, give Insertion to a great many fleshy Fibres in a very  
small Compass, and thereby supply the Place of four large  
Tendons, which would have taken up much more Room; but  
by this Union these sour Muscles are more disposed to act joint-  
ly than separately.

They not only bend the second Phalanges on the first, bnse  
also, the first on the metacarpal Bones, and the Metacarpus  
and Carpus on the sore Arm. To conceive the Mechanism  
and Force of these Muscles, which is very great, and necessary  
-in certain Circumstances, .it. must be observed, that as; in the  
Muscles of the Scapula, every Muscle, which can move a Bone  
in any given Direction, is, likewise, able with the same Force  
to keep it immoveable in any-Situation, against whatever tendo  
Io move it in a contrary Direction. The following Examples  
will sufficiently illustrate this Observation.

It is by hending the Fingers that we ralse the greatest Weights;  
that Sailors pull large Oars, that Printers turn the Screws of  
their Presses, and that Climbers support their whole Bodies,  
even with an additional Burden upon them. It is by means of  
the Fingers, when bent, that we tear, -pull up, bruise, and  
the like, things that require great Force to he so treated,  
r The Strength of Muscles depends on the Multitude os their  
fleshy Fibres, and -the Extent os their Motions, on the Length  
os.these Fibres ; and, consequently, where-ever Strength is more  
necessary than large Degrees os Motion, there we, find the-  
Fibres of Muscles proportionably increased in Number; and,  
where-ever there is more Occasion for a large Degree os Motion  
than Tor Strength, the fleshy Fibres are of a proportionable  
Length. ' . . ...... .. .

In the Perforatus we meet with both these Contrivances, a  
great Numher of Fibres for Strength of Motion, and a great  
Length of Fibres for Extent of Motion. The different tendi-  
nous Septa serve to give Insertions to a Number of moving  
Fibres, sufficient sor the Strength required in the Cases already  
mentioned. .. ...... i- ... :

Large Degrees of Motion are, likewise, sometimes very  
necessary ;in this Muscle, as for Instance, when we hend the  
Fingers at the same time -that -the Metacarpus and -Carpus are.  
bent. on.the-fore Arm and, in this Case, certain Fasciculi of  
Fibres are chiefly employ’d, which appear to be longer than the  
rest.

The particular Use :of the Tendons of: this Muscle is best  
understood with that os the Perforans Manus.

\ ~ ’ ss - ... -

**PERFORAT Us PEDIS, isIvE FLEXOR DIGITORUMSEvISi**

This is-the undermost of all the common Muscles os the  
-Toes, being situated immediately above the Aponeurosis Plan-  
laris, -which it resembles something in Figure; and. herice we  
*see,* that it has been-very improperly termed *Sublimis:*

It is-fixed by fleshy Fibres .to the -anterior and lower Part of  
.the great Tuberosity os the.OS Calcis; and to the neighbour-  
ing Part-os the upper Side of .the Aponeurosis Plantaris:

Prominence it runs forwards, heing-divided into -four fleshy  
Portions, which terminate in the same Number of Tendons,  
.split at their Extremities in the same manner aS those of the  
Sublimis, or Perforatus of-the Hand, and inserted in the second  
Phalanges of-he sour small Toes, a little nearer the Inside,  
than in the Hand. *Winsiow.*

The Uses of this Muscle are mentioned under the Perforans  
Pedis. : - - -- :

: -PERFRICTIO. A great Shivering, or Coldness.

PERIAMMA, or PeRIAPTON, *from* πεειάπτῶ,^οsion-  
nect, or bind to.. An Amulet; ' *~ s..' ' y* -T

PERIBLEPSIS, πεείβλεψις, from πεειβλέπω, to stare about  
That kind of wild staring Look, and Instability of the Eyes,  
which is perceived in People labouring under a Delirium.

PERIBOLE, τεριβολη, from περιβάλλω, to surround. In  
*Hippocrates, de decenti Habitu,* it signifies the Dress, Garb,  
or Cloathing of a P«ion. In other Pisces it imports a Trans-  
lation of the Humours, or morbific Matter, to the Surface of  
the Body. Thus, when a Disorder is relieved by a copious  
Eruption of Pustules, this is a *Peribole,* or -Removal of the  
morbific Matter from the internal Parts to the Surface.

PERICARDIUM. See CoR.

PERICARP1UM, πεεικάρπιον, from περὶ, about, and  
καρπὸς, Fruit. Whatever furrounds the Fruit of Vegetables,  
whether Membrane, Huso, or Pulp, heme restrain the Signi-  
fication to the soft and moist Pulp, which covers the Seeds, as  
in Apples, Pears, and Peaches. But,

PERIcARprUM, from περὶ, and καρπὸς, the Wrist, im-  
ports a topical medicine apply’d to the Wrist.

PERICHAfiiA, πεειχαρἱια. An Excess of Joy, which  
has been sometimes known to produce strdden Death.

PERICHRlSIS. A Liniment.

PERICLASIS, from περὶ, about, and κλἀω, to break. A  
Fracture with a great Wound, wherein the Bone is laid bare.

PERICLYMENUM.

The Characters are ;

It has the Appearance of the Honey ruckle. The Flower is  
rnonopetalous, resembles, in some measure, a Tube, and has  
its upper Part divided into several almost equal Segments. The  
Ovary has its Top adorned with a dentated Crown, and be-  
comes a soft Berry, full of a compressed, roundish Seed.

*Boerhaave* mentions het one Sort of *Periclymenum*; which is,

Periclymenum ; perfoliatum ; Virginianum ; sempervirens,  
It florens. Hi Li 484. 4S5. *Jo. et Defer. Boerh. Ind. ale.  
Plant. - -*

There are no particular medicinal Virtues ascrihed to this  
Plant at present, that I know of.

**PERICLYMENUM** is, also, a Name for several Sorts of Ca-  
TRIFOLIUM ; which see.

PERICNEMIA, from περὶ, about, and κνήμη, the Tibia,  
or Leg. The Parts about the Tibia.

PERICRANIUM, πεεικροἐνιον. The Name of a Mem-  
brane, which covers the Bones of the Skull. See Caput-.

PERI DROMOS. The extreme Circumference of the Hairs  
of the Head.

PER1ESTECOS, πεειεστηνὰς, from πεειίστημι, to surround,  
or guard. An Epithet for Diseases, Signs, or Symptoms, im-  
porting their heing salutary, and that they prognosticate .the  
.Recovery of the Patient. ' . .

PERIGRAPHE, πεειγρο-φί. An inaccurate Description,  
Or Delineation. In *Hippocrates, de decenti Habitu,* it seems  
.to import, a Charaoleristic. ln *Vesalius, Perigraphae* are cer-  
tain white Lines and Impressions, obfervable in the *Museulus  
Pectus* of the *Abdomen. r.*

PERIN, πηείν. A Testicle. Some explain it, the *Peri-  
rtaeurn*; others, the *Anus.*

PERINAEUM. The Space betwixt the *Anus* and Parts of  
Generation, divided into two equal lateral Parts, by a very  
dift iced Line, which is longer in Males, than in Females. This  
Part is fubjedt to Laceration in a difficult Birth. See OBsTE-  
TRicATIo, And in this Part an Operation is perform’d,  
call’d *The Puncture of the Oerinaum.* See IscHURIA.

But the principal Disorders to which this Part is fubjedt, are  
Abscesses, and Fistulas.

**A FISTULA CF.THE PERINAUM.**

Sometimes, after the Operation of Lithotomy, or after a  
.Pundture of the Perinasurn or Bladder, or from an Ahicest in  
.the Perinseum near the Urethra, or from a Scirrhus in the  
Glandula Prostata, or when, by the bad Habit of the Pa-  
.tient, a Wound or Uleer can by no means be healed, but its  
Lips become callous, a Fistula is formed, through which the  
’ ’ Urine is preternaturally discharged with great Uneasiness to the  
-Patient Thefe Fistulas are sometimes generated in the Pcrinse-  
um by malignant Abscesses, which spread amongst the Fat under  
the Skin, to the Intestinum Rectsm, and Scrotum, the Urethra  
remaining entire; but these cannot be called *Urinary Fistulas,*- -because no Urine is discharged by them. The urinary Fistulas are  
often occasioned by the Use of Tents, or Pipes, which have  
heen too long retained in the Wound after extracting the Stone;  
or when the Perineum has been greatly distended, lacerated,  
'.or burst, by a large rough Stone ; or when, by the Obstruction  
of a Stone in the Urethra, the Acrimony of the Urine cor-  
rodes rhe adjacent Parts, and ar last the Skin, especially if **the**sPatient he of an ill Habit of Body.

The Cute of this Fistula varies according to the Habit of  
She Patient, and the Degree of this Disorder. When the

Fistula is large, and has consumed a great Part of the Urethra,  
and the Patient is of an ill Habit and weak, a Cure is not withe  
out great Difficulty, and very seldom, obtained ; and the more  
callous, or inveterate, the Fistula is grown, the harder is the  
Task to remove is. On the other hand, is the Fistula is sinall,  
and not much indurated, if the Parient is young, and of a  
goad Habit, the Cure may proceed with Ease and Expedition,  
But if a Scirrhus is produced in the Prostate Glands, before  
a Cure can he effeoled, the Scirrhus must first be removed,  
which I have learned by Experience to be a most difficult  
Tash.

There are four Methods of treating thefe Fistulas : I. The  
Tent-pipe, or whatever is contained in the Wound, which  
occasioned the Fistula, must be immediately removed. Then  
the Patient must be laid upon the Bed, or a Sear, in the farne  
Posidon as is required for performing the Operation of Litho-  
tomy ; and the indurated Sides of the Fistula must be extirpated  
with great Dexterity. After the Application of a vulnerary  
Balsam, or Powder, the Lips of the Wound must be brought  
into Contact by an adhering Plaister, and over it should be laid  
a narrow Compress on each Side os the Wound, and the Whole  
must be secured with a tight Bandage. After the Operation, the  
Patient should be confined to his Bed, with his Knees tied toge-  
ther, and strictiy injoined to abstain from Motion, that the  
Lips of the Wound may more easily coalesce. For a few Days  
a very little Drink must be allowed him, that be may not be  
often excited to make Water. The Dressings ought not to be  
renewed till the second or third Day, or as long as the Patient  
can contain his Urine. The Wound being, by these means,  
almost conglutinated, the Patient maybe treated in the.fame  
manner, as if he had been cut for the Stone; and, if he .has  
Youth in his Favour, he may begin to walk about gently, and  
hy degrees. Thus, if the Fistula is not malignant, he may be  
- restored to his former Health. 2. Another Methnd of Cure is,  
by consuming rhe indurated or callous Lips of the Fistula with  
corrosive Medicines; and, after removing the Eschar with Basi-  
licon, or a digestive Ointment, the Wound may he congluti-  
nated by a vulnerary Balfam, and adhesive Plaister, as before.  
The most proper Corrosives in this Cafe are, the Troches of  
red Lead, the Lapis Causticus, or infernalis, or white Pre-  
cipitate mixed with *Arcaeurs* Balfam; or, in a recent Fistu-  
ls, a: Piece *of* Blistering-plaister, according to *Cheselderda* Me-  
thod, as we are told by *Douglas,* in the Appendix to his Histo-  
ry of the lateral Operation.

It is-to be observed, that the Cure of these Fistulas sometimes  
advances slowly, especially if the Orifice be wide; if the cal-  
lous Parts are not totally extirpated or consumed; and if .the  
Patient cannot sufficiently refrain from Motion, or observe a  
proper Dies. If from thefe, or the like Causes, **the** Fistula is  
not removed, het begins to renew its Callosity, the Operation  
must be repeated, till the Parts appear round.. 3. Sometimes  
these Fistulas may be cured, by bringing the Lips of the bleed-  
ing Wound, after the callous Part is cut off, into Contacti  
with a proper Suture, of two or more Stitches. The Dres-  
sings may be those before directed; and, as the Lips of the  
Wound appear to conglutinate, the Threads may be cut and  
extracted. 4. It may he sometimes necessary, during the Cure,  
to keep a Catheter in the Bladder and Urethra, by which **the**Urine may be discharged, and its Course turn’d from the  
Wound, thc Conglutination of which it would greatly obstructs  
If the Orifice of the Fistula be too small to admit of these Me-  
thods, it may he dilated with a Sponge-tent, or enlarged by  
Incision. .

**I** shall only mention another Way of treating these Fistulas,  
which is called *The palliative Method.* For this Purpose is the  
Instrument described by *Nack* and *Solingen,* and proposed  
by *Wonstcw,* which, while the Fistula is compressed, and closed  
by it, prevents the Efflux of the Urine that Way; and thus  
the Disorder, when a perfect Cute cannot be obtained, may at  
least he mitigated. But Experience informs us, that this is not  
to be depended upon, as the Urine easily escapes through it,  
and it is troublesome to the Patient. *Heister. Chirurg.*

In *August s.yi.5.* Mr. *Lis Serre,* Apothecary to the King,  
recommended .an *Englise* Officer to me, who was sixty-sin  
Years of Age, and in a declining Condition.

He had the Scrotum very large and bard, covered with **fistu-**lous Sinuses, through which Pus and Urine were discharged **5**which extended from the Anus to the Root of the Penis, and  
the Number of them daily increased.

As it was the Urine that occasioned all this Ravage, to pre-  
vent its escaping this Way, I endeavoured to introduce the Α1-  
galy ; and was fortunate enough to pass it into the Bladder,  
though with much Difficulty, the Canal of the Urethra'heing  
very callous and winding in its whole Extent. You .know,  
that, in Fistulas in Perinaeo of a short Date, the Canal loses its  
Pliancy, becoming hard and uneven; that it, also, losesSits  
.Figure, growing crooked in proportion to theNumber of **Cub-**

doffties. T waStObliged to'change -the Direction rosiny-Probe  
.'every Inch, in order To advanceit: Atdength, shaving pene-  
rtrated into theBladder, I judged it-most proper to leave itsthere  
ifiveorsix-Days, to form-the-Passage. During the Space of  
three WeeksLdid- nothing more -than m withdraw the Probe  
'sometimes:to olean.it, -and to introduce -another of thesame  
.Shape immediately.: The Size of-the Scrotum was much di-  
tmintshedin~thisfrme,.and. no more -Fistulaswere formed*some*reven. closed -up, and other fresh Callosities were resolved, inose  
'only remaining which had so long-subsisted.

Thesenotheing curahle without an Operation, I had a Con-  
dfultation ’with .Mr. *Petit, Mr. Malaval,* and Mr. *Botcdou ;*lonhen we . agreed To make a Passage that'should go directly  
to the Bladder, that we might -introduce a Cannula into  
it, andto takeoff as-rnuch of the Callosity as we could, being  
-persuaded, .that the Remainder would dissolve by an ample Sup-  
-puration. .'d - - - - .......so --- .— -

I placed the Patient upon the Edge of his Bed, in The same  
. posture .aS .for Lithotomy ; andyinstead of theAlgaly, introduced  
a Catheter, -and thrust the Point of-the Ihcision-knife cross the  
- Terinaeum into its Groove. As the Callosity was two inches  
.thickfrom-the Skin-to the Urethra, l could not feel the Cut-  
mature os .the Probe withmy Finger-at thePerinaeum; and as  
**Ί** cut, was obliged to put my Finger into the Wound sometimes,  
to seek-for the Urethra, that I might not carry the Point of  
-the Incifion-knise on .one Side the Catheter. The Point heing  
lodged in ins Groove, Imade an Incision in the same manner as  
in the Operation for the Stone; and then bordering an Assistant  
to held the Catheter, Ϊ removed a Part of the Callosity; then,  
taking the Catheter into my own Hand, Iintroduced a Gorget  
into the Bladder, by means of its Groove, that I might the  
-more easily pass the Cannula.

. The first Week a flender Dissolution of the Callosities was  
procured by the Suppuration; and the Circumference of the  
.Wound, he coming less, made theDresting more difficult; when,  
very fortunately, an Abfcess was form'd in the Scrotum; on  
the Right Side, near the Suture. I open'd it; and, taking Ad-  
vantage of the Opportunity, extirpated all the Callosity he-  
tween the fresh Wound; and that I had made eight Days he-  
fore: Then I withdrew the Cannula, and substituted a round  
' Piece of waxed Linen in its stead, as thick as my littie Finger,  
covered with Mucilage-plaister and Diachylon with the Guins  
mixed together. I lessen'd the waxed Cloths by Degrees, that  
the Canal might contract a little, and leave a free Passage for  
the Urine through the Wonnd.

The whole Urethra being distemper'd, I judged it proper to  
shppnrate that also : To this end, I thrust an Algaly into the  
Penis j and, passing it through the Wound, put a Seton into  
theEye of it at the extremity; and, withdrawing theAlgaly,  
conducted the Seton through the Penis. -:

During the first Week, I armed the Seton with the *Unguen-  
tum Fuscum,Ao* consume the Callosities, and to procure a largo  
Suppuration ; then armed it afterwards with Diachylon, mix'd  
with-Ointment of Marshmallows : I dressed the Wound at the  
same timewith lsi^tiemiusn *Fus.cum,* or with Diachylon with  
the Gums-melted,-with which I armed both Dossils'and  
Pledgets. In short, I desisted from the Use of the Seton, and  
waxed Linen; iir three -Weeks, all the Callosities heing entirely  
dissolved. . .. ..

NowT began to think only of a Reunion, and introduced.  
A leaden Algaly-into the Bladder, that the Urine might not-passthrough the-Wonnd whilst'it was healing, (wasssepossible  
to effect it)’ or, atrleast, tiff the Canal was form'd.

- During al! this Time, we had terrible Symptoms fo encounter. -  
Notwithstanding the exact Regimen observed, the Patient had a  
veryviolent Fever for tetr Days, his Pulse was intermittent, and  
the Buttocks almost mortified, by being obliged to lie upon them  
’ continually, and' the\* Difficulty attending his being removed.

Bleedings proportioned to'the disserent Necessities and Strength  
ofthePatient, aproper Regimen, with Emulsions, and'other  
Remedies,, at length quieted all'these Symptoms;

" While the leaden Algaly was in the Urethra, an Erysipelas  
came upon the Right Knee, winch spread over'the Thigh and’  
Leg to the: very Foot.' I prescribed resolving-Fomentations,  
and-in eight Days'theEryfipelas terminated by an Abscess'of'  
the Bigness of :a Crown, covering a Part os'the'Rotula,, and'  
Part os The Ligament that fastens it to the Tibia.

I open'd it when the Matter was form’d, and was-surprised  
to find a Stone with the Pus aS big as a Lentil,’ the sixth Part  
of an Inch thick, and very rugged, resembling a Piece ofeari-  
ons.Bone. Moreover, a large Quantity os'small Gravel was  
mixed with the Put, which adhered to some small Ln inps of  
indurated Fat. I cut - off a Part of the Lips os the Wound,  
making it flat and oblong r For the Space of in Fortnight, at  
each Dressing, I took out a Quantity of incrnstated’Gravel,  
**the** third Part of an Inch within the *Pamsicula Adipose,* rount

the'whole Circumserencnof the Ulcer; and than it took an  
:happy Turn, 'and advanced in healing. '

During tins time the Urine pasted in. the leaden Algaly, and  
the Wound in the Perintetim visibly lessen d.

The Quality of this gravelly Abscess, and that os the Urine,  
which was very muddy, and loaded with Films, proving , a Dis-  
position in the Blood to form Concretions and Petresactions, I  
apprehended the Patient would become subject to the Stone,  
provided theDrine had not a Very free Passage; therefore I  
changed my Opinion as to the Management os the Fistula in  
thePerinaeum, and resolved to keep it open instead of heal-  
ing it. Then, withdrawing the leaden Algaly that was in the  
Bladder, I'put a Cannula into the Wound, whose Extremity  
reached beyond the bulbous Part of the Urethra, near the  
Prostatae. This Cannula, supporting the Sides os the Fistula,  
which daily approached, suffered the Urine to pass with greater  
Facility, than by the Canal os the Urethra, which.could not  
have been suppurated without being a little contracted. This  
Cannula did not confine the Neck os tho Bladder; so that the  
Patient kept his Urine as long aS the -pleased : He wore it a  
considerable time, only drawing it out sometimes to clean it.

Eight Months after, he came to see me, and to inquire what  
Method it 'was most proper to take. He had drawn out the  
Cannula a Week before, because it was incommodious when he  
fat; ‘and 'could not introduce it again. I examined the Fistula,  
which was a little contracted, and seemed to be cicatrized As  
no Matter issued froth it, and he told me the Urine evacuated  
freely, both by the Fistula, and the Penis, I judged that these  
*two* Orifices would be sufficient for it, and prevent the Forma-  
tion of a Stone; and therefore thought it unnecessary to con-  
tinue the Cannula. . ' ...

I saw the Patient about a Year after, when the Fistula was  
*so* contracted, that no Urine passed through it, but waS freely  
discharged by the Penis. - *Le Dran. .*

It has been always an Axiom, that to heal a Wound by the  
Art os Surgery, or to perform.an Operation belonging to it,  
a thorough Knowledge is requisite, both os the natural and  
preternatural State os. the Part: I go still farther, and say, that  
the Operation should be performed two or three times in the  
Surgeon's Imagination, before he comes to the Patient ; and  
that it is an improper Time to'take ins Measures for the Ope-  
ration with the Instrument in Hand. The Distemper, which  
is the Subject of the sollo wing Observation, is one of those  
Cases, whereon (because they are not out of the general Rule)  
we cannot too much reflect before we begin. .

In I 727. I had cut a Boy os twelve Years of Age for the  
Stone, extracting one considerably large ; and he went from  
the Hospital perfectly cured. In I729. he felt a Pain, in  
making:Water; and the Pain increasing for several Days, a  
small Hole was at length formed in the Perinaeum, by which, a  
Part of the. Caine was discharged, the rest evacuating by the  
Penis. In *May* by 30. he was brought to *La Charite* ; they  
examined his Distemper, and found a Stone of the Bigness os a  
Pea, fixed in the Fistula ofthe Perinaeum, just under the Skin,  
which they easily extracted. ‘... .

When I.wont to the Hospital to dress those Patients'! had  
out, Mr. *Merand* committed this Lad to my Core again. Γ  
examined him, and sound a small Orifice in the Perinaeum,  
surrounded with Callosities , and could only introduce a very  
sinall Probe into the Bladder, which was then confined in the  
Passage, aS though it was in a Case: I endeavoured to intro-  
dnher ah Algaly into the Penis ; shut the Extremity of the in-  
strument, with iny utmost Endeavours, would go no farther  
than’ the Bulb os the Urethra, because the callous, or fungous  
Flesh, had either broke, or turned the Passage, by possessing  
the .membranous Part of the Urethra: . . . . .

The Distemper seeming to me of no small Consequence, T  
deferred the Operation till the next Day;. Havingwell reflect-  
ed upon theStructure os theParts, an d upon the present Con-  
dition, to which the urinary Passage was reduced by the Cica-  
trices and Callosities, I placed the Lad upon his Bed, in the'  
same Attitude aS for the Operation ' os Lithotomy, with his  
Hands fastened to his Heels, and supported hyr assistant Sur-.  
geons. First, I introduced an Algalyjnto the Penis as far as  
it would go; and ordered yt to be held by'an Assistant, in such  
a manner, that the Handle made a right Angle with the Body'  
of the Lad. - Then I introduced a very flender Probe into the  
.Bladder, and upon this an hollow one open at the End, so that,'  
embracing the small Probe, tt could not' err, and withdraw'^ the'  
other. \_ Ψ. ... . .. .... ....

The Groove of the Probe being turned towards the Symphy-  
sis of the Os Pubis, I conducted a long strait Bistory by it to  
the End of the Probe; Observing that the- Edge directly an., j  
fwered the Extremity of the Algaly; so that, ass hetween the ’  
two Instruments was divided.’ I withdrew the Bistory, and,  
tinning the Groove of the Probe towards the Intestinum

Rectum, I made a second incision. This being performed, I  
passed a Gorget into the Bladder by means of the same Prohe;  
and, by the Assistance of the Gorget, introduced a leaden Can-  
nula. The same Day the Urine, a Drop whereof had not  
passed by the Penis for three Months before, resumed its natu-  
ral Course, Part discharging by the Penis, and Part by the Can-  
nula. Perhaps the sudden Thought I had, at the time of the  
Operation, os turning the Edge of my Bistory towards the Ex-  
tremity of the Algaly, occasioned the Success; and that, by  
this means, I opened and renewed the Communication  
from the Neck of the Bladder, to the nervous Part of the  
Urethra. Is it had not heea-the first Day, it could not he done  
after the Dissolution of the Callosities. I continued the Use of  
the Cannula for the Space os eight Days, during winch time I  
dissolved and destroyed the Callosities by the Assistance of Es-  
charotics. At the End of this Term, I took out the Can-  
nula, and lest the Cicatrization of the Wound to Com- .  
presses and Bandage; and he was perfectly cured the twentieth

. of *fune.*

**AN ABSCESS OF THE PERINAEUM.**

On the nineteenth of *September* I726. a Gardener; about  
twenty-two or twenty-three Years of Age, leaving his Work  
-in the Evening, was seized with an acute Pain in both Groins,  
which gave him a Difficulty in Breathing the whole Night. He  
sent for his Surgeon the next Day, who, having examined the  
painful Part, sound neither Tumor, nor Inflammation: He  
bled the Patient, who was attacked with a Shivering some Hours  
after Bleeding, which was followed by a Fever. In the EVe-  
’ ning he was bled again, and the Pains were a little quieted ;  
.but the third Day the Shivering and Fever returned about the  
same Hour; and then the Pain fixed upon the Perinaeum. He  
was again twice blooded the two following Days, and, at each  
time, his Pains went off, and hegan again soon after.

This induced his Surgeon to bleed him again the sixth Day.-  
The Patient still complained; and, though neither Elevation nor  
Inflammation appeared upon the Part, they applied anodyne  
Cataplasms, which were continued for several Days: In this  
Interval, the Fever was become continual, the same Pains sub-  
sisted, and yet nothing appeared externally. The Surgeon gave  
the Patient several Clysters, and purged him, substitutingemol-  
Iient Fomentations instead os the Cataplasms. The Patient  
remained in this Condition till the Beginning os *Qctclber,* when  
a Tumor began to appear *in Perirueo, and,* on the seventh of  
that Month, he came to the Hospital.

Till this time he could not make Water, but with infinite  
Pain, and only by a Drop at a time; at length he had a total  
Suppression of Urine, and was obliged to he probed in the  
Night. ' μά ‘

In .the Morning I found the Tumor *in Perinaeo* inconsi-  
derable, and probed him to know in what Condition the  
Urethra was; and, the Catheter not passing without Difficulty,  
there was Reason to presume it was affected either by the Pres-  
sure or Inflammation.

To hasten the Suppuration, 1 applied a maturating Cataplasm,  
which occasioned the Tumor to rise considerably in the Night;  
and, finding a Fluctuation in the Morning, I open'd it, first  
introducing the Algaly into the Bladder, that I might not lose  
Sight of the Urethra. A great Quantity of serous PuS issued  
from it; and though the Incision was large, having dilated as  
much as possible, both above and below, all the Sinuses were  
not open’d, some extending heyond the Reach os my Finger:  
Then I drefled the Wound according to Art. The Patient made  
Water freely after the Operation, the Urethra not heing affect-  
ed, and no longer compressed. He was bled again that Day.

When the first Dressing was removed, all the Sinuses appear-  
ed, winch furnished a large Quantity os PuS. There was one  
which passed from the Neck os the Bladder, eVen towards the  
Bottom of it, in the Cellular Texture that surrounds it, and  
another that extended behind the Tuberosity of the Ischion.

The Patient was bled again, but the Fever never left him ;  
hesides, he had a yellowish Complexion. I used detersive In-  
jections to all the Sinuses in Vain; the Wound was always of a  
bad Colour. The sixth Day aster the Operation, he was sein-  
ed with a Shivering, winch was followed by many others Very  
irregular ; and, the Suppuration diminishing, he died on the  
ninth.

I opened the Body, and found, besides the Sinuses that ex-  
tended by the Side of the Bladder into the Cellular Texture  
that surrounds is, the Os Puhis, and Os Ischion, so extremely  
canons, that you might crumble them between your Fingers,  
like a Piece *oi* Touchwood.

REMARKS.

Tt is not surprising, that the Bone should he so sar destroyed in  
To short a time; for the OS Pubis is of a spongy Texture,

like the Extremities of the large Bones; and their Celis are  
always lined with a Membrane furnished with Vesseis and  
Glands, that separate the Succus Medullaris from the Blood.  
This bring taken for granted, ought these Parts to he less  
susceptible of critical and symptomatic Abscesses, than these  
winch are softer I Because the Membranes, lining those little  
Celis, are not exposed to external Injuries, are they less ex-  
empt than others from an Erysipelas or Inflammation ? No,  
certainly; all the Difference is, that they are concealed from  
us, and lie heyond the Reach of Chirurgica! Relief. For  
this Reason, a Distemper in them ruins the spongious Tex-  
ture of the Bone, hesore any certain Sign makes it external-  
ly manifest ; and, eVen when it becomes manifest. It is too  
late to stop its Progress, the Bone heing destroy'd.

For this Reason Collections of Pus in the Cellular Texture of  
the Bones cannot he called *critical,* although the Mass of  
Blood may he depurated by them, as well aS by Matter col-  
lected in the softer Parts. Therefore I shall call them sympto-  
matic, fince they can only cause the Loss of a Limb, when  
they are formed upon Parts that may he amputated.

With regard to the Method of Cure in such a Case, the In-  
flammation that preceded the Putrefaction of the Membranes,  
might have been dissipated by copious and repeated Bleedings.  
It is true, that the Patient was bled five times in JiVR  
Days ; but the Relief he received from each Bleeding, is .a  
certain Proof, that, if thefe five had heen performed the .first  
Day, the Inflammation would have entirely yielded.

Though nothing appeared externally, yet there was a .deep  
acute Pain ; and wheresoever that is sound, it is sufficient, to  
fear an Inflammation, if not already hegun, at least at hand;  
and to act accordingly.

The Blood may, without doubt, he disposed to he inflamed, and  
fix indifferently upon one Part or another ; but its Quantity,  
its rapid Course to one Part more than another, for Reasons,,  
of which we are ignorant, these two, jointly with the sinall  
Diameter of the Vessels, are what cause the Disturbance,  
which must os Necessity augment,- while the same Causes  
subsist. We must, therefore, not only diminish the Quan-  
tity of Blood, and divert its Course, when it threatens any  
Part, by a convenient Regimen, but.by copious and quickly  
repeated Bleedings.

Four Bleedings, in twenty-four Hours, often stop the Progress  
of an Inflammation, that twenty would not cure, when once  
arrived to a certain Degree. *Le Drarsts Surgery.*

*N. B.* An Algaly is a sort of hollow Probe or Catheter.

PERIN-KARA. *Hi M.* A wild Olive-tree of a vast Big-  
Dels, growing in *Malabar,* and bearing Fruit in Form, Size,  
and Substance, resembling the larger Sort of Olives; when ripe,  
they are of a purplish-azure Colour, of a sweetish acid and  
grateful Taste; but, when immature, they are of a yellowish  
Colour, and of an austere and bitterish Taste.

The Fruit is accounted a Delicacy, and preserved with Supra  
or kept, like Olives, in Pickle, to serve as Sauce for other  
Foods at Dinner and Supper, being strengthening to the Sto-  
mach, and greatly promoting Digestion. *Raii Hi P.*

PERIN-NIROURI *feu Ma Niroteri. Hi Me* A *Mala-  
barian* bacciferous Shrub, with a brittle Stone Containing six  
Kernels.

PERIN-PANEL. *Hi M.* A bacciferous *Indian* Shrub, bear-  
ing its Flowers in Clusters, and an oblong Fruit, containing  
four Seeds: It groves in *Malabar,* and is always green, arid  
with Flowers and Fruit upon it. Of the Leaves dry'd, and  
put upon Chais, is made a Suffumigation, which is said to give  
a most effectual Relief in hysteric Paroxysms. *Raii Hi P.*

Of the Flowers, Fruits, and Roots, helled in Water, with  
Long-pepper, and the Seed of Cumin, is prepared a Drink,  
which is highly commended for the Asthma, Cough, Phthisis,  
and the like Affections of the Lungs. The Leaves with the  
Bark, helled in an Infusion of Rice, and reduced to the Form  
of a Cataplasm, and thus applied to a Tumor, are said to he  
powerful Ripeners os the same. Of the Bark of the Tree host-  
ed with Milk, Honey, and Butter, is prepared a Balsam, which,  
taken inwardly, and applied outwardly to the Place, is said to  
cure the Pleurisy. The *Tsjerin Nirouri,* the Authors of the  
*Hortus Malabaricus* tell us, is Very like the preceding; and  
they have given us no distinguishing Characters of it, noradded  
a Cut. *Raii HiP. .*

PERINYCTIDES. Pustules, or Pimples, which break  
out in the Night.

PERIODEUTES, περιοδευτής. A Mountebank.

PERIODUS. The Period of a Disease is the Time herwixt  
the Access os one Fit, or Paroxysm, and that of the next, in-  
eluding the entire Exacerbation, Decline, .and .Intermission, or  
Remission. These, in some Diseases, are frequentiy VeryTegu-  
Jar and constant, as in Fevers ; but in chronical Disorders,

shore irregular and uncertain, as in Epilepsies: Hence such  
Diseases are called *Periodical.*

’ The Period of the Blood is its Circulation.

PERIOSTEUM. The fine sensible Membrane of the  
Bones. See Os.‘ \*

- PeRIPHIMOSIS. The sanie as PARAnHIMosIS.  
PERIPLEUMONIA. The same as PERIPNEUMONIA.  
PERIPLOCA.

The Characters are;

The Flower is monopetalons, and rotated; the other Cha-  
rasters are the same with those of the *scdxstentApocynum.*

*Boerhaave* mentions five Species os *Pcriploea*; which are,  
' 1. Periploca *y* follis oblongis, *T. qh. Apocynafn, folio oblongo:***C.** B. Ρ.Ἀο3.η \_ .si sc . ss .

2. Periploca ; Monipeliaca ‘ foliis rotundioribus, *Tourn. Past.*\*93. *Boerh. Ind. A.* 3I5. *Scammonia Monspeliaca.* Offic.  
*Scammonia Mons.pellaca foliis rotundioribus.* C. B. R 294.  
*Scammonia Monspeliaca dicta.* Parin Theat. I6.4. *Seamrno-  
nia Monspeliaca store parvo.* J. Β. 2. I36. , *Scammonia Va-  
lentina.* Gen 7 I 6. Emac. 866. *Apocynum latifolium Scam-  
monia Valentina.* Raii Hish 2. IC8S. ITALIAN, or  
TRENCH SCAMMONY. siδ᾽ \_ .

- It is cultivated by the Botanists, and flowers in *August.* The  
concreted Juice, which is useful in Medicine, requires to be  
given in a larger Dose than that of the true Scammony, as he-

. ing lefs effectual. *Dale. \* . ,*

. 3. Periploca ; Monspeliaca*y* foliis acutioribus. T. 93. *Scam-  
monia Monsipeliaceg affinis, foliis acutioribus.* C. B. t R 294.  
*Apocynum latifolium, amplexicaule. se* B. 2. I35. Μ. H. 3.

. 611. '

4. Periploca; foliis Scammonise acutissimis.

5; *An* Periploca; foliis atro-Viridibus, Inacuistis, Scammo-  
nii latioribus? *Boerh. Ind. alt. Plant. . ‘ ἐν. .: .*

: The Plant is of a poisonous Quality, especially the fourth  
Species; bur not to fuch a Degree as the *Apocynum.* The  
Juice of the. second is a Species of Scammony, and operated  
almost in the same Manner. *Hist. Plant, adscript. Bocrh.*

: PERIPLUSIS, πιρίπλυσις; A Diarrhoea, when the Ex-  
crements discharged are extremely thin and watery, is some-  
times called by this Name.

PERIPNEUMONIA VERA. A true Peripneumony, or  
. Inflammation of the Lungs; from Ήυρὶ, about, andπνευμων,  
the LungS.' : sc.su

When in those pulmonary Vessels which are susceptible os an  
Inflammation, a true Inflammation is form'd, the Disorder is  
called a *Peripneumony. / ’ \**

. The Vessels susceptible of such an Inflammation are the  
Bronchial and Pulmonic Arteries, and their lateral lymphatic  
Veffeis. .......

Hence we may conceive two different Rinds of Peripneumo-  
nies, one of which has its Seat at the Extremities of the Pul-  
ί monary Artery, and the other in the Bronchial Arteries.

‘ It is sufficiently obvious, that the former is far more danger-  
ons than the latter; that the more dangerous may arise from  
that which is less so; and that they have many Causes in com-  
mon. ' '

These numerous Causes may be reduced,  
\* i. To the general Causes of all Inflammations throughout  
the whole Body. ’ . . . -

**- 2.** To those which in a particular manner affect the Lungs,  
**such** as an Air too humid, dry, hot, cold, heavy, or light;

- or an Atmosphere impregnated with caustic, astringent, or  
coagulating Exhalations, and consequently unsalutary; a thick,  
dry, and Viscid Chyle, either mixed with acrid Particles, or free ’  
from such a Mixture; Violent Exercises of the Lungs by.Run-  
ning. Wrestling, Efforts, Singing, Crying, or Riding hard  
against the Wind; coagulating, caustic, and astringent Poisons  
. introduced into the Veins running to the Heart; Violent .Per-  
turbations of Mind; a Quinsey accompanied with an Oppres-  
sion of the Breast, and an Orthopnoea , a Violent Pleurisy, and  
an excessive Paraphrenitis.

If these Causes have once exalted the Disease, it will  
produce Various Effects, according to the Diversity os the Part  
affected; for a Bronchial Inflammation, by Compression and  
Contagion, inflames the contiguous Extremities of the Pulmo-  
nary Artery.

When the Extremities of the Pulmonary Artery are inflamed,  
the Blood becomes stagnant, the Vessel is extended, the most  
liquid Part of the Fluids is, as it were, expreffedby Transuda-  
tion ; the thicker Part of the Fluids is accumulated ; and all  
the Blood, as yet capable of Circulation, is collected between  
the Right Ventricle of the Heart, and the extremities of the  
Pulmonary Arteries: Hence the Lungs become oppressed, in-  
capable of expanding themselves, and livid ; the Lest Ventricle  
of the Heart is deprived of Blond; a great Weakness is brought  
**on ;** the Pulse is small, soft, and highly unequal ; the Respira-  
**tion. is** small,, frequent, difficult, hot, accompanied with a

Cough, arid incapable of heing performed but Jo an asedfc  
Posture; the Blood about the Right Auricle and Ventricle *As*the Heart stagnates; the Face, Eyes, Countenance, Farrows,  
Tongue, and Lips, become unusually red; and, at last  
a suffocating Death, attended with an unfunnountable Anxiety  
and Delirium, ensues. .

If a Peripneumony strongly affects both Lobes of the Lungs  
at once, a sudden and inevitable Death will ensue; since, in  
such a Case, Nature can he assisted by ho antiphlogistic Medi-  
cine *4. . 'po , ~ ' o - ..*

But if a Peripneumony affects only a small Part of one of  
the Lohes of the LungS, and does not. proceed from Violent  
Causes, there are some, though not infallible Hopes, that it  
may he happily cured. . - . .

. From whet has been said, we may deduce the diagnostic and  
prognostic Signs of a Peripneumony ; especially if we consider,  
that the Terminations of this Disorder are the same with those  
of an Inflammation. Hence it has, also. Various Stages, ac-  
cording to the. different Times of ita Duration; so that it may  
terminate in a Recovery, shine other Disease, dr in Death.

A Peripneumonia is cured,

.'I. By a henign Resolution, is the Habit is lax, .the Humour  
.rnild, the Viscidity not too great, and she Part affected, whe-  
ther in the Bronchial, or Pulmonary Arteries; not considerable.

2. By a speedy, free, and copious spitting os yellow thickish  
Matter, .infixed with a littie Blood ; in consequence os which  
the Pain is alleviated. Respiration amended, the Pulse render’d  
larger and fuller, and the Spit itself soon transformed into a  
mild Nature, and changed into a white Colour. This princi-  
pally happens, when the Seat os the Disorder, whether in the  
Bronchial or Pulmonary Artery, is not Very large.

3. By a bilious Flux, which affords Ease, and in which  
a Matter, almost resembling the Spit already described, is  
eliminated. . . ‘ I ‘

4. By a copious, thick, and hypostatic Urine, which affords.  
Ease, has, at first, a red, and then a whitish Sediment, dis-  
charged before the seventh Day. In this Case, the Respiration  
becomes easy ; the Fever mild, and os a good Kind ; the Thirst  
as removed;, and the .Heat, Moisture, Laxity, and Softness,  
are equal all over the Body.

A Peripneumony may terminate in some other Disease, de-  
pending either on the Nature of an Inflammation, or os the  
Lungs, themselves, according as they are by this means dtio  
prived of their pro perAction. E ; ' χ

Hence, in the first place, a Peripneumony may terminate in  
a Suppuration ; which happens, when the inflammatory Mat-  
ter, heing neither resolvable by Nature, nor corrected by ArtI  
but, however, being mild, stagnant, hot, and acted upon, breaks  
the small Veffeis, resolves them into PUS, and, by extending  
or corroding the Sides of the veffeis in which it is confin’d,  
forms an Abscess, or Apostem, within fourteen Days.

That this is about to happen, .may he known from the fol-  
lowing Signs: I ~ . si . . .:

I. If the sure Signs of a pretty severe, though .not of the  
most Violent Peripneumony, have preVioufly appear'd.

2. If a Resolution, and its Signs, have not appear'd soon  
enough ; that is, before the fourth Day. . - I

3. If the Symptoms are neither reliev'd by a concocted  
Spit, evacuated on the critical Days, which are the third,  
fifth, seventh, ninth, eleventh, and fourteenth, which indi-  
cates that the Cure is hegun, by the successive Change os the  
Spit; nor by Venesection, nor by Medicines, and a proper  
Regimen. . . .. .

4. If On the contrary, the Symptoms, of .themselves, not  
very Violent, obstinately remain, and are accompanied with a  
soft undulating Pulse, and a continual *Delirium.*

That an Apostem is really forming, may be known,

I. Is the Signs above enumerated are present. - .

2. .If flight, wandering, and often recurring Horripilations  
happen without a manifest Cause; is the Pain remits, and the  
Dyspnoea continues; if the Cheeks and Lips are red; If a  
Thirst is present, and a Fever, especially towards the Evening;  
afflicts the Patient; and if the Pulse is weak and soft.

That an Apostem is already form'd, may he known,

1. From the preceding Signs: mi ...

st.. From the obstinate and dry Cough, which is increased  
after eating ; the difficult, small, and, wheezing Respiration,  
winch is accompanied with a kind of Noise, and increased aster  
Eating or Exercise ; a Capacity os lying with Ease only on one,  
and that is the affected. Side, a continual periodical Fever aug..  
merited after Eating, Drinking," or .Exercise, and attended  
with a Redness of the Cheeks and Lips; a Loss of Appetite;  
an excessive Thirst ; Night Sweats, especially about the Breast  
and Forehead; frothy Urine; Paleness; extenuation; and\*  
lastly, from the extreme Weakness *os the* Patient.

An Apostem already formed has Various Terminations; for  
i. It either suffocates the Patient by a Tumor possessing the

whole Lungs, and which either compresses, or hinders those \*  
. Parts of them, which were before free; or, '

2. AnApostem suffocates tho Patient by an Eruption of Pus, 1the A postem discharging itself into the AJpera Arteria all at once;

or,

3. An Apostem is dissipated by purulent Spit, which consumes  
it, and frees the Patient from the Disorder; or,

4. An Apostem is terminated by a Falling of the Pus into the  
Cavity of the Thorax, or the dilated Vacuities of the *Me~  
diastinum : EDA., - .*

5. Hence arise Consumptions, os various Kinds, and an  
Empyema,' which generally proves mortal.

A Peripneumony terminates in same other Disease, if the  
purulent. Matter, hecoming inflammatory, is resorb'd into the  
Pulmonary Veins, mixed with the Blood, and deposited on  
fome particular Parts. Hence the Lungs rarefreed, and some  
other Parts loaded ; and, if these are Jess requisite to Lise, the  
Transiationis good jrbut, if the Tranflation is to the Liver,  
Spleen, or Brain, the-Event is generally fatal. Hence peri-  
pneumonic Abscesses are form'd about the Ears, Legs, and Hy-  
pochondria. *"A..' .. .............*

That such Abscesses are about to he form'd, may he known,  
I. By an Observation os the Signs os a-Peripneumony not  
of the'worst Kind; accompanied with a Fever, neither violent  
nor malignans, though continual; with a Pain, Anxiety, and  
Heaviness os the Thorax, and a Dyspnoea, which are not Vio-  
lent, and without being attended with the Signs of aResolu-  
iiom " οῦχδφα'. ἐν;...: tat:.-.dur.

- 2. If, in Conjunction with these Signs; the Pulse is greatly  
and continually’fluctuating; and, " '

/- 3t- By the Pains, Redness, Heat, and Tension, about these

Parts. . - : - ' - -

'That such Abscedes areabout to be form'd about the Legs,  
may be known, ‘ : '

I. Is the Signs os future Abscesses are present ; and

2. Is, together with-these, the Signs of, a flight Inflamma-  
tion about the Hypochondria are observed. si

- That, inch Abscesses are about to be form'd about the Ears,  
may be known, -0Y' - .

I. *Is* -the Signs already enumerated are present; and,

2. Is the Hypochondria are at the same time sosta

That the Matter ofan Abscess is convey'd to the Liver, may  
be known, - . - - δ᾽ ‘“E

I. Isthe before enumerated Signs are present, and,

2. If there is a permanent Pain os she Liver, accompanied  
with a Discharge of yellowish tlrine, and. a yellow Colour of  
the Skin. Hence, an Apostem of the Liyer arismg, terrible  
Disorders are produced. . ' ;

If these Abscesses in the Legs, and about che Ears, relieve  
the Lungs, and remove-the Fever; if they remain purulent,'  
Tunning, and fistulous; and if they happen soon enoughs, that  
is, before the ninth Day; they are always salutary.. But, if  
they arife after the Spit is already purulent, though not *very*yellow, and without affording Relies, they are had;'but is,  
aster they are form'd, they disappear, the Disease being crnde,  
Bud the Peripneumony returning, they are absolutely mortal.' ‘

A Peripneumony may, also, terminate in a callous or  
scirrhous Tumor of the Lungs, if an impacted Matter, and  
other Conditions, contributing to the Generation of a Scirrhns,  
concur. See INFLAMMATIO. Hence the Patient's Respira-  
tion during the whole remaining Part of his Life is difficult,  
attended with a Cough, cannot he performed but in an erect  
Posture, is increased after eating and Exercise, and unaccom-  
Died with the already described Signs of a intent Apostem.  
Hence arises the Adhesion of the Lungs to the Pleura.

- If the Bronchial or Pulmonary Artery are, either from an  
internal or external Cause, seized with a Violent Inflammation,  
a Gangrene soon arises ; rand hence a Sphacelus, on account  
of the Quantity and Motion of the Blood, and the continual  
Motion of these Tender Viscera. That a Gangrene is about  
to happens inay he known,

- I. By the Signs of an highly Violent Peripneumony, not re-:  
sieved by any Accident, or Art. ; ί. : .

2. By the great and sudden Weakness, principally discover-  
ing itselfin the Pulse; and, . - - - ;

3. By a Coldness of the Extremities. But that a Gangrene  
is already form’d, may be known, if these Signs have preceded,  
and is the Spit is ichorous, thin, cineritious, -livid, black, and  
fetid. This State is soon succeeded by Death.

- Thefe various Changes of a Peripneumony are to be learn-  
ed from an Observation of the History of the Disease, and a  
Dissection of the Carcases of those who have died of it. ’ - - - \*

Hence ’tis obvious, that the Disorder which the Antients  
described under the Name Of a *Peripneumony,* is a true In-  
stammation of the Lungs. i " \* ’ - "

The Prognostic, therefore, will be clear and just, when we  
affert, that a Peripneumony ]S always dangerous, on account

of the great Necessity Of the Function of the Lungs to Lite,  
and the Correction of the inflammatory Matter; on accouut  
of the Quantity and impetus of the Blond continually con-  
vey'd to the Lungs ; on account of their perpetual Motion; on  
account of their Situation, winch prevents the Application of  
Remedies; on account of the Tenderness of their small Ves-  
sels, which are easily destroy'd; and, lastly, on account os  
the impossibility of a Revulsion, so requisite to'the Cure os an  
Inflammation.

From .what has been said we understand, when, why, and  
with what Symptoms, a Peripneumony proves mortal: For if  
the whole Lungs, together with the Heart, are inflamed; is  
the Heart salis to the Side; if the Patient is seized with a Para-  
plegy, becomes cold, and is deprived of Sensation; then he  
dies on the second or third Day. Jf, in the Beginning os the  
Disease, the Urine is good, .and duly concocted, but thin aster  
the fourth Day ; if, in the Height of the Disorder, the Patient  
is obliged to sit .erect ; if he discharges Pus by Stool; is the Dis-  
ease is of the dry Kind, and accompanied with anHeat and None  
in the Throat, proceeding, as it were, from a Stuffing os the  
Lungs; if the Disease is Violent in Very dry, hard, and cal-  
lousHabits, and such aSthaye heen accustomed to Exercise; if  
it is os a bad Kind, and accompany'd with a Stillicidium of  
Very red Blood ; if it is os the dry Kind, accompanied with  
red Spots on the Breast; If a'.Coryza, or excessive Sneezing,  
'either precedes or follows it ; if it arises from a burning Fever;  
is a bflious Spitting with Pus begins immediately aster the sixth  
Day; if from the Beginning the Spit is very bloody, entirely  
yellow, white, and round. Very frothy without affording Relief;  
if it is dark-coloured, clayish, like the Lees of Oil, black, livid,,  
unequal, or aeruginous; arid lastly, if neither the Fever, nor the  
Difficulty of Respiration, remit'; the Patient dies on the seventh  
or ninth Day. And, when such Patients die, their Pulse saiis,  
all the Parts of their Bedies become cold, except their Breast,  
Neck, arid Head, which are intensely hot, and. thelr Cheeks  
become red and livid.

The Cure of a Peripneumony is to be Varied according to  
the different Stages of the Disease, and its Symptoms; so that  
whet is beneficial at one time of the Disorder, is injurious at  
another. ' ......

If, therefore, in a Peripneumony, the Habit Is lax, the Hu-  
inourmild, the Viscidity not great, and the Part os the Brone  
chia and Lungs affected, not considerable, the Patient is to use  
Rest os Body and Mind, a tepid moist Air, a Vapour-bath of  
pureWater, applied to the pulmonary Region, the Nostriis, the  
Mouth, the Feet, and the Legs, slender Aliment, and light  
Drink; aqueous, nitrous, farinaceous Medicines, and Prepa-  
rations os Honey. Thus, .

Take os Barley-water, forty Ounces; of Nitre, two Drams;

Y and ofOxymel, four Ounces: Mix, and let the Patient  
drink two Ounces warm every Quarter os an Hour.

But is, in a Peripneumony, a speedy, free and copious Exp ecto-,  
ration of yellow thick Spit, which alleviates the Pain, amends -  
Respiration, renders the Pulse larger and fuller, and gradually,  
becomes more mild and white, the last-mentioned Medicines  
are not only to he ufed, bus, also, such as are os an emollient  
and depurating Nature, such as promote Expectoration, and  
are gently restorative, and Steams. In this Case we are to abs-  
tain from Venesection, Purgatives, Sudorifics, and every other  
thing capable of disturbing Expectoration.

Take of Pellitory of the Wall, Agrimony, and Dandelion,  
each one Handful; of the bruised Seeds of white Poppies,  
and Fennel, each sone Ounce ; and of Liquorice, One.  
Ounce and an half; Boil in fifty Ounces of Water, and  
exhibit in the same thinner, and for the same Purposes,  
*with the former, ss*

*If* a Peripneumony is attended with a bilious Flux, which,  
affords Ease, and in which, the. Matter eliminated resembles  
the Spit above descrihed,' rrrildsand emollient Clysters are to he:  
used ; gentie Fomentations are to be applied to the Abdomen;,  
emollient and gently laxative Decoctions are, also, heneficial;  
taking, at the same time, the other Measures hefore recommend-.  
ed.

If, in a Peripneumonia, a copious, thick, and hypostatic  
Urine, with a Sediment intfirst red, and then gradually hecom-  
ing whitish, is, to. the Relies'os the Patient, discharged he-  
sore the seventh Day, let all'the Measures already prescribed;  
be taken ; but let Baths for the Feet be added, and Tomenta-,  
tions of the Kidneys by internal emollient Clysters, and the.  
Application os Linen Cloths externally: Let the Parient, also,,  
drink Decoctions os a gently abstergent and diuretic Na-,  
ture. For this Purpose,

- Take os the Roots of Grass, Butchers-broom, Parley, and  
. Fennel, each two Ounces; of Masterwort, two Drams ;  
and of the bruised Seeds of Burdock and Parfley, each  
one Ounce: Boil with forty Ounces os Water, and exhi-  
bit for the same Uses with the former.

If the Inflammation is recent, great, and dry, in a robust  
Habit, a littie before sound, and habituated to Exercise, it.  
may be discovered by the Signs already enumerated ; and we are  
forthwith to have recourse,

i. To speedy and copious Venesection, which is to be insti-  
tuted according *to* the Degree of the Disease, and duly repeat-  
ed, that the Quantity of thick Blood may be lessen'd, and  
proper Room made for diluting Liquors.

2. To Vapour-baths of an emollient Nature, continually  
applied to the Pulmonary Region, and frequently to the other  
Parts’of the Body.

3. To diluent, resolvent, emollient, laxative, antiphlogistic,  
nitrous, and anodyne Decoctions, to be often drank warm, and  
in small Quantities.

: An To mild antiphlogistic Clysters: And,

- 5’ a stender Diet, consisting of antiphlogistic Juices.

- If the Inflammation, being great, accompanied with a Fever,  
and other Violent Symptoms, lasts beyond the third Day, and  
if the Signs of an inflammation tending to a Suppuration are  
present, there is always much Danger, though the Disease may  
be protracted so long, as to afford a due Time for the Cure. In  
this Cose,

I. We areto use no Venesection; or, if some important Cir-  
cumstance call for it, only a small Quantity of Blood is to be  
taken away. - :

2. We are to use flender Food, but somewhat incraflating,  
and consisting of maturating Substances, as Pot-herbs, farina-  
ceous Vegetables, Peas, and ripe Autumnal Fruits..

3. Till the fifth Day, from'the Beginning of the Disorder,  
we are to use Baths sor the Region of the Lungs, consisting of  
emollient and maturating Ingredients.

4. On the fifth and sixth Days, we are to use these Baths,  
adding Sorbitions, which gently excite a Cough, and produce  
Repletion, that thus, on the seventh Day, the Part may be re-  
liev'd by a Discharge of concocted Pus, the Veffeis attenuated,  
and Lise sustained. For this Purpose,

Take of the Vinegar of Squills, six Drams ; Oxymel of  
Squills, three Ounces; Sal Polychrestum, one Dram;  
Barley-water, eight Ounces ; and distilled Hysiop-water,  
four Ounces : Mix all together ; and let the Patient drink  
one Ounce every Half-hour, τ

Take of Coffee, two Pints; of Honey, two Ounces; and  
of Elder-Vinegar,, half an Ounce: Mix all together, and  
let the Patient drink aS much of it as he pleases warm.

If sufficient Signs inform us, that an Abscess is form’d in the  
Lungs, its breaking into the Aspera Arteria is to be accele-  
rated ; aster which the ulcerated Part .is to be quickly and safe-  
ly depurated.

The breaking of the Abscess is brought about, if, aster the  
Use os many soft and subpinguious Aliments, and- soft Wine,  
the Lungs already suppurated, and prepared by warm Steams,  
are agitated either by Crying, Coughing, Expectorants, Con-  
cussion in a Ship, or Coach.

But as soon as there are any Signs, that theApostem is broken,  
we are to use a Milk, and a mild, and not easily putrefying, ve-  
getable. Diet: Then, in the Day-time, we are to use aperient and  
detersive Medicines; and, towards Evening, gentle Opiates:  
Emollient Steams, sailing in a Ship, riding on Horseback, or  
in a Coach, are, also, to be used.

’’ Medicines of an aperient and detersive Quality, proper for  
open Ulcers of the Lungs, are these following: The Leaves of  
the common, black, white, and golden Maidenhair, *Agri-  
mony, Lady's-mantie,* Brooklime, Betony, Meadow-daisy,  
Borrage, Oak os *Jorufalem,* Bugle, Spleenwort, Germander,  
Ground-pine, Succory, Dandelion, Endive, Hedge-mustard,  
Fennel, Fumitory, Ground-ivy, Noble Liverwort, Star Liver-  
wort, Alexanders, St. John's-wort, Hyssop, Woad, Lettuce,  
Harts-tongue, white Horehound, Devil’s-bit; Moneywort,  
Rest-harrow, Primrose, Self-heal, Sage of *Jerusalem,* Soap-  
wort, Scabious, Water Germander, Solonion's-seai, Flix-  
weed. Coltsfoot, Garden and wild Valerian, Vervain, Vero-  
-inca. Periwinkle, and Goldenrod.

The same Intention is answered by Gum Ammoniac, Gal-  
banum, Opopanax, Sarcocolla, Massich, Myrrh, Olibanum,  
and Turpentine.

Take of the recent Leaves of Agrimony; Goldenrod, Be-  
tony, and Garden Valerian, each one Handful; of white  
Horehound, one fourth Part of an Handful; os the Five

aperient Roots, - each one Ounce; of the Flowers of the.

Lesser Centaury, Agrimony, and St.John’s-wort, each one

. Handful; Boil in four Pints of Water ; of which let the  
Patient drink two Ounces every two Hours: Or,

Take of the Roots of Burdock, China, and Sarsaparilla, each  
three Ounces: Boil in Water for half an Hour; then add  
three Ounces os Sassafras-wood; and when theyhave boil'd  
a littie, add to three Pints of the Decoction, two Ounces  
os the Syrup of the Five aperient Roots. Its Use is the  
same with that of the preceding.

Take of the best and most transparent Myrrh, two Drams ;  
and of the Yolk of a new-laid Egg, one Scruple: To  
these, when duly trimrated together in a glass Mortar,  
add of the best Frankincense, two Scruples- Make into  
Pills, consisting of three Grains each, of which let the  
Patient take one or two before tho Use of the Decoction.

Take os the best Myrrh, two Drams ; and of Sperma-ceti,  
one Dram : Make into a Powder, to be divided into  
twelve equal Doses ; one of which let the Patient take  
every Morning and Evening with .the Decoction. .

Take of Myrrh, and Olibanum, each .one Dram; and of  
the purest Honey, two Ounces: Mix, and lot the Pa-  
tient take one Dram every Hour. -

Gentie Opiates, to he uscd in the Evening, are these follow-  
ing. '

Take os the Pilulae de Cynogloffo, one Scruple ; form into  
six Pilis; os which set the Patient take one or two in the  
Evening, before going to Beth

Take of the Styrax Pill, the same Quantity: To he used  
in like manner, and for the same Use.

Take of Opium cut into thin Slices, and gentiy dried, one  
Grain; of red Coral, twelve Grains; and of Olibanum,  
fix Grains : Make into a fine Powder, to be used like the  
others, before going to Bed. -

Taste of the Syrup of Diacodinm, half an Ounce; of the  
Aqua Vitae of *Matthiolus,* one Dram; and of distilled  
Hyssop-water,' one Ounce : Make into a Draught, to be  
taken in the Evening.

Take of Opium, one Grain : Make into two Pilis ; one.of  
which is to be taken in the Evening.

. . Ο

Take of Opium, one Grain ; of the Syrup of Maidenhair,  
four Drams; and of the Water distilled from the Flowers  
of the red Poppy, one Ounce : Make into a Draught.

For an emollient Steam:

Take of the Leaves of Mallows, Marshmallows, and Pel-  
litory of the Wall,' each two Handfuls ; and of the Pow-  
der of Linseed, two Ounces: Boil in Water; and let the  
Patient receive the Steam, as he draws in the Ain

If there appear Signs, thet the inflammatory Matter is be-  
come punilent, resorb’d by the Veins in the Lungs, thence con-  
vey'd to the Bloed, and deposited on some other Part, whence  
the Lungs are reliev'd, and the Part which receives the Matter  
oppress’d, without any Certainty whither the Matter will tend,  
then the Patient is to use a light, fluid, gently aromatic, and some-  
what vinous Diet. His Body is to be preserved in a State of  
Rest : Let his Medicines be emollient, and gently aperient:  
Let his Lungs be treated with Emollients : Thus the peccant  
Matter will either be determined to some other Part, or farther  
dissolved and eliminated: For this Purpose, ,

Take of the expressed Juice of recent Chervil, and of sweet  
\ Milk, each four Ounces ; and of the Syrup of Hyssop,  
one Ounce: Make into a Mixture; of which let the  
Patient drink one Ounce every two Hours.

But if to the Signs which indicate, that such Abscesses are  
about to be formed, those which signify a Determination os the  
Matter are join'd, the last-mentioned Measures are to be taken;  
and, at the fame time, the Parts indicated for the Deposition  
of this Matter, whether Ears, or Legs, are to be so treated by  
Suction, Relaxation, Stimulants, and Aperients, that they may  
resist dess, and attract the Matter more.

If the Matter is determined to the Liver, the same Measures  
are to be taken with those prescribed when the Abscess is absorb'd,  
without any certain Prognostic whither the Matter tends : But,  
at the same time, let Aperients somewhat stronger, sapona-

CeonS and hepatic Substances, he used : Then let Clysters, and  
Fomentations of the like Ingredients be, also, prescribed.

Take of the greater Soapwort, two Handfuls; of recent  
Endive, four Handfuls; and of the Flowers of wild Sue-  
Cory, three Handfuls : Boil in three Pints of Water; and  
of the expressed Decoction, let the Patient drink two  
Ounces every two Hours.

When a Peripneumony terminates in a callous or scirrhous  
Tumor of the Lungs, it is rarely susceptible of a Cure ; tho'  
it may sometimes yield a little to external and internal Emolli-  
ents, to riding on Horseback, or in a Coach.

When a Peripneumony degenerates into a Gangrene, it is  
absolutely incurable.

Is in a Peripneumony, beginning to be carried off by Spit,  
the Expectoration is stops, we are immediately to use all our  
Endeavours to recal it. The Causes which retard this Ex-  
pectoration, are generally an excessive Cold, suddenly admitted  
to the Body ; and excessive DrinesS of the Parts all over the  
Body ; a burning Fever succeeding; heating Medicines ; a Dis-  
charge os Stools, which does not prove critical; excessive  
Sweating ; and Violent Commotions of Mind.

Immediately upon this, a fresh Inflammation arises from a  
Suppression of the Matter, and an Increase of it from Con- .  
geshon: Hence are forthwith produced the same Symptoms  
which arise from a primary Peripneumony ; but Accidents of  
this Nature generally soon prove mortal to Patients already  
weakened. . -

When a Suppression of Spit in a Peripneumony, heginning  
to he carried off by that means, happens, the Misfortune is pre-  
vented, by the Steam of some hot, moist, and emollient Sub-  
stance, continually drawn into the Mouth and Nostrils, and by  
that means convey'd to the Lungs; and by an Air artificially ren-  
dered similar, or of a like Quality, with this Steam ; The liberal  
Use, also, os Liquors of a like Nature, especially when pre-  
pared with Honey and Vinegar, is highly beneficial. The same  
Intention is, also, promoted by gently resolvent antiphlogistic  
Medicines, such as diaphoretic Antimony with fixed Nitre; by  
gentie Opiates; by avoiding Sweat; and, principally, by preserv-  
ing the Calmness and Tranquillity of the Mind. For this Purpose,

Take of simple Oxymel, three Ounces; of the Syrup of  
the Five aperient Roots, two Ounces ; of a Decoction  
of Ground-ivy, ten Ounces j and of pure Nitre, one  
Dram: Make into a Mixture ; of which lot tho Patient  
take one Ounce every Hour.

Take of pure Laudanum, two Grains; of tho Flowers of  
Sulphur, Sperma-ceti, and unwashed diaphoretic Anti-  
mony, each one Dram: Reduce to a fine Powder, to be  
divided into twelve equal Parts; one of which the Patient  
may take every three Hours, with an Ounce or two of  
the preceding Mixture.

. Take of the Flowers of Sulphur, two Drams; of Olibanum,  
one Scruple4. Os Sperma-ceti, half a Dram ; and os un-  
wash'd diaphoretic Antimony, one Dram. Reduce to a  
Powder, to be divided into twelve Dofin, of which let  
the Patient take one every Hous, with an Ounce of tho  
Mixture-

Take of the recent expressed Oil of Sweet-almonds, one  
Ounce and an half; of the Syrup of Violets, Virgin-  
honey, and the Yolks of hew-laid Eggs, each half anOunce; form into a Mixture; of which let rhe Patient  
take half an Ounce every Hour, till the Expectoration  
returns.

- PERIPNEUMONIA NOTHA. - A spurious Peripneumonia.

This Disorder is frequently produced in the Winter by an  
Excess of Cold, and in the Spring by an Excess of Hear.. It  
generally arises from a viscid Phlegm form’d in the Blood,  
” I. By farinaceous, crude, austere, and ill concocted Adi-  
.ments:

2. Sy a Want of laudable Blood:

3. By a Weakness of the Vesseis, Viscera, and Bile:

u 4. By a Diminution of animal Motion I

5. By a Dissipation of tho more liquid Parts of the Fluids, in  
consequence os a Relaxation of the Secretory Vesieis :

.- 6. .By a Retention of the grosser Parts of the Fluids, in  
consequence os a Weakness of the Instruments os Excretion.

This Phlegm gradually stusta the Lungs, till the Disorder  
degenerates into this terrible, and, often unexpectedly, mortal  
Disease.

When, this Disorder is of a considerable Standing, it pro-  
duces various effects in the Body, and especially those peculiar

to a flow Peripneumony -. Hence its Cure must necessarily he  
difficult. ’ . ,

For Venesection, celebrated so much as is necessary, in  
some Cases os a true Peripneumony, is in this Disorder highly  
prejudicial, on account of the Weakness of the Viscera, and  
a Viscidity os the Juices : Hence, what at first seems to afford  
Relief, soon aster increases the Symptoms.

Attenuants in this Case so much esteemed, whilst they  
augment the Impetus on the Pulmonary Vesieis, often increase  
the Thickness and Impaction of the obstructing Matter; by  
which means they soon render the Disorder mortal.

This Disorder is frequentiy incident to old Persons, those of  
pituitouf, cold, and catarrhous Habits, or such as labour under  
frequent *Coryzas.* It is generally produced by all thofe  
Causes, which, by quickly moving the stagnant Matter, act  
upon the Lungs, such as Running, Crying, Singing, Drinking  
hard, especially of heating Liquors, high Feeding; the Heat  
of a Fire, of a Bath, or os the Sun, especially if the Body is  
suddenly exposed to Cold aster such an Heat.

This Disorder at first deceives the unwary Patient by its fal-  
lacious Lenity; for, beginning with a flight Sensation os Fatigue  
and Weakness, a Prostration of almost all the Faculties os the  
Mind, a Difficulty of Breathing, and an Oppression of the Breast,  
it excites so gentle Commotions, that the Heat and Fever scarce-  
ly indicate any Danger. Soon aster, wandering Horripilations,  
and the Paroxysms of a gentle Fever, appear. Hence the Diffi-  
culty os Breathing, and Weakness, suddenly increasing. Death  
happens, tho’ hardly any Signs of it could he discovered, either  
in the Urine, or the Pulse.

This Disorder is most prudently cured,

I. By letting Blood from a large Orifice : -.

2. By a seasonable Injection os Clysters, tyhich are to be re-  
peated daily, till the Symptoms evince, that rhe Lungs are re-  
lieved. For this Purpose,

Take of Honey, three Ounces; of Nitre, one Dram ;  
one Yolk os an Egg; and os Barley-water, eight Ounces:  
Make into a Clyster.

3. Let.the Patient use a flender Diet of Flesh-broth, elpe-  
cially such as are impregnated with mild Acids ; and let him  
drink a thin Liquor consisting *of* Water and Honey. ,

4. Let him use the Steams and Suffumigations described un-  
eder the Article PERIPNEUMONIA vERA: He mini, also,  
drink diluting, detergent, and gentiy aperient Decoctions : Ills  
Legs and Feet are to be bathed, and large Veficatories applied.

Take of the Roots of Fennel, two Ounces ; of the Roots  
of Grass, four Ounces ; os the Leaves of Pelli tory and  
Agrimony, each one Handful and an half ; of the bruised  
Seeds of white Poppy, one Ounce; and of Liquorice, an  
Ounce and an half: Boil sor a Quarter of an Hour in two  
- Pints and an half of Water; of which let the Patient  
drink two Ounces every two Hours. - '

From what has been said, the Reason is obvious, why n Pe-  
ripneumony is rarely incident to Children and Women; aS, also,  
why it hardly ever happens to those whose Solids are Very lax’;  
why in such it is easily, and almost spontaneously, cured ; and,  
on the contrary, why it is otherwise in robust Constitutions,  
and those inured to Exercise. From what has been said, it,  
also, appears, that this Disorder is, sor the most- part, generated  
by some other Disease, which precedes it, before the Patient  
dies of it ; and consequently, that a Peripneumony is the im-  
mediate Cause of Death, and almost the last Effect of all mor-  
tal Disorders. *Boerhaaves Aphor.*

A Fever, attended with several peripneumonic Symptoms,-  
arises every Year towards the Beginning, but more frequently  
at the Close of Winter. It principally attacks such as are of  
a gross. Habit os Body,, middle-aged Persons, but Oftener those  
who are more advanced in Years, and too much addicted to  
spirituous Liquors, especially to Brandy. For as the Blood of  
such Persons hath been loaded with phlegmatic Humours col-  
lected in the Winter, and is put into fresh Motion by the ap-  
proaching Spring, a Cough is hereby immediately occasioned,  
whence these Humours hurry to the Lungs ; and then, if the  
Patient happens to live irregularly, and drinks more freely of  
spirituous Liquors, the Matter, occasioning the Cough, grows  
thick, and stops the Passage *os* the Lungs, and the Fever preys  
upon the Mass of Bloed. .

At the Beginning of the Fever, (I.J The Patient grows het  
and cold alternately. (2.) is giddy. And (3.) complains of  
an acute Pain in the Head, when the Cough is most trouble-  
some. (4.) He vomits up all Liquids, sometimes with, and at  
other times without. Coughing. (5.) The Urine is .turbid,  
and intensely red. (6.) The Blood taken away resembles pleu-  
ritic Blood. (7.) He breathes quick, and with Difficulty r If  
he he advifed to cough, ,his Head aches, as if it would burst ;

for so the Patient Commonly expresses himself (8.) A Pain Of  
the whole Breast generally accompanies the Disease. And (9.)  
\_ a Wheezing is heard by the Attendants, whenever the Patient  
coughs, the Lungs not heing fufficientiy dilated ; so that the  
vital Passages seem to he closed by the Swelling ; whence the  
Circulation is so intercepted, that there are no Signs of a Fever,  
especially in gross Habits; tho' this may, also, happen from  
the Abundance of the phlegmatic Matter, whereby the Blood '  
is'so surcharged, that it cannot rise to a perfect Ebullition.

In order to the Cure of this Fever, I judge it proper (I.) .  
To take away that Blood which inflames the Lungs, and en-  
dangers Suffocation : (2.) To open and cool the Lungs by  
pectoral Medicines: And (3.) to abate the Heat of the whole  
Body-by a cooling Regimen. But as, on the one hand, the  
Collection of the phlegmatic Matter contained in the Veins,  
and daily affording fresh Supplies for the Inflammation of the  
Lungs, should seem to. indicate frequently repeated Bleeding ;  
yet, on the other hand, I learnt from the most accurate Ob-  
servation, that this Practice proved very prejudicial in feverish  
Persons of a gross Habit, especially is they were past the Prime  
of Life; so that Bleeding with Frequency was often con-  
traindicated. I, therefore, had recourse to frequent Purging in  
its stead, which is properly enough substituted, where the Pa-,  
tient hath an Aversion to copious and frequent Bleeding.

^Accordingly I proceeded in the following Manner : I dinect-  
**ed** Bleeding in the Arm in Bed, and forbid the Patient to rise  
till two or three Hours afterwards ; because Bleeding, which, -  
in some measure, weakens the whole Body, may, by this  
means, be more easily born ; for the Patient can better bear to  
have ten Ounces taken away in Bed, than six or seven, when  
he sits up. The following Day I give this purging Draught in  
the Morning.

Take of fresh Pulp of Cassia, ope Ounce; Liquorice-root,  
two Drams ; three Figs; Sena, two Drams and an half;  
Troches of Agaric, one Dram : Boil them in a sufficient  
Quantity of Water, to leave four Ounces of Liquor when  
strained, in which dissolve an Ounce of Manna, and half  
. an Ounce of folutive Syrup of Roses: Mix the Whole  
for a purging Draught.

The next Day I usually repeat the Bleeding, and, interpo-  
sing a Day, I exhibit the purging Draught again, which is to  
be repeated every other Day, till the Patient recovers. On the  
Intermediate Days of Purging, I advise the Use of a pectoral  
Decoction, Oil of sweet Almonds, and the like Remedies. In -  
the mean time, I forbid Flesh, and Broth made thereof, but  
especially all spirituous Liquors ; and, instead os these, I allow  
a Ptisan, made of Barley and Liquorice, boiled in Water,  
for his common Drink, or small Beer, if he desires it. .

This is the Method of curing the spurious Peripneumony,  
caused by an Abundance of phlegmatic Humours collected in  
the Blood, and by reason of the Coldness and Moisture of the  
Winter, thrown upon the Lungs; wherein both repeated  
Bleeding, and Purging, are indicated otherwise than in a true  
Peripneumony; which I esteem to be manifestly of the same  
Kind with the Pleurisy, with this Difference only, that a Pe-  
ripneumony more universally affects the Lungs: And, in-  
deed, both the Distempers are cured by the same Method,  
namely, by Bleeding principally, and cooling Medicines.

Though the spurious Peripneumony, in some measure, re-  
sembles the dry Asthma, both in the Difficulty os Breathing,  
and some other Symptoms, yet 'tis fufficientiy distinguished  
from it, as being attended with manifest Signs of a Fever and  
Inflammation, which never appear in the dry Asthma ; but  
they are much less considerable and apparent in the spurious  
than in the true Peripneumony.

It must be carefully remarked, that when this Disease attacks  
such as have been great Drinkers os Brandy, and other like  
spirituous Liquors, it is by no means safe to quit them os a  
sudden, but they must he lest off gradually ; for so sudden a  
Change makes way for a Dropsy r And this should be made a  
standing Rule in all other Diseases arifing from the. same Cause;  
*Sydenham. . .*

*A* pneumatic Fever is one of the acute, inflammatory Kind,  
arising from a Stagnation of the Blood in the Blood-vessels  
**os** the Lungs, or the small Ramifications os the Vena Azygos in  
rhe Pleura; and accompanied with an acute and pungent Pain  
- of the Side, a Difficulty os Breathing, an immoderate Heat,  
an hard and frequent Pulse, a dry or a moist, and, sometimes,  
a bloody Cough : This Disorder is always dangerous.

There is no inflammatory Fever, which is so incident to Per-  
sons os all Ages, Sexes, and Temperaments, in cold as well aS  
hot or temperate Climates, or which affects more epidemically,  
on account of the Inequality and Intemperature of the Air,  
than that which happens in the Thorax, whether in the Lungs  
themselves, or in the intercostal Muscles, both internal and ex-  
ternal, lin’d internally with the Pleura, which is a nervous

Membrane. But, according as the Inflammation seizes dis-  
ferent Parts os the Thorax, it not only receives different  
Names; but, also, differs widely with respect to the Symptoms,  
the Event, and the Method of Cure. The Antients, who  
were destitute of an accurate anatomical Knowledge of the  
Parts, thought the Pleura the Seat of a Pleurisy and Peripneu-  
mony ; for which Reason they gave the Name of Pleurisy:  
to almost every Inflammation in the Thorax: But *Hippocrates*made a Distinction between a .Pleurisy and a Peripneumony.  
For this Reason all the antient Physicians, those of the inter-  
mediate, and those of the present Age, are of Opinion, that in  
a Peripneumony the Lungs were affected, whereas in a true  
Pleurisy the Lungs were not at all affected, but only the Pleura,  
and the Muscles which it lines. But this Assertion is false ;  
for *Petrus Servius,* according to *Ipielschius,* in *Decad.* i. *Cur  
rat. An* upon dissecting three hundred Subjects who died of **a**Pleurisy, always sound one os tho Lobes of the Lungs affected,  
and fill'd with Matter, whilst rhe Pleura was not sensibly, or at  
least but very littie, corrupted. Hence, in my Opinion, **the**different Seats of an Inflammation in the Thorax are to be de-  
termin'd ; that, is it only prizes the external Parts, a spurious  
Pleurisy is produc'd ; is, like an Erysipelas, it seizes the Surface  
of the membranous pulmonary Substance, a true Pleurisy is pro-  
duc’d ; and the sarther jt penetrates into the Substance of the  
Lungs, the more violent the Pleurisy is, and whet is called a  
Peripneumony is produced. .

These different Species of Inflammations in the Thorax are,  
therefore, by the Physician, to be carefully distinguished, by  
certain peculiar and characteristical Marks. For, in a spurious  
Pleurisy, there is an acute and pungent Pain os the Side, which  
is increased by being touch’d ; lying on the affected Side is dis-  
sicult ; there is a dry Cough without any Expectoration os **the**pituitouS or bloody Matter, which, however, if it is Violent,  
augments the Pain. It is, also, accompanied with a FeVer, and  
a Pulse somewhat hard, depress'd, and frequent. It is produc'd  
not so much by a Stagnation os the Blood, as os the Serum, in  
the Extremities of the small Arteries, and Veins connected  
with the Vena Azygos, and in the Extremities of the .small  
Ducts in the Pleura, or in the Periosteum of the Ribs, where  
the Sense is still more acute and intense. Hence 'tis no more  
thana Species os Rheumatism, and sor that Reason incident **to**those who are subject to Catarrhs, rheumatic or arthritic Pains,  
or who are now-and-then afflicted with an Hemicrania, espe-  
cially .when they remove from an het to a cold, or from a cold  
to an hot Air, particularly in the evening: Nor, for this Rea-  
son, is Venesection necessary, but only a Diaphoresis, and an  
increased Perspiration; by which means it is generally easily  
terminated about the seventh Day, and is free from Danger,

But a true Pleurisy is a sanguineous Inflammation, arifing  
from a Stagnation *of* Blood in the small Ducts of the Bronchial  
VesielS discover'd by *Ruysch,* and which are only subser-  
vient to the Nourishment of the Membranes, Vesicles, and  
Vessels, which constitute the Fabric of the Lungs. Hence,  
in this Disorder, the Lungs are principally affected, tho' only as  
to their more external and superficial Part. Hence there is, in  
this Disease, a greater Difficulty of Breathing than in a spu-  
rious Pleurisy; there is, also, a Discharge os bloody Spit, and  
the Disease is terminated by Expectoration. It is, also, accom-  
panied, for the most part, with a Fever, tho' of a more acute  
Kind than that attending a spurious Pleurisy, There are, also.  
Pains in the affected Side, tho' not so intense, nor capable of  
being augmented by the Touch ; sor the Pleura, which lines  
theThorax, is, also, drawn into Confent, both because theexte-  
rior Pulmonary Membrane is form’d of the Pleura, and be-  
cause in most Men the Lungs, at least on one Side, adhere

. to the Pleura. .

In a Peripneumony the Pain is rather tensive, obtuse and  
pressory, than acute, and is propagated to the Back and Sca-  
pulae : But there is a greater Anxiety and Difficulty of Breath-  
ing, and a more painful Expectoration, in which Spit of various  
Colours is discharg’d ; for, in a Peripneumony, the Vessels of  
the Lungs, winch convey the Blood from one Ventricle of the  
Heart to the other, are affected, insarcted, and obstructed, by A  
thick Blood, which, in Process ofTime, assumes a solid Nature.  
For this Reason it is attended with greater Danger, and soon  
destroys those whom it seizes, especially if they are old, or if  
seasonable Venesection is omitted.

But tho' the Antients were not Very accurate in distin..,  
guishing the Inflammations of the Thorax; yet because this  
Misfortune was Very frequent in those Parts where *Trallian, Ace-  
tous, Ccelius Aurelianus,* and others of them, liv'd, a more exact  
History os the Symptoms of the Disease may, perhaps, be drawn  
from them than from the Moderns. But, among all the others,  
*Areteeus* seems to be the most distinct, who, in *Tib.* I. *Cap.*Io. *Acut.* speaks in the following manner: " It. is aceom-  
." panted, says he, with an acute Pain ascending to **the**" Tbroat, and an intense Heat : But the Pain, in some Pa-

cC tients, extends to the Back and scapulae ; a Difficulty of  
" Breathing, also, ensues; Watchings, Loathing of theAliments,  
" a Redness of the Cheeks, a dry Cough, a Spit which is dif-  
" charged with Difficulty, pituitous, pretty bloody, or yellowish.  
" It is still worse, if a bloody Spit is not expectorated, and if  
" the Patients are delirious or comatous." The fame Author,  
also, informs us, that the Patients die or recover within the  
seventh or fourteenth Day, according as the Symptoms are vio-  
lent, or gentie; or, if the Disease is protracted to the twentieth  
Day, that they are seiz'd with an Empyema. He adds, that  
the Disorder is most frequent in the Winter, less frequent in  
the Autumn, still less in the Spring, unless it should happen to  
he Very cold, and least os all frequent in the Summer. He, also,  
telis us, that old Persons are most subject to this Disorder ;  
whereas Children are either not at all subject to it, or not en-  
dangered by it, hecause their Bedies are moist, rare, and subject  
to copious Exhalations.

' But fince the violent Symptoms, which accompany a pneu-  
monin Fever, are only founded on the Inflammation *of* the  
pulmonary Substance, we may readily perceive, that all things  
which hinder the free Circulation os the Blood through, the  
Vesseis of the Lungs, either by an Obstruction of the Ducts,  
by a Redundance os thick Matter, or a strong spasmodic Con-  
.striction of them by a thin, acrid Matter, are subject to generate  
this inflammatory Fever, especially when many antecedent,  
procatarctic, and remote Causes concur to the Production of  
this Effect. Those, therefore, who by gross and impure Ali-  
rnents, the Use os spirituous Liquors, a Defect of Moisture and  
Exercise, have a large Quantity of thick Blood, which *Syden-  
ham,* by way of Distinction, calls pleuritic Blood, easily, when  
other procatarctic Causes concur, fall into this Disorder; espe-  
cially when the Body, by intense Exercise, herd Labour, warm  
Baths, or the drinking of spirituous Liquors, is rendered exces-  
sively hot, and afterwards exposed to a cold Northern Air ;  
or, which is still worse, when cold Liquors are greedily drank.  
This Disorder is, also, quickly generated in sanguineous and  
plethoric Habits, by the Omission of seasonable Venesection.  
The same Misfortune happens to Women, whose Menses flow  
either immoderately, or too sparingly, or if, through Age, they  
are entirely suppress'd; as, also to Men, .in whom the haemor-  
rhoidal Flux is either not duly carried on, or entirely suppress'd.  
« I have frequently observed, that Gripes, Spasms, colical and  
hypochondriacal Pains, accompanied with.a Violent Costiveness,  
have been succeeded by Inflammations os the Lungs, especially in  
plethoric and cacochymic Habits; for such is the Nature and  
Quality of these, that by compressing the Vessels, especially  
the Veins, they hinder the free Circulation of the Blood, render  
its Motion greater,.and its Congestion, especially to the superior  
Farts, more copious. By which means it afterwards happens,  
that the Blood is not only urg’d to those Ducts, which, on ac-  
count of the Smalness os their Diameters, generally neither  
receive nor convey the Blood ; but, also, remaining impacted  
in these narrow Chanels, interrupts the equable Progress os the  
Blood, and disturbs all the natural Functions. And because  
Persons Very subject to Haemorrhages are, for the most part, of  
sanguineous Habits, and subject to spasmodic Strictures in  
the Abdomen, hence it is, that young Persons, who have  
.heen early subject to large Haemorrhages from the Nose,  
Spittings os Blood, or the Haemorrhoids, occasional Causes con-  
curring, easily fall into Pleurisies or Peripneumonies. 'Tis,  
also, confirmed by frequent Experience, that Inflammations of  
-the Breast have been produc’d by repelling Itches; by pre-  
-posteroufly stopping simple or dysenteric Fluxes; by consoli-  
-dating old Ulcers; by suppressing a critical and usual Sweat *os* the  
-Feet, or of the whole Body ; and by the Repussion of chro-  
nical purple Eruptions by external Cold; for this recrementitious  
Matter, of an acrid and caustic Quality, being impacted in the  
.nervous Coats of the Lungs and Thorax, by reason of the spas-  
-modic Strictures it excites, hinders the equal and due Circu-  
station of the Blood. Nor is it uncommon for an Inflammation  
to be produced in the Thorax after the Small-pox and Measles,  
’fince these Disorders always leave some Fault or Weakness in  
-the Lungs.

Besides, in consequence of the preternatural Constitution of  
the Air and Weather, it frequently happens, that Pleurisies, both  
-of the true and spurious Kind, rage epidemically. This Prin-  
cipally happens in a long and cold Winter, as, also, when a  
warm Air, and a light State of the Atmosphere, is suddenly suc-  
ceeded by a cold, northerly, and highly elastic State of the Air ;  
-and when this last happens, especially .in the Spring and Autumn,  
.Fevers, both of the catarrhal, malignant, benign, and pleuritic  
.Kind, rage. After a severe Winter, I have observ'd crude Pleu-  
.rifles raging, in which the Spit hardly appear'd on the ninth  
-and tenth Day. These Pleurisies are, by *Hippocrates, Lib.* 2.  
*Ac Mcrb.* called dry Pleurisies; and, during the first Days of  
'.these, the Patients are greatly tormented and wasted with- a  
.racking Cough, so that the Discharge .of Spit proceeding, the

Patients are hardly able to bear the Expectoration, and with  
great Difficult)’ recover: There are, also, endemial Peripneu-  
monies ; for it is certain, that a Peripneumeny is a very frequent.  
Disease, and proves mortal to many, in *Wostphalia, Pomerania,  
Sweden, Denmark,* and *Russia.* This, in my Opinion, is owing  
to the gross and coarse Food, and the Coldness of the Air, in  
these Northern Climates.

in no Fevers have I more accurately observed the Crises,  
than in a Pleurisy and Peripneumony ; for, in young and robust  
Persons, a bloody Spit generally appears about the fourth Day ;  
and, on the seventh, the Disorder is spontaneous terminated  
by a profuse Sweat. In phlegmatic and languid Constitutions,  
as, also, when the Disorder has a deep Seat in the Lungs,  
there is a Termination of the Disease on the eleventh or four-  
teenth Day, partly by Expectoration, and partly by Sweat, the  
Pulse becoming softer, the Sleep calmer, and the Strength being  
increased. In. an imperfect Crisis, a Sweat, tho' not sufficient,  
also, appears on the critical Days ; for which Reason, it nei-  
ther relieves the Patient, nor terminates the Disease: And,  
when the Disorder continues to the twenty-first Day,, a dan-  
gerous Abscess os the Breast is to be dreaded. It is, therefore,  
a good Sign, when the Expectoration from the Lungs succeeds  
well, carrying off, on the fourth Day, a Viscid, bloody, then  
yellow, and, sometimes, a purulent Matter; and the more  
expeditious the Spitting is, the greater Hopes there are os a  
Recovery; and; on the contrary, the flower it is, the less Hopes  
os Safety are to be entertained; only, we are to take care,  
lest, when the Disease terminates by a copious Expectoration  
os virulent Matter, it should be succeeded by a Phthisis, or  
an Hectic: But frequent Stools are never safe : Urine without  
a Sediment is a bad Sign; aS, also, profuse Sweats happening not  
on the critical Days. But when, on the eleventh or twelfth Day,  
a moderate Looseness happens, in which a purulent Matter is  
sometimes discliarged, a Recovery is not to be despair’d of.  
When, also, about the fourth Day, there is an Haemorrhage  
from the Nose, it affords singular Relief. .

No Inflammation so readily occurs as a pneumonic Fever,  
especially when deep-seated, and attended with an Abscess. I  
have known some, who, being hardly recovered, have, byan  
irregular Diet, and the liberal Use os rich Wine, relapsed in a  
Month's time ; and the Event generally proves fatal. I have,  
also, known fuch an Inflammation return twice, - thrice, sour  
times, or ostenera Year, in the same Part in which it first  
appear'd. So that those who have once labour’d under inis  
Disorder, ought always carefully to guard against a fresh At-  
tack, by an exact and proper Regimen.

Those who die of an Inflammation of the Lungs, are sufih-  
. cated, because they can no longer throw up, by Cough, the

Matter lodged in theVestcles of the Lungs, and the Ducts of the  
Bronchia. In dissecting such Subjects, the Lungs are found in-  
stated, hard like the Liver ; and, because the Vessels are in-  
farcted with a thick and tenacious Blood, they subside when  
put into Water. I have, also, seen the Lungs full of small  
Abscesses, and herd Tubercles, whilst the Pleura was inflamed,  
sphacelated, and adhering to the Substance os the Lungs. I  
have, also, known Instances, in which polypous Concretions  
found in the Puimonary Vein, aS, also, in the large Artery,  
have hindered the free Circulation of the Blood through the  
Lungs, and brought on an Inflammation, by reason of the too  
large Quantity os Blood convey'd thither.

Since, therefore, a Stagnation os the Blond, which hinders  
its equal Circulation,. is the immediate Cause of this Disorder,  
the principal Intention of Cure is, to render it capable of cir-  
culating freely ; for obtaining which End, the following Mea-  
sures are to be taken : First, the farther Stagnation of the Blood  
is to be prevented. Secondly, the Lentor observable in the  
Blood os pleuritic Patients is to be diluted and colliquated.  
Thirdly, when, the Part affected, and rigid by Spasins, Pain,  
and a copious Afflux os Humours, is soften'd and relax'd, that  
thus the impacted Matter may be again wash'd away, and put  
.in Motion by the Action os the arterial Blood : And, fourthly,  
when the Excretion of the viscid, sanguineous, and purulent  
Matter, lodged in the Bronchia os the Lungs, is facilitated by  
Spit, and, by that means, an Abscess, and the Generation of  
an Empyema, prevented.

In order to prevent the Increase os the Inflammation, nothing  
is more useful than Venesection ; which is the more beneficial,  
the sooner it is administered. For this Purpose, let a Vein he  
Opened in the Arm os the affected Side, and a large Quantity,  
os Blood taken away, if there is a considerable Plethora, and  
the Blood flows with a considerable impetus : But if a Viscid  
and glutinous Serum floats in the Blood, and the Respiration con-  
tinues difficult, the Venesection is boldly to he repeated, espe-  
cially is there is a Suspicion os a deep inflammatory Stagnation.

Among internal Applications, those are most beneficial, which  
render the Blood, Serum, and Humours, thin and fluid, colli-  
quate those which are thick and inspissated ; and, at rhe same

**time,** promote a gen tie Diaphoresis. The most proper things for  
obtaining these Ends are, an Infusion of Paul's-hetony, Chervil,  
.and Sage, each two Handfuls; Liquorice-root, one Ounce;  
and Fennel-seeds, two Drams; of which let the Patient fie-  
quentiy drink four or five Dishes. Then let him use the .fol-  
lowing discutient and diaphoretic Mixture. ' λ '' .

: .Take of the Waters of CarduUs Benedictus, Scabious, Elder-  
flower5» and the *Egyptian* Thorn, each two Ounces;-os  
Treacle-water, half an Ounce ; os distilled Vinegar, ' one  
Ounce; of Crabs-eyes, one Dram ; of diaphoretic An-  
timony, two Scruples.; of the Syrup of red Poppies,"or  
of Saffron, (prepared of dissolved Sugar, an Ounce; and  
of Extract of Saffron, eight Grains) two Drams. - Of  
. this Mixture two or three Spoonfuls are, every two Hours,  
so ; to be exhibited alternately with the following Powder, ς

Take of diaphoretic Antimony, or of the Ceruss of Anti-  
. rnony, of Crabs-eyes, os the Jaws os the Pike-fish, os  
the Tooth os the Sea-horse,, and of the Solution of Crabs-  
eyes, each one Dram; of pure Nitre, two Drains; and of  
Cinnabar, one Scruple Make into a Powder, of which,  
half a Dram is to be taken for a Dose. ’ ' /

When the Patient is languid, and'the Pleurisy epidemical,  
and of a bad Rind',, to the foregoing Powder we are to add  
Camphire, which powerfully resists Inflammations, and,hinders  
them from spreading; only'we are to observe, that half a Grain  
is sufficient for - a Dose.-; and that the Patient is to drink after  
it an Emulsion prepared os the Four greater cold Seeds,,Ladies-  
thistle, Pine-kernels,' and aDecoction of Barley and Harts-  
horn. . ' " si suscsi si  
. The acute Pains are mitigated, and the rigid Fibres relaxed,  
by the almost continual Application osa Bladder full'of awarm  
Decoction of emollient Ingredients, such as the Tlowers of  
Elder, Melilot, Mullen, Chamomile, Mallows,, and white  
- Lilies, the Four carminative Seeds, and Saffron, boiled In Milk.

*Aretaus,*therefore, in Z/3. *s.Acut.ffi* the Cure of a Pleurisy, pru-  
dently orderso Bladder full of warm Oil to be applied to the Part  
affected, provided the Fomentation is not of such aWeight as to  
increase the Pain. And, certainly, by this Topic,, the Pain is  
considerably alleviated, the Respiration facilitated, and the pec-  
eant Matter prepared for Expectoration, which din greatly-pro-  
moted by the following Linctus. \ ' ' . -E

Take of the Oil of sweet Almonds, half an Ounce ; of  
Sperma-ceti, two Drams; of Saffron, ten Grains; of the  
Syrup of Violets, and Sugar-candy, each half an Ounce:.  
Make into a Linctus; of winch some is to be frequently  
taken in a Decoction of excorticated Oats, or in sweet  
**Whey.**

The principal Part of the Cure depends upon Venesection,  
concerning winch *Aretaus,* in *Lib.* I. has these Words ; " In  
" pleuritic Cases, no Delays are to be used; but we are to  
" have recourse to the most powerful Remedy with all Expedi-.  
α tion: For which Reason a Vein is to be open’d in the Arm  
" the Very first Day of the Disorder; and, when a moderate  
" Quantity os Blood is taken away, the Patient is refreshed.  
" Then, some time aster, the Operation is to be repeated, if  
" the Patient can bear it ; if not, it is to be delay'd fill the  
" following Day. " These Measures are not only useful in  
Youth, but, also, in old Age, because Persons in this last  
State abound more with a thick and tenacious Blond, which  
renders their Inflammations more fix'd, and worse to be discussed ;  
for which Reason Venesection is, also, to be repeated in old  
Persons, if their Strength will admit os it. We are, above all  
things, to be careful, that the Quantity taken away bear a Pro-  
portion to the Strength and Quantity of Blood os the Patient;  
for, if too large a Quantity is taken, the Expectoration is not  
only hindered, but, also, the Stagnation of Blood to he dis-  
. solved more consumed, or the Disorder degenerates into a Spha-  
celus. But, if too small a Quantity is taken away, little Good  
is produced ; the Blood, acquiring more Room, flows more im-  
petuousiy to the Part affected ; and the Stagnation and Inflam-  
mation are increased.

In a Pleurisy and Peripneumony, the Body is to be kept solu-  
ble, and the Intestines free from Spasms: This is the Advice of  
*Trallian,* and os *Hippocrates,* in *Lib.* 3. *de Morb.* where  
he tells us, " Thar, in the first four or five Days, the  
" Body is to be rendered soluble ; and so much the more, **the**" flower the Fever, and the shghter the Pains are. " For this  
Purpose, we recommend emollient, paregoric, and domestic  
Clysters, prepared with Oil os sweet Almonds, by which the  
Body is not only render'd soluble, but, also, the spasmodic  
Stricture of the Intestines is relaxed. *Aretaus,* also, justly ob-  
serves, "That we are not to neglect Medicines applicable **to**

" the inferior Parts, such as; Oil os Rue injected into the Antis  
" of Men, and into the Uterus of Women. " Winch Expel,  
riment may be, also, made, if 'the large Intestines are spasmo-  
dically constricted, or in Cases where Women are afflicted with  
Spasms of. theUterus.Y ’ ' ' '

*Trallian, in Ltb.* 6. in such inflammatory Disorders, greatly  
and justly commends Drinks prepared of Mulsum and Water,  
as, also,' Cremor os Ptisan, well boiled with sweet Almonds,  
and liberally drank. "It inhst, 'says he,»be constantly exhibit-  
" ed warm,. when Aliments, or other Potions, are given ; for,’\*  
adds he, "'no other Medicine is sound so beneficial to pleuritic.  
" Patients, even tho' the Fever is violent.*su'Hippocrates,* also,  
always commends his,Ptisan; and I myself from Experience  
affirm, that moistening Liquors, used tepid, are preferable to all  
other Medicines. Buni'in order to dilute the Humours, nothing  
is more, heneficial than; a Decoction of Oats, or Barley, with  
the Addition of a Quantity of *Prussian* Honey, and sweet  
Whey ; and the larger'Quantity of fuch a Liquor is taken,  
especially if the Body sweatsinuch, the inore salutary it proves. :

AS in all inflammatory. Fevers, so especially in those os the  
pneumonic Rind, we are carefully to abstain from too warm a  
Regimen with respect to- Ped, Chamber, ondDri nk : But. W  
are, also,.Io guard against. Refrigeration, .and the Use of cold  
Liquors.' in the Cure pos this Disorder, none of those Medin  
tines are’ to be used, which forcibly provoke Urine, Sweat, or  
Stools, lest the fine lymphatic Humours,, by whose Assistance  
the Stagnation ought to be dissolved, should be drawn elsewhere ;  
for *Hippocratis,* in *.Lib.* 3. *de Morbis, vstcaeci* speaking of Stools,  
justly informs us, "That, if, aster the fifth Day, a large Quan-.  
" tityos Matter is discharged by Stool, it proves mortal, since,  
" by that.means, the superior Parts are dried, and the Spit  
iC not carried upwards. The Body most not, therefore, be  
" too costive, lest the Fever should he acute; nor too soluble;  
" that thus the Spit may he carried upwards, and the Patient’s  
" Strength preserved.'’ But when two, or even four,- Stools  
happen spontaneotifly, they are not. to be checked.

In order to sooth the acute Pains, Anodynes and Opiates  
are generally commended: But they are to be abstain'd from,,  
by those, especially if old, in whom the Humours are thick, and  
the Inflammation considerable. "We are, says *Trallian,* in such  
" Cases, caresally to avoid Diacodium and Philonium ; for they  
" are dangerous, since they render the Humours difficult to be  
ρά eliminated, impair the Strength, and render the Patient lan-  
iC gnidi ” But in young Persons, when the Pain is intense, we  
are nos, except upon urgent Occasions, to exhibit stronger Ano-'  
dynes, than Preparations os Poppies : Such as an Emulsion pre--  
pared os tho Seeds and Syrup of Pop pi es,t or the Diascordiuin  
of *Fracaismriui,* taking care, at the same time, always to mix  
nitrous and diaphoretic. Medicines with them. Externally,  
in order to mitigate the Pains, and assist the Discussion, besides  
the things already, recommended, a Fomentation, prepared with  
the warm. Fat of a ..Capon, in an Ounce of which half a Dram  
os Camphire is diffoyed, is useful.

Expectorating and sweet Substances are not to be too soon  
exhibited, that is,’ on the first Days ; but only when the viscid  
Matter is concocted,-moveable, and fit sor Excretion; other-  
wise a greater Afflux to the Lungs is excited.' Some recom-  
mend Sperma-ceti,.taken in large Quantities, sor dissolving the  
Blood: But I have observed, that this Medicine is more injurious  
than beneficial, on account of the Nausea at creates; nor,,  
at the same time, is it os so distolvent a Quality, as Vinegar,  
mixed with Crabs-eyes.

When, on the critical Day, as it frequently happens unless the  
Physician imprudently raises Commotions, the Inflammation is  
terminated bya copious Sweat, which is succeeded by a freer Re-  
spiration. Ease of Body, and an Increase os Strength, we are still,  
for some time, to continue the Use of diaphoretic and diluting  
Medicines, but not to exhibit them so often. Particular regard  
is, also, to be had to the Method of Living, Test more should  
be eaten, than the weak Stomach is capable os digesting, that,  
thus the Remains os the Disease may be consumed, and a Re-  
lapse prevented.. *Hoffman.*

**A PLEURISY.**

A Pleurisy is said to be present, when the Patient labours,  
under an acute, continual Fever, accompanied with an hard  
Pulse, an acute, pungent, and inflammatory Pain, which in In-  
spiration is greatiy increased, but in Expiration, or during tho  
Retention os the Breath, milder; aS it is, likewise, when, with-  
out any Motion of the Thorax, Respiration is principally per-  
form'd by the Assistance of the Abdomen : This Disorder is ge-  
nerally accompanied with a perpetual Cough, which excites such  
an intense Pain, as to endanger a Suffocation.

When, with these Symptoms, symptomatic Expectorations  
are made from the Lungs, the Disorder is call’d *a moist Pleuorfyysy*but, when fuch Expectorations are wanting, it js call'd *a desfo  
Pleuris.y.*

This Disorder affects all the Parts of the internal Integu-  
ments or the Thorax, the Whole of the Pleura, the Whole  
of the *Mediastinum. ,* and consequently, the anterior, posterior,  
right, lest, superior, inferior, exterior, and deeper Parts, but  
especially the Sides, are affected by this Disorder.

When the Membrane internally luting the Rihs is the Seat  
Of the Disorder, it is called *a true,* or *legitimate Pleurify:* But,  
**if the** intercostal Muscles, and those lying above them, are far-  
ther affected, the Disorder is call'd *a spurious,* or *bastard Pleu-  
rise- .* Ϊ . ..

This Disorder principally attacks adult Persons of sanguineous  
Habits, those who eat and drink too copioufly, who use Violent  
Exercise, who are rarely afflicted with acid Eructations, and  
who are disposed to inflammatory Disorders in the Spring, eipe-  
cially, when an intense Heat suddenly succeeds a severe Cold ;  
or, in the Winter, when excessively cold Winds blow : And,  
in such Cases, the Disorder is call'd *an idiopathic Pleurify.*' But a Pleurisy arising from the Motion of the Matter of a  
previous inflammatory Disorder, and itSTranflation to the Parts  
already mention'd, is call'd *afymptomatic Pleurify.*

This Disorder, for its antecedent Cause, has -

I. Every thing capable of generating an Inflammation of any  
Rind.

’ 2. Every thing which, in a particular manner, determines this  
general Cause to the Pleura ; such aS the Nature of the Patient,  
according as his intercostal Arteries are narrower or herder; a  
previous Disease, which leaves a Disposition to the same Miss  
fortunes, such as a Scirthus or Collus of the Pleura, or an  
Adhesion of the Lungs to that Membrane; the Nature of a  
raging epidemical Disorder; a cold Air convey’d forcibly thro’  
small Chinks to the naked Body, previoufly OVer-heated by  
Exercise, or the Influence of the Fine ; cold Liquors copioufly  
and suddenly drank, when the Body is over-heated ; and cold  
Northerly Winds in the Winter-time.

Ἔ. A Tranflation of the inflammatory, ichorous, orsuppu-  
ratory Matter, before lodged in the whole Body, or in some  
particular Part, to these Parts of the Thorax; as in theMeafles,  
the Small-pox, ulcerous Tumors, large and broad DlcerS,  
which suddenly disappear in consequence of an Absorption of the  
peccant Matter into the Veins. ‘

' This History of the Disease, together with an Account of  
its several Stages, and a Dissection of those who die of it, suf-  
ficiently evinces, that it is an inflammation of the sanguineous  
Kind in those Parts of the Thorax already mentioned, and  
generally arising from a preceding acute Fever.

Hence we may easily deduce the History of this Disease ; for  
It often begins with a pretty keen Appetite for Aliments; a  
Coldness and Horror; a Weakness, Lassitude, and Fever; in  
Process of Time, it is attended with a moderate Heat, which  
gradually hecomes excessively intense ; a Thirst ; a total Loss  
of Appetite; a Pain at first mild, but gradually becoming in-  
tolerable; and a considerably injured Respiration r At its Height  
it is attended with a Violent, tho' less perceptible Fever, on ac-  
count of the Respiration, which ischeck'd, and almost suffocated,  
hy reason of the intense Pain. Hence tho Physician is often  
shamefully mistaken ; and the Disorder terminates in Various  
Manners, which depend upon Various Causes, but especially on  
the Diversity of Changes to which Inflammations are subject,  
specified under the Article INFLAMMATIO ; on the Nature of  
the Parts affected; and a due Consideration of the following  
Circumstances : Whether there are more or fewer Parts affect-  
ed at once ? Whether the Impetus of the Blond is Violent ?  
Whether the Malignity of the primary Disorder is great, and  
accompanied with a Train of unlucky Symptoms? And espe-  
cially, whether the Respiration, Pulse, and Excretions, recede  
from their natural State ?

A Pleurisy, like other Inflammations, terminates tn the Re-  
eovery of the Patient, some other Disorder, or Death.

This Disorder terminates in the Recovery of the Patient,  
either by the Assistance of Nature, or of Art, whilst the Dis-  
ease is as yet simple and recent.

It is cured by the Assistance of Nature, either by means of  
a benign Resolution, Or by a Concoction and Excretion of the  
peccant Matter.

A Pleurisy is cured by Resolution, when the Humours are  
mild, their Motion regular, the obstructing Cause not too  
obstinate and the Obstruction small; for, in this Case, the  
Benignity of the Symptoms indicates nothing to he done,  
but only to alleviate the Disorder by light Aliments, mild Ape-  
rients, and softening Fomentations.

A Pleurisy is cured by the Concoction and Excretion of the  
peccant Matter;

-1. When, by the haemorrhoidal Veins, a proper Liquor is.in  
a due Quantity, and at a proper time, discharged.

2. When a copious, thick, hypostatic, strangurions, red  
Urine, with a white Sediment, is discharged, to the Relief of the  
Patient, before the fourth Day ; such a Discharge of Urine, also.  
Cures a dry Pleurisy. -

- 3. When» hesore the fourth Day, copious, bilious, and yei-  
low Stools, are discharged, to the Relies os the Patient. ''

A. When ichorous, purulent, fistulous, or song-flowing Ab-  
scefles begin, hesore the sixth Day, behind rhe Ears, or on **the**Legs, ’ ' . ' . s

*5.* When the Pain of the Side is translated to the Shoulder,  
Arm, or Back, and accompanied with a Stupor, Pain, and  
Heaviness os these Parts.

6. When the Spit is, in some measure, freely discharged,  
affords Relief, is unattended with a Coryza, copious at. first,  
resembling Pus, foon aster'white, appears before the fourth  
Day, is continued, or returns immediately aster its Suppression;  
for, in these Cases, the,Patient recovers, either on the ninth, or  
the eleventh Day. susu 'sc. Ἀ -

When the Signs, accurately observ'd, indicate, that the now  
descrihed State os a Pleurisy in present, then the Physician is to  
make no Alteration, but suffer every thing to remain aS it is.  
For this Reason, neither Venesection, nor Evacuation, nor any  
other Change, are to be attempted. The Patient is, therefore,  
first, to use soft lightTood, Rest os Body and Mind, a tens,  
perate hot and moist Air, spontaneous Sleep, or such as is pro-  
cured by gentle Narcoties, softening, thin, and gently aperient  
Medicines. Then, secondly, each particular Evacuation, which  
gives Relies, is to be promoted.

. When, therefore, in a. Pleurisy, a proper Liquor, is in a due  
Quantity, and ata seasonable Time, discharged from the haemor-  
rhoidal veins, the Anus is; to be fomented with emollient, laxa-  
five, and aperient Fomentations; or,is these should prove in-  
effectual. Leeches are to be applied.

When the Urine is copious, thick, hypostatic, and fuch as  
has heen already described. Fomentations, of the same Nature  
with those" now recommended, are to he applied to the Kid-  
neys, Perinaeum, . and Hypogastrium ; lenitive and diuretic  
Aperients are to be used ; the Patient is to be kept in an Ain  
somewhat cool; Sweating, and other Evacuations, are to he  
avoided; and mild diuretic Clusters to be injected.

If, in a Pleurisy, yellow and bilious Stoois are copioufly  
discharged before the fourth Day, to the Relief of the Patient,  
the like emollient Fomentations are to be applied to the whole  
Abdomen, laxative Clysters are to he injected, and a laxative  
Regimen prescrihed.

When ichorous, purulent, or fistulous Abscestes appear be-  
fore the sixth Day, hehind the Ears, or on the Legs, and if  
the Part affected is discover'd, then the Patient is to use a  
light, fluid, gently aromatic,’ and somewhat Vinous Diet,'  
to remain in a State of Rest, and to have emollient and gent-  
ly aperient Medicines' prescribed him. The Part, also, **to**which the Matter is determined, ought to the treated with  
Suction, Relaxation, stimulating and aperient Medicines, that  
thus it may resist less, and attract more. Then somewhat more  
strong Aperients may be used ; as, also, saponaceous and hepa-  
tic Substances; to which may be added Clysters and Fomen-  
rations consisting of the fame. Then the Aperture made in  
the Abscesses is to be kept open sor some time, by suppurating  
Medicines. '

When the Pain is tranflated to the Shoulder, Arm, or Back,  
and attended with a Stupor, Pain, and Heaviness of these Parts,  
besides the things commonly prescribed, the Parts to which  
the Pain is tranflated, are to he fomented with emollient Sub-  
stances, rubhed gently with hot Cloths, and stimulated byPlai-  
stars, in some measure, attractive.

When the Spit is, in some measure, freely discharged, affords  
Relief, is unattended with a Coryza, is copious, at first resem-  
bling Pus, but soon becomes white, or appears hesore the fourth  
Day, is either continued, or returns immediately after its Sup-  
pression, then the whole Treatment is the same as in a true  
Peripneumony. See the Article **PERIPNEUMONIA.**

By Art, a Pleurify may be cured without any other Disease,  
especially by the following Method : Is a recent Pleurisy, be-  
fore the End of the third Day, is accompanied with Violent  
Symptoms of the dry Kind, and sound in a robust, exercised,  
and dry Habit, without any Hopes, or Presence, of a Resolu-  
tion, or of the Concoction and excretion of the peccant Mat-  
ter; then, -

I. A large Quantity of Blood is speedily to be taken from a  
large Vein, with a large Stream, and from a large Orifice, the  
Patient, in the mean time, lying at Rest on his Back, and  
quickening his Respiration, as the Blood flows, by Coughing  
and Sighing. The Part affected is, in the mean time, to be  
fomented, and gentiy rubhed. The Discharge of Bleed ought  
to he continued, fill the Pain is considerably remitted, or the  
first Signs of a Deliquium brought on\*. The Venesection is to  
he repeated, according to the Return of the Symptoms it was  
intended to remove. The Absence of the Pellicle, formed  
upon inflammatory Blood, determines when ’tis time to stop.  
And, ' -

**2. We** are immediately to use Fomentations, Baths, hot Ap-

plications. Liniments, and Plaisters, to relax, resolve, to miti-  
gate, and avert the Pain. See **INFLAMMATIO.**

- 3. Then such Medicines are to he exhibited, as dilute, re-  
solve, relax, mitigate, refrigerate, and alleviate, or sooth Pain;  
which, when taken warm, in a moist Form, in a large Quan-  
tity, and determined to the Part affected, are highly beneficial,  
and may he Varied, according to the Symptoms ; always taking  
care, that such Ingredients be chosen; aS resist Putrefaction.

**4. A** light, soft, refrigerating, and antiphlogistic Diet is ne-  
Ceflary.

5. Every thing, which dries, heats, or increases the Impetus  
of the Blood, is to be avoided ; such as the Heat os the Arr, of  
the Sun, os the Fire, or of the Bed ; as, also, hearing Aliments  
and Medicines.'Δ Fomentation may be prepared in,the foi-  
sowing Manner :. *say \ si ...*

Take os the Leaves of Mallows, Marshmallows, and Pelli-,  
tory of the Wall, each two Handfuis; os Garden-poppy,  
and Henbane, each one Handful; of the Leaves of Elder,  
Chamomile, and Melilot, each three Ounces: Boil in sweet  
Milk, for a Fomentation.

: Liniments, for anointing the Sides, are these following:

Take of the Sugar of Lead, four Drams; of Vinegar, six  
\* Drams ; and of the Oil os Roses by Infusion, one Ounce:

Malte into a Liniment, to be applied to the Side.

**' ' Os, 'μάμά . . . . :‘**

\* Take of the Unguentum Populneum, two Ounces.  
' . : . ' °'» '

- Of the Emplastrum Diapompholygos, a sufficient Quantity :  
Spread on Leather, and apply for the same Purpose.

Take of the Leaves of Colts-foot and Mallows, each two  
Handfuis; of the Leaves of wild Poppies and Marshmal-  
lows, each half a Handful ; of the RoolS of Parsley and  
.... Sarsaparilla, each three Ounces; of bruised Linseed, four

Drams; of the bruised Seeds of Lettuce and Ladies .thistle,  
each one Ounce : Boil in three Pints of Water, of winch  
let the Patient drink two Ounces every Hour. .

Take of the.Four greater and smaller cold Seeds, each three  
Drams; and os white Poppy-seeds, two Ounces : Make  
into an Emulsion wwithBarley-water; with every fourteen  
Ounces of whichrnix, of the purest Nitre, one Dram and  
- an half;'and of the Syrup of Maidenhair, one Ounce,  
Let the Patient drink one Ounce every Hour, or every  
Quarter of. an Hour.

Take of the distilled Waters of the Flowers of the red Poppy  
and Elder, each eight Ounces ; os the distilled Water of  
Barrage, five Ounces; of Crabs-eyes, two Drams ; of Sal  
Prunelhe, one Dram ; of the Syrups *os* the Flowers of red  
and white Poppies, each one Ounce*: Mix,* and let. the  
Patient drink two Ounces every Half-hour.

. How long these Measures are to he persisted in, or repeated,  
is to he known from the Obstinacy of the Disease, itS Remiff-  
ness, or its Change into a State os Health and Recovery.

A Pleurisy degenerates into other Disorders, first, when the  
inflamed Part suppurates ; which we know, first, from the gene-  
ral Signs of a Suppuration, specified under the Article IN **EL AM-  
MATIO** ; secondly, from the Obstinacy of the Pain, Cough, **and**Fever, beyond the fourth Day ; thirdly, from the Absence of  
the Sign os a Resolution and Cure ; and, fourthly, from a Ne-  
glect of the proper Measures of Cure.

That an Apostem is already, forming, is known from the  
common Signs specified under the Article **INFLAMMATIO ;**but especially, in this Case, from the often recurring Horror,  
without any manifest Cause, and the Signs specified in the Ar-  
ticle PERIPNEUMONIA. Hence it is, also, known, when an  
Apostem is actually formed ; which sometimes is evacuated by  
Spit, thro’ the Lungs.

But such an Abscess isfometime broken by itsownPus, which  
drops into the Cavities of the Breast ; whilst the Ulcer, as new  
Pus is formed anal accumulated, filis the whole Cavity of the  
Breast, and consumes the whole Body. That such a Misfortune  
has happened, may be known from the preceding Signs: From  
the Duration of the Misfortune beyond the seventh Day; from  
the sudden Remission of the Symptoms, and their quick Re-  
’turn. Hence arises a Phthisis.

When, therefore, by the Signs already enumerated, we know  
that the Inflammation is forming into an Abscess, the Part,  
before painful, when known, is to he corroded by Caustics; an  
’Incision is to be made quite to the Pleura, and kept open by sup-  
purative Medicines, that the Matter, heing forced outwards by

the Action of the Lungs, may he discharged from the Pleura;  
and prevent an Empyema ; then the Part is to he softened,  
till it is quite cleansed. - . '

Put is there are Signs, that, the Apostem being broken, the  
Pus has already form'd an Empyema, the Thorax is forthwith  
tobeopened, the Pus eliminated, and the Wound cured by proper  
RegimenandMedicines. See INFLAMMATIO and EMPYEMA.

A Pleurisy, also, degenerates into some other Disease, when,  
for Instance, the Part affected becomes scirrhous, or callous, or  
when the Lungs adhere to the Pleura:; and, when this Lst Mis-  
fortune h appens, there is produced .an Asthma, a Dyspnoea, and  
a dry Couch, especially after Eating or Exercise; from which  
Signs the Disorder is known, is they are present without, the  
Signs of an Abscess or Empyema, already specified , and, espe-  
cially, if they continue long, without any great Increase of- **the**Disorder. ' '. . .... ' . . ί . in  
j This Misfortune, when known, is either absolutely incurable,  
or to be removed by abstemious Living, Exercise, a free Air,,  
ing in the Country,, violent and often-repeated Riding.-

. Such ah Inflammation, also, degenerates into a Gangrene,  
first of the Side, and then of the Lungs, by reason of the Con-  
tiguity of the latter with the former.

. This last-mentioned Disorder arises, either from the Violence  
of the Pleurisy, or from the acrid and putrid Matter accompa-  
nying it. . so ..... ' ἐν ;

That a Gangrene of the Lungs is about to happen, or is al-  
ready begun, may be known from Various Circumstances : Is,  
for Instance, the Spit-is purulent, and somewhat bilious, round,  
purulent, and somewhat bloody, black, and /uliginous, dirty,  
or fetid ; if there is. a great Noise in the Breast, accompanied  
with aSadtiess oftheCountenance ; if tbeEyes are of a yellowish-  
red Colour, full of Sordes, and dim-sighted ; or is the Spit is at  
first Various ; then the Patient often dies on the third or fifth Day:  
If there is a Stertor, none, or a difficult Expectoration, a languid  
Pulse, and an high-coloured Urine , if there isaFlux,the Matter  
of which is liquid, fetid, putrid, and symptomatic; ifa violent Pe-  
ri pneumony comes op ; if a second Paroxysm succeeds the first ;  
if the Blood is highly florid, when flowing from an opened Vein,  
and without an inflammatory Pellicle, thoughts comes from a  
large Orifice, with a full Stream, and is received into a clean  
Vessel; if the Spitting is suppressed, whilst the Dyspnoea re\*  
mains ς or is increased, and accompanied with Pain? Heaviness  
os the Breast, an hard, small, quick Pulse, and an intense Heat;  
for, when'these Symptoms are increased on the fifth Day, they  
prove mortal on the seventh; is the Urine is. highly red, and  
dark-coloured, with a Various and indistinct Hypostasis, the Dis-  
ordersproves mortal within fourteen Days : If the Hypostasis is  
black, hr fursuraceous, the Disorder proves mortal sooner : If  
the Pleurisy, being at first mild, is increased on the fifth or  
sixth Day, the Patents are in Danger on the seventh and twelfth,  
and are rarely cured, till aster rhe fourteenth; if the Back, Side,  
and Shoulders are highly red and painful; and if there is a Flux,  
os which the Matter is green, and highly fetid.

Is the Pleurisy is of the dry Kind, on account of the Defect  
of Strength, the intense Pain, the Unfitness of the Matter sor  
Expulsion, the excessive Contraction and Crispation os the V *es-  
seis,* and the excessive Use of hot Substances, the Pain, at the  
same time, tending to'the superior Parts ; if the Tongue is at  
first, dry, sordid, livid, or black, with a black Blister on it ; if all  
or most of these Signs happen, the Disorder, winch is generally  
mortal of itself, is not easily cured ; but, for the most part,  
destroys the Patient by a Gangrene of the Part, either in the  
Side, or in the Lungs contiguous to it.

But when these Signs indicate, that such a Misfortune is  
already threatening the Patient, the most powerful Remedies  
are, without Delay, to be used ; nor are we to trust to the As-  
sistance of Nature, nor the Influence of gentler Medicines, pro-  
vided the Patient has a sufficient Degree of Strength remaining.

In thisCafe, therefore,’deep Eschers are forthwith to be excited  
in the Part affected with the actual Cautery; then they are to  
be covered with strong, cleansing Medicines, and kept conti-  
nually warm with penetrating Fomentations ; then large Quan-  
tities of strong, diluting, aperient, and antiseptic Liquors are  
so be taken; sor by these, if by any, the Severity of the Disorder  
will be mitigated: For this Purpose,

Take of the Leaves of Scordium, Jack-by-the-hedge, and  
white Horehound, each two Ounces: Boil in two Pints  
of Water; with which mix, of the Oxyrnel of Squills,  
eight Ounces ; of Nitre, three Drams; and os Treacle-  
Vinegar, one Ounce : Of this Mixture let the Patient, every  
Quarter of an Hour, take two Ounces as warm as possi-  
ble.

But if the Violence of the inflammatory Cause produces the  
most severe pleuritic Symptoms, neither to be removed by the  
Assistance of Nature, nor by any antipleuritic Medicine, and  
if these Symptoms are suddenly removed without a Cause, so

sar as they depended on the Inflammation, thePulfe remaining  
quick, small, and intermittent, and the Sweat heing small and  
cold,' it is obvious, that a Gangrene has already seined the in-  
flamed Parts. Hence a Delirium, and soon after Death, hap-  
pens, especially if the Tnorax is’ of a livid Colour. The same  
Thing happens, if the Patient, who expectorates a somewhat  
bilious Spit, is relieved of his Pain, without any manifest Rea-  
son ; for, in this Case, a Delirium, the *Psefazp* os Death, pro-  
duced by a Gangrene, is present.

A Pleurisy terminates in Death, when its Causes are so Vici-  
lent, that, the Pain produced, suppressing all Motion *os* the  
Thorax, soon creates a mortal Peripneumony, by .stopping the  
Circulation of the Blood.

\* Hence the Reason; is obvious, why a Peripneumony succeeds  
**every** violent Pleurisy: Why a Pleurisy is generally mortal to  
old Persons,. Child-bed and pregnant Women: And why **the**Swathing of the Thorax with a Bandage so‘alleviates the Dis-  
order, as to render it tolerable. *Boerhaave^ Aphorisms.*

PERIPSYXIS, πὸρὶψήξις. The same as **PERFRICTIO./**PeRIPTOSIS, περίπτωσις. A Chance, or fortuitous Ac-  
cident; by which Remedies for Diseases are sometimes disco-  
Vered. \_ ’ ’ . " .  
- PERIPYEMA, περιπύημά. A Collection of Matter, fur-  
rounding any Part. i - -- - -

PER IR RHE DES, περάῥαδές. Bent, or broke every Way',  
Or both Ways, or in every Direction. It, also, imports, sprin-  
kled, or irrigated all over. ' *Hippocrates.*  ' I

PERIRRHePSIS, περίῤῥεψις. The Declination of a Band-  
age; when it recedes from its due Situation, either to one  
Part, or to another. *Hippocrates de Officina Medics. "'si*

PERIRRHOeA, πἐεἰῤῥοια, from περιῤῤἐω, to stow from  
every Part. A copious Flux of the Humours, or morbific  
Matter; from all Parts of the Body, to the proper Emuncto-  
ries, in order to their Discharge ; or, rather, the Discharge  
itself. z

\* PERISCELES, περισκελές. An Epithet for a Medicine in  
*Hippocrates,* importing, very hard, irritating, or pungent.

PERISCEPASTRUM. See **CATHoLcEUS.**

*i* PERISCYPHISMUS.

-'’ This Operation, which, according to the Etymology of the  
Word, imports an Incision round the Cranium, is performed  
on those; who are afflicted with copious DestuxionS on the Eyes,  
supplied by a large Number of deep-seated Vessels. During  
this Disorder, the Patients Eyes are extenuated, small, their  
Sightweak, and their Angles corroded ; the Eyelids are exulce-  
rated, and the Hairs fell from them thin, acrid, and hot  
Tears are discharged; and an acute and deep-seated Pain of **the**Head afflicts the Patient, who, also, sneezes in a violent Man-  
her, without Interruption. We are, therefore, in this Case,  
to shave the Head ; and, avoiding the Temporal Muscles, to  
make a transverse Incision from theLestto the Right Temple r  
But let the Incision be confined to such Parts, as are possessed  
os no great. Degree of Motion : Thus, for Instance, let it be  
made a little above the Forehead, taking care, at the same time,  
to avoid the coronary Suture. *Leonides* orders the Incision to he  
made in the Middle of the Forehead. When the Bone is denu-  
dated, we are to separate the Lips of the Incision by means of  
Tents, or a large Quantity ofLint ; but the Extremities of the  
Incisiori are to have proper Dressings applied to them, which are  
to he moistened with Wine and Oil. When the Dressings are  
removed, and the Inflammation declining, we are to rasp the  
Bone, till it begins to produce Flesh, and carry on the Cure by  
means of.incarning Powders. Among which are, that prepared  
of two Pans of the Flour of Wheat, and one Part of Colo-  
sphony, the Powder called *Pulvillus Capitalis,* and inearning  
Compositions of Pumice; for, when the Skin is rendered thick  
by a Cicatrix of this Kind, the Orifices of the Vesieis are shut  
up, and, by that means, the former Defluxion to the Eyes is  
prevented. *Paulus AEginet. Lib.* 6. *Cap. J.*

- PERISPHALSIS, περίσφαλσις, from περισφάλλομαι, to wan-  
der about. A Circumrotation of a luxated Bone, in order to  
its Restitution.

PERISSOSIS, περίπωσις, from περιανὸς, redundant. A Re-  
dundance, orsoperfluous Plenitude ofthe Humours. *Hippocrates.*

PERISTALTICUS, from περιστέλλω, to compress, or con-  
tract. The Vermicular, spontaneous Motion of the Intestines,  
by which the Fjeces are protruded towards the Anus, is called  
the *Peristaltic Motion.*

PERISTERON. A Name, in *Dioscorides,* L. 4. Co 6.  
for the *Verbena,* Vervain.

PERISTOLE, Ηεριστολή. In *Hippocrates, de decenti Habi-  
ru,* it imports a modest and composed Dress, or Habit. But is,  
also, signifies the compressive Power os the animal Fibres, and  
the peristaltic Motion of the intestines.

PERISTOMA. The villose Coat of the Intestines.

PERISYSTOLE. The Interval of Rest hetwixt the *Systole*and *Diastole* of the Heart.

PERITERION. - The perforating Part of the Trepan.

PERITENIS,/περίτήξις. A ColliquatioIL

' PERITONEUM, περιτόςαιον, From περιτεἴνω, to extend  
round. \_\_ ...... :' ~ ' . ~~ . \* . ' ,

J After the Removal of the Muscles of the Abdomen, in Dis.  
sections the first Thing that appears, is a Very considerable mem-  
branous Covering, which adheres immediately th the inner Sur-  
face of the transverse Muscles, and of all the other Parts of this  
Cavity ; andjnyolves and invests all the Viscera contained therein,  
as in a Bag. . This Membrane is named *Pcritonauni. -t i*

It is of a pretty close Texture, and yet Very pliable, and ca-  
pable of a very great Extension , after which it can recover *itself,'*and he contracted to its ordinary Sine; aS we see in Pregnancy,  
Dropsies, Corpulency, and Repletion. . «

It seems to be made up, at least, of two Portions, one rail  
ternal, the other external; which have been looked upon, thy  
many Anatomists, aS a Duplicature of two distinct membranous  
Laminae: But, Properly speaking, the internal Portion alone  
.deferves the Name of a membranous Lamina, as being the main  
Body os thePeritoheeum; the external Portion is no more, than  
a kind of fibrous, or follicular Apophysis of the internal, and  
may be properly enough termed the cellular Substance of the  
Peritonaeum.

\*. The true membranous -Lamina, commonly called the *internal  
Lamina,* is Very smooth sand polished on that Side, which is  
turned to the Cavity and Viscera of the Abdomen, and conti-  
nually moistened by a serous Fluid, discharged through, almost  
imperceptible Pores. . νύ

These Pores may be seen, by spreading a Portion of the Peri-  
tonaeum on the End of the Finger, and then pulling it Very  
tight on all Sides; sor then the Pores are dilated, and small  
Drops may be observed to run from them,. eVen.without a Mir  
Croscope. ' '

The Sources of this Fluid are not asyet sufficientiy known.  
Perhaps it comes out by a kind of Transudation, or Tran:  
spiration, like that which we observe in Animals, newly killed.  
The whitish Corpuscles, found in diseased Subjects, are no Proof  
of the Glands, which some Anatomists place there in the na-  
rural State.

The cellular Substance, or external Portion, of the Perito-  
naeum adheres Very closely to the Parts, which form the In-  
sides of the Cavity of the Abdomen; and it is not every-where  
of an equal Thickness, in some Places it is in a very small  
Quantity, and scarcely any appears at the tendinous or aponeuro-  
tic Portions of the transverse Muscles, and on the lower Sine of  
the Diaphragm.

in all other Places, it is thicker, and forms Cells expanded  
into Very fine Laminae, which, in diseased Subjects; become  
sometimes so broad and thick, as to resemble so many distinct  
Membranes. . ?. .-

in fome Pisces this Substance is every way like a Membrana  
Adiposa, being filled with Fat, as round the Kidneys, and along  
the fleshy Portions *of* the transverse Muscles, to which it adheres.  
It entirely surrounds some Parts, as the Bladder, Ureters, Kid-  
neys, and spermatic Vesseis ; and it is, in these Places, impro-  
perly termed the Duplicature of the Peritonaeum. Y . *-y.*

Besides these Differences in Thickness, the cellular Substance  
has several Elongations, which have heen called *Productions As.  
the Peritonaeum.* Two of these Productions accompany and  
invest the spermatic Ropes in Men, and the Vascular Ropes,  
commonly called the *round Ligaments,* in Women. There are  
other two, which pass under the Ligamentum Fall opii, with  
the crural Vesseis, which they involve; and they are gradually  
lost in their Course downward. .. ......

To these four Productions of the cellular Substance os the  
Peritonaeum, we may add a fifth, which is spread on the Neck  
of the Bladder; and, perhaps, a sixth, which accompanies the  
Intestinum Rectum. All these Elongations pass out of the  
Cavity of the Abdomen, and may be termed external, to di-  
stingnish them from others, that remain in the Abdomen, and .  
**are** called *internal. . nd*

The great Blood-Vessels, that is, the Aorta and Vena Cava,  
are likewise involved in this cellular Substance of the Perito-  
naeum. In a word, it involves immediately, and separately, all  
the Parts and Organs, which are commonly said to lie in the  
Duplicature of the Peritonaeum.

The true Lamina, or membranous Portion, of the Peritonaeum  
is connected, by the Intervention os the cellular Substance, to  
the inner Surface of the Cavity of the Abdomen ; hut it does  
not naturally accompany the external Elongations of that Sub-  
stance ; it only covers the Origin, or Basis, of these Produc-  
tions, without any Alteration in its own Surface at these Places.

It has, nevertheless. Productions of its own ; but they **are**very different from those of the cellular Substance ; *foe* they  
**run,** from without, inward ; that is, they advance from the -  
.convex Side os the great Bag of the Peritonaeum, into the Cavity  
**of** that Bag, some more, some less, and, also, in different Min-

ntrs ; aS if the Sides ofa large Bali or Bladder were thrust in-  
ward into the Cavity of the Ball or Bladder.

Of these internal Elongations, or Intropressions ofthe true  
Lamina os the Peritonaeum, some are simply folded, like a Du-  
plicature; some are expanded, like inverted Bags, or Sacculi,  
to contain some Viscus ; some begin by a simple Duplicature,  
and are afterwards expanded into a Cavity, which contains some  
Organ ; some are alternately extended in the Form of simple  
Duplicatures, and os Cavities ; and, lastly, some form only a  
small eminence on the inner Surface of the great Cavity of **the**Peritonaeum. - - - '

Under the first Species of these Productions we.may bring the  
membranous Ligaments of she Abdomen, such aS those:Of the  
Liver, Colon, *etc.* We fee the second Species in the external  
Membrane ofthe Liver ; the third in the Mesentery-;-the fourth  
in the Mesocolon ; and the fifth;-at the Kidneys and Ureters.

Besides the external Productions.os the cellular Substance of  
**the** Peritonaeum, it has the same Number of internal Elongations  
with the true Lamina, which lie between all the Duplicatures,  
and line the Insides, os all the Cavities, or that Side, next the  
Viscera, contained in them. - - - ".st τμ

' The Uses of the Peritonaeum seem to be Very evident, from  
its Description; and the principal Uses are, to line the Cavity  
of the Abdomen; to invest the Viscera contained.mThatCavity,  
as in a common Bag ; to supply them with particular Coats to  
sorm Productions,pLigaments, Connexions, Folds, Vaginae, and  
the like. ς - - . / - - .... ..... . :

The fine Fluid, -which transudes through .the whole internal  
Surface of the Peritonaeum, prevents the Inconveniences, which  
might arise from .the continual Frictions and Motions, to which  
the Viscera ofthe Abdomen are exposed, either naturally,-or by  
external impulses, . . . - . . . εἴ -ιε .-.. .

: I must here observe, that it is the common Custom to demon-  
strate fourligamentary Ropes, termed the umbilical Vessels,  
before the Peritonaeum is opened, because they adhere to the  
Umbilicus, and three of them are really Veffeis in the Foetus,  
**two** umbilical Arteries, and one Vein. .. *.z’' A .?\**

Three os these umbilical Ropes, or Ligaments, are involved  
separately, andsustainedhy a Preduction, or Duplicature, which  
the Peritonaeum sends into the Cavity of the Abdomen, in **the**Form os a Falx., *Winsiow's Anatomy.; ' .*

PERIZOMA, from περιζώννυμα, to gird about. A Belt, or  
Truss. ' ' - - . :

' PERLA. Ἄ Pearl. See CONCHA MARGARITIFERA, and.  
Τ./Γ Δ rj *ei* Α ΙίΤΤΤν’ ' - - - *. e*

. PERNA... A Sort of Shell-fish. See PINNA.

Γ PERNIO. A Chilblain, or Kibe.

,. Tumors os .this Kind are produced, generally, in the Hands  
and Feet, by extreme Cold ; and they are attended with Red-  
ness, Inflammation, Heat, pricking rains, and an. Inability of  
Motion in the Part affected. Sometimes Pustules appear, and  
then the Ulceration penetrates' deep. The Humour emitted is  
sometimes a littie fetid, and either resembles Pus, or Sanies.  
Frequentiy the Inflammation degenerates into aSphacelus. From  
these Symptoms, in my Opinion, Chilblains may be reckoned  
a Species of Inflammation ; and so much the more, as, like  
other Inflammations, they excite a Sense of Heat, and termi-  
nate in a Discussion or Separation, or degenerate into a Gan-  
grene and Sphacelus.

Chilblains may be known by Various Symptoms; j. The.  
common Appearances of Inflammation are to be observed. 2.  
It must be inquired, whether the Parts affected have suffered  
by extreme Cold, as in performing a Journey, or in military  
Expeditions and Sieges undertaken in the Winter. 3. If the Pa-  
tient seels an itchy Sensation, attended with Heat, and a prick-  
ing Pain, and if the Part becomes stiff and insensible.

. When the Chilblains swell and redden, if the Part retains  
Sensation and Motion, without a great Degree of Heat and  
Pain, the Diforder is mild. On the other hand, when the Chil-  
hlains are livid, and the Part is affected with a Stiffness, Numb-  
ness, and pricking Pain, there is great Danger of its degene-  
rating into a Gangrene, or, at least, a deep Exulceration. When  
Pustules rise upon the Skin, like those aster a Burn, they are  
certain Signs os an immediate Gangrene. Lastly, when the  
Sensibility of the Part is lost, and it becomes livid, soft, flaccid,  
or.fetid, there is Reason to suspect a Mortification, or Sphace-  
lus.

The principal Couse os. Chilblains is certainly Cold ; for, by  
a violent Degree os Cold, as in other Inflammations, the small  
Blood-vessels are not only constricted, but the Blood is, also, in-  
spissated. Nor is there any Degree os this Disorder, but may  
he readily accounted sor, aS a Consequence of these Causes.

Naturalists are not yet unanimous with regard to the true  
Nature os Cold, which has generally heen imagined to he only  
the effect of a Privation os Heat ; but I am rather os Opinion,  
that some acrid, rigid, hard, and saline Particles, which were

before rendered soft, subtile, and volatile, by the Heat, are  
again condensed and indurated by the Cold. Now, when these  
Particles infinuate themselves into the small Pores of the Body,  
they constrict tile small Blood-vessels ; and, upon their burst-  
ing, the Blond is inspissated, and stagnates. Hence, in my  
Opinion, it happens, that the Skin of the Face, Lips, and  
other uncovered Parts, becomes chapped, broken, and affected  
with a continual pricking Pain, by the Cold. The flower the  
Motion os the Blood, and the smaller the Degree of Heat in  
any Member, the more gently is the Blood impelled into the  
Veffeis of that Memher. So that there is no Cause of Won-  
der, that the Hands, Fingers, Feet, Toes, Heels, Nose, and  
Ears, are more subject to Chilblains, than the rest of the Body,  
which are sometimes milder, and sometimesmore severe. Some- .  
times the Cold is so extreme, as to stop the Circulation of the  
Blood entirely over all the Body ; which necessarily occasions  
the Death of the Patient, and he is commonly said to have pe-  
rished with Cold.

Chilblains are almost always, in some Degree, dangerous ;  
and the more the Pan affected has suffered by the Cold, both  
the Violence of the Symptoms, and the Danger, are the more  
increased. The Danger is, also, greater, when a whole Hand,,  
or Foot, has sufferedthy the Inclemency of the Cold, than when  
Only a single Finger or Toe is affected. But the most trou-  
blesome Circumstance is, that those, who have once been afflicted  
with Chilblains, are almost every Year subject to Inflammations  
and'Pains; or, in an extreme Degree ol Cold, to malignant  
Ulcers, Chaps, and even a Gangrene. Lastly, when Chilblains  
are unshilsully treated, when they are removed from the Cold,  
and suddenly exposed to an Heat, or the Fire, or wrapt up in  
warm Cloths, there is the utmost Danger, that the Part will  
become black, soft, and putrid, and, having lost all Sensation,  
contract a Sphacelus.

Hence, then, it may appear, that the principal Part of the .  
Cure consists in restoring the inspissated Blood to its former Flu-  
idity and Circulation ; and this Intention must be answered by  
a/Method different from those used in other Inflammations.  
For warm Applications, which are beneficial, and even abso-  
lutely necessary, in other Inflammations, are sound to be ex-  
tremely pernicious in Chilblains. Nor is it safe to expose those,  
who have suffered by extreme Cold, to a Fire, or Heat; he-  
cause the sudden Vicissitudes of Heat and Cold produce an im-  
mediate Mortification. It seems, therefore, much more safe  
and convenient, to .bring the Patient into a cool or temperate  
Ain, and to order him to exercise his Limbs continually, and  
then to be gradually introduced into agreater Degree of Warmth.  
When the Patient is too weak to exercise himself, let the  
Part affected be well rubbed with Snow, or .cold Water,whichwill  
seem warm to him; by which means the acrid, saline Particles,  
sucking in the Pores, will be extracted, and the natural Circu-  
lation os the Blood restored. AS soon as the Sensation returns, ’  
comforting Medicines are gradually to be applied, such as Spirit  
of Wine alone, or mixed with Treacle, Oil of Petre, and Bal-  
sam of Sulphur. When the morbid Part has heen well rubbed  
with thefe Remedies, the Patient may. be gradually brought to  
the Fire, or put to-bed, afterwards endeavouring to raise a gen-  
tle Sweat.

For this Purpose let the Patient gradually drink a few Glasses  
of warm Wine, boiled with Cinnamon and Sugar; for by this  
Method the Patient will revive, and grow warm, and the Cir-  
culation of the Blood will he restored. Nor will it he improper  
to give, alternately with the Wine, a littie of the following su-  
dorific Mixture:

Take of the Waters of Goats-rue, Rue, and Scordium, each  
two Ounces ; of the Aqua Theriacalis, and the Aqua Vitae

’ Matthioli, each six Ounces; and of the Aqua Prophylactica  
Sylvii, half an Ounce ; os the Mixtura simplex, or of the  
Tincture os Bezoar, two Scruples ; and of the Syrups of  
Cinnamon and Cloves, each half an Ounce: Mix all to-  
gether.

About three Spoonfuis Of this Mixture should be given To the  
Patient every Quarter os an Hour, and the hot Wine as osten,  
till the Sweat appear. If Wine cannot be readily had. Ale  
boiled with Cinnamon, Cloves, and a littie Sugar, may he used.  
Draughts of this kind must be taken, till the Sweat be kept up  
for an Hour, or half an Hour, or according to the Circum-  
stances os the Patient. It can scarcely be imagined, how ex-  
peditious and effectual this Method of Cure is, in the most Vio-  
lent Degree os this Disorder, even when it tends to a Gangrene.  
In milder Degrees of Chilblains, those Medicines may not,  
indeed, be absolutely necessary, but are, at the same time, ex-  
tremely beneficial.

When the Chilblain tends to Suppuration, it ought to **be**treated like other recent Abscesses. First cleanse the Wound  
with a digestive Ointment, or the Unguentum Asgyptiacum ;

then dress it wish the Oil of Eggs, and os Was, and the *Persrtiian*Balsam, or the Essence os Aloes and Myrth j and, lastly, apply a  
Planter or Lead, or or Litharge. The Oil Os Myrrh per Dali-  
quium may be beneficial; and, also, burnt Mice, if we may  
believe *ihC Ephemerides Natura curiosarum.* Lastly. Lime-water  
mixed with camphorated Spirit os Wine, may be, also, used very  
advamageoufly, is a Compress dipt in it he applied to the Ulcer,  
either alone, jor\ aster the Application os the Medicines above-  
recommended. But, if a Gangrene or Sphacelus appears, it must  
be cured aS such.

. These who are subject to Chilblains every Year towards Win-  
ter, in order to' prevent their Return, carefully anoint the Parts  
affected with Petroleum, Or Oil Of Turpentine, during the Win-  
ter: Or, if the Chilblains begin to appear again, alsply to the  
morbid Heel or Finger, a Bladder dipt in the fore-mentioned  
. Oils; but the Cold n self should always be ^carefully avoided, or  
defended against, with proper Cloths:Or6Coverings. Consult  
*M A. Severinus Disse. de Perartonibus in Lib. de Abscessibus. Het.,  
fieris Sorgery. " " ' . . . :*

PEROLIDUS. A Term .Used hy *Paracelsus,* and *Nelatons,*by which they understand the extreme Circumference os the Bo-  
dy Of Air surrounding the Earth.

PF. RON ./EUS MUSCULUS. A Name for three different  
Muscles, the first Of which is the

**PER0NAEUS MEDIUS, VULGO PERON.iE.US ANTICUS.**

This is a long Muscle, situated anteriorly On the middle Part  
of the Fibula. \* ' Ἀ '

. It is fixed above by fleshy Fibres, to rnorethan the middle third  
Part of the anterior or’Outside of the Fibula, and to the height  
honring Part Os the Aponeurosis Tibialis, ’

. It is likewise fixed to a Production from the Inside Of that  
Aponeurosis, which suns to the upper Part of the Tibia; and  
there serves fora middle Septum, between'this Muscle -and the  
Extensor Digitorum longus. " - v - . . . - . ..

Fiom thence it runs down, and forms a Tendon, which, go-  
ing in the Direction Of the oblique Line son the Fibula, paisas  
hehind the external Malleolus, and then through an annular Li-  
gament Common ro it, and to the Peronteus Maximus; and in  
afterwards inserted tn . the Tuberosity, at the Basis of the fifth  
Metatarsal Bone, sending off a small Tendon to the first Phalanx-  
of the little Toe.. . ' ' *:i' . ' .*

**.PERONAEUS MINIMUS.**

This is a small Muscle, Commonly thought to he a Portion  
of the Extensor Digitorum longus, though-is is easily separable  
from it. . ' - ...... Ἄ. . ..

It is fixed by fleshy Fibres in the lower Half Of the Inside of  
the Fibula, between the two oblique bony Lines, on one Side os  
the lower Part of the Extensor Digitorum longus, to which  
Muscle-it is simply contiguous.

From thence it runs down, contracting in Breadth, and pastes,  
with the Extensor LonguS, through the common annular Liga-  
ment, forming a flat Tendon γwhich soon separates from those  
of the Extensor, and is inserted near the Basis Of the fifth meta-  
tarsal Bone. ' . . .

It is distinguished from the two other Peronaei, by a Septum,  
or Production of the ligamentary Aponeurosis Of the Tibia.

, The Peronatus Medius bends theFoot; and hinders the Leg  
from falling back, in the same manner as the Tibialis Anticus,  
By its Insertion in theTuberoshyof the fifth Metatarsal Bone, it

. turns the Sole of the Foot Outward, at the same time that it  
spends it, when it acts without the Assistance Of the Tibialis Anti-  
Cus, the Co-operation of which Muscle is likewise necessary to  
enable it to Counterbalance the Force with which the Leg would  
he carried backward, when we stand upon one Foot.

The Peronxus Minimus is an Assiliant to the Medius, in the  
Flexion or the Leg, in preserving the Equilibrium Of the Leg,  
and in turning the Sole Of the Foot Outward; neither can it per-  
form the first two. Of these Motions uniformly, without the Co-  
operation os the Tibialis Anticns.

The uniform Flexion Of the Foot furnishes an Example of  
all the three Kinds Or Levers: Of the first, when.we bend the  
Foot, while off rhe Ground, in which Case the Fulcrum is in  
the Articulation between the two Extremities Of the Lever: Of  
the second, when we walk upon the Heels, or Toes; forthen the  
Weight is between the Power and the Fulcrum : Os the third,  
when we raise a Weight by the Toes, for then the Power is be-  
tween the Weight and the Fulcrum.

**PERCNAEUS MAXIMUS, VULGO PERONAEUS POSTERIOR.**

This is a long penniform Muscle, lying on the Fibula.

It is fixed above, to the anterior and Outer Part Os the Head  
of the Fibula, and to a small Portion os rhe Head Of the Tibia ;  
then to the Outside os tho Neck os the Fibula, to the upperHalf  
of the external Angle of that Bone, and to the Aponeurosis Ti-  
bialis, which, at that Place, makes a Septum between this Muscle  
and the Extensor Pollicis.

From thence turning a little haokward, aceording-to the Di-  
recticn of the Bene, it forms a considerable Tendon, which, run-

ning down behind the external Malleolus, pastes through a kind  
Of hollow GreOVe, and through an annular Ligament, Common  
to it, and to the Tendon Of the PeronoeuS Medius, which lies  
before it: It passes, likewise, through an annular Ligament on  
the outer and anterior Part Of the Os Calcis, and under the small  
lateral Tuberosity sometimes sound there, ....

Afterwards running through the Oblique Groove, in the lower  
Side Of the Os Cuboides, it is inserted in the Side of the Basis  
Of the first Metatarsal Bone, ando also, a little in the Basis Of the  
Os Cuneiforme Majus. - ' .....

The fleshy Body os this Muscle cannot always be distinguished,  
from that Os the PerOnaeuS Medius»

When the Peronaeus LonguS, Or Maximus, acts alone, it may;  
extend the Foot, hanging freely in the Air; bur, then, this Ex-  
tension-is-Obliquely Outward. Together with the Gastrocnemii  
and Soleus, it likewise Changes their Direction to an Oblique  
Extension outward.

This Muscle, and the Tibialis Posticus, acting without the Gaa  
strocnemii and Soleus, may extend the Foot almost directly, but  
they can Overcome but a Very small Resistance... When it acts  
with the Other two Peronaei, the Sole Os the Toot is turned'  
more Or less directly outward, towards the external Malleolus.  
*IFinsionsts Anatomy. ' ;*

PERONE./ The Fibula: A Bone in the Leg. See CRUSs '  
PERPESSIO, in the Spagiric Phrase, is the Treatment of  
Metals by Tire. "so \* ;

PERPETUATIO, in Chymistry, is a Reduction of any  
moveable and Volatile Substance, to a State Os Rest.

PERSEA. Offic. C.B.P. 44I. J. B. i. I69. Ran Hist. 2.  
I552. *Persia Arbor.* Ger. I6O6. *Persea Arbor Clusii.* Parin-  
Theat. I5I4. *Prunifcra Arbor, fructu maximo, pyrisiormi, viridis  
prricarpiaesculento butyr aceo, nucleum unicum-maximum, nulla  
ossiculum tecto, cingente.* Cal.Jamaic. I 85. Raii Dendr. 48. *Ah-  
vacastuanhitl sou Arbor §focrcisorrnis butyraceo fructu.*

*Jons.* Dendr. 424 *AhavacaquahuitI* Laet. 226. Pyro *similir  
fructus in Nova Hispania nucleo magno.* C.-B. P. 439. *Pyre  
feoie-Aguaeap.* J. β. I. IO7. *Nicaragua pomum Nuce rotunda.*Ejssd. 1.2Io. *Mala Americana pyri facie.* Co-β. R433. SPA-  
NlSH PEAR. .

The Tree has the Appearance of a Pear-tree, is wide-spread-  
ing, and always greenr the Leaves are like those Of the broad-  
leaved Laurus: The Flowers, pretty like those Of the Laurus  
Hexapetalus, and growing in Clusters: The Print, at first, re-  
sembles a Plum, afterwards becomes Of an Oblong Figure, like  
a Pear, Of a bisck Colour, and a pleasant Taste, and Containing  
an Heart-shaped Kernel, in Taste much liken Chestnut, or sweet  
Almond.

The Persea-tree is mentioned by *Theophrastus, Sceatio, Pliny,  
Diofiorides, Plutarch,* and *Galen.* Some will have the Persea to  
he the same with *shtPersica Malus,* but they are refuted by  
*Sc aliger* at large, though *Theophrastus* calls both those Trees Per-  
sein The Dsscription given Of it by this last Author differs in  
many Characters from that of *Clusius,* given above, who never  
saw but one Tree, and that near the City *Valentia in Spain,* which  
was supposed to be brought thither from *America. -*

Some Authors have written, aS *Diofiorides* telis ns, that, this  
Tree, in *Persia,* is poisonous; hut, being transplanted into *Egypt,*has its Nature so changed and meliorated, as to produce a Fruit-  
fit for eating; *Galen* writes the same. *Pliny* says, that some in-  
dustrinns Authors have written, that this Tree in *Persia* has its  
mortal Poison attended with tormenting PainS, but, heing by the  
*Persian* Kings transplanted to *Egypt,* in order to be employed aS  
a Punishment, had its Qualities mitigated by the Soil: But this  
Relation is denied, he telis ns, by the most learned Writers, who  
say, that the Persea-tree was planted at *Memphis,* by *Perseus.  
Plin. Hist. Nat. Lib.iAn Cap.* I3. This last Opinion seems to  
me, says *Ray,* the most probable, though I do not deny, but  
there may be in *Persia* fuch a poisonous Tree, Of a distinct Spe-  
cies from the *Egyptian* Persea, especially since *Bauvaolfius* writes,  
that a *Persian* Merchant informed him Of the poisonous Fruit of  
fuch a Tree, Called by them *Sepha,* which, for that Reason,, they  
would not meddle with. *Raii Hist.*

The Persea is a Native Os *Jamaica,* theFniit is good for **the**Stomach: And we are told by *Diofiorides,* that the Powder of  
the dried Leaves stops Haemorrhages, being sprinkled on **the**Part.

The *Laurus Indica Alcdini* is the Perfea of *Clusius.*

Under the Head Of PERsEA, *Bay* reduces

*Persicae Nuci similis Fructus Nucleo venenato Monardis.* **J.** *B.*

This Fruit is Of a Catheretic, or rather of a septic Quality *r*For a certain *Indian,* as *Monardes* tells us. Cured a female Negro,  
whose Legs were full of malignant and inveterate Ulcers, with  
the Powder hereof sprinkled on the Parts, which Consumed **the**putrid Flesh, with the same Powder put upon Cotton, and ap-  
plied to the Ulcers, he incarned and cicatrized them. This Fruit .  
is very common in the lfland *Margarites,* and commonly eaten:  
It is of the Size of an *Adams* Apple, Or Orange, and contains a  
Nut like the Stone of a Peech, which, burnt to Powder, is good  
for the Purpose before-mentioned. The Kernel it contains is of  
so noxious and deleterious a Quality, that, eaten, it is present

Death to Man or Beast, without Hopes of a Remedy, aS if It  
were Sublimate, or some Corrosive. It as probable, says *Pay,*that this Fruit, is the lame with that of the *Mtnga Silvestris,* or  
*Mangas heavas,* described by *Acosta. Raii Hist. Plant.*

- .PERSICA ... εἴ t . -J \_ \

; The Characters are, ... - :. '

The Leaves are narrow and oblong, the Calyx is fnonophyi-  
ions, deeply ent Into five or fix Segments, expanded and hollow.  
.Within the Calyx is tested .a rosaceous, penta petalous or. hexape-  
TaJUtrs Flower, (the Petals growing On the Inside of the Margin  
of'the hollow Calyx) and furnished with thirty Stamina: The  
Ovary is seated in the Very Bottom os the Calyx, and isfnrnished  
with a long Tube, adorned with a globular scabrous Apes, and  
wecomes a pnlpous Fruit,.almost globous, sulcated Or furrowed  
lengthwise, and inclosing a Stone, adorned with little Pits and  
Cavities deeply Cut, and Containing, for the most part. Only a  
single oblong Kernel'.The Pedicle is Very short.

*Boerhaave* mentions fix Species Of Perfica, which are, .

; i. Persica; molli carne, & Vulgaris, Viridis & alba. *(st. HP.*44o. *Tourn. Info I* 624. *Boerh. Ina. alt.* 2. 243. *Pcrsiea malus.*Ossie. Ger. Ia58. Emac. 1447. Park. Pared. 580. J. B; x. 157.  
Raii Hist. 2. I5I5. THESEACH-TREE. '.

The Peach-tree is known to he a Tree os no great Bigness,  
being here, in *Englands* generally planted against Walk: The  
Leaves are long and narrow,; and serrated about the Edge? : The  
Flowers consist of five pale-purple Leaves -. The Fruit is covered  
with a downy Coat, full Of pleasant juicy Pulp, having an hard red-  
ish Stone fall of wrinkled .Cavities: It is planted in Gardens, and  
flowers in *March,* Or the Beginning *Cis April,* and the Fruit is ripe  
*in .August* and *September.*

The Flowers are only used in Physic, they are opening and  
gentiy purging, and principally given to Children, to carry off thin  
serous Humours, and to kill Worms. The Fruit is.cooling and  
moistening, grateful to the Palate, but subject IO putrefy, and  
cause Surfeits. ' .. ... ...

The Only officinal Preparation is *Syrupus Florum Persicorum.  
MillrtisBat.Os.fi. . . .*

*Galen* and *Paulus* condemn all Kinds Of Peaches, as Of bad  
Juice, and hurtful to the Stomach, for which Reason they ad-  
vise to eat them at the Beginning of Repasts, before other Fond,  
and to drink no Water, hut pure Wine, after eating them. But  
*1* see no Reason, says *Pay,* why the Judgment of *Pliny* and *Diosc  
auricles,* that Peaches are good for the Stomach, procure a good  
State of the Belly, and that nothing more innocent can be eaten,  
should .he wholly Condemned and rejected: Nor indeed it is  
probable, that a Fruit so savoury and delicious, and the most  
. pleasing to Our Palate Of all Summer-fruits, aS if Nature itself  
had recommended it to our Choice, should be quite noxious and  
tinwholsome. We ought, however, to he Careful in Chusing  
1 .these Fruits, and to observe a. Measure in eating them. And,  
therefore, *Amarus* thinks, that what has been said by *Calces,* and  
others, .Concerning the bad Effects of Peaches, ought to bo un-  
. derstood of those which have a very soft Pulp: .For the Case, he  
says, is. quite otherwise with the *Duracina,* (Peaches Of an hard  
and firm Pulp) which emit a Inost grateful. Comfortable, and  
- reviving Smell, for these have a most deliciousSayonr, miked  
withfoinething of Austereness, which is agreeable and strengthen-  
ing to the Stomach , and all Persons :of Quality, in *Spain* and  
*Portugal,* and those of the most delicate Palates, eat them after  
.Mods, though not hefore they are infused in Wine; and find no  
ill Effects froth them.

t Preserved Peaches are extremely grateful to sick Persons, espe-  
cially to such aS are afflicted with Thirst, and Dnness of the  
Tongue, for they strengthen at the same.time they refrigerate;

whence they are Os excellent Service in all hot Distempers. *Braf-  
suvola* used to give his Patient a Peach or two roasted under  
the Ashes. *Arnatus* affirms it so be a most delicious Food, and  
extremely grateful to sick Persons. The. Leaves, on account Of  
their Bitterness, being boiled in Peer, Or Milk, destroy and expel  
Worths in Children. *Galen* says, that they work the satne Effect,  
.being bruised, and applied to the Navel. *Parkinson* affirms, that  
they purge gentiy, if taken in a sufficient Quantity, the Flowers  
Operate in the same manner, and more effectually than Damask  
Roses; for which Purpose there is prepared Of them a Conserve,  
to be taken chiefly in the Morning fastingand a Syrup, also, is  
prepared thereof, which is Very effectual for the same Intentions.  
The recent Flowers, says *Matthiolus,* not only purge, hut pro-  
voke Vomiting, and, eaten in Salads, prove HydragogueS in  
Dropsies, but not without disordering the Patient;- The distilled  
Water is a Cosmetic. The Gum Of this Tree is Commended for  
- Fluxes of the Belly, the Stone, \_ Impetigo, Tumors Of the Fauces,  
Roughness of the Windpipe, Spitting Of Blood, Disorders Of the  
Lungs, and rhe Dysentery. *Matthiolus* recommends the Ker-  
Dels lor the Gripes, and to prevent Ebriety, being taken to the  
Number Of six or seven before-hand, and, for the Alopecia, be-  
ing bruised, and boiled in Vinegar, to a Pap-like Consistence.  
The Oil of rhe bruised Kernels, being rubbed on the Temples,  
procures Sleep, and eases the Hemicrania, Or Megrim; drank,  
or used in Clysters, ir cures the Colic , and, taken to the Weight  
os tour Ounces, it gives Relief under the Iliac Passion, and the

Stone. The Water of sissy Kernels of Peaches, wish that of *mn*hundred Kernels Of Cherries, and an Handful Of Flowers Of El-  
der, macerated in three Pints of Malmsey, then buried for teg.  
Days under Ground, in an earthen Pot, and afterwards distilled,  
expels Stones from the Kidneys in a surprising manner, aS we are  
assured by *Matthiolus. Raii Hist. Plant.*

.. 2. Pcrsiea, Vulgaris, flore pleno. *T.* 624.

3. Persica, InaluS, Swollana. *Munsing. Prax. y.* 43.

4 Perfica; Africans, fioreincamato, simplici. *T.fozSe Acmjgr -  
dalus Afric arta, vulgro. si si*

5. Perfica; Africana; nana; flore incarnato, pleno. *T. siuq.*

0. Pertica sacco quasi sanguineo. 6. Ρ. *P.* 44o. *Bperh. Ind.  
asit.Plant.stol.u.so*

sc It is Called *Persica,* from *Persia,* the Country whensce .it was  
.first transplanted. Ah Infusion of the Leaves, aster the manner  
Of Tea, ts purging and Opening, and kills Worms, aS do, also,  
the Flowers. The Fruit is Cordial, pectoral, and moistening:  
TheJuich ir of Service in burning Fevers: The Kernel Is anti-  
oolical, and antine pluisse: The expressed Oil thereof is good for  
the Ringing of the Ears. *Hist. Plant, adscript. Boerhaaet.*

.. .There is no Tree inore Common than the Peach-tree, and  
yet it has furnished *Salrnasiui* with Matter enough for a large Disc  
senatiom The *Greeks,* jt seems, had learned by a certain Tradi-  
tion, that the *Persians,* who were Enemies to the *Egyptians,* had

\_ consulted to Convey secretly .into *Egypt,* and there to .plant, a  
certain Trees called *Persia,* from the Country whence it Came,  
the Fruit of which was *of* a poisonous Quality: They supposed  
that the *Egyptians,* tempted by 'the Beauty of the Fruit, could  
not be prevented from eating it; They did indeed make no  
Scruple so eat it; but the Event was quite contrary to what the  
*. Persians* expected from it, for the Goodness Of *trsC Egyptian* Soil .  
had *so* Changed the Nature of the Fruit, by removing its noxious  
Quality, that the *Egyptians* could eat it with Safety. The *Greeks ,*and *Romans,* says *Salmafius,* who wrote fince *Theophrastus,* aS  
*Diofcorides* and *Pliny,* believed that the Persea of *Egypt was*different from the Perfica; because they found, that the Descrip-  
tion which *Theophrastus* had given Of the first did not agree tO  
she latter. But they did not consider, that there was no Peach-  
tree in *Greece,* in the Time of *Theophrastus;* that this Tree was  
brought thither Very late,, and from thence into *Italy,* and. Con-  
sequently, that *Theophrastus* spoke of it aS Of an exotic Tree Or  
Fruit. *Salmafius* Concludes, that thePerfea and Persica are the  
'same Tree, because those who make them different, among whom  
*is Diofcorides,* give in good Description of the last, but by no  
means Of the former. Only saying, that it is a Tree peculiar to  
EigyfeI which is a Proof, he says, that they had never seen that  
pretended Tree; or Only spoke Of it by Hearsay. The Only  
Difference, according to. *Salmafius,* between these two Names  
Of the Tree is, that the first was In Use among the antient *Greeks,*and the Other among the more modern *Greeks,* aS well as the  
*Romans :* He adds, that what has made the Persea Of *Theophrafiui*he mistaken, is, that this Author, instead Of describing all the  
Species of the Peach-tree, has Only described the Apricot-tree,  
which was, also. Called *Persea ;* but, for Distinction, was aster-  
wards named *Pcrsiea praecox,* and by the *Latins* simply *Praecoques*whence the later *Greeks* formed their Βερίκβκκα *lBericoccosu*whence Comes, the *Trench Aheicots.* The Persea, or Perfica,  
was, also. Called *Bhodocinea* and *Rhodacina,* because the first of  
these Trees had been planted at *Rhodes,* where *Theophrastus* re-  
marks, that it only flower'd, and bore no Fruit. But that Phi-  
losopher might be misinformed, the Fruit in his Time being as  
yet a great Rarity in *Greece,* perhaps too the Soil, where it was  
first implanted, was improper for it. It is probable, however,  
that those Trees thrived very well afterwards in that Island, and  
.were able *to* furnish *Greece* and *Italy* with Plants, where the  
Name *Ehodacina wls* still preserved, whence, by a Transposi-  
tion os Letters, which is very common, are formed the Names  
*Doracina* and *Duracina,* whence the *Breach Dureau.*

The Peach-tree has, also, been taken for the Lemon-tree, not  
for any Similitude between those Trees, or their Fruit, but only  
because the Lemon-tree was not Only Called *Malus Medica,* hut  
*Malus Perfica. Le Clers, Hist, de la Med.* See PERSEA.

PERSlCARIA.

The Characters are; '

The Flowers are disposed in Spikes, at the Top os the StalkS  
and Branches: The Calyx is quadfifid, though some take it for a  
tetrapetaloidal Flower: The Stamina are six in Number: The  
Ovary, in the Centre Of the Calyx, is Compressed, Of an Oval or  
orbicular Form, and furnished with a bind fimbriated Tuhe:  
The Seed is flat, and Ovally acuminated. A Membrane surrounds  
the Stalk, at the Rise Of the Leaves, and small Branches, Opposite  
to the Leaves.

*Boerhaave* mentions eleven Species of Persicaria; which are,  
i. Persicaria, mitis, non maculosa. C. *Β.Ρ.* Ioi. *Μ. Pi.* 2.  
.588.

2. Persicaria; mitis, non maculosa. *C.B.P.* IOI. *Plorealbo.  
Persicaria, Antvorplensis, floribus albis.* Lob. Obs. I 7 t.

3. Persicaria, mitis, maculosa. *C. Β. Ρ.* IOI. *M H.* 2. 588.  
*Persicaria, mitis.* J. B. 3.779. SPOTTED ARSMART.

*Dalit* seems to make this and the first Species the same Plant.

Thh Arsmart has many round Stalks, two Feet high, Gr more,  
-lull Or Branches, having their Joints thick and swelling, and co-  
vered with a thin Film, Or Sjtin. The Leaves grow alternately,  
.and are long and sharp-pointed, but broader in the middle, and  
- larger thanrhofeof *thtPersicaria aureus, sou Hydropiper zTstuty art.*-smooth, and have a dark-brown or blackish semilunar Spot in  
the middle of each. The Flowers grow at the End Of the  
Branches, in thick round pale-red Spikes, being small and stami-  
nous, containing starish angular, sharp-pointed shining Seed.  
The Root is a Bush of Fibres; it grows in moist Places, and by  
Pond and Ditch-sides; and flowers in *July.* The Leaves are  
. .used. \* ' . '

- - They are faid to be Of a cooling Nature, and good for hot  
Tumors, Inflammations,. Impostumes, and green Wounds,  
'though they are but seldom used. *Miller's Bot. Csss. ' .*

*- Fuchsites* has affirmed, that it is of a very astringent Taste ;  
*CCees.alpinus* found it acerb. *Tragus* and *Lobel* sourish; for my  
- Parr, I have sound nothing but a littie Astringency. This Plant  
- gives a pretty deep-red Colour to blue Paper, which makes  
' ns conjecture, that its Salt resembles Sal Am moniso, loaded  
with a great deal of Earth, and joined with a little Sulphur « thus

1 this Plant is astringent, detersive, and Vulnerary. It yields a little  
volatile concrete Salt by the Analysis: The Decoction of the  
- whole Plant is good for a Looseness, and for the Diseases of the  
Skin. *Martyns Tournofort: r.l*

4 Perficaria, mitis, maculosa. Caulibus & ramis nodosissi-  
-mis, rubris Y-

S 5. Pessicariry. mitis-, cum maculis Fenum equinum referen-  
tibus,.T5o9. \_ - ... -

6. Perficaria, urens, sett Hydropiper; C.B. Ρ. Io I. *Boerh.*i *Ind.* a. 2. 87. *Perficaria non maculata. Hydropiper.* Ossie. *Per-  
sicaria acris five Hydropipcr.* J. B.3. 7So. *Perficaria vulgaris  
acris sive Hydrapiper. PAu* Hist. I. 1S2. Synop. 58. *Perficaria  
vulgaris acris five minor.* Park. 856. *Hydropipcr.* Ger. 36I.  
'Emac. 445. *Potincoba Lusitanis pulgera:* Pis. 22I. *An. Scho-  
- ^vanna.mndela.muccu.* H. M. I2. I47. Tab. 76 ? LAKEWEED,  
-ARSMART, Or-WATER-PEPPER.; -

- This Arsmart grows not so much branched aS the Perficaria  
’ mitis maculosa, the Leaves are long, ‘and proportionably nar-  
rower, and more like the Leaves of the Peach-tree,- whence it  
takes its Name *Perficaria*; but they are not serrated about the  
Edges, and they want the Spot that is in the Leaves os the mild  
Arsmart, and they have a Very hot biting Taste, burning the  
Tongue like Pepper. The Flowers grow in long, slender,  
loose Spikes, of a paler Colour than the *Perficaria, metis, ma-  
culosa* , but containing like Seed: It grows in like Places with  
that, and flowers about the same time.

This has been accounted an extraordinary Plant against the  
Stone, Mt. *Boyle* having, in his Book Of the Usefulness of  
experimental Philosophy, given to the distilled Water Of this  
Plant a mighty Character for its Virtues against that Distem-  
’ per. It is Commended, also, as very Cleansing, and good for  
old stubborn Ulcers. *Millers Bot.Qss.*

' Arsmart is Of a very acrid and burning Taste, and gives  
**a** lively Tincture Of red to the blue Paper. It is full os acid  
-Sulphur and Earth; - its Salt resembles that which results from  
the Mixture Of the Sait Of Coral with the Sal Ammoniac,  
loaded with a great deal more Acid than Ordinary.

For this Plant, by the Chymical Analysis, yields a great  
deal Of Acid, Oil, and Earth, and a little Volatile Concrete Salt.  
Arsmart is Very detersive and Vuinerary; and it is used in  
:Glysters, for the Dysentery and Tenesmus. They give, at the  
fame time, a Dram of this Powder in a Bolus, Or mixed with  
Wine, thickened into a Syrup, with Sugar. Some carry this  
Plant in the Shoes , but it were better to boil an Handful of it  
in lean Broth, and strain it through a Linen Cloth, adding half  
**a** Dram of chalybeated Tartar, for the Jaundice and green Sick-  
**ness. .** *Martyris Tournefort.*

It is evidently Of an hot and dry Quality, and .is principally  
lused externally for Wounds, indurated Tumors, inveterate  
’Ulcers, and the like. *Schrodor.* For a pained, hollow Tooth,  
rake Water-pepperinnd put it into the Cavity. With this Remedy  
*J. He urn i us* cured a Woman much afflicted with the Tooth-  
ach. There is nothing found more effectual sor expelling the  
Flies , for whatever W ounds Or Ulcers in Horses or Cattle are  
Tubbed with the Juice Of Arsmart, they remain secure from **the**injuries os the Flies. *Tragus. 'Raii Hist.*

7. Perficaria;frutescens, maculosa, Virginians, **fiore albo &**CarneO, Parkinionih *Theocr.* 857.

8. Persicaria - minor. *C. B.* P. *IoI.*

’ 9. Perficaria; maior. Lapathi foliis2.calice floris purpureo.  
IT. 510.

IO. Perficaria; Salicis folio; perennis. H. I.. 483. *Potamo-  
geton. Salicis folio.* C E. Ρ. 193. *Potamogeton.* Dod. p. 582.

II. Persicaria, Orientalis; Nicotianae solio. Calice florum  
purpureo. *T. Cor.* 38. *Commes Bar.* 43. *Ic. et Doscr. T. Voy.* 2.  
. 3 ro. *Boerhc Ind. alt. Plant. Fol.* 2.

It is called *Persicaria,* hecause its Leaves»resemble those Os the  
Peach, the sixth Species is called *Hydropipcr,* from ῦδωρ  
*{Hyder)* Water, and πέπερι, *(Peperil* Pepper, that is. Water-

pepper; because it is an aquatic Plant with the Taste of  
Pepper.

The first Species is highly commended by Mr. *Boyle,* as an in-  
comparable Lithontriptic: An *English* Nobleman, he says, cured  
every body os the Stone with the Juice and distilled Water of  
this Herb, and Prepared every Year a Vast Quantity os the  
distilled Water for the Use of the Poor. I have, also,tryd this  
Remedy, but withou: Success. A Decoction Of the Leaves is  
'Of Service in the Diarrhoea, Dysenteay, and all cutaneous Dis.  
eases. *Paracelsus,* Observing an impression Os Spots On the second  
and third Species, pronounced them extraordinary Vuineraries,  
and asserted them to be an effectual Preservative for HorfeS  
against Galls and Attritions by the Saddle, heing placed undes  
the same; *Persicaria* is an astringent Vulnerary, and a Febri-  
shgeὁ and is good for spitting os Blood, for immoderate Fluxes  
Os the Haemorrhoids, Menses, and the Fluor albus; the Leaves,  
'bruised, and apply'd, repress an Haemorrhage os the Nose. The  
sixth Species is a Very burning Plant, and being Chewed in  
the. Mouth strikes the Tongue aS it were Lightening. The  
' Leaves, bruised, and apply'd to the Skin, raise an inflammation  
and Exulceration, in manner Os an Escharotic. This Herb de-  
terges and depurates Ulcers, being mix'd with Other Things of  
**a** more temperate Quality. It is heating, and, on account of its  
Acrimony, is temper'd with Raisins: Being thus prepared, it is  
of Service in the Dropsy, Jaundice, and all Obstructions of the  
Viscera. In Surgery it is a Very good Medicine for discussing  
oedematons Tumors, if they be fomented with a warm Decoc-  
tion of the Leaves. *Hiss. Plant, adscript. Boerhaav.*

PERSICUS IGNIS. A Carbuncle, according to *Sennertus.*But *Avicenna* makes a-small Distinction betwixt a Carbuncle  
and *Ignis* Ρπὸοιιι, calling, that Species Of Carbuncle attended with  
Pustules, and VesicationS, an *Ignis Persicus. ;*

PERSISTENS FEBRlS. A regular intermitting Fever, the  
Paroxysms of which return at Constant and stated Hours.

PERSIUM. The Peach-tree. *Oribasius, Medic. Collect. Is. s,*C. 63. See PERsicA. . ......

PERSOLATA. The fame as *Personata.*

. PERSONATA.. A Name for the *Lappa. See BARDANAS*PERSPIRATlO. Perspiration. Having given an Account of  
Perspiration, and the Organs destin'd for this Secretion, under  
the Article CUTIs, I shall, in this Place, farther remark, that  
Perspiration is less in Women, than in Men; that a redundant  
Excretion of the perspirable Matter induces great Weakness, in  
proportion to its Excess, FaintingS, and sometimes sudden  
Death. But if Perspiration is diminish'd, or utterly obstructed,  
the extreme Cutaneous Veffeis become dry, and are Oblite-  
rated; and hence the Veffeis, and Glands, destin'd for the Dis-  
charge os Sweat, and the Oily Humour mention'd under the  
Article CUTIs, are dry’d; in consequence of which, the Circu-  
lation of the Blood is alter'd, the acrid perspirable Matter is  
retain'd, and Putrefaction, Crudities, Fevers, Inflammations, and  
ApostemationS, ensue. *Boethaasods Institutes.*

*I* must, farther. Observe, that when the Orifices of the innu-  
’merable perspiring Veffeis are Obstructed, the Blood propefd  
from the Heart meets with a stronger Resistance; Hence the  
Circulation labours, and must quickly cease, unless rhe Heart  
Contracti itself with greater Force. But because, when the  
perspirable Matter is retain'd, the Quantity Of the circulating  
Fluid is increas’d, on this Occasion the Blood returns more  
frequentiy to the Left Ventricle of the Heart: Hence the Con-  
traction of the Heart is more frequent , and, in Consequence of  
the stronger, and more frequent. Contraction of the Heart,  
there is a greater Attrition' betwixt the Solids and Fluids, and a  
greater Heat, which we Call a Fever.

PERTICE CASMIANA. The Name Of a compound Me-  
dicine, in *Marcellus Empiricus, C.* 2o.

. PERTURBATIO ALVI. A Diarrhcea.

PERTUSSIS.

The' this Word, according to its natural and most genuine  
Signification, imports no more then a Violent and terrible  
Cough; yet it is generally appropriated to that Species of  
Cough, call'd the Chin-cough, a Disorder principally incident  
to infants and Children ; especially in the Spring and Autumn,  
at which Seasons it is generally epidemical. The Patients, .la-  
bouring under this Disorder, have frequent and violent Pa-  
roxysmS of Coughing, in which the Organs Of Respiration he-  
ing not Only oppress'd, but, also, spasmodically affected, Vari-  
oufly interrupt, suspend, and pervert their respective Functions.  
But for the most Part, the Diaphragm convuls'd, either os it,  
self, or by the Impulse of Other Parts, so long protracts some-  
times the Systole, and at other times the Diastole of the Heart,  
that inspiration, or Expiration, heing for a time obstructed, the  
Breath, so subservient to Life, can hardly he drawn, in eonse-  
quence Os which, the Patients are, aS it were, suffocated; and, by  
reason of a Stagnation Of the Blond, contract a kind of Black-  
ness os Countenance; and if thy chance the Organs, subservient  
to these Purposes, should not be so strongly convuls’d, as to  
hinder the free Coughing of the Patients, they are nevertheless  
forc'd to cough in a violent manner, and till their Strength is  
worn out. °

The Concurrent Cause Of a Chin-cough seems IO. consist in  
these two Circumstances, that there is a frequent and Violent  
Irritation of the Lungs, by which they are almost continually  
stimulated to throw up the Matter, which proves uneasy to them,  
by Coughing, and that the moveable Parts of the Thorax, that  
is, the Nerves, and nervous Fibres, being previoufly dispos'd to  
Spasms, as Often as they are thus irritated, ezcite not a regular,  
but generally a convulsive Cough, and induce some Indifpofi-  
tion opposite to the Function of Respiration.

- The Matter which, in all Probability, stimulates the Lungs so  
frequently to coughing, is Serum, by reason Of its too thin Tex-  
ture continually secreted from the Mass of Blood, and affecting  
the Pans of the Thorax; because it isnot only convey'd thro'the  
'Tracheal Arteries into the Cavity Of the Aspera Arteria; but,  
also, copioufly pour’d thro' th- pneumonic Arteries into all the  
adjacent open Ducts. . \* -

The spasmodic Disposition of the moving Parts seems, as in  
other' Convulsive Disorders, to proceed from an heterogeneous  
and elastic Maner convey’d along with the nervous Fluid from  
the Brain through the Nerves into the moving Fibres Of the  
. Breast. For this Reason, when the Spirits, lodged in thefe Fibisis,  
are excited to the Violent Morions os Expiration, they sail into  
convulsive Motions.

- As for the Prognostic Os this Disorder, tho' a Chin-cough is  
rarely mortal, or Very dangerous, yet it is not to he cured with-  
out the greatest Difficulty: and is frequently subdued and remov’d  
by a Change in the Season Os the Year, rather than by Medicines.

The Measures taken for the Cure Of other Coughs, are rarely  
effectual in removing this ; for which Reason Nurses and Quacks  
use various Medicines Of their Own, such as Cup-moss, and irs  
- various Preparations exhibited internally 5 and, if any farther Cure  
' is necessary, they put the Child into a Fright, in Order to remove  
its Disorder. But, if all these Measures should prove ineffectual,  
they generally reject Ptssans, Syrups, Julaps, Decoctions, and  
Other Medicines, whether pectoral, or os any other Nature, wan-  
ing, till the Disease either terminates spontaneOuily, Or is cured  
by the succeeding Season Of the Year.

Cup-moss, so far os can be Collected from Sts Taste, is Of an  
astringent Quality, and contains somewhat acrid Particles, which  
smell strongly of a volatile Salt. Hence we may conjecture, that  
its Use'consists in fixing the Blood, allaying the Defiuxions of  
Serum, and in removing the spasmodic Disposition of the Parts,  
by volatilizing the nervous Fluid. Cup-mOss may be exhibited  
either in the Form Of a Powder, a Decoction, or a Syrup: Thus,

Take of the Powder of Cup-moss, one Dram; and of Sngar-  
candy, one Scruple : Mix all together, and divide into three  
equal Doses ; One Of which is to be taken every Morning and  
Evening, in some proper Vehicle.

. Gr, ; ' ss

Take Of Cup-moss, two Drams , Of Milk Of Sulphur, two  
Scruples, and Of the Powder of Anise-seeds, One Scruple:  
Mix all together, and divide into six Doses, one of which is  
to he taken every Morning and Evening, in some proper  
Vehicle.

Ora \_ -

Take OsCup.moss, One Dram : Boilin a sufficient Quantity Of  
Milk) strain the Milk, and drink it every Morning and Even-  
ing. For such aS do not like-Milk, Or are injured by  
it, we may prepare a Decoction Of Cup-moss, in Spring-  
water, that of Hyssop, Or any Other pectoral Water, two  
Or three Ounces of which are to be drank twice a Day,  
edulcorated with Sugar, Or some proper Syrup.

Os, ;

Take One Ounce Of Cup-moss : Boil in two PintS Of some  
pectoral Water, till Half of it is consumed; to rhe Li-  
quor, when strain'd, add One Pound of Sugaccandy, and  
set the Whole evaporate in a gentie Bassheat, to the Con-  
sistence Of Sugar-Candy. . .

Another empirical Method Of curing the Chin-cough, when  
Medicines prove ineffectual, is, to fright the Child, by putting it  
. in the Hopper of a Mill, which makes a terrible Noise, and the  
Aspect of whore Wheels is dreadful; and by this Method a Chin-  
Cough is sometimes suddenly Cured, the Reason Of which un-  
doubtedly Consists in this, not only that the animal Spirits, being,  
by the Fright, forced into new Distractions, leave their former in-  
ordinate Motions, but, also, that the Matter producing the Spasms  
is, by fuch a Perturbation, either dissipated, or forced into Other  
NerVes, where it proves less troublesome.

But a more rational, and, according to my Own Experience,  
a more effectual Method Of curing a Chin-Congb, is to begin  
with Purging; for which Purpose,

- Take of the SynIp of Peach-Sowers, one Spoonful, and of  
hysteric Water, one Scruple: Mix together, and exhibit to  
the Patient, who must, at the same time, uso a proper Re-  
gimeni.

' - Or’ .

Take of Calomel, six Grains ; and of sulphurated Scam-  
many, and Refin Os Jalap, each three Grains r Reduce ro a  
Powder, a small Quantity Os which is to he exhibited to A  
Child Of six Years old, the Dose being inorealed, or dimi-  
nished, in proportion to the Age Of .the Patient.. Let the  
Purge he repeated in fix or seven Days

If the Patient, as it frequentiy happens, is subject to VO-  
miring.,

Take of Oxymel os Squills, six Drams, and OsSalt Of Vitriol,  
. ... three Grains: Mix together, and exhibit, to a,Child of six

Years Old, and, according to this Proportion, the Dose is  
to he accommodated tO Patients of other Ages. I have  
- known an Emetic of .this Kind, . repeated every. Morning

. for four or five Days fucoessively, produce very happy Effects.

For the Cure of Chin-coughs, VesiCatorieS are frequentiy used,  
and applied sometimes to the Nape of the Neck, sometimes be-  
hind the Ears, and at Other times to the internal Parts Of the  
Arms near the Axillae; and, when the Blisters begin to heal in these  
Parts, Others are to be excited in others.

Instead Of Ale, the Patient Ought to use the following Decoction  
for Ordinary Drinin

Take of China-root, an Ounce and an half 5 of all the Species  
os Sanders, each an Ounce and an half; Of the Shavings Os  
Ivory, and Hartshorn, each three Drams: infuse in six Pints  
of Spring-water, which is to be boiled to the Consumption  
os one half , adding an Ounce and an half of stoned Raisins,  
and three Drams Os Liquorice.

*'. - Os, .*

Take os the Spirit Of Gum Ammoniac, prepared with Sal  
Ammoniac, One Dram , Of the Syrup Of Cup-moss, three  
Ounces , and Of hysteric Water, One Ounce: Mix all toge-  
ther, and give One small Spoonful for a Dose, every Morn-  
ing and Evening. ..... .

' - - Ess ‘ θ\* - E . .. -  
Take Of the Tincture Of Sulphur, two Drams; of which mix  
three Drops, with One Spoonful Of the Syrup of Cup-moss;  
and exhibit for a Dose every Morning.

In Children Of hot Constitutions, who, in Coughing, are seiz'd  
with an intense Redness, Or rather a Blackness, of the Face and  
Countenance, I have sometimes, with great Success, Ordered  
two or three Ounces Of Blood to he taken away; either by Phle-  
botomy, or Leeches ; aster which .the following Preparation is  
to be used. . " ' - . . '

Take Of well-cleaa'd live Millepedes, two Ounces, os the  
Powder Of Anise-seeds, One Dram ; Of Nutmegs, half a

' Dram , and Of the whitest Sugar, one Ounce r Bruise all to-  
gether, and pour upon them, Os Hyssop-water, six Ounces. .  
Agitate thema little with a Pestle, and make a strong Ex-  
pression of the Liquor, two or three Spoonfuis Of which are  
to be exhibited twice a Day for a Dose. *Willis.*

' In a Chin-cough, *Ettmuller* informs ns, that the Patients  
Cough so long, that at last they throw Up a mucous Matter from  
their Stomachs by Vomit, after which they are relieved, for some  
time. Perhaps, half a Day, when the Disorder returns in the same  
manner. A Chin-cough, like most Other Coughs of Children,  
according to *Walschmied,* proceeds from a Disorder Of the  
Stomach, where, according to *Dolaeus,* it is produced by a tough,  
viscid, and acid Matter lodged in its Coats. . But, according to  
*Ettmuller,* a Chin-cough is sometimes produced by a certain  
Salt communicated by the Air to the tender Bodies of Children,  
and coagulating the Lymph, which, becoming acrid, and stagna-  
ting, Or overflowing, affects the Larynx in such a manner, aS IO  
produce a Chin-cough, which, he says, can hardly he cured  
without the Use of Emetics, but may be easily removed hy Vo-  
miting, which may he promoted by means Of a Feather dipt in  
Oil

*Sydenham* informs us, that in Chin-coughs Seeding affords  
InOre Relief than the Use of pectoral Medicines,, and affirms,  
that they may he happily cured by Venesection alone, and due  
Purging, with mild Cathartics, the Doses Ofwhich are m be pro-  
portioned to the Age Of the Patient. He, also, tells ns, thar ut  
this Disorder Drinks, and liquid Aliments, Ought to be taken in  
smaller Quantities than usual, whilst, in their stead, tho Patient is  
moderately to use a mild Decoction of Sarsaparilla, China-root,  
Sanders, the Shavings of Ivory, and. calcined Hartshorn, toge-  
ther with diuretic and antispasmodic ingredients. He, alio, telis  
us, that many have been relieved by the Decoction, or Syrup, of  
Castor and Sassiori, aS, also, by a Decoction of the Roots of  
male Piony- Misteto, and Hyflop.

Doctor *Pulles,* in bin *Pharmacopoeia Extemporanga,* orders the  
ro:-owing Preparation for rhe Chin-Cough.

Take of well-cleaned live Millepedes, two Ounces : Of the  
Powder Of Anise.seeds, one Dram; os Nutmeg, half a Dram,  
and of white Sugar, One Ounce: Bruise all together, and  
pour upon them of Penyroyal-water, six Ounces , and Of  
the compound Waters Of Bryony and Piony, each one Ounce:  
Make a strong Expression, and Of the expressed Liquor ex-  
hibit one Spoonful after every Paroxysm *os* Coughing, till  
the Disorder is removed.

Doctor *Cheyne,* in his Treatise of the Gout, informs ns, that  
a Spoonful of the following Syrup, exhibited at a time, and re-  
peated, infallibly cures the Chin-cough.

- - Take Of Millepedes, a sufficient Quantity; immerse them in  
White-wine, express the Juice, and add a sufficient Quan-  
tity Of Sugar to make a Syrup.

For the Cure Of a Chin.Congb, Tnrnep-broth is much recom-  
inended by Old Women and Nurses; and a proper Quantity of  
Sperma Ceti, in common Broth, is Laid to be an admirable Re-  
medy for this Disorder.' The Flesh os srsid Mice, eaten, is, also,  
among the common People, accounted a Specific : And *Ilumglivi*informs us, that the Moss which grows upon Trees, especially On  
the Oak, is from Experience found to be, of all Others, the most  
.effectual Cure sor a Chin-cough. The *Aur urn Mosuicttm is*greatly recommended by some for the Cure Of this Disorder, but  
Ought Only to be exhibited to such as are pretty far advanced In  
Age. The Oil of Sulphur by the Bell, the *Julapium Mos.chatvm,*and the *Syrupus ad Tussim Convuls.ivam,* are sometimes used with  
Success. Some order fresh Whey to be used for common  
Drink.

PERVERSIO. The same **as DIASTREMMA.**

; PERVIGILlU M. Watching, er Wan r Of Sleep ; a Symptom  
very common in Fevers, and always of bad Presage. See PT-  
**.RETOS.**

PERVINCA. .

The Characters are ; . .

The Branches are long and creeping; the Calyx is monophyl-  
. lons and quinquesid, being divided into five long stender Seg-  
ments. The Flower is mOnopetalous, and much in the Form Of  
a Salver, deeply cut into five Lobes, and furnished with five Sta-  
mina adorned with elegantly bearded Heads.- The Ovary seated  
in the very Bottom Of the Calyx, between two lateral Placentae,  
is bifid, and from the Centre os its Apex shoots forth a stender  
cylindrical Tube, expanded at the Top into a Circle,7rom whose  
Centre rises a beautifully plumouSApex, the Ovary at last be-  
comes a Fruit consisting Os. two Pods, which Contain oblong sul-  
cated, and almost Cylindrical Seeds.

*Boerhaave* mentions eight Species of *Pervincat,* which are,

I. Pervinca; Vulgaris ὁ latifolia ; flore coeruleo. *Tourn. Inst.* I I9.  
*Bocrh. Ind.* .X. 3 I I. *Clematis Daphnoides rnnsor.* C. B. P. 302.  
RaiiHist.2 X09I. *Synop.* 3.268. *Clematis Daphnoides major flore  
coerulee.* J. B. 2/ I 32. *Clematis Daphndides latifolia sive Vinca Per-  
quinoa mayor.* Park. Theat. 3?o. *Clematis Daphnoides. Get. ys,J.  
Clematis Daphnoides five Pervinca major.* Emac. 894. THE  
' GREATER PERIWINKLE.

It grows on Banks by the SideS of Ditches, but rarely flowers,  
*in April* ,and it agrees in Virtues with the lesser or Common Pe-  
Iiwinkle, and may be used, in its stead.

2. Pervinca; latifolia. Variegata. *T.* I2o. *ClematisDaphnoides,  
mayor, flore variegato. . '*

3. Pervinca ὁ Vulgaris, angnstifolia ; flore coeruleo. *Tourn.*durst. I2o. *Bocrh. Ind. A.* 3I1. C. Β. P. 3oI. Rail Hist. 2. Iopt.  
J. 8.2.130. *Vinca Pervinca.* Ossie. Ger. 747. *Vinca Pervinca  
minor.* Ger. Emac. 894. Raii Synop. 3.268. *Vinca Pervinca vul-  
garis* .-Park. Theat. 340. *Clematis Daphnoides, Vinca Perndnta.*Chain IIS. PERIWINKLE . '

Periwinkle, from a stringy, creeping, fibrous Roos, sends  
forth stender, smooth, weak Stalks, having two oval, smooth,  
shining-green Leaves, set opposite at a Joint. The Flowers  
grow single at a Joint, on long Foot-stalks, usually purple, some-  
times white, in Shape like the Flowers of jessamine, but more  
round-pointed, which are sometimes, bur Very rarely, succeeded  
by two long and stender Pods ὁ it grows in shady Banks, and dry  
Ditches, and flowers in Summer. The Leaves are useher  
. This is a good vulnerary Plant, and of frequent Use in Wound-  
drinks, for Bruises, Contusions, inward Bleeding, and Wasting,  
Spitting of Blood, the Excess of the Catamenia, and the Fluor  
Albus.- *Miller’s Dot. Qsse*

This Plant is bitter, and gives a considerable Tincture Of Red  
to the blue Paper ; it is very likely, that the Oil and Earth pre-  
dominate in the Periwinkle. Its Salt resembles Alum, but it par-  
takes-a little Of the urinous Salt, and is like the Alum, with which  
they mix some Urine, to make it crystallize the better. For,

By the chymical Analysis, we Obtain from this Ulant, besides  
several acid Liquors, a great deal of Earth and Oil, and very  
little Volatile Salt. Periwinkle is Vulnerary, astringent, and  
febrisngous. For spitting Blood, the immoderate Flux os the  
Piles, the Terms, Or the Whites, pour two Quarts of boiling  
Water upon three Handfuis Os the Leaves Of Periwinkle, cover  
the Pot, remove it from the Fire, and give the Infusion to drink  
by Glass-fulls. Its Conserve and Extract have the fame Virtues.  
For Bleeding at the Nose, stop it with these Leaves bruised.  
Milk curdled, with the Decoction Of Periwinkle, is Very good  
for the Phthisic: This Milk is prescribed for rhe Dysentery, and  
a Gargarifm is made Of it for the Diseases Of the Throat. For  
The Dropsy they distil the Milk, after having macerated in it a  
whole Day the Leaves Of Periwinkle, Tansy, and Agrimony: This  
distilled Milk is a much easier Medicine, than the curdled Milk.  
*Martyrss Tournescrt.*

The Leaves of Periwinkle, held in the Mouth, stop Bleeding  
at the Nose, aS we have frequently seen tryd, says *Coflaeus, Lsm  
de Stirp. Differs* "The fresh Leaves, spread upon coarse and thick  
brown Paper, and well-matted and pressed together, then Covered  
with Combed Flax, and afterwards suffhmigated with Frankio-  
cense, being, by the Advice Of an Old Woman, apply’d to a strn-  
mous Swelling, discussed it in a short time, after it had been, for  
a whose Year, under theTreatmentosa learned Physician, without  
Effect. The old Woman had, before this, with the same Medi-  
cine, cured another, whose Cose was reckoned desperate. *Bais  
Hist. Plant.*

*4..* Pervinca, vulgaris, angnstifolia fiore albo. *T.X20. Clema-  
tis, daphnoides, minor, flore candida.* C. B. P. 3O1. *Clematis, da-. ,  
phnoides, flore albo simplici.* J. R 4.136.

5. Pervinca ; Vulgaris, angnstifolia , flore rubente. *T.* Iaor  
*Clematis, daphnoides, minar, flore 7scheme.* C. B. P. 3oI. *:Clernartis, daphnoides, flore purpureo, simplici.* J. B. 2. 130.

*6.* Pervinca; Vulgaris -, angnstifolia , flore pleno, saturate pur-  
Pureo. *T.* I20. *Clematis, daphnoides, flore purpuree, plena.* H.  
Eysh o. I. F. 8. Fig. 5. . mi ' . t . - .

7. Pervinca ; angnstifolia , vulgaris , variegata ex aureo .&  
Viridi. ' ' *. fr . r - . . c.' :-*

δ. Pervinca ; angnstifolia, Vulgaris^ Variegata ex argenteo &  
Viridi; flore purpurascente, pleno. *Boer». Ind. alt. Plant.  
Vol.* I.

The Juice of this Plant is bitter, beating, penetrating, sapona-  
Ceous, opening, detersive, stimulating on all Sides, and Vulnerary:  
Hence it affords a sovereign Remedy sor Infirmities proceeding  
from pituitous Causes. The Juice, boiled in Water, and drank  
to a good Quantity, opens the Uterus, provokes the Lochin, and  
revives the Viral Heat. The Leaves cut fmalL then boiled a little,  
and expressed, and the juice taken in the Morning in Wine, is  
am excellent Remedy sot the Scurvy, by depurating the Blood,  
and deterging the PrimaeVhe. It is proper for Virgins affected  
with the Chlorosis, and the Dysentery. The Plant is Very ser-  
viceable in the Phthisis, and in Diseases Of the Fauces. The  
Leaves, used in Butter-milk, are good for the Fluor Albus. *Hiss.  
Plant, adscript. Boerhaav. -*

PERUNDIS. See ZENDA.

PERUVIANUM BALSAMUM. Balsam Of ***Ecru: See*BALSAMUM.**

PERUVIANUS CORTEX. Peruvian Bath. See-QUIN-

**QUINA. . ....**

PERYGUA. See **ALATERNUs. ' . ...**

PERYSlAS, περυσίας. An Epithet of Wine, importing, that'  
it is Os the last Year’s Vintage.

PES ANSERINUS. A Name for the *Chenopodium* Per  
*anserinus, primum et secundum Ta bernaemontani. .*

PES CAT! A Name for the *Helichrysum , montanum flora,  
rotundiore.*

PES COLUMBINUS. See GERANIUM.

PES LEONIS. See **ALcHiMILLA.**

PES LEPORINUS. A Name for the *Trifolium kumstey  
spicatum, five Lagopus. . -*

PES TIGRIDlS. A Name for. the *Sclarea; Indica, flortbus*

*Variegatis. '*

PESSARIUM, a Pessary, a Medicine proper to he in-  
troduced into the *Pudendam muliebre,* for the Cure Os several  
Diseases incident to the Uterus, has had different Names, ac-  
cording to its Variety Of Forms. . .

. When it. is prepared Of the Length Of the fore Finger, and the  
Thickness Of the Thumb, with a due Roundness and Smooth-  
ness, it called *Pesseprittm,* Ur *Sasses, P* Pessary,” and by some,  
πριαπισκωτὸς *{Priapiscotos)*; but Preparations tor the fame Pur-  
pose, which are or a round Figure, like a Nodule, are Called  
*Nas.calia. More llus.*

Among other external Remedies employ'd by *Hippocrates, wCxc  
Pessaries\*.* These were a hind of Suppositories, which they.  
introduced into the exterior Neck of the Matrix ; they were pre-  
pared of Wool, or Lint, or Linen, mix'd with Powders, Ods,  
Wax, Or Other Things, and made round and long like a Finger.

- ♦ Πεστσι, προσθετα, κολλήρια *{Pesti, Prastbetaj Collyridis* they were, also,, call’d ιπριαπ*ισAcord (Priapifoetd),* from their Figure; hut  
that Word is not to he found in *Hippocrates..*

The Use of Pessaries was very frequent in anrient Times; for  
they served almost *aS an* universal Remedy for female Disorders.  
They were made to answer the intentions ofmollirfing, stippling,  
opening, attracting, stimulating, closing, purging, and cleansing  
the Matrix, Of drying is, retaining it in its proper Place, and for  
Other Purposes. In order to attain those Various Ends, they made  
use sometimes Of Oiis and Eats, sometimes of Juices of Herbs,  
sometimes Os acrimonious and stimulating Ingredients, aS Nitre,  
ScammonyYTithymalus,Cantharides,Garlick,and Cumin; some-  
times Of Astringents, as the Bark and Flowers os the Pomegra-  
nate, Rhus, Or Sumach, Alum, and the like ; sometimes of Aro-  
matins, as Myrrh, Castor, and sweet-scented Plants. There was  
not a Distemper Of the Uterus, in which they did not use Pessa-  
ties; they were the Remedy for the Suffocation, which they pre-  
tended was caused by that Part; with Peflaries they provoked Or  
stopped the Menses; they scrVed as Medicines for the Relaxation,  
Or Falling out Os the Matrix, for the superfluous Humidities, Ul-  
cerations, and Inflammations os the same, sor a Dropsy of the  
Uterus, and for the Fluor Albus, and Sterility. With Pessaries  
they facilitated the Expulsion os the dead Child, and the After-  
birth, and promoted the Child-bed Purgations, besides Other  
- Services not to mention, that they made use of them, also, as a

Means to procure Abortion. .

Pessaries, Or Tali, were by the Antients principally used in Diss  
Orders of the'Uterus, and distinguish'd into three Kinds, that is,.  
the emollient, the astringent, and such as Open the Orifices Os  
the Veins. Thofe Os the emollient Kind were used in inflamma-  
tions. Ulcerations, Risings, Refrigerations, Distortions, and In-  
stammations of the Uterus, This Species of Pessaries was pre-  
pared *of Tyrrhenian* Was, the Oleum Cyprinum, or Susinum,  
the Fat of a Goose Or Fowl, fresh Butter, dry’d-Resin, the Mar-  
row Of an Harr, Fenugreek, and other Substances Of similar Qua-  
lities: Such as Open the Orifices Of the Veins were used, when  
the Intention was to recal the menstrual Discharge, Or remove a  
Closure, Or Contraction Of the Uterus This Species was pre-  
pared Of Honey, Mugwort, Dittany, the Juice of Cabbage, Li-  
quorice, the Juice of Leeks, Rue, Scammony, and Other Ingre-  
dients of a like Nature. But astringent Pessaries were used for  
Purposes quite differentfrom thofe Of the aperient Kind, fince  
the intention Of the former was to check the menstrual Discharge,  
. Contract the expanded Uterus, and prevent its falling down.  
The Consistence Of these Pessaries must be somewhat thick and  
strigmentitiouS. Then a Piece Of Wool must be folded up in  
Form Of a Tent, immersed in the Ingredients, and introduced  
into the Mouth of the Uterus, with a Thread fixed to it, that  
by this means the Pessary may be the more easily extracted, when  
it seems expedient. *Paul. AEgrnetsc Lib.* 7. *Cap.* 24.

The Moderns have too much neglected the Use of Peflaries  
Of this Kind ὁ but employ Pessaries Of Various. Figures and Ma-  
terials, many Of which are represented in *Tab.* LV. They are  
principally serviceable in a *Prolapsus Uteri,* and Incontinence Of  
' Urine in Females. Their Uses ate farther explained under the  
' Articles of the Disorders in which they are employ’d.

PESSOS. A Pessary. See **PESSARIUM.**

’ PESSULUS. A PesserY.

peSTlCHLE. The same as **PETECHIAE.**

PeSTIffi The Plague.

‘ The Plague is one os the most acute kind of Fevers, arising  
from a poisonous Miasma, brought from the Eastern Countries,  
and which proves mortal, unless, by the Vigour of the vital  
Motions, the Poison is soon carried off by means of Buboes  
and Carbuncles.

The Plague differs from other Fevers of the Contagious,  
malignant, and exanthematous Kind, jn this, that it is os all  
others, the most acute, fince it sometimes destroysine Patient  
on the first or second Day os its Attack. In *Europe* the Plague  
is neither epidemic, nor sporadic, arising from a preposterous  
Method of living, or an insalutary Constitution of the Air ;  
but, in our healthy Parts of the World, draws its Origin from  
aContagion derived from the sultry, and before infected Eastern  
Climes. A Plague, also, has this peculiar to it, that it is not,  
like other malignant and putrid Fevers, terminated by large  
Sweats, Fluxes, or other excretions ; but the Poifcn being in  
aoritical and salutary manner, forced to the external glandular  
Parts, it is terminated by Tumors, which end in Abscesses.  
Besides, contrary to what happens in other contagious and pe-  
techial Fevers, such is the subtile Quality os the pestilential  
Poison, that it quickly adheres to porous Substances, and,  
without any Diminution of its Force, may be convey'd to  
Countries many thousand Miles distant from each other. It is,  
also, peculiar to this Contagion, that its malignant and  
spreading. Nature is not only check'd, but, also, totally ex-  
tinguished, by intense Cold. Hence it happens, that in cold  
Weather, and cold Climates, a Plague is rarely or never ob-  
served, whereas it rages frequentiy and violently in hot and  
sultry Climates.

Bur; as, in all contagious and malignant Fevers, the poison-  
ous Miasma, taken in with the Air, insinuates itself into the fer-

mentable Saliva, and exerts its baleful Influence 0n the PartSthrough which it passes ; so this, in a particular manner, holds  
true, concerning the pestilential Contagion, which, immediate-  
ly attacking the Head, Brain, Nerves, and nervous Fluid, ev-  
cites a Torpor of the Head, a Sense of Weight, Drowsiness,  
an excessive Pain, a Stupor of the Senses, Forgetfulness of  
everything. Restlessness, Watchings, and a Lofs *of* Strength.  
When this pestilential Contagion is convey'd thro’ the Fauoes  
to the Stomach, it excites a Loathing of Food, Nauseas, Un-  
easiness of the Praecordia, a symptomatic Cardialgia, Efforts to  
vomit, and. actual Vomiting. Then, being convey’d to the  
Membranes of the Spinal Marrow, and the nervous Coats of  
the Arteries, it not only produces an Horror, and a languid,  
small, contracted, and frequent Pulse, but, also, Deliquiums.  
All these are the ordinary Symptoms os a beginning Plague, and  
are so much the more violent and quick in then Operation, aS the  
pestilential Poison exceeds that of other contagious and malig-  
nant Disorders.

The many violent and terrible Symptoms appearing under a  
Plague are no-where more fully and accurately described, than .  
in the first Description os this Disorder given by *Thucydides* the  
Historian, when, in *Lib. 2. de Bello Peloponnes.* he gives an Ac-  
count of the Plague os *Athens* in the following Words : de For  
" my own pars, being ill os it myself, and having seen others  
" afflicted in the same manner, I shall give an Account os ir,  
" that, is it should happen again, the Person who reflects on it,  
" may be able to form the hetter Judgment concerning It.  
" The Year in which it began was universally agreed to he  
" highly salutary, and free from other Diseases ; and, *if* by  
“ chance any one was sick before, all his Indisposition termi-  
" nated in this; and they who before were in perfect Health,  
" were, without any apparent Cause, suddenly seized with a  
" Violent Heat in the Head, accompanied with Redness and  
" Inflammations of the Eyes. - Their Tongues,. Throats, and  
" internal Parts, became immediately bloody,. whilst their  
" Breath was fetid, and Respiration difficult.’ A Sneezing  
" and Hoarseness ensued ; and, in a short time, the Pain de-  
" scended to the Breast, and was accompanied with a Violent  
" Cough. When this Pain was once settled in the Stomach,  
" a Vomiting of bilious Matter, os as various Kinds as ever  
" were specified by Physicians, succeeded, but not without the.  
" greatest Anxiety and Uneasiness. Many were seized with  
" an Hiccup, that brought up nothing, but occasioned a vio-  
" lent Convulsion, which, in some, went off presently; but  
" in others, continued much longer. The Surface of the  
" Body was neither Very hot, nor pale,, but redish, livid, and  
" full of small Pustules and Ulcers : But, internally, the Heat  
" was so intensely great, that they could not endure rhe slightest  
(i Covering, though of the finest Linen; but could only be  
C( satisfied with absolute Nakedness. It was, also, an infinite  
" Pleasure to them to plunge themselves into cold Water ; and  
" many of those who were not well attended, did so, running  
" to Wells, in order to .quench their insatiable Thirst, which  
" still remain'd, whether they drank much or littie ; a great  
" Uneasiness and Restlessness attending them, together with  
" a continual Watching. Whilst thia Plague was advancing  
Ce to its Height, the Patient's Body did not sell away, but re-  
" fisted the ν iolence of the Disorder beyond Expectation j so  
" that many died on the ninth and seventh Days, of the inter-  
" nal Burning, some Strength yet remaining; or, is they held  
" out longer, many of them afterwards died of Weakness;  
te the Distemper descending to the Belly, and there producing  
" violent Exulcerations and Diarrhoeas: For the Disease went  
" through the whole Body, beginning first in the Head; and,  
" if any one surmounted these terrible Symptoms, violent  
Y Disorders of the Extremities succeeded ; for : the Plague  
" broke out upon the private Parts, the Fingers, and the Toes;

and many sustained the Loss os these Parts : Some, also, lost  
CC their Eyes; whilst others, immediately upon getting tip,  
" were seized with a total Forgetfulness os every thing, neither

knowing themselves, nor their most intimate Acquaintances.".  
And, a littie aster, he adds these Words : “ The Disease, there-  
" sore, to pass over many surprising Circumstances, which.  
" differed in different Persons, was in general such as I. have  
" described it. And, aS for other usual Distempers, they either  
" did not then appear, or,, if they did, they all terminated in  
" this, aS Lines do in a common Centre. Some os the Patients  
" died for want os Care; and others, notwithstanding all the  
" Care that could possibly he taken of them : Nor could it he  
" affirm'd, that there was any certain Remedy, which, wlien  
" used, proved universally beneficial, since, is it did Good to  
" one, it did Harm to another. Nor was. there any Differ-  
" ence in different Constitutions, as to Strength or Weakness,  
"to enable them to resist the Violence of this Plague, which  
" swept all away, whatever Care was taken, or whatever Re-  
" girnen the)’ used. But the most terrible Circumstance of all  
" was the Dejection of Mind in those who found themselves

ct beginning to he ill; for, growing immediately desperate, they  
" gave themselves up for lost, without making any Efforts for  
*(i their* own Relief; and one being infected by another, whilst  
" they endeavoured to take care of each other, they died  
" like Sheep. And this Circumstance, of all others, contri-  
" buted most considerably to the surprising Mortality." ν

In a Plague, however, the Symptoms are not always os the same  
Nature, but very considerably different according to different  
Constitutions; and this Diversity is carefully to he investigated  
by the Physician. Now, 'tis universally agreed upon by all  
Authors who have wrote concerning the Plague, that those  
who are os a spongious, rare, and porous Habit of Body, as,  
also, those who are sat, of sanguineous and phlegmatic Tem-  
peraments, Women, young Persons, and infants, those of  
timid and abject Dispositions, those accustomed to poor or tin-  
wholsome Diet, those addicted to Surfeits, and who protract  
their entertainments till late at Night, are much more readily  
*seized,* and more terribly afflicted, with the Plague, than those  
of bold and resolute Minds, lean Habits, nervous Constitutions,  
Persons of large Veffeis, Adults, those advanced in Years, those  
ebnoxious to the haemorrhoidal Discharge, and those who have '  
Fontaneis, or open Ulcers. 'Tis equally certain from Expe-  
rience, that nothing says a hetter Foundation for receiving or  
heightening the pestilential Miasma, than Dread, the Fear of.  
Death, and Consternation: So that 'tis certain, that some  
have not only been seized with the Plague, but, also, died of  
it, purely through the Influence os Terror; for those Passions  
of the Mind are the most considerable, which lessen and destroy,  
the Vital Motion of the Heart and Arteries, and, consequently,  
the Circulation of the Blond, whilst, at the same time, they  
Impair the vital, natural, and animal Force, fince, by the Be-  
nefit of these Motions, the Contagion received is to he exter-,  
minated.

'Tis an hard Talk to determine the specific Nature of **the.**pestilential Poison d *priori,* because it is hardly subjected to our,  
Senses. But, in as far as we are able to form a Judgment of it.  
d *posteriori,* and an Induction of Facts, it seems to consist,  
partly of a sulphureous, putrid, and multiplicative Nature,..  
like Leaven, and partly of an highly subtile, acrid, and caustic,.  
though, at the same time, more alcaline than acid. Nature.  
Its putrid and highly foreign sulphureous Nature appears from  
this, that all malignant Disorders derive their Origins from **the**putrid Vapours arising from unburied Carcases, putrid stagnant  
Lakes, and other fetid and excrementitious Sordes; and that this  
Minima immediately contaminates the nervous Fluid, stops the.  
systaltic Motion of. the Solids, and induces a sphacelous Cor-  
ruption of the Juices. But that this Miasma is, also, possessed,  
of a caustic and subtile Acrimony, is certain from this, that  
the Ingress of contagious Disorders is not only generally pre-  
**ceded** by Swarms of insects abounding with a caustic Salt, and  
generated from Putrefaction ; but, also, from this, that, by vel-  
Iicating and corroding the nervous Fibres, it produces a Pain,.  
Tumor, and inflammation, sufficiently conspicuous in the Bu-  
boes and Carbuncles.

This pestilential Poison, as we have above observed, when,  
received into the Body, totally disturbs and perverts its Fun-  
ctions ; and, unless suddenly forced from the internal to the ex-  
ternal Parts, proves infallibly mortal: Nor is this Effect, aS in  
other malignant Disorders, produced by profuse Sweats, Dis-.  
charges ofthe Faeces and Urine, the Haemorrhoids, or Menses,.  
nor by Discharges of Blood from the Nose, whether spontane-  
ous, or excited by Art; fince these Excretions, especially when.  
profuse, rather prognosticate the Death of the Patient. But the  
salutary and critical Excretion, by which the Plague is perfectly  
terminated, is brought on by Tumors appearing on the Surface  
of the Body: So that, as in an Erypsipelas, this happens with-  
in the third and fourth Days; and the sooner and more copi-  
ousty they appear, **the** Violence os the Disorder is so much **the**more mitigated; for that these Tumors contain and eliminate  
**a** formal Poison, is certain from this, that if the Surgeon opens  
the Vein of a sound Person with a Lancet, which has heen em-  
ploy'd in opening one Of these Tumors, **the** sound Person is  
forthwith seized with the Plague.

These pestilential Tumors are of two Kinds: The one is by  
the *Greeks* called *Bubo,* a Name common to all Tumors.  
These Buboes appear principally on the gland ulous PartS, and  
most frequentiy on the Groins, under the Ann-pits, on the  
Parotid, Mammary, and inferior Axillary Glands, under the  
Chin, as, also, on the Glands adjacent to the Afpera Arteria;  
and discover themselves by an hard painful tensive Tumor of the  
Glands, accompanied with Heat; and, if they are of a good  
Kind, they become humid, soft, and are suppurated. The  
**other** Kind is far worse than the former, and is by the *Greeks***called** *Anthrax,* winch signifies a live Coal, from which the  
*Latins* derive theWord *Carbunculus. Celsus, in Lib.* 5. *Cap.*28. describes a Carbuncle in the following manner : " It is a  
" Redness Of the Part with Pustules not rising far above it ;

" and these Pustules are generally black, tho’ sometimes they **are**" livid, or pale. There feerns to be a Sanies in these; and **the**" Bottom is of a black Colour. The Body os them is more hard  
" and dry, than it ought to he naturally; and is surrounded with  
" "a Crust, attended with an Inflammation: Nor in the Part as-  
" sectedcantheSkinhe raised, butadherestothe subjacentFlesh."  
*Minder crus,* who lived where the Plague raged, and has wrote  
excellentiy concerning it, describes Carbuncles in the following  
manner: " When a Carbuncle, os the Bulk os a Mustard or  
" Hemp-seed, happens, it contracts round about it a burning  
" Diik, or Halo, as large as a Trencher, according to the Part  
" affected: The Flesh affected is separated from the sound  
" Parts, and, like an Escher, or putrid Flesh, salis off; so that  
" the Cavity gapes, as if it had heen corroded by that Species  
" Os Cancer called *Lupus. ”* NO Part os the Body is free from  
these Carbuncles; but they most commonly possess the Mein-  
branes os the Muscles, and the nervous and fibrous Substance  
os the Skin, especially in the Back, the Arms, and the Thighs.  
In the Part affected, the Patients first perceive an exquisite  
Itching; and, is they scratch. Pustules os a red, livid, whitish,  
purple, or black Colour appear. These Pustules are. Very  
thick, and appear full of Pus; and, under some of them, **a**cineritious Crust is form'd, which being taken away, the sub-  
jacent Flesh appears corrupted and spongious, with an intolera-  
ble Pain and Heat of the adjacent Flesh. Then a total Morti-  
fication or Sphacelation of the Part ensues.

But, among those to whom the Plague proves mortal, some  
die, on the first or second Day, of a Syncope, which, no doubt,  
proceeds from the Terror with which they are struck. But in.  
many, when the Poison either is not expelled, or when expelled,  
suddenly it returns, and, lodging in the Coats os the nobler PartS,  
**such as** the Pleura, Oesophagus, Stomach, Intestines, and Me-  
ninges, a Sphacelus is induced, which quickly spreads to the  
Viscera and Blood ; by which it happens, that the Carcases of  
such Patients immediately become surprifingly fetid, tumefied,  
and are quickly putrefied. Sometimes, also, when there is too  
large a Quantity of pestilential Tumors, the Patients, justas  
in the Small-pox, die of a symptomatic Fever,'on account of  
the Inflammation, Pain, and intolerable Heat.

*The* **C U R E.**

✓

Since \*tis certain, that the Plague is not originally generated  
in *Europe,* but is imported from other Countries, there can he  
no more safe and infallible Advice given, than to fly from the  
Contagion. It is the Advice os *Celsus,* that the Person, who li-  
as yet safe, but cannot long be sure os being so, sail/and travel,  
which in the *Italian* Plague, in the Year I 625. were of singu- '  
lar Service, as we are told, by *Natalis Comes, Hist. Lib.* 27.  
And *Sanctorius,* in *Med. Stat. Sect. Aph.* I38. informs us,  
" That they, who, in order to avoid the Plague, advise any  
" other thing then flying from it, are either ignorant them-’  
." selves, or intend to impose upon others." For the same  
Reason, thofe Princes excellentiy consult the Welfare of their  
Subjects, who, in the Time os the Plague, ufe all Methods  
to prevent its Importation; and, if an House is infected, for-  
bid sound Persons to enter it, and forthwith burn all the:  
Furniture, lest, with it, the Contagion should be propagated to  
others/But all Persons, when the Plague rages, ought to live'  
Very temperately, and every Degree of Excess is to be avoided \_  
in the Non-naturals, especially with respect to the Passions of  
the Mind; and all those things are to be abstained from, which,  
impair the Strength, disturb Perspiration, and generate Crudities.  
in the Primae V *iae.* In a particular manner, the Mind is to  
be fortified, and Terror, Dread, and Cowardice, are to he  
banished, since, 'tis certain, that these Passions, during a'  
Plague, destroy inore'than the Contagion itself.

- Those whose Business obliges them to live among the In-  
fected, ought to take care, that the Mtasma do not enter the.  
Vital Juices, nor convert to its own Nature the salival Humours  
lodged in the Primae Viae, which easily happens. For this Pur-  
pose, we recommend frequent Vomitings, and Washings of the  
Mouth, with Wine-Vinegar or Wine, or the Drawing these  
Liquors up the Nostrils ; and these are still more efficacious, if  
they are impregnated witlr Scordium, Rue, or Citron-peel , -  
for an Acid seems to be the genuine Antidote against a Poi- s  
son of a putrid and sulphureous Nature, because from Chy-  
mistry it is certain, that an Acid fixes and enervates Sulphur and)  
Volatile Salts. For this Reason it is far safer to use Acids :gentiy, or contain them in the Mouth, than to chew alexi-  
pharmic Roots, such as those of Zedoary, Angelica, and  
Masterwort. Hence, ’tis, alfo, expedient to drink *Rhsm.su*Wine, or to take a few Spoonfuis of bezoardic Vinegar, di-  
luted with Water, or Wine. Thus *Forestus* informs us, " That,  
" when the Plague was raging, he used, when called to his  
" Fellow-citizens, to fortify himself by these Medicines, espe-  
" Cially by chewing Citron-peels.\*’ The *Turks,* according IO

*Cole, Lib. de Morb. Acea,* when the Plague rages, frequently  
**use** Lemon juice, large Quantities of which they squeeze into  
all Kinds ol Broths. '

Among the external Remedies sor this Disorder, many re-  
commend Fontaneis; because it has been observed, that those  
who had chronical and scorbutic Ulcers in their Limbs, remain-  
ed free from the Plague, and other contagious Diseases. *Hil-  
danus* greatly commends Fontanels sor this Purpose ; and, in  
*Cent.* 4. *Obs.* 23. has these Words: " I do not remember,  
" that any of those who had Fontaneis in their Legs and Arms,  
" died of file Plague, except one or two, who were highly  
" CacOchymic; and I have sound Fontanels to be an efficacious  
" Preservative against the Plague, both in myself and others.''  
I remember the same was, also, told me by the Physicians who  
were Witnesses to the Plague of *Ers.uri.* The Reason of so  
shrprising a prophylactic Effect seems to be this, that the  
Matter os the received Miasma, which generally firmly adheres  
to the serous Parts of the Blood, will, by the Vigour of Na-  
ture,. he conveyed to the Part where the Fontanel is, and  
thence eliminated as heing weaker. Hence an unusual Pain  
and Tumor are observ'd about Fontaneis. Perhaps, also, the  
Confidence os the Efficacy *os* Fontanels may remove the Fear,  
rouse the Spirits, and work like a kind of Amulet.

. . Ln the Cure os a Plague, the following intentions are to be  
pursued:

**I.** To promote the Expulsion of the received Miasma in a  
proper manner, especially by these critical Tumors, which are  
to he duly manag'd : And,

2. To rouse and support the languid Strength, which is of so  
great Importance to Lise ; and to remove, or relieve, the most  
urgent Symptoms: But, since I am not experimentally ac-  
quainted with the Methods of answering these Intentions, I  
shall deliver the Method os curing a Violent Plague, described  
by *Johannes Langius, Lib.* I. *Epist.* I8. and then subjoin my.  
own Opinion, and such Observations as are most agreeable to  
Reason and Experience. " You know, says .this celebrated  
" Author, that I have cured many os the Plague, whose Re-  
" covery was despair’d os, by the sollowing Method : First,  
" if, for some Days before the Beginning os the Disease, little

or no Faeces were discharg'd, then I rendered the Body so-  
fa luble by a Suppository, or a gentie Clyster : Then I exhi-  
" bited a sudorific Alexipharmic, which, according to the Age  
" and Strength of the Patient, is to promote a Sweat for two  
" or three, or more Hours; Then I applied an Epithem to the  
" Heart. Six or seven Hours aster the Sweat, supporting the Pa-  
" tientis Strength mean time; by some proper Broth, I open'd a  
" proper Vein; and, immediately aster the Use of the Alexi-  
" pharmic, exhibited, every Morning and Evening, alterative  
\* ‘ Draughts, which by the ir Quality resisted the Poi son, and were,  
" at the same time, cordial; such as Decoctions prepared of the  
de Juices os Citrons, Lemons, Oranges, Sorrel, and Bugle,  
" with a little Vinegar and Sugar. In the Decline of the  
" Disease, if the Appetite is languid, in order to carry off the  
" Remains of the Disease, I exhibited a Medicine prepared of  
" Rhubarb, Agaric, Cassia, or *Elaeomeli,* or Manna, and  
" Tamarinds. Then I order'd the Surgeons not to precipitate  
" the Consolidation *of* the Carbuncles and Ulcers ; and those  
" who had the Care of the Patients, to exhibit proper AJi-  
" ments and Liquors at the Time prescribed : By which Me-  
" thod, a large Number of Patients were restored to perfect  
" Health." A little aster, he goes on in the following manner:  
" But if Buboes and Carbuncles appear about the Emunctories  
" near the Ears, if Abscesses are formed under the Axillae, if  
" Buboes are formed in the Glands of the Groin, or if Car-  
\*( buncles appear in the Arms or Legs, then, aS in poisonous  
" Wounds, we are,, with all Expedition, to apply to the Part  
" such Medicines as extract the Poison, or Cupping-glasses, or  
" a plaistet of Leaven, Treacle, Meal, Mustard, and Onions,  
- ' " roasted under the Ashes, adding Opopanax and Galba-

. " num dissolved in strong Vinegar: Then scarify the Abscess  
" hesore its Maturation, or lay it open, or cauterize it. But,  
" if the Patient dreads the actual Cautery, we may use one of  
" the potential Kind, prepared os Cantharides and Leaven, or  
" the Roots of the *Flammula* bruised in Oil; which, *by* their  
" heating and burning Quality, not only attract the noxious  
" Humours, but, also, frequentiy open the Collections made  
" of them."

This Methed os curing the Plague is highly congruous to  
Reason ; for, in the Cure of all Diseases, it is to be laid down  
as a Maxim, that if,.for some of the first Days of the Dis-  
. order, few or no Faeces are eliminated, the Body is to be ren-  
tier'd soluble by a gentie Clyster, that, by this means, the In-  
testines may be freed from the Excrements, lest otherwise the  
Symptoms should be increased, and the Efficacy of the Medi-  
cines obtunded.. *Langius* is, also, greatly to he commended,  
for using an Alexipharmic, in order to excite a Sweat for some  
Hours, since, by this means, the Poison is more expeditiouily

exhaled and dissipated. The Application of an Epithem to the  
Heart Is, also, a Circumstance os great Importance; sor tho'  
it does nor immediately touch and affect the Heart, but only  
the Right Orifice of the Stomach, and its nervous and muscu-  
lar Coats, yet it is of the last Importance, that the Stomach,,  
which is an highly nervous Pars, os exquisite Sensation, has an in-  
timate Communication with the nervous Parts os the whole Body,  
and in which the Poison first exerts its Virulent Influence, should  
he well-defended ; which intention is answer'd by such Medi-  
mines as are antispasmodic, and, at the same time, corrobora-  
five and balsamic ; sor which Purpose I generally recommend  
such as are prepared of Treacle, exprefled Oil of Nutmegs,  
Camphire, Saffron, Castor, and *Peruvian* Balsam. Aster the  
Use os Alexipharmics, the Opening of a Vein in, also, highly  
beneficis!: For to begin the Cure with Venesection, is danger-  
ous, hecause, one or two Days aster it, the Motion os the Blood  
to the Surface of the Body, and consequently the Perspiration,  
is diminished, and the Poison retain’d. Besides, the Dread and .  
Terror with which those who are sein’d with the Plague are  
struck, forthwith recal the Blood from the Circumference of  
the Body ; so that Venesection, which produces the same Ef-  
sect, mush of course, prove prejudicial. But, aster the Use of  
Sudorifics, Venesection may be admitted, if Custom, aRedun-  
dance of .Blood, a luxurious Diet, or an excessive Use os Wine,  
requires it, because, the Redundance of the Blood heing removed,.  
the Propulsion os the virulent Matter to the Glands is facilitated  
and promoted ; and this is so much the more effectually done,  
if afterwards the Flux of the Blond to the external Parts is  
now-and-then assisted by gentle Diaphoretics: Acids, such aS  
Vinegar, the Juice os Lemons and Citrons are, also, justly  
recommended, since they resist the Poison, prevent the Putre-  
faction os the Humours, and the Dissolution of the Blood; for  
which Reason they are preferable to all other alexipharmic and  
. antipestilential Medicines. .

When the Disease is on the Decline, *Langius* purges the Pa-  
tient by gentle Laxatives, which, aS in the Beginning os the  
Plague, and other contagious Disorders, it proves hurtful, by  
retarding the Motion os the Humours to the external Parts, so  
it is highly beneficial in the Decline of these Disorders: For, by  
this means, the Sordes generated during the Disease are eli-  
minated ; whereas, if they were retain'd, the Appetite would  
be destroy’d, flow and purple Fevers induced, the Strength  
render'd languid, flow Heat brought on, and a new and vio-  
lent Disorder os the same Kind frequentiy produced again. Then  
he orders the Poison, in the pestilential Tumors, to be extracted  
by .Copping-glaffes, Scarification, and VeficatorieS; in which  
he is, also, seconded by the best Authors: For *Riverius,* in  
*Observat. Cent.* 2. *Obs.* I9. greatly recommends Cantharides  
made up with Leaven and Vinegar, and applied behind the ears,  
or to the other ushalEmunctories; aster this, thePatient is to be  
ordered to Bed ; and, in twenty-sour Hours, a black and serous  
Humour is discharged, by which means the Plague is in a sew  
Days removed. *Langius,* also, justly advises, not to consoli-  
date the Ulcers too soon: But, the Matter being solicited to the  
external Parts, and a Suppuration brought on, the Tumor is  
rather to be open’d, and the Ulcer cleansed with the usual Di-  
gestures; hut it is to be kept long open with a Tent, that the  
Poison may he sufficiently .eliminated, and the Ulcer, at last,  
brought to a Cicatrix.

*Sanctocius,* in *Aph.* I39. *Medicin. Stat,* affirms, " That  
" sew os the Nobility are cured even by the Use os Medicines,  
" whereas many of the common People are cured without  
" them." For Tis certain from Experience, that common  
People deprived os all the means of Relief, and who use a tem-  
perate Regimen, and large Draughts of light Liquors, sooner  
recover in pestilential and other contagious Disorders, than  
those in opulent Circumstances, who are ruined by a Redun-  
dance of Medicines, and a Variety os Advice ; for, in the for-  
mer, Nature is rohust and Vigorous, to whom if the Cure is  
committed, it succeeds sar better, than when attempted by  
Art, which sometimes hinders and disturbs it. But, in Persons  
of opulent Fortunes, Nature is often disturhed in her Opera-  
tions, and the Disease terminates unluckily, on account of their  
irregular Method os Lise, and their too liberal Use of Medicines,  
which are sometimes highly improper.

In the Cure of a Plague, nothing is more prejudicial, than a  
liberal Use of the alexipharmic Roots turgid with an hot Volatile  
Gil; such as those of the *Carline* Thistle, Angelica, Butter-  
bur, Zedoary, *Virginia* Snake-root, Masterwort, Swallow-  
wort, Buntet; the Essences and Elixirs prepared of these.  
Treacle, and Mithridate. But still more prejudicial are  
**the so** much commended urinous and Volatile Spirits ; such -  
as those of Hartshorn, Vipers, and Soot, aS, also. Volatile  
Salts, and Balsam of Sulphur. For the pestilential Miasma is  
so far from heing expelled by these means, that it is rather re-  
tain ed, and more deeply rooted in the Constitution: For it is **a**constant Law in the animal (Economy, that the Secretions

which precede the Excretion of the recrementitions Parts, suc-  
ceed better, when the Humours are moderately and freely con-  
vey'd to the Emunctories, than when they are thrown into Vio-  
lent Commotions. Hot Medicines rather increase the Uneasi-  
ness about the Praecordia, augment the Heat, promote **the**Dissolution os the Bleed, and easily force the malignant Mi-  
asma from the Stomach, and nervous Parts; in consequence of  
which, they cannot fail to prove prejudicial. This is sufficient-  
ly certain from all the Authors, who have liv'd where the Plague  
raged, and especially from *Hildanus, Chald. de Heredia,* and  
from *Thoraerus,* who informs us, " That those who used hot  
" Alexipharmics, died of the Plague. ”

Nor are we, in a Plague, absolutely to condemn the Use of  
alexipharmic Roots and Herbs ; sor they are by no means pre-  
judicial, when corrected with Acids and Nitre. Thus I have  
heen informed, that in the Plague, which in the Year I682.  
raged ar *Hall,* nothing was more beneficial than a Mixture of  
the Water of Carduus Benedictus with sour Spoonfuls of Wine-  
vinegar, and of Crabs-eyes and Treacle, each a Dram, fre-  
quently exhibited. In that Plague, also, which in the Year  
1576. raged almost all over *Lombardy,* many, and especially  
the Inhabitants of *Melon,* were said to be cured by the Juice  
os Goats-rue mixed with Vinegar, Cardu us-water, and a little  
Treacle, covering their Bedies afterwards, in order to sweat.  
*Thonerus,* in *Observat,* informs us, that in the Beginning os a  
Plague nothing prov'd so beneficial, aS Treacle-vinegar, exhi-  
bited in order to provoke a Sweat; and that in the Year I543.  
when a malignant Fever raged among the Soldiers, a whole Re-  
I giment os them was preserved by this Vinegar, every one recover-  
ing who used it, except a sew, to whom it was exhibited too sate.  
*-Kirchcr,* also, in his Treatise *de Peste,* informs us, that in  
the *Raman* Rague so happy Effects were produced by an Infu-  
sion of Vinegar with Rue, the Root of Burnet, Betony, Gar-  
lick, and Juniper-berries, with the Addition of a little Cam-  
phire, that whoever used it, even the' they liv'd among the  
infected, escaped the Plague. Besides, in malignant Disorders,  
. as well as in the Plague, the Aqua Prophylactica Sylvii has  
been always-greatiy esteemed, because the principal Ingredient  
of it. is Vinegar: For this Reason, *Gesucr,* in *Lib.* 3. *Epist.*

advises to exhibit all Alexipharmics in Wine mixed with  
Vinegar. But these Alexipharmics mixed with Acids are prin-  
-cipally proper on the first Day of the Disorder, where Resolution  
and Sweat are necessary; *for Mindererus* asserts for a Truth,,  
that, unless, twenty-four Hours after the Invasion of the Diss  
ease, alexiterial Medicines are exhibited, all Attempts to cure  
the Patient afterwards prove fruitiest.

But 'tis universally allow'd by all who have wrote on this  
Disorder, that the most present and efficacious Medicines for **a**Plague, are those of the acid and earthy Kind. Thus *Fra-  
castorius,* in *Lib.* 3. *de Morb. Contag.* both for preventing and  
curing the Plague, orders the following Medicine;

Take of the Juice of Wood-sorrel, two Ounces; of the  
Juice of Citrons, one Ounce ; os Diascordium one Dram;  
of the Cordis! spices, two Scruples; and of Vinegar, one  
Ounce.

*Mendererus, de Poste, 'Cati IS.* has these Words: " There  
" is no Putrefaction, no Infection, no Depravation of **the**" Juices, winch cannot be subdued by Acids; and, to speak  
**" the** Truth, if I was debarred the Use of vitriolic Medicines,  
" I should be but ill qualified for the Cure of a Plague.\*\*  
*Fonseca, de vera Ralumcurand. Pest,* affirms the same: " For,  
" says he, *Johannes Crato, Augenius.de Monte Sancto, Martinus*

*Rulandus,* and others, affirm, that in pestilential Fevers the  
". Spirit of Vitriol is highly beneficial; and I can from my own  
“ Experience affirm, that I have with great Success exhibited'  
it not only with Syrups, but, also, with Conserve of Roses. "  
Among earthy Substances, and those of the fixed bezoardic  
'Kind, the most considerable are, diaphoretic Antimony, the  
Bezoardicum Minerals, Crabs-eyes, Hartshorn calcin'd, and  
.philosophically prepared, Amher, Seal'd Earth, *Armenian* Bole,  
and Cinnabar. Os thefe Various Medicines may be prepared,  
and used either alone, or in Conjunction with Acids. But,  
with Tespect to these, the Curious may satisfy themselves in  
*Antonius Schneeberg,* in *Catal. Med. Simpl. adverse Past.  
Heriricius, a Bra. Unzerus, Lib.* 2. *Antid. Postil,* and *Min-  
der erus.de Peste, Cap.* I5. 1

Among the Medicines conducive to the Cure of a Plague,  
none are more considerable than Analeptics; sor in this Dis-  
order the Strength is greatly impaired, not only by the Conster-  
nation and Terror of Mind, but, also, by the Malignity of  
the Disease. Hence the Physician is carefully .to remove every  
thing, whether of a moral or natural Kind, which is preju-  
-dicial to the Strength ; and, in the Cure, he must diligently  
avoid Anodynes, aS, also, highly Vaporous and fetid Substances.  
For recrutting the Strength, nothing is hetter than a Cordial  
-Water, which is prepared in the following manner:

Take of *Turlciso* Baum, four Handfuls; of Rose-leave?  
bruised with Salt, and of the Flowers of Lilies of the Val-  
ley, each one Handful; of recent Citron-peel, half an  
Ounce; os Cinnamon, one Ounce; and of Mace, hisif  
aDram. Pour upon these, of *Rhrnisu* Wine, one Quart,  
os common Water, three Quarts; and, by a gentle Fire,  
draw off two Quarts and an naif. . . .

This Water, mixed with an.equal Quantity of that of Car-  
duns Benedictus, may either serve as a Vehicle for the other  
Medicines, or it may he exhibited .alone with Syrup of Citron-  
juice, and acidulated with Spirit of Salt. t

Nor are Emetics less beneficial in a Plague, fince the  
Intention of Cure is, with the utmost Expedition, to eliminate  
the received Poison from the Body. Now the contagious Mi-  
asma is first of all mixed with the Saliva, when it descends to \_  
the Stomach; whence it is convey'd to .the Mass of Bleed.  
Hence 'tis proper, with all Expedition, to eliminate the Poisoi 1by the same way it enter'd, and, at the same time, to evacuate,  
by Vomit, the Crudities of the Primae Vite, which greatly  
heighten its deleterious Quality. But this must be done aS soon  
as any Person finds himself infected, and perceives a Languor  
and Cardialgia. Thus 'tis certain from Experience, that by  
thefe means, and the subsequent Use os Sudorifics, the Plague,  
and other malignant Disorders, may be checked in their Begin-,  
ning. To this Purpose, there is a curious and memorable On-  
servation in *Rivcrius,* concerning a certain Man, who, aS soon  
aS he sound from the Symptoms, such as a Pain of the Head,  
and Nausea, that he was seined with the Plague, thrust the End  
os a Feather, immersed in Oil, into his Fauces ; upon drawing  
which out, he evacuated, by Vomit; a Matter at first serous,  
then yellow, and at last ponaceous. Then, betaking himself  
to his Bed, he look Broth, sweated, and was forthwith reco-  
Vered. . . ' ss

The Use of Venesection is not equally agreed upon by all,  
fince some condemn, whilst others approve of it. *Celsius,* in  
*Lib.* 3. *Cap.* 4. gives the following excellent Advice: "Pestis  
" lential Fevers, fays he, require a particular Consideration,  
" since, in these. Hunger, Medicines, or Purges, are by no  
" means useful. But, if the Strength of the Patient permits,  
" Venesection is highly beneficial, especially when the Dis-  
" order is accompanied with Pain." *Rivcrius,* also, affirms,  
that in a pestilential parotid Tumor, winch destroy'd consider- -,  
able Numbers, he preserved many by moderate and repeated  
Venesection; a few Ounces, for Instance, heing only taken  
away. Venesection, however, is never to he used in the Be-  
ginning, or immediately after the Invasion, when the Patient  
is rack'd with Terror and Dread. But *if* there is a Plethora,  
and the Patient has sufficient Strength, it may he moderately  
used on the second or third Day. [Other Authors, however,  
recommend copious Bleeding in the Very Beginning, as it should  
**seem,** upon Very good Grounds.]

Neither are Physicians agreed about the Use of Nitre in a  
Plague : Those who condemn it think, that it refrigerates too  
much, and, for that Reason, resists the Expulsion of the Poison;  
and that the pestilential Poison is stupesactive and putredinous,  
and therefore fatal Diarrhoeas are to be expected from its Use.  
Those, on the contrary, who approve *os* it, maintain, that, in  
Conjunction with Diaphoretics, it must he as beneficial in a  
Plague, aS in other exanthematous, malignant, and inflamma-  
tory Fevers : But the Contest is easily decided ; for the indivi-  
dual Nature and Constitution of the Patients are to he regarded,  
and the Symptoms os the Disease duly consider'd. If the Pa-  
tient is plethoric, the Temperament choleric or sanguineous,  
the Heat violent, and the Fever intense, accompanied with  
Thirst, and an Head-ach, nitrous Substances exhibited in small  
Dofes, with the bezoardic Powders, are highly henesidal. But  
where a Torpor and Drowsiness, a weak Pulse, a Coldnefs of  
the Extremities, and an excessive Fear, have preceded. Reason  
informs us, that nitrous Preparations are to be abstain'd from.  
But 'tis always safer to associate the Nitre with Camphire, by  
winch Union the Vaporous Nature of the Camphire, and the  
refrigerating Quality os the Nitre, are mutually corrected; by  
which means a Medicine is produced, which is not only alexi-  
pharmic, but, alfo, effectually resists Inflammation. I remem-  
ber, when at *London,* to have heard an old Surgeon, who was at  
*Vienna* when the Plague raged in it, say, that he, with great Suc-  
cess, used what he called *she black Elect nary,* composed os Elder-  
rob, and Honey, each half a Pound ; of Gunpowder and Cam-  
phire, each a Dram. The Dose is one or two Drams. And,  
*Giselerus* affirms, that, in the Plague of *Brunsmick,* he, also,  
with great Success, used Gunpowder.

.. Besides thefe, critical Tumors, which terminate a Plague,  
are m be sailfully, treated. Buboes are a good Sign, when they  
‘ soon appear, and are quickly maturated : But, when they im-  
mediately recede. Death is either to be dreaded, or, at. least, a  
Train of terrible Symptoms. Thus, if inguinal Buboes disperse.

a Palsy, or a Gangrene of the Side, ensiles : If Tumors under  
the Chin recede, an intercepted Deglutition, both of solid and  
fluid Aliments, follows, with a Quin fey, which generally proves  
mortal. Tumors behind the Ears are dangerous ; those with  
Carbuncles on them, still worse ; and those surrounded with a  
livid Cisele, mortal. Carbuncles are always worse than Buboes,  
but the), are the more dangerous, the larger, the blacker, and  
the nearer the Heart they are. In both, Sudorifics, and such  
Medicines as force the Humours to the Circumference of the  
Body, are most proner. When Buboes come flowly forward,  
attracting Medicines, Cupping-glasses, and Vesicatories, are  
ordered to he applied. If the Buboes are protuberant, the Sup-  
Λ puration is to he promoted by Cataplasms of Figs, white Lily-

root, Onions roasted under the Afhes, Meal of Linseed, Honey,  
and Saffron; or we are to apply suppurating and discutient  
Medicines at the same time, such as the simple Diachylon-plai-  
ster, or that made tip with the Gums, the Mucilage-plaister,

\*'2nd the Melilot-plainer. When the Buboes are suppurated,  
they are to he .laid open, and cleansed with the Liniment of

*' Arcaus,* sometimes mixed with Basilicon ; then they are to bo  
consolidated, but not too soon, since, 'tis better the sanious  
Matter should be suffered to flow for a considerable time. To  
-Carbuncles, becaufe the Humour is already subject to Corrup-  
. tion,..we are not to apply Suppurants; but we are to endeavour  
. to procure the sailing off of the Crust : For which Purpose, the

Authors who write on the Plague, order the adjacent Parts to  
'he anointed with a Digestive, and some acrid Piaister, to be laid  
upon fine-Carbuncle. When the Crust is fallen off, the Car-  
buncles are to be treated with the Unguentum AEgyptiacum,  
or the Unguentum Puscum Wurtaii, with Honey of Roses.  
But is a sphacelous Corruption is present, and seems to spread,  
itdin to he.checked by a sufficient Scarification, and the Appli-  
. 'cation os some Liquor which. powerfully resists inflammation

and Putrefaction. sADiquor.of this Kind, much recommended  
as highly effectual, may be prepared in the following manner :'

Take of rectified Spirit ofWine, four Ounces; of Camphire,  
two Drams ; of Saffron, one Dram ; and a Dram of arti-  
sicial Nitre, which is prepared of urinous Spirit of Sai Am-

-. - moniac, and Spirit of Nitre : And let this be perfectly dis-  
solved in Spirit of Wine.

As to the Regimen, it is to be observed, that, as in all ex-  
anthematous Disorders, so, much more in a Plague, excessive  
Heat, both of the Bed and Room, is to be avoided, as highly  
prejudicial. On the contrary. Cold is to be guarded against ;  
lest, by its means, the Eruption of the Tumors, and the Exha-  
lation of the poisonous Matter through the Pores of the Skin,  
should, be prevented. In this Disorder, all things ought to be  
temperate, since Danger attends both Extremes. *Hosisiman.*

PETALA. Petals ; that is, the Flower-leaves of Hants See  
'. the Explication os Botanic Terms, under the Article BOTAN γ.

PeTALODES, πεταλώδινς. An Epithet sor the Sediment  
of Urine, importing scaly, or resembling Leaves ; which is a  
Sign of an unequal Colliquation os the Parts of the Body, and  
sometimes of an Erosion, or Exulceration, *os* the Bladder, in  
Botany *Petalodes* is an Epithet sor those Plants, which are fur-  
nished with Flower-leaves, or Petais ; whereas those, which  
have none, are called *Apetalous,* that is, 'without Petals.

PETASITES.

The Characters are ;

The Root is large and perennial; the Leaves are grey, large»  
and orbicular. The Calyx is cylindrical, multifid, squamous,  
and contains many Floscules collected into a Flower. The  
Flowers are disposed in a Thyrsus, and appear before the Leaves ;  
and the Ovaries are furnished with a Tube, which has a cla-  
Vated, bifid Apex.

*Boerhaave* mentions four Species of *Petasites* ; which are,  
I. Petasites; major; & Vulgaris. C. B. P. Iq7. *Tourn.*

*Inst.* 45I. *Boerh. Ind. A.AiS. Petasites.* Offic. Ger. 667.  
.Emac. SI3. Raii Hist. I. 260. Synop. 78. *Petasites vulgaris.*Park. 4t Q. *Peta sites vulgaris rubras rotundiori folio.* J. B. 3.

. 566. BUTTER-BUR. . .

The Roots of Butter-bur are about a Finger thick, long,  
smooth-branched, and creeping in the upper Part os the Earth,  
having but few Fibres ; they have a strong Smell, and an hot,  
aromatic, bitterish Taste; from these, early in the Spring, arise  
thick, hollow, downy Stalks, a Span high, clothed with small  
purplish Flowers, which consist only of a fistular Thrum, with-  
out any Border *of Petals,* which turn into Down : When these  
are past, the Leaves appear, which are Very large, and roundish;  
Tut hollowed in next the Stalks, indented about the Edges,  
whitish and woody underneath, and green above; it grows by  
River-sides, and in marshy Grounds. The Flowers appear in  
the Beginning of *March.*

The Roots of Butter-bur are sudorific, alexipharmic, and  
good for all kinds of Fevers, and malignant,' infectious, and  
pestilential Distempers; they are cordial, prevent Fainting, and

Shortness or Breath ; they likewise provoke Urine, and are ac-  
counted good to destroy Joint-worms. They are outwardly  
applied, in the Form of a Cataplasm, to pestilentis! Buboes,  
and Plague-fores; a great Quantity of them are put into cheAqua Theriacalis. *Miller\*s Bat. Off.*

The Plant is extraordinary bitter, but not with an equal De-  
gree of Acrimony. The *Gormans* commonly call it the *pesti-  
seniial Root,* because it is sound, by Experience, to be os ex-  
cellent Service in pestilential Fevers. They put the Roots,  
stripped of their Bark, in Vinegar, till it be sufficiently impre-  
gnated with their Virtues, and then exhibit it with the Juice of  
Rue and Theriaca; it is, also, recommended for an uterine Lipo- .  
thymy. Difficulty of Breathing, Cough, and Asthma; and is  
effectual against the broad Worm, and provokes Urine, and  
the Menses. Used outwardly, it is said to he good for Buboes,  
and malignant Ulcers. *RaH Hi P.*

2. Petasites ; minor. *Co B. P.* joy.

3. Petasites; minor, alter; Tussilaginis folio. *Hi R. Par.*

4. Petasites; Africanus ; Calthae palustris folio. *Hi L.* 488.  
*Blitum Africanum, Caltha tsalnstris folio, caule nudo, cubitali  
spicam pedalem et amplius sustinente.* Plukn. Phytog. I82. Al-  
mag, 68. *Boerh. Ind. alt. Plant.*

The Name *Petasites* is from πετἀω *(peta css* to extend, be-  
cause of the Largeness of its Leaves ; or from πετασος *(petasis)*an Hat, or Bonnet, because the Leaves have a sort of Cavity in  
the Middle, and have their Margin expanded horizontally  
round it.

. The first Species, in particular, and, also, the second, are  
officinal. The Root, Leaves, Pedicles, Stalks, and Flowers,  
have a singular Taste, not to be found any-where else. Peta-  
sites is heating, aromatic, and balsamic, by which its Virtues  
are understood. It is aperitive, and, in Cases where a Poison  
is very moveable, expels it by means os Sweat ; whence it cures  
the Pestilence, and, in all *European* Languages, has a Name .  
from that Disorder. They infuse a Dram, or half an Ounce,  
of the Root in Water, or Vinegar, and sweeten it with Honey ,  
this procures a profuse Sweat, and so expeis the Poison. This  
Property principally belongs to the Root, which is, also, esteemed  
an Alexipharmic. The Leaves, stripped of their outer thin  
Membranes, and applied to the Feet of hydropic or leucophle-  
gmatic Patients, dissipate the watry Matter ; for, being of an  
attenuant, aperient, and resolvent Quality, they excite Sweat, '  
increase Perspiration, and, by that means expelling every thing  
that is Volatile, discuss putrid, alcaline Matter, and extermis  
nate them out os the Body. Preparations of the Petasites are, **a**Powder, Syrup, and Decoction. The Leaves and Flowers  
have the same Virtues as the Root, which later is to he taken  
up, before the Leaves come forth, or when the Flowers begin  
to appear; otherwise its Virtues are exhausted. They scrape off ...  
the Bark os the Roos, and infuse the Shavings of the rest; then  
mixing this Infusion with theJuiceofRue, and a littie Theriaca,  
they exhibit it as a most effectual Remedy against the Plague. The  
Leaves, outwardly applied, , discuss Contusions. The Roots are,  
also, proper in the Pleurisy, when the Pus is concocted, and in  
Disorders of the Breast. *Hast. Plant, adscript. Bocrhaau.*

PETECHLE. Red, or purple Eruptions, resembling Marks  
excited by the Bites of Gnats, or Fleas, which frequently appear  
in Fevers, and the Small-pox ; and are always of Very bad Pre-  
sage. *Sydenham,* with great Reason, apprehends, they are Very  
often excited, and exasperated, by too warm Medicines, and an  
over-heating Regimen.

PETECHIALIS FEBRIS. - A Petechial FeVer.

Petechial Fevers of the genuine Kind are of an highly malig-  
nant and contagious Nature, greatiy prejudicial to the Head  
and Strength, accompany'd with Spots ot various Colours ap-  
pearing on the Skin ; they arise from a Corruption of the Vital,  
Juices, and, in consequence.of their subsequent putrid Diffolu-  
tion, prove mortal.

These exanthematous Fevers are justly call'd *malignant,* or  
*poisonous,* since, for the most part, they are produced and pro-  
pagated by an highly subtile Vapour, or Miasma, of an active  
and virulent Nature, exhaling from the Bedies of those afflicted  
with them. Besides, they are not to be cured without **the**greatest Difficulty; and, in a short time, prove mortal to many.

. They, also, quicklyand greatly impair and destroy that.Strength,  
on which the Motions, which sustain and support Life, depend.  
And lastly, they at fust appear to be os a mild and gentie Na-  
ture, and often impose so far upon Physicians and By-standers,  
as to he mistaken for catarrhal Fevers ; but afterwards exert  
their pernicious Effects with so much the greater Violence.

But the deleterious Nature of Petechial Fevers may be  
known from the following Signs: At first the Patients generally  
complain of so great a Weakness, and Loss of Strength, that,  
they can hardly stand upright, or walk, but immediately faint  
away ; whereas such a Weakness is only to he observed in the  
Vigour and Height os other continued and acute Disorders. The  
Head is, also, in the Beginning of this Disorder, afflicted with

Pain, Heat, and **a** Torpor; the Mind is dejected, anxious,,  
uneasy, loses all Hopes of Recovery, and prognosticates the  
worst. A continual Watching torments the Patient, nor does  
he ever enjoy a refreshing Sleep; his Appetite is lost, and  
his Countenance dejected ; his Pulse is lang-iid, small, and un-  
equal ; his manner of lying in Bed is preternatural and irre-  
gular, since with his Limbs folded, aS it were, together, he tosses  
his Body perpetually. His Breast is oppressed, and this Op-  
pression is sometimes accompany'd with a dry Cough , the Fi-  
thres of the Muscles are convulsed by a kind of undulatory and  
tremulous Motion, whilst the Tendons are contracted, and are  
affected with TwitchingS. Many Patients, labouring under  
Petechial Fevers, neither complain of Thirst, Heat, Pain, nor  
Anxiety ; but rather affirm, that they are sensible os no Indis-  
position, except an unusual Languor, and want os Sleep. The  
Urine is, at first, thin, like that of sound Persons. On the  
fourth, fifth, or even the seventh Day, appear Spots, frequently  
os Various Colours, especially on the Back and Coins, some-  
times more, and sometimes sewer in Number; but, for the  
most part, without affording any Relief to the Patient; for  
which Reason they are rather to be esteemed symptomatic than  
.critical.

The Antients gave these Spots the general Denomination of  
*Exanthemata* ; but the *Italian* Writers have fince called them  
*Petechia,* from the Word *Pedecbio,* because they resemble the  
Bites os Fleas. The *French* Authors have call'd them *Purpu-  
rates,* from their purple Colour; the *Spaniards, Tobcrdillo,*from their redifli-yallow Colour; and the *Germans, Puncti-  
.culares,* or *Lenticulares,* because in Figure and Colour they  
resemble a Lentil; whilst the *Hungarians* denominate this  
Disease from the Pain and Delirium which attend it.  
But, besides the Figure of the Spots, Petechial Fevers differ  
from other exanthematous Disorders in this, that the Spots in  
the former not only appear without any Degree of Heat, Itch-  
ing, elevation. Asperity, and Exulceration of the Skin, but,  
also, for the most part, without affording any Relief to the  
Patient, because the Matter of them is not of a saline and  
caustic, but rather of a putrid and corrupted Nature.

These Spots are so far from affording any Hopes of RecoVery,  
that, on the contrary, the more numerous they are, the greater  
Degree os Corruption they discover; and when they are os A  
livid, leaden, or blackish-green Colour, they are plain Proofs  
os a sphacelous Corruption. It is, also, to be observed, that  
those, who escape the Fury of this Disease, are recovered, not  
by any cutaneous Eruptions, but either by profuse Sweats, of  
a fetid, acrimonious Smell, or by critical Fluxes. But such an  
happy Event only happens by the Strength and friendly Concur-  
rence of Nature in those Persons, whose Juices are not as yet  
greatly corrupted, but are as yet temperate, and retain some-  
thing of an alexipharmic Quality. Many Patients, labouring  
under Petechial Fevers, rather die, either of a sphacelous Cor-  
ruption in the Stomach, Intestines, and other Viscera, or of a  
phrenitis, or, which happens more frequently, of an anginous  
Inflammation os the Fauces and Oesophagus ; the Carcases, in  
the mean time, of such Patients diffusing a most intolerable Stench  
immediately aster their Death. This fatal and unlucky Event  
is prognosticated by the following Signs: If the Patient's Thirst  
is either none at all, or insatiable; if the Tongue is dry, fur-  
rowed, and blackish ; if the Fauces are inflamed, and covered  
with *Sordes,* and the Deglutition is difficult; if, aster the eru-  
ption of the Spots, the Respiration becomes difficult, and the  
Uneasiness of the Breast not only continues, but is increased ;  
if, after Sweat, or a Flux, the Delirium, and other Symptoms,  
**are** augmented, whilst the Urine is neither turbid, nor deposits  
**a** Sediment; if the Eyes become dim, **the** Mind totally deli-  
xious, and the Patient pick the Knaps *os* the Bedcloaths ; if there  
is a fubsultory Motion os the Tendons ; if the Excrements are  
involuntarily discharged ; if the Patient is covered with in cold  
Sweat; and, lastly, if Convulsions come on, which put an  
End to Respiration and Life.

The formal Caufe os these pernicious Fevers consists in a  
putrid Dissolution or Colliquation of the Blood, and Vital Juices,  
and especially in the Contamination, and totally peccant State,  
Os that most subtile, elastic, and lymphatic Fluid, which, being  
originally contained in the Blood, secreted in the Brain and  
spinal Marrow, and distributed through the Nerves to the  
whole Body, conveys Sensation, and a Power os Motion, to all  
its Parts ; for that this poisonous Vapour, by which even found  
Bodies are infected, is os such a Nature and Power, aS not  
gradually to induce a putredinous Fermentation on the Blood,  
and other Humours of the Body, but, also, penetrate imme-  
diately to the interior Recesses os the Brain, and nervous Parts,  
and there to corrupt the subfile nervous Fluid, is obvious from  
this; that, as soon as such a poisonous Vapour is received into  
the Body, the natural. Vital, and animal Strength begins to  
languish, even in perfectly sound Habits, whilst the Crash of

the Blood and Humours as yet remains entire, and free from)  
Corruption.

This virulent and contagious Miafma principally enters the.  
Bedy by the Nostrils, Fauces, and Bronchia ; for in no Part  
of the Bedy are there more open and less defended Nerves,  
than those in the Nostrils distributed from *the Jinst and foe  
cond Pairs.* Whilst, therefore, this deleterious vapour passes  
with the Air through these Nerves, it is not surprising, that it  
should immediately reach the Nerves and Brain, and that the  
Persons, who have this Misfortune, should he immediately  
seized with a kind of Intoxication, a Torpor of the Head, **a**languor os Strength, and a Vertigo. But this eon tagin us Mi-  
asma, most of all, mixes itselfwith the Saliva, and, with it, de-:scends to the Stomach ; which, as heing, also, a nervous Part, is  
generally the first heat Of thefe contagious Fevers. Hence **the**first bad Symptoms, for the most part, discover themselves first  
in the Stomach and Praecordia ; such aS a Nausea, accompanied  
with an Inclination to Vomit; frequent Stools, accompanied'  
with Gripes , or Violent Costiveness ; Loathing *of* the Food,"  
Anxieties of the Praecordia, aCardialgia, and frequent and copious-  
eructations of Lymph from the Stomach. And it is evinced  
by Anatomical Observations, that, in Persona who have died  
of Petechial Fevers, the Stomach has, beyond all other Parts,  
been sound affected with a sphacelous Corruption. But whilst  
this Miasma is mixed, not only with the Saliva in the Mouth, \*  
but, also/ with the Gastric Liquor, and the Pancreatic  
Juice in the Stomach, its contagious and propagating Force is  
much augmented ; sor it is universally agreed upon, that thefe  
salival Juices, subservient to the intimate Digestion of the Ali-  
ments, are of *so* subtile, spirituous, aereal, elastic, and sermenta- .  
ble a Nature, that sweet Substances, with which they are mixed,  
are forthwith put into a fermentative Motion. Hence these  
Juices, already in an intestine fermentative Motion, readily  
conspire with the subtile and putredinous Miasma, when con-  
Veyed to .them ; fo tisat the latter propagates itself, and is in-  
creased, exactly in the same manner, aS a small Piece of Leavea  
ferments a large Mass os Dough.

Hence the Reason is sufficiently obvious, why, in order to  
avoid the Contagion of Petechial FeverS, nothing has, by **the**most Ikilful Physicians, been observed to prove more effectual,  
than avoiding the Breath of the Infected, especially when the  
Disorder is at its Height, and the Putrefaction greatest ; sre-  
quently discharging the Saliva, and holding such Stibstances in  
**the** Mouth, aS have a Tendency to evacuate it ; chewing the  
Roots of Angelica, Zedoary, Masterwors, and Burnet; or  
smoking Tobacco. Hence, also, the Reason is obvious, why  
this deleterious Miasma is far most easily received, and soonest  
exerts its pernicious Force, in a Stomach that is loaded with **a**large Quantity os Crudities, and pituitous or salival Sordes,  
Hence, also, the Reason appears, why gentle Emetics, in Con-  
junction with Alexipharmics, in Persons recently infected, are  
the most effectual Means of checking a Petechial Fever in its  
Beginning.

I am os Opinion, with *Hippocrates,* that these contagious Fe-  
Vers derive their first Origin from some common and prevalent  
Intemperature osthe Air ; such as a long-continued, moist, rainy,  
cloudy, as also a close, hot, and moist State of the Atmosphere;  
which, by reason of the large Quantity of aqueous Vapours,  
obtund and depress the brisk, elastic, and expansive Force of  
the Air, which sustains such a Motion of the Solids and Fluids,  
as is necessary to Lise. Hence the salutary Excretions, espe-  
cially Perspiration, hecome languid and disturbed ; whilst **the**useless, superfluous, and corrupted Parts are retained in **the**Habit; winch, heing accumulated in the Blond and Juices,  
must necessarily generate a strong Tendency to Corruption **and**Distblution. Belides, under such a Constitution of the Wea-  
ther. Vegetables and Grain acquire a kind of foreign Nature,  
. which is unfriendly to the human Constitution ; sor it is Cer-  
tain from Experience, that, during a long Tract of moist and  
.rainy Weather, there is found, especially in Rye, a large  
Quantity of the Darnel, which is of a noxious and almost  
poisonous Nature. Nor does Rye, produced in such rainy Sea-  
sons, yield so large a Quantity os Spirit, nor prove so salutary  
and nourishing Bread, as that which grows during dry and hot  
Weather ; so that it is not surprising, that such unsalutary and  
corrupted Aliments should dispose rhe Bedy to Putrefaction.

Besides, the Aur is rendered insalutary, and unfit sor gene-  
rating putrid Disorders, by frequent and long-continued Inun- -  
dations; for, in this Case, the Water stagnating, especially by  
means os the Heat of the Sun, begins to grow putrid, arid  
sends up many noxious Effluvia. into the Atmosphere. Large  
Quantities, also, of Various kinds os Insects are generated about  
stagnant Waters, from which a large Portion of caustic, saline,  
deleterious, and subtile Matter is exhaled into the Air. Now,  
that these things are highly prejudicial to Health, is certain  
from Various Observations, which evince, that, after large Inun-

dations, contagions and almost pestilential Fevers have been  
nroduced. See *Hiflsiman, de Temp. Ann. infalub.* Of the same  
offensive and insalutary Nature is the Air, when impregnated  
with Exhalations arising from uninterred and putrefying human  
Carcases,orfrom theExcrementsof Animals ; and especially when  
fuch an Air is confined, and deprived os the Access of a more  
pure Atmosphere. ..

Not only an impure and insalutary Air, hut, also, the parti-  
cular Habit and Disposition of the Body, contributes to the  
Generation of Putrefaction, and, consequently, to the Pro-  
duction os Petechial Fevers. Thus it is certain from Experience,  
that phlegmatic and sanguineous Persons, those of lax and soon-  
gious Habits, those of timorous and anxious Minds, and those  
whose Strength is exhausted by Luxury, the excessive Use of  
improper Aliments, Drunkenness, Venery, Hunger, protracted  
Sorrow, Watchings, Fatigue, or Haemorrhages, are not only  
easily and frequently seized with Petechial Fevers, but also with  
Difficulty recover from them ; for no other Reason, than that  
their impure and weak Bodies have a strong Disposition to Pu-  
trefaction and Corruption. Cachectic Women, also, and those  
affected with a Suppression of the Menses, those labouring under  
**a** Lues Venerea, and such as have the dire Remains of it in their  
Habits, are not only readily seized with Petechial Fevers, but,  
also, escape with great Difficulty.

. .Hence we may easily judge, why these contagious Fevers  
rage so frequentiy in Camps, where all the Causes productive of  
this Disorder generally concur; for the Soldiers are sometimes  
exposed to a dry and hot Air, and, immediately aster, to a  
moist and cold Atmosphere. They fleep in the open Air, and  
often in moist and marshy Places. The Excrements Of Men  
and Animals are every-where to he found. Nor, on account  
Of the Intrenchments, is there any Access to the Wind, in  
order to dissipate the fetid Exhalations. They eat improper,  
and sometimes absolutely corrupted, or half-boiled Aliments.  
They drink stagnant and putrid Waters, and have their Strength  
impaired by Hunger and Watchings. Hence, when, from this  
laborious and hard Course os Lise, they retire to their Winter-  
quarters, indulge themselves in Ease, and eat copiously, the in-  
rental Corruption, gradually contracted, at last increases so far,  
as to appear in a Petechial Fever; for which Reason Disorders  
of this Kind are more frequently observed in the Winter-quar-  
ters, than in the Camps of Soldiers. For the same Reason these  
malignant and contagious Diseases are more incident to poor  
Persons, who live in Tilth, and are confined, in small Cot-

\* tages, to a Vapid and impure Air, than to opulent Persons,'who  
have hetter Opportunities of observing the Rules olTiealth, with  
respect To Air and Regimen. These Fevers, also, frequently  
happen in Hospitals, Nurseries for Orphans, and public Prisons,  
where many are kept together, and lead a miserable Life, which  
**poses the** Body for receiving the Contagion.

*’ ’’ . -The-QsyBB.*

inorder to preserve ourselves from Petechial Fevers, nothing  
is of greater Importance, than that, during insalutary Seasons  
**of** the Year, fit for generating malignant Disorders, we should  
carefully avoid-an Air impregnated with noxious Vapours and  
Exhalations, and destitute os a briik and elastic expansion. Be-  
sides, fince, under such a Constitution of the Air, the Bodies  
of People are weak, and disposed for contracting Diseases, it is  
highly expedient, that, at such Seasons, we should abstain from  
everything, which can either impair the Strength, or render  
the Excretions more languid ; such as Violent Commotions of  
Mind, Grief, Terror, Care, intense Meditation, protracted  
Watchings, and exposing the Body to Cold, especially in the  
Night-time, or with thin Cloaths in cold Weather. Besides,  
the Increase of Crudities in the Primae Vise is to be prevented;  
for which Reason we are to abstain from eating excessively, es-  
pecially of insalutary Substances, from Surfeits, the continual  
Smoking of Tobacco, and the profuse Use of Coffee, winch,  
as it is. unfriendly to the Stomach, so it is much more the  
nervous Parts, and the Mixture of the vital Fluids. We are  
to take care to breathe a salutary and pure Air; for which Rea-  
son we are to avoid low Pisces, in which the Air readily be-  
comes Vapid; as, also. Houses, which are not exposed to a free  
a nd. open Air. The excessive Humidity of the Ain is, also, to  
be corrected by Fires, and Fumigations by Mastich, Amher,  
and Juniper-herries.

But, among all the .Preservatives against Petechial Fevers, I  
know none more effectual, than the moderate Use of good  
Wine, especially of the *Rhenish* Kind ; for this, drank mo-  
derately in the Morning, or even at Meals, surprisingly suf-  
tains and recruits the Strength ; promotes the Circulation of the  
Blood, and the several excretions ; assists the Digestion of the  
Aliments ; and.excellently resists Putrefaction, especially when  
moderate Exercise, and some other diluting Liquor, are used in  
Conjunction with it. I can, from long Experience, affirm,  
.that in epidemic Disorders, arising from a moist Constitution

Os the Air, those who observed a good Regimen, find, daby  
drank a moderate Quantity os laudable Wins, escaped : Those.  
also, who have written .concerning the Plague, affirm, that  
Wine is ope os the hest Preservatives against that Disorder. And  
I Venture to assert, that, aster a Crisis happens in .Petechias  
Fevers, there is no better Medicine, than Wine, for.reinforce-i  
ing the languid Strength, and promoting cutaneous Excretion.  
. in the Beginning os Petechial Fevers no.MedicineS are more'  
heneficial than Acids, especially Citron-juice put into Ptisans  
to be drank, in order to extinguish the Heat,' and remove the  
Putrefaction, as, also. Wine-vinegar either simple or distilled.  
Joined with Mixtures of proper Waters, and fixed diaphoretic  
Powders. Besides these, such Medicines are, also, proper, as,  
without impairing the Strength, coll ion ate the Saliva, and free  
the Breast from Infections.; for, with the celebrated *Cramerus,***I** haVe often observed, that hardly any Persons, who had **a**copious Discharge os Saliva and Spit, died os Petechial FeVerS.  
For this Reason, the Physician now mentioned, in these DIs-  
orders, made frequent Use of alexipharmic Mixtures, com-  
posed of distilled Vinegar, or Vinegar os Scordium and Cinna-  
bar, and sometimes of bezoardin Mineral, and Oxymel os  
Squills. But it is an horrid Practice, in the Beginning, of  
Petechial Fevers, to exhibit Volatile beaoardic and sudorific  
Medicines, with an hot Regimen, and boiling-hot Infusions; foe  
hy these means the intestine putredinons Motion is increased,  
an Orgasm brought on, and a greater Loss of Strength"  
produced. . .

In the Decline os a Petechial Fever, no Excretion is more  
salutary, than that made by Stool coming on at a proper time :  
**I** have sound from a Series of more than fifty Years Experience,  
that Fevers of this kind were rarely terminated by Sweats **and**Haemorrhages alone, but more frequentiy by a Diarrhoea appear-  
ing on the seventh, the ninth, or the eleventh Day ; and that  
nothing was more prejudicial, than stopping a Violent Di-  
arrhoea, or a critical Flux, in the Beginning. I have, also,  
sound from Experience, . that, in, Cases where catarrahal,  
malignant, and exanthematous Disorders have been terminated  
by Fluxes, the Patients have escaped the white Purple Fevers;  
which, in the Decline os a Petechial Fever, when the Pulse is  
become equal; frequently supervenes about the eleventh Day, not  
without great Danger to the Patient. The most Ikilsul Phy-  
sicians have long ago adverted to the Salubrity of Fluxes in  
Disorders of this Nature. Thus *Hippocrates,* in his *Epidemics,*informs us, that those who labour under acute Fevers os this  
kind, were cured by Fluxes. *Galen,* also, in his Treatise *de acres  
Bile, Cap. An* informs us, that, in a certain pestilential Const!-  
tution, a Diarrhoea proved highly salutary. *Gcrardus Columba,’*also, in his Treatise *de Postil. Febr.* highly extols the beneficial  
Effects of Fluxes, in these Words,: " All, who had copious  
" Fluxes, though with the Signs os Crudity, were at last  
or cured ; for, as the Flux proceeded, the Signs os Concoction  
" appeared, the Disease became milder, and, the Flux still  
" continuing, the Patients were totally and entirely cured."  
This Doctrine is, also, consumed by *Falleriola,* in *Ohs. Lib.* 6.  
*de Febr. Schenkius, Observat. Lib.* 6. *de Febr. Rdvcrius, Obser-  
vat. Cent.* I. *Olsseervat.* 47 ζδ 48. and *Cent.* 2. *Obs.* 34 *et Sy.  
Hirst ius, in Observat, io.. Johannes Rhedius in Ctnt.ot. Obse*85. *Screta, de Febre castrensi maligna. Cap.* 4. and *Borecus iri  
These Pract. de Febr. pair,* as, also, in hrs Treatise *de Cause,  
Cap.* 2.

This is, therefore, the Method of Nature, with which **the**Physician ought to act in Concert, and which he ought to assist,-  
if weak-and defective. I am convinced from Experience, that  
whatever is to be expected in the Cure of putrid, malignant,  
pestilential, and Petechial Fevers, consists in a seasonable Use  
of such Medicines, as, with Safety, render the Body soluble **j**but these ought principally to be exhibited about the critical  
Days, that is, from the seventh to the fourteenth ; for, if they  
are used in the Beginning, they do but little Service, because  
the Matter is not then concocted, and sit for Excretion ; but  
as, in order to render the Body soluble through the whole Course  
of Petechial Fevers, there is nothing more prejudicial, tharj  
thoseMedicines, which act by a certain caustic Acrimony, Sena-  
leaves not excepted ; so nothing is more proper for this Pur-  
pose, than such Substances, as have nothing in their Contexture  
capable of impairing the Strength, but render the Body, soluble  
in a mild and gentle Manner. The most considerable of these  
is a due Dose of Manna, mixed with a sufficient Quantity .os  
Cream of Tartar, which, on account os its grateful Acidity,  
is, also, beneficial in these Disorders. This Intention is, also,  
answered by solutiVe Syrup of Roses, mixed with a saline Sti-  
mulus, prepared of Cream of Tartar, Sal Polycbrest. or anti-.  
moniated Nitre ; and exhibited in A due Dose, ata proper Sea-  
son, and with some diluting Vehicle, fuch as Whey duly pre-  
pared ; or temperate mineral Waters, such as rhe *Antonian* and  
*IVildungensian* Springs. No less excellent for the same Purpose  
is the Pulp os Tamarinds, or Decoctions Of them prepared

with Mantra, or Rhubarb. How excellent Effects are, in Pc-  
techial and malignant Fevers, produced by Laxatives, we are  
informed by *Mcraeus,* in his Treatise de *Malign. Febr.* where he  
gives us more than twenty Instances, in which he, with great  
Success, used Pulp of Tamarinds, and an Infusion of Rhubarb»  
Sena-leaves, Cream of Tartar, and Manna, in the Water of  
Wond-sorrel.

Bur, in the Cure of Petechial Fevers; Physicians are pot  
**agreed** with respect to **the** Propriety of Venesection ; and, in"  
deed, it must he owned, that there is so great a Difference he-  
tween malignant Fevers, that the most skilful Physicians are  
often lost and bewildered in investigating their Natures ; but  
it is certainly true, that, when such Fevers afflict plethoric or  
pletbotioo-cacochymicai Patients, Venesection is highly proper,  
as a Preservative; as, also, in those accustomed to V enescehon,  
high and luxurious Living, or a sedentary Life; for, I have found  
from Experience, that thofe, from whom Blond has been pre-  
viously taken away, either were not seized with those Disorders  
at all, or were less affected, and more easily recovered, then those  
who had nor the Advantage of Venesection.

But it is carefully to he observed, that both daring Petechial  
Fevers, and in their Decline, the languid Stomach is nor to be  
overloaded with Aliments, much less with those of an infalu-  
**tary** kind, and especially with large Quantities of Flesh. It is  
**a** vulgar Error, especially among the common People, to he-  
Iieve, that the Strength is restored by Aliments. But this is  
one of the principal Causes, why Patients, who sometimes think  
themselves past Danger, yet find themselves miserably' mistaken;  
since, by this means, the former Disorder returns, and more  
effectually endangers Life; or a new Disease supervenes. Hiofse  
*tnan.*

PETIA. **A** Rag sonned into a *Modulus,* or Bag, in order  
th contain Medicinal Ingredients. *Petia Oculi* is an Haemor-  
rhage from the E5'c. *Castellus.*

’ PETICULAE. The same as PETEcHIjE.

PETIGO ; the same as *Impetigo.* See **LEPRA.**

PETIOLUS. The Pedicle, or Stalk, of a Fruit.  
PETIVERIA. Guinea Henweed.

The Charactsrs are;

It hath a Flower consisting of four Leaves, which are placed  
almost in the Form of a Crofs, from whose Cup rises the Poin-  
ts!, which afterwards becomes the Fruit, which is bordered and  
cut at the Top, resembling an inverted Shield, containing .oh-  
long Seeds.

*Moller* mentions but one Species of this Plant;

Petiveris folani foliis, loculis fpinosis. *Pluk. Nov. Gen.*

This Name was given to this Plant by Father *Plunder,* who  
discovered it in *America,* in Honour to MI. *James Peciver,* an  
Apothecary, who was a curious Botanist.

It is a very common Plant in *Jamaica, Barbadaes,* and most  
of the other Islands in the *West Indies,* where it grows in shady  
Woof, and all the *Savannahs,* in such Plenty, as to become **a**very troublefome Weed ; and, as this Plant will endure a great  
deal of Drought, S0 it remains green, when other Plants are  
burnt up, which occasions the Cattle to broufe on it; and,  
having a most unfavouty strong Scent, somewhat like wild Gar-  
lick, it gives the Cows Milk the fame Flavour ; and the Cat-  
**de,** which are killed soon after seeding upon this Plant, have  
**a** most intolerable Scent, so that their Flesh is good for little.  
*Mollers Dictionary.*

- PETRAE OLEUM. **See NAPHTHA** and PETRoLjE-

**t)M.**

PETRACORIUS LAPIS. Geoff. Praelecti AngL Edit.  
174. THE PERIGORD STONE.

This is a fossile ferruginous Substance, black, hard, and heavy,  
seeming to contain some Particles of Iron. It is dug in the  
Mountains of *Dauphins,* and ufed only in painting earthen Ves-  
feis, and by the Enamellers. *Geoffrey.*

PETRELAEUM. Bee PETRoLJEUM.  
PETRIFICATIO. See ANCUBITUS.  
PETROLEUM. See **NAPHTHA.**

In *Brosely, Benily, Pitchford,* and other Places adjacent in  
*Shropshire,* there lies over most of the Coal-pits,, or Mines, a  
Stratum, or Layer, of a blackish Rock, or Stone, of some Thick-  
ness, which is herous, and contains great Quantities of bitumi-  
nous Matter.

This Stone, heing brought to the Workhouse, is ground small  
by Horsemills, fuch as are used sor grinding Faints, to make  
Glass of j the Powder is thrown into great Coppers of Water,  
where, by Boiling, the bituminous Matter is separated from the  
stony, or gritty, this last sinking to the Bottom, the other  
swimming at the Top.

This bituminous Substancejbeing gathered together and evapo-  
rated, comes to the Consistence of Pitch, and, with the Help of  
an Oil distilled from the fame Stone, and mixed with the Pitch,  
comes to he thinner, or like Tar ; the Uses of both which  
Materiais, either for Shipping, or otherwise, these **Substances**

are said to supply, and even to excel. This harhecti triad on  
several Boats, and it does nut crack, like the ordinary Pitch or  
Tar, hut always keeps blade, or soft ; and therefore is proposed  
to hinder the Worms from getting into the Ships pitched with  
in ’ ’ . ..... - . - ... s...

- There is, likewise, distilled from this Stone an Oil, which  
may he used for Oil of Petre, or Turpentine, and her been  
tried in Akes and Pains. *Philascphical Transactions. -*

This Oil has lately been advertised as a recrea and excellent  
Topic for Pains, by the Name of *Oil diestilled -from a stinty  
Pock.*

PETROMARULA- Α Name of a *Cretan* Species: of  
*ihapuriculus. Raii Hist. Plant.*

PETROSELINUM. See **AFIUM.**

PETROSUM OS. The herd Part of the Temporal Bone.

**SeeGAPUT. ' : - - . . -i .- i,. -T**

PETUM. Tobacco. See NICOTIANA. *: A st*

PEUCE. The Pine-tree, or *Larix.* s - . . :

PEUCEDANUM. -.

The Characters are ; ' J

The Root is perennial, deeply funk; and hairy. The Leaves  
are winged, narrow, grassy, and divided into three Paris. The  
Seed is flat, almost oval, slightly striated and marginated.

*Boerhaave* mentions three Species of this Piant ; which are,

I. Peucedanum; maius; Italicum. C. *B. P.* I49. *-M. U.*36. *Tab.* 9.

2. Peucedanum; majus; Italicum foliis longis, angustis.  
*An ferula Orientalis, Peucedani folio?* T. Cor. *22. ' 'st.*

*3. Peucedanum* ; Germanicum. *Ce Β. P.* I49. *Tourn.Insu*31S. *Boerh. Ind. A.* 66. *Peucedanum.* Offic. GeI. 896?  
Emac. Io54. Raii Hist. I. 416. Synop. 3. ac 6. *Peucedanum  
vulgare.* Park. Theas. 880. *Peucedanum minus Germanicum:  
j.* B. 3. 36. *Peucedanum, Pinastrella, Paniculum porcinum:  
Mete.* Bor, I. 58. HOGS-FENNEL.

The Leaves of this Plant are large and winged, observing a,  
tripartite Division, and having three Leaves upon one Stalk,'  
which are much broader and flatter than common Fennel. The  
Stalk grows to he about two Feet high, divided toward the  
Top, hollow and striated, on which grow broad stat Umbels  
of five-leav’d yellow fmall Flowers, which are succeeded by  
larger and flatter Seed, than that of Fennel, The Root is  
thick and long, of a dark-brown Colour, heing somewhat  
hairy, or beset with sinall setaceous Villl on the Top, ofavery  
strong sulphureous Smell: It grows in several Places by the Sea-  
shore, and flowers in *July.* The Root is the ouly Part ofed,  
and that not ostem

Hog-fennel is accounted good to olear the Lungs of tough  
vifcid Phlegm, and thereby to help old Coughs, and Shortness of  
Breath; it, likewise, opens Obstructions ofthe Liver and Spleen,  
and helps the Jaundice j it, likewise, provokes the Menses, **and**gives Ease in Labour-pains ; the Juice, stmffed up the Head, is  
commended by the Antlents, against the Lethargy, Apoplexy,  
Epilepsy, and other Disorders of the Head and Nerves. *Mil..  
ler’sBot. Ost.* : : - . i

The Root, and the other Parts, of the *Peucedanum* are en..  
dued with a cathartic Virtue, as we are inform’d by the An- .  
dents; but, on account of its fetid and rank Smell, were not  
much ufed. -

*Peucedanum* expeitorates tartareous Mucus, and extracts Bile;.  
it provokes Urine, and is said to be good for the Stone. Out-  
wardly it is of Service in the Hemicrania, and other Pains in-,  
cident to the Head, and proceeding from Catarrhs ; in renitent  
Tumors; and for cleansing old Ulcers. *Raii Hast. Plant.*

The Name *Peucedanum,* is from Πεὑκη, *(Peuce)* a **Pine-tree,**which it refembles in its Leaves.

It is commended by the Antients fordifcussing inflammatory  
Diseases; for which Purpose, they prescribe aDecoction of-the  
Root in Water, sweetened with Honey, and drank warm.  
Hence it is very proper for refolving a Pleurisy and Penpneu- -  
many, when they may he remov’d by an Anacatharsis, or.Ex-.  
pectination. They prescrihe it, also, for Bloody Urine, and  
the Stone or Gravel in the Kidneys. It provokes Urine, is -  
an excellent Resolver of Phlegm, and cleanses the Kidneys of.  
every thing which adheres to them ; for which Purpose, **the**Root is boiled in Wine. It is commended as of Service in .the  
Beginning of a Cataracti, and in a Redundance of Phiegm,-and  
as an excellent Resolver and Discusser of all Obstructions. The  
Root is very good for the hysteric Passion ; and is posseffed.of a .  
balsamic, deterging, and gently heating Virtue ; and is of.ex-  
traordinary U so for olcaosing W oands and Ulcers. *Hist .Plant,  
adscript. Beerbnav.*

PEVETTI. *Hi. M. Baecifora Indsca, Floribus nd Poliorum  
Exortus, Fructu saleato decapyreno Solanum somniferum Anti-  
quorum.* Alpin. Exor. *forte.* A bacciferous Tree growing in  
*Malabar,* of whose Leaves they prepare a vulnerary Ointment..  
*Rail Hist. Plant.*

PEXIS, τηξις. Congelation, or Concretion. ;

PEZA, τέξἀ.- The Malleolus, or Sole of the Foot;. and,  
according to some, the very Bottom of the Sole. ' *Pollux* says,  
that the Part under the Tihis is called *Sphurem,* and *Paca, in  
Galen's* Exegesis, under Πεζαι, we . read as follows ο " sin the  
" second Book *de Mcrb. Must* it is written, καὶ οἱ πόδις σιδόσ-  
" κονται, αι πέξαι μαλιστα [and the Feet swell, and especially  
\*\* thePcaaj. *Z-enndatus,* in *ism Gentilia Vccabuld,^yTosds* prof  
"" per to certain Countries],fays, that the *Arcadiane lumd Dos.  
“ riant* call the Foot *Pna* ; but *Hippocrates* feems to call by  
" that Name, either the Bottom of the Sole, called *Pedion,* or  
"" the *Malleeli. ” Consarias,* in his *Hiippscrates,* renders it- by  
*Pedum Extremitates*; and Colons, by *Tali. .:*

PHACE, οαμό or PHACOS, φαμα. A Lentil:

PHA CODES, φακώδ ης. Of the Colour of a Lentil.  
. PHACOIDES, φακοβδ'ὴς. Os the Form of a Lentil i an  
Epithet for the Crystalline Humour of the Eye: ; ;-'5

PHACOPTISSANA, φακοπτιονάνη. Α sort of Aliment pre-  
pared os Ptisan and Lentlls. *Galeri, de Aliment. Pacultat.*. PHACOSIS, φάκωσις. A black. Spot, in the Eye; refem-  
bling a Lentil. ' ! -

-r PHAENOMENA- Appearances. Wherever happens to  
Bodies, and falisunder the Cognizance of the Senses, either ac-  
cording, or contrary to Nature,, is called *A Phanonienon.*

PH AEON COLLYRIUM.' The Name of a *Collyrium,*described by *Scribonius Largus.*

PHAGEDAENA, φαγέδαςνα, from φάγω, to eat, seed  
upon, is taken sometimes in a general Sense, as signifying all  
Kinds *of* Ulcers, which corrodethe sound Parts adjacent to it;  
and grow still worse as they spread ; sometimes it means only a  
particular Sort of Ulcer, as distinguished from other Kinds, as  
an Herpes, Noma, and the rest, in which Sense it is defined to  
he a tumid and.deep Ulcer corroding the subjacent Flesh, and  
the Parts around it. This is the Substance of what *Galen* fays  
On the Subjects in his Comment on 6 *Aph.* 45. . The same  
Author, in his Book of *preternatural Tumors,* makes the cha-  
rndferistical Difference hetween an *Herpes* and a *Phagedaena,* to  
cooftst in this; that rhe former spreads itself only by Corrosion  
and Exulceration of the Skin, but a *Phagedaena* by corroding;  
also, the subjacent Parts. - *Celsus, Lib. hi Cape* I8, makes a  
*Phagedaena* in the Penis, a Species of *Cancer.*

*. Phagedaena* is, also, used, in a kind of metaphorical Sense,  
to signify an Affection of the Stomach, much the fame with  
. the *Caninus Appetitus,* as appears by the Definition given of it,  
by the Author of the *Definitiones Medica. Pliny,* also. *Lib. 26.  
Cap.* IX. makes *Phagrdana* .to signify sometimes a Disorder,  
under which the Panent eats immoderately, and sometimes a  
{ sort of Ulcer A and *Hiofychius.gives* the same double Exposition  
of the Term.

PHAGOS. ANameforthe.^iiirtw; *parva., iiv&Phagus  
Graecarum, et Esculus Plinii.*

PHAGRUS, or PAGRUS. The Name of a Sea Fish,  
about a Foot long, not unlike a Roach, but larger, and  
thicker. . ' - '

TheEtones found in the Head of this Fish, when reduced  
**-to** a Powder, And exhibited internally,- are of an aperient Qua-  
lity, and proper for removing the Stone of the Kidneys, ren-  
deringthe Body soluble, and correcting the acid and acrid Hu-  
mours of the Stomach. The Dose of this Powder is from  
half a Scruple to half a Dram. *Lemery des Drogues.*

PHALACRA, φαλακρα σιδένια, in *Hippocrates,* are olant  
and smooth iron chirurgica! Instruments, as a Probe, or any  
other, with a Button ar the End.

PHALACROCORAX. The Cormorant. The Skin is  
said to he good to fortify and warm a weak Stomach, if apply’d  
thereto., *deemery Acs Drogues.*

PHALACROSIS, φἀκάκρωσις. Baldnest.

, . PHALAENA. The fame as *Balaena,* the Whale.

PHALAIA. Α barbarous Term introduced by *Basel Valen.  
tine,* importing an universal internal Medicine, or *Panacea;*But *Polstnkius* uses this Word to express a Tinfture of Jalap.

PHALANGIA. A very large Sort of Spider, common in  
hot Countries, as *Italy, Spain,* and the *Indies.* They are said  
-to-cure an intermittent Fever, if they are bruited, and applied  
to the Wtists, a little hesore the Fit. *Lemery des Drogues.*

PHALANGITES, φαοαγγίτης. Α Name for the *Lilia  
: astrum; Alpinum; minus,* it isthuscalled by *Paulus Acgineta.*

PHALANGIUM. A sort of Insecti of the Spidenilaind,  
whose Bite is said to be venomous.

They who have written of venomous and noxious Animals,  
have.desertbed several Species of the *Phalangium,* as the *Pha-  
grum, Lupus, Fornicarium, Cranocolaptes, .Sclerscephalus,* and  
*Scaleciurn,* in all six. The *Phagium.* is round and black, refein-  
bling the Stone of a black Grape, whence it has its Name ;  
τῤάγιον, *Biidgium,* signifying' a Grape-stone]. Its Mouth is  
- situated near the Middle of its Belly, and its Legs are very short  
on each Side. The *Lupus* kills Hies, and seeds on them; it  
has a broad and voluble Body j the Paris about its Neck are in-

dented, and its Mouth has three Eminences. The third *Sped*ties, called *Jpfyrmectum,* or *F&rinicarium, very* much refcmbIes  
an Ant; it is of a sooty Colour, and its Body is marked with a  
shrnof Stars, especially about the Badri The fosirth; or *Cree-  
nccoiaites,* is somewhat long and green, and has a Bristle near  
its Neck, and, in its Attack, aims at the Head. The fifth;  
called *Sclerocephalus,* has an hard and stony Head, and all the  
Lineaments of those Animals, which sty about lighted Candles  
by Night. The last, which is *Scolecium,* or *Vcrndcarium, is*somewhat long and spotted, especially about the Head.

. The Bite of these An Imais is so sinall, as hardly to be dis-  
cerned , but is followed by a llvid, and sometimes a red Tumor,  
attended by a Coldness about the Knees. Loins, and Scapulas.  
Sometimes the whole Body is oppressed with a Sense of Weight,  
accompanied with a contioual Pain, Trembling, Paleness, and  
Want of Sleep. In some there is an Erection of the Penis, and,  
an Itching aboutthe Head, and sometimes'about the Calves of  
the Legs ; the Eyes are hollow, watery, and shed Tears , the  
Belly is unequally swelled, and rhe whole Body and Face  
are tumefied, especially the Parts aheut the Tongue, so as to  
caufe an Impediment in the Speech: Sometimes the Patients  
are assiioled with -a Dy fury, accompanied with an Erection of  
the Pudendum, and a Pain. Ifthey make Water, their Urine  
is aqueous, and contains something like Spider, Webs; and  
their Vomit, and sometimes then Stools, are of the same Na-  
tore. By bathing in warm Water, theyfansy themselves eased  
of their Pain j but afterwards it returns with more Violence,  
and a painful Erectiion of the Penis; but, in old Persons, far  
from heing erectied, thet Part suffers a great Relaxation. These  
are the Symptoms in general, which are common to the Bites rof all thofe Creatures. Those which proceed in particular front'  
the Bite of the *Cranecclaptes,* are an extraordinary Pain of the  
Head, Vertigo, a continual Coldness, Delirium, Restlessness,  
and a pungent Pain of the Stomach:. They, who are bit by  
these Animais, are relieved by bathing every Day, and washing  
the Wound with the Decoction of Trifolium bituminosum;  
mixed with Oil. It is good, also, to foment the Wound often  
with Sponges dipt in warm Vinegar, and to anoint the Body  
all over with the most liquid Kind of Cerate. Proper Cata.  
plasms are prepared of Bulbs, Sanguinaria, .Leeks, Bran boiled  
in Vinegar, Barley-meal boiled with Bay-leaves in Wine or  
Honey, Rue, unripe Figs, Goats.dung in Wine, Sampsuchus  
with Vinegar,; also, Cyperus. *Asclepiades* advises the fellow.,  
ing Cataplasm, which he much commends:

Take of the Seeds of Wild-ruej Rocket, Stavefacre, Cen.  
chrys, and the Vitex, the Fruit or Leaves of the Cypress;  
of each equal Parts j bruise them in Vinegar, and make  
them into a Cataplasin with Honey; The same is good  
taken inwardly.

Another celebrated Receipt, to he used either, inwardly of'  
outwardly, is as sollows .

Take of native Sulphur, Galbanum, each four Drams; Sues  
cus Cyrenaicus, two Drams'; or, for want of ir, four  
Drams of Laser, of bitter Almonds blenched, two Drams;  
Steep them in Wine, and make them up with Honey.'

Eating of Garlick, Bathing, and Wine, are, also, proper  
Remedies. *Actius, Tetrab. 4. Serm. I. Gap.* I8.

PHALANGIUM.

.The Chara tilers are;

The Flower is naked, hexapetalous, furnished with six Stat  
rnina, and contains a roundish Ovary, full of angular Seeds;  
the Root is fibrous:

*Boerhaave* mentions six Species of *Phalangium* ; which arc»

I. Phalangium ;-parvo-store ; non ramosum. *CeB.Fo.2q.  
M. Hi.* a: 333.

a. Phalangium; parvo flore; ramorum. *G. B. Ps.* ani *M.*2. 333.

3. Phalangium; Africanum ; floribus luteis, parvis. *Raii*atift. 3- She.

4. Phalangium; parvo flore ; ramosum ; foliis fistulosis 5  
annuum. *Hi. L. Asphodelus, foliis fiestulofis.* C. Β. P. ad.  
T.344.

5. Phalangium; Africanum; soliis cepaceis; floribus spica-  
tis aureis.

6. Phalangium Africanum , sollis Ficoidis ; floribus spi-  
catis, aureis. *Bserh. Ind. Alt. Plant.*

**“PHALANGIUM is,** asso, a Name for several Sorts of Ej,HE“  
**MERUM: .**

**PHALANGIUM ALLOERoCIeUM: A Namesot the List,***astrum Alpinum; minus. . '*

PHALANGOSIS, φαλαγγωσες. A Disease of the Eye,'  
when the Margin of the Eye-lid torns inwards, fo that the  
Hairs stimulate the Eye. SeeOcULUs: *Paul. Aseineta, Lip.*6. Cap. I. “

**PHALANX. The Bones Of the Fingers are Called** *Phalanges.  
See BRACHIUM. & - -*

PHALARiS. '  
The Characters are; s '.

It has a thick Spike, which is Compos'd Of a shaamotis Con-  
geries of Husks, Containing Seeds; Pairs Of these hollow, can-  
Dated Husks, containing in the middle hetween them a Seed in-  
volv'd in a Hull, have the Appearance Of Scales

*Boerhaave* mentions eight Species os *Phalaris,* which are,  
I. Phalaris; major; semine albo. *C.B. P.* 28. *Theat.* 524.  
*Eoerh. Ind. A.* 2. I 58. *Raii Synop.* 3. *Phalaris.* Ossie. Ger. 8O;  
Emac. 86. J. Β. 23 442. Raii Hist. 2. I248. *Phalaris vulgaris.*Park. Theat. 1163. *Gramen spicatum semine miliaceo* N/lonTourIL  
Inst. 5IS. CANARY GRASS. y ’ :

It grows not Only in the *Canary* "Istands, but in *Tuscany,*among the Corn, and in *Spain,* and in *Languedoc* about *Mont.,  
poster.*

The Antients commend the Seed of *Phalaris,* the Juice of  
the Herb, and the Leaves, to he used inwardly under, tormenting  
Pains Of the Bladder. And we are inform'd by *Lobel,* that some  
have Bread made Of it, which they frequentiy eat, in Order to  
Cleanse the Bladder from Stones, and all Other Things which  
might incommode the free Discharge Os the Urine. *Pais Hist.  
Plant. .*

2. Phalaris; major5 semine nigro. *Ca Β.Ρ.*28. *Iheat.* 536.  
iif. Η. 3. I 86. *J. B.* 2. 443. *Gramen, spicatum, semine miliaceo,  
migro.* T. 528.

3. Phalaris; alter; semine griseo. *H.R. Par. Gramensepiea..  
. sum,semine miliaceo, griseo. T.j 19.*

. 4 Gramen j tremulum; maius. *C.* Β.Ρ. 2. *Theat.^.2.*

*T* Gramen, tremulum *s,* majus perenne. *H. L.* 196.

*6.* Gramen ; tremulum, Imaximum. *C.E.P. 2. Prode.* **5.***- Theat.* 24. *J.* B. 2. 4yo.

7. Gramen, Paniculis elegantissimis, sive ἐρἀγρωστις. *C. B. P.  
. 2. Theat.* 26.

8. Gramen; tremulum; minus, panicula parva. *Boerh. Ind.  
.ali. Plane. Vos 2..*

The Seeds are highly aperitive , for which Reason they are Of  
Service in the Stone of the Kidneys and Bladder. *Hast. Plant,  
adscript.- Boerhaav.*

PHALERIE, φἀλαραι. Α sort of Bandage for the Nose,  
describ'd by *Galen,* in his Treatise of Bandages.

PHANiON, φανίον. **A** Name of two compound **Medicines,**describ’d by *Galen de C. Ael. S. L. Lib.* 4. C. 7.

PHANLEC. Iron. *Etelandas. -*

PHARICUM. The Name Of an excessive poisonous Medi-  
cine, which, by great good Fortune, is unknown to the Mo-  
derns. *Scribonius Largus,* Ν° 195. informs us, that it was frid  
to be Compounded Of many Ingredients, but not one Of them  
is known.

PHARMACElA, φαρμακεία. Purgation of the Belly hy the-  
ExhibidOn Of a Cathartic. *Hippocrates.*

PHARMACEUTICA, φαρμακεήτική. Pharmaceutics, that  
' Part of Medicine, which gives the Description Of Remedies,  
and teaches the Method Of righdy exhibiting than. *Gorraeus.*

PHARMACIA. Pharmacy.

PHARMACITES, φαρμακίτης, **see** AMPELITES **TERRA.**

PHARMACOCHYMIA, that Part Of the Chymical Art,  
winch teaches the Preparation of Chymical Medicines, by way  
of Distinction from the Spagirical Part, winch treats Of the  
Transmutation Of Metals. *Castellus.*

PHARMACON, φάρμακον, signifies Poison, Medicine, and  
Colours in Painting. It is One Of those Terms which *Aulas  
Gellius, Lib.* 12. *Cap.* 9. Calls *vox media,* a middle Word be-  
tween two Contraries, which may indifferentiy dignify either of  
them. 1

PHARMACOPOEUS, φαρμακοποιὸν, from φάρμακον, a Me-  
cine, and ποιέω, to make. Or prepare, is one well vers'd in the  
Art Os preparing Medicines. *Cafieilus.*

PHARMACOPOLA, φαρμακοπώλης, from φάρμακον, a Medi-  
cine, and πωλέω, to sell, is properly One who sells Medicines.  
To illustrate the three preceding Articles, it may he proper  
to Observe, with Le *Clerc,* that those who addicted themselves  
to Pharmaceutics, Or Medicament ary Medicine, were Called  
*Pharmaceuta,* as says *Galen ad Tloraseb.* The Name *Pharma.,  
copteus* was taken in an ill Sense, and signisy'd a *Poisoner,* who  
was, also, called *Pharmacos* and *Pharmaeeus,* from the Word  
*Pharmactim,* which signisy'd indifferentiy all sorts Of Drugs  
. or Compositions, both good and bad, every Medicine or Poison,  
both simple and compounded. The *Latins,* in Conformity hereto  
Used the Word *Medicamentum* for *Poisini^sand Medicamentarius*for Pofsetior, the' the last Word signify'd,\*also, an Apothecary,  
as the first did a Medicine. The Word *Pharmacopola,* among  
. the Antients, signisy'd one os another kind of Profession, whose

Business was to sell Medicines; particularly it belong'd to such aS  
are now called Mountebanks.

PHARMACOPOLIUM. An Apothecary'S Or Druggist’s  
Shop. '

PHARMACOPOSIA, φαρμακσπβσίη, from φάρμακον, a Medi-  
Cine, and ποσις, a Potion, is either any liquid Medicine in gene."

rah *or* a liquid Cathartic in particular ; in winch latter Sense this- .  
Term, and φαρμακεί», are commonly used by. *Hippocrates,* aS  
*Galen observes. Com. ad* 7 *Aph.* 25. And thus are rhe Words  
used, 4 *A ph.* Ip. and *Coac. 251.* T

PHARMACOTA *Medicamenta.* Medicines winch have **a**Mixture of Poison. *Castellus.*

PHARMACOTHECA, a Box, or Chest, for the Reception  
of Medicines. *Castellus. - , ". ’*

' PHARMACUM. See PHARMACON.

PHARMACUM .AD AURES. See sEGYPTIUM PHAR-  
MACUM AD AUREs, \* 'Τ ‘

PHARMIANUM» A Malagma so Called. *Galen,Lib. of. de.  
C. MP.G.Napst: see- ' .*

PHARYNOETHRON, φαρήγγεθρον, in *Hippocrates, -Lib.  
de Dissect,* is the Pharynx, or Fauces. -

PHARYNGIEUM SAL; An artificial Salt, Of Use in the  
Qttinsey, when.the Pharynx, Or Fauces, are incommoded with  
a Defluxion Of impure and serous Humours; it -is prepared of  
Cream Of Tartar, and Nine, each One Ounce, with half an  
Ounce Of bunt Alum,; dissolved in distilled Vinegar, which So-  
lotion is afterwards coagulated according to Art.. This Salt;  
mixed with two Drams Os Honey, and dissolved in five Ounces  
of Plantain-water, makes an excellent Gargarism for the Quinsey  
*Frederic Hoffman* from *Lobelias.* - - . . tt

PHARYNX, φάρυγξ. Bee OESOPHAGUS. '  
PHASEOLUS. " \* .: - Ἀ . . 4

- The Characters are,

It has a long Pod, lull of Kidney-shap'd or Oval Seed5 **the**Plant, aS IO its Habit, or outward Appearance, is flexible,  
scandent, and, for the most span, trifoliated. Or has its Leaves  
growing by Threes. j ' ’ ;

*Boerhaave* mentions twenty-five Species Of *Phaseolus,* which  
are, - - . . - so sc ' 'so'' . - ’ / '

**I.** Phaseolus, vulgaris. *Parle. Parade* 52I. *Tourn. Info.* 4I2.  
*Bocrh. Indi A. 2. 28. Smilax hortensis.* Ossie. J. B. 2.255?Rafi  
Hist. 1.884. *Smilax hortensisfive Phaseolus.* C. B. R 339. *Phdo  
sectusalbus.Ger.* IO38. Emac. 12I2. KIDNEY-BEANS.

It is Cultivated in Gardens, and flowers in *July.* The Pods,  
which are the Parts in Use, are opening, digestive, and provoke  
Urine, and the Menses. *Hale. :*

*2.* Phaseolus, Vulgaris; fructu migro, - \* "

**3,** Phaseolus, Vulgaris; fructu rubro.

4. Phaseolus; vulgaris fructu Pallido. ' -

5. Phaseolus; vulgaris; fructu luteo.

*.. 6.* Phaseolus;- hortensis; minor. T. 4I5. *Smilax hortensis  
minor.* CB. Ρ. 359.

*J.* Phaseolus; hortensis, filiquil longissimi, νύ 4 -

8. Phaseolus ; hortensis, siliqua longissima, & latissima.

9. Phaseolus, peregrinusxthortenfi similis, fructu timidiore,  
minore niveo. *C.B. P.* 34o. .. .

Io. Phaseolus, hortensis; fructu albo, minore OVisorrni,  
Venereus dictus. *Hessen, cat. Altors.* i

II. Phaseolus, hortensis; minor, fructu incano. Cujus hilum  
limbo fusco cingitur.

I2. Phaseolus2.pnniceo store. *Corn.* I84. ;

13. Idem (I2), fructu lex nigro & Colossino Variegatoe

I4. Phaseolus' Indictis, floribus, & fructu, candidissimis.'  
*Flor. Nor. Volk.*

I5. Phaseolus Americanas; perennis; floreCOCbleato odorato,  
seminibus fuscis orbiculatis; Caracalla dictus. **H.** *Sa Phaseolus  
Indicus, cochleato flore. Triums.ett. Obscrev.* 92.

I6. Phaseolus; Octocaulis; Mungo Persarum; Tuscarum  
Masc, Hispanorum Max. TaACo/. *Annat, et Addit, in Nord.  
Ant. Bech. le. et Hoscr. Raii.*

It is a Plant with an erect Stalk, three Feet in Height, with  
Leaves and Flowers like those Os our *Phaseolus,* and Pods Con-  
taining Seeds the Size Of dry Coriander-seeds, ἐν

The People Of the Eastern Countries Commonly eat the  
Seeds boiled, with Butter, as they do other leguminous  
Foods; and esteem it a Delicacy much, preferable Io/the  
rest. ς . - ’’ - -.

*.. Garcias* telis us, that the Seed, when ripe, is black, and is  
Food for Horses, and is sometimes eaten by Men: He gives us,  
-also, the Method Of using it, by the -Inhabitants of *Guxarate*and *Decan,* in the Cure Of a Fever. - The Patient in This Case  
abstains from' Food ten, and sometimes fifteen Days; after  
which they give him the Decoction Of this Fruit, in which  
. they have lest some Of the Pulp remaining; then they give him  
*Mungo* decorticated and boiled, like Rice, and suffer him to **oat.**no Bread made Of Wheat for many Days. *Raii H. P.*

*ly.* Idem; semine albo.

18. Phaseolus, tenerrimus, supra & infIs, tertam fructus  
\_. gerens, ficque perennans.'

Ip. Phaseolus, AIgyptiaCuS, nigro semine. *C. B.* R 34I.  
*Phaseolus, ntgor Lablap rvocatus.* Alpin. ..Egypt. 3p.

It is a sarmentous Tree, of the Bigness Of the Vines, and  
spreads ite Branches and Leaves aster the same Manner, in  
Appearance, it is altogether like the common Phaseolus,, hears  
Flowers twice in 2. Year, that is, in Spring and Autumn; these  
Flowers are somewhat like those of our Phaseolus, and are sue-

ceeded by long Pods, aS thofe or Beans; and ccncsming Seeds  
forne black, some redish, exactly like Our Kidney-beans. The  
Tree lives an hundred Years, and more, and is always green.  
The *Egyptians* commonly eat the Seeds Or Beans, which are aS  
well tailed aS ours.The Women use rhe Decoction with Saffron,  
to provoke the Menses, the same is good, also, for the Cough,  
a Dyspnoea, and a Suppression of Urine. *Prosper Alpinus de  
Plantis ASgypti.*

2o. Phaieolus, Aegyptiacus; semine rufo. *C. B.* P. 341.

*sui.* Phaseolus; AsgyptiacuS, semine albo.

22. Phaseolus; ZeylanicuS, solio longo; siliqua tenui; semine  
parvo, pallido.

23. Phaseolus Asiaticus; siliqua alba, longissima, articulata;  
semine rubro.

24. Phaseolus; ZeylanicuS, solio longo, siliqua tenui; se-  
Inine Violaceo, parvo.

. 25. Phaseolus, Indicus; minimus; folio magno ; flore coeru-  
lescente. *Bocrh. Ind. alt. Plant. Vol.* 2.

: The Pods Of the Kidney-bean are esculent, but the Seeds yield  
a gross Nutriment; whence they are good for those who ufe  
much Exercise, but are prejudicial to Students, and sedentary  
Persons. *Hist. Plant, adscript. Boerhaav.*

Besides the foregoing Species of *Phaseolus, Desie* mentions  
the four following ;

*i. Phaseolus.* Ossic. *Phaseolus vulgaris Italicus humilis, seu  
minor, albus cum orbita nigricante.* I. B. 2. 358. Raii Hist. I.  
885. *Phaseolus erectus.* Park. Theat. 1057. *Phaseolus peregrinus  
fructu minore albo.* Ger. Emac. I2I3. *Phaseolus minor siliqua  
sursum rigente, fructu albo.* Tourn. Insta 4x3. *Smilax siliqua  
sursum rigente, vel Phaseolus parvus Italicus.* G B. P. 339. ITA-  
LIAN KIDNEY-BEANS. .

It is cultivated in Gardens, and Sowers in *July.* The Pod is  
Used, which, as *Diofcorides* fays, if boned, whilst green, and  
eaten, is good to mollify the Belly, and proper to provoke, VO.  
Initing.

2. SO IAS Ossic. *Phaseolus Japonicus, ex quo Japortensium Sola,  
estes intinctus Species esi, conficitur:* Herm.

This Species is a small, white Kidney-bean, brought from  
*Jupan,* Of which they make the Pickle called *Ketchup* ; Of this  
there are two Kinds, the liquid and the solid. *Dale. .*

3. Phaseolus erectus siliquis Lupini, fructu Pisi majoris Can-  
dido. *Kemph. Amcen. Excit.* 837.

We Owe the Knowledge of this Species, says *Dale,* to the late  
learned *Paul Herman,* who communicated it, under the Title  
abOVesaid, to the learned *William Sherrard,* LL. D. from  
whom we borrowed it. .

. 4. The fourth sort ofiPHAs EoLus is the COUHAGE , which see.

PHASGANIUM, φασγάνιον. A Name in Ρ. *AEgineta* and  
*Actius* for the LAPPA.

PHAULUS, φαῦλος, according to *Galen, Com. in Lib. de  
Tract,* with the Antients, signisy'd not only VitiouS and depraved,  
but plain and simple, in Opposition to ἀκριβὴς, « exquisite,” in  
which Sense it is apply’d by *Hippocrates* to Diet; and *Hypophou-  
los,* ὑπόφαυλος, in the same Author, is expounded in *Galen* by  
μέτριος *(Metrios)* moderate. Or a Mean hetween simple and ex-  
quisite.

PHAUSINGES, φαὑσιγγἐς, in *Callums* Exegesis, are said  
properly to signify red Circles in the Legs, excited by the Fire,  
hut, by an Abuse of the Word, it signifies Other sorts of Spots.  
Some, who read σπίλοι. Spots, for κύκλος, Circles, will have it to  
he red *Spots,* Of any kind, excited by the Fire. -Other Senses of the  
Word may be'found in *Hes.ychius,* which are not material.

PHAUSTIANOS, φαυστιανός. The Name Ofa Very acrimo-  
nious and corroding Pastfl, described by *Aetius, Tetr.* 3. *Serrn.*I. 600.49.

PHAZALA. The Name of a Disease incident to HOrseS  
which wash in the *Ped Sea. Cafiellus.i*

PHEGOPYRUM. See FAG0PYRUM.

PHELLANDRlUM. . .

The Characters are, ‘

The Root is fibrous, the Stalk very thick, the Leaves very  
large, and Very finely jagged: the Petals of the Flowers are shaped  
like an Heart; and the Seeds are small, .gibbous, and {lightly  
striated. ί . . ‘

*Boerhaave* mentions three Species of *Phellandrium* which are,  
I. Phellandrium. *Osseo. Tournsc last. ^06. Bocrh. Ind. a. ati.*

*Phellandrium vel Cicutagia aquatica quorundarn.* J.B. 3.183.  
*Phellandrium.* Rafi Synop. 3.2I5. *Cicutaria palustris.* Ger. 905.  
Emac. 1063. Raii Hist. I. 452. *Cicutaria paluflris tenuifolia.*Path. Theat. 933. C. B. P. I6I. WATER HEMLOCK.

The Leaves are Commended by *Blancard* in Virulent Inflam-  
mations of the Penis; internally it is an Emetic.

This Hemlock has a thick, hollow, striated, and jointed Stalk,  
which arises not so high aS the ordinary Hemlock ; it is divided  
into several Branches, having large winged Leaves, much finer  
and tenderer than Hemlock; the Flowers grow in Umbels,  
which are but small in proportion to the Bigness of the Plant:  
They are white, with a Cast-Of Red. The Seed is small, and Of  
a dark.brown Colour. The Root is compos’d of a great  
Number Of white Strings, which shoot Out from the Joints at

the Bottom os the Stalk: It grows in DitCheS and Ponds,  
flowers in *June.*

Iras suppos’d to he much like Common Hemlock in he Na-  
tnre and Qualities; but it is believ’d to be more poisonous,and  
therefore is Very seldom made use Of in the Shops.

*igrebfer* has wrote a whose Treatise concerning this Plant.  
*Millers Bot.Osse . :*

2. Phellandrium; folio Thyssalini; Caule rotundo. *Ind.* 2.

3. Phellandrium; Thystelini folio, cause fnlcato. *Indati  
Cicutaria Casseubica, Tbysselini folio.* Breyn. Prodr. I. Raii  
Η. I 868. *Bocrh. Isid. alt. Plant. Vol.* 1.

It is said to possess the Virtues of Hemlock, but is sweet-  
scented and aromatic, and of excellent Service, where a gentle  
Dissipation Of Humours is required. The first Species is Of  
Use in Surgery, for discussing inflammatory and cold Tumors; .  
and is said to.resist a Gangrene; and nothing can be more safely  
apply’d to scirrhous and cancerous Tumors; it is, also, com-  
mended for Diseases of the Breast, being apply’d in the Form  
of a Cataplasm. *Hist. Plant, adscript. Poerhaaar.*

PHELLODRYS. Ossic. *Phellodrys alba latifolia et angusti-  
folia.* Park. Theat. I399. *Phellodrys candicans latifolia, molliter  
aculeata et candicans, angtcflifolia, serrata.* C. B. P. 423.  
*Phellodrys Matthioli.* J. B. I. 2. I00. *Phellodrys sive Cerro.  
Sugaro Mattbiolo.* Raii Hist. 2. Io9I. TUE LAUREL-  
OAK.

It grows in *Dalmatia,* and, aS some say, in *Greece;* the  
Leaves, Bark, and Acorns, which are the Parrs used in Medi-  
cine, agree in Virtues with those of the *Gspercus,* Or Common  
Oak. *Dale.* The *Phellodrys* Of *Theophrastus,* which *J. Batehsque*Proves to the the same with what he, also, calls *Aria, Pliny*seems to. have taken for the *Suber,* called *Phellos* for he ascribes  
to that Tree all the Properties which *Theophrastus* ascribes to  
the *Phellodrys: ‘*

The *Phellodrys nigra* is distinguish'd by the Smoothness and  
Blackness Of its Bark , the Leaves dister from those Of the *Ilex, .*as heing rounder and broaderfrom those of the *Smilax,* as  
being much shorter in respect Of their Breadth, and from  
those Of the *Suber* just mention'd, Rs being harder, and more  
prickly.. *Bait Η.Ρ. .*

. PHELLOS. A Name for the *Subcr, lenifoliirm', perpetuo  
virens.*

PHEMOS, φῆμος, the Name Of a Medicine against the Dys.  
entery. Composed by *Idartianus,* and described by *Actius,  
Tetr.* 3. *Scrm.* I.

... PHENGITES, φεγγίτης, a luminous Stone, capable of aC-  
qniring Light, and dispensing it again.

PHENULE, φέρουλα, in *Nyrepsus, Antidot. yy.* as *Fuchsias*Observes in his Notes, is -Corruptly written for *Enula,* ένουλα. for  
*Phenula,* he fays, is the same as *Forticulum.*

PHESAL A kindof broad Fish, mention'd by *Oribosius, Med  
Coll. Lib. 2. Cap.* 58. from *Xenocrates,* among Fishes whose  
Flesh is hard and difficult of Digestion.

PHIALA, a glass Vestel, withabig Belly, and long Neck, Of  
frequent Use in Coagulations and Solutions. *Castellus.*

PHIBAL1OS, φιβάλιος, in *Galen's* Exegesis, is expounded a  
Species Of Fig; some take it for the *Carica,* or dry’d Fig. *Phi-  
balean* Figs are Commended by *Athenaeus, Lib.* 3. NowTse'eda-  
*leos* is a Place in *Attica. .sista*

PHlBlT, *rapax.* Rapacious. *Eulandus.* Perhaps *Amber.*PHILADELPHUS. A Name for the APARiNE. *Blancard.*

- PHILADYNAMOS, φιλαδύναμος, in *Hippocrates de R. Vi  
LA.* is an Epithet Of Water; expressing that Property of it, by  
which it diminishes the Strength. .

PHILAGRIANON, φίλαγριανός.. The Name of a Malagma,  
described by *Acsuitta, Lib.* 7. *Cap.* I8.

PHILALYSTES, φιλκλυστῆς,. in *Hippocraters* Book of Pre-  
cepts, means One who is Of an anxious and perplexed Mind.

PHILANTHROPOS. The Name Of a compound antine-  
phritic Medicine, in *Nicol. Antidot. Op er. Mesuae. Castellus.*

PHILETiERIUM, φιλέταίριον. A Name in *Bioscorides, Lib.*

4 *Cap.* 8. for the PoLEMoNIUM. . ss ’

PHlLETlS COLLYRIUM. The Name. of a Compound  
Medicine for the Eye, in *Celsos,Ub. 6. Cap. 6.*

. PHIL1PENDULA, the same **aS FILIPENDULA.** *Blancard.*The Term occurs in *Myrepsus, Aniidot.* 4o.

PHILIPPI *Trochiscus,* the Name of a Troche, described by  
*Paulus Acgilneta, Lib. η. Cap.* I2.

PHILlST-iEA. An obscure fpagiric Term in *Basil, Valent,  
injcepetii. Lap. Philos. C.de Antim.* where he says, that, jf  
Antimony should pass into *Philistaea,* it would Of itself become  
Glass. *Castellus.*

PHILLYREA. - ----

The Characters are,

The Leaves are conjugated, and always green. The Flower  
is monopetalous, Bell.shapsd, divided into four Parts, and Coss  
rained in a qnadrifid Calyx. The Ovary in the Bo.tom of rise  
Calyx becomes a globular Fruit, full os' round Seeds.

*Bccrhaave* mentions eight Species of *Pbillyrea-* which  
are,

I. Phillyrea, Crasso, latissimo, atroviridi folio quasi Dicis.

*u..* Phillyrea; latifolia; hevis. C.B.P. 475, *PHiferea, Ma-  
baleb Serapionis.* Lugd. I 54.

3. Phillyrea, latiiolis, spinosa. *C.B.P.* 4I6. *Phillyrea, folio  
Ilicis.* J. B. I. 54I.

An Phillyrea; latifolia; spinosa. *C.S.P. Longiori solio Ala-  
terni- Ind.‘yeses.*

5. Phillyrea; folio leviter serrato. *C.B.P. esnsi.*

*6.* Philiyrea; folio magis serrato, subrotundiori. *Ind.* 248.

*J.* Philiyrea, folio Ligustri. C. *B.* P. 4/6. *Tourn. Inst. essse.  
EoerhiTna. a.* 2.2I5. *Phillyrea.* Ossic. *Phil lyre a laiiusculo folio.***J-** B. I. 539. Rati Hist. 2. I"[85. *Phillyrea latiore folio.* Ger.  
1209. Emac. I 3 95. *Phillyrea '’latifolia foliis fore non serratis.*Parle Theat. I443. MOCK PRIVET.

The Leaves are drying and astringent, and are very much  
Commended for Ulcers in the Mouth. *Dale.*

8. Phillyrea; angnstifolia , prima. *C. B. P. qsuq. Boerh. Ind.  
alt. Plant. Fol. 2..*

Many confound the *Phillyrea* of *Dtnsoorides* with the *Philyra*Of *Theophrastus’,* Others, rightiy in my Opinion,distinguish them  
*J. Bauhins* proves the *Macaleb* Of'the *Arabians* to he the *Phise  
lyrea os Diofcorides.* But whether the *Mahaleb,* Or *Phillyrea*be the same Tree which is now Commonly known by that  
Naths, is a Question. *Rauviolsius* writes, that he saw at *Aleppo,*in the spicery-shopS, small white Seeds, which they call *Ma-  
- chM,* surrounded with an hard Cortex, somewhat long, and  
acuminated, and Cover'd with a thin Membrane, aster the  
manner Of PistacheS; these Seeds they use in tho Composition  
of their sweet-scented Soap. And the Monks who have com-  
mented On *Mesus,* write that *Mahaleb* is a very common  
Shrub in *Syris,* thorny, and with Leaves like rhe Olive-tree;  
that it bears Fruit in Clusters on the Branches, like tho Lentisk,  
but somewhat bigger ὁ from whence the *Syrians* express st Very  
fragrant'Oil, Of which they prepare their sweet-scented Soaps,  
and several other Things. But how all this can agree with the  
Common *Phillyrea,* says Kay, I am at a LOss IO understand.

The Leaves of the *Phillyrea,* according to *Diofcorides,* are  
astringent, like those Of the wild Olive-tree; and are therefore  
proper in those Cases, which require Astriction. Being chewed  
inx the Months they are Very good for Ulcers therein13- and a  
Collntion of the Month with the Decoction has the same Ef-  
fect. The Decoction drank provokes Urine, and the Menses.  
What the *Arabians* write of the Virtues os the *Mahabtb,* which  
7. *Bauhine* supposes to be the *Phillyrea as Diofcorides,* may he  
found in *Bauhine.* At present the *Phillyrea* is not used in Medi-  
cine, but. On account of its evergreen Leaves, is Osgood Orna-  
Inent in Gardens, being disposed in clipt Hedges, Plots Of Ever-  
green, and by the Sides of Walks. *Pali* Η. Ρ.

PHILOCHYMICUS. A Lover Of Chymistry.

PHILOCOTYCHE. The Name Of a Plainer in *Myrepscus  
Capriati. » . J rd o*

PHILOCRATIS *Emplastrum.* A Plaister described by *Celsos,  
, Lib. q. Cap.* Io.

PHILOLAGNOS, φιλολάγνος, in *Hippocrates de P..V. TA,*means One addicted to Venery.

PHILOLUTROS, φἐλολουτρος, from φιλός, a Friend,\*and λἄτρον,  
a Batin A Lover Of Bathing. *Hippocrates de R. Vi. i. A.*

PHILOMEDICA. The Name Of a Potion, prescribed in  
burning Fevers, for allaying the Thirst; and described in CoI.  
*leclan. Chymic. Leidens. Cap.* 332.

PHILOMELA, the Nightingale. See LUsCiNIA.

PHILONIUM. A kind of somniferous, anodyne Opiate;  
taking its Name from *Philo,* the inventor. *Galen, de C. M. S. L.  
Lib.* 9. *Cap.* **4.** says, that the Antidote Of *Phils,* Or *Philonium,*was in great Reputation for a long time past; and that this Me-  
dicine was One of the first and most antient Of its Kind. By  
Medicines Os this Kind, we can understand no Other than Anti-  
dotes, fuch as *‘Mithridate, Theriaca, Hiera,* and the like. I do  
not believe this Composition of *Philo* to be quite so antient as  
'Mithridate, but it was, doubtless. Coeval with the simple Hiera,  
invented by *Themison,* who lived under the Reign of *Augustus.*The Theriaca was Of later Invention, and not begun to he com-  
posed till the Time Of *Nero.* What makes me think, that *Phi-  
lonium* was somewhat later than Mithridate, is, that, among the  
' Virtues which *Philo* ascribes to his Composition, he says, it is  
proper for the Colic. NOW this Disease was not known by that  
Name, long before the Reign of *Tiberius.* I imagine then, that  
*Philo* lived under *Augustus,* near about the Time Of *Themison,*and the first Disciples Of *Asclepiades. Galen* may, however,  
speak of the *PHlontum,* as an antient Medicine, because he did  
not write till about two hundred Years after the Time in which  
I suppose it to he invented. . ,

*Philo* wrote it in *Greek* Elegiacs, and after an enigmatic Man-  
ner , so that it required to he well versed in Mythology, Or Fable,  
to be able to conjecture at his Meaning. « Take, fays he, red  
" and Odorous Hairs of the Youth whose Blood is still fresh in  
" the Fields of *Mercury*; aS many Drams as we have Of Senses  
« [five] ὁ of*Ettboic Nauplium,* one Dram; aS much Of the Killer  
" of the Son of *Mcnaetius,* aS is contained within the Bellies Of the  
« Ewes. Add thereto twenty Drams of white Flame, and the  
“ same Weight of Beans of the *Arcadian* Swine, with One Dram

" of the Plant falsely Calpd a Root, and which Comes from rhe  
α Country celebrated on account of *Jupiter Pisseus.* Wore *Par  
" tern,* and, to the Hord of that Word, add the masculine Ar-  
\* ticle Of the *Greeks.* Take ten Drams Of this lost: ingredient,  
" and carefully mix the Whole with the Works of the°Daughe  
\* ters of the Bull Os *Athens sc* You may see, in *Galen,* an Ky-  
plication of this Jargon, which amounts to this r Take os Saf-  
fron, Pyrethrum, white Pepper, Henbane, Spikenard, and Oplo  
um, the Weight assign’d to each Ingredient; and incorporate the  
Whole with *Attic* Honey. Not only *Galen,* bur *Arctans, P.  
AEgineta, Aetius, Oribafius,* and Other Authors, mention this  
Medicine, which is still common at this Day. *Celsus,* also, quotes  
*Philo,* but it is Only for a Collyrium, and says nothing of his An-  
tidote tho’ it is probable, that it was this *Philo* of Tsarser, from .  
whom he borrow’d that Collyrium. *Le Caere Hist, da la Medicine.*

*Philontum Persicum* is thus prepared. Take Of white Pepper,  
and white Henbane, each ren Drams, Of Opium, Terar  
Sigillata,teach five Drams; Lapis Haematites, Saffron, each two  
Drams and an half; Castos, *Indian* Spikenard, Pyrethrum, Pearls,  
Amber, Zedoary, Doronicum, Or else Elecampane, Troches op  
RamiCh, each half a Dram; Camphire, a Scmple; Honey of  
Roses, fifteen Ounces. Mix them together for an Opiate.

The Roots, the Seeds, the Castor, the Spikenard, the Saffion,  
and the Troches Os Rarnicb, are to be.reduced to a Powder to-  
gether. Then the Seal'd Earth, and the Cafnphire, are to he  
pounded together; and the Blood-stone, the Pearls, and the Am-,  
her, are to be levigated on a Marble, Till they are reduced to an  
impalpable Powder. The Opium must he Of the best Kind, and  
Cut down into small Portions; after which, it is to be beat in a  
brazen Mortar,’ with a little Honey Os Roses, till it is reduced  
to a kind of liquid Paste. Then boil Honey Of RoseS to the  
Consistence Of a thick Syrup, with fifteen Ounces Of which  
intimately mix the Opium, and the Powders, for an Opiate, to  
be kept for Use in a Close-stopt Vestel.

This Preparation is proper for stopping Haemorrhages and  
Fluxes, aS, also, for preventing Abortion. The Dose of it is  
from One Scruple to One Dram. ’ . .

A Scruple Of this Opiate contains Two-thirds of a Grain of  
Opium, and One-third Osa Grain Of the Seeds of white Hen-bane.

Half a Dram Of the Opiate contains a Grain and half aquar-  
ter of a Grain Of Opium, and two Grains and an half ofthe white  
Henbane-seeds.

Two Scruples Of the Opiate contain a Grain and an half *of*Opium, and three Grains of the Henbane-seeds.

One Dram Of the Opiate contains two Grains and a quarter  
Of a Grain Of Opium, and four Grains and an half Of the Hen.  
bane-seeds. ♦

The *Philonium Romanum* is thus prepared.

Take of white Pepper, and white Henbane-seeds, each five  
Drams, Opium, two Drams and an half; Cassia-bark,  
One Dram and an half; Smallage-seed, one Dram the Seeds

. Of *Macedonian* Parsley, Fennel, and Candy Carrots, each  
two Scruples five Grains, Saffron, One Scruple and an  
half. Spikenard, Pellitory Of *Spain,* and Zedoary, each  
fifteen Grains, Cinnamon, a Dram and an half; Myrrh  
and Castor, each a Dram; Syrup Of white Poppies, a  
sufficient Quantity, to make the Whole into an Electuary.

This is a Prescription, Originally, Of *Nicolaus Myrepsus,* but  
the first Dispensatory of the College received it with Euphorbi-  
um, as does the *Augustan,* which the College has now rejected,  
it being an Ingredient too hot, and irritating, for inward Use.  
There are several Other Compositions Of this Denomination taken  
by the Dispensatory-writerS from *Mesue, Galen,* and Others; but  
they all nearly agree. *Ziaelser,* however, prefers the *Confectio  
Archigenis* to them all, aS a warm Opiate, which is their main  
Intention. The former Prescriptions of this were all with Ho-  
ney, in three times the Quantity of the Other Ingredients, but  
the *Syrupus de Meconio,* as here ordered, is Vastly preferable, as  
agreeing so much better with the Intention Of the Whole.' It is  
a powerful Opiate, and given from ten Grains to two Scruples,  
to ease Violent Pains, and procure Sleep, *sssuincy.* But, perhaps,  
this Medicine, and all of this Class, may be much better, if pre-  
par’d with Honey. s

PHILOPARABOLOSjeiAonapi/SoAoi. An Epithet, apply'd by  
*Asclepiades* to one of the two Methods used by him in the Cure  
Of a Phrensy, and signifying *violent* and *dangerous,* in Opposi-  
tion to his Other Method, which was safer, or, in the Language  
Of *Ccelius Aureliartus, non meticulosus,* and proper for most Pa-  
tients This *dangerous* and *violent* Method (for that Reason  
called *Philoparabolos,* which is used, by *Plutarch,* to signify one  
who desperately throws himself into the midst Of Dangers) consisted \*  
In exhibiting, at the first Visit, a large Draught Os pure or undiluted  
Wine, mix’d with Sea-water; for, says *Asclepiades,* giving a  
Reason for this Practice, all those Helps and Benefits which ac-  
crue to the Sick, in a weak and flow Manner, from the Use Of  
Mulsiirn, and forbile Liquors, are much more readily and plenti-  
fully procured by Wine ; for the Exhibition thereof is succeeded  
by a Vast Fervor, with a Lowering of the Pulse, and a Repression  
.os the colliquative Sweats, the Wine performing the Office of an

.miversst Cautery. *'fiaUus Aurelianus, Acui. Mora. Lib.r. Cap.*^THILOXENIAS ANTIDOTUS. - The Name Of an An-  
tidore, described by *Nicolaus Myrepsus, Sect.* I. C-239.

PHILTRON, φίλτρον. A Love Potion, Or Medicine to  
excite Love. It, alfo, imports that Cavity, Or Depressure, in the  
upper Lip, which is situated immediately under the *Septum* of  
the Nose.

PHlLUMENI MEDICAMENTUM The Name Of a  
Medicine for the Eyes, described by *Oribafius, Collect. Medicinal  
L.* 8. C. 47. ' . '

PHILYPOSTROPHA, φιλυπόστροφα. ‘Whatever cause. Or  
threaten, a Relapse, are thus call'd by *Hippocrates, Prorrhet.*and *Coac. Prtenot.*

PHIMOSlS. Sometimes the Praeputium, or Foreskin, is so  
contracted by a Violent Inflammation, that it cannot be drawn  
backward behind the Glans. This Disorder is call’d Phimosis  
by the *Greeks,* and produces many dangerous Consequences ;  
especially if a Virulent Venereal Matter he lodged between the  
Glans and the Skin; fos, by the Contraction Of the Skin, those  
little Ulcers Of the Glans, called Chancres, which proceed from  
impure Copulation, cannot he ConVenientiy Cleansed Or healed.  
Nor is it surprising, as *Fcrdac* observed, that a Gangrene, Or  
Cancer, Or, at least, a Violent Inflammation of the Glans and  
Foreskin should arise from this Cause, and, upon account Of  
these Mischiefs, the Penis must either be consurtied by the Ul-  
Cers, Or removed by the Knife. The Patient, generally, cannot  
.void his Urine without extreme Pain, because of the Corrosion  
os the Skin and Glans. The general Cause Of a Phimosis is,  
by Physicians, rightly ascribed tO impure Coition. For whilst  
the Virulent Matter, which had been lodged in the Sinuses Of  
the Vagina, Continues hetween the Skin and Glans, the Fore-  
skin, especially if it should be naturally long. Or tight, can hardly  
escape being sweli'd'with an Inflammation, and a Phimosis must  
he induced. Some, however, have the Foreskin naturally so  
long, and so straiten’d, that the Glans can either he not at all,  
or Very littie uncover'd, but aS this neither occasions Trouble in  
discharging the Urine, nor any Impediment in Procreation, it  
requires no Aid from the Surgeons, unless it be attended with  
an Inflammation, violent Pain, Or any remarkable Inconvenience  
in Coition. Those who have their Foreskin naturally Very long,  
are much more easily infected by impure Embraces, than others,  
as we learn both from Reason and Experience.

If this Disorder is occasion'd by no Venereal Taint, it is cured  
- hy bathing the Penis, a sufficient Time, in warm Water r But,  
if it proceeds from a Venereal infection, proper internal Medi-  
cines must be exhibited, and the Pain may be alleviated, and the  
.Ulcers heal’d, by the following Method, in order to wash Out  
the acrimonious morbid Humours lodged under the Skin, let  
warm Water, Or rather, a Decoction of Barley, min’d with Honey  
of Roses, be frequently injected with a Syringe, between the  
Skin and the Glans. To discuss the Tumor, apply, externally, .  
an emollient and digestive Fomentation, Or Cataplasm, round  
the tumefied Part Os the Penis, and, if the Inflammation be se-  
vere. Bleeding should not be Omitted. After these Measures are  
duly taken, we may endeavour to draw back the Prepuce. But  
if the Tumor, and Violent Exulceration, Of the Glans render this  
Attempt impracticable, if the Disorder increases, or, lastly, if the  
Prepuce was naturally long, and Could not be drawn back before’  
the Infection, Recourse must be had to the Knife.

' in this Case, there are two Methods Os Operation. I. Let  
- the Endos the Prepuceine drawn aS far forwards as possible,and let  
an Assistant hold the Cover'd Glans in his Fingers. Let the Ope-  
rator, with his Lest Thumb, press back the Glans cover’d with  
the Skin, and then, with a Knife, Or Scissars, let him. extirpate  
all that Part of the Skin which projects beyond his Thumb, much  
in the same manner with the *Jourifh* Circumcision. Thus may  
the most straiten'd Part Of the Skin be easily drawn back , and,  
the Glans being uncover’d, the Ulcer may more expeditiously  
be cleansed and heal’d.

2. The Other Method is thus perform'd. The superior Part Of  
the Prepuce must be drawn up by the Fingers, and a Pair Of  
Probe-scissarS introduced; then an Incision must be made  
so sar in the contracted Skin, aS may he sufficient for uncover-  
ing the Glans. *Guillerneau, Pals.yn,* and others, prefer a parti-  
cular Knife for this Use, represented *Tab.* XLVIL *Fig. A* But  
why this Knife should be crooked, or why a strait Knife may  
not as well serve the Purpose, I cannot understand. After this  
longitudinal Incision, some Surgeons cut Osh with the Scissars,  
as much Of the End Of the Prepuce, aS appears superfluous. A  
copious Discharge of Blood succeeds this Operation; nor should  
it he suddenly stopped, but rather suffer’d to flow, aS long aS the  
Strength Of the Patient will permit, in order to prevent an In-  
flammation. Then dress with dry\* Lint, and apply a proper  
Compress and Bandage; and proceed, afterwards, aS in the Cure  
’ - of other Wounds. Besides the Cautions to be Observed in the

first Method of Cure, particular Care must be taken, that, in  
healing the Wound, the Extremity of the Prepuce , he not too  
much contracted; by which means the Patient would be again  
. exposed to the same Disorder. Sometimes, by dividing the Pre-

puce, the Glans is drawn back by the Frenum, and the Penis be-

comes inctirvared; in which Cafe, the Frenum must been:with  
the Knife, Or Scissars. *Is* a Gangrene affects the Glans, as iQan instance related by *Vcrduc,* it is necessary to penetrate to the  
sound Parts by frequent Scarification, and tO apply a Fomenta-  
tion Os *Unguentum AEgyptiacum,* and Treacle, dissolved in cam-  
phorated Spirit of Wine, till the Gangrene disappears But the  
stubborn Ulcers, or Chancres, can scarcely be removed without  
the LJse of internal mercurial Medicines; and, sometimes, not  
without a stightSalivation. Nor must I omit to mention an In-  
strument contrived by mV Friend, Dr. *Trorae,* for this Purpose,  
and represented in *Tab.* XLVIL *Fig. S.* whose Plates A A, be-  
ing introduced under the Skin, and gradually distended by the  
Screw B, they, by their Elasticity, gently dilate the contracted  
Skin, and thus may the Glans be denudated, without the Help of  
a Knife. Bur I question whether this Instrument will always an-  
swer the Intention.

PHLASMA, φλᾶσμα. A Contusion, or Collision.  
PHLEBION, φλεβίον. A small Vein.

PHLEBODONODEA, φλεέοδβνώδοα, an odd, and sort .Of  
foreign, and, for that Reason, obscure Term in *Hippocrates,*I *Prorrhet.* Io I. and *Coach.* 20. *Galen* explains it .Of the Veins  
or Arteries, agitated by the excessive Heat Of the Blood, which  
happens under a great Effervescence of the Humours, Or Violent -  
Pains Of the Head, when the Veins and Arteries at the Temples,  
aS well as the Jugulars, are subject tO a sort of Concussion and  
Snbsultus; so that the Word, by Etymology, imports as much  
as φλέβες δοκόμὲνἰοι *(Phlebes danumenoil Feins agitated. ..* Some,  
he says, read φλεβοτονώδεα *sePhlebotonodees,* understanding there-  
by a Distention of the Veins. Others, to avoid als Ambiguity,  
write it φλεδονώδοα *{flhledanodees,* deriving it from φλεδόνες *{Sale-  
-denes),* expounding the Word by ιώ^μληρῆντα *{paraleruntaso* and  
apply it to Persons in a Delirium: For φλεδόνες are expounded  
in the *Exegesis,* by φλϋαρίαι *(phluarlum), Tristes, Follies,* and ληραὲ  
(Lari;, *idle Amusements of delirious Persons.* In 4 *Epid,* we read,  
that *The Hypochondrium appeared distended, lpingrlcaosscia. rstyrov.*Bur we Ought, says *Foe fits,* to read the Word φλεβοδονώδεα. Or  
φλεβότονώδεα, or φλεδονώδεα, and to understand it Of 2 Disten-  
tion of the Hypochondrium, aster the manner of the Veins and  
’ Arteries, when under a Distention and Agitation, or Concussion  
from the Heat and Effervescence os the Blood.

PHLEBOPALIE, φλεβοπαλιη. The Vibration, er Pulsation,  
Of an Artery.

PHLEBORRHAGIA, φλεβῤῥῥαγία, from .φλὲψ, a Vein; and  
ῥήζνυμι, to break. A Rupture Of a Vein.

t PHLEBOTOMIA, φλεβοτομία, from φλὲψ, a Vein j and  
τέμνω, to cut. Phlebotomy.

There is not a more excellent, instantaneous, and efficacious  
Remedy for removing Various Diseases, both Of the acute and  
Chronical Kind, than Venesection, prudentiy and Cautiously used "  
for some Violent Disorders, of the most dangerous Nature, arise  
from a Redundance Of Blood, from a Suppression of its Critical  
Evacuations from the Uterus in Women; and a Desector In-  
terruption *of* the hemorrhoidal Discharge in Men. A Phlethora,  
by retarding and stopping the free and equable Circulation, lays  
a Foundation for Impurities Of the Humours, Stagnations, In-  
farctions, Obstructions, ExtraVafations, and Ruptures of the  
Vessels: For whilst the Blood, by its too great Quantity, strongly  
resists the contractile and elastic Force of the Heart, Arteries,  
and Other Vessels, its progressive Motion through the whole Body  
is not only retarded, so that it becomes thick, and fit for gene-  
rating lnsarctions, and Obstructions, the fruitful Sources os chro-  
nical Disorders, but, also, in delicate Patients, and highly ner-  
vous Parts, by exciting spasmodic Strictures, it induces an Inequa-  
lity in the Circulation Of the Humours, and violent and impe-  
tuous Congestions, to some of the nobler Parts, which lay a  
. Foundation for terrible Disorders in the Head, Breast, and Prat-

Cordis: These dangerous Disorders are not only prevented, but  
presently relieved, by Venesection seasonably and duly instituted,  
especially in Patients who abound with Blood, have large and fust  
Vessels, Or who labour under a Suppression Of the Menses, or  
Haemorrhoids: When in the Spring, and about the Equinox,  
the Air, On account Of the Nearness os the Sun to our Climate,  
becoming thin and rare, produces a Violent Expansion in the  
Blood, there is great Danger of those Diseases which arise from  
a Phlethora, as *Hippocrates* justly observes, so that, before these  
Seasons come on, it is expedient to lessen the Redundance Of  
the Blood by Venesection, and by that, means prevent the ap-  
proaching Disorders: Nor is it absolutely necessary we should  
always accurately observe these equinoctial Seasons; for, when  
the Quantity Of Congested Blood requires a more speedy and ex-  
giditions Evacuation, or when, about the End of *February,* and  
cginning of *March,* the serene and tepid State of tne Atmo-  
sphere produces an Expansion and TurgescenCe Of the Blond,  
which prove injurious to its progressive Motion, we are not towait for, but,’without Hesitation, to anticipate, the Equinox. I  
have known some,who from an ill-tithd Adherence to their usual  
Custom, have delay'd Venesection till the Equinox, whilst in the  
mean time, the Phlethora increasing, they died Of an apoplectic  
Fit before that time: Nor are we to listen to those who affirm,  
that Venesection is Only proper at certain Periods of the Moon,  
Or when Certain Conjunctions os the Stars happen: But we are

boldly, and without any Scruple, To take Blood from phlethoric  
Patients, under ail Phases of the Moon, and every Conjunction -  
of the Stars, especially .if the Atmosphere is serene and calm :  
Thofe, also, who abound with Blood, ought to use Venesection  
about the autumnal Equinox, lest the Rood should, by the Win-  
ter Cold, he inspissated, and become fordid, rhe Excretions be-  
ing disturbed by the inclemency and Variation os the Weather ;  
by which means a Foundation is laid sor those Disorders which  
groceed from an Impurity and Stagnation of the Humours.

ome, who greatly abound in Blood, ought to preserve themselves  
from Disorders, by using Venesection thrice a Year, thas is, in  
the Beginning of *March,* and in the Ends of *May* and *September.*

*As* a Redundance os Blood indicates Venesection, a Penury  
Of it, and a Defect of Strength, contra-indicate this .Operation.  
A Redundance of Blood is sufficiently known, from the Reple-  
tion of the Vessels, the Largeness of the Pulse, the luxurious  
Diet, the quiet and calm Method of Life, and the Intermission  
pf any critical, natural, or artificis! Evacuation; for, when ’all  
these Circumstances concur, we may safely and boldly useVene-  
section. On the contrary, when the Body is infirm and ema-  
ciates, and the Pulse weak, in consequence of a Want of Blood  
and Strength, Venesection is absolutely to be condemn'd, unless  
we intend to do an immediate Mischief to the Patient*, for* the  
Strength of the Pulse depends upon the large and brisk Impetus,  
with which the Blood is convey’d from the Left Ventricle os the  
Heart into the large arterial Tube: Now the Strength of the  
Heart to perform this Expulsion, depends upon the free and  
fussicient Motion of the Blood through the Coronary Veffeis  
into the Substance of the Heart, as, also, on the Influx of the  
nervous Fluid into the Fibres of the Heart: When, therefore,  
the Pulse is weak, small, and languid, from too scanty an Influx  
of the nervous Fluid, and a laudable Blood, and too weak an  
Impulse os the Blood into the Arteries, it is highly prejudicial  
to Open a Vein in any Patient, Or in any Disorder, because it more  
exhausta the Blood and Strength, which are already too much  
impaired.

Those Physicians, therefore, err, who order Venesection either  
in the Decline Of the Disease, or in Cases where one Disease  
succeeds another, aS it happens, sometimes, in Fevers, Or Vio-  
lent Haemorrhages. Nothing is more frequent in Practice, than  
To observe a Suppression Os the Menses in Women, who sur-  
mount any Disorder which consumes their Blood and Strength.  
But, in this Case, we are not, in order to provoke the Menses,  
to prescribe Emmenagogues, Or Evacuations Of Blond; hut we  
are rather by Analeptics, and a. rich Diet,. to generate a fresh  
Stock of laudable Blood and Humours. 5

A Defect Of Strength, sometimes, arises not from a Penury,  
but from a Redundance, Os Blood: We often perceive a Slowness  
and Weakness in phlethOric young Persons and Adults, who were  
before brisk and active, ln phlethoric Patients we, also, Ob-  
serve an unusual Languor, both Of Body and Mind, a Defect Of  
Sleep, and a preternatural Expansion Of the Arteries : In this  
« Case, it is expedient to remove the superfluous Masses Blood,  
which, by its Quantity, hinders the systaltic Motion of the Ar-  
teries, immediately after which the Pulse becomes more frequent  
and strong. But the skilful Physician must distinguish such an  
Oppression of the Strength, when present, and arising from a  
Redundance Os Blood, from that Weakness which draws its Ori-  
gin from a Penury thereof.

After Venesection, the salutary Excretions of Blond, and the  
Evacuations by Stool, Sweat, and Urine, succeed better, and  
Inore freely, than they did before, aS all the salutary Excretions de-  
pend upon the quick Or flow, the brisk Or languid. Circulation of  
the Blood: Hence it is Obvious, that if, by a Redundance Of tho  
Blood, its progressive Motion, together with the Excretions, is  
retarded, the diminishing the Plenitude of the Vessels, must in-  
crease its Circulation, render it more fluid, free the Passages of  
the excretory Ducts, and convey the Blond more freely and co.  
piousty to the Emunctories, that thus the Excretions may he the  
better carried On.

Hence I have Often observed, that a Suppression of the Men-  
ses has soon been removed, by Opening a Vein in the Foot.  
I, also, know several Instance?, in which the haemorrhoidal Diss  
charge, aster having been a long time stopt, has been happily re-  
stored by Venesection.

It is certain, from Experience, that in plethoric Patients, and  
those labouring under spasmodic Disorders, an aqueous and lim-  
pid Urine is discharged with Difficulty, but, immediately after  
Venesection, it is evacuated more copiouflyYand more deeply tin-  
ctured. *Hippocrates,* also, in *Sect. 6. 'Ach.* 36. informs us, , that  
" Phlebotomy removes a Difficulty of Urine; and, for that Pur-  
" pose, opens the Veins of the inferior Parts Of the Body.'' *Ri-  
verius,* also, in *Cent.* **I.** *obs.* 1. et48. et49. affirms, thats by  
Venesection, aqueouSUrine has been render'd os a deeper Colour.

I have, also, frequentiy found, that in hypochondriac Patients,  
who are generally costive, the Body has heen render'd soluble by  
Venesection: The Reason Of which is certainly this, that in the  
hypochondriac Disorder, by reason os the difficult Passage Of the  
Blood through the Mesentery and Liver, the Veffeis are too co-  
pioufly filled with Blood , and, by reason Of their preternatural

Distention, Spasms are produced in their Coats, and their peri-  
staltic Monon .is injured 5 in consequence os which, neither the  
Faeces, nor rhe Flatulencies, are duly evacuated, by the Anu,:  
Bur, by seasonably opening a Vein in the Foot, or, aS I have  
Often observed, by recalling the haemorrhoidal Discharge, by’  
the Application Of Leeches to the Veins of rhe Anns, theCircu-  
lanon Of the Blood through the Vessels or the intestinal Coats is  
render’d free; 2.due Strength and Motion is restored to the in-  
testines themselves^ and the *Faeces* are more regularly and natu-  
ralsy discharged.

Venesection is not only Often nfesul to Old Persons, but, also,  
powerfully contributes to Longevity, or the Protraction of their .  
Lives: For it is a common, though a palpable Error, to affirm,  
that Venesection is absolutely improper in Old-age; aS is Persons  
at this Period of Lise were-so far from labouring under a Re-  
dundance Of Blood, that they were rather afflicted by a Defe-  
Ciency Of that Fluid, and a Want of Strength. We may indeed  
readily grant, that all old Perlons are not phlethoric, and, con-  
sequently, do not stand in need Os Venesection ; nor does Age  
Of itself contribute to the Repletion Os the Vessels: But, at the  
same time, there are some Vigorous, robust, and sound old Per-  
sons, furnished with capacious Vessels, who not Only eat heartily,  
but are, also, capable Of duly concocting and digesting the hea-  
viest Aliments , in consequence Os which, it is not to be doubted  
but a copious Chyle and Blood will be generated from well-  
concocted Aliments; and such a S:ate is sufficiently apparent  
from the florid Colour of the Countenance, and the Turgescence  
Of the Veffeis with Blood t It, also, frequently happens, that not  
Only Adults, but, also. Persons extremely old, discharge large  
Quantities of Blood from the haemorrhoidal Veins, without any  
remarkable Loss of Strength: And I myself have known some  
Persons Of eighty Years of Age, who have evacuated large Quan-  
tities Of bloody Urine, without a perceptible Decrease os Strength.  
Besides, Age is not very fit for Morion and Exercise and, for  
this Reason, the Excretions cannot bear a due Proportion to the  
Quantity of Aliments taken; and, aS the Blood is little consumed  
by Heat and Morion, there must, necessarily, be produced a  
Redundance of Humours, and an Infarction and Plenitude of  
the Veffeis, which, unless seasonably removed, lay a Foundation  
for those Disorders which are most familiar to Old Persons, such  
as Wasting of the Flesh, Coughs, Coryzas, Hoarsness. Pains ofthe  
Joints, Palsies, a Difficulty of Urine, Stones Of the Kidneys  
and Bladder, Itchings, and the dry Itch: Which Disorders do  
not proceed immediately from a Redundance of the Blood, but,  
rather, from an Impurity of the Serum; but, at the same time,  
this Impurity of the Serum derives its Origin from the Redun-  
dance Of the Juices, by which the Excretion Of the Sordes is  
prevented.

*I* know many Instances Of Old Persons who have lived sound,  
robust, and free from the ordinary Diseases incident to Old-age,  
by no other means than Venesection, used twice a Year. And  
that Venesection is not unfriendly to Old-age, is sufficiently oo-  
ViouS from this, that almost all the *Svtisi,* even when eighty or  
ninety Years os Age, use Venesection every Yean See jTryser,  
*Lib. de Apoplexia. Primrose,* also. *Lib.* 4. *da grul. Error. Cap.*23. evinces from three Instances, that PessenS Of eighty Years of  
Age may commodioufly bear Venesection in the most violent  
Distempers, whether arising from internal Or external Causes:  
This I have, also, found Confirmed by frequent Experience. But  
we are by no means from this to Conclude, that Venesection is  
proper in old Persons, who are weak and languid, whose Appe-  
tite is lost, or who labour under a Weakness Of the Stomach and  
Intestines, and, especially, in those who have previously struggled .  
with some long and Chronical Disorder. - - - ;

In continued and acme Fevers, Venesection is generally not  
Only useful, but absolutely necessary: It is surprising, that some  
eminent Physicians, in Other Cases remarkable Patrons of Vene-  
section, should yet maintain, that in all acute Fevers, whether  
.Of the. benign Or malignant Kind, as, asso, in exanthematous Fe-  
vers, and those that are not such, it is so far from being neces-  
sary, that it is rather pernicious, except in the Synochs, in which  
they do not think it absolutely necessaryὁ but Only when it is ad-  
Companied with a Phlethora, and- an Orgasm: They assert,  
that it has been frequently observed, that Venesection, in the Be-  
ginning Os such a FeVer, has, about its State Or Height, pro-  
duced dangerous Translations and Congestions os Blood to the  
Head, which induce Convulsions, and a mortal Phrenitis: They  
are, also. Of Opinion, that Nature, which always wifely governs  
the animal Oeconomy, does not in these Fevers intend an Eva-  
cuationof the redundant Blood; but only a Resolution of it into ‘  
an excrementitious Serum, with a Secretion os the noxious Mat-  
ter, by means of an intense Heat; and that, for this Reason, Ve-  
nesection is, in these Cases, contrary to the intention os Nature,  
fince, by it, the salutary Work of Secretion is disturbed. But this  
Doctrine is OVerthrown, both by Reason and Experience: For  
I have known many robust Perlons, both young and full-grown,  
who, being full Os Blood, and seized with thefe Fevbrs, in  
consequence of the Omission of Venesection, have, in a few  
Days, died of a Phrenitis, an Inflammation of the Stomach or  
Fauces, or a Peripneumony. In such Cases aster Death rhe .

whole Body has been found surprisingly tumid, and the sangui-  
neous Ichor has been copiously discharged from the Nostrils: A  
prodigious Stench, also, accompanied with Putrefaction, has irn-  
mediately succeeded; for no other Reason but the inflammatory  
Stagnation of the BIond. On the contrary, I have, from many  
Ojservations, found, that Venesection, only once performed, in  
Patients labouring under acute Fevers, has not only diminished,  
or absolutely removed, the Ankieties of the Patients, bur, *also,*a Train of other terrible Symptoms. This Doctrine is, also, con-  
firmed by rhe Practice of *the French,* who, in all Fevers, with great  
Success, use Venefection, nor only once, but twice, or oftener,  
if the Condition of rhe Parient indicates its Propriety: But that  
Venesection, about critical Times, producesTransiationsof Blond  
to the Head, is an egregious Mistake; for though Phrensies and  
Convulsions frequently happen, in those who labour under acute  
Fevers, yet the fame Misfortunes happen, and that too more fre-  
quently, when Venesection is omitted, than when it is used: And  
since almost all who die of acute Fevers, are seized with a Pine-  
orris and Convulsions, certainly, if Venefection is the Cause Of  
thefe Symptoms, a Person labouring under an acute Fever, can-  
not readily die, if that Operation is neglectsd.

I, .on the contrary, do not hesitate to affirm, that, in acute Fe-  
vers. Venesection is often not only useful, but necessary; for  
Perrons seized with acute Disorders have always rather a Redun-  
dance, than a Penury, of Blood and Humours: Now it is cer.  
tain, that the very Essence of a Fever consists in an Augmenta-  
tion of the Tone, and a certain spasmodic Stricture, of all the  
Vessels and Fibres, upon which bosh the Circulation Of the  
Blood, and the increase of the Heat, depend: It is, also, known,  
that by Spastns the Diameters of the Vesseis are lessened; and  
that, by Heat, the Humours are expanded, and possess a larger  
Space: For which Reason the redundant and raging Blond, being  
denied a free Passage through the Blood-vessels, rs impetuously  
agitated hither and thither, and forced, as to improper Parts, thro’  
Vessels whose Diameters are naturally too small for the Admission  
of the Slood, where it remains, becomes stagnant, and lays a  
Foundation for dangerous Inflammations, which are most effec-  
tually prevented by seasonable Venesection. This is sufficiently  
confirmed by She Authorities of the most skilful Physicians; for  
*Hippocrates* himself, in his Treatise *de Ration. Viciineicut.* warmly  
recommends Venesection, in acute Disorders: Besides, the An-  
treats,, in there dangerous Diseases, used Venesection till a Deli-  
Suium was brought on, as we are informed by *Galen,* in *Lib.* I.  
r *Pat. Vict.* where be tells us, that fuch Venesection asbrings on  
a Deliquium is only to be used rn the most acute Diseases, and in  
thofe Patients who are robust and vigorous, in rhe Flower of their  
Age, and abound in Blood, as, alfo, where the Climate, the Air,  
and rhe Season of the Year, are very temperate. The Diseases  
: of this Kind are highly burning Fevers, inteofe Pains, considera-  
ble Inflammations of the Vsscera, Carbuncles, a Synochus, an  
inflammatory Lassitude, and violent Pains Of the Joints: For, in  
all these Dilorders, when a large Quantity of Blood is evacuated,  
the Heat is immediately abared; in some of them the Body is  
render’d soluble, or Sweats are excited, by which means the Dis-  
ease is either terminated, or at least diminished, according to  
*iiollerius, in Comment, adAphor.* 3. *Sect.* I. *Hippocr.*

In Exanthematous Fevers, also, thofe of the Petechial and  
Purple Kind, rhe Measles, and Small-pox, and even the Plague,  
Venesection is so far from being unsafe, that, when prudently  
used, it proves highly beneficial. It is a Dispute of great Im-  
portance among Physicians, whether in thofe Disorders, in which  
the peccant Matter is forced to the Surface of rhe Body, Vene-  
section may be properly and successfully hied: Some espouse th  
. Affirmative, and others the Negative, whilst both appeal to Ex~  
perience: But a due Distinction is to he made, and Venesection  
is to be accommodated to the Nature and Variety Of Circum-  
stances: Thus, for Instance, when the Humours are defectsve;  
when, in the Beginning Of a Difceder, the Strength is impaired;  
when the Pulfe is weak, bard, and small, theVcsseis numerous,  
but narrow ; when the Strength is diminished by any Affliction  
of Mind, or by a Flux; in a Word, where ever there is a Ma-  
lignity of rhe Humours; Venesection is rather prejudicial than  
salutary: For, in order to eliminate a Mauer which offends, not  
so much by its Redandance, aS by its caustic, subtile, and virulent  
Quality, so prejudicial to the nervous Parts, a strong moving  
Force of the Heart and Arteries is required, which can ooly be  
expected from a sufficient Influx of the Blond, and nervous Fluid.  
Besides, this peccant Matter to be expelled can only be con-  
vey'd to the Surface of the Body, by the Assistance of the Blond  
sod Humours; since, when the Diameters of the Vessels are  
small, they easily collapse, and are only filled by a brisk and lively  
Impulse of rhe Fluids. If, therefore, a Physician, by Venesection,  
diminishes the already defective Blood, Humours, and Strength,  
be does a terrible Injury to the Patient; sicce, bythismeans, the  
peccant Matter remaining within, like a Poison, perverts the  
Motion of the Solids and Fluids, and proves mortal.

But quite different Measures are to be taken, when, in con-  
sequence of the Redundance of the B'ood, and its Rarefaction  
by the febrile Heat, rhe Coats of the Heart and Arteries are so  
distended, that their Systole is diminished, and almost suppressed;

*I*

**in** Consequence of which, the Bicced is not freely convey’d to the .  
small cutaneous Tubes, that the peccant Marter may be tioly  
secreted and eliminated; for, in strch a Case, Reason informs us,  
that, when a certain Quantity Of the Biood is evacuates, **the**remaining Pan circulates more briskly; the equable Resistance of  
the Coats to the impulse Of the Fluids, and the fystakic and dja-  
stalric Motion, are restored, by which the Secretion and Evacua.  
tion of the peccant Matter is excellently carried on: This most  
frequently happens in young and phlethoric Persons of sanguineous  
Constitutions, who live high, or are accustomed to an indolent  
Course of Lise; as, also, in those Contthutions, in which anim-  
moderate Indulgence Of boundless Passion has diminished the Ex-  
cretions, and, consequently, generated a Redundance ofHumours:  
Patients of this kino, when labouring under a purple, petechial,  
a cararrhous, benign, or malignant Fever, or the Small-pox, are  
exposed to the most certain and infallible Danger, by an Omission  
of Venesection; whilst, on the contrary, thofe Disorders are  
happily removed, when, by diminishing the Pblethora, the free  
Circularion of the Blood is restored.

In Exanthematous Fevers already appearing on rhe Skin, Ve-  
nesection is so far from being prejudicial, that it is sometimes  
highly beneficial. It is a common Opinion, that upon the Esho-  
rescence of Petechial and Purple Fevers, the Meastes, and Small-  
pox, it is neither proper to use Venesection, nor Purgatives, lest:  
the malignant Matter, heing by these means recalled into the  
Habit, should produce an irreparable Lost. But though it is an  
Observation of great Importance, and fupporced by Experience,  
that Venesection is not to he ufed, when Nature is employ’d in  
the Work of Excretion, and when the exanthematous Eruptions,  
have not had a long and fixed Seat .in the Skin, yer there are  
Cases, in which, aster the Appearance of the Efflorescences, Ve-  
nesection is both useful and necessary: For I have observed, in  
those who have died of a Purple Fever, whether of the primary  
or secondary Kind, Or of the Measles, or Small-pox, violent  
Spastns, not only of the Joints and Extremities, but, also, of the  
Abdomen, which, in consequence of the Contraction of rhe  
Skin, were succeeded, not only with a Retrocession of the Efflo-  
rences, but, also, with a violent Anxiety, a Tossing of the Body,  
and frequently a Delirium, accompanied with a De.iquium ,. all  
which mortal Symptoms are non as is commonly believed, so  
much produced by the Retrocession of the exanthematous Mar- .  
ter to the internal Parts, as by the lmpetus and Congestion of the  
Blood to rhe Heart and Brain: Hence, induced by the Reason  
of the Thing alone, in one Year’s Time, I, by Venefection in  
the Arm, saved four Childbed Women labouring under so violent  
Purple Fevers, that their Lives were despair’d of; for, as soon as  
a Vent was given to the Blood, the Anxiety about the Procardia,  
and the Deliquiums, were removed, and the Patients forthwith  
became better, to the great Surprise of the Surgeon and By-  
standers, who predicted the Death of the Patients, under rhe very  
Operation which could only afford them Relief. Io a yoting Man,  
also, dangeroufly ill of the Small-pox, when an imminent Deli-  
rium, and a violent Anxiety about rhe Prsscordia, threaten’^.  
Death, I successfully order’d Venesection in the Arm. Nor does  
this Piece of Practice want the Authority of some of the most  
celebrated Physicians to support it: Thus *Bat alius,* that noted  
Patron of Venesection, in *Lib. de Penaesect.* informs us, that, with  
great Success and Advantage, he order'd Venesection in pesti-  
lential Buboes, and other exanthematous Disorders, if the Fever  
did nor remit. *Mur altus,* also, not to mention others, in AL  
N. *C. Dec. 2. An. η. Obsc* **I** *Iy.* observes, that Venesection proved  
salutary in an epidemical Fever, in which a large Number of Pa-  
-puke appeared on the Body.

in the Paroxysms and Exacerbations of Fevers, and other Dis-  
eases, Venesection is dangerous; but is beneficially used on the  
intervening Days: ln the Paroxysms of intermittent Fevers, un-  
der an immediate Fit of an Epilepsy, or the hysteric or hypo-  
chondriac Disorders, and in Cases where the Extremities are  
cold, or internal Heat and Anxieties rack the Patient, Venesec-  
tion not only augments the Violence of the Symptoms, but, also,  
endangers the Life of the Patient. The Reason of this is obvious;  
for the Exacerbation of Symptoms and Diseases is accompanied  
with Spasms, especially of the external Parts, aS, also, of rhe  
Stomach and Intestines; by which the free Circulation of the  
Bicod is intercepted, and the Blond itself forced, with a greater  
Impetus, to the large Vessels, and especially to the Breast and  
Heart: If, therefore, any one attempts Venesection in the Arms  
or Feet, when all the Parts are spasmodically constricted, he will  
in these Parts infallibly augment the SpaTrns ; for the larger Quan-  
tity of Blood is taken from these Parts, rhe more the spasmodic  
Contraction os the Fibres is increased ; since nothing more power-  
fully resists this spasmodic StriSure, and the Regurgitation of the  
Blood to the internal Parts, than a strong Impulse of the Heart  
and Arteries, and a liberal Afflux of the resisting Blood to the  
Parts: Hence it is expedient to delay Venesection till the Day  
Of intermission or Remission, when the Spafms are remitted,  
and the free Assiux of the Biood to the Parts is restored.

But there are some Cafes, in which it is expedient, even under  
the spasmodic Paroxysmi, though not in the Parrs spasmodically  
affected, hut in those to which the Blood is conveyed with **the**

greatest Impetus: Thus it Otten happens, rher, m consequence of  
Spanns of the Parts Of the Abdomen, or of.the Legs and Feet,  
which are extremely cold, either On account of a Fright, Or any  
Other Cause, the Blood is impetuously convey’d to the Breast and  
Head, and threatens an Apoplexy, or a Suffocation; in winch  
Cafe, a Vein opened, not in the inferior, but superior Parts, is  
highly useful, and affords present Relief

There is, therefore, a flight Species of Apoplexy, which may  
be removed by Venesection alone, when, either by the Violence  
Ot some Passion, especially a Fright, or by terrible Spasms Of the  
insertos Parts, the Blood being with such an Impetus convey'd  
to the Head, aS, by its Quantity, to distend the Vessels Os-the  
Membranes of the Brain,-their systaltic Motion is checked, and  
a flight Species of Apoplexy produced. This Species Of Apo-  
plexy is vcry familiar to hysteric-Women, to Persons os ρίρι  
thoric Habits, and those os delicate Constitutions and Minds,  
and is, by the unskilful and unthinking Part Of Mankind, taken  
for a Deliquium; from which, however, it is widely different;  
For, in a Deliquium, there is noPulsation Of the Heart andArteries,  
the Face is pale, and the Breathing imperceptible , but, in this  
si ght apoplectic Paroxysm, the Use Os all the Senses, whether  
ex ernal or internal, is totally destroyed, rhe Limbs remain im-  
moveable, there is a Violent Palpitation of rhe Heart, the Pulse  
is large and quick, and the Face tumid and red: Nor does this  
flight Apoplexy arise from a Rupture of the Vessels, which is an  
incurable Disorder; nor from a Secretion os the Serum, which  
terminates in a Palsy; but Only from a Stagnation os Blood in  
the Cavities os the preternaturally distended Vessels; sor it is cer-  
tain from anatomical Discoveries, that the carotid and Vertebral  
Arteries, as soon as they enter the Cranium, and run through the  
Membranes Of the Brain, lay aside their thicker Coats, with which  
ail their other Parts are covered: For which Reason it is not  
to be wonder'd ar, is, by the Quantity and Impetus of the Blond  
convey'd to the Brain, their contractile and elastic Force, by the  
Assistance os which the Blood is farther protruded into the VenouS  
Sinuses os the Head, is diminished or destroyed; by which means  
the Systole of the Carotins being destroyed, the Blood stagnates  
in the too much distended Vessels of rhe Membranes of the  
Brain, and in the Plexus ChoroideS: Hence the Secretion and  
Influx Of the nervous Fluid, on which Sensation and Motion  
depend, are intercepted and destroyed: Hence it is obvious, that,  
in order to restore the due Systole of the Veffeis, the free Circu-  
lation Of the Blood through the Head, and the Influx Of the ner-  
vous Fluid into the Nerves, there can be no more proper and  
efficacious Remedy, than taking a sufficient Quantity os Blood  
from a large Orifice made in One Os the Veins of the Arm ; for,  
by this means, in a short time. Reason, Sensation, and Motion,  
are restored.

But those Physicians ill consult the Safety of their Patients, who,  
Tor want os a sufficient Knowledge of the Causes os this Missor-  
tune, order Venesection in the inferior Parts, because these are,  
in such a Paroxysm, generally- spasmodically Constricted, cold,  
and too remote from the Part affected, by which Circumstances  
the Derivation Os the Blood is rendered less expeditious and com-  
modious. Besides, I have Often observed, in Patients whose whole  
nervous Systems were disposed to spasmodic Contractions, and  
whose Extremities were always cold, that by Venesection, even  
when seamy, the Violence Os the Spasms in the inferior Parrs has  
been in a sew Hours increased: In consequence Os which, the  
Blood, being afterwards impeiuousty convey'd tO the Brain, pro-  
duces the apoplectic Fit above described, and which, in Process  
*Of Time,* becomes so Violent, as to cut off the Patient, or,at least,  
leave behind it a Palfy, or Loss os Memory, unless removed  
by a speedy and seasonable Venesection-

Disorders os the Heed arising from a Congestion os Blood,  
and a Distention of the Vessels, require a Venesection, which,  
however, is to be performed in the adjacent Parrs. A Vio-  
- lent and obstinate Head.ach, a frequent Haemorrhage from the  
Nose, melancholic Madness, a Vertigo, an Ophthalmia, an Ery-  
sipelas of the Heal, and Inflammations os (he Larynx and Pha-  
rynx, Very frequently draw their Origins from Spasms, too great  
a Congestion of Blood to the superior Parts, and a violent Dis-  
tention of rhe Vessels; especially in hypochondriacal Patients, and  
in Cases where the Sromach and Intestines are turgid with Flatu-  
lencies and Sordes, or are spasmodically constricted ; as, also, in  
Cases where the free and equable Circulation Of the Blood is fo  
intercepted, that, rushing copiously and impetuoufly to Other  
Parts, especially the Head, it there produces these Disorders. In  
such Cases, for preventing Danger, and deriving the Impetus Of  
the Blood elsewhere, it is expedient to open a Vein, either in **the**Forehead, the Temples, under rhe Tongue, or in the Neck

In violent Cephalalgias, Ophthalmias, and Quinseys, Venesection  
under the Tongue is always highly beneficial, bur, in a Phrenitis,  
Melancholy,, and an Head-ach, arising from internal Causes, it  
is most expedient to open the external Jugular Vein, and, if this  
cannot be found, the Vein which runs longitudinally along the  
Forehead, and is a Ramification os the external Jugular, is to be  
open'd, the Neck being previousty tied with a Ligature under the  
Chin, and the Breath retain'd. The Opening of this frontal Vein  
was Very’ common among the Antients. Thus *Hippocrates, in*

*SeS. esu Aph.* 68. informs ns, « that a Pain in the posterior Pari:  
tC Os rhe Head is relieved by opening the Vein running along the  
" Forehead.'' And *Hollerius,* in his Commentary On this Apho-  
rism, tells ns, \* that 'tis certain from experience, st that many  
" have been instantaneously freed from Head-achs, by opening  
\* the same Vein.” *Alexander Trallian, in Lib .A. Capita.*greatly recommends the opening Os the frontal Vein in a Phte-  
nitis , and affirms, that he suddenly Cured a phrenitic Patient .by  
that Means; and in the tdth Chapter of the same Book, *de Me.  
lancholia,* be has these Words: " If a sanguineous Matter is im-  
“ pacted in the Brain, we are boldly to open the frontal Vein:  
" for, in consequence Of the Evacuation Os the whole other  
" Pans of the Body, there *is* no Harm produced by immediate.

Applications to the Pari: affected." ' ......

- The' we are Certain from Experience, that in Violent Disorders .  
Of the Heed, Opening the frontal Vein, those behind the Ears, the  
external Jugulars, and the sublingual Vein, are osgreat Service, yet  
this Practice is not to be universally recommended, nor is it proper  
in all Cases, since we are to have a particular Regard to the State  
and Constitution Of the Patient; for if such Disorders of the Head  
are accompanied with a Plenitude os the Veffeis, or if Violent;  
Spasms Of the inferior Parts convey the Blood copiouily and im.  
petuoufly to the Head, it is to be dreaded, lest opening a Vein-  
in the Head should invite a larger Quantity of Blood to it. For  
this Reason the most skilful of the Antients unanimouily advise,  
that, at the same time, a Vein should be open'd in the Arm, or  
in the Foot. Thus *Alexander Trallian,* in *Lib.* I. *Cap.* Id. tells  
us, " that if we attempt any Core on the Head, before the Body  
" is freed from its recrementitious Juices, we do Harm rather  
" than Good , since by that means a larger Quantity of Hu-  
" moors ‘is attracted to the Part affected." *Hollerius,* also, in  
*Comment,* in *Aph.* 68. *Sect.* 5. os *Hippocrates,* informs us, “that,-  
ίς if a Pain 0s the Head is accompanied with, a Plethora, we  
“ must first open a Vein in the Cubiso and then the frontal Vein,  
“ but, if there is no Plethora,, we may forthwith safely open the  
" frontal Vein; and if the Pain of the Head is produced by Con-  
w sens, if, .for Instance, it arises from a Suppression Of the Menses,  
*“ we* are first to Open the Vein in the Ancle, then that of the  
(C Cubit, and then the frontal Vein. If the Head-ach arises  
“ from some Disorder os the Diaphragm, or Liver, we are first

. α to open the cubital, and then the frontal Vein."

With respect to Opening the sublingual Veins, in an Angina, it  
is, also, to be Observed, that in a plethoric Habit, this Practice is  
dangerous, unless the Plethora is previousty removed, by opening  
a Vein in the Arm. We are, therefore, to follow the Direction?  
Of *Alexander Trallian,* who, in *Lib.* 4. *Cap.* I. *de Angina,* uses  
these Words: ‘ι In Cases Of Necessity, I have, in the Mornings.  
“ open'd the cubital Veins, and then the frontal; after which,  
" by exhibiting Cream *os* Ptisan in the Evening, I have perfectly  
" cured a Qtnniey. I have, also, with great Success, open'd the

jugular, when I Could not find the sublingual Veins.”  
In Disorders Os the Breast, such aS a genuine Pleurisy, and a  
Peripneutnony, Venesection in the Arm is Often highly necessary.  
Tho’ a spurious Pleurisy, which is a Species of Rheumatisms  
Or arthritic Pain, and which arises from an acrid Serum con-

. tain’d within the Pleura, and surrounding 'the Ribs, does not -  
always require Venesection, but is often happily remov’d by a  
Diaphoresis, yet quite different Measures are to be taken, in a  
true Pleurisy and Peripneumony, the former Of which is only  
a flight, and the latter a more profound inflammation of the  
Lungs, arising from a Stagnation Of Blood, firmly impacted in  
their Vessels, for, in these. Venesection is not Only necessary, but,  
if there is a Plethora, must be repeated, in Order to prevent the  
Increase of the inflammation, which End is obtained, when the  
Blood, which is too copiouily congested in the Vessels, stagnant,  
and incapable Of a free Circulation, is, for the fake Of a better -  
Derivation, drawn from the most contiguous Part, making a  
large Incision in the Vein, that thus the Blood may be the more  
quickly and impetuoufly deriv'd from the Lungs.

Venesection is of singular Use for the Purposes Of Evacua-  
tion. Revulsion, and Derivation: The evacuating Use .Of Ve-  
nesection is to diminish the Quantity Of the Blood, and, when  
this Intention alone is pursued, it is Of no Importance, from  
what Part of the Body the Blood is taken. The derivatory  
Use of Venesection is to attract the Flux of the Blood from  
any Part affected to Other Parts, from which it may be more  
commodiousty evacuated. Thus, in Violent spasmodic and flam-  
lent Disorders of the Abdomen, and in Diseases arising from a  
Suppression, Gr retarded Discharge, Of the MensieS Or Hsmor-  
rheids, ’cis safer for - the Purposes of Derivation to open a  
Vein in the Foor, rather than in the Arm. Hence *Hippocrates,*in *Lib. de Nat. Hum.* justly informs us, ‘c that, in Pains  
ζς of the Back and Coxendices, we are to .use Venesection in the  
“ Hams and Ancles.5' And *Severinus,* in his Treatise *de essicaci  
Medic. Cap. 2.6.* informs us, that, for preventing nephritic Pains,  
promoting the haemorrhoidal and lochia! Discharges, as, also, ’  
in Inflammations and Fallings down of the Anus, in Vomitings  
of Blood, and Schiatic Pains, a Vein is with great Success  
opened in the Foot: On the contrary, in Disorders Os the  
Head, such as an Apoplexy, a Lethargy. Madness, Melancholy,:

a Phrenitis, a suffocative Caiarrh, a sanguineous Asthma, *i*Spitting of Blood, a Pleurisy, a Peripnenmony, a spurious In-  
summation Os the Liver, rhe too great Quantity and influx Os  
the Rood, which ought speedily to be deriv’d to other Pans,  
are more happily remov'd by opening a Vein in the Arm,\* which  
is far nearer the Part affected: But Revulsion, Or rather Avulsion,  
is made, when the Impetus of the Blood is recal’d, or, aS It  
were, drawn upwards, from the inferior to the superior Parts.  
Thus, in too profuse a Discharge Of the Menses or Haemor-  
rhoids, a Vein is successfully open'd in the Arm. The same  
Practice is, also, expedient in pregnant Women, in order to  
prevent Abortion, if the Vessels of the Uterus are so much  
infarcted and distended with Blood, that the Weight Of the  
Uterus, pressing downwards, becomes burdensome and uneasy to  
the inferior Parts.

Venesection is to be prudently us'd for the Purposes Os Deri-  
vation and Revulsion; for, if Obstructions Of the Vessels  
arising from impacted Blood are to he remov’d, it is expedient  
not to take a large, hut a moderate Quantity from the ynost  
contiguous Part; because, by this means, the Remainder Of the  
Blood is more impetuoufly Convey'd to the Part affected, and  
carries off the stagnant Blood lodg’d in the small Vessels, since  
moderate Venesection accelerates the too languid Motion Of  
the Fluids in the Vessels. Hence, Opening the Vena Saphena  
often instantaneously restores the menstrual Discharge ; and the  
haemorrhoidal Discharge, when tOO stow, is happily promoted  
and accelerated by Opening a Vein in the Foot; whereas  
these Effects are Often not produc'd, by taking a large Quin-  
tity Of Blood from the Arm, Or the Foot, bur, is the Disorder  
is inveterate, and the Obstructions Os the Vessels so great, that  
it cannot be remov’d, in such a Case, if the Patient is ple-  
thoric. Opening Os the Vena Saphena is more hurtful than  
beneficial, because jt invites the Blood more copiouily to the  
Uterus, by which means a greater Obstruction of the Vessels  
is produc'd. Nor in an Hemicrania, Or Obstinate Head-ach, in  
a Chronical Vertigo, Or in Melancholy, does Venesection in the  
frontal Vein afford any Refies,' because by that means a greater  
Afflux os Blood to the Head is produc'd, and the obstructed  
Vessels os the Membranes os the Brain more infarcted. Tis,  
therefore, better, in such Cases, to take Blood from the inferior  
Pans: In recent Ischiadic Pains, Venesection in the Foot Often  
affords immediate Relief, whereas, when the Disorder is inve-  
terate, it rather increases it. in Bodies, therefore, full of Blood  
and Juices, 'tis far more safe, according to the Advice of .Ho/-  
*legists,* in *Comment,* in *Sect.* 4. *Aphor.* 36. first to Open a Vein  
in the Arm, and then the Schistic Vein, that there thus may be  
a Revulsion Of the Blood in various Places, at one and the same  
time. The same Author, also, justly informs us, that in DysurieS  
proceeding from Infarctions os the Kidneys with Blood, as, also,  
in Inflammations Of the Bladder, we are first to Open a Vein in  
the Arm, and then the Vena Saphena, in the Ham Or Ancle.  
From what has been said, his sufficiently obvious, that Vene-  
section may be us’d in a Part very contiguous to that affected,  
if the Disease is recent, its Cause moveable, and the Plenitude  
of the Vessels\*1 not very great, but when the Diseaseis Osa long  
Standing, and the Body abounds with too much Blood, we are  
first to use Venesection in the more remote, and then in the  
more contiguous Parts Of the Body.

If is of great Importance to take away Only a due and proper  
Calamity Of Blood, and sometimes there, is a necessity for  
reiterated Venesection. Young Persons, those Os tender Ha-  
bits, such aS have small Vessels, and Women who readily sail  
into *Deliquiums* by means Of large and copious Venesection,  
Ought to abstain from ir, if possibles but, it it should be abso-  
lutely necessary, the Orifice should in such Persons he made  
small, and the Blood but gradually evacuated, compressing  
the incision at proper Intervals with the Finger.’ But Women,  
after fifty Years of Age, when their Menses generally cease, re-  
quire a larger Extraction of Blood, which, also, holds in robust  
Men with large Vessels, and in Persons, who, being accustom'd  
to rich and delicate Living, begin to have the hxmorrhoidal  
Discharge cease. In the Spring, especially in *May,* People  
Can bear larger evacuations Os Blood, than in the Summer,  
Or Autumn; but a moderate Quantity of Blood is only to be  
taken away in excessive Haemorrhages,' such aS spitting Of  
Blood; as, also, enormous Discharges Os the Menses, and Hae-  
morrhoids: Nor is it expedient to deprive the Body Of a large  
Quantity Os Blood, before the ordinary Time Of the Menses,  
. lest the subsequent. Discharge should either totally Cease, or he

Considerably diminished.

In all inflammatory and exanthematous Fevers, if, in Con-  
sequence of a Plethora, there is a Necessity for Venesection,  
we are to bo very careful, that only a due Quantity of Blood  
he taken away; fur, if, in case of a Redundance Of Blood,  
too small a Quantity of it, such as an Ounce or two, is taken  
away, the orgastic Expansion of the Blood is often augmented;  
so that it is so far from being beneficial, that it rather does  
Injury by increasing the Inflammation, and preventing the Erup-  
tion os the exanthematous Matter. In like manner, is too large  
a Quantity Os Blood is taken away, more Harm than Good is

dene, since by this means the Expulsion Of the exanthematous  
Macer, which ought to he Conveyed to the Skin by the Biood,."  
is hinder’d, and the peccant matter, ’ to the great" Detriment of  
the Patient, retain’d in the Habit. In a Peripnenmony and  
Pleurisy, too copious Venesection hinders the Expectoration  
and Discussion or the inflammatory Matter, which ought, also,  
to be evacuated, and carried off, by means or the Blood, ln  
Rheumatisms, an Erysipelas, and arthritic Pains, both Os the  
fix’d and wandering Kind, it is, also» necessary to leave a Quan-  
tity of Blood sufficient for the Cure Os these Disorders, that is,  
we are neither to take away too large, nor too fmall a Quantity.

If a Plethora not .Only Oppresses the Vessels, but, also,  
impairs the Strength, a large Quantity Os Blood, such as a Me-  
dical Pound, for Instance, is to be taken away, for, if Only a  
small and inconsiderable Portion is evacuated, the Blood finding  
a greater Space, its Elasticity is more increas’d. It becomes  
more expanded, and often acts with a greater Impetus on the  
Part affected. I have known Instances, says *Hofsioan,* where,  
in considerable Plethoras, the Extraction of a small Quantity Of  
Blood, an Ounce Or two, for Instance, has,a few Hours aster  
been socceeded by an apoplectic Fit, which has been happily  
remov’d by liberal Venesection in the Arm, from which eight  
Ounces, for Instance, have been taken. J, aiso, remember,  
says he, that, in a certain plethoric Person, Violent Anxieties of  
the Praecordia were produc’d by a Suppression Of the haemor-  
rhoidal Discharge, arising from Cold. Upon Opening a Vein in  
his Foot, and taking away only sour Ounces Os Blood, all the  
Symptoms were augmented, such aS the Anxiety os the Pjae-  
cordis, the Watchings, the Inquietudes, and Difficulties os  
Breathing, which, however, forthwith ceas'd upon taking teveti  
Ounces Of Blood from his other Foot.

Rheumatisms, Catarrhs, Coryzas, and Coughs, are often gd«  
Derated by a preposterous and unskilful Venesection, which,  
however, when seasonably us'd, proves an excellent Means for '  
preventing and removing these Disorders. I have frequently  
Observ'd, says *Hoffman,* in the Course Of my Practice, that a  
few Days after Venesection, especially in the Spring and Au-  
tumn, when the Weather is not calm, and serene, many have  
fallen into Violent Catarrhs, Coryzas, Coughs, rheumatic Dis-  
Orders, and catarrhal Fevers; and this happens very frequently;  
especially when Persons, not sufficiently clothed, expose them-  
selves to the cold and moist Air, particularly in. the Evenings;  
for it almost always happens, that the Perspiration is diminish'd  
by a pretty copious Venesection, in Consequence Os which, the  
Humours usually carried Off thro' the Pores Os the Skin, in  
.the Form of Vapours, are, in some measure, retain’d in tho  
internal Parts; and this happens most frequently in Persons of  
spongiosis Habits, and small Vessels Nor is this Phenomenon  
hard to be accounted for: When a large Quantity of Blood is  
.taken away, the Vessels, especially such as are small and near  
the Extremities, being before distended with Blood, begin to be  
flaccid and empty. And aS there is an exquisite and highly  
sensible Tone in the subcutaneous Integuments, hence it hap-  
pens, that. On rhe Access of a cold Air, the elastic Fibres Of  
the Skin are contracted, and the sudoriferous Ducts by th ass  
means block'd up; in Consequence Of which, reCrementitiouS  
Sweat not Only remains in the Habit, but, also, is forced froth  
ths external to the internal Parts, especially to the glandulous  
Parts of the Fauces and Bronchia, Or to the mucilaginous Glands  
Os the Joints, or to their glandular Ligaments, where an highly  
acrid, saline, and stagnant Serum, exciting violent Irritations  
and Constrictions Of the Vessels, hinders the free Circulation  
Ofthe Humours, by which means\* Secretions Of Serum, Pains,  
intense Heats, and a copious Afflux of Humours, are excited.

But as an unskilful, or too copious. Venesection lays a  
Foundation for Catarrhs, so it is frequently observed in Prac-  
rice, that Venesection prudently us’d in the Spring and Autumn,  
and repeated every Year, has treed many’ Of Coryzas, Stuffings  
of the Heed, and annual Coughs, and especially, those who  
hefore abounded in Blood, and have never had a Vein Opened  
before. In the Spring, in consequence Os the Rarefaction and  
Expansion os the Air, the Vessels are turgid, on account os the  
expansion Of the Blood, by the Access Os a subtile Ether: lf  
therefore, an Evacuation of Blood, either natural or artificial, is  
not made. Stagnations Of Blood, and Humours, and Secretions,  
and Depositions Of Serum, readily happen in the most lax,  
soft, and glandular Parts: all which Misfortunes may be happily  
prevented by seasonable and prudent Venesection.

AS the flatulent Colic is sometimes augmented by Vene-  
section, so those of the convulsive and baemorrhoidal Kind are  
often alleviated, and totally remov'd, by it. Those Flatulencies  
which violently distend the intestines, most frequently depend  
Upon a want of due Tone in them, or a Weakness Of their  
peristaltic Motion; for fince, by the Force Of this Motion, not  
Only the Flatulencies, but, also, the Other Contents, of the  
Intestines are carried downwards, so when ir is either dimi-  
nish'd, Or totally destroy’d. Flatulencies are copioufly generated,  
and become stagnant, - especially in the Flexures os the Colon  
about the Hypochondria j but this want Of Tone in the Intestines  
principally arises from the Defect os a laudable Blood, and net-

vans Fluid; for which Reason Old Persons, People aster Re-  
Covery from a Disease, those weaken’d by any long-protracted  
Disorder, Or indisposition Of Mind, thofe abounding in Phlegm,  
cr who seed upon very refrigerating Aliments, are frequently  
subject to a particular Species Of Colic, which is happily  
. cur'd, not by Venesection, or diminishing the Quantity of  
Blood, but by carminative Medicines, possess'd Of a balsamic  
and aromatic Principle. But other Measures are to be taken  
with the spasmodic Or convulsive Colic, which arises from  
Blood lodg’d in the intestinal Coats, and Violentiy distend-  
ing them ὁ for seasonably opening a Vein in .the Foot not Only  
proves a Preservative against this terrible Misfortune, bur, also,  
affords present Relief under it, as *Fiveriusi* in *Cent. 1. Obs.* 44.  
has justly observ'd.

Both before and after Venesectionj some Cautions are to be  
oblerwd aS useful: For,

I. We are not, except in Cases Of urgent Necessity,  
to open a Vein in the Equinox or Solstice themselves, at full  
or new Moon, Or in a rainy and gloomy Day. But 'tis expe-  
dient, a few Days before these Seasons, and on a clear and  
serene Day, to use Venesection aS a Preservative; because about  
these Seasons the Discharge Of the Menses generally happens,  
and various Disorders Os the spasmodic Kind, epileptic  
Paroxysms, and the Diseases familiar to hypochondriac and me-  
lancholic Patients, generally return, and before the Paroxysms  
Os these Diseases it is expedient, by Venesection, to free the  
Body from its superfluous and redundant Blood.

2. It is always expedient, in Persons who readily faint, to  
constitute Venesections, not with an empty Stomach, but after  
taking a little Broth, making the Orifice at the same time but  
small.

3. After Venesection, it is highly improper to load the Stomach  
with Meat Or Drink ; and much more, to drink to Excess, or ex-  
pose the Body to a cold or moist Air, for 'tis certain, from  
Λ frequent Experience, that by these means many, especially in  
the Months Of *March* and *October,* and particularly if they  
are os a spongionS Habit of Body, fall into CoryEaS, Coughs,  
Rheumatisms, caiarrhous Fevers, and spurious Pleurisies; for  
by Venesection, especially when copious, the Perspiration is  
considerably diminish'd, because the exhausted Blood no longer  
keeps the subcutaneous and sudoriferous Ducts so open aS they  
were before. Hence the cold Air, by closing them up, and  
repelling the Humours from the Surface Of the Body to the  
interior Parts, produces the now-mentioffd Disorders.

4. Before Venesection, it contributes to Health to free the  
Primae Vias and Stomach froth Crudities and Sordes, not by  
a drastic Purgative, but by a gentle Laxative *, for we* are by no  
means to exhibit strong Purgatives to plethoric Persons, be-  
Cause, by exciting Spasms Of the Intestines, they by that means  
disturb the free Circulation Os the Blood, and produce prejudi-  
cial Congestions in Various Pans of the Body.

5. in Women, On account of the menstrual Discharge, and  
in Men subject to the Haemorrhoids, it is always expedient to  
Open a Vein in the Foot, lest the Blood should be derived,  
from these Emunctories. But Men free from the Haemorrhoids  
Ought not to accustom themselves to Venesection in,the Foot;  
for I have by that means seen blind Haemorrhoids, without any  
Discharge excned, for removing Of which Venesection in the  
Arm ought to be instituted.

6. After Venesection, a careful Regimen is to be observ'd ;  
nor must the Patient forthwith return to his former Diet, and  
Method Os Life. Hence we Cannot forbear Condemning the  
Custom os *ihe.Germans,* who never eat and drink more plenti-  
fuisy than aster Venesection.

Cupping with Scarification is often us'd aS a Succedaneum  
for Venesection. Thus *Celsus,* in *Lib.* 2. *Cap.* Io. informs us,  
« That the principal Use of Cupping-glasses is when any Fault  
" is lodg’d, not in the Whole, but in fome particular Part, of  
" the Body, to which, for the Purposes of Health, they need  
" Only be applied : And this ssa Proof, that, in Order to relieve  
‘ " any Part, we are, with the Knife or Lancet, principally tO  
" take Blood from the Part affected, fince no One applies Cup-  
“ ping-glasses to a distant Part, unless when he intends to derive

the Blood from it, but to the Part affected, and which is to  
u be relieofd.” For this Reason, in Rheumatisms, especially  
such aS affect the Back, Scapulae, and Arms, and in ’ Pains Of  
the Gout, a profound Scarification is with great Advantage  
made; aS, alm, in Parts affected with a pressOry and con-  
strictory Pain; hut it is observable, that a smaller Quantity of  
Blood Is always Obtain’d from the injured, than from a sound  
Part. In Order to prevent Gout-pains, some, every Month, with  
great Success, use Scarification, either On the sole, or on the  
upper Part, of tho Foot. In Efflorescences, and DefedationS of  
the Face, Cupping with Scarification is, also, useful, in Order  
to derive the Blood from that Part. Io fat and spongionS Habits,  
this Practice is, also, useful, for removing Itches, and cutaneous  
Deformities.

In acute Disorders, where the Strength does not admit of a  
quick and speedy Evacuation of Blood by Venesection; it is ex-  
pedienin gently, and by degrees, to procure this Evacuation, if ne-

cestary, by Cupping, with Scarification. Thus *Celsus,* in Lin. 2.  
*Cap.* II. informs us, aThat Cupping, with Scarification, is to be  
" used in some acute Disorders, when the Body is to be relieved,  
Cc and the Strength does not admit Os an Evacuation os Blood  
" from the Veins. And this Practice is not only less violent, but  
Ci more safe, and never dangerous, rhe' used when the Fever is ar  
" its Height, and when the Crudities abound. For this Reason,  
iC when immediate Danger attends the Opening or a Vein, or  
" when the Disorder is lodged in fome of the more noble pans  
CC Of the Body, we ought rather to have recourse IO Cupping,  
" with Scarification, especially when we know, that it is a safe

and gentle Method, and that violent Disorders must only he  
\*C Cored by Violent Remedies." I have found this Cannon of  
*Celsius* to be founded On Experience -, for I have observed, that  
Disorders of the Head, such aS Epilepsies, Vertigoes, Madness,  
and Convulsions Of the Joints, have been increased, and thtir  
Paroxysms rendered more frequent, especially in young Persons,  
and those Of delicate Constitutions, by a quick and pretty co-  
pions Evacuation Of Blond from a Vein ; whereas they were  
Very able to bear the Extraction Os Blood by Cupping-glasses,  
which' greatly alleviated their Disorders. The Reason, os this  
feerns to be, that, in the Parts affected, the Violence of tbe-  
Spasms, to which the Blood in the Veffeis greatly resista, is in-  
creased, if that Blood is suddenly taken from them. In acute Ee-  
Vers, when, in Consequence of a Congestion Of Blood in the  
Head, a Phrenitis is to be dreaded, it is, also, more safe andex-  
ped lent to lessen the Quantity of Blood, by applying Cupping-  
glasses to the Occiput, than by opening a Vein in the Cubit.  
*Prosper Alpinus,* in his Treatise *de Medicin. Aigypt.* informs us,  
that it was a Common Practice among the anrient Physicians of  
that Nation, in all acute Fevers, where, from a Redness Of the  
Face, and continual Watchings, they dreaded a Phrenitis, to sea-  
rify the in'ernal Veins Of the Nostrils, and, bytepid,Baths of sweet  
Water, procure an Evacuation of Blood from them. But when,  
in any Disorder, instantaneous Relies is necessary, and a speedy  
Derivation of the Blood from the Part affected, in an apoplectic  
Fit, for Instance, a Peripneumony, an Inflammation osthe Ute-  
rus, or a cardiac Syncope, proceeding from an Infarction of the  
Blood in the Heart, Or in Cases where there is Danger of a Suffo-  
cation, Cupping-glasses are but of little Service; for'’tis rather  
expedient to make quick and speedy Evacuation of Blood, by  
making a large Orifice in fome proper Vein near the Part affected.

. Cupping-glasses are to he used, when, in Consequence of Blood  
Or Serum, stagnating in fome external Part, Pains, Tumors, In-  
summations, or Other Disorders, are produced. This Doctrine  
is confirmed by *Celsus,* in the former Of the Passages before-  
quoted from him ; for the Use of Scarification is either eVacna-  
tory or derivatory, the former, in order to diminish the Plethora,  
and the latter, in order to extract the Corrupted and impacted  
Matter. Man)’ of the Antients, and especially among the *Egyp-'  
grans,* denied, that Cupping was of any Service in order to re-  
move a Plethora and, for that Reason Only, applied Cupping-  
glasses to certain Parts. But when these are applied to any Part  
of the Body, such aS the Back, Arms, Thighs, or Legs, and the  
Incisions made frequent and deep, twelve Ounces os Blood are  
often evacuated, os the same Weight and Consistence with that  
which is taken from the Veins; for l have Often convinced myself  
of this, by drying the Blood extracted by Cupping-glasses, aud  
found three Parts fluid to One of the solid, aS in the Blood taken  
from rhe Veins ; so that it may justly be class'd among the Vulgar  
Errors of Medicine, to affirm, that the Blood, extracted by Cup.  
ping-glasses, is thinner than that obtained from theVeins. How-  
ever, in Order to evacuate and divert the’peccant Matter, Cup-  
ping is preferable to Venesection; for I remember some Instances,  
where, in Violent Pains of the Scapulae, Pains and acrid De-  
fluxions Of the Eyes, a Gutta Rosacea, erysipelatous, Swellings  
Of the Head, Venesection in the Feet Or Arms, was of no man-  
ner Of Service; but Scarification in the Neck, Occiput, and be-  
hind the Ears, and the Application of Cupping-glasses to the Back,  
afforded great Relief. *Prosper Alpinus,* in hisTrearile *de Medicin.  
AEgyptior.* informs us, that in Pains and Deflulions of the Head  
and Eyes, Ophthalmias, LippitudeS, and in Order to procure  
Sleep, the *Egyptians* applied Cupping-glasses to the Occipur,Neck,  
and behind the Ears, and, by profound. Scarifications, extracted  
the Blood, but first Ordered a Vein in the Arm to he opened.  
This Advice is carefully to be followed in plethoric Patients, even '  
where the Veins Of the Face Or Nostrils are to bo scarified in Vio-  
lent Pains of the Head, Or Madness, lest Space being afforded, a  
greater Afflux Of Blood to these Parts should be excited, in or-  
der to prevent Gout-pains, Scarification made in rhe Soles Of the  
Feet, every Month, is Ofgreat Service. And *Cardan,* in *Lib.de  
Art. Parv.* recommends Scarification under the Very Paroxysm  
Of the Gout. And *Platerus, Lib.* 2. *Prax. Med.* confirms this  
Doctrine, by giving us fome Instances of. Persons cured by this  
means. Besides, *Severinus,* in his Book *de Essicac. Medic. Lib.* I.  
greatiy recommends the Use of Scarification, in order to pre-  
vent the spreading of a Sphacelus, and cure malignant Ulcers.  
*Galen,* also, in his Treatise *de Sang. Mission,* greatly recommends  
Scarifications of the Legs in Suppressions of the Menses and Hae-  
morrboids, which may he. also, used in those who have an Aver-

sion :ο Venesection, who, from a languid Strength or the Heart,  
are subject to Paintings , *or those* who, on account of the Ten-  
derness os their Age, cannot bear a sudden Extraction OF Blood  
from an opened vein.. ... .... ...

Binod may be, also, extracted from the Body by Leeches, which  
are greatly commended by some Physicians. Tho' this Method  
seems to have been littie known to the most antient Physicians;  
yet PZiny, in *Hist. Nat.* Διὓ.32. *Cap.* io. fpeaks of them thus,:  
" The Uses of Leeches for extracting Blood are Various,, and  
ίζ the same with those of Cupping-gin lies, which are to relieve  
iC the Body, when oppressed with a Redundance of Blood, and  
zc to open the Pores? \_ Among the *Arabians, Phases* knew, the  
Use of Leeches 5 and, atnongthe Physicians Of the last Age,\* *Za~  
catus Lusitanus, Am cie uri Loft anus,* and *Mcrcatus,* greatly com-  
mend the Application of them, especially in those Disorders’which  
are generally incident to the Head, such aS the Cutta Rosacea,  
Pustules ofthe Face, andDeed-achss especially of the rheumatic  
Kind; as, also, in Vertigoes, Melancholy, Quinseys, and Tooth-  
achs, in which these Physicians applied them to the Occiput,Neck,  
and behind the ears, Thff Γ do not ar all doubt ofthe Salubrity  
ofthe Evacuation of Blood made by Leeches, yet I have good  
Reason to suspect, that no'greater Advantage is, to be obtain’d  
from them, , than-from the Evacuation procured by Cupping  
with Scarification.- . - v. - - - -Τ-

οῦ The Application of Leeches to the Anns in a Suppression of  
IheHaemorrhotds, and Disorders arising thence, is generally greatly  
recommended..This Method of extracting Blood from the Veins  
of the . Anus, by rhe Application Of Leeches, is, by some, pre-  
ferred to others,in Disorders arifing from a Suppression. Ofthe  
Haemorrhoids; such as hysteric Symptoms, and in those Disorders  
which, according *to Hippocrates,* are terminated by the thaeinor-  
rhoidal Discharge, such as phrenitic, melancholic, hypochondriac,  
nephritic, and ischiadic Disorders; because these Diseases arise  
.from Blood stagnating in rhe Vessels of theTntestines, which-ter-  
minate in the haemorrhoidal Veins, in consequence of which,  
this Blood is more easily evacuated, and the Part affected reliev'd,  
hy applying Leeches to the Veins Os the Anus, than if Blood was  
extracted from any other Parts of the Body.. I rannordeny, bur,  
in these D isorders, Leeches may be of .some Use, especially if we  
may believe rhe Observations os *Zacutus Lusitanus, AmatusLusu  
tanas,* arid *Mercatus sc* Bur, whether an happier Effect may be  
produced from them,’ than from openinga'Vein iff the Toot, or  
from profound Scarifications in the Legs, I cannot asters, fince  
I have not Experience to authorize me: For, in Violent andsnVe-  
terate Spasms Of the Hypochondria, I have often seen/Leeches  
applied" without any Effect; I have, on other Occasions,seen  
them afford Relief for a time *; and, by* theirApplication to blind  
Haemorrhoids,-I have seen" malignant Ulcers and Fistulas pro-  
xluced. Besides, there is Reason to doubt-, whether Leeches draw  
the Blood from the Part affected, because they suck it .from the  
external hsernotrhoidal Veins, the internal being concealed. Now  
the internal haemorrhoidal Veins have little Or no Comrnunicai-  
. tion withshe intestinal Vessels, the mesaraic Veins, and the Ra-  
mifications. Of the Vena. Portse, in which,, however,- the Seat Of  
spasmodic and hypochondriac Disorders is placed. But, in an  
haemorrhoidal Discharge,; the internal haemorrhoidal Veins-eva-  
cuate the Blood, for which Reason;if the Haemorrhoids flow  
duly, and at proper Times, they afford great Relief in .the Diss  
orders arising from ai Stagnation Os Blood in the RamificafionS  
of theVeoa Portae. *Hossenan. ;i ἐν. -A.*

Phlebotomy, usied in such a Degree aS .not . to impair the  
Strength, produces the following. Effects, -. ..j

I. If. diminishes the Redundance os the arterial and Venous  
Humours. . . Τ ’th. ‘ἐν ' -

2. For this Reason irrenders the Resistance. Of the Fluids to  
be moved less. \ ῖίἀ . ... sese ς

3. In consequence of this, itsseffens not only the Plenitude  
Of the Vessels, bur, also, their mutual Compression on each  
- Other. ' . .. .... . .

4. Hence in restores a due Degree Of'Contraction, or Elasti-  
city, to the preternaturally distended Veffeis..

5. It rarefies the Fluids \

*6.* It attenuates rhe Humours,

*J.* It resolves the Juices.

8. It removes Obstructions.

9. It promotes the Circulation Of the Blood, together with the  
several Secretions and Excretions so necessary to Lite and Health.

’ . io. It produces a Revulsion.

i I. It refrigerates and Cools - -

. Hence it removes many Disorders Of very different Natures,  
and induces surprifing Changes on the State and Condition of the.  
human Body. ....

. Phlebotomy is indicated aS expedient,

I. By a Redundance, Or excessive Quantity, Of Blood.

2. By too powerful 4 Resistance made to:the Action, of.the  
- Heart by the Humours. \_ ss

3. By a fustocated Motion Of the Heart, in con sequence of  
too tumid a State Of rhe Arteries, arifing from a Redundance or  
Rarefaction Of their Contentio ' - - - . .... ss

„4. hy the Motion Of the Heart beginning to be shsthcated, in

consequence ofa preternatural Extension Of the Vessels, hy which  
their Elasticity is destroy’d. .

5. By too great a Condensation Of the Blond.

*- 6.* By too great a Concretion of the Parts of the Blond. -

*- J.* By toO great an inspissation ofthe Blond. ς ; O ’

8. By the Signs Of a Violent and inflaininatory Obstructing  
found every-where in the Body.; the most considerable of which  
are Pain, Tumor, Redness, intense Heat, and Anxiety, accom-  
panied with a Suppression Of the Sweat, Spit, and Urine.

9. By too accelerated a Motion Of the Humours through the  
-Veffeis ; Or, also, a too flow and languid Circulation of the Ha-  
mours, arifing.from a Redundance Of the Humours ὁ a Plenitude,  
and preternatural Distention, Of the Vessels, a RaresactionSAt-  
tenuation OrResolution,Ofthe Humours; and Obstructions Of  
.the Veffeis.::.. ί :

io. By too intense an Heat in all theVeffeis. ’

. ir. By too violent an Impetus Of the Blood forced into one  
.particular Part, as in Haemorrhages and Defiuxions.

- ? I2. By epidemic Disorders, whose Natures are understood.'

-.. \*3. hy the Age, the sex, the Method of Life, and the Consti-  
tution, of the Patient. .....

I4. By a Cacochymy: And. ' .

v IS. Phlebotomy k indicated, when the Intention is to make  
.Medicines enter theVeffeis, to procure their duo Mixture with  
the Fluids, and to. augment them Efficacy in performing Cures  
Of great Importance, ἐν. - - .-

' Phlebotomy is best and most advantageously performed, -

I. By making a large Orifice with some cutting Instrument.

♦ 2. In a.Vein that is disengaged, large, easily discovered, and re-  
mote from Arteries, Nerves, and Tendons. *i - . .*

; 3. By accelerating the Velocity of the Blood, whilst inflows, by  
.means Of a strong Respiration.

, 4. By the Motion of the Muscles. COntignouS to the Opened  
Vein And,.. ... -ἐν-.... . . -

- 5. Tis most proper to perforin Phlebotomy on Patients, whilst  
they lie in Bed. ..t. .

' That Phlebotomy may he the more happily and successfully  
performed, the Patient may be prepared for it, .

- \* -I. By Frictions. And,. I .. '

2: By Fomentations. ; ... ' .

Phlebotomy is contra-indicated, and rendered improper,

I.’.By many Chronical Disorders, in which there are many Ob-  
structions, and only a Very small Quantity Of fluid Blood remain-  
ing in the Vessels. ' τ.- . ..

. 2. By.Oldrage.' r - - ν

- 3. By particular Temperaments, Or Habits, of Body. . .-

4. By the known Nature os any epidemic Or endemic Disor-  
der.. - .--.παρ. ‘ '

*S.* By a Crisis already made in another manner.k

*-... 6. By the Deficiency os red* Blood, and the Consequent Weak-  
ness of the Patient. And,’. ' ' .

- 7. ByTecent Childbirth.' '

Hence ’tis Obvious, that an irreparable Injury must be done  
to Mankind, by using Phlebotomy in all Cases, according to the  
Advice Of *Lelumhartus Botallas* and by banishing it entirely from  
the Practice Of Medicine, according to *Johannes Baptista. Van  
Helmont. : - : -* - i

. The Extraction. Or Evacuation of Blood from the htemor-  
rhoidal Veins is indicated, .... ' -

I. By an arrabilarious Habit Of Body..

2. By Diseases accompanied with irregular and disorderly Work-  
ings Of the Fancy.

. 3. By a Suppression of the usual Discharge of Blood from these

Veins. ’ -' - - ' ‘.I

4. By an Eruption Of Blond from other Parts, which was he-  
fore more happily evacuated from rhe haemorrhoidal Veins.

Blood is evacuated from the haemorrhoidal Veins,.-

’ i. By softening these Vessels by an emollient and warmFomen-  
ration prepared of Water, Oil, Honey, and Other, emollient in-  
gredients j and applied by way Of Clyster, Vapour, Or Fomen-  
tation. .......

2. By opening these VefielS by Friction, with rough Substances,  
or by means Of Leeches. And, ' νύ

a. By the Use of Preparations of Aloes.

Scarifications act by stimulating, and by evacuating. Hence  
we are enabled thoroughly to understand the Action Of Leeches.  
- But Setons and Fontanels stimulate with lefS Pain, agitate the  
nervous System, evacuate Serum, and procure a Vent, or Diss  
Charge, for preternatural Repletion.

Hence we may learn in what Parts, and on what Occasions,  
these are indicated. . . - :

Stimulating Medicines, or such as create Pain, Heat, and Red-  
ness, act by procuring Motion to the Nerves, and by determin-  
ing Blood to particular designed Parts. . tio ..;

Hence they undoubtedly perform an nnconceiveable Number  
of happy Effects, thy the known Necessity Of which they are,  
also, indicated. . \* \* ’ - ' ’ . ι

Stimulating. Medicines are generally reduced,

I. To highly adhesive, andj at the same time penetratingDro-  
. paxes, aoolied warm in the Form of a Plaistar. and torn off. re-

hearing this, till **the Part affected** becomes red, tumid, and hot.  
The Ingredients proper for thefe Dropaxes are. Pitch, Oil, Bitu-  
men, the Ashes of Twigs of Vines, Galbanum, Pepper, Pelli-  
Wry of *Spain,* Sal Gemmes, and Sal Ammoniac.

2. TO gentle Sinapisms, called *Phtenigmi,* applied by **way of**Cataplasm, and left till Redness, Heat, itching, and Tumor, ap-  
**pear in the** Part. The Materials for these **are** Mustard, Bryony,  
Garlick, Orisons, Water-cresses, Squills, Euphorbinm, Crow-foot,  
**-and** the deadly Carrot.

-;...3. To Vesicatories, which are Only stronger Sinapisms used in  
.she same Form, bur producing more violent Effects. The Dt-  
-versify only consists in.the augmented Quantity Of the acrid Sub-  
..stances Thus, for Instance, three Parts of Figs, mixed with one  
Tart Of acrid Substances, yield a Phcenigmns ὸ one Part Of Figs,  
’mixed with one. Part Of acrid 'Substances, yields a 'V esicatory ; and  
One Part Os Figs, mixed with three Parts Of acrid Substances,  
yields a strong Vesicatory. - ' s c ’

es TO. the potential Caustic, applied either in the Form of **a**Poultice, Or with Lint. The Materials for this are Crow-foot,  
rhe Esola, the Tithymalus, fixed alcaline Salt, alcaline volatile  
Spirits, .and Salts. The Effects produced by this Species of Re-  
medy ate Inflammation, and an Eschar. And, : -

4. TO the actual Cautery, which is ignited lron. *Ecerh. Inst.*-. Phlebotomy, Or' Bleeding .herthe Veins, .is performed by  
making an incision in a Vein, with a fine sharp-pointed Instru-  
ment, or Lancet, by which as much Blond is taken away, aS may  
he proper sor restoring or preserving the Health Of the Patient.

This Operation may not improperly he called Venesection,and  
is not only extremely beneficial, but of a Very antient Date,  
haying been Commended and practised about three thousand  
Years, aS we leasn from the Writings Of *Hippocrates, Celsius,* and  
Other antient Authors upon Surgery. Yet some Physicians, both  
antient and modern, such as *Erasistratus, Paracelsus, Helmans,  
Portias, Bontekoe, Geherna,* and Others, have asserted it to he a  
most pernicious and unlawful Operation, and have termed the  
Ptactisers of it no less than the Destroyers and Butchers Os Man-  
kind. But Experience shews us, that all their Objections are  
Trifling and unjust; and that there is no Remedy in the whole  
Art Os Medicine, more reads, or more serviceable, in Curing Or  
preventing the generality of Diseases, than Phlebotomy. Some  
relate, that Physicians took the Hint of this Operation from **the***Hippopotamus,* or Sea-horse, who, at Certain Seasons, used to Open  
**a** Vein with a sharp-pointed Reed. See *Polydore Virgil de Rer.  
Inventor.*

. Bleeding, according to the vulgar Opinion, is a very easy Ope-  
ration. In some Persons I Own that the Veins are so large and  
conspicuous, that they may he Opened by Novices, without Dan-  
ger Or Difficulty. But, in Others, they are fo small, or so deeply  
seated, that they Cannot be discovered by the most expert Sur- .  
geon without Difficulty, nor Opened without Danger. For **the**Arteries, Or the Nerves and Tendons adjacent to the Veins, are  
very liable to he wounded by the Lancet, a Misfortune which  
is generally attended with violent Pains, Convulsions, Inflame  
.mations, profuse Haemorrhages, Aneurisms, Gangrenes, and  
sometimes a most miserable Death; and, therefore, this Opera-  
tion, aS well aS Others, requires Caution and Attention, since the  
Reputation of young Surgeons, especially, may suffer aS much  
hy a timorous Introduction Os the Lancer, so that the Blond  
follows not, aS when, by affecting to perform easily and expedi-  
tiousty, a Misfortune should ensue.

An expert Phlebotomist should have an active, gentle, and  
.steady Hand, **a** Clear Sight, and an intrepid Mind, sor, without  
these Qualifications, he will he subject either to miss the Vein, Or  
.to occasion some Mischief, which may he fatal to the Patient.  
This is the Reason, why the Dexterity Of Surgeons, in Bleeding,  
gradually declines, asthey advance inYears ὁ for, as Age increases,  
the Eyes become weak, and the Hands unsteady.

The Instrument now commonly used in opening a Vein, is  
called a Lancet, and is represented in *Tab.* XXll. *Lit. A.* and  
*Tab.* XXXII. *Fig.* 5. A Surgeon should always he provided  
with several of these Lancets, of different Sines, and in good  
Order. Some Surgeons in *Germany,* particularly in *Franconia,  
Bavaria,* and the Lower ίαχσπχ, bleed with a Fleam (see *Tab.*XXXII. *Fig.* I.) in this manner: With the Fingers Of one Hand,  
they hold the Part B, and place the Point A upon the Vein, with  
**a** Finger Of the Other Hand, they strike the Part C, by which  
means the Point pierces the Vein» as Farriers do in bleeding  
Horses. Others use a sort Of elastin Fleam, Called by the Ger-  
*mans, schnappcr,* or *Schnapperletn,* (fee *Pig.* 4-). thus: Having  
raised the Point A, they apply it to the Part', ands by pressing at B,  
force down the Point into the Vein : Others use an Instrument  
shaped like a Dart. But, as these Instruments cannot be always  
adapted to the different Position and Figureof the Veins of differ-  
-ent People, the Lancet seems to he more proper 2. the', many Of  
the *Germans* are very expert in the Use Ofcheir *Schnappcr. s :.. .*- Tho' Phlebotomy is uled in various Parts of the Body, as in the  
Arm, Hand, Foot,Forchead,Temples, NecinTongue, Penis, and  
Others, yet, as is is most frequently performed in a Vein Os. **the**Arm, which is near the Joint of the Elbow, we shalh therefore,  
«begin with this Operation, and enlarge **a** little upon it.. -. sc.n

**OF BLEEDING IN THE ARM.**

It is commonly known, that Bleeding in the Arm is performed  
on the Veins placed on the Inside of the Cubit.. In this Ope-  
ration several Circumstances are to he considered: I. What is  
to he done preparatory to the Bleeding. 2. How the Opera-  
tion itself is to he performed. 3. and lastly. What is necessary  
to he done, in consequence of it. With regard to the prepara-  
tory Circumstances, the Surgeon must necessarily have in Rea-  
diness a Linen Fillet, about an Ell in Length, and of the  
Breadth of two Fingers. 2. Two small square Compressis.  
3. Porringers, or Veffeis, proper for receiving the-Blood. 4.  
A Sponge, with warm Water. 5.. A small Quantity of Wine-  
gar, Wine, or *Hungary* Water, for relieving the Patient, if he  
should he inclinable to saint. 6. Two Assistants, not fearful,  
one to hold the Porringer, and the other to bring whet may be  
wanted. 7. A small Wax-candle, when this Operation is ne-  
cessary to he performed in the Night, or in a dark Place. 8.  
The Patient should he placed in a Chain a little reclined, or, is  
timorous, in a Bed, that he may not he in Danger of dropping  
off his Seat in a Swoon. 9. Lastly, The Surgeon should take  
care, that no Cloaths, and the like, should lie in the Way.  
The Patient should banish all Concern, and he by no means  
apprehensive of any Danger from the Operation. The Opera-  
tor should he as expert in performing with his Left, aS with his  
Right Hand ; for the Vein in the Right Arm must he opened  
with the Right Hand, and in the Left Arm, with the Lest  
Hand. Some will insist on being blooded in the Left Ann; and  
sometimes the Vein in the Right is not conspicuous, or proper  
to he opened. ’

With regard to the Operation itself, though it may be per-  
. formed by a single Puncture, yet many Circumstances are ne-  
cessary to he observed, for the hetter Execution of it. The  
Surgeon should narrowly inspect the Arm whence Bloed is to be  
taken, in order to observe the Veins; then he must take  
hold of the Arm, and extend it towards his Breast. The Sleeve  
being tucked about an Hand’S-breadth above the Elbow, he  
should make a tight Ligature about three Fingers-breadth above  
the Elbow, with a Fillet of the Breadth of a Thumb and a  
Yard in Length, rolling it twice, and fastening it with a Knot  
(See *Tab.* XXXII. *Fig.* I. D) ; by which means the Veins,  
being compressed, and the Reflux of the Blood obstructed, are  
swelled, and rendered more conspicuous. This Fillet is ge-  
nerally made of a Piece of thin scarlet Cloth, though any other  
Colour may do. The Surgeon may now let go the Arm, and,  
taking out his Lancet, open it to an obtuse Angle, and held it  
in his Teeth, at the Joint A, *Tab.* XXXII. *Fig.* 5. in the  
mean while the Veins grow more turgid, and more conspicuous.  
The Surgeon must now again lay hold Of the Arm, and extend  
it towards his Breast, the Assistant heing ready with the Porrin-  
ger, and in the most convenient Situation, for receiving the  
Blood. The Surgeon must next examine, which Vein is most  
conspicuous, and, therefore, most proper for Incision. It is ne-  
ceffary to be observed here, that three principal Veins appear in  
the Arm: The first is called the *Fena Cephalica,* and lies towards  
the exterior Part of the Arm ; the second is termed the *Basilica,*and is found towards the interior Part of the Arm ; see *Tab.*XXXII. *Fig.* i. A; it is, also, denominated, in the Right\*  
arm. *Hepatica,* and, in the Left, *Splenetica,* as at B; the  
third, heing situated in the Middle, obliquely, between the other  
two, is named *Mediana,* as at C. The Mediana and Basilios,  
heing larger, generally emit the Blood more copioufly, than the  
Cephalica, but they areopened with greater Danger; for, under  
the Basilica, lie the great Artery of the Arm, and the Brachial  
Nerve ; .and, under the Mediana is a Tendon, of the Musculus  
Biceps. But, .as these two are most conspicuous, they are most  
frequently opened ; though it is safer, especially for young Sur-  
geons, to make the Incision in the Cephalic Vein, or, at least,  
in the Median. But, when the Veins are so situated, that only  
one of them can he made to appear, then there is no Choice  
left, and there is nothing to be depended upon, but the Skill  
and Care of the Surgeon.

When the Vein is already pitched upon, the Incision must he  
made where it is appears largest and conspicuous. If any Marks os  
former Wounds remain, it will he proper to open the vein rather  
below, than aheve the Cicatrix; which generally straitens the  
superior Part. For this Reason, whenever you open a Vein  
for the first Time, begin as high as you can ; by which means  
you may gradually descend in repeated Bleedings.

Before the Lancet be applied, if the Veins do not sufficiently  
rise, it will he properabo stroke the Arm from the Hand up-  
wards, which will Compress the Blood-towards the Elbow, and  
make the Veins become more turgid.-. If the Incision is to be  
made In theRigbt Arm, the Surgeon is to hold the Arm in his  
Left Hand, in such a .manner, that his Thumb may he placed  
ppon the Vein which is to he opened, in order to prevent the  
Refiuxofthe Blood, and the Vein from Aiding out of its Place.'  
ν ... \_

The Vein being thus firmly held, the Surgeon must *keep* his  
Eyes fixed upon that Part, where he intends to introduce the  
\ Lancet. - Then, taking the Lancet out of the Mouth with his  
.. Right Hand, he must hold it about the Middle of the Blade,  
.between his Tore Finger and Thumb, suffering the other Fin-  
gemito rest gently, upon the Patient's Arm, that his Hand may  
-not flip. : -'' .' ' . - - - - -

Then the Lancet must he softly and carefully pushed by the  
fore Finger and Thumb, tin it penetrates-the Coats os the  
Vein i and the Point must he immediately turned a little up-  
wards, by which the Wound may he enlarged, and ine Dis-  
charge of the Blood may soon, he rendered - plentiful. - "Those .  
Orifices are reckoned most convenient, whoseILength *id* equal  
to twice the Thickness of-the .Back of a small Knife. The  
Lancet must he introduced, not with Rashness; lest,'by dene-  
trating too deep, an Artery, a Nerve, or Tendon; should he  
wounded ; nor with Timidity, lest you should only divide the  
.common integuments, without reaching the Vein; The Vein  
may be opened in three Directions: Some make the Wound  
lengthwise, as ar *Tab.* XXXII. *Fig. L.* A ; others make it  
transverse, as at B; but most Surgeons make it oblique, as at  
**C** and D. If the Incision is to made in the Left Arm, the  
Operator must held the Arm in his Right Hand, and all must  
he done with the Left Hand, which was before proposed to he  
done with the Right. If the Fleam at *Fig.* 3. he used in this  
Operation, the Point A must he applied to the Vein ; and,  
the End B heing held in the Left Hand, the Point must he  
.driven into the Vein by the Stroke of a Finger of the Right  
Hand. If the elastic Fleam is to he used, let the Point ’A,  
placed above the Vein, he raised towards the Hook C ; by a  
flight Preffiire at B, the Point is plunged into the Vein.

... The Vein heing thus opened, and the Instrument immediate-  
ly drawn back, the Blood will either Vigoroufly spring out, or  
flow gently. The Lancet must now he put into a Bason, and  
never thrown upon the Bed, lest it should be accidentally lost,  
*ex* the Patient should wound himself by it. In the mean time,  
the Blood should he suffered to run, till a sufficient Quantity is  
discharged. But if it should stop too soon, as often happens  
from the Stricture of the Ligature above the Elbow, the Band-  
age may then he untied, or rather a littie relaxed; by which  
means, the compressed Artery is again enlarged, and the Dis-  
charge of Blood is continued.. *If* the Wound should he stopt  
by teo great a Tension of the Skin, or by Fat, the Piece of Fat  
should he pressed hack with the Finger, or a warm Sponge, or  
the Skin may he relaxed by bending the Ann. If the Orifice  
should he obstructed by thick coagulated Blond, that Impedi-  
ment may he removed by wiping the Wound with a Sponge  
dipt in warm Water. S. . .

That the Patient's Arm may not tire by heing long extended,  
the Surgeon ought to support it about the Elbow. A small  
Stick, or Cylinder, should he. put into the Patient's Hand,  
winch he should continually turn round, by this Method acce-  
lerating the Motion of the Blond towards the Wound ; which  
will he further promoted, if the Patient urges a little Voluntary  
Cough. The Attendants should he ready, with empty Veffeis  
for receiving the Blood, to remove such as are filled, and to admi-  
nister the Compresses, BandagesjCordiais, and other Necessaries.  
- The Quantity of Blood to he taken away must he regulated  
by the Physician, according to the Nature of the Disease, the  
Temperament, Strength, and other Circumstances, of the Pa-  
tient. But, when the Surgeon attends his Patient without a  
Physician, he may determine the Quantity himsels, according  
to the Nature of the Disease, the Strength, Age, Constitution,  
and other Circumstances, of the Patient. It the Patient retains  
his natural Complexion, and neither grows languid nor faint,  
the Bleed may he suffered to flow longer, than in those who are  
foon affected with Paleness and Swooning.

. When a sufficient Quantity of Blood is discharged, the Band-  
age above the Elbow must he removed; and the fore and mid-  
dle Finger of the Left Hand must be gently drawn over the  
Orifice, stroking the Skin on each Side os the Wound; by  
which means the Lips os the divided Vein are more easily prefled  
together. Then let the Surgeon take the smaller Compress in  
his Right Hand, and apply it to the Wound, having first re-  
moved the Fingers of his Left Hand, that the Blond, hetween the  
Vein and the Skin, may he discharged, before the Compress he  
applied. Over this, lay another larger Compress, which must he  
retained with the Thumb, till the Whele he secured by **the**Bandage. - - -

The Patient's Sleeve may now he drawn down over the Arm,  
which he should keep bent towards his Breast ; and the Patient  
should he ordered not to use any Motion too soon, lest a new  
Haemorrhage, Inflammation, or Suppuration, should he occa-  
sioned. If the Patient should saint away after the Operation,  
it will he proper to apply to the Nostrils and Face some Cor-  
dial Water, as *Hungary* Water, or Vinegar, or Wine; or cold  
Water may.he .sprinkled on the Face a or, if in the Summer\*

time, ..the Window may he opened, and **the** Spirits and  
Strength of the Patient restored by the Admission of frefn Air.  
A small Glass of Cordial Water, or generous Wine, should,  
likewise, be given to the Patient. - \_. j i

It is customary for **the** Surgeon, or thePhysieian, **if there is**one present, th look at the Blood, and give his -Opinion of in.  
In this Case, the Surgeon should never discourage the Patiens,  
whether the Blood he good or bad, or whether the retains his  
Senses, or salis into Faintings. -Favourable Accounts'here great-  
ly contribute Io **the**-Recovery of Health ; but to dishearten **the**.Patient by a severe Prognostic, may occasion very fatal Conse-  
. quences.. Is, therefore, the Blood appear florid, the Surgeon  
mould declare, it a Sign of immediate or approaching Health ,  
- if the Blood he .os a bad Colour, orvitiated, he must pronounce,  
-that the Bleeding will he extremely serviceable. If the Patient  
should fall into a Swoon, the Surgeon intimates, that this Weak-  
ness is an Evidence of the speedy and salutary Effects of **the**Remedy.1 TheBlood shouldhe-set by in a cool Place, till the  
Physician, or Surgeon, renews his Visit. 1

.If, after Bleeding, the Patient should he affected with Thirst,  
he may he allowed to quench is, especially if he can drink small  
-thin Liquors. It is a Custom among the *French,* immediately  
after Bleeding, especially if the Remedy is used to prevent Dis-  
orders arifing from the Heat, of the Blood, to take a Draught  
of cold fresh Water : Which Method, in het Habits, may he  
Very serviceable; but in cold, infirm Constitutions, Very pre-  
judicial; for whom a littie warm Tea, or Coffee, would he  
much more proper. The Patient may either he forbid or  
allowed to steep after 'the Operation, according to Circum-  
stances. If the Patient used Bleeding only by way of PreVen-  
tion, it would certainly he more proper for him to divert his  
Drowsiness by some agreeable Conversation, Amusement, or  
Exercise ; for, if Sleep he indulged, the Bandage may flip, and  
a Violent Haemorrhage he occasioned. But those who are ex-  
tremely weak, or labour under some indisposition, should by  
.no means he hindered from Sleep, especially if they have heen  
troubled with tedious Watchings; for,- by Sleep, the weak  
wearied Body .is often .wonderfully refreshed, in the mean  
time, an Attendant should carefully observe, that the Bandage  
continues fast, or, if it should flip, to stop the Flux of Blond,  
by compressing the Wound with the Fingers, till the Surgeon  
he called.

If, at the neat Visit, the Blood, as is usual, should be again  
brought to the Surgeon, and his Opinion of it asked, he should, '  
as we before observed, say nothing, but what may tend to en-  
courage the Hopes of the Patient. The Surgeon should, like-  
wise, suspect rhe Dressing; and, if the Bandage be relaxed, he  
should untie it, and apply it afresh; if the Compresses adhere ’  
to the Wound; they should not the removed; but, if they are  
loose, they should be again applied, and secured by the Bandage;  
which, bang suffer'd to continue a Day or two, till the Wound -  
he healed, may then he taken away. Some People, of an hot  
Constitution, will have the Blood run into cold Water, imagin-  
ing, that by some secret Sympathy the Heat of the Blond may he  
by this means allayed. But, however trifling and false such a NO-  
tion may he, yet as it may be complied with.without Danger,  
and aS it may have some good Effect upon the imagination of a  
credulous Person, it ought not to he rejected, but permitted.

**OF BLEEDING AT THE HANIX**

Phlebotomy is sometimes practised on two Veins of the Hand,  
one os which is called the *Salvatella,* and the other *Cephalica.*The Salvatella extends on the exterior Part of the Back of the  
Hand towards the littie Finger, heing sometimes named *Splen  
nica* in the Left Hand, because many antient Physicians he-  
sieved, that **the** Opening of at was beneficial in Diseases of **the**Spleen. The Cephalica runs hetween .the fore Finger and Thumb,  
and was so denominated by the antient Physicians, hecause they  
fansied, that Bleeding from it was an excellent Remedy against  
Disorders of the Head. Although it is plain, that Bleeding at  
the Hand is more difficult than in the Arm, -and that all these  
Notions of the Antients are without Foundation, yet, fince the  
Effect is **the** fame with that of Bleeding in the Arm, it may  
he sometimes proper for the Operation to be performed on the  
Hand; especially if the Patient he prepostested with a gooff Opi-  
nion of that Operation ; or if the Veins of the Hand are more  
conspicuous, then those of the Arm. Some Women, too, in the  
.last Months of their Pregnancy, or near the Time of their

Delivery, prefer Bleeding at the Hand,, which, they imagine,  
does not so much debilitate the Foetus, as in the Arm.

in this Operation, therefore, it is proper for the Patient to  
bathe and rub his Hand in warm Water, that the Veins may  
fwell, and become conspicuous. The Bandage must he fix’d im-  
mediately about the Carpus, to keep the Veins turgid ; then the  
Hand must he dried, and the inchion made in the most conve-  
inent Place, as was before directed. If the Blond stows but.  
flowlva the Hand'must be again dipped in warm Water, and

continue there, till a sufficient Quantity is discharged. Then  
the Hand may be dried, the Wound contracted by the Fingers,  
and the Compresses and Bandages applied as above directed.

**OF BLEEDING IN THE FOOT.** .7

Bleeding in the Foot is a Very ancient Operations' which  
has been observed by Physicians to he a most efficartouS Re-  
fried y for various Diseases os the Head and Breast, and, also»  
against those Disorders which proceed from an Obstruction  
sos the Menses, or Haemorrhoids. Hence the Veins of the  
Feet have long ago been called *Cephalica,* and *Saphena.* The  
Vena Cephalica extends towards the great Toe ; and the Sa-  
phena towards the lesterToes. ‘ But, notwithstanding the Dis-  
Terence’ of the Names, in Bleeding, they have both the same  
Effect; and, therefore, I think, the more conspicuous of the  
two ought’ always to he preferred. However-, when the Veins  
of the r eet do not sufficiently appear, it will he more proper  
to open a Vein about the Ancles, the Cals of the Leg, ortho  
Knees, as I have frequently dene, especially as.the Nerves and  
Tendons of those Parts are notfo liable, to he wounded, .as  
those os the Foot. But it is proper to advise the Surgeon here.  
Io he cautious in bleeding single Women, at the.Feet, without  
the Advice os a Physician; for some, under the Pretence of  
an Obstruction of the Menses, endeavourchythis Method, to

. procure a Miscarriage. .... A \* fir ts.

. In order to facilitate the Persormancenosa this Operation, let  
the Patient bathe his Feet, in warm Water,., till the-Veins he-  
come tumid; .and the Surgeon should choose .that Foot;, in  
which the Veins are most conspicuous. vrThe Bandage should  
be tied about the Breadth of two Fingers above the Ancle; and,  
. whilst the Surgeon is taking out his Lancet, the Patient should  
keep his Foot , in the warm Water, in order to increase the  
.Rising of the Vein. Then the Surgeon, kneeling on one Knee,  
and having dried the Foot, lays it on the other Knee, or on a  
Stool, or on the Edge of the Vessel which Holds the Water.  
He then takes the Foot in his Lest Hand, and keeps the Vein  
fixed, as was directed for bleeding in the Arm. Is the .Veins  
appear not sufficiently below the Ancles, it will not.he impro-  
. per to open them above, or in .the Calves; and then the Liga-  
ture must he made at the Distance of the Breadth of two Fin-  
gers' above the Place of Incision, and the Veins may he ren-  
dered conspicuous by the Method already directed. - We must,  
.also, observe, with regard to the Surgeon’s Posture, that he  
may place himself .before the Patient on a low. Seas, and . put  
the Foot on either Knee. ’ When the Spring-fleam is used, as  
is often done in *Gcrmany,*. it will..he then mostconvenient sor  
thePatient to put his Foot on a lowfitooh . .I. .th

The Vein being thus opened,:the Blood:.may he received  
into proper Vessels ; and, if .the Blood does.not flow.freely, let  
the Foot be again put into the warmVVarer,-which will, also,  
prevent the Blond from congealingand stagnating in theWound;  
an Accident which frequentiy happens. .When a sufficient  
Quantity of Blood has been thus discharged,, which may. he  
discovered, not only from the Time, bus, also, from the Quick-  
ness or Slowness os the Evacuation, from the Redness of the  
Water, and especially from the Strength of the Patient,, the  
Orifice is to be stopt by a proper Compress and Bandage. The  
Advantages resulting from this Operation may he seen in *Vcr-  
due, Caspar Coder a de Heredia,* a *Spanijh* Physician, *Stahl,*and others. These Authors have been opposed by *Hicquet* of  
*Paris,* in his Book *sur la Soignee da Pied,* and again defended  
by *Ju. Bapi..Sylva,* also, a Physician of *Paris,* in his Trea-  
tise *de l'Ufage des disserentes Sortes de Saignees, Amsterdam,  
fnissi -* He was. answered in I730, by *Chevalicr,* a Physician,  
and, also, by *l^uefnay,.* a Surgeon, both of *Parti.*

**- OF BLEEDING. IN THE FOREHEAD, TEMPLES, AND**

' i **OCCIPUT.**

Some are os Opinion, that Bleeding at the veins of the  
Forehead and Temples is more efficacious and expeditious: in  
the Cure os violent Pains os the Head, of VeriigoS, Melane  
choly. Madness, Deliriums, and the like obstinate Disorders of  
the Head, than the like evacuation by Veins more remote  
from the Part affected ; judging, that the morbid Matter may  
more readily be extracted hy she Veins os the Forchead and  
Temples, by reason of thein Vicinity. But, in my Opinion,;  
the Situation of these Veins , contributes very little towards,  
hastening the Cure, hecause they have little\_or.no Communi-  
cation with the internal Parts os the Head,.and they generally,  
yielchbut a small Quantity of.Plood. ssThe.Jugular Yeinseems  
to me much better adapted to this Purpose;, as iitds.situated:  
very near the Veins of the Forehead .and Temples,: which ter.-’  
minate in it, as it. is larger and moreconspicunus,. and as.it  
communicates with the internal Parts. :SutJifjhij Operation  
must he performed, either by Order of the Physician, ot.at.the  
Request ofthe Patientj the following.Directions.are necessary,  
toheobsyrved. Let an Handkerchiefor Napkin, be drawn tight

about the Neck ;by which means the Jugular Vein heing Coni,  
pressed, those Branches of it may he become more conspicuous.  
The Vein being open'd, the Patient should incline his Head  
downwards, that the Blood, which is discharged slowly and  
. gentiy, may not flow into his Eyes or Mouth. A sufficient  
Quantity or Blood heing evacuated, unless it stops spontane-  
oufly, as is Often the Case, let the Wound he compressed with  
the Fingers, the Forehead and Face he washed, and afterwards  
let one or two Compresses, with a Bandage, be properly applied.

Bleeding at the occipital Veins, which communicate with  
the lateral Sinuses of the Dura Mater, is proved, both by  
Reason and Experience, to be Very beneficial in many Distem-  
Pers of the Brain, especially when it is necessary to avert and  
evacuate the Blood from that Part. The celebrated *Morgagni*particularsp recommcnds.it in obstinate lethargic Disorders, by  
.Cupping arid. Scarifications; and *Zacutus Lusitanus gyves an*Instance os an desperate Apoplexy, heing cured by Cupping, and  
deep Scarification in the Occiput. *De Medic. Princip. Host.*Lib, I. Hist, sese . Is the Incision in ro be made with a Lancet,  
ithe same Method is to be used, as in opening the Veins of the  
Forehead and Temples. . ... . ζ

OF BLEEDING AT. THE GREATER CANTHUS. OF THE  
si. si. . . . ."EXEE .. . / ‘.sc -ς .

ς Anatomists have ch served, between the Nose and the greater  
Canthus, on each Side of-the Pace, a Vein,, proceeding partly  
from the Eye, and partly from the Forehead, which, like the  
Frontal Vein, descends to the external Jugular Vein; Bleed- ,  
ing in this Vein has been recommended by almost all Oculists,  
and particularly *Dionis,* as extremely serviceable in Violent. In-  
flammations of the Eye; the/, in my Opinion, with no better  
Reason than-inthe Veins of the Temple.and Forehead. But,  
when this Operation is to be performed, let- the Ligature be made  
about the Neck, as hefore directed; and let the Lancet he care-  
fully introduced -into the Vein. The Patient ought, likewise,  
to hold down his Head to prevent the Blond froth flowing into  
his Mouth; and, as much Blood heing diseharged.as may he ne-  
cessary, apply a thick triangular Coinpress with proper Bandages.  
For Bleeding in the Eye itself, see OcULUI. ’

- ’ E' ‘si. .' \* \* \* ’ ‘ἐν

OF BLEEDING AT TRE JUGULAR VEINS. .

i The Operation of Bleeding at the external Jugular Vein, in  
Violent Inflammations of the Neck or.Quinsey, in Inflamma-  
tions of the Brain, in Madness and Melancholy, in Inflamma-  
tions of the Eyes, in Apoplexies, Head-achS, lethargic Disorr  
ders, and violent Diseases of the Head, is Very antient; and  
many of the Moderns have recommended this Practice, be-  
cause, by it, the violent Influx of the Blood into the Part affect-  
ed, and the Collection and Stagnation of the Humours, may he  
inost expeditioufly prevented. Besides, there is no.Danger in  
the Operation,,, as these Veins, extending on each Side, os the  
Neck from the Head to the Clavicles, lie immediately under  
the Skin, and are sufficiently large and conspicuous. But, be\*  
fore the Incision, it will he .proper., to make a Ligature tighter  
than ordinary about the lower Part os she Neck, which must  
he straitened by thePatient, or an Assistant, till the Veins be-  
come turgid; or, a loose Bandage being thrown about the Pa-  
tient's Neck, it may be drawn down towards his .Breast by him-  
self, or an Assistant. By this means the JugalariVeins,-dieing  
compressed on each Side, wist ,become more-turgid, without  
obstructing Respiration. . .... : Ί οὐρ.ν»

When the Veins are sufficiently tumid, that is Io he chosen-  
which is most conspicuous, when the whole Head or Fauces are  
affected ; but when the Disease lies only on one Side of the  
Head, or in one os the Eyes, that Vein is, in my Opinion, to  
he preferred; which is situated on the morbid Side. A sufficient  
Quantity of Blood being drawn, the Ligature must he removed\*  
theWound compressed by the Finger, and Compresses with a cir-  
cular Band^e must be applied; and thus the Bleeding is stoptiwithn  
out any Danger os a fresh Haemorrhage, as I have osten experi-  
enced. It is, indeed, tnre, that the Patient is Very subject to saint  
in this Operation ; but that Circumstance is attended with no  
had Consequences *TralUs,* a learned Physician of *Bresiaw,*published in 1735. an excellent Treatise on the Usefulness of  
this Operation. . . . . . -

**THE METHOD OF BLEEDING IN THE VENAE RANIH.Es**.Bleeding in those Veins, under the Endos the Tongue, is  
by some esteemed henesicial in a Qidnsey, or Inflammation of  
the Neck, iespediilly is.a Vein has been before, opened several  
times in the FoctrUArm, Or Neck ; for, by these means, the  
inspiflaredand stagnant-Blood is gradually discharged. The  
Operation may he thns performed: Make a Ligature about the  
Neck, as was already-directed ; then, raismg the End of the  
Tongue with the Left Hand, carefully open, both these Veins  
with the Lances, one after another ; for one of them will never

discharge a sufficient Quantity of Blond. When it becomes  
necessary to stop the Haemorrhage, unbind the Ligature, and it  
commonly ceases spontaneous; but, if it should still, continue,  
let the Patient hold a little Vinegar, or *Ponta c* Wine, in his  
Mouth 5 or, if necessary, apply to the Wound a little Vitriol,  
or Alum, Or a Compress dipt in some astringent Medicines,  
till the Bleeding stops. But there is seldom any Danger Os a  
violent Haemorrhage here; and, unless the Discharge he copious,  
in Diseases of the Fauces, little Effect can he expected from it.

**THE METHOD OF BLEEDING BY THE VEINS OF THE  
PENIS.**

In some violent Inflammations of the Penis, this Operation  
has a wonderful Effect, and is sometimes more successful than  
almost every other Remedy, introduce your Lancet about **the**Middle or back Part of that large Vein, which runs along the  
inperior Side of the Penis, and is already sufficiently tumefied  
froth the Natureof **the** Disorder; let the Evacuation be con-  
**tinued,** till the Penis becomes flaccid, or till a Quantity is dis-  
charged proportionable *to* the Degree os the Disease. Then the  
Wound may be closed with the Finger, and Compresses are to be  
appled, with a Bandage proper for the Penis. Particular Care  
must be taken in this Operation, to avoid wounding the adjacent  
Nerves and Arteries, which might produce fatal Effects; and  
not to make the Bandage too tight, which might increase **the**Inflammation. X

**OF THE ACCIDENTS WHICH ARISE -FROM BLEEDING.**

**THE METHOD OF TREATING AN ECCHYMOSIS.**

. An Ecchymosis is an Extravasation of the Blond, from the  
Vein, between the Flesh and the Skin. Os this Disorder there  
are different Degrees; as when a great Part'of the Arm is so  
Violently affected, that it not only becomes livid, black, and  
fweUed, but is, likewise, affected with Inflammations, PainS,  
Suppurations, and a Gangrene.

This Disorder is produced, either when the Surgeon has cut  
the Vein entirely through, or, which is more frequentiy the  
Case, when the Patient has used some Violent Exercises, espe-  
cially of the wounded Arm, too soon aster the Operation ; for  
by these means it may Very readily happen, that the Blood may  
be extravasated from the wounded Vein, between the Flesh and  
Skin, more or less in proportion to the Violence of theExer-  
**ease.**

When the Quantity of extravasated Blood is but small, little  
Danger is to- be apprehended; for the stagnant Blood may he  
easily discussed, by applying a Compress dipt in Vinegar and  
Salt, or in Spirit of Wine, Sometimes the Blood degenerates  
into Pus, and then the Suppuration should be promoted by a  
Diachylon-plaister; and when'the Matter is once ripened, it  
will spontaneoufly make its Way by Degrees, without Incision.  
As long as any Pus appears to be discharged, it should be daily  
expressed with the Fingers, and the Wound may'he healed with  
a Diachylon-plaister. .. '

Is the Quantity os stagnating Blood he very considerable, there  
do little or no Hope of a Discussion : For the Vitiated Blood  
generally degenerates into a Violent Inflammation and Suppura-  
tion, and sometimes into a Gangrene. In order to prevent  
these Consequences, let the Surgeon make frequent Incisions  
in the livid Part, for evacuating the stagnating Blood. He  
may then apply a Diachylon-plaister, or Fomentations proper  
for Contusions, or Phlegmons. But is, as often happens, a  
violent Inflammation, or even a Gangrene, affects the Arm,  
it ought to be frequently scarified, and digestive Fomentations,  
.or Cataplasms, should be applied. But, in thefe Cases, it is  
often necessary to take a sufficient Quantity of Blood from an-  
other Part os the Body, and to exhibit resolvent Medicines in-  
ternally, till the Violence of the Inflammation, Or the Gan-  
grene, abates ; or till it entirely ceases.

**THE METHOD OF -TREATING Α NERVE OR TENDON  
WOUNDED IN BLEEDING.**

A Nerve or Tendon may be certainly known to be wounded  
in Bleeding, if the Patient, at the time of Incision, feeis most  
acute PainS, so that he can scarcely refrain from a Vehement  
Outcry; especially if the PainS continue, and are followed by  
Tumors, Inflammations, Spasms, or, likewise, a Rigor and  
Convulsions of the Limb : Winch Symptoms, if not time-  
ly relieved, are succeeded by most dangerous Convulsions, a  
Gangrene, and Death itself.

Among the Various Methods of remedying this Malady, that  
seems the most excellens, which was formerly performed by  
*Pare* on the *French* King *Charles* IX. No sooner had the’King  
signified his Pain, by crying Out at the Instant that the Vein  
was opened, than *Pare* justly suspected, that a Nerve had  
been wounded. Immediately the Arm began to swell, and  
grow rigid, with'the Acuteness Os the Pain. Hereupon the

King's Physicians, in Consultation with *Pare,* agreed upon the.  
following Method : They first injected into the Wound, Oil  
of Turpentine with rectified Spirit of .Wine ; then they applied  
to the whole Ann the Emplastrum. Diachalciteos, distolved in  
Vinegar and Oil os.Roses ; then they used the expulsive Band-  
age, beginning at the Hand, and ascending gradually in con-  
tinned spiral Turns to the Shoulder; by which means, the Vio-  
lent Impulse of the Blood, .and.the Inflammation, were not  
only abated, but the Pain, also, diminished by degrees. In  
order to complete the Cure, they applied to .the Arm the fol- ’  
lowing Cataplasm, till the Pain entirely ceased. . .

Take of tho Meal of Barley, and .Vetches, each two  
Ounces; of the Flowers of Chamomile, and Melilot,'  
each two Handfuls ; of fresh Butter, an-Ounce and an  
half: Boil them in Soap-suds into a Cataplasm.

Thus, though the natural Activity of the Arm was impaired  
for three entire Months, yet it gradually recovered its former  
Strength. . . \_

However, it may not be improper, in this Method of Cure,,  
to substitute, instead of the Oil of Turpentine, and Spirit of  
Wine’, the *Peruvian* Balsam, *or'Hungary* Water- which  
may be for some Days instilled into the Wound, till the Pain  
diminishes. As the Emplastrum Diachalciteos is rarely to he  
found in the Shops, in room of it, the emplastrum Diapom- .  
Pholygos, or the Plaister of red Lead, may he used. But great  
Care must be taken, whilst, the Remedies are preparing, that  
the Wound be not exposed to the Ain It will, therefore, he  
proper, immediately to apply any Sort of Plaister, which is  
the readiest, to the Wound, and to wrap up the whole Arm  
in Linen Cloths moisten'd in Oxycrate, which will both lessen  
the inflammation, and defend the Wound from the Injuries oT  
the external Air. If the Patient he of a Vigorous plethoric Ha-  
bit. Bleeding in another Part may tend to prevent the Inflam-  
matiori. *Scultetus,* in *Obs.* gives a certain Ointment, which  
he commends aS an excellent Remedy in Punctures of the  
Nerves ; where he, also,.informs us, that he has successfully  
divided entirely, or cut through, some of these wounded Nerves.  
*Horsier\* s Surgcry. '*

PHLEBOTOMUS. A Lancet, or a Fleam: Instruments  
used for Bleeding. '

PHLEDONODES, φλεδονῶδες. See **PHLEBoDoNoDES.**

PHLEGMA, φλέζμα. Phlegm. Every Humour, says *Ga-  
len, Lib.* 2. *de Diff. Feb. Cop. is.* which is both cold and hu--  
mid, comes under the Denomination of *Phlegma,* " if we  
" would speak in the Language of *Hippocrates,* and accord-  
" ing to the usual Custom, not only of the antient, but modern  
*" Greeks* ; or," aS he says a little aster, " if you please, you  
" may call it *ScindapsusP* Of Phlegm there are four Spe-  
cies, the Vitreous, sweet, acid, and salt: These are reduced  
by *Galen, de Discs. Feb. Lib.* 2. *Cap.* 6. to three. But, in his  
Book *de Plenitudo* he makes five Species of it.

*Phlegma,* also, in *Hippocrates, as Galen* says in his *Exegesis,*signifies not only a white and cold Humour, but, also, an In-  
stammation [Ὤώζωσιντ. Instances to this Purpose are innume-  
.rable. \*’ \*

*Phlegmasia,* φλεζμασἰη, in the fame Author, signifies not only  
an Inflammation in the common, but is sometimes to he under-  
stood of the Violent Heat excited by a Fever; as *Lib. de R. Vi  
I. A.* But φλεγμασίη τῆ ince is a pituitous Sort of Urine,  
abounding with a gross and cold Humour.

*Phlegmainon, iplaislsusvuv,* signifies not only inflamed, but  
sometimes imports tumid, and increased in Bulk ; as may he  
shewn from many Places in *Hippocrates,* in which ισχναίνειν, ***to****extenuate,* and φλεζμαίνει», *to induce a Tumor,* are set in Oppo- .  
fition: Many Instances os this Sense os the Verb may be given  
from the Book *de Locis in Homine. Foestus..*

PHLEGMAGOGUS, φλεζμαζωγής, Phlegmagogpe. **An**Epithet for such Cathartics aS purge off Phlegm.

PHLEGMASIA, φλεΐμασία. An Inflammation.

PHLEGMATIAs, φλεγματίαι. Persons abounding with  
Phlegm are thus called, by *Hippocrates.*

" PHLEGMATORRHAGIA. *Salmuthus, Observat, psp.  
Cent.A.* gives an Account of a Disorder, which he calis by this  
Name. This was a Very considerable Flux of thin Phlegm  
from the Nostrils, which continued for three Days, and was  
cured by the Use of the Cephalic Pilis.

PHLEGMONE, φλεζμονή. A Phlegmon, or Inflammation,  
\_See **INFLAMMATIO.**

PHLEGMONODES. Resembling an Inflammation.

PHLEPS, φλεψ. A Vein. But among the Antients it sig-  
nisied both the Arteries and Veins. .. ’.

PHLI.E, φλίαι, in the Scamnum of *Hippocrates,* or other  
Machines of that Kind, are the upright wooden Posta, which  
are bored to receive the ends of the Axes, and in which they  
turn. *Oribasius de Machinamentis, Cap.* 24. Gr, as *Galen* ex-

plains it, in his *Exegesis,* strait Pieces of Wood, fixed opposite  
to each other, like the Posts of a Door.

PHLOGINON, φλογνν'ν. The Name of a liquid Colly-  
rium, described by *Galen, Lib. 4. de C. M. S. L. Cap.* 7.

PHLOGISTOS, φλογνστος. inflammable. The Liquor called  
*Act her,* is called, also, *Phlogiston,* on account of its great In- \_  
flammabilitv.

PHLOGIUM. A Name for the *Viola; tricolor ; herten-  
fos., repent.*

PHLOGODES, φλοτώδις. Of a Flame-colour, intensely  
red, inflamed.

PHLOGOE1DES, φλοτοειδής. ThefameasPHLOGoDEs.

PHLOGOSIS, ,φλοτωσιι. An Inflammation; or an Heat  
and Exestuation of any Part, without an inflammatoryTumor.  
*IVillis* fpeaks frequently of a Phlogosis of the animal Spirits ;  
but, ! am afraid, no just Idea can be framed of such a Phlogo-  
sis, till such rime as we know, that animal Spirits really exist,  
and we are better acquainted with their Natures.

PHLOMIS.

'' The Characters are ;

The Root is perennial; the Leaves thick; the Galea large,  
hollow, falcated ; the Beard trifid, the middle Segment being  
large, broad, marginated, and extended beyond the Galea,  
which closely presses upon the Beard: The Calyx is a short,  
wide, pentagonal Tube, sometimes indented; The Sceds are  
oblong.

*Boerhaave* mentions eight Species of Pblomis. which are,  
I. Phlornis; Narbonensis; folio Horrnini j flore purpura-  
scente. *T.* I78. *Marrubium, nigrum, Tongifolium.* C. B. P.  
230. *Herba venti, Monspelieastbus.* J. B. 3. App. 834.

2. Phlomis; fruticose, Salviae folio latiore, & rotundiore.  
*Tourn. last. syy. Boerh. Ind. Ac* I 6o. *Phlomis.* Ossic. *Sal-  
via fruticose lutea latifolia, five Verbascum fylvestre quantum  
Matthioli.* Park. Theat. e I. Raii Hist.. I. 5 I I. *Verbaseum  
latis Salviae foliis.* C. B. IP. 240. *Verbaseum Matthioli.* Ger.  
625. Emac. 767. YELLOW SAGE.

It is cultivated in Gardens, and flowers in *June..* It is astrin-  
gent, and reckon’d among vulnerary Plants,

3. Phlomis, fruticosa ; Salvhe folio longiore, & angustiore.  
*T.* I77. *Verbaseum selvejlre.* Dod. *Pseudeselvia, fruti-  
cofa, minor, lutea. Verbascifoliis incanis. . M..H.* 3. 397.

4. Phlomis; fruticofa; folio subrotundo, breviore, flore lu-  
teo. *Verbajiulum, falvifolium.* Alpin. Exos. Ic9. *Pseuds-  
falvio, minor, Cretica, lutea.* M. H. 3. 397. ‘

*Dioseorides* says, that the Flowers are good to dye Hairs of  
a Gold-colour; and that the Leaves cure Ambustions. *Galen*writes, that the Leaves are moderately drying, and digestive.  
*Prosper Alpinus de Plantis exoticis. -*

5. Phlomis, Sarnia; herbacea; folio Lunarise. *T. Cor.* Io.

6. Phlomis; Orientalis; solis laoiniatis. *T. Cer.* IO.

7. Phlomis, Orientalis; angusto & longiori solio; flore lu-  
teo. *T. Cor.* Io. *Boerh. Ind. alt. Plant. Vol.* I.

The *Phlomisfouticofa* was called by the Antients *Verbaseum.,*for which Reason *Tournescort* makes it belong to that Kind.  
The medicinal Virtues are not known; only rt is recommended  
with the Lamiurn and Galeopsis: The Juice, however, is emol-  
- lient. *Hist. Plant, adscript. Boerhaav.*

PHLUS, φλους.. This Word occurs, *Lib. de intern. Affect.*where we read, καὶ ἐν τῇ κεβαχῆ ὑπὸ τάς τρίχαςοιον φλους οπεστι-  
*And on the Head, under the Hairs, there is,- as it sucre, a Cor-  
tex.* In this Passage Φλους signifies the fame as φλὄος *(phloos),*or φλοιὸς *{phloios),* that is, a Cortex, or scaly Skin, Eke the  
Exuviae or Slough of a Serpent: For which Reason *Calvus*renders theWord *fquamulas,* \*" sinallScales.” *Hofychius,* also,  
expounds φλους by φλοιὸς, λἱπὑχανον *(Lapichancn),* and λεπυρὸν  
*ILepyron),* Words much of the fame Import.

- PHLYCTAENAE, φλυκταίναι, from φλὀξυν to hell. Small  
Eruptions on die Skin, arising from an hot or.acrmionious Hur  
mour. *Hippocrates* fornetimes represents them, as resembllng  
those Pustules which appear after Ambustions.

PHLYCTAENOIDES. An Epithet of Pustules which re-  
semble *Phlycturiia. Blancard.*

PHLYCTIDES, φλυάτίδἱς. The fame asPHLYcT.sN.is.

PHLYS1S. An Eruption on the Skin, from a Redundance  
of Humours. *Castellus* from *Galen.*

PHLYZACION, φλυζάκιον. A Pustule, or Vesication on  
the Skin, excited by Fire or Heat. Sometimes it imports the  
fame as PHLYcrisNA.

PHOCA, or *Vitulus Afarinus.* The Sea Calf. An arnphi-  
bious Animal, which lives sometimes in the Sea, and forne-  
times on Shore, but most in the Sea. It is said, that the Fins  
of this Animal, especially those taken from the Right Side, ex-  
cite Sleep, when applied to the Head; Its Fat has an emollient  
Quality, and, if rubbed on the Region of the Uterus, is thought  
proper to provoke the Meofes, and remove Vapours: Shoes  
made of the Skin of it are, also, thought to he a good Prefer-  
vativc against the Gout- *Lemery, Traile des Drecues.*

PHOCAENA. Α Species of Dolphin, somewhat thicket  
and shorter than the ordinary Kind; the Fat of which is  
esteemed resolutive, and good for the Nerves. *Lemery des  
Drogues.*

RHODES, or PHOIDES, φῶδεστ, or φοἰδος. The fame as  
**PHAUSINGES.**

PHOENICITES. Α Name for the *Judaious Lapis.*

PHOENICIUM EMPLASTRUM. The *Emplastrum  
Diachaleites,* or *Diapalma.*

PHOENICIUS MORBUS.*ThaElephantiasts.* SeeLBPRA.

PHOENICOPTERUS, φοινιμόπτερος. The Name of a  
Bird, frequently mentioned by the Antients, whose Tongue  
and Brains were esteem’d great Delicacies. I don’t know, that  
it is certain what Bud this was; but, by the Derivation, it should  
have red Wings.

*Lemery* describes the Phoenicopterus, as a Bird as large as an  
Heron, of an Ash-colour, with a crooked Bill, and very long  
Neck, which lives upon small Fish, and Shell-fish: He fays it  
is esteem’d aperitive, and good for the Epilepsy ; and that the  
Fat is resolutive, and good for the Nerves.

PHOENICURUS. The Name of a Bird called, also,  
*Rubecula, Ruticilla,* and *Erithacus. Lemery* says, rt is about  
the Size of a Cuckow, and has a red Tail, as the Derivation  
of the Name imports. It is esteem’d goad for the Epilepsy,  
either eaten, or in Broth. The Fat is resolutive, and ano-  
dyne.

PHOENIGMUS, φοινιτμὀς, from *ββΐιτίξ,* a red Colour, A  
Russification, or Rubefaction, of the Skin, that is, an Ex-  
citement of a Redness os the Skin, by means of acrid Appli-  
cations.

PHOENIX. A Name for the *Gramen-, Liliaceum;folia  
et Spica angustiore.* See LOLIUM.

PHOLAS. The Name of a Sea Shell-fish, somewhat like  
a Mussel, which grows to the Rocks at the Bottom of the Sea,  
and is said to be good Fond. The Shell, powder’d, and taken  
internally, is said to be aperitive, and good for the Stone.

PHOLIS, φολίς. A Scale os Metal.

PHOLLIDODES, φολλιδώδες,, *Lib. 4. Epid,* is apply’d to  
Tumors in the Legs, and signifies soft, lax, and fungous, as in  
those who labour under an *Anasarca,* and especially, a *Leuco-  
phlegmatia.* AlltheCopies, indeed, read φολιδώδες, which *Calvus*.renders *fquornous,* because φολὴς is the same as λεπὶς *{lepis)* a  
Scale like that of Fishes, or Serpents. Whence the Passage in  
*Hippocrates* above.mention’d, supposing this to be the true  
Reading, may be understand of such Tumors in the Legs, as,  
by reafon of the Driness and Corrugation of the Skin, and the  
want of Aliment, are cover’d with a scaly sort of Substance,  
as with a Cortex, as is often observable in the Legs and Feet,  
and other Parts, under a Cachexy or Dropsy. But petheps for  
φολλιδώδες we are to read φολλςκῶδ.ς *lPhollicodes)* which sig-  
nifies fungous, fax and empty like Husks, void of Sceds, as  
*Galen* expounds the Word in his Exegesis, with an Eye, it is  
probable, to the Place in *Lib. 4. Epid,* where it is said, τἀ  
φολΧικώδεα φλυκταιεουμενα, " the pustulous Eruptions were Ioft  
“ and lax.” *Erotian* expounds φολλικώδη by ἐφηλώδη. and  
λεπράδι, rquamous and scabrous, as if exasperated by the *Lepras\_*for the Antients, he says, called the Asperities of the Skin,  
Sroceeding from the *Psara,* and the like Affections, by the  
lame of φόλλικες, *Pholliees.* And this affixes a very different  
Idea to the Word, which must then be understood of those  
Tumors, which are exasperated with a sort of squamous  
Crust, as is sometimes observable in cachectic Bodies. .

PHORACIODES, φορακιω'δες, from φορὸς (ρδοστοι), which  
in the Exegesis is expounded by έυσὑλλεπτος *leyfylleptos),* dif-  
pofed for Conception, *Lib.* 2. γυναικ. is spoken of the Orifice  
of the Uterus, as open and duly qualified in order for Con-  
ception. But *Fcestus* suspects, that the Word ought to be read  
φαρκιδωδϊς *apioarcidedes},* which *Galen* and *Erotian* expound by  
ῥὐτιδῶδες *lrutidedesy* corrugated. But he should rather like to ..  
read, he says, φοργανώδες *[phorganodes),* hecaufe φοργάνη *lPhor-  
ganri* is expounded, in *Hiesechius,* by αραιὄϊης (γτσταονηι), as im-  
portiog the Orifice of the Uterus to be lax, rare, and open ;  
which, *Lila de Aiuliehr. Nat.* and *Lib. de Mnrb. Aiul.* on  
the same Occasion, is expressed by έυρὑ *(eury),* wide, ex-  
panded. " .

PHORIMOS, φοριμος. An Epithet for that Species of  
Alum, which is call’d in the Shops, Roch-alum.

PHORINE, φοργνη. The Skin of a Man or Beast, or, ac-  
cording to *Pollux,* an HogS-skin. Thus, *Lib. de* R. *V. I. A.*speaking of Swines-flesh, it is said, that it ought to be eaten  
ανευ τῆς φορενης, that is, as *Galen* fays, in his Commentary,  
ἄνευ τὸ δέρματος, “ without tbs Skin.” Φορίνη is, also, fpoken  
of the human Skinjwhich by stome, too, is called πυρίιη (Pj-rstw),  
as *Hesecbius* observes.

PHOS, φῶς. Light; but it, allo, signifies the black'Circle,  
, which surrounds the Pupil of the Eye.

PHOSPHORUS, from φῶς. Light, and φίρω, to bring.  
The Name of a *Collyrium, in Galen, L. An de Comp. Me S. L.  
Cap. J.* It is the same as the DIACROCU.

There are several Chymical Preparations call'd by this  
Name, which shine in the Dark, some of which I have taken -  
Notice of under the Article ALUMEN.

**HISTORY OF PHOSPHORUS.**

The *Phosphorus igneus* differs from other naturally shining  
Bedies, in this, that it is in reality nothing but a kind of con-  
Ceased Fire, which discovers itself by its Light and Smoke ;  
bus, if you rub it harder, it will break out into a Flame. This  
Discovery appeared about the Year I677 ; but was preceded  
*by Baldwin's* Phosphorus, which is an artificial Imitation of  
the natural *Bolognian* Stone. *Christopher Adolphus Bala-win,*Governor of a certain Place in *Mifnia,* happened to dissolve  
Chalk in Aqua Fortis, or Spirit of Nitre, which last he again  
brought over by the Fire; and he found the remaining Body  
to imbihe the Light, when exposed thereto, and retain it for  
some time, and carry it along with it into a dark Place, aS a  
Sponge.does the Water it has imbibed. This Experiment  
did not a little startle the *Cartesians,* (Very few of whom had  
seen the *Bolognian* Stone) that Light should of a sudden be-  
Come a gross and portable Thing, whose Rays they supposed  
**to** consist in Pression only, and to be propagated in an Instant  
of Time. *Baldwin,* in an obscure manner, described his Ex-  
periment in a Treatise intituled *Aurum Aura.*

To this succeeded *Brand* of *Hamburgh's* Invention, named  
the Phosphorus igneus, the Pyropus, and afterwards, by way of  
Eminence,the Phosphorus, which was discovered in this man-,  
ner. *Brand* had fallen on a Chymical Process, extant in a  
printed Book, which taught how to prepare from Urine a  
Liquor fit to ripen a Particle of Silver into Gold ; and in la-  
touting on this he found out his Phosphorus. He had some  
Acquaintance with *Ju. Daniel Kraft,* of the Council of Com-  
merce to the Elector of *Saxony* ; and, by his means, with *Jos  
Kunkel,* one of the said Prince's Bed-chamber ; hut who, un-  
der that Character., performed Chymical Processes. On per-  
snading *Brand,* that this Arcanum might be sold to the Great  
**at** an high Price, and offering him their Assistance, they ob-  
tained the Composition from him. And, upon going from *Drese  
den* to *Hamburgh,* they both saw and learned from him the  
Process of the Phosphorus. But *Kunkel,* upon his Return  
Home, had committed some Mistake in the Process, and for a  
long time could not hit upon the Phosphorus ; and he sent  
a Letter to *Brand,* complaining that the Secret was not  
sincerely communicated to him. *Bur Brand,* repenting that he  
had been so easy in imparting the Secret, delayed to satisfy  
him. *Kunkel,* in the mean time, aster Various Trials, cor-  
rected the Error himself: Whence he pretended to be the In-  
ventor ; and of this *Brand* bitterly complained.

*Kraft,* who was a Man of a good Address, undertook to  
vend the Discovery among the Great ;and,in his Way to *Eng-  
land,* he made me a visit at *Hanoucr* ; and ingenuousiy men-  
tioned to me, both the Matter of the Process, and its Author  
*Brand*; and he likewiseishewed the Experiment of the Phos-  
phorus, to the great Surprize of Duke *John Frederic ;* and  
afterwards in *England* to K. *Charles* Π. Prince *Rupert,* tlte  
illustrious Mr. *Boyle,* and others, os which there is an Account  
by Dr. *Hook.* . But he never, as far as I know,zmentioned  
himself as the Inventor. The Phosphorus was first sent into  
*France,* by me to *Huygens* and at length the Composition it  
fell was, by the illustrious *T.fchirnhausen,* upon his Return  
from *Germany* into *France,* communicated from me to **the**Royal Academy, to whom *Huygens* had already shewn the  
thing. That *Boyle* had got but an imperfect Description of  
it, appears from his Dissertation on Phosphorus ; for his Phof-‘  
phorus differs from *Brand's* only in this, that it is more im-  
perfect. : - . . , ‘ '

But Duke *fohn Frederic,* as he was a magnificent and ge-  
nerous Prince, ordered that I should send for the Inventor:  
*Brand,* therefore, came to *Hanovcr,* and saithfully communi-  
cated to us the Process ; for, whatever he did, I imitated in  
another Laboratory. Upon collecting a large Quantity of  
Urine, *Brand* came to us, and went through the Process.  
Upon *Brands* Return to *Hamburgh,* the Duke settled an  
annual Pension upon him, winch was punctually paid him till  
the Duke's Death ;. and this probably was the only considerable  
Encouragement which he reaped from his Phosphorus.

I myself shewed to the same Prince, who was Very curious  
in thefe Matters, another kind of Phosphorus, which **we**may call the *Thermophofphorus,* which does not acquire its  
shining Quality from Light, as the *Bolognian* and *Bald-  
vtirsts* Phosphorus, but from Heat. There is a kind of Sub-  
stance found in Mines, capable of being dissolved by Fire,  
with the Powder of which if you draw Tetters and Figures  
**on an iron** Plate, and lay the Plate upon burning **Coals, the**

Strokes shine, though the Plate he not ignited, .snd though  
the Rays of Light cannot penetrate from rhe Coals to theFigures.

It is a thing commonly known, that herd Bodies acquire-  
Heat, and at last take Fire, by Motion; and the Flame pro-  
duced by the Attrition of two Pieces of Wood was, by the  
antient *Saxons,* regarded as a religious Ceremony. But we  
are not so well acquainted with the Manner, in which Smiths  
at our Mines kindle the Fire extinguished in their Forges.  
They strike, with an Hammer, an iron Bar on its Very Edge,  
and which is wont to come from the Mines, in the Form of **a**quadrangular Prism. This Bar they shift, that the Edge may  
he alternately struck, now on the Right, and again on the  
Left: Thus it immediately becomes hot, and, after repeated  
Blows, glowing hot, so as to set on Fine any inflammable  
Matter.

We have, besides, other kinds of Phosphori, in **which there**are no Traces of Fire, the principal os which we owe to *fob.  
Bernouilli,* who has improved the Observations of others on  
Mercury shining in Vacuo, and carried it so far, that now it  
may be produced at Pleasure; whereas before Mercury was  
rarely, and by chance, made to shine. It is credible, chat this  
Phosphorus always retains its shining Quality, or, at least, for a  
long time ; hecause it does not stand in need of the free Air  
to make it shine, like the Phosphorus igneus, but emits a Light -  
by only shaking it in a Glass, hermetically sealed ; and with this  
\* the King of *Prussia* was so well pleased, that he rewarded the  
Inventor with a Gold Medallion. I understand, that M.  
*Dutal* at *Paris,* and others, have laboured with remarkable  
Success in establishing and promoting this Phosphorus. It  
would be worthy inquiry, what Quantity of Light might be  
produced by many such Phosphori, continually shook; for **a**continued Shaking may easily be effected by means ofa Machine,  
and the Light os many Phosphori may be collected either by  
Refraction or Reflexion, an Experiment which I wonder has  
not been hitherto attempted. *Leibnitz,* in the *Miscellanea  
Eerolinensia.*

**DR. SHAw'S ACCOUNT OF PHOSPHORUS.**

We took half a Dram of Camphire, and ground it in a  
glass Mortar, 'with three Grains of the solid Phosphorus of  
Urine.; then added aS much essential Ost of Cloves, as served  
to reduce the Whole to a fluid Form. The Mixture thus  
made may be rubbed upon the Clothes, the Hain, or **the**Hands, without Danger osBurning.

The successful Method of making it is this: Evaporate any  
Quantity of fresh Urine over a gentle Fine, to a black, and  
almost dry Substance ; then with two Pounds thereof tho-  
roughly mix twice its Weight of fine Sand. Put the Mixture  
into a strong-coated Retort of Stone; and, having' poured **a**Quart or two of clear Water into a large Receiver with a long  
Neck, join it to the Retort, and work in a naked Fire ; let  
the Heat be small for the two first Hours ; then increase it gra-  
dually to the utmost Violence, and continue thus for three or  
four Hours successively. At the Expiration of whichTime, there  
will pass into the Receiver a little Phlegm, and volatile Salt,  
much black fetid Oil, and, lastly; the Matter of the Phos-  
phorus in form of white Clouds; which either stick to the  
Sides of the Receiver, like a fine yellow Skin, or fall to **the**Bottom in form of a small Sand. Now let the Fire go out 5  
but take not away the Receiver, before it is cold, for fear of  
setting the Phosphorus on Fire by admitting the Airs To re-  
duce these small Grains into one Piece, put them into a little.  
Tin Ingot-mould, along with Water ; heat the Ingot to make  
the Grains melt together; then add cold Water, till the  
Matter is congealed into one solid Stick, like BeeS-'wax; which,  
being cut into littie Pieces, fit to enter the Mouth of a Phial,  
may be preserved by Water, and keeping the Glass close stop-  
ped. Is the Glass were not to be stopped, the Phosphorus  
would rum black on its Surface, and at length he spoiled.

The Cautions required to make the Process succeed are;  
I. To evaporate the Urine, while it is recent. 2. To prevent  
itsthoiling over, and so lofing the most unctuous Part. 3. To  
let the Matter afterwards ferment in the Cold. 4. To mix  
the black Matter with Sand, to prevent its melting and run-  
ning together. 5. To use a Stone Retort, those of Earth  
being too porous, and suffering the Phosphorus to transude  
sooner than pass into the Receiver. 6. To have the Receiver  
Very large, and with a very long Neck, to prevent its breaking  
and over-heating ; which would either evaporate the white Va-  
pour, wherein the Phosphorus consists, or else prevent its  
coagulating. 7. To put Water into the Receiver for keeping  
it cool, and quenching the Phosphorus, as it falis to the  
Bottom. - 8. To make the Firefmall at first, that the Retort  
may be preserved, and the black Matter gradually dried ; which  
would otherwise swell and come over in a black Froth. Lastly»

It is sound necessary, that the Urine for the Operation he of  
such aS use Malt Liquors, rather than Wine. All these Cir-  
cumstances heing required for obtaining the Phosphorus to Ad-  
vantage, no wonder if so manyros those who attempted it  
miscarried. . .. T

This Operation may. he greatly shortened, 'by freezing,Ed  
concentrating fresh Urine ; afterwards ^evaporating, it .with..  
Care; then digesting it *per fe,* in the manner above-men- r  
tinned. When thoroughly digested, commit the Matter, in a  
large. Quantity, to an iron Pot, with an earthen Head, as **the**Chymista usually do, for making. Spirits of Hartshorn,  
or the Spirit and Salt of Urine. . When thus all the Salt and.  
Oil are obtained, let the.Caput *Mortuum,* he taken out, anti-  
mixed with twice its own Weight of Alum. The Matter may  
now he put into a well-coated long Neck, and worked with „  
Cate in a reverberatory Furnace, into very large Receivers  
filled with Water, and connected to the Necks by Adapters;  
the lower Ends whereof may enter the Water, as in distilling  
of Quicksilver; the Operation heing continued for eight or  
ten Hours. And this we apprehend to be the best way hitherto  
known of procuring Phosphorus to Advantage. Dr. *Wall* in-  
forms ns, that Mr. *Boyle,* heing concern'd to find hew small a  
Proportion of Phosphorus was afforded by Urine, desired him  
to look \*.vut for another Subject, that might afford it in greater  
Plenty. The Doctor afterwards Causing a Piece os dry Matter  
to he dug up in the Fields, where Night-then .emptied their  
Carts, he observed a great Number of finals Particles of Phos-  
phoruS therein. This Matter the Doctor immediately carried  
to Mr. *Boyle* ; who set *Bilgar* the Chymist to work upon it r  
But he could obtain very littleThosphoruS from it, till another  
. Material was added to it in Distillation ;'arid then he procured

Phosphorus in such Plenty, that, selling large Quantities at six  
Guineas the Ounce, he soon became rich, and left *England.*The Matter which thus fixes and increases the Phosphorus, we  
apprehend to be Alum j which is itself not only prepared from  
Urine, but appears to afford the same kind of Acid that Phos-  
phorus yields by burning. For, upon its Analysis, Phosphorus  
appears to be a Composition of a strong acid and an inflamma-  
ble Matter, exactly in the manner, of common Brimstone;  
whence it may not improperly he called an animal Sulphur.  
Accordingly, like common Brimstone, it will burn’under a  
.. Glass-bell, and afford Flowers, that become an acid Liquor,  
.like *Oleum Sulphuris per Campanam,* by attracting the Moisture

of the Air. . -

And in this manner it has been used, so as to produce ex-  
traordinary Changes upon Metais, especially in'the philosophi-  
cal View ; the Acid’ itself, even without Heat, proving a  
Menstruum to perhaps all the Metais. Put when this Acid .is  
driven into the Pores Of the Metal, by. the Action of the  
Flame in burning the Phosphorus,, it seems productive of much  
greater Effects; as is known to those acquainted with the  
fublimer Metallurgy. This Phosphorus, of all the kinds hitherto  
discovered, seems the most useful \* .’ ""ί. . .

ThisPhosphoruS has been severalWays disguised4.so as to make  
it appear under various Forms; sometimes as a Solid/sometimes as  
a Liquid, sometimes as anointment, and sometimes as a running  
Mercury. There are, also, others of different Kinds; of which  
we shall only mention two, discovered by *NLHornberg :* The first  
is that usually called the *black Phosphorus,* now commonly pre-  
pared with Alum and Wheat-stour, by taking four Or five Parts  
of Alum, to one of Wheat-flour, and calcining them together  
to a brown or blackish Mass; which being powder'd, and put  
into a Phial, loosely stopped with Paper, and set in a Sand-heat,  
fo as to continue glowing hot for some time ; then removing  
the Whole from the Fire, and suffering it to cool gradually,  
and at last stopping the Bottle close. A little of this Powder,  
being poured out of the Bottie, and exposed to the open Air,  
immediately takes Fire, and appears like a glowing Coal. But  
the Powder must he fresh made, to have a strong effect ; for  
the Sun's Rays, or the Moisture of the Air, heing gradually  
admitted to it, destroy its Virtue; whence it ought to he  
kept in a dark and dry Place. 'Tis remarkable of this Phos-  
phoruS, that it may he made almost from any animal or -vege-  
table Substance, instead of Wheat-flour; but. that no Salt  
whatever can be substituted instead os Alum.

. M. *Hamberg’s* other Phosphorus is made of one Part Sal Am-  
moniac, and two Parts Lime flaked in the Air : These heing  
mixed well together, a Crucible is to he filled with them, and  
fer in a small Fire of Fusion ; where, as soon as the Crucible  
becomes red-hot, the Mixture will melt, and should be stirred  
with an Iron Rod, to prevent its running over- When the  
.Matter is entirely fused, if may he poured into a Brass Mortar ;  
and,' when cold, it will .appear of a-grey Colour, and almost as  
if it were Vitrified. If now it he struck upon with any hard  
. Body; it appears as on Fine, in the whole Extent of the Stroke:

But, the Matter being brittle; in may he Proper, for the Expe-

rimentis Sake, to dip little Bars of Iron, or Copper, into the  
melted Matter in the Crucible; for thus they will be enamel'd,  
as it'were, with the Matter, and these Bars may he struck up-,  
on, so as cornmedioujly to repeat the Experiment several times  
hefore the Matter falls off. - The Bars are to he kept in a dry  
Place, to prevent the Phosphorus upon them from running, by  
the Moisture of the Air.

Both these Phosphori were discover'd by Accident. The  
first was obtained by searching for a limpid Oil, from the com-  
mon stercoraceous Matter, that shouldfrx Quicksilver; and the  
second by endeavouring to calcine Sal Ammoniac with Lime, so  
as to render it fusible likeWax; which Iynd was obtained, but  
not the other. ......... - .. *r.: . ... - ...*

’There,have been ho Very, considerable Uses of these two  
Phosphori hitherto discovered s but the Phosphorus of Urine has  
heen employed for .making, marly, eurinus Experiments; a few  
whereof we shall here exhibit. . t . -

I. The Light of this Phosphorusappears ’greater in Vacuo;  
than in the open Air. “. ....

2. In hot Weather it is observed to dart Flashes of Light  
through the Water wherein it is contained, so as exactly to *re-  
semble Lightning ;* winch thus darts, unextinguished through  
watery Clouds and Vapours. . ' . ...

3. These Flashes are not liable to kindle or,burn, any coin\*  
bustible Matter, in winch they resemble the harmless Kind Of  
Lightning; bur, in a condensed .State,’ this Phosphorusthurns  
Very furioufly, and with a most penetrating Fire, .so as to melt  
and dissolve Metals: In which respect it again resembles the  
more destructive Kinds of Lightning, which are found th have  
the same Effects. .. .

An Is a littie Piece of this Phosphorus he View’d through **a**Microscope, the internal Parts appear in a constant Ebullition.

5. A little Piece os it being put into a Silver Spoon, and  
held over the Fire, Jt bursts out into a shining Flame, leaving  
a red Spot in the Spoon, os a corrosive acid Taste ; and, heing  
diluted with Water, the Mixture makes a Conflict with Oil of  
Tartar *per Deliquium.*

6. Is a littie os it be ground in . a Glass Mortar, with twenty  
times its own Weight of Nitre, it does not take Flame,, het  
Only disperse a shining Property through the Body of the Ni-  
tre ; but, ifground in the same manner, with Iron-Filings ye-  
duced to Powder, a bright Plame immediately ensues, ...  
. 7. Though this Phosphorus appears to he a kind'of Sulphur,  
yet it does not dissolve in highly rectified Spirit of Wine, but  
communicates some sulphureous Parts thereto : For is this Spi-  
rit be poured to Water in the Dark, it yields a saint Degree  
os Light.

8. The Nature os this Phosphorns is considerably changed,  
by being long digested with Alcohol; for thus it becomes **a**kind of white transparent Oil, that does not coagulate without  
an extreme Degree of Cold, nor afford any manner of Light;  
and, when fresh Spirit of Wine is pour’d thereon, it does nor, ν  
like other Oils, mix therewith, nor dissolve thereincu-7

9. If this Phosphorus heseparated from the Spirit of Wine,  
wherewith it was digested, and, he.afterwards well washed in  
common Water, it, by degrees, -.recovers its former Con-  
fistence, and coagulates into a transparent Matter.whiter thari  
before ; but neither affords so much Light, nor recovers its  
primitive shining Virtue, nor its yellow. Colour, t ai her

IO. The Spirit Of Wine so separated becomesi yellowish,  
and smelis strong *of* the Phosphorus; though iefshines notd:ex2  
cept when poured upon Water;, *s'. .* .su s. ‘ et

II. This Phosphorus, being mixed with a large Quantity of  
Pomatum, makes, as well as with Camphire, and the Oil os  
Cloves, a shining Unguent, that may be rubbed on the Hands  
and Face, without Danger of burning; so as to render them  
luminous in the Dark.

12. Is a Piece of Paper, or Linen, be dipt at' one End in  
Spirit of Wine, and a Bit of Phosphorus be Crushed on the  
other End that remains dry, the Spirit will .he sired by the ;  
Phosphorus, without immediate Contact. But the same’thing  
will not happen, if the Paper were dipt in Oil of Turpentine,  
.nor. if a Bit of Phosphorus were rubbed upon the End .dipt in  
the Spirit of Wine ; only, when the Spirit is entirely evapo-  
rated, the Phosphorus will burn, though .with Difficulty; and  
stowly. ,

There are many os these odd kind of Experiments, that  
might he made with Phosphorus ; which is a Substance that  
seems in Chymistry to he much such a thing, as the Load-stone  
in Natural Philosophy ; and its Effects almost aS odd, and disti-  
cult to be explain’d,-for want of knowing the latent Properties Xof Bedies. H r ’ .

**hesat.. .**

ί.τε. **. A X 1 Ο.Μ S.**

We learn from the Preceding Experiments, that the Phos-.  
phorus of Urine is applicable, to many- extraordinary Purposes.

particularly to the introducing of uncommon Changes in **me-**talline Bodies.

That, as most Discoveries os chymical Explosions and Phos-  
- phori were accidental, greater Things may be expected from a  
sagacious Experiencejand by a further Discovery os Causes and  
Axioms.

That the Phosphorus of Urine may he made in large Quan-  
tities, and with small Expence; so as to afford desirable Op-  
portunities for the further Improvement of Chymistry and  
Metallurgy.

PHOTEL, by **some** called *Ficus Pharaonis Thevet,* is a  
Tree nearly resembling **the** *Banana-tree,* growing in **the**‘ Kingdom of *Catay,* according to *C. Bauhine*; which is all we  
know os it.

PHOXINOS SQUAMOSUS. The Name of **a** River-  
fish, about half a Foot long, pretty duck, and covered with  
yellow and blue Scales, with a red Tall. It is esteem'd ape-  
- ritiVe. *Lemery des Drogues. . -*

PHOXOS, φοξός. One with an acuminated or sastigiated  
Head, that is, sharpen'd towards the Top, the Eminences  
either os the Forehead or Occiput, or both, being depressed,  
or one or both os those Parts beyond measure prominent.

. - Or, as *Galen* expresses it *Com.* I. in 6 *Epid, n* φοξή κεφαλἤ,  
&c. " An acuminated Head, with one or both the Eminences  
" [of the Forehead and Occiput] indecently prominent, or

. " having one Eminence,and wanting the other: " And again,  
" Acute Heads want either the Eminence of the Forehead, or  
ft Occiput; or else have it produced beyond a just Degree."

- But *Phoxoi* are properly those who have the Top of their Head  
very much sastigiated and turbinated,and consequently deformed.  
*Thersites* is described by *Homer* with such a Head. Φοξὸς, in  
*Hisechius* and *Erotian,* is expounded by ὁξυκέφαλβς," sharp-  
*tc headed.''* The Word occurs twice 6 *Epid.*

- PHRAGMITES, φραγμήτης. A Name in *Dioscorides,* for  
the common *Arundo.*

PHRAGMOS, φραγμὸν, from φράσσω, to inclose as with  
**an** Hedge. An Anatomical Term for the double Series, or  
Cage, os Teeth.

PHRASIUM *viride.* Flos .ffiriS. *Rulandus.*

PHRENES, φρένες, was the Name by which *Hippocrates,*and the antient Physicians, called the *Diaphragma..*

PHRENESIS, PHRENETIASIS. The same as PHRE-  
NITIS; which see.

’ PHRENITICI NERVI. The Nerves belonging to the  
Diaphragm. See PHRENES.

PHRENITIS, φρηνῖτις, from φρὸν, the Mind. A Phrensy.

There is no Inflammation, Or particular Fever, Of so great  
Importance in Medicine, as that which is lodged in the Brain,  
the noblest of all the Parts, and hot only totally destroys the  
.Use of Reason, but, also, induces a sudden Danger OfDeath, and  
is, by the *Greeks,* call'd *Phrenitis.* NOw this Disorder is an acute  
.inflammatory Fever, arising from too great a Congestion Of  
Blood, and its interrupted Circulation, elpecially thro' the most  
-minute Arteries of the Membranes Of the Brain, and accompa-  
Died with inlense Heat, a Delirium, and Danger Of Death.

The Signs Of an approaching Phrenitis are, by *Alexander  
Trallianyin Lib. i. Cap.* I3. accurately and COmpendiouily de-  
scribed in the following manner: " An approaching Phrenitis,  
es says he, is preceded by intense and Continual Watchings ; Or, if  
the Patients steep, their Restas troubled and interrupted. They,  
also, start, and are afflicted with terrible Dreams. They soon  
Ci forget what is said to them, and if, at any time, they re-  
Q turn an Answer to a Question, they appear more fierce and  
se angry, than just before they seem'd to be. Their Pulse is  
" hard and small, whilst they are frequentiy afflicted with a Pain  
" of the Occiput. When the Disorder increases, theirEyes be-  
" come more fix’d and red. Tears, nt the same time, flowing  
\* from both Of them.'' But the Signs and Symptoms Of a pre-  
sent Phrenitis are by none Os the Antients so well specified  
and‘characterized, as by *Ccelius AureUanus,* in *Lib.* I. *Cap.* 2. in  
the following manner:\* " In a Phrenitis, the Patient is afflicted  
-"-with an acute Fever, his Pulse is hardly perceptible On the

Surface Of the Body; os, if it is, it is low and tense; his Face  
is inflated and full; the Blood drops from his Nostrils 5 he is  
afflicted with continual Watchings ὁ Or, if he steeps, his Rest is  
K disturb’d , he is seized with a kind Of turbulent Madness, a  
preternatural Solicitude Of Mind,. and a Privation Of Reason 5  
.“ he frequently Changes his Posture in Bed, and his Head is in a  
continual Commotion. He is sometimes chearsul, without  
any apparent Cause, his Eyes are red, he weeps gently, and  
" tosses his Arms about him, but has no Pain in his Head. His  
.? joints are cold, but without any Tremor. His Urine is co-  
" pious, yellow, aqueous, thin, and discharged by little and little.  
“ Some phrenitic Patients are afflicted with a Noise in their

Heads, a Ringing os their Ears, and an incessant Head-ach.  
. \* Their Looks are, also, fin’d and stern, and their Eyes frequentiy  
. " wink.”

. All these injured Functions Of the Body, accompanying a Phrt-  
niris, arise from too Copious and impetuous a Conveyance of  
Blood to the Head; its interrupted Circulation thro' tho minu **e**Vessels of the Brain; its Stagnation -, and its quick Conveyance  
thro' other unusual Ways Hence Distentions os the Vessels of  
the Brain and Face happen; a serous Humour is secreted, and  
eVery-where obstructs the Veffeis. The Brain is totally disturb’d,  
and especially in those Functions which are subservient to theUfe  
os Reason; *set Hippocrates,* in his Book *deElatibus,* audio many  
other Parts, justly observes, that Prudence and .Reason depend  
upon a laudable State Os the Blood in the Brain, Or, in the mo- .  
dern S ile, upon I.S equable Circulation thro' it, so that, when  
this is disturb'd. Prudence and Reason are destroy’d. And that  
the true Seat of a Phrenitis is in the Brain, is sufficiently evinced  
by dissecting those who have died of that Disorder. in whom,  
not only the Vessels of the Dura Mater, with its Sinuses, but, :  
also, those of the Pia Mater, are infarcted with a thick and co-  
agulated Blood; whilst these Membranes themselves are fo dry  
and parch'd, that the Pia Mater can he easily separated from the  
cortical Substance of the Brain. Besides, the medullary Sub-  
stance of the Brain appears Cover'd with a large Quantity Of a se- ;rous Humour. These Circumstances are Confirm'd, in many in-  
stances, by *Blancard,* in *Anatom. Bract. Obs.* 3. *Schehekius,  
Lib.* I. and *M.* N. *C. Decad.* 2. *An.* 5. *Obs. rose..*

Among the antecedent Caules Of a Phrenitis, *Ceelius Aureli-  
anus,* in the Part before quoted, justly reckons, drinking Wine  
too copioufly, Warchings, remaining long exposed to the Sun;  
a Mino naturally giddy and inconstant; Anger, a Weakness Of  
.the Head, brought On by Study; and Youth. NOw'tis certain,  
that all those Things dispose tO a Phrenitis, which render the Head  
weak and infirm, in consequence of which, there may easily hap-  
pen a Stagnation Of the Blood, and a too long Continuance of  
the Humours in its Vessels Those Things, also, dispose to a  
Phrenris, which forcibly convey the Blond from the inferior  
Pans to the Head. Hence 'tis confirm’d by practical Observa-  
tions, that a Phrenitis, and delirious Fevers, are highly incident  
to those afflicted with long Grief, Or Care, who fatigue their  
Minds by profound Meditation and Study; to those who are  
strong and vigorous; who are of melancholic and choleric Con-  
sthutions, who are Often under theInfluences os Anger or Hatred;  
who are rack’d by violent Passionswho are afflicted with Watch-  
ings and Inquietudes, who surfeit themselves with strongly  
hope Malt-liquors; who are addicted to Wine and Women;  
to those who lead a sedentary Lise, free from Motion and Exer-  
cise ; and to such as, in consequence of a had and preposterous  
Regimen, contain a large Quantity of impure Blood in their Veins.  
Tis, also, certain from Experience, that a Cessation, Or speedy  
Suppression, of an usual haemorrhoidal Discharge, of the Mt uses,  
or Lochia, in Child-bed Women, especially when such Patients  
are costive, lay a Foundation for a Phrenitis. For, in such a  
State, in consequence Of the Stagnation Os Blood in the abdo-  
minal Viscera, spasmodic Strictures are excited in the nervous  
Parts, which render the Circulation Os the BlOod unequal, and  
convey it impetuOuily to other Parts, where it is too copionsiy  
congested. Α Phrenitis is, also, frequently induced by external  
Vi.sence. This easily happens in Wounds and Contusions Of  
the Head, especially in plethoric and cacochymicHabits; unless  
such a Misfortune is speedily prevented by Venesection and Dts-  
Cutients. In a Phrenitis, arising from such a Cause, the Event is  
generally fatal, according to *Hippocrates,* in *Sect. J. Aph.* I 4.

A Phrenitis is justly to be distinguish'd into that Of the idio-  
pathic, and that Of the symptomatic Kind. In both Of these,  
there is, indeed, an acute Fever, but with this Difference, that, in  
the latter, it precedes; whereas, in the former, it is the inseparable  
Concomitant Of the Disorder. An idiopathic Phrenitis is rarely  
found in temperate Climates, but occurs more frequently in hot,  
dry, and southerly Countries, for which Reason the antient Greek  
Physicians, especially *Artius, .Alexander Trallian, stave,* in  
their Works, treated accurately and copioufly Concerning a Phre-  
nitis. There are, however, in temperate Climes, Instances Os **a**Phrenitis arising, without any previous Disorder, especially from  
Surfeits, continual Anger, and a Weakness of the Brain, produced'  
by profound and continual Meditation, Watchings, and Fatigue ,  
in sanguineous. Or choleric and melancholic Persons, those ad-  
dicted to a sedentary Lise; hypochondriacal Persons, and those  
subject to the Haemorrhoids, especially is that Evacuation is im-  
prudently stOpt. But *Willls,* in *Pathol. Cerebri, Cap.* Io. justly  
informs us, from his own Experience, that unless this Species of  
Phrenitis is soon removed by proper Medicines, it degenerates  
into a Mania, Or a furious Delirium. An idiopathic Phrenitis,  
. which degenerates into a Mania, also, frequently happens after  
burning, purple, exanthematous, and catarthous Fevers, improperly  
treated bya too hot Regimen; by Volatile Medicines, which throw  
the Blood into too Violent Commotions, by Opiates ; hy too for-  
cible Repellents ; by Refrigerants ὁ and unseasonable Venesections.  
. And this Disorder, happens the more infallibly and Violently,  
when the Patient is much and frequentiy subject to Anger.

A symptomatic Phrenitis is much more frequent in our Conn-  
try, for.it frequently happens, and proves mortal, in the Height.

of malignant Fevers, acute exanthematous Fevers, petechial  
fevers, the Smail-pox, malignantcaurrbous Fevers, especially  
such aS rage in Campo, and most of all in the *Hungarian* Fe-  
ver. particularly when the Disorders are ill treated ; *for* in these  
Diseases a Phrenitis, of the symptomatic Kind, generally appears  
about the critical Days, and is attended with Rigor and Tre-  
mor of the Joints, a Tension of the Praecordia, a Refrigera-  
tion os the Extremities, and a Thinness of the Urine, which  
is discharged either in too small, or in too large a Quantity.  
But hecause, in ccnfequence of the preceding Disease, and the  
continual Watchings, the Strength is almost totally lost, and  
**the** Tone of the Vesseis distributed through the Membranes of  
the Brain too much weaken'd, irresolvable Stagnations of Bleed  
happen in them, which generally prove mortal on the third  
Day. -

- But, though a Phrenitis frequentiy degenerates into a Mania,  
according to the Antients, especially *Hippocrates, Caelius Au-  
relianus,* and *Areteeus,* who for this Reason join, or rather con-  
found, the one with the other, there is yet a great Difference  
between them ; for in a Pbrenitis there is always a Fever, ac-  
' cornpanied with a quick, hard, and small Pnhe. There is,  
also, a Delirium, not absolutely intermitting, but sometimes  
remitting, at which time every thing whicss happened under  
the Delirium, is forgotten. But a Mania is a chronical Dis-  
order without an acute Fever, though accompanied with a pre-  
ternaturalry hard and unequal Pulse, which is sometimes small,  
and at others large and quick. A Mania has, also, its lucid  
Intervals, and is generally accompanied with great Pride, An-  
ger, and -Hatred to the Patientis Friends and Neighbours.  
And, when the Paroxysm ceases, the Maniacs have generally a  
surprising Remembrance os what happened under it. A Phre-  
nitis is, also, different from that flight Alienation of Mind,  
which is frequently observed in acute Fevers, hesore the criti-  
cal expulsion of the exanthematous Matter ; for such a flight  
- Alienation of Mind goes more easily off, nor is it accompa-  
nied with thin and watery Urine, nor a Rigor and Refrigera-  
tion of the external Parts : Sometimes, also, aster the Decline  
Of an acute Fever, we observe, for some Days or Weeks, a  
certain Foolishness, or Inconstancy os Mind, which iS different  
from a Phrenitis, arises from the Loss of the Strength, and  
Weakness of the Brain produced by the Disease; and, aS the  
Strength returns, it either fpontaneoufly ceases, or is easily re-  
moved by proper Medicines.

*The* **CURE.**

Since the violent and terrible Symptoms, which accompany a  
Phrenitis, depend upon an Inflammation of the Meninges,  
which is their immediate Cause, .the principal Intention of the  
Physician ought to be, either to prevent, or remove, such a  
Misfortune. But as the Cause of this Inflammation is, a Stag-  
nation of the Blood in the Vessels of the Meninges, and a sud-  
den Conveyance of it to other Parts accompanied with Pain,  
a spasmodic Tension, and Heat, Reason informs us, that those  
Medicines are, os all others, the most proper, which check the  
fierce Impetus of the Blood to the Head, derive the congested  
Humours from it, disengage and discuss rhe stagnant Bleed,  
.and relax the spasmodically constricted Meninges.

Now, both in preventing and curing a Phrenitis, both antient  
and modern Physicians unanimoufly recommend Venesection,  
as near as possible to the Part affected. *Trallian,* and the *Ara-  
.. hearts,* in a Phrenitis, often open'd the Jugular Vein ; but this  
laudable Practice is too much neglected, since ttis certain from  
Experience, that in all Disorders of the Head, arising from a  
.Congestion and Stagnation os the Blood, opening this Vein is  
preferable to an Incision os any other, because both the exter-  
nal and internal Jugular Veins derive the Blood from the  
'Carotid and Vertebral Arteries. Nor is the Incision of this  
'Vein either so difficult, or dangerous, as 'tis commonly  
:thought, fince by applying a Ligature about the Neck, in such  
a manner, aS to render the Vein turgid, it may be easily per-  
:formed. Besides, opening the Sublingual Veins is a Practice  
highly esteemed by Physicians, not only in a Phrenitis, but,  
also, in other Disorders os the Head. Thus, *Ammannus,* in  
*Parian,* informs us, that in the Year I 664. among all the  
Soldiers who return'd from the *Hungarian* Expedition, and  
labour’d under the *Hungarian* Fever in the Hospitals, none of  
those died, who, in due Time, had the Venae Raninae open'd,  
‘ whilst those were carried off by the Disorder, who had not that  
Advantage. I have, also, known the Opening of these Veins  
.highly useful in acute Fevers, for preventing a Delirium, when  
performed on the, sixth or seventh Day, whilst the Patient’s  
Reason yet remained. Bus, if a Delirium is already present, it  
is with Difficulty performed. Besides, if the Incision is large,  
a terrible and satal Haemorrhage is to he dreaded, in consequence  
- os thedmpetus of the Blond Io the Head- On the contrary,  
. from too small an Orifice, but little Blood is evacuated; and, a

Space being there procured, the Blood is rather more solicited  
to the Brain. Others, after the proper Application of a Liga-  
ture to the Neck, recommend opening the Frontal Vein ; and  
*Trallian* informs us, that by this means he cured a Person  
afflicted with a Violent Pbrenitis. Some prefer Arteriotomy in  
the Temples. Thus *Panarclus, in Pentec.* I. *Obs.* 19. informs  
us, that in a violent Phrenitis he sound this Practice so suc-  
cessful, that the Patients were immediately relieved by it. Ina  
Phrenitis, *Ccelius Aurelianus,* aster shaving the *Head,* orders  
the Whole of it to he scarified. But the *Egyptian* Method  
of scarifying the Nostrils is far more commendable; and, if a  
proper Instrument for this Purpose cannot he had, the end may  
he obtained by thrusting a Straw, or any other thing of the like  
Nature, up the Nostrils, in such a manner, as to.-procure  
an Haemorrhage, which I have often seen productive os im-  
mediate Relief. These Methods os Venesection in the Parts  
contiguous to that affected are to be used not only in the idio-  
pathic, but, also, in the symptomatic Phrenitis. . Bus, when,  
from a Retention or Suppression os the Menses; or Lochia,  
a Phrenitis is dreaded, a Vein is quickly to be open’d in the Foot,  
and a large Quantity of Blood must be taken away.. If from  
any Fault, .or Interception, of the Haemorrhoids, a Delirium is  
dreaded, the best and most proper Method of affording Relief is,  
to open the haemorrhoidal Veins by the .Application of Leeches.

Aster a due Evacuation of Blood, the Body is to he render'd  
soluble; since, when the Patient is costive, the Afflux of the  
Humours is directed to the superior Parts, whereas, when his  
Body is sufficiently soluble, they are derived to the inferior  
Parts. *Hippocrates,* in *Lib.* 3. *de Morbis, Sect.* 9. justly ad-  
vises, that, in the Cure os a Phrenitis,. the Body is to he ren-  
dered soluble by moistening Potions, which relax the spasmo-  
dically constricted Coats os the intestines, because Spasms of  
the Primae Viae are frequently the Causes of Deliriums. But,  
for answering this Intention, J, above all other Medicines, re-  
commend Potions prepared with Manna. Thus,

Take sour Ounces osManna ; dissolve it in a Pint of Whey;  
’ and add one Dram os Cream of Tartar, half a Dram os  
Nitre, and one Ounce os the Oil- of sweet Almonds.

*Baglivi,* in *Prax. Lib.* I. recommends the Pulvis Corna-  
chini in the sollowing manner : " Since, says he, it has often  
" been observed, that Deliriums are terminated by Fluxes, I  
" have therefore, in Imitation os the Method pointed out by  
" Nature, found the Pulvis Cornachini effectual *for* this Pur-  
" pose; drinking aster it diluting Decoctions prepared os Bar-  
“ ley, Sal Prunellae, and other Ingredients calculated for sweet-  
" effing the Humours, especially is there is a preternatural Heat  
" of the Viscera, and an internal Inflammation." But, is the  
Case calls for speedy Relies, the Body is to be rendered soluble  
by a lenient, paregoric, and domestic Clyster. ...

Among the internal Medicines against a Phrenitis, we must,  
also, class diluent, demulcent, and moistening Potions drank  
in large Quantities, if the Patient is very thirsty, which, ac-  
cording to *Aretaus,* rarely happens. Bus, among all other  
Drinks, none is more proper and expedient than Whey,  
either acidulated with Citron-juice, and prepared with Julap  
of Roses, or edulcorated with Syrup of white Poppies. In  
a Quart of this Whey, we may, with-Ad vantage, dissolve a  
Dram of depurated Nitre, or Sal Prunella. ; Phrenitic’Pa-  
tients, also, with Advantage, use Emulsions prepared os De-  
coctions of Barley, Shavings of Hartshorn, - and the Four  
cold Seeds, with Julap of Roses ; especially if to a Quart os  
such an Emulsion two Scruples os Nitre are added. Pti-  
sans, and Milk mixed with the *Selteran* or *Antonian* Waters,  
are Very proper for those who labour under this Disorder ; for  
the more copiously these Liquors are drank, the more efficaci-  
ous they are in diluting the Humours, relaying the constricted  
Vesseis, removing Obstructions, and extinguishing the Heat.  
The diaphoretic and discutient Mixture, described under the  
Article ANGINA, is, also, of singular Service, not only in .a  
Phrenitis, but, also, in all other Inflammations.

Among the external Means *os* freeing the Head from **the**Afflux of Humours, we may justly reckon bathing the Feet,  
or wrapping them up in a moist and warm Linen Cloth, or,  
which is still better,’ temperate Baths, os fresh Water. The  
remarkable Use os these js not only confirmed by daily EXperi-’  
ence, het, also, supported by the best Authorities. Thus  
*Alexander Trallian,* in *Lib.* I. tells us, \*" That those wno have  
" sufficient Evacuations made, whilst the Quantity os the Hu-  
" mours is prejudicial to no Part os the Boay, but are afflict-  
" edwith a DrinesS of the Body, and an obstinate Watching,  
" ought to bathe and anoint; and, even if the Patient is fever-  
" ish, it will do him-noHarm to bathe in this manner, espe-  
" cially if the .Bath\* is Tepid, and neither the Air, nor the  
" Bathing-tub, too hot. But those who do not bathe forFear

" of theFever, are greatly mistaken, fince, by abstaining from  
" the Bath, the Patients have their Watching, and Perturbation  
" of Mmd, increased. Such Patients are, therefore, to be  
" bathed in the manner directed, fince by this means they are  
" restored to a due Temperament, and freed from their De-  
" lirium, and the Disorder which excited the Fever.'' The  
Antients, also, and especially *Alexander Trallian,* and *Aretaus,*after Venesection and Purgation, fomented the Head with  
*an Oxyrrhodinum* os V inegar of Roses, lest, as they said, the  
Head should attract a large Quantity of Humours, and he  
filled with them. Nor iS this Piece os Practice to be con--  
temn’d. in all Deliriums, however, I with great Success order  
the Head to be shaved, and fomented with the following tem-  
perate Epithem:

Take os Rose-vinegar, two Ounces ; of the Spirit os Roses,  
- in which ten Grains of Camphire are dissolv'd, two

Drams; of pure Nitre, two Scruples ; and of the Oil of  
Rosewood, twenty Drops. Mix all together for Use.

This Method of curing not onl)’. an idiopathic, but, also,  
a symptomatic Phrenitis, and especially that inveterate Species  
of the Disorder, which seems to degenerate into a Mania, is  
founded upon my own Experience ; nor can any other Measures  
be well invented, or found out : But the Use os these must be  
for a considerable time persisted in. *Alexander Trallian,* in *Lib.*I. gives an accurate Account of the Regimen proper for phre-  
nitic Patients, in the following manner : " The Place, says he,  
" in which the Patient lives, is to be duly consider'd, fince he  
" ought to be exposed to an Air, which is neither too thick, too  
moist, nor too hold, lest the Pores os his Head should be by  
- " that means obstructed, or a Repletion os it produced. But  
" let the Atmosphere be temperate, that by its laudable Qua-  
" lity the animal Spirits may. be revived and relaxed. Let  
" his Chamber be rather light than dark, that by this means  
"he may gradually arrive at the Perception and Remembrance  
(t of such Objects aS he was formerly accustomed to. For  
" this Reason, let some intimate Acquaintances attend him,  
". and reprove him for what he does, and exert a due Autho-  
" rity over him. Nor ought any Servant or Friend, on whose  
" account he is sometimes grieved, or at whom he is angry,  
" to enter the Room; for this generally irritates the phrenitic  
" Patient, and lays a Foundation for his greater and more  
". manifest Perturbation. Nor ought great Numbers os his  
". Friends and .Acquaintances to enter his Chamber, since  
" they not only form a Croud about him, but, also, render  
" the Air thick by their Breaths. He is not to be re-  
cc moved in Bed with Violence, but gently, lest, in conse-  
" qnience of his Weakness, he should be hurt; for this, above  
" all things, irritates the Patient, and prevents Sleep. Let '  
" the By-standers held all his Limbs without Violence, and  
. " gently rub them, especially the inferior Members : And his  
" Limbs are to he secured with Cords, principally when his  
" Convulsions seize him; for this solicits the Matter to the  
" inferior. Parts, and allays the Convulsions. It is, also, ex-  
" pedient, when the inferior Parts are rim'd, to foment.  
" them, and apply .Ligatures to them in such a manner, that  
" the Matter by Fomentation and Friction convey’d to them,  
" may be derived still further downwards."

With respect to Venesection, we are to observe, that phre-  
nitic Patients often absolutely refuse to submit to it: In which  
Case, I know no more expeditious and effectual Method of Re-.  
lies, than suddenly and unexpectedly to thrust a Quill or Straw  
into the Nostrils ; thy winch means a large Quantity of Blood  
is sometimes commodiousty evacuated. But, if the Phrenitis is  
Idiopathic and chronical, we are not to open the Frontal Vein,.  
especially in plethoric Habits, till we have previoufly opened a.  
Vein either in the .Arm or Foot, lest the impetus of the Blood  
to the Head should.be augmented. Neither, in'persorming this  
Operation, are we to use too sharp an Instrument, lest, passing  
it through the Vein, we should wound the Pericranium.

A Phrenitis arifing from any Disorder of the Menses and  
Haemorrhoids, and the violent Spasms by that means produced,  
is best and most commodiousty alleviated by Baths, drinking  
Mineral Waters, and the Application of Leeches to the Veins  
of the Arms, using, at the same time, a proper Regimen and  
«Diet; for I have known a long-continued Phrenitis happily re-  
moved by the Eruption of the menstrual or haemorrheidal  
Discharge. But when a Pbrenitis does not so much proceed from  
a Redundance of Blood congested in the Veffeis of the Brain,  
as from a subtile, acrid, and Virulent Matter, which is either  
repel'd from the Surface of the Body, as in exanthematous Dis-  
orders, or, being;by too hot and volatile Medicines, too much  
exalted, is firmly impacted in the Dura Mater, winch is a ner-  
vous Membrane, .excites Spasms, hinders the free Circulation  
of the Blood, and intercepts itS Return tn the Heart, besides  
opening the Veins contiguous to the Head, we are .to shave che

Head, and apply to it the. warm Paris os Animals Just  
killed, soch as the Lungs, the Liver, and the Omentum,  
which, becoming cold, are to be immersed in warm Water, in  
order to heat them again.

. In *Poland,* a melancholic and maniacal PbrenitiS is Very fre-  
quent, in consequence os a latent *Plica* ; and, when the latter  
appears, the former ceases. For this Reason, 'tis expedient to  
solicit and forward the Egress of the Plica; sor which Purpose,  
the inhabitants of that Country generally use a Decoction of  
two Handfuis of Club-moss, prepared with two Quarts os Wa-  
ter. When with this Decoction they wash their Head and Hairs  
twice a Day, the Plica generally appears in a Week's time,  
and removes the Delirium. When in a Plica PoloniCa the Harrs  
are cut off, there frequently ensues a Violent Head-ach, winch is  
succeeded by a Phrenitis, a FeVer, and sometimes a Mania,  
winch, however, aro soon removed by thing the Decoction of  
Club-moss, or the Liniment of Club-moss, described in *M.  
N. C. Dec.* I. An. 2. *Obs.* 54. by winch means the Plica is  
recalled. ... - -

But as in all Inflammations, so, also, in a Phrenitis, we are  
carefully *to* abstain from acrid Substances, and such as put the  
Humours into a Commotion; from spirituous Liquors ; from  
Vinlent Exercise, both of Body and Mind ; and from, all All-  
mentS capable of putting the Blood into a preternatural Mo-  
tion. The Patients are by no means to he irritated and pro-  
Yoked to Anger: For .which Reason, no Person who has in-.  
jured them, or whom they cannotendure; is to be admitted to  
them. Opiates and Narcotics are by no means to be used in a  
. Phrenitis, especially where the Strength is already impaired j  
for 'tis certain from Experience, that, in Fevers, Deliriums are  
sometimes brought on by Opiates and Narcotics. Hence,  
*Alexander Trallian, in Lib.* I. justly advises, ""That in a  
" Phrenitis, where the. Strength .is low, we are to exhibit  
" nothing which induces Sleep, and a Torpor; since, by such  
" Medicines, a great Injury is done to the Patient." Vesica-.-tones, also, by some much used in a PbrenitiS, are to be con-  
demned; for the Cantharides, by their acrid Stimulus, irritate,  
the already tense and spasmodically constricted Fibres; hy which  
means they increase the Delirium, and bring on Convulsions,  
as *Baglivi,* in *Lib.* I. *Prax.* informs us, in the following man-  
ner : "In *Rome,* says he, I observe more Men killed than  
" cured by Vesicatories, which, however, are more bench-  
" cial, and lefs dangerous, to Women :" And, a little asters  
he subjoins, " Is Vesicatories are applied to Patients labouring  
" under a Delirium, accompanied with an acute Fever, a Dri-  
" Hess of the Tongue, and the Signs of a Violent Inflamma-  
tion .of. the Viscera, all the Symptoms become worse, and  
" the Patient, for the most part, dies of Convulsions.".  
*Frederic Hoffman.*

When a Violent and perpetual Delirium arises from a primary  
Disorder of the Brain, accompanied with a continual FeVer, it  
is called *A true Phrenice. . .*

- When a Phrenitis arises from a Disorder communicated to  
the Brain from some other Parts, in Fevers and inflammations,  
it:is cafled *A fymptomatic Pbrenitis,* a Disorder which corre-.  
spends to the *Greek xet^atsgrausn,* and the *Latin Desipientia. . .*

A true Phrenitis is preceded by Heat; a Violent internal anti-  
inflammatory Pain *os* the Head ; a Redundance of Blood ; an .  
inflammatory’ Disposition ; a Redness of the Eyes and Face ;  
turbulent Sleeps ; a flight Degree os Folly; Youth ; the Use of .  
hot Substances; remaining in the Sun ; Haughtiness, or Fierce-  
ness; fudden Forgetfulness ; a Driness of all the Parts; and  
especially of the Brain ; and picking the Knaps of the Bed-  
cloaths. r

- A symptomatic Phrenitis is preceded by almost every acute  
Disease, accompanied with a Fever; aS a Pain of the Side, which .  
is-not pleuritic, hut accompanied with a flight Perturbation of  
Mind, and InflarnmWon of the Pleura, Lungs, and Diaphragm,  
which is a very bad Sign : Such an inflammation is prognosti-  
cated by a Blackness of ’the Tongue, a Suppression or White-  
ness of the Faeces, and'a Retention of the Urine, which Sym-  
ptoms never fail to prove mortal : A thin, pale, and ill-colour’d  
Urine ; a Want of Thirst; Redness ; Urine with black Mat-.  
ter suspended in it; and WatchingS ; are Signs of an approach-  
ing inflammation of the Head.

Both a true and symptomatic Pbrenitis, have the following  
Symptoms:

I. Α Depravation, not only of the sensible Ideas, but, also,  
of the internal Senses, of Reason, and of the Affections of tho  
Mind.

2. An increased violent and restless Fierceness, or often tur-  
bulent Sleep. . -

3. An herd Pulse, and a rare and large Respiration.

4. A Countenance, for the most part, highly red, stern and  
ghastly ; fierce and protuberant Eyes; and a flight Hemorrhage  
of the Nofe.

AS for the Prognostic, a tme Phrenitis generally carries off the  
Patient on the third, fourth, or seventh Day, which it rarely  
surpasses; and when it does, and happens to he Violent, it de-  
generates into a Mania, or, when riling somewhat higher, it  
becomes intolerable It, also, often terminates in a Lethargy,  
a Coma, and a Catoche.

An aeruginous Vomiting, in consequence or an inflamed  
Brain ; a frequent and indecent Spitting; a Tremor; the Faeces  
and Urine intercepted, or white; crude Urine; Convulsions ;  
catching at siting Flakes; muddy Eyes ; a Gnashing of the  
Teeth ; a Want of Thirst, the general Forerunner of Con-  
vulsions ; a perpetual Change of Symptoms ; and the Subsiding  
of a tumid Ulcer; are frequent Presages of great Danger, and  
of Death.

A true Phrenitis is mortal after a Peripneumony, and the Iliac  
Passion ; and Very bad after the Small-pox.

. An Inflammation somewhat fixed, and a Roughness os the  
Fauces tending to the superior Parts, produce a mortal Phreni-  
tis ; and the Patients labouring under it grope for Objects  
which have no Existence, and are greatly oppressed.

That Phrenitis is the worst, winch prevents the Patient from  
submitting to what is necessary for him.

Upon laying open the Bodies of such aS have died of a Pine.,  
nitis, the Meninges have heen sound inflamed. Gangrenes,  
Abscesses, and a Sphacelus of the Brain, are, also, sound; or  
acrid and corroding Ichors are discovered. .

From what has been said, 'tis obvious, that the immediate  
Cause of a true Phrenitis is a primary Inflammation os rhe  
Pia and Dura Mater; whereas the Cause os a symptomatic  
Pbrenitis is a like Inflammation arising from the Conveyance of  
an hot and phlogistic Matter to the Meninges of the Brain.

Whatever is capable of producing such inflammations, may  
he considered aS immediate Causes of a Phrenitis.

Hence the true Diagnostics, both of a true and symptoma-  
tic Phrenitis, are to be taken.

- In the Cure of a. Phrenitis, the fullowing Circumstances  
ought to be adverted to:

. Varices, and haemorrhoids! Discharges, are beneficial to phre-  
nitic Patients ; as is, also, a *Diarrhoea. A.* Pain of the Breast and  
Feet, or a Violent Cough supervening, often terminate a Phre-  
nitis ; as does, also, an Haemorrhage.

- A true Phrenitis requires the speedy Use of the strongest  
Medicines, calculated for removing the Inflammation in the  
Arteries of the Brain, which are sound under the Article IN-  
**ILAMMATIo:** . Only it is to be observed, that Venesection is  
to he copioufly instituted, either making one Very large Orifice,  
or opening, at one time, a Vein in the Foot, and the Jugular  
and Frontal Vein. Diluting, antiphlogistic, and nitrous Decoc-  
tions are copioufly to be exhibited : Then antiphlogistic Pur..  
gariVes are to be used, in Conjunction with a large Quantity of  
a diluting nitrous Drink. Clysters of the like Nature, with  
an Addition os proper laxative Ingredients, are to be used: The  
Antis is to be fomented, and the haemorrhoidal Veins either  
rubhed with Fig-leaves, or evacuated by the Application of  
Leeches. Gentle Collusions and GargarismS for the Mouth  
are to he frequentiy used: The Nostrils, eyes, and Ears, are  
to he fomented; and the Head is to he shaved. If these Mea-  
sures are taken without removing the Disorder, we are to use  
Opiates, wash the Feet, and apply gentie Epifpastics and Cup-  
ping-glasses to the inferior Parts. The Patient is to be refresh’d  
in a moderately cool Air, and held in an erect Posture. /

But is a Phrenitis is os the symptomatic Kind, and arises  
from some otlier inflammatory Disorder, we are carefully to  
consider, whether the Nature of this primary Disorder will ad-  
mit of the Measures now recommended :. If not, it is to. he  
cured thy the Manner usually appropriated to itself; taking care  
always to use deriving and topical Medicines. *Boerhaau. Aph. ,*

PH RICE, φρίκη. See HORROR. S -

. PHRI CODES *Febris, wdeldnt arvofsm.* Α Fever attended  
with an Horror, or Shivering, not only in the Beginning os a  
Fit, but during a good Part of it; os which Nature is a semi-  
tertian Fever. *Galen, de Disc. Febr. Lib. so. Cap.* 9. The  
Author of the *Definitiones medicae* describes it aS attended with  
an Heat, mixed with *B* Rigor, and a remarkable Lowness of  
the Pulse, which is insensible to the Touch, and recedes, as it  
were, inwards: The Belly, in this Case, is tumesy'd, and a  
Rumbling is heard : The Tongue is extremely tumid, and in-  
rigated with an ac d Humour, as with the Saliva. *Foesius.*

PHRONTlS, φροντμ, properly signifies intense Cogitation,  
or painful Exercise of the Mind ’: But in *Hippocrates, Lib.t.  
de Morb.* it is taken in a particular Sense , for a Disease, where he  
says, φροήτις νῆσος χαλεπἡ, *Phrontis is a troublesome Disorder ;*in which, as he describes- it, the Patient feels, as it were, a  
Thom pricking the abdominal Bowels ; .is extremely restless ;  
avoids the Light and Company; is only pleased in Obscurity ;  
and is afraid of every thing: The Membrane, which separates  
the Abdomen from the Thorax, swells outwards; the Patient

is very fearful of being touched, and suffers greatly thereby r  
He is molested with terrible Dreams; and imagines that he  
sees frequentiy frightful Objects, or dead Persons. This Dis-  
order may he reduced to the Class of melancholy Affections.  
*Ice Clerc. Hist, de la Med.*

PHRYCTE, φουάτή, in *Latin, Fricta,* simply, or without  
its proper Substantive, is *Resina Colophoni a, black Resin, so*called by way os Distinction from the liquid Sort, named *vsad,  
Hygra:* It is called φρυκτή, from φρήγω, to torrefy, hecause it  
is burnt, or torresy'd, as *Diofcorides* shews. *Lib.* I. *Cap.* 93.

PHRYGANON, φρήγανυν. A dry Twig, or Branch fit sor  
Burning. *Farinus.* A Bundle of these dry Sticks, or *Phry  
gana,* is directed by *Hippocrates, Lib.* I. *de Morb. Mul.* to be  
placed under the Bed of a Woman in Travail, in order to  
prevent its Feet from coming to the Ground, when it  
was let fall backwards, from the erect Posture to which it  
was before raised. This kind of Operation was called σεισμὸς  
s *Siifmos), Concussion,* and order'd to he used for the Promotion  
os Delivery in difficult Cases. .

PHRYGIUS LAPIS. Offic. Boet. 4O6. De Laet. I34.  
Matth.I3So. Aldrov. Mus. Metalh 689. Calc. Musi 285.  
THE PHRYGIAN STONE.

The *Phrygian* Stone, so called, because it is used by the Dyers  
in *Phrygia,* is produced in *Cappadocia.* The best is pale, mo-  
derately ponderous, os no solid. Contexture, and distinguished  
by white Lines, like the Cadmia : They hern it in the sallow-  
ing manner ; they first wash it over with the best Wine, then  
coyer it with live Coals, and blow them continually; when  
they perceive it has changed its Colour, and is become redder,  
they take it out, and extinguish it in the same Wine ; they put  
it under the Coals a second time, and do as before ; and even  
burn it a third time, but take care, that it does not crumble  
away, nor pass into Soot.

The *Phrygius Lapis,* whether crude or burnt, is an essica-  
cions Astringent: It moderately cleanses, also, and has an es-  
charoticVirtue, .and with Cerate cures Ambustions: It is wash'd  
like the Cadmia. *Diofcorides, Lib. %. Cap.* **I4I.**

. It is good in Diseases of the Eyes, ane for Ulcere, and other  
Purposes. *Galen.* It is at present unknown in the *English*Shops. *Dale.*

PHRYMION. A Name in *Oribafius, Collect. Medicinal.  
Lib. 12.* for the *Poterium* of *Diofcorides.* **See POTERIUM.**

PHTHARTICOS, φθαῤτικὸς, from φθείρω, to corrupt. Dele-  
terious, deadly; an Epithet applied to Poisons, and their Qua-  
lities. *Galen, de S. F. Lib.* 5. *Cap.* **I** 8. It is opposed .to  
ἀλεξιτήριος, *alexitcrius.* **See ALExITERIA.**

PHTHElNAS, φθεινἀς, from φθιω, to corrupt, signifies ta-  
bific: Thus φθάινάδες ἀι νοὐσοι are Diseases caufing a Tabes, by  
a Defluxion from the Head upon the Lungs. *Ltb.* περι άδἐνητ.  
Again, .φθΰιιἀδες put substantively, with the Epithet ξηραἰ her- .  
*red),* signify dry Consumptions, which owe their Original, to  
Tophi, or a .Concretion and Induration os Humours in the  
Lungs, and seem to he opposed to φθ.τώδοες *(phthinodees)*; which  
means those who are in a Consumption, proceeding from a Sup-  
puration, or: Collection of PuS in the Lungs. See PHTHI-  
**NODES.**

PHTHEIRIASIS. \* See **PHTHIRIASIS.**

PHTHEIROCTONON.. A Name for the Stavesacre, so  
called from φίειρ, a Louse, and κτείνω, to kill, because it de-  
stroys Lice. .

PHTHINICE, φθινική. *Hippocrates,* 2 *Prorrhet.* men-  
tions a Disease called νῦσοςφθινική, *The* Phthinic *Disease.* The  
near Affinity between *phthinic* and *phthisic* has induced some in-  
terpreters to believe that he there speaks of a Phthisis: But the  
most learned are convinced, that there is a Fault in the Text,  
and that, instead *os ornvslum,* we are to read φοςνικί» *(Phoenicie),  
A Disease os.* Phoenicia: They found their Opinion on their  
meeting with the Word *Phoenicie,* in the antient Glossaries on  
*Hippocrates,*. where it is added, that *By this IVird is to be un-  
derstood a Disease common in* Phoenicia, *andothcr Eastern Courcr  
tries, and probably the very fame with the Elephantiasis.* What  
Confirms this explication is, that *Hippocrates, \n* the same Place,  
t.reats of the Impetigo, Lepra, and Leuce. I shall only ob-  
serve, that *Galen,* who .is the Author of the Glossary above  
cited, might he mistaken in that respect,, so sar only as in sup-  
posing the Disease of *Phoenicia* to be wltat they called the *Ele~  
phantiasis,* whereas it is possible, that it might have no more  
titan a bare Relation to it ; and that, by this *Disease of* Phoeni-  
cia, *Hippocrates* might mean the Leprosy os the *fews,* which  
was a Sort os Leuce, and might have something in common  
with the Elephantiasis, without being exactly the same Distem-  
per. *Le Clerc, Hist, de la Med.*

PHTHINODES, φθινώΛἰς. Tabid, or consumptive. An  
Epithet for Diseases, and Persons labouring under such Diseases.  
In *Hippocrates,* it sometimes signifies a Tendency, to a Con-  
sumption.

..PHTHINOP0R0N, ρθρνίπωροπ. The Autumn.

PHTHIRIASIS. The lousy EVil, from ρετεὸν, a Louse.

The Phthiriasis is a lousy Distemper, to which Children are  
particularly subject, and sometimes Adults. *Swammcrdam,* in  
**his** History of the Generation os Insects, tells ns, that what  
we commonly call the *Nit,* is the true Egg from which the  
Louse is hatched ; this Egg requires a moist and warm Place for  
its Matrix, and then its Multiplication is incredible, in a short  
Space; and some even suggest, that, in twenty-four Hours, a  
Louse is not only *Abavus* but *Tritavus,* that is, not only Great  
Grandfather's Father, but Great Grandfather's Great Grand-  
father. But if they miss this kindly Repository for their Eggs,  
as heing exposed to the cold Ain but for one Day, they are kiss'd  
hesore they are hatched.

There are reckon'd four Kinds of Lice which molest human  
Bodies, i. The *Pediculi,* so called, fays *Isidore,* because they  
are more troublesome by the Motion of their Feet, than their  
. Bite. These generally breed in the Heads of Children, espe-  
cially if fore or scabby, and often in those of Adults, who are  
flothfnl and nasty.

2. *Crab-lice,* so called from their Resemblance to the Crab-  
fish, which lodge in the Arm-pits, Eye-lids, Eye-brows, and  
Pudenda of grown Persons. See **MORPIONEs. , ”**

3. *Body-lice,* which infest the Bodies, and breed in theCloaths,  
of the Slothful and the Nasty : .These are of a large Size, ob-  
Iong, thick, and ending with an acute Point towairds **the**Head. ’ su ssi

An Those generated, according to some, under the Cuticle,  
heing found in the Hands and Feet, of a round Form, like the  
small Eggs of Butterflies ; some of them so minute as to escape  
the Sight: By their creeping under the Scarf-skin, they excite  
an intolerable Itching ; and sometimes, bursting the Skin, they  
discover themselves in Clusters ; but they generally keep them-  
felves concealed : They are named by some Authors, *Acari,  
Cyrones,* and *Pedecelli.*

The Cause os their Production is, by some, ascribed to the  
plentiful eating of Figs. *Galen* says, that the Flesh of Vipers  
breeds them; but, undoubtedly. Slovenliness and Nastiness are  
**the** chief Promoters of their Propagation, as affording fit Ma-  
trices for hatching their Eggs, and, also, proper Food for their  
Nourishment.

The lousy Evil is best prevented by wholsome Food, keep-  
ing the Body clean, and the Head carefully combed.

When they breed in the Head, let it be well Combed, and  
**washed** with the following Lixivium.

**Take** of Wormwood, StaVesacre, Rue, and Horehound,  
**. each an** Handful; lesser Centaury, half an Handful; Oak-  
ashes, five Ounces: Make them into a Lixivium, with  
Spring-water ; in which distolVe, Of common Salt, two  
Ounces; Salt of Wormwood, One Ounce: With which  
**let the** Head be washed\*

Or anoint it with the following Ointment.

Take Of the Oiis Of bitter Almonds,. Rue, and Bays, each  
an Ounce; the Powders Of StaVesacre, and Myrrh, each  
two Drams; Powder of Aloes, one Dram ; salted Lard,  
**two** Ounces: Min them with a little Vinegar. **Or,**

Take of Hogs-lard, Oil of Bays, and black Soap, each half  
an Ounce ; Quick-silver, extinguished with Spittle, a  
Scruple 5 Myrrh, and Aloes, each half a Dram; Staves.  
acre, two Scruples ; *French* Soap, two Drams r Reduce  
them, in a Mortar, to the Form of an Ointment.

For Body-hoe, the wiping the Body with Gilders Cloths is  
reckon’d an efficacious Remedy, On account of the Quicksilver  
which they Contain. Or,

Take of StaVesacre, and the Powder of red Arsenic, each  
an Ounce; common Sals, Olive-oil, and Vinegar, each  
a sufficient Quantity: Mix them together: Or,

Take of StaVesacre, and Powders of Nitre, and white Helle-  
bore, each equal Parts; Oil of bitter Almonds, a suffi-  
cient Quantity: Mix them.

Take of Wormwood, and lesser Centaury, each an Hand-  
ful; Lupins, one Ounce; StaVesacre, and Birthwort,  
each half a Pound: Boil them in a Lixivium, to which  
add two Ounces of Salt,

Take of Oil of bitter Almonds, one Ounce; Oiis of Rue,  
and StaVesacre, each half an Ounce; the Powders os  
lesser Centaury, Myrrh, and Aloes, each a Dram ; Quick-  
silver, half a Dram ; rancid salt Lard, two Drama ; Make  
them, with a littie Vinegar, into a Liniment.

The following Lotions and Ointments are taken seech stasc  
*nerius.,*

Take of long Birthwors, Lupins; and the Leaves of the  
Pine and Cypress, each equal Parts: Boil them in a suf-  
ficient Quantity of Spring-water, for a Lotion for the  
Head. ' '

Take of the Root os Elecampane, two Ounces; of Bryony,  
half an Ounce; Beet, and Mercurial Soap, each an Hand-  
ful; Lupins, an Ounce; Nitre, half an Ouncer Boil  
them *for* a Lotion for the Head.

Take of the Powder of StaVesacre, three Drams ; Meal of  
Lupins, half an Ounce; white Agaric, three Drams ;  
native Sulphur, two DramS; of the Gall of a Bull, 'half  
φα Ounce; Oil of Wormwood, enough to make them

. into a Liniment.

Take of StaVesacre, an. Ounce; Wormwood, and Rue,  
each half an Ounce.;. Sulphur, and Nitre, each two  
Drams: Mix and make them into a Powder, which re\*  
duce to the Form os a Liniment, with Oil of Bays.

Much stronger is this ;

Take of the Powder of the Seeds os StaVesacre, an Ounce i  
white Hellebore, three Drams; Quicksilver, extinguish’d  
with Spittle, two Drams; Hogs-lard, and Oil os’Bays,  
each a sufficient Quantity to make them into an Oint\*  
ment.

In Infants and Children the Quicksilver must be omitted, as  
too hazardous, since milder Medicines will answer the Intention.

All the Bitters, sour, and salt Things are here recommended,  
as, also. Mercury, which, by a singular Property, is said to  
destroy these Vermin, beyond all other Medicines ; but it must  
be used with Very great Caution. *Turncr de Morbis Cutaneis.*

*Ettrnuller* advises the Head to he wash'd with a Lixivium,. in  
which have been boiled the Seeds of StaVesacre; and anointed  
with the following Ointment :

Take of the Oil of Spike, two Drams; the Oil os bitter  
Almonds, half an Ounce; the Ointment of Tobacco,  
fix Drams: Mix and make them into a Liniment.

This will destroy all those Animals in one Night's time.

The Powder of the *Indian* Berries, sprinkled on the Head,  
infallibly destroys them. *Codrbchius* (who has wrote a ‘parti-  
cular Treatise of these Animals) fays, he has a thousand times  
experienced the Use of this Powder; and that, in small Quan-  
tities, mix'd with Hogs-lard, a boiled Apple, or the like, ap-  
plied to the Head, it miraculoufly destroys Lice, more effec-  
tually than the StaVesacre, and more safely than Quicksilver. Γ

To destroy the Crab-lice lodging in the Groins of Adults,  
the anointing the Parts with black Soap is an infallible Reme-  
dy, neither is there Occasion to seek for any other. *Turncr*proposes Lac Sublimatum; but that is a Medicine not so safe **to**he .used about the Genital Parts. See **MORPIONEs. -**

*Sennertus* says, that the Loufiness os the Eye-lids is no Cori-  
temptible Disorder; for it occasions sharp Fluxions, and **the**Eyes are at last much prejudiced by it: The same Author enu-  
merates a great many Medicines for it; but there is no Occa\*  
fion to mention them here; for these and all other Sorts of  
Lice are easily killed by anointing with black Soap.

Those who would see more relating to this Subject, may  
consult the following Writers;*'Mercurialis, Lib.* I. *Caso* 7.  
*Lusiian. Cent.* 3. *Cur.* 58. *Zwingcr. Theatrum Vit. Hum.  
Fol.* 525. *Tulsa. Obs. Lib.* 3. *Cap.* 4o. *Forest. Schol. Lib.* 8.  
Οἤ/l *'Cardan\* Lib. de Subtilitate,* 9. *Scaliger, Exerci-  
tat.* 94. si

PHTHIRION. The same as **PHTHIROCTONON.** *Blancard.*PHTHISICUS. The same as **PHTHINoDES.**

PHTHISIS.

. Except the Heart, no Part of the human Body is so useful  
and necessary for the Preservation of Life, as the Lungs, the  
genuine Instrument of Sanguification, in which the chylous and  
nutritive Lymph is intimately mixed with the Blond, and assi-  
1 milated to it: It is, also, by means os the Lungs we draw that

Vital Air, or ethereal and elastic Fluid, which communicates  
Strength to the solid Parts, and a due systaltic Motion to the  
Heart: But, as the Lungs are of more Use and importance,  
than most other Parts os the human Body, so they are subject  
to more terrible Disorders, which we shall endeavour to account  
for, from their Fabric and Texture. The Lungs, then, consist  
ofmembranaceousVesicles, which receive the Air; of Nerves,  
which contain an highly subtile Fluid; and *of* various Rinds of

Veffeis, appropriated for the Blood and Lymph; so that, in con-  
quence os so many small V essels, it is not to he wondered as,  
is there should happen frequent Congestions, Stagnations, and  
Obstructions of the Blood in them, which lay a Foundation for  
various Disorders, among which one of the most considerable is  
a Phthisis, which is a Consumption or Wasting of the Body,  
accompanied with a flow Fever, a Difficulty os Breathing, a  
troublesome and continual Cough, and a copious Expectora-  
tion Of corrupted and purulent Phlegm and Matter. This Dis-  
order arises from an injured State os the Lungs, by means of  
an Abscess, or a scirrhous or ulcerous Corruption.

There are Various Species os Consumptions accompanied with  
a Fever, an .uneasy Cough, and an Expectoration os peccant  
and corrupted Matter, which, with respect to their Progno-  
stics and Cure, are widely different from a Phthisis, and ought  
not, by the Physician, to be confounded with it, fince they  
happen without any considerable Injury to the Lungs. Thus it  
is certain from Experience, that a Consumption frequently arises  
from a simple Gonorrhoea, or nocturnal Pollutions long, continued,  
as we are informed by *Hippocrates* in/.. 6. *Ep. Sect.* 8.47. Nor  
is it uncommon to observe a Consumption arising from excessive  
Venery, and a Cacochymy, or depraved State Of the nutritious  
Juices in scorbutic Habits, whilst the Texture of the Lungs  
is as yet sound and entire. Almost the same thing may be  
observed in the Atrophy of Children, in which, on account of  
a scirrhous Induration of the mesaraic Glands, the Chyle can-  
not easily and freely pass to the Blood ; in consequence of which.  
Nutrition is prevented; and, by this means, the superior Parts  
are consumed and wasted, the Belly inflated, the Patient afflicted  
with a flow Fever, a Difficulty of Breathing, a Cough, and a  
preternatural Solubility Of Body. Nor is that Species of Con-  
sumption always to be accounted a Phthisis, in winch there is  
an Extenuation os Body, a flow Fever, a Cough, and more  
or less sanious Stools; sor it frequentiy happens, that, whilst  
the Compages of the Lungs is sound, a Sanies is conveyed to the  
Breast from other Parts, such as the Mesentery, the Uterus,  
and Kidneys, when labouring under an Abscess, or Ulcer. A  
Phthisis is, also, to be accurately distinguished from a chronical  
Cough, accompanied by a copious Expectoration of Phlegm,  
and succeeded by a Consumption, Loss os Strength, and pre-  
ternatural Heat, fince this last Species of Consumption in the  
Autumn and Spring frequently seizes Persons subject to catar-  
rhous Disorders, and afflicts them sor a considerable time ; but  
may he happily removed by the Force os Nature, and the As-  
sistance Of Art.

Bus, that there may remain no Mistake in distinguishing a  
Phthisis from Other Disorders, we shall here give the Signs os it  
from *Caelius Anrelianus,* who, in *Lib. 2. Cap.* 14. has the fol-  
lowing Passage: " A Phthisis is frequently produced by a pre-  
" Vious Spitting of Blood, and sometimes by a gentle, but long-  
" continued Catarrh, Or Cough, by which the Lungs are, at  
" first, gently lacerated, and then ulcerated. A Phthisis is  
" accompanied with a latent Fever, which begins in the Even-  
" ing, is alleviated in the Morning, and attended with a Vio-  
" lent Cough at those times. At first a small, but afterwards  
" a large Quantity of sanious Spit is expectorated. Those  
" who fall into a Phthisis, in consequence os an Haemorrhage,  
" discharge, at first, a bloody Spit, which, afterwards, becomes  
" feculent, and then livid, or green, and, last of all, white  
\*\* and purulent, sometimes salt, and, at others, sweet ; whilst  
" the Voice is hearse, and shrill, the Breathing difficult, the  
" Cheeks red, and the rest of the Body of a cineritious Co-  
" lour. A Phthisis is, also, accompanied with a Loathing of  
" Food, and a preternatural Thirst. Some Patients have, as  
« it were, a Sense of a Wound in their Lungs, and eVen ex-  
" pectorate Fibres of them. The Pulse is-weak, hard, and  
" formicular. A Phthisis is, also, accompanied with an Infia-  
" tion of the Feet. As the Disorder increases, a Flux is brought  
" on; and the Phlegm discharged, when thrown upon live  
" Coals, is os a fetid and disagreeable Smell." *Hippocrates,* in  
*Lib. de Morbis,* delivers the Signs of an approaching Phthisis in  
the following manner: " A Patient, says he, is rendered Phthi-  
" sical, when the Phlegm salis down from the Head upon the  
" Lungs ; at first, for the' most part, insensibly ; and excites a  
" gentie Cough: Thesspitis, also, bitterer than usual, and  
" sometimes there is a gentie Heat of the Body. But, in  
\*c Process of Time, the Lungs, and especially their internal  
" Parts, are exulcerated by putrid Phlegm ; the Breast is op-  
" pressed by a Sense of Weighs, and acute Pain is perceived  
" both in the anterior 2nd posterior Parts, and the Heat os the  
\*€ Body becomes more intense. The farther a Phthisis proceeds,  
" the more unmixed Pus is discharged,, the more intense the  
." Fever becomes ; the Cough is more violent and continued ;  
" the Patient is racked with a Sense of Hunger, and a Diarrhoea  
" comeson."

Having thus specified the Marksand Characteristics of a Phthi-  
sis, we now Come, from a Consideration of the Phaenomena

observable in the Bedies of those who have died of that DIserairs  
to investigate the Causes of the several Symptoms with which it  
is accompanied. First, then, in all Persons, who hate died of  
a Phthisis, either the Right, or Left, or both Lobes of the-Lunas  
adhere so firmly to the Pleura and Ribs, or to the Vertebrae df  
the Back, that they cannot, without great Difficulty, be segni-  
rated with the Knife ; and the Part, in which they adhere, is  
generally full os a putrid SenIm, or Ichor. In some Prsthisical  
Patients, especially such aS have been afflicted with an Empye-  
ma, I have observed one Lobe os the Lungs totally consumed by  
the previous long-continued Disorder os the Breast, and the  
other inflamed ; which Circumstances prove the Cause os the  
Patient's Death. For the most part, there are, also, in one of  
the Lobes of the Lungs, ImpostumationS, or closed Ulcers, of  
different Bulks, and sometimes more, sometimes fewer in Num-  
ber ; which, when laid open, contain partly a thick, and  
partly a fluid Pus. When an Incision is made, especially in  
the superior Part of either os the Lobes of the Lungs, there are  
found pretty large Cavities silled with Pus and Phlegm, almost  
of the same Kind and Colour with that hesore evacuated thy the  
Mouth. Sometimes, also, in the Lungs, when become knotty  
and scirrhous, there are found spreading and fistulous Ulcers,  
like Cancers, which prey upon the adjacent Parts, and contain  
a sanguineous and fetid Ichor. There are, also. Instances of  
scirrhous Tubercles, hard, like the Stones of Fruit, and con-  
taining a tophaceous, calculous, and putrid Matter, sound in  
the Lungs, It is, also, to he observed, that, in Phthisical Pa-  
tients, the Heart is, for the most part; flaccid, and its Veffeis  
infarcted with polypous Concretions ; a memorable Instance of  
which is sound in *M. Nt Co Decad.* 2. *Obs.* 35. in the Peri-  
cardium, also, and frequentiy in the Cavity os the Breast, there  
is a large Quantity of impure and fetid Serum. As sor the Ab-  
domen, and other Parts, the Veffeis are generally without  
Blood, the Liver large and pale, the Glands of the Mesentery  
tumefied, the Omentum destroyed, and all the Fat; both of  
the internal and external PartS, appears to the View .. Those,  
who desire a farther Knowledge of the Phenomena observed in  
dissecting Phthisical Patients, may consult *M. N. Co Decad.* I.  
*An.* i. et 2. *Decade* 2. *An. An Obs.* 45. I I8. An. 8. *et q.  
Cent.* 3. et 4. *Obs.* II8. *Cent.* S. *Obs..* 105. *Cent. Q. Osts.*I6. et 26. *Cent.* Io. *Obs.* I43. *Vorzaseha. 0bf.* I00.  
*Lofsius, Obs.* II. *Pausius, Obs.* 22. *PlaterUs, Lib.* 3.  
*Oof.* I 89. et 690. and *Pezoldus, Obs.* 63, 64. 74. and 92.

Hence it is fufficientiy obvious, hew Violent the Injury done to'  
the Lungs must be in a Phthisis, in order to induce Death We  
now come to inquire into the Causes productive of such an In-  
jury ; among which the most considerable are fchirrous Stagna-  
tions in the Vascular, Vesicular, and membranous Substance of  
the Lungs ; which, if considerable, are not, without **the**greatest Difficulty, to be removed, on account of the continual  
and reciprocal Passage of the Air. *Hippocrates,* in *Lib. de  
intern. Affect. Cap.* 4. speaks concerning this in the following  
manner: " When the Lungs receive Blood, or a salt Phlegm,  
" without again discharging them, but retain them impacted in  
" them. Tubercles are formed, and come to a Suppuration in  
" the Lungs. From the Beginning of the Disorder, through  
" its whole Course, there is an acute, dry Cough, a Rigor  
" and Fever, a Pain in the Back and Breast; and sometimes in  
" the Sides. The Breathing, also, is so violent, aS to force  
" the Patient to fit in an erect Posture. Then the Pus is cor-  
" rupted, and expectorated in large Quantities." *Aretaus,* also,  
in *Chron. L.* i. *Gap.* S. has given us nearly the same Descri-  
ption of Phthisical Patients: " Before, fays he. Phthisical Pa-  
" tients can discover their Disorder hy manifest Signs,  
" especially by putrid and purulent Spit, they have Tuner-  
" oles, or scirrhous Knots, formed of a Viscous and toughish.  
" Matter, which gradually hecomes hard in their Lungs.  
" Thus they live in a consumptive State sor several Years be-  
" fore these Tubercles are corrupted, and formed into Absces-  
" ses. If there are such Tubercles in the Lungs, the Patient  
" is afflicted with a dry, strong, and sonorous Cough, an acute  
" and pungent Pain of the Breast, a Difficulty of Breathing,  
" and a kind of Uneasiness and Resistance in the Breast, from  
" the profound Attraction and Inspiration of the Air. Then  
**" the** Cough becomes more Violent, especially aster strong  
" Exercise.’'

Though.this Doctrine of *Hippocrates* and *Aretaus* is strictly  
agreeable to Truth, yet we shall, sor the better Illustration of  
the Subject, add some Observations. These Tubercles, filled  
with a Viscid Matter, constitute the Beginning os the Abscesses,  
which are nothing else, but Ulcers os different Bulks, sur-  
rounded in a peculiar Membrane. These ImpostumationS, .  
when small, are sometimes expectorated by Cough ; but when  
they become large, and break internally. Abscesses and Ca-  
vities are formed ; a purulent copious Spit, mixed with  
Phlegm, is expectorated, and then a true Phthisis is  
present. Sometimes, also, these scirrhous Knots, which are

inng so latens, as to produce only a dry Cough, in consequente  
os their acrid Matter retained and pent up, degenerate into can-  
cerous, fistulous, spreading, and setid Ulcers; which so consume  
and putrefy the adjacent Parts, that, according to *Forestus, in  
Lib.* 16. *Obs. ide.* and 53. Portions of the Aspera Arteria have  
been spit up ; and, according to *Sylvius,* in *Obs. Lib. 2. Cap.  
12.* Ramifications of the Pulmonary Vein have been evacuated  
in Coughing.

There are, also, other Beginnings ofa Phthisis, especially an  
Haemoptysis, when ill-treated, or when a large Quantity of  
Blood is lost ; for then the Blood is easily extravasated from the  
small Vessels os the Lungs into their Air-bladders ; and, becom-  
ing stagnant. It putrefies, corrodes the adjacent Parts, forms  
Sinuses, or is.reduced into Nodes and Tubercles. And I can,  
from my own Experience, affirm, that almost half of the  
Phthisical Patients, who have subjected themselves to my Care,  
received the Origin os their Disorder from a previous ill-cured  
Spiting os Blood. Among the Beginnings of a Phthisis we  
may, also, with the Antients, reckon a salt Catarrh for a long  
time affecting the Breast, and which is frequentiy succeeded by  
a Phthisis.

We now come to inquire into the Origin of these Causes.  
The Stagnation, then, os the Blood firmly impacted in the  
Vessels is the Origin, not only os a Phthisis, but, also, several  
otherDisorders ; for when the Fluids do not circulate, they lose  
. their former temperate Nature, become impure, saline, and acrid ;  
or, by filling the minute Vefl’els too full, produce Obstructions,  
Indurations, and Scirrhuses. Now these fatal Stagnations os  
Blood and Humours, in the minute Vessels os the Lungs, pro-  
ceed from too impetuous and copious Congestions os the Hu-  
mours to a.Part already too saint and languid, so that the Veins’  
cannot return so much as-they received from the Arteries.

But there are Various other Causes, which are capable of in-  
ducing such a fatal Stagnation os the Blood and Humours in the  
Lungs, and, consequently, contributing, in a remote manner,  
to the Production of a Phthisis. The most considerable os **these**Causesis, an hereditary Disposition, conveyed from Parents to  
- Children; in consequence of which they readily fall into  
a Phthisis, when any flight Cause occurs. This is con-  
finned, not only by Experience, but, also, hy the Authority  
**os** the most celebrated Physicians. Thus *Fernelius, in Patholog;  
Lib.* 5. *Cap.* Io. informs us, " That such as are sprung from  
" consumptive Parents, by a kind os hereditary Right, become  
" consumptive ; and we often observe, that a Phthisis rages in  
" such Families.'' The Reason os this is obvious; for fince  
this Proclivity to Diseases received from the Parents principally  
consists in a bad Conformation os the solid Parts, or such a Laxity  
of the Fibres and Vefleis, as is insufficient; with a proper *Ef-  
fort,* to promote the Motion of the Fluids conveyed to them,  
the Reason is plain, why those, who have naturally weak and  
flaccid Lungs, should be more subject than others to Disorders  
of the Breast, and especially to a Phthisis. Among the Persons  
subject to this Disorder, we may, .also, with *Hippocrates,* rec-  
kon those of narrow and depressed Chests, whose Scapulae are  
prominent, like Wings, whose Ribs are protuberant, whose  
Necks are oblong, or who are gibbose.

. It is, also. Certain, not ortly from Experience, but, also, froth  
the Authority of *Hippocrates*, in *Aph.* 9. *Sect.* »5. that Persons  
of flender and tender Habits, of tall Statures, and between the  
eighteenth and thirty-fifth Years os their Age, are highly sub-  
ject, not only to a Spitting os Blond, but, also, to a Phthisis ;  
tor no other Reason, but because, at this Period of Lise, the  
Vesseis are more tender, and easily expanded, than in Persons  
further advanced in Years. But generally a Spitting of Blood  
and Phthisis happen most readily to full-grown and young Per-  
' fons, who, being of a sanguineous and choleric Habit, are easily  
fuinoct to Commotions of Mind, and have had frequent Hae-  
morrhages from the Nose, in their Childhood, especially when  
they are OVer-heated by too Violent Exercise ; for then the  
Blood, being copioufly and impetuoully conveyed to the superior  
Parts and Breast, cannot return freely to the Heart through the  
minute Vesseis Os the Pulmonary Artery and Vein. Hence, in  
the larger Ramifications, the stagnant Blood must necessarily  
produce Expansions, Ruptures, and Extravasations.

This Disorder is, also, frequentiy produced by an unseasona-  
hle Drinking of spirituous Liquors. Nor is it difficult to prove  
this, fince it is almost universally known, that, in the Coun-  
tries productive of Wines, all the Disorders incident to the  
Breast, and especially a Spitting of Blood, and a Phthisis, are  
far more frequent, than in other Climates. Hence *Hi offer us,  
in Hircule Mnd. Lib.* I. *Cap.* 3. justly concludes, that a Phthi-  
sis being so endemial, and destroying such Numbers in *Lower  
Austria ,su* owing to nothing, but their excessive Use of gene-  
rous Wine, especially in the Morning.

**"" We** now proceed to consider those Causes winch produce the  
De fluxion of saltish Humours in the Breast. Tins Humour  
the Antients in general asserted **to** Come from the Head, as if

all Humours conveyed to the Breast proceeded from it: But this  
Opinion is not sufficiently perspicuous, and founded on Expe-  
rience. Too copious a Congestion of serous Blood to the  
Breast, and especially to the Fauces, and Whole os the Aspera  
Arteria, which is covered with an internal glandular Coat, is  
rather to be accused, especially in serous Patients, and those,  
who, during their whole Lives, have been subject to Stuffings  
os the Head, Coryzas, and frequent Catarrhs ; for is more Blood  
and Serum is conveyed to the glandular Parts through the Arte-  
ries, than can return through the Veins, there is a great Secre-  
tion of the Serum, which, increasing in Quantity, is coagu-.  
lated by the Admission of the free Air, and, at last, often ex-  
pectorated in large Quantities. In Process of Time, when the  
Disorder continues, and other Causes concur, such as Crudities  
arifing from a bad Diet, or indigestion, an obstructed Perspira-  
tion, or profound Grief, the Serum acquires a saline and corro-  
sive Nature ; in consequence os which, in Process os Time, it  
corrodes the Vesicles and tender Vessels os the Lungs.

Prom what has been said, we may easily understand, how  
injurious cold and northerly Winds, rainy, cloudy, and cold  
Weather, which, by relaxing the Tone os the Pulmonary Ves-  
sels, accumulate the Sordes in them, must necessarily be to con-  
sumptive and phthisical Patients ; so that, with *Hippocrates,*in *Aplj.* Io. *Sect.* 3. we may justly affirm, that the Autumn is  
prejudicial to consumptive Patients. And, indeed, th- Influence  
os the Air is not more considerable in producing any Disorders,  
than those os the Breast, and especially a Phthisis. Hence *Toil-  
plus,* in *Obs. Med. Lib.* 2. *Cap.* IO. justly assigns the State os  
the Air; as the Cause why Impostumations, and Phthisical  
Indispositions, are so frequent in *Holland,* in marshy Places, and  
such as are exposed to an Air perpetually impregnated with putrid  
Vapours.

We now come to investigate those Disorders, which gene-  
rally dispose to a Phthisis, among which we may justly rec-  
kon the Small-pox. I know many Children, and young  
Persons, who, aster the Small-pox, have been subjected to Va-  
rious Disorders os the Breast, which have lasted for several Years,  
such aS a dry Cough, an acute Sense of Pain, a Difficulty of  
Breathing, a Consumption, and a flow Fever, who, at last,  
upon the Formation os an Abscess, have died, among whom  
was the Prince os *Saxony.* Almost the same Misfortunes are  
produced after the Mealies; for, in thefe exanthematous Dis-  
orders,. the Serum is highly acrimonious, and, not only in the  
Beginning Of these Disorders, remaining firmly in the nervous  
Membranes of the Lungs, excites a dry and uneasy Cough, but,  
also, leaves a considerable Weakness in the Lungs, an Expul-  
sion of the peccant Matter being made to the Surface of the  
Body. Now, if. the Patients, before the whole peccant Mat-  
ter is carried off by Transpiration, expose themselves to the  
free Air, especially in the Spring or Autumn, it readily happens,  
that the Remains of the peccant Matter, receding to the inter-  
nal Parts, acts upon, irritates, and exulcerates the weakened  
Lungs : See *Thomas Bartholine, Cent. An Inst.* 43. and *Mi-  
chael's,* in *Prax. Clin. Pari.* I. *Lib.* 3. *Cap. 5.*

It, also, frequently happens, that,- aster Effervescences of  
the Skin, such as the Itch, the Gutta Rosacea, scorbutic and  
purple Spots, are repelled, a Phthisis IS often produced. The  
same Disorder is, also, frequently caused by the Suppression of  
copious Sweats, hy the unseasonable Treatment of Ulcers of  
the Head and Feet, and by the too speedy Consolidation of Fon-  
taneis. Nor are there wan ting instances, in which a Phthisis  
has been produced by the Repression; or unflhlful Treatment;  
ofan Erysipelas, and Gout-pains ; for since;by this means, the  
acrid and caustic Matter is retained in the Habit, and resorbed  
through the Veins by the Mass os Blood, hence it happens, that,  
being conveyed to the nervous and tender Membranes of the  
Lungs, it is firmly impacted in them, and, by irritating, con-  
stricts them. Hence the constricted Vessels must, at last, be  
obstructed and corroded. I, also, remember to have seen a  
Phthisis produced, in consequence os curing Tumors under the  
Axillae, and behind the ears; so, also we may readily, suppose a  
Phthisis frequently generated by a Suppression of the haemor- .  
rhoidal and menstrual Discharges.

There are, also, other Instances, though not common, in  
which, besides a Spitting of Blood, a Phthisis may, in soma  
Patients, be induced by other Haemorrhages s and this princi-  
pally happens in those Patients, who, either from.hereditary  
Disposition, or from other Causes, having brought on a Wane  
of due Tone in the Lungs, are disposed to this Disorder. This  
Doctrine is, also, confirmed by Experience, which informa us,  
that not only a Redundance, but, also, a Defect os Blood has  
a strong Tendency to produce Stagnations. Hence those, who  
place the proximate Cause of a Phthisis in a Plethora, only pai-  
pably contradict Reason and Experience.

It is disputed, among Physicians, whether a Phthisis is con-  
tagious : But I do not hesitate to affirm, that it is; or, at leasts  
to assert, that, if the Miasma of this Disorder is not sufficient

to induce a Phthisis, it is, nevertheless, capable of promoting it,  
if there is already a Disposition to it; for all ulcerous and cor-  
runted Matter is of so surprising and contagious a Nature, that  
many malignant and contagious Disorders, such aS the Itch,  
the Leprosy, the Small-pox, old sordid Ulcers, pestilential Car-  
buncles, and Dysenteries, are to he accounted for from hence.  
Nor am I os Opinion, that the Nature of the Phthisical Miasma  
is so malignant, as suddenly, and, at a Distance, to prove inse-  
ctious ; but that it only does so to such aS continually converse  
with Phthisical Patients. This Doctrine is confirmed to us by some  
Of the most celebrated Physicians. Thus *Rtverius,* in *Cent.* I.  
*Obs.* 99. gives us an Instance of a Maid, who became Phthisi-  
cal by attending her Mistress, who was in that State, Day and  
Night ; and, in *Cent. 4. Obs.* 92. he mentions a Girl infected  
by her Sister, who had become Phthisical by giving the Breast  
to a Man in that Condition. *Schenckius,* also, in *Tib.* 3. *Obs.*I33. informs us, that the Spit of Persons labouring under aeon-  
firmed Phthisis is so contagious, that a Physician, only' by smell-  
ing it, hecame Phthisical. A Phthisis, produced by Contagion,  
is, also, described in *M. N. C. Cent.* 9. *Obs. 2L.*

AS for the Prognostic of this Disorder, that a true Phthisis is  
a Violent Disease, and not to he cured without the greatest Dif-  
ficulty, is not only known to the Vulgar by many fatal Instances,  
but, also, confirmed by long Experience to the Physician.  
Thus *Hippocrates,* in *Lib. i. de Morb.* informs us, " That  
" when Consumptions happen, they necessarily prove mortal.''  
He is seconded in this by *Galen,* in *Lib. de Logits affect. Cap.* 8.  
and 5 *Meth. Medend. Cap.* I. et g. *Celsius, in Lib.* 3. *Cap.  
2.2..* informs us, " That a true Phthisis ought to have proper  
" Measures taken with it in the Beginning, fince, when it be-  
" comes inveterate, it is not easily cured.\*’ Among latter  
Authors, see, with respect to the DiffiCulty os curing a Phthi-  
*sis, Foresius, in Obs.erv.* 45. *Lib.* I 6. *Rodececus a Fonseca, Tom.*1. *Consult.* 58. *Tom.* 2. *Consult.* 48. and *Timaeus a Guldenklee,*in *Epist. Lib.* 3. *Cap. 2.* where these Words occur: " I iq7  
" genuouily confess, that, during the whole Course of my Pra-  
" ctice for thirty-seven Years, I could never totally restore such  
" as had then Lungs ulcerated ; though I lest no Means un-  
" tried, which could in the least contribute to the Cure os this  
" Disorder: Nor have I seen any one in this Condition totally  
" recovered by the most celebrated Physicians.’'

But tho' the Cure ofa Phthisis is very difficult, and eVen im-  
.possible, when the Disorder discovers itself by such manifest  
Signs, as to appear to the Vulgar, yet I would not affirm the  
like of every Phthisis, especially when as yet in its Beginning;  
for I know several Instances, in which, aster Wounds of the  
Lungs, a Spitting of Blood, a Rupture of the Vessels, a Pleu-  
risy, and Peripneumony, the Patients have laboured under an  
Abscess and Impostumation of the Breast, but have, neverthe-  
less, heen totally cured, by taking due Measures in time. Be-  
sides, I, and others, have frequentiy observed many sprung  
from Phthisical Parents, who have had their Breasts de-  
pressed, and their Scapulae prominent, like Wings ; who, heing  
addicted to Anger, had in their Youth frequent Haemorrhages  
from the Nose, without any external Cause ; who have had sa-  
line DefiuxionS on the Breast and Fauces, accompanied with a  
dry and Violent Cough, even in the Summer; who have fur-  
prisingly lost their Flesh, and perceived a Heat in the Palms of  
their Hands, whilst their Cheeks as yet remain florid; totally  
cured by proper Medicines, and a due Regimen. I have, also,  
Teen Abscesses of the Lungs, where a large Quantity of white  
equal Pus, of one Colour, has heen expectorated, but where  
the other Parts of the Lungs have not as yet been corrupted,  
nor spoiled, with scirrhous Indurations, and ulcerous Fistulas,  
and where the Vessels ofthe Heart and Lungs have not heen  
insarcted with polypous Concretions, happily cured by proper  
Remedies, and a due Regimen.

But it may here be asked, by way os Objection to my Do-  
ctrine, Why is it, that even beginning Phthisical Disorders are  
so rarely Cured ? But this is frequentiy brought about by  
various Causes, the most considerable of which seems to be, that  
We are not always sufficiently ascertained of the Presence, Na-  
ture, and genuine Causes, of a true Phthisis, by evident dia-  
gnostic Signs. Thus *Fernelius,* in *Patholog. Lib. ζ. Cap. io.*informs us, " That a latent Abscess, at first, neither known  
" to the Physician, nor Patient, is often the Cause of this  
" Disorder ; in consequence of which, the Patient neither de-  
\*\* sista from his usual Bufiness, nor thinks himself afflicted with  
" any Disease ; but bears the secret Cause of his Death in his  
" Breast, without knowing it. However, some have, in a  
" Quarter of an Hous, died unexpectedly of this Disorder, in  
" whom, when dissected, no other Cause of their Death could  
" he discovered, than the sodden Breaking of an Impostu-  
\*c mation in the Lungs ; by which the Patient was suffocated.  
Ci But all such Patients are, before the Rupture of the Abscess,  
Xt afflicted With a Cough, a Spitting of Blond, an Heaviness of

ce the Body, a flight Oppression of the Breast,

and a Difficult?  
" os Breathing, which rarely accompany a Consumption, bhe  
" are Signs frequentiy common to other Disorders. ” Besides,  
we may he convinced of the difficult Diagnostics os a Phthihis  
by the frequent Errors committed, in this respect, by the must  
celebrated Physicians. Thus many are accounted Phthisical,  
who, labouring under a chronical Cough, accompanied with  
a catarrhal Deflexion, discharge a thickMatter of a whitish-  
green Colour ; or who are afflicted with a stomachic, or hypo-  
chondriac Cough, arising from the Sordes of the Primae Vise  
sailing upon the Lungs. A moist Asthma, especially, when  
it arises after a Suppression of the Menses, or Haemorrhoid,,  
and a consequent Regurgitation and Congestion of the Humours  
to the Breast, is frequentiy taken for a Phthisis. It is, also,  
certain, that a flow Fever, accompanied with a Cough, a fed-  
den Extenuation of the Body, and colliquative Sweats,. which  
sometimes succeed Arthritic Pains, the Gout, or Scurvy, is,  
also, confounded with a Phthisis; whereas, in the former of  
these Disorders, there is no Solution of Continuity in the Lungs.  
Since, therefore, the Knowledge os a Pulmonary Consumption  
is so difficult, hence we may infer, how uncertain and preca-  
rious the Cure of this Disorder must he.

There is, also, another equally important Cause, which hin-  
ders the Cure os a Phthisis, and os an Hectic arising from it ;  
which is, that there are sew Physicians, who know, with due  
Caution and Circumspection, to use proper Medicines for this  
Disorder; for, if in any Disorder, certainly in a Phthisis, the  
Caution os the Physician is necessary, on account os the so great  
Contra-indication os Remedies ; for a Phthisis requires laxative  
and moistening Medicines, gentle Traumatics and Astringents,  
and sometimes mild Anodynes, which, unless exhibited with  
due Caution, at a proper time, and with sufficient Regard to  
the Circumstances of the Patient, are so far from affording any  
Relies, that they rather increase the Disorder.

Having taken a general View Os the Prognostics Of a Phthisis,1we now come to consider its Terminations or Events, whether  
salutary or fatal. First, thep, 'tis a Very bad Sign, when the  
hectic Heat is more, and more increased ; when, in .the Mom-  
ing, the Pulse is quicker than usual, and when the Flesh and  
Strength are consumed, without heing in the least recruited by  
Sleep. Which Misfortunes generally the rather happen, if, when  
there is a large Quantity Of PuS, there is Only a small Portion of  
it expectorated; for then it becomes more acrid and filthy, and,  
when thrown On the Coals, diffuses a fetid Smell, the more the  
Fever is, also, increased. If, besides, there is a great Difficulty of  
Breathing, accompanied with a Dread Of Suffocation ; if the  
Patient cannot lie on that Side, where the injured LOhe of the  
Lungs is, is his Breath is Of a CadaVerous Smell, and his Voice  
hoarse, is he is afflicted with colliquative Sweats, a Diarrhoea, and  
a Swelling of his Feet, sometimes accompanied with Pain; 'tis  
Certain that Death is not far off If the Expectoration is totally  
suppressed, the Patients gradually, but especially in an erectPOsture  
Of the Head, die, retaining their Reason.

But greater Hopes are to be entertained, if there is still a Con-  
siderable Degree of Strength, and the Respiration free, if the  
Appetite and Digestion are entire, if the Spit expectorated is  
white and equal, and if there is no hectic Fever. The Hopes  
Of Recovery are still the greater, if the Patient is ofa good Ha-  
bit Of Body j if he has a large Chest; has no hereditary Dispo-  
sition to the Disorder; and if his Heat becomes more mild, and  
the Substance of his Stoois is compact for, by means of these  
Circumstances, Phthisical Patients, especially when they use a  
proper Regimen and Medicines, may often protract Lise for a  
great many Years. Thus *Willis,* in *Lib. de Medicament. Opcrat.  
Sect.* I. *Cap. 6. deTabe seu Phthisi,* speaks in the following man-  
ner : \* It sometimes happens, says he, that a Cavity, or, perhaps,  
\* two are formed in the Lungs with callous Sides every-where,  
de so that the Matter collected in them is not convey'd to the  
" Masi Of Blood, but is every Day totally expectorated, tho’ its  
" Quantity should be Very large. Persons in this Situation have  
\* only, aS it were, a Fontanel in their Lungs;«and, although they  
" should every Morning expectorate a sarge Quantity off thick,  
" Or yellow, and eVen, aS it were, purulent Spit, and a small Quan-  
“ city of the fame throughout the Day, yet in Other respects,  
\* they enjoy sufficiently good Health, breathe freely and easily,  
\* eat and steep well, have a due Quantity Of Flesh, or, at least,  
“ are blessed with a good Habit of Body, and are frequently cured.  
" Hence some are said to have laboured under a Phthisis for  
" thirty Or forty Years, and eVen not to have had their Lives  
" shortened by this Disease." And, with respect to Ulcers os **the**Lungs, 'tis observable, that they may continue for several Years  
without any considerable Decay of the Body, whilst the Other  
Viscera remain sound and entire. See *Korkringius,* in *Specilegit,  
Anatom. Obs. yu.* and *Earthed. Cent.* 2. *Hist.* I4. Nor is this diffi-  
cult to be Conceived ; for aS Nature sometimes advantageously  
expels peccant and recrementitious Matter by an Ulcer os the  
Extremities, Or by an artificial Ulcer, such aS a Fontanel, so I  
**see** no Reason, why the same Circumstance should not some-  
times happen in Ulcers of the Lungs.

The Physician Ought, also, to he well acquainted with the  
particular Signs which manifest the Recovery Of phthisical Pa-  
tierss, which are, by *Aretaus,* in *Lab.* 3. *Cap.* I. excellently enu-  
merated in thesollowing manner. " When phthisical Patients be-  
“ gin to grow better, the Cough seizes less frequently, and at  
“ longer Intervals; a larger .Quantity Of sanious and more moist

Spit is expectorated -, much aqueous Matter is evacuated by  
C\* Stool ὁ the Urine is copioufly discharged, the’ it has aS yet no  
" Sediment the Voice becomes more clear and sonorous, the  
a .Sleeps are sufficiently long, the Praecordia relieved, and the  
“ Pain remitting is, sometimes, transferred to the Scapulae; the  
" Difficulty of Breathing is gentie and less frequent, but accom-  
α panied with an Asperity os the Voice, and, when these Things  
" happen, the Patients recovers ,

*The* CURE.

The Application of proper Remedies, in a Phthisis, is widely  
/differens/ according to the different State of the Patient, with  
respect to Strength, the Time and Gauses Of the Disorder. The  
Method Of treating a Phthisis in general, may be divided into  
. Curative, mitigative, and preservative. The first is to be taken  
when there are such Causes, such Circumstances, and such a Con-  
ditionof the Patient, as to lay a Foundation for expecting a Re-  
covery, by means of proper Medicines. The mitigative Method  
is to be taken, when the Force Of the Disease is fo great, that it  
will Dot yield to the best Medicines, in which Case we are to  
mitigate the most urgent Symptoms, prevent fuch as are worse,  
and, by that means, protract Life aS long aS possible. And aS the  
preservative Method is the best, the most easy and safe, against  
all terrible Disorders, so it is Of the highest Importance in a  
beginning Phthisis. ;. . ί’

AS for the curative Method, it is principally to be used, when.  
In consequence Of a broken lmpostumation, an open. Abscess is  
formed, and a large Quantity os Pus expectorated, which most  
generally happens aster the unlucky Termination Of a Pleurisy,  
.Or Peripneumony; aster a SpittingOs Blood; after Wounds of the  
Lungs, whilst the rest Of their Substance is sound, and neither  
corroded, nor scirrhous, in this Case, the best and safest Cure is  
Milk duly used, by which I have known many phthisical Patients  
brought from the Gates of Death, and restored to perfect Health ὁ  
for no Medicine has longer. Or more universally, been found essi-  
cacions in rhe Cure of a Phthisis, than Milk.

ς The most antient Physicians warmly recommended Milk for  
the Cure of this Disorder, aS is obvious from Various Passages Of  
*Hippocrates.* And *Galen,* who greatly extols Milk for a Phthisis,  
*iaLib.* e. *Meth. Medend. Cap.* I2. mentions a Place Called *Stabias,*to which, on account Of the Purity Of the Air, the fine Pasturage  
for Cattie, and the consequent salubrious Quality of the Milk,  
there was a great Conflux Of phthisical Patients, just as, in Our  
Days, the Valetudinary and infirm resort to the medicinal Springs.  
This Method Of Cure was known in *Italy* above an hundred  
Years ago ὁ for the Celebrated *Andreas Baccius,* in *Lib.* 4. de  
*Thermis,* informs us, α That the *Neapolitan* Physicians, as the  
“.last Resource, send phthisical Patients, such aS spit Blood, Or  
" those afflicted with any Ulcers Of the Thorax to *Stabeas,* with  
" so great Success, that some remain in that healthful Part all  
,c their Lives."... . ..

*Aretaeus,* also, one Of the most Skilful of the antient Physi-  
cians, in *Lib. 6. de stiorb. Chron,* does not hesitate to affirm, that  
phthisical Patients stand in need of no Other Thing for their Re-  
covery, but the liberal Ute of Milk. *Trallian,* also, who, in his  
Work *de Pe Medica,* greatiy extols Milk in all Disorders of the  
Breast, in *Lib. y.* has thesollowing remarkable Passages: « lfthe  
" whole Body, not having Nourishment convey'd to in begins  
" to decay manifestly, and if there is not much PuS in the Tho-  
" rax. Milk alone ought to be exhibited to them , and, for this  
" Purpose, that Of AsseS is best, because it is an excellent Pur-  
in gafive" In another Place he speaks in the following manner:  
\* I have frequently seen those afflicted with a Difficulty OfBreath-  
" ing, relieved by the due and proper Use of Milk, which re-  
\* moves the peccant Matter lodged in the Cavities of the Lungs."  
And, in the Part already quoted, when speaking of an Haemo-  
ptysis, he says, Ci Let all those afflicted with a Spitting os  
" Blood, use Milk; for no Medicine nor Aliment is so use-  
Q ful and beneficial to them as Milk, and those, who, in the  
f6 Beginning of this Disorder, use Milk alone for a long time, are  
tc totally recovered. Thus, says that Author, I knew a Certain  
Q Man, who, hy using Milk for a whole Year, and abstaining from  
" Wine, was totally freed from a Spitting Of Blood, and Pus, so  
" that he did not afterwards fall into a .Phthisis.”

It may, also, he shewn from Reason, without the Evidence  
Of Experience, that Milk is an efficacious Remedy in Disorders  
Of the Breast. But ’tis to he observed, that all Milks are not of  
the same Kind, and Of tho same Efficacy for all Purposes; since,  
according to the Diversity of Animals, and their respective Foods,  
they are possessed of different and peculiar Qualities, which are  
to he considered apart. First, then, AsteS Milk, which was al-  
ways greatiy esteemed by the Antients, Contains a great deal of  
Iweet Serum, but a Very small Quantity of earthy, roseous, and

pinguious Substance; for which Reason, it is not easily coagu-  
lated, and consequently but Very unfit for Butter and Cheese.  
Its Whey is abstergent, laxative, moistening, and proper for cor-  
recting the Acrimony of the Humours. Goats Milk does not  
Contain so large a Quantity of Whey, aS that Of Asses, nor is it  
Of so laxative and abstergent a Nature, but of a thicker Con-  
sistence.- And as Goats eat the Leaves Of Trees, which con-  
tain something Of a resinous Quality, their Milk is Very efficacious  
for the Consolidation Of suppurated Parts. Cows Milk is more  
pinguious, contains a large Quantity Of Earth, but less Whey,  
for which Reason it generally yields a great deal os Butter and  
Cheese. This Species of Milk is os a temperating, nutritive,  
and consolidating Virtue.. Womens Milk, for medicinal Pur-  
poses, is preferable to all Others, sor it is- the sweetest Of them  
all, and its nutritive Quality is sufficiently Observable in Infants.  
The Virtues Of Milk are, also, different, according to the Diver-  
sity Os Herbs and Pasturage, which Animals eat. Hence Milk,  
in the Spring, is highly salutary, becaufe, at that rims, the Ve-  
getables abound with temperate Juices; whereas Mdk in the  
Winter is accounted less salutary, because then Animals seed on  
Hay and Straw. . -

Hence we may easily judge, that in all Disorders Of rhe Breast,  
and an universal Decay or Wasting os the Body, Milk may be  
accounted a Medicine proper for answering all Intentions: For,  
first, we find nothing more efficacious than Milk, especially that  
Of Cows, for correcting, mitigating, and allaying rhe Acrimony .  
of the Humours, which is the principal Cause of the Irritation,  
the Violent Cough, and the Corrosion, foras this Species OsMilk  
is capable os breaking the noxious Force of Corrosive arsenical  
Poison, *so* 'tis much more efficacious in sheathing up and Ob-.  
tunding the saline Spicula lodged in the Fluids os the human  
Body. But when the Intention is to deterge Viscid Humours, to  
cleanse Ulcers, to render the Body soluble, to provoke Urine, and  
- derive the Afflux of the Humours from the Part affected, AsseS-  
Milk is Of all Others the most efficacious, on account os the large  
Quantity of sweet abstergent Whey it Contains. When wounded  
Parts are to he consolidated and conglutinated. Goats Milk is best  
for answering the Intention. For nourishing wasted. Parrs, and  
restoring Strength, nothing is more effectual tban'WomenS Milk,  
especially when suck’d immediately from the Breasts, without any  
Access Of the Ain, by which its spirituous Principle is exhaled, and  
flies off. . With respect to this Milk, the learned *Wepfer,* in  
*Epifi. ad Verxnsoham,* speaks thus: « There is certainly a divine  
K Quality both in Womens and in Asses Milk, which I could  
-“not have believed, if I had not had the Evidence of my Senses  
K for it, for by their means I have, with my Own EyeS, seen Per-  
f( sons rendered, aS it were, entirely new , and, by a due Use of  
w these two Species Of Milk, many have acquired not Only a  
K founder Habit, but, also, a better Colons, and more Strength."

Not only Milk, but, also. Whey, when duly prepared, is highly  
efficacious, and even sometimes more powerful than Milk, in  
Curing the chronical Disorders Of the Lungs, and the other Vise  
. Cera r.FOr if the Obstructions of the small Vessels Of the Viscera,  
which generally lay a Foundation for chronical Disorders, are to  
be removedὁ if the Viscid and tenacious Humours are to be dis-  
solved ὁ if the Emunctories are to be kept Open, and the Heat of  
.the Parts allay’d by proper Moisture, Whey, prepared of whatever  
.Milk, is preferable to the Milk itself. See LAC.

Hence the Reason is obvious, why not Only in the Cure Of  
Disorders Of the Breast, but, also, in that Of the most terrible  
and Obstinate Diseases, the most skilful Physicians, both among  
the Antients and Moderns, have always greatiy recommended  
Milk. But the whole Secret consists in the due Use Of it, both  
for mitigating and curing Diseases for, if either Aliments or Me-  
dicines should be improperly used, they prove more detrimen-  
tal than beneficial. This should be adverted to, especially by  
those of the Moderns, who strenuously endeavour to destroy and  
discredit the medicinal Use Of Milin

But tho' the Use Os Milk and Whey is sufficient to answer -  
many Intentions in the Cure Os a Phthisis, yet ’tis equally Certain, -  
that its divine Energy, in producing different Effects, may be  
assisted and augmented by Various means: For, first, the Efficacy'  
Os Milk is surprisingly increased, and rendered truly Medicinal, if  
the Animals, whose Milk we use, are fed with Substances accom-  
modated to the Intention Of Cure; for, from the different Ali-  
ments which Animals and Women use, the Milk they afford, also,  
acquires a different Quality, since ’tis certain from Experience,  
that a Purgative exhibited to the Nurse is, with the Milk, con-  
vey’d to the Child upon whom it operates. The Antients are,  
therefore, to be commended, who, in order to render their Milk  
more efficacious, gave their AsseS and Goats, among their Fond,  
such Herbs as were possessed of a specific Virtue against the Dis-  
ease they intended to cure. Hence *Galensio* the Part before-quoted,  
mentions the Herbs growing in *Stabiae,* such as Grass, Knot-grass,  
Bastard-baum, the Bramble, Ivy, Shrub-trefoil, the MastIch-  
tree, and some others, by eatir» which the Milk of the Animals  
was rendered highly salutary. ’ This Custom I have successfully  
used, when, in Order to the Abstersion and Depuration ofany Part  
affected, I have ordered Barley,Scabious, Scordium, Chervil,Gor-  
*man* Leoparffs-bane,Hyssop, Paulis Betony, and white Horehound,

to he mixed with the Food of the Animal-, from which the Milk  
was to taken. But, when the Intention was to consolidare, I have  
Ordered their Food to be mixed with the several Species of Plan-  
tain, Ground-ivy, Agrimony, Yarrow, Sanicle, the greater Con-  
sound, and Lungwort.

But there are still other Methods of augmenting the medici-  
nal Virtues of Milk, according to Various Intentions; the most  
Considerable of which is the mixing Milk with mineral Waters,  
a Practice, by me, first introduced into *Germany* ; for when,  
upwards of thirty Years ago, I was, by a chymical Analysis, in-  
vestigating the Principles of the mineral Waters in *Germany,*both hot and cold, and found no acid and truly vitriolic Salt in  
them, but rather one os an alcaline and neutral Kind, together  
with a subtile Earth, and fine Particles os Steel, I mixed Milk  
with these Waters, and that with such Success, aS, in curing and  
alleviating many chronical Disorders,to find happy Effects, which  
could neither be obtained by Milk alone, nor by the Waters ex-  
hibited separately from Milk. Hence 'tis surprising, and even to  
be lamented, that there formerly were, and still are. Numbers Of  
Physicians, who, in a Phthisis and ExulcerationS of the Lung,,  
think cold mineral Waters highly prejudicial; and dare neither to  
prescribe them alone, nor in Conjunction with Milk. Before  
our Times, however, two celebrated Physicians recommended  
cold mineral Waters in Disorders os the Lungs, The most an-  
tient Os these is *Raymundus Joannes Fortis,* in *Cent.* 2. *Consist.* 2o,  
. 27ς 28,30. and especially in *Consil.* 54. where he speaks in the  
following manner: "Ata proper Season of the Year, cold mi-  
Ci neral Waters I have found to ho highly useful in Ulcers of the  
α Lungs; and Io them I have ordered the Patients to have re-  
" Course, aS the last and most effectual Expedient; since, if the  
\*c Disorder did not yield to them, I could hardly think, that it  
" could be removed by Decoctions, Milk, and other Things Of  
" a like Nature.'' And the celebrated *Morton,* a later Physician  
of the *Engliso* Nation, in his *Phthistologia,* recommends medi-  
cinal Waters in Disorders Os the Lungs, and when they are af-  
flicted with steatomatous Tumors, accompanied with a gentie  
hectic Hear, on winch Occasion, he speaks in the following  
manner : " I have seen, during a Course of several Years, many  
" Phthisical Patients have their Appetites and Strength restored,  
" their Cough and hectic Heat lessened, their Respiration ren-  
“ dered freer, and, at last, their Disorder totally removed, with-  
" Out any Relapse, by means of these Waters.''

But though I would not prescribe strong mineral Waters in  
Disorders which arise from a Solution of Continuity in the  
Lungs, especially if Very considerable, yet I can from Expe-  
rience affirm, that mild mineral Waters, abounding with an  
alcaline Salt, such as the *Selteran* and *Caroline* Springs, mix'd  
either with the Milk of Asses, or that of Goats, afford fur-  
prising Relief, not only in a chronical and obstinate Cough,  
accompanied with an oppressive Pain of the Breast, a Difficulty  
of Breathing, a flow Hectic, and a Consumption, but, also,  
in a deep Suppuration of the Lungs, and a true Phthisis ; for,  
by this Admixture of the mineral Waters, the Milk is ren-  
der'd more efficacious and powerful in dissolving the tough and  
viscid Matter, removing the Obstructions os the capillary Ves-  
sels, and deterging and cleansing the Ulcers. But using this  
Mixture of Milk with medicinal Waters is still more indi-  
cated, when such Diseases of the Lungs are supported by hy-  
‘ pochondriac, scorbutid, arthritic, or calculous Diseases, which  
frequently happens.

This Method of correcting Milk by Various Admixtures was  
not only known, but, also, practised, by the antient Physicians.  
Hence, in *Hippocrates, Trallian, Aetius,* and *Aretaus,* there  
are several Instances in which they prescribed Milk mixed with  
Water, sor Phthisical Patients; or Hydromel, mixed with  
Milk; to which *Hippocrates,* in *Lib. 2. de Dieeta,* ascribes a  
surprising efficacy, affirming, that it softens the Lungs, allays  
the Cough, procures an Expectoration of the Spit, and pro-  
motes a Discharge of the Urine. The celebrated *Spontus, in  
Aphorism, ncvis. Sect.* 5. *Aph.* 99. not only extols the external  
and Vuinerary, and, also, the internal Use of Lime-water, in  
curing an Impetigo, and Leprosy; but, also, commends the  
Mixture of the same Water with Milk in the following man-  
ner .. " Besides, says he, this Water, mixed with Milk or  
" Whey, produces surprising .Effects in internal Ulcers, Di-  
arrhceas, and Dysenteries, as I was informed by Mr. *De-  
iC closure,* a celebrated practical Physician in *Gascony.* ” Nor  
shall I condemn this Method, since in Dysenteries, accompa-  
.nied with an Exulceration of the Intestines, I have always  
found Milk, mixed with rhe *Selteran* Waters, an incomparable  
and highly efficacious Medicine.

But let us inquire with whet other Remedies Milk may be  
commodioufly joined : him curing, therefore, violent Disorders  
.os the Lungs, in a true Phthisis, Infusions and Decoctions, pre-  
pared of vulnerary and pectoral Herbs, have not only been high-  
lv esteemed by Physicians, but, also, bv the common People.  
:The Herbs most recommended for this Purpose, are the greater  
.Confound with its Roots, Saracens Confound, Coltsfoot,

sharp-pointed Plantain, spotted Lungwort, Sanicle, Spleen-  
wort, Scabious, Paulis Betony,.Agrimony, Ground-ivy, white  
Horehound, Yarrow with its Tops, St. John’s-wort with its  
Flowers, Rose-flowers, and others of a like Nature, which  
are to be boil'd either in Ale or Water, adding Figs, Honey,  
and the Seeds os Fennel, and stellated Anise. Nor are there  
waning instances of considerable Benefit done to Phthisical Pa-  
tients by these means; fince when there is only a simple Ab-  
scess without a scirrhous induration, or a polypose Concretion,  
they contribute much to the Consolidation os the affected Parts.  
It must, however, be own'd, that these Decoctions, in conse-  
quence os their astringent Quality, have produced very un-  
happy effects , especially, when, in the Beginning os the Dis-  
order, the Lungs are affected with herd Tubercles, or when they  
are unseasonably used to stop a Spitting of Blood ; for by this  
means the extravasated Blood is easily coagulated, and the  
minute Vessels obstructed ; so that there happens a far greater  
Stagnation os tlte Blood and Humours tin the Lungs, a Circum-  
stance which has the strongest Tendency to produce a Phthisis.  
But, in order to prevent these Dangers, such Infusions and  
Decoctions may properly be mixed with an equal Portion, or  
only half the Quantity, os Milk; by winch their astringent  
Quality is, in some measure, destroy'd, and the Acrimony of  
the Humours corrected. . - -

If the Primm Viae are to he cleansed of any Sordes, Sena-  
leaves. Rhubarb, and Manna, may be commodioufly infused,  
and gently boil'd either with Milk alone. Milk and Water, or  
Milk diluted with temperate mineral Waters; since, otherwise.  
Phthisical Patients, especially os delicate Habits, are easily in-  
jured even by mild Purgatives. I have, also, observed, espe-  
cially when there was a large Quantify of acid Sordes in the  
Primae Viae, that a Dram or two of the Magnesia, which in  
nothing else but an highly subtile Flour of Quick-lime elu-  
triated, mixed with a sew Ounces of .Goats Milk, proved a  
safe and excellent Purgative.

In order to alleviate a Violent Cough, which destroys the  
Strength and Sleep, to correct the Acrimony of the Humours,  
and relax the constricted Parts, the Antients, with great Sue-  
cess, used their Various Diacodiums, the Principal os which are  
composed of the Juice and Seeds of the Poppy. But the Mo-  
derns, for the same Purposes, use the Piluhe de Cynoglosio, and  
the Pilulae de Styrace, which, when exhibited in a small Dose,  
are fufficientiy efficacious: But all these Medicines are render'd  
still more efficacious, if they are exhibited about Bed-time, in  
a Draught of Milk. It is, also, sometimes expedient, when  
there is a great Afflux of the Humours to the Breast, and when,  
in protracted and phthisical Coughs, a great Corruption is to  
he dreaded, to make moderate U se of such Remedies as pro-  
voke Urine, in order to derive the Impetus os the Humours  
from the Breast : For answering which Intention, we may use  
Milk and Whey, the diuretic Virtues of which are in some  
increased, by making them into an infusion with Seeds of Se-  
leri, Parfley, *Cretan* Daucus, Gromwell, and Violets, well  
bruised together. .

Besides those already mentioned, there are still other Reme-,  
dies highly beneficial, not only for the Depuration, but, also,  
for the Consolidation, of those Ulcers of the Lungs, which  
constitute a Phthisis. The most considerable and celebrated of  
these are, the pectoral and Vulnerary Balsams, of which, tho’  
there are Various Kinds in the Shops, yet we shall only men-  
tion those invented by the most celebrated Physicians. The  
hest, then, is the justly celebrated Balsam of *Meibomius,* pre-  
pared in the following manner r

Take of the old Oil os St. Johnis-wort, two Ounces; of  
. Sperma-ceti, six Drams ; of the best *Fenice* Turpentine,  
three Drams; of Dragonss-bloed, one Dram ; and of  
Laudanum Opiatum, six Grains : Mix all together, and  
let the Dose be froth one to two Drams.

Nor have I found the following Balsam less efficacious :

Take of the Oil of sweet AlmondS, two Ounces ; and of  
the Flowers of Sulphur sublim'd by Quiok-lime, two  
Drams: Boil over a gentle Fine r Then add, of the Balsam  
of CapiVi, one Dram; of Sperma-ceti, and Bees-wax, each  
half an Ounce ; of the extract os Saffron, half a Dram.,  
and of the Oiis of Anise, Fennel, and Mace, each ten  
Drops.

Another Balsam sor answering the same End may be pre-  
pared thus:

Take of the *base Prussian* Honey, and Mountain Diacodium,  
each one Ounce; os the aqueous Essence of Myrrh, in-  
sptstated, half an. Ounce; of the Flowers, of Sulphur, and

the Extract of the Tops os Yarrow, each two Drams.  
ot the Extract os Saffron, half a Dram ; and of cho Oiis  
of Macc and Sasafras-wood, each eight Drops.

These noble and efficacious Balsams, when their Use is indi-“  
cated, cannot be exhibited in a better, or more proper Vehicle,  
than a sufficient Quantity of the Milk of Asses, Goats, or  
Cows.

Having considered the curative Method in a Phthisis, we now  
come to treat of the palliative, or mitigative Method, by which  
we endeavour to render Phthisical Patients free from the most  
terrible and deplorable Symptoms, and to protract their Lives  
as long as possible. This Method is principally to be ufed in  
those Patients, in whom there is an intense Heat, gradually  
consuming the Flesh and Strength, which is generally excited  
by a Mixture of the purulent Matter with the Bloed, and by  
which the Blond, being contaminated,' is put into an Efferves-  
cence, and becomes more acrid and saline. In order, there-  
fore, to extinguish this preternatural Heat, and correct the  
Acrimony of the Humours, nothing is more effectual than due  
Doses, either of Asses, .or Womens Milk, exhibited in Con-  
junction with a proper Regimen. For answering the same In-  
tention, emulsions os the Four cold Seeds, .and white Poppies,  
Decoctions of Barley, or Hartshorn, the Waters of Roses,  
Lilies os the Valley, and black Cherries, andJulap of Roses,  
may be frequently exhibited. The Virtue of these is greatly  
increased, is they are exhibited with the temperate nitrous  
Powders, which are os great Efficacy in a beginning Hectic.  
These Powders maybe prepared in the following manner :

Take of Mother of Pearl, and Crabs-eyes, each two  
Drams; of purified Nitre, one Dram ; and of the distil-  
led Oil of Mace, four Drops ; Mix all together, and ex-  
hibit one Dram for a Dose.

Nor, in order to allay the Violence of the Symptoms, are we  
to neglect Baths of sweet Water mixed with a sufficient Quan-  
tity os Cows Milk, and purified Nitre; by which means the  
constricted, tense, and dry Parts, are relaxed and moistened,  
the Cough allayed, the Heat lessen'd, and the Sleeps rendered  
more sweet and gentle ; sor which Reason such Baths are some-  
times highly proper in the curative Method.

When the Lungs are affected with a callous , and inveterate  
Ulcer; and a Spit, mixed with Pus, is daily expectorated, by  
which the Flesh and Strength are considerably impair'd, the  
principal intention is, by correcting the acrid and saline Dyscrasy  
os the Blood and Humours, to prevent the farther Exulcera-  
tion of the Lungs.. This End is excellently answer'd by tem-  
perate Infusions of Ground-ivy, the Herb CostuS, Chervil,  
Paulis Betony, Scabious, Coltsfoot, and Lungwort. But  
fuch Infusions must be frequently,, and for a long time, used.'  
In serous Persons, and such as are subject to Catarrhs, when  
the Disorder is brought on, and shpported, by a large Quantity  
of impure Humours selling on the Lungs, in order to prevent  
the greater Congestion os the Humours to the Breast, for  
ordinary Drink the Patient may use a Decoction of China-root,  
and of Red-saunders prepared with Raisins, a Dink highly re-  
commended by Authors for this Purpose.

In such a Condition of the Patient, we are, as much aS poffi-  
ble, to endeavour to preserve the Tone of the Lungs. This  
Intention is excellently answered by Sugar os Roses frequently  
exhibited in the foregoing Decoction. This simple Remedy  
was not only known and commended by the *Arabians,* and  
especially *Avicenna,* but, also, some of the Moderns think,  
that this alone is sufficient to mitigate, and even to remove, a  
Phthisis.. See *Zacutus Lusitanus,* in *Prax. Adrtir. Lib.* I.  
*Obs.* I 39.. and *M. N. C. Decad.* 2. *Ann. Obs.* I9. and *Syl-  
vet tic ns,* in *Consisc*

We are now come to consider the preservative Method of  
Cure, which consists in preventing a Phthisis in those who are  
subject to it by Nature, Age, Habit, or Errors in Regimen,  
by a seasonable Removal os its Causes, or in removing it, or  
preventing its further Progress, by proper Medicines, when it is  
already present. We have already sufficiently shewn, thet in  
sanguineous, choleric, and lender Habits os Body, from the  
Age os eighteen to thirty-sour, a Phthisis, or purulent Spitting,  
accompanied with a Violent Cough, and a Difficulty of Breath-  
ing, is not only generally produced by a Spittingos Blood, but,  
also, frequently recurs; in which Case, the principal Intention  
of the Physician ought to he, to remove this SpittingosBleed,  
os, at least, so to mitigate it, as that it may not degenerate in-”  
to a Phthisis. -

In order, therefore, to remove a Spitting os Blood, besides,  
the Efforts of Nature, there is no more safe and efficacious  
Remedy, than Venesection, duly repeated, till the End is ob-  
rained. This is confirmed, not only by experience, but, also,  
by the Authorities of the greatest Physicians; Thus the cele-

hrated *Boerhaave,* in his *Praxis Medica,* informs us, " Thet,  
" if we intend to cure a Person naturally disposed to a Phthi-  
" sis, we are carefully to prevent his having a Spitting os Blood ;  
" otherwise we cannot cure him. Henctio about the seven-  
" teenth Year of his Age, Venesection is to he twice or thrice  
" used ; Gestations are, also, to be used , and in this Method  
" we are to continue till the twenty-fifth Year os his Age.  
" I know a Family, the Father, Mothes, and all the Clul-  
" dren os winch, died Phthisical, except one Son, whom I  
" preserved by this Meshed, who is now above fifty Years of  
z" Age, has lived above the Time ascribed by *Hippocrates* for  
" the Access of a Phthisis, and has no bad Symptoms attend-  
" ing him. ”

Belides Venesection, great Moderation, with respect to the  
Non-naturals, is to be used ; sor which Reason, 'tis necessary, .  
that such Patients should carefully guard against Violent Com-  
motions, heth osBody and Mind, and abstain from spirituous Li-  
quors, and every thing which is capable of throwing the Blood  
into an Orgasin. And, since a Spitting of Blood, preposteroufly  
treated with strong Astringents, easily degenerates into a Phthi-  
sis, such Medicines are to he as carefully abstained from, as  
if they were as much Poison. In such a Case, it is rather ex-  
ped ient to use Milk and Water for Drink ; gentie Laxatives of  
- Manna and Sena-leaves, Powders, which allay the Ebullition os  
the Blood, prepared of Shells, Mother of Pearl, Crabs-eyes,  
‘ and Nitre ; with each of these we may commodioufly join the

Decoctions or Infusions above-mentioned.

But there is nothing so effectual either sor preventing a Phthi-  
sis, or removing it, when begun, as a due Regimen and Me-  
thod of living; which, among the Antients, *Celsius, in Lib.* 3.  
*Cap.* 22. has elegantiy prescribed in the following manner: " A  
" Phthisis is, in the very Beginning, to be attacked by proper  
" Remedies: If the Patient’s Strength admits, along Voyage is  
" to be made, and a Change from a rare, to a more dense. At-  
“ mosphere is highly beneficial; for which Reason it is ex-  
" pedient, phthisical Patients in *Italy* should sail to *Alexan-.  
" dria.* Is any Circumstance forbids Sailing, the Patient is  
" to he removed in a Bed, or some other manner. He must,  
" alfo, abstain from Bufiness, and every other thing which has  
" aTendencyt.o discompose his Mind; he is,farther, to indulge  
“ himself in Sleep; Defiuxions are to be carefully guarded  
" against, lest, perhaps, being somewhat relieved, his Condi-  
" tion should again become worse. For this Reason Crudities,  
" the Influence of the Sun, and the Access of Cold, are to

he prevented. The Mouth and Fauces are to be co-  
" Vered, and the Cough removed by Medicines appropriated CO  
e( that Purpose. In such a State Water is to he drank, **and**

Milk may, alfo, be commodioufly exhibited. "

*Celsius,* in prescribing a dietetic Regimen proper for the Cure  
‘ of a Phthisis, justly and principally recommends Exercise, and  
Choice of Air: Of almost the same Opinion is our justly cele-  
hrated *Sydenham,* who telis us, that he has prevented many  
Phthises, and cured many Phthisical Patients, by prescribing  
Riding. He, also, thinks, that Tis of no small Importance  
whet Air they breathe: " For, says he. Phthisical Patients are  
" much more happily cured in the Country, then in the Town,  
" since the Air os the former purges their Lungs, and contri-  
" butes more to their Recovery, than any other Remedy.'' We  
are more effectually convinced os this, by considering by what  
Causes it principally happens, that in *Holland* and *England* so  
many die of a Phthisis ; and that. In half of these, this Disc  
order is brought on by a Spiting of Blood. For, certainly»  
this is to be ascribed, not only to the gross Aliments, fince  
these Nations use rich Food, eat much Flesh, and Sea-fish .  
with high Sauces, by which is generated a crude Chyle and  
Blood, which, easily stagnating in the Lungs, dispose to a  
Phthisis ; but this is rather principally to he ascribed to the Iin-  
purity of the Air, which is much impregnated with Smoke, by  
which the Bronchial Glands and Membranes, together with the  
minute Capillary Ramifications, os the Pulmonary Artery, are  
dried; by which means a Consumption of the Lungs is, in Pro-  
cess of Time, brought on. The same Misfortune is, also, fre-  
quentiy produced by cold Weather., and Northerly Winds,  
which almost always prove offensive to the Lungs, especially of  
old Persons, and such as are disposed to a Phthisis; so thet a  
considerable Number of Persons are destroy'd by this means.  
But nothing is more prejudicial, than exercising the Body strong-  
ly by Walking or Running against such a Wind ; for by this  
means, I have frequently known Abscesses produced in the  
Lungs both- os Men and Horses. -

Is any Disorder requires not only an accurate dietetic Re-  
gimen, but, also, a cautious and circumspect Use of Medicines,  
'tis certainly a Phthisis, of which there is so great a Contra-  
indication of Remedies, thet, unless they are all duly consider'd,  
the Physician may easily fall into an Error, and, instead of re-  
’ sieving, injure his Patient. Thus, in order to promote Ex-

pectoration, sweet and pinguious pectoral Syrtrps, incrasthting  
Substances, and Preparations of Honey, are requisite; by the  
immoderate Use of which, however, we destroy not only the  
Tone os the Lunsss, but, also, that of the' Stomach ; and by  
that means produce a larger Quantity *of* Crudities, and a greater  
Congestion osHumours in the Breast. The flow, drying, hectic  
Heat requires Diluents, moistening Liquors, and Milk Γ which,'  
however, in a moist Cough, increase the Afflux of the Hu-  
mours to the Breast. The sordid putrid Ulcers require bal-  
samic resinous Medicines, such aS Myrrh, *Penice* Turpentine,  
Balsam os Capivi, *Peruvian* Balsam, and the other consolidating  
and vulnerary Balsams; which, however, by increasing the  
‘intestine Motion and Heat of the Fluids, generally produce bad  
Effecti. .

We find the same Difficulty in those uneasy, and almost con-  
vulsive Commotions of the Breast, which, in long and violent  
Coughs, are excited by the Acrimony os the Humours; for  
these require to be alleviated by Anodynes, Preparations of  
Poppies, oleous and somniferous Substances ; which, however,  
when frequentiy exhibited, surprisingly destroy the Strength:  
The corroded, dissolved, and ulcerated vascular Substance of  
the Lungs requires consolidating and gently astringent Medi-  
cines ; but since they retain in the stabit the extravasated  
Humours, which ought to be eliminated, and suppress Expecto-  
ration, the)', by these means, increase the Corruption: Be-  
sides, is any one intends the Consolidation os Ulcers, he ought  
to prevent the Afflux of the Humours to the Part affected;  
which is obtain'd both by vulnerary Substances, and Decoctions  
of the Woods, and by Powders composed os *Armenian* Bole,  
Sealed Earth, and Blood-stone ; but, when there are Tophs,  
Tubercles, and Indurations of the Lungs, these are enlarged  
by such Medicines. In order to extinguish the hectic Heat,  
nothing is more beneficial and efficacious, than the nitrous Pow-  
ders But even these do not at all times produce the desired  
Effect; fince they readily prove purgative, and lessen the Sy-  
staltic Force of the Stomach and Intestines. Milk is, also, os  
fingularEfficacy in the Cure of these Disorders: Yet, in young  
and phlethoric Habits os Body, where there is a beginning  
Phthisis, and many acid Crudities, accompanied with a stow  
Fever, I have often observed it highly prejudicial.

AS Venesection is highly useful, not only for the Cure of a  
heginning Phthisis, but, also, for preventing it in young Per-  
sons, so it is Very improper, with a curative Intention, when  
the Strength is greatly exhausted by the Disease, and the Heat ;  
unless, perhaps, we should take away an Ounce, or an Ounce  
- and an half,.of Blood, sor the sake of Ventilation. Drastic  
Purgatives, such as Preparations os Aloes, Scammony, and  
Hellebore, but more especially Emetics, are highly prejudicial,  
not only by impairing the Strength, but, also, by carrying off  
the temperate Moisture of the Body : Hence, when the Hu-  
mours are to be derived from the Breast, and gently evacuated  
by Stool, these Ends are most commodiousiy obtain'd by Laxa-  
tives prepared of Manna, Tamarinds, Rhubarb, Agaric, and  
Sena-leaves: But if, when exhibited in a small Dose, these  
should not he sufficient for diminishing the Redundance of Hu-  
mours, or if the gross and Viscid Humours, which obstruct the  
minute Vessels, are to be resolved and eliminated, we may, in-  
stead of these, substitute the Piluhe de Succino Cratonis, or  
Pilis prepared os Gum Ammoniac, Saffron, Mercurius Dulcis,  
Extract of Rhubarb, and Aloes.

Motion and Exercise, and especially Riding, is highly com-  
mended sor the Cure of a Phthisis and Hectic, by the most -  
skilful Physicians, both antient and modern. But in the Be-  
finning os the Disorder, where the Patient is young, and **the**

Iabit plethoric, it often does more Harm than Good, by ex-  
citing a Spitting of Blood. Nor is it expedient, where the  
Lungs .are Violently injured, and a Vomica is suspected, fince,  
by the briik Motion of the Horse or Chariot, a fatal Inflam-  
mation may readily he brought on. But 'tis far otherwise in  
hypochondriac Consumptions, in which moderate and often **re-**peated Exercise is highly beneficial. .

The more temperate, pure, and serene the Ain is, the more  
beneficial it is to Phthisical Patients ; for a moist Intempera-  
ture os the Atmosphere is surprifingly injurious to the Lungs,  
which ate already relaxed, tumid, and insarcted. 'Tis, also,  
highly expedient, to impregnate the Air surrounding the Pa-  
tient, with the balsamic Particles arising from Fumigationsof  
Mastich and Amber ; or to render the Air drawn in balsamic,  
by holding a Piece of the hch Myrrh in the Mouth, till it is  
dissolved by the Saliva.

Since the Beginning of 2 Phthisical Exulceration is frequent-  
ly produced by a saline Catarrh, or a certain acrid caustic Mat-  
ter, convey’d, by Translation, from other Parts to the Lungs,  
in order to derive this Afflux elsewhere, and evacuate the Hu-  
mours, we may safely and advantageoufly use the actual Cau-  
tery; by the Application of which, between the Scapulae, and

in the Neck, we read of an imminent Phthisis happily re-  
moved, in *Rivcrius,* in *Obs. Cent. 2.. Obs. by.* 7S. *Cent.  
Obsc.* 92. and in *Schenkias, Obs.* 56.

In order the more effectually to institute the Cure of a Phthi-  
sis by Milk, either alone, or mixed with mineral Waters, the  
following Cautions are to he observed I

i. We ought diligently to inquire, whether the Strength of  
the Stomach is sufficient to digest, and again expel, this Species  
of Medicine.

2. 'Tis expedient, that, before the Use os the Milk, the  
Primae Viie should be well cleansed from Viscid and acid Hu-  
mours ; which Intention is most effectually answer’d by a laxa-  
five Infusion os Manna, whose Virtue is augmented by the  
Addition os a sufficient Quantity os Tartar.

**3.** On the first Days, it is expedient, every Morning about  
six or seven, and every Afternoon about five o’Clock, to drink  
six or eight Ounces os Womens, or Asses Milk, and after-  
wards gradually to increase the Quantity.

4. Aster the Patient has sor six or eight DayS(drank the  
Milk in this manner, a gently laxative Medicine, and such aS  
has assendency to evacuate the Sordes, is to.heinterposed, and  
repeated every sixth Day.

5. He ought never to use Wine, nor Malt-liquors, sor  
Drink, but rather Ptisans of Barley, Hartshorn, and,Citron-  
peel. He must, also, carefully abstain from Aliments of hard  
Digestion, and such as generate bad Juices. On the contrary.  
Broths prepared of Tortoises, Cray-fish, Veal, Fowls, Let-  
tuce, and Garden Succory, are of singular Service.

6. In order to augment the concoctive Force os the Stomach,  
which in a Phthisis is Very languid, 'tis expedient, between  
Meals, to exhibit some balsamic, pectoral, and stomachic Elixir,  
such as that made of the best Myrrh, Saffron, Nutmegs,  
Orange-peel, Marsh-trefoil, and Liquorice-root.

In those excessive and colliquative Sweats, which, in phthisi-  
cal and hectic Disorders, exhaust the Strength, hesides Whey  
and Emulsions, the Species de Hyacintho, mixed with a small  
Quantity of Nitre, and half a Grain of Laudanum Opiatum  
sor a Dose, afford singular Relief. But, if, in consequence of  
the Violence of the Cough, by which the Mass of Blood and  
Humours is greatly exagitated, an excessive Profusion os Sweat  
should he produced, a gentle and corrected Opiate, such as  
the Piluhe de Styrace, or the Pilulae Wildegansii, may be com-  
modioufly exhibited with some temperating Powder, fince, by  
removing the Cough, it checks and lessens the Sweats. But,  
if, besides the Cough, a colliquative Heat of the Blood should,  
also, prove the Cause of the Sweat, *Morton* and *Pitcairn*are not afraid to prescribe the *Peruvian* Bark, with one Grain  
of Laudanum Opiatum. *Hoffman.*

If an Ulcer has so corroded the Substance os the Lungs, that  
the whole Habit of the Body is by that means wasted and con-  
fumed, the Patient is said to labour under a Pulmonary Phthisis,  
or Consumption of the Lungs.

The Origin of such an Ulcer may be deduced from any  
Cause capable of so stopping and detaining the Blood iu the  
Lungs, that it must necessarily degenerate into a purulent Mat-  
ter. - . .

These Causes may be reduced,

I. To that Very Habit and Temperament of Body, sh con-  
sequence of which, the Patients first begin to spit Blond, and  
are afterwards afflicted with an Erosion and Exulceration os the  
Lungs. This Habit or Temperament of Body consists, first,  
in the Tenderness of the arterial Vessels, and **the** impulse of  
the Blood, when in any Degree acrimonious. Such a Consti-  
tution is known by the Sight of the small and tender Vessels, .  
and of the whole Body; by the Length of the Neck; a stat  
and narrow Thorax; depressed Scapulae; an highly red, thin,  
dissolved, acrid, and hot Blond; a Very white, and sometimes  
**a** rosy blooming Complexion ; a bright and shining Skin, Chear-  
fulness of Temper, and an early Ripeness and Subtilty of Ge-/  
nius. Secondly, in such a Weakness os the Viscera, as to oc-  
casion those Aliments, which are in their own Nature too  
tenacious to create Obstructions, Putrefactions, and Acrimony ;  
and in consequence os these unhappy Circumstances, to exul-  
cerate the corroded Vessels aster a previous Spitting os Blood.  
This Weakness of the Veffeis is known by a flight Fever, **a**dry and gentle Cough, a preternatural Heat, an increased Red-  
ness os the Lips, Fauces, and Cheeks; appearing about the  
time the new Chyle enters the Mass os Blood ; by a Propen-  
sity to Sweat, during Sleep s by a Weakness and great Diffi-  
culty of Breathing upon the smallest Motion. Thirdly, it ap-  
pears at that Age, when the Veffeis, having acquired their full  
Growth, resist the farther Efforts *of* the Fluids to lengthen  
them, whilst the Blood, in the mean time, is increased in (Quran-  
tity, Acrimony, and Impetus; so that it appears between the  
sixteenth and thirty-sixth Year of the Patient'S Age, and  
earlier in Giris than in Boys ; hecause the former sooner arrive

at their full Growth, than the latter. Fourthly, in an hereditary  
Disposition to the Disorder: Whet is said under the Article  
FiBRA, compared with the Circumstances just now mentioned,  
are sufficient to explain, ascertain, and prognosticate the Nature,  
Causes, and Effects of Blood-spitting. Now, this Effect, or  
a Spitting of Blood, is brought on, and accelerated,

**I.** By an Interception os the usual Evacuations, especially of  
Blood, such as the Haemorrhoids, Menses, or Lochia; a Sup-  
pression of Haemorrhages of the Nose, and Neglect os usual  
Venesection, especially in plethoric Habits, and those who have  
lost any os their Limbs.

2. By any greatV iolence or Force apply'd to the Lungs in Cough-  
ing. Crying, Singing, Running, violent efforts os the Body, An-  
ger, or any Wound inflicted, hy whatever Cause or Instrument.

3. By acrid, saline, or aromatic Aliments ; by Drink os the  
like Qualities; by a particular Manner of living, or by any  
other Disease, which have a Tendency to increase the Quantity,  
Acrimony, Velocity, Rarefaction, and Heat Os the Blood.  
Hence it is, that this Symptom happens so frequentiy aster acute  
Fevers, the Plague, the Small-pox, and Scurvy.

Hence it arises accompanied with a flight Pain, a mode-  
rate Heat, a Difficulty of Breathing, and an Oppression of the  
Thorax. The Blood discharged from the Lungs is generally  
florid, scarlet-coloured, and frothy, full of small Fibres, Mem-  
branes, arterial. Venous, or bronchial Vesseis ; a Cough, a Noise,  
or Rattling of the Lungs, a soft, small, and undulating Pulse,  
a Difficulty of Breathing, and a saltish Taste in the Mouth,  
having preceded.

It is cured, first, by liberal Venesection, repeated every third  
Day, for four times, till the inflammatory Crust entirely dis-  
appears. Secondly, by refrigerating, inspissating, styptic, and  
lenient Medicines, long persisted in, and sometimes intermixed  
with very mild Balsamics. Thirdly, by managing the six Non-  
naturals in such a manner, aS that" they may he contrary to the  
Causes os the Disorder already enumerated; and especially by  
**a** moderate Regimen, and mild Aliments, continually persisted  
in, to- which a Milk-diet peculiarly belongs. And, fourthly,  
by correcting the specific Nature of the Cause, or particular  
Disease, which has produced it.

When a Spitting os Blood has happen'd, and is removed, the  
Patient is to have Blood taken from him every six Months sor  
some succeeding Years; but the Quantity is to be gradually  
lessen'd each time, that at last the Practice may be left off,  
without any Detriment.

Bus, if, in consequence os the Violence of the Disorder, the  
preposterous Use of Styptics, or a Neglect of the Method os  
Cure already prescribed, there should, aster the Spitting of  
Blood, arise a continually increasing Difficulty of Breathing, a  
wandering Horror, an Heat and Redness of the Cheeks, a dry  
and gentie Cough, a flight hectic Fever, a preternatural Thirst,  
a Weakness and Sense os Weight in the Thorax; these Sym-  
ptoms import, that the Wound from which the Blood was ex-  
pectorated, has already begun to change the Matter collected  
about its Lips, and under the Crust of dried Blond, into Pus;  
and this Collection is degenerating into a conceal'd Vomica,  
which, breaking, terminates in an open Ulcer of the Lungs.

This Collection of Matter, besides the Causes already men-  
tinned, also, arises from any Peripneumony terminating in an  
Apostem; which may be known from the Signs specified under  
the Article **PERIPNEUMONIA.**

Besides, an Empyema may corrode, waste, and consume the  
Lungs 4. in which Case, the same Disease is produced with that  
occasioned by an Ulcer primarily formed in their Substance.  
This is known to be the Case by the Signs specified under **the**Article **EMPYEMA.**

Hence 'tis obvious, what Signs discover an Ulcer of the  
Lungs, even os the conceal’d Kind; how many Causes and  
Sorts there are os such Ulcers ; and consequently, how many  
different Kinds os Phthises, or Consumptions, there may be.

Now the Effects of an Ulcer of the Lungs already formed,  
but concealed, and commonly called a *Vomica,* are generally  
- these followingThe Acrimony, Quantity, and Putrefaction  
of the Pus, are dally increased; the Membrane containing it  
is dilated, corroded, and macerated ; the Blood-Vessels, and  
those of the Bronchia, ate converted into Pus; the whole Sub-  
. stance of the Lungs, or at leash of one os their Lobes, is con-  
verted into a purulent Matter ; the Patient is afflicted with a  
continual dry Cough, or such an one as, only by the Concussion  
in Coughing,' produces an Abrasion and Expectoration of **the**Spit; the Blood convey’d into the Ulcer, is converted into  
- PuS; the Vomica in the Lungs spreads, and is propagated ;  
then it breaks at last into the Ducts of the Larynx. Some-  
times there is a suffocating Secretion, and sometimes a daily  
and copious expectoration, accompanied with a Cough of a  
Pus, which subsides in Water, is os a thick Consistence,  
sweet, pinguious, fetid, white, red, yellow, livid, cineritious,  
full of Strigrnents, and which, when put upon a live Coal,

smells like stale roasted Flesh. Then **the** Vomica **hrealon into**the Cavity of the Thorax. Hence the Respiration becomes  
highly difficult, and the Symptoms of an Empyema appear.  
Then the Respiration is most difficult ; the whole Blood and  
Chyle are converted into Pus ; the Preparation' of **the** nu\*  
tritive Juice is totally destroy'd ; the Solids are almost totally  
consumed ; there is an hectic Fever, accompanied with a small  
and languid Pulse; an intense Heat of the superior Parts ; an  
Hippocratic Face, and a Rednefs of the Cheeks. There is an  
unaccountable Uneasiness, especially towards the Evening, **a.**preternaturalThirst, profuse Sweats **in the** Night, red Pustules  
on the Face, Neck, and Breast, cedematous Swellings of **the**Hands and Feet, great Weakness, Hoarseness of the Voice, **a**Falling of the Hairs, an Itching all over the Body, accompa-  
nied with watery Pustules, a Griping, a frequent and weakening  
Diarrhoea, the Stools discharged in which are yellow, fetid,.  
purulent, and cadaverous; a Suppression os the Spit, and at  
last. Death.

Hence we may draw the following Rules t

I. An hereditary Phthisis is the worst of ail, and not to he  
cured, but by preventing a Spitting of Blood.

2. A Phthisis, arising from a Spitting os Blood, produced by  
external Causes, without any previous inward Defect, is, of **all**others, the mildest, if all other Circumstances are alike.

3. A Phthisis, in which the Vomica is suddenly broken, and  
the expectorated Pus white, well concocted, smooth, and in  
Quantity corresponding to the Largeness of the Ulcer, with-  
out Thirst, but with a good Appetite, due Digestion, laudable  
Secretion and Excretion, is curable, though with Difficulty.

4. A Phthisis, produced by an Empyema, is incurable ;  
And, -

5. A Phthisis, accompanied with an Expectoration os heavy,  
solid, fetid, sweet Spit, together with the Symptoms last enu--'  
umerated, is to he despaired of.

When a Vomica is already formed in the Lungs, the Inten\*  
fion of the Physician ought to he, to maturate and break it  
with all Expedition; which is done by a Milk-diet, Riding on  
Horseback, tepid Steams, and expectorating Medicines: And,  
when it is broken, it-is requisite,

i. To guard and defend the Blond against the purulent Con-  
tagion.

2. AsToon as possible, to evacuate thePusfrom the Ulcer, **and**to cleanse and consolidate its Lips. And, .

3. To use such Aliments as are of easy Digestion, that they  
may not only pass through, but, also, be changed and duty  
assimilated by the remaining Force os the Lungs. They ought,  
nevertheless, to be capable of nourishing the Body, and unfit  
for generating new Pus.

The first of these Intentions is answer’d by mild and grate-  
ful acid and saline Medicines, Vuinerary Herbs, and mild  
Balsamics exhibited in all Forms, in large Doses, and long per-  
\_ fisted in.

The second intention is answered by liquid and diuretic  
Medicines ; together with such as promote Coughing, whether  
internal or external; by Exercise, Riding, and the Country Air,  
which expel the PuS; by Abstergents, and Balsamics, both in-  
ternal and external, winch depurate; and, lastly, by consolida.»  
tory Paregorics. And,

The thud intention is answer’d by Ptisans, Broths, and a  
Milk-diet.

The palliative Cure of a Phthisis principally regards **the**Cough, the Oppressions, and the Flux: And

These Symptoms are remov'd by a proper Regimen, **Opiates**cautioufly exhibited, and proper warm Liquors.

As a Phthisis is most generally produced by an Ulcer Of the  
Lungs, *so* it may sometimes arise from an Ulcer of some of  
the other Viscera, such as the Liver, Spleen, Pancreas, Me-  
sentery, Kidneys, Uterus, and Bladder; the Knowledge,  
Prognostics, Effects, total and palliative Cures of which may  
easily be deduced from what has been said, by the Physician  
who knows the natural Effects of each particular Dowel,  
*Boerhaav. Institut.*

The following Observations of Dr. *Bennet,* relative to the  
Subject Of this Article, are of Importance sufficient to **deserve**Notice.

Omitting all Consideration of that Moisture, which, when  
it superabounds in the Stomach, by the Assistance of the Oeso-  
phagus, and the Membrane common to that and the Tongue,  
stows into the Mouth without Coughing or Hanking; aS, also,  
that Rheum which ouses out of the capillary Arteries, and their  
Coats, from the Brain upon the Palate, and ejected with the  
same Ease, the Nature of that Expectoration is to be examined,  
which proves injurious to the Breast. This is nothing else **than**a Portion of Fluid derived from the Blond by Suffusion into  
the Cavity of the Thorax through the pectoral Arteries, **and**thrown up through the Trachea into the Mouth, in order to its  
final ejectment, by the contractile Motion of the Lungs, either

in Coughing or Hanking. .AS the Blood, therefore, is consti-  
tuted in Conformity to its Aliment, *so* the Matter of this  
Excretion is as the Blood, from which it is derived. The  
Truth os this will appear, upon considering the Manner os this  
Excretion, and rhe Largeness of its Quantity, in those who are  
not troubled with a Defiuxion from the Brain upon the  
Trachea.

Whoever shall use proper Medicines sor purifying the  
Blood, although Pectorals be omitted, yet the Matter expecto-  
rated will become hetter, in proportion to the Rectification of  
the Mass of Blood. - Thus, when the State and Colour of the  
Matter is bad, if such Sweats he promoted; as serve to clear  
the-Blood from its Impurities, the Matter brought upwill mend,  
in Conformity to the Blood's Depuration..

That the Pulmonary Artery, with its Ramifications, receives  
the Recrements of the Blood, and thence detaches them into  
the .BrancheSos the Windpipe, is a matter heyond all Dispute:  
Some are more, and some less, affected with this Lodgment,-  
according to its Nature and Quantity; and sooner or later dis-  
charge it by Expectoration\*; according to the Circumstances  
os its Adhesion. . Every body has not the same Freedom in  
the Organs of Breathing: Some are fatigued with a severe  
Cough, without any Expectoration ; whilst others, with a flight  
Hauking or Coughing, discharge the irritating Matter. Some  
have it *so* much -diluted -with *Ichor* or *Scrum,* that the Lungs  
endeavour in-vain to bring - it up; others have the Defluxion  
so hardened into Clots, that it yields with great Difficulty.  
Some, through a cold Laxity os the Breast, can evacuate but  
littleMatter; while others, os a firmer and warmer Constitu-  
tion -in the-same Parts,-discharge it with littie Uneasiness.  
Some, by the Freedom os the Motion os the Lungs, when they  
do not'adhere to the adjacent Parts, easily expel the Matter,  
while others,-either- through Plenitude or Constriction, natural  
or adventitious, have such a Diflodgment either retarded, or  
rendered intpactidable.\*

- In Expectoration, the' Matter that settles about the upper  
Parts -os the Trachea; is evacuated with little Labour of  
Hawking and-Coughing ; but what is deeply situated is with  
great Difficulty expelled.

- Matter of a moderate. Consistence is easily expectorated ;.hut  
when it is too thin, or formed into hard Clots, it is not dis-  
lodged'.without great Trouble and Difficulty. . . ι - . .

Nature then carefully consults her own Security, when the  
Matter, inPhthifical Patients of a more healthy Constitution, is  
supplied from .the Blood, and when rhe Times os Formation  
and Expulsion are determined. -For, when crude, it cannot he  
naturally or. spontaneoufly discharged ; but it is prepared for  
Evacuation, when it comes to Maturity, and is, as it were,shaped  
Io the Capacity of the Vessels, Through winch it is to pass.  
Those who are accustomed to this sort-Of Expectoration, are  
under, the salutary Directions of Nature, to which the Means  
are to be accommodated ; but is the Matter be interrupted in  
its Course, fo that -it\*, does not proceed according to the Inch-  
nations of'Nature, it occasions a Necessity for more vigorous  
Efforts. The Treatment, therefore, of inch Patients is a Mat-  
ter of great'Importance.

Whoever attempts to hasten Expectoration by violent Exer-  
cise, or any voluntary Anticipations os Hawkings, extremely  
satigues the Contents of the Thorax j when Nature at her  
appointed Time would easily have relieved them. Those who  
expectoratothe Rheum freely and dopioufly,Will soon find them-  
selves eased of the Burden upon the Lungs. On the contrary,  
at the .Beginning-of a Cough, every thing is difficult and  
fatiguing ; het in' its Progress, a, the Matter ripens, every  
thing becomes easier.

In my Opinion, the white frothy Spit is produced by a  
thin sort of Rheum, oused out into the Lungs or Fauces,  
and there agitated.' For a Defluxion, proceeding from a Cold-  
ness of the Brain, is thicker, and, unless it he retained and  
agitated some time in the Mouth, is not so white, is more  
mucous,, and froths not up so much into Bubbles; whence  
it seldom or never hurts the Lungs; but, if it froths, I he-  
sieve it proceeds from some Motion of the Parts, from Heat,  
and a Mixture of Air. Besides, - *if* this Matter rises unmixed,  
it indicates no more, than that there is some internal Exsuda-  
tion, occasioned bv a more vigorous Action of the PartS than  
usual:

A frothy Spittie is increased by Exercise, in those especially  
who perspire het littie. and that the Motion os the Mouth  
and Lungs conduces to it, is manifest, because it always hap-  
pens to thosewho cough or talk much.

This Spittie is very light, consisting principally of a watery  
Pellicle instated with Ain

Nature has given the fame Laws to Plants, and to Animals ;  
and, according to *Hippocrates,* implanted in both what is sour,  
bitter, sweet, salt, and os all Tastes. Nor does the Micro-  
cosm .want its Insipid Fluids, a moderate Proportion of which

is necessary to dilute the Blood ; but, if a Superfluity he con-  
rained in the Vessels, it loads the -Constitution, ar does rhisr  
which is extravasated, if it collects upon particular Pans,  
especially the Organs of Respiration. Bur at present it is of no  
great importance, whether fuch insipid Humidities collect in  
their proper Veffeis, or are thrown upon them after the Dis-  
charge of their proper Offices, so that they have heen circu-  
lated with the Blood, and are sound inspissated upon Protrusion  
into the large Cavities of the Body. The Excretions, however,  
which consist os a mild Humour, are more troublesome then  
dangerous; but those .which do not readily pass into the  
Trachea, in a liquid Consistence, harden into a thick Viscid  
Consistence, and are expectorated with great Difficulty.

A Lady of forty-seven Years of Age, fleshy, but valet Udi-  
nary, who had all the Capillaries in the Liver, Spleen, and  
Mesentery, obstructed, was frequently affected with unequal  
Shiverings, attended with a Coldness, in one or other of the  
Parts, which seemed to her to resemble the pouring on os  
cold Water; winch Symptoms, notwithstanding our endea-  
Vours, continued ; but when a Ptyalism, or Diarrhoea, arose, it  
then ceased. At last, aster the exhibition os some Cathartics,  
by sweating in dry Baths, and a sparing dry Diet, she was quite  
cured.

In many Persons, a thin Lymph arising srom the Blood is  
at first copiouhy discharged upon the Trachea, upon which  
the Coldness will disappear ; but the Spit will then grow thick,  
pellucid, and be evacuated with violent Reaching. With this  
Matter we have often observed the Breast to ne extremely-  
obstructed.’ - .

Pleuritic Patients, after the purulent Matter has heen ex-  
pectorated, cast up Spit of this kind for some Days; and the  
more the other Vessels are affected with is, the less will the  
Organs os Respiration be obstructed by it ; and not at all, when  
it is tranilated upon the Bowels. I am of Opinion, that  
this Mucus, being unequally supplied from the Blood, serves in  
the place of Nourishment to those who have the Rickets j  
and I take it for granted, that the same, stagnating in the Ure-  
ters, and hindering the Passage of Urine, regurgitates into the  
Stomach and Bowels, and occasions Pains of the Back, Vo-  
miting. Gripes, and a bastard Ischury. It is sometimes *to he*observed, that the like Viscosity hinders the Circulation of the  
Blood, by lodging in the greater Veffeis. An Instance of this  
I once met with in a Child, who was taken off in the third  
Fit, it having obstructed the Pulmonary Artery, or that winch  
is called the ArteriaVenosa. Lastly, if these thick Rheums are un-  
equally deposited upon some of the extreme PartS, they gene-  
rate cedematous Swellings; but if upon the whole Habit, an  
universal *Oedema* or a *Leucophlegmatia,* and an *Anasarca,* Very  
difficult to be cured.

This Mucofity, which is the Cause of obstinate Obftru-.  
ctions in the Bowels, increases in the Female Sex, or in Men of  
a cold Temperature ; and even in a State of Recovery, where  
the natural Heat is defective, or is wasted, and .grown languid,  
by the long Continuance of any Disease.

**' OF YELLOW coLoURED SPIT.**

Yellow Spit is probably derived from the bilious Juice, the  
Blood heing so weakened before Secretion, that it is, at least,  
deprived ot its Taste. Salts make Ulcers by erosion, so putret  
fring Bodies by penetrating, inciting, and railing the Parts into a  
Tumor; but I have always been os Opinion, that saline Serosi-  
ties prepare the way for Putrefaction, by too much relaxing  
and softening the Parts, but both together make an internal  
compound Ulcer, which cannot be cured without great Diffi-  
culty. It is not surprising, that a Fluid, otherwise thin, clear, and  
agreeable, while it flows in the Biood-VesselS, should be chang-  
ed into a yellow Colourj for, aS the Blond, at its Source, and be-  
fore it is distributed into its proper Vessels,st destitute os Tincture  
and Consistence, so the Spit, which is its Recrement, is changed  
by the Alteration Of Heat in the Parts thro’ which it pastes, and  
retains no distinguishing Quality that it possessed, whilst it was  
carried about in the Circulation. It is still less surprising, that  
yellow Spit should lose its Taste, when it has not only be-n  
blended with the whole Mass of Blond, but strained, also, thro'  
the fleshy Substances of the PartS, and the Pores of the Mem-  
branes; for that Substance in which its Bitterness consists, may  
nor be able to penetrare through such fine Strainers

The whole Mass of Blood is impregnated with Bile, Or hitter  
Particles, which serve to preserve in However, no Part os that.  
Or Of any other Fluid os the Body, is so affected with Bitter-  
ness, as to communicate, by the Tongue and Palare, any con-  
siderable Sensation to the Nerves, except that Part secreted  
from the common Mass, which is of a remarkable bitter Taste,  
and is discharged in extreme Vomitings, when it is drained from  
its natural and appointed Receptacle.

In Phlebotomy, when the Blood happens to full upon the  
Skin, it Commonly seels hot, and yet the Heat Of this Blood

whilst tn the Vessels, might, aS far as could he Conjectured, he  
moderate and benign.

Once,\_ in a dissected Subject, I saw the Neck of the Gall-  
bladder filled with Tophe; hut the Bladder itself was filled  
with a pellucid Lymph, strained through those TOphs, aS through  
'.a Filtre Os a thtck Contexture. These TophS resembled candied  
Coriander-seeds; but the Lymph was insipid, and coagulated  
upon the Fire into a Mucilage like the White of an Egg.

These yellow Excretions are not produced, except by a  
continued lncalescence Of rhe Blood, or by an Heat concentrated  
' by Cold, or from a Corruption or Redundance; which different  
Causes may be known by physicians from the Nature Of the  
Complaints Of the Patient.'

That some Portion of this yellow Humour penetrates through  
the Skin under the Arm-pits in sweating, appears from the  
Linen.

The consistent fleshy Substance of none Of the Viscera could  
give the Blood its red Colour, without the Assistance Of a pro-  
per Heat; but the Spit Owes Its Substance, and Variations of  
Colour, to the Blood, and Juices of the Viscera, and also, to the  
Aliments. The most remarkable Sorts of Spit, that frequently  
'Occur, are the bluish, the rust-coloured, and blackish; which,  
are not, as many imagine, produced by what is drawn in with  
the Breath, either.by the Nostrils Or Mouth,, but from a Taint  
lodged in the Viscera and Vessels, and formed, perhaps, in the  
Spleen, its principal and peculiar Laboratory: This Taint, being  
'received into the Blood, is expelled in the Course Of Circula-  
tion. But I do not imagine, that it receives its deep Colour  
' immediately, aS it is discharged from the Vessels; but aS it must  
distil from the suscipient Viscera and Vessels, where it con-  
dentes, there it Is endowed with its dark Tincture. 'However  
the Degrees of Hear, in themselves, are not the effectual Cause  
of the different Colours; yet, where they increase or diminish,  
The Spit is more or less coloured. But for these Diversities  
‘which I have enumerated, an Heat more gentle, but os longer  
Continuance, is.requisite.

-' Expose to the intense Heat of the Sun, Or Of a culinary Fine,  
^ Portion Of bluish Spit, and it will immediately change to **a**white Colour; which would not happen,' if the bluish Colour  
proceeded from any Mixtum Of extraneous Partioies, drawn in  
with the Breath. This bluish kind of Spit has, I believe, never  
heen observed to -he of A thfn Consistence, but always mucila-  
ginons. ‘ -

i This Species Of Expectoration is increased by exhibiting  
things that cool the Breast, as Barley and Apples; butts lessened  
hy the Use Of sudorific Or mercurial Medicines. Those, also,  
spit bus little, whose natural Heat has been much exhausted by  
.long Sicknessὁ those whoare accustomed to flender Diets, Exer-  
**else,** and Fasting ; these-who have the Breast of an hot Tempe-  
rature, or who are much used to Smoaking; and those who  
**are** agitated with frequent Coughing. Whence it appears, that  
the Matter Of this, sort Of Expectoration is formed by a more  
gentle Heat, and longer Concoction, and by a Breast Of a cold  
flaccid Temperature.

I remember an Instance of this kind, in a middle-aged Wo-  
man,^nder a Violent .Catarrh, whose Spleen so filled the Head  
with noxious Vapours, that every Morning, she discharged a  
**vast** Quantity Of a Rust-coloured Spit, which resembled **the**Threads Of a Cobweb 5 a Portion of which was sometimes  
diverted, by the hot Catarrh, into the upper Part Or the Aspera  
Aneria , but, upon opening and deterging the Vessels of the  
Spleen, both the Catarrh and Excretion ceased.

If .the White of an Egg he long, though gently, kept warm,  
it will change its white into a bluish Colour.

At the End os a Fit Of accidental Coughing, from Con-  
gestion, Or of a thick periodical Expectoration, l have Observed  
this sort of Spit to rise more white and depurated; and I have  
observed, that such Kinds generally proceed from Disorders of  
the Spleen Or Womb , mor does the Mucus Of the Nose he-  
eome discoloured from any Other Cause.

Though a salt Spit is produced by a salt Blood, and may  
give some Commotion to the Humours, yet I imagine, that it  
seldom bursts the Membranes and Coats Of the Vessels by its  
incisive Quality; but, aster the Blood has strained out its saline  
Serum,, like a Dew, through the-Membranes and Coats of the  
Breasts it occasions **a** Cough, by stimulating the contractive  
Motion of the Lungs. By this sudden Concussion and Con-  
traction, the tender Parts, through which the saline Particles of  
the Blood are conveyed, being rendered weaker, are soon cor-  
roded. So that the saline Particle, lodged upon any of the  
Viscera, does not immediately, like a Needle, penetrate the  
Part itself; but, by remaining long upon it, it dissolves its Tex-  
ture, and assimilates it to its Own Nature; so that this Effect  
rather proceeds from a Power Of Solution, than of incision;  
for, by insinuating into the Very Substance Of the Parr, it is  
mixed and united with its most intimate Combinations, and  
so changes its Substance into a kind os middle State between  
Mixture and Dissolution : When it has continued in this neutral  
Stale some time, ir, at last, diffolveS, and is, hy an induc'd

Friability, entirely destroyed. Thus, if a saline Fluid he eE'rava-  
sared, perhaps, like a Vapour, and deposhed upon a particular  
Part, by its penetrating Acrimony, it intimately unites wish rhe  
Substance or the Part, and endangers its Corrosion and Dissolu-  
tion. And if the acid and saline Particles should even, be de-  
posited on the extreme Parts, great Trouble and Danger are Oc-  
Casioned to the Patient.

'Many whose pectoral Vessels have been burst by a turgescent  
Blood, perhaps of a saline Nature, have heen cured bv  
using Phlebotomy Once or twice, bur *I have known none whose  
Lungs* have been corroded, that could be recovered without  
an entire Edalcoration and Change of the Mass Of Blood.

Some have been affected with Luxations Of the Vertebrae, by  
an acrid Defluinon upon the Spine; and I have, also, seen the  
joints os other Bones distorted by the same .Means. But is the  
Qualities Os the Fluxion are en irely offensive to Nature, aS in  
the Venereal Diseaie, Protuberances will' be raised on rhe Bones,  
especially the Tibia ; and they will be entirely render’d friable,  
spongious, and soft. Ths same Case happens in the Elephanti-  
asis. And, if we may believe some, rhe BoneS **ate** so diflolved,  
as to become flexible, like Wax.

I have seen many almost entirely emaciated, whose whole Mass  
Of Blood abounded with Salt ; and who used, periodically, to  
expectorate a briny Matter, discharged into rhe Breast from the  
pulmonary Veins, which, however, has not corroded the Lungs..  
Among these, I knew a. Merchant *Css Condon* almost reduced  
to a Skeleton, in whom the saline iMatter was tranflited from  
the Lungs into the Palms of the Hands, Feet, and Ancles,  
where it produced most malignant connoting Ulcers, whilst the  
Lungs continued entire.

I have, more than once, seen the Constituent Substance Of the  
Lungs so uniformly dissolved, that they seem'd reduced into **a**kind of putrid Mud. ' -

I have, also, met\* with Patients, whose Lungs have been toni  
away in pieces, by a sharp and unequal Corrosion; and ap-  
peal, upon D.ssection, as if they had been gnaw’d by a Rat.  
A redundant Acrimony of the Blood, which is frequent in me-  
lancholic Habits, nor only Decisions a general Tenderness, but  
exposes the Parts to suffer by exbrru.l injuries, and destroy, the  
Nourishment Of the muscular Flesh. And the Rheumatism,  
which is nearly related to the Gout, both in its Causes and Seas,  
produce Very intense Pains.'

The consta ruent Ma'ter os all Spit is different, and assumes Va-  
rious Appearances, according to the Part from which it derives  
its Source, for the Serum ofthe Blood is not the only Matter  
which is tranflated into the Cavity of the Thorax, but, sometimes,  
that dewy Substance, which is destined tor Adhesion and Nou-  
rishment, rise, into the Mouth. The Blond is first deprived of  
its thin Serum, and thereby becomes heated ; and rhe Increase of.  
this Heat throws its more glutinous Parts upon the Lungs, which  
have been already relax'd and weaken'd by the Transtation of wa-  
tery Humours and Patients, in this Situation, are, I think, in  
the greatest Danger. .For.Nature greedily embraces this Juice,'  
till her attractive and assimilating Qualities are entirely lost.

When I practised at *Bristol,* where Consumptions are Very see-  
quent, I met with some who easily expectorated a pweetsspit for  
three Months together, and were totally wasted and enervated:  
Some of these were seized with a violent Cough and, having en-  
tirely lost their Vital Moisture,’ they expired, pals, dry, and en-  
firely emaciated. In one Instance Of this Kind, who, for our  
Information, was open'd, and who, sometimes, expectorated  
Blood aster the saline Excretions Of Spit, the Lungs had entirely  
lost their Tone ; and yet the other Organs of Respiration, and  
all the Viscera, were sound to Appearance. Nor is this sur-  
prising to those who know how unfit Blond, that is too much at-  
tenuated, is for Nutrition ; or who have observed too much, col-  
liquated and rarefied by intense Heat, flow through the capfl-  
lary Arteries, particularly Of the Nose, and produce Fainting.  
For it is inevitable Destruction to the animal Oeconomy to  
deprive it of that conremperating glutinous Juice, which, by a  
moderate Warmth, gives a due Smoothness and Consistence to  
the whole Mass.

This sweet Spit, in all the Patients that I remem her to have  
seen, happens after a tedious and generally saline Ptyalism.

This Spit, put upon the Fire, becomes os the Consistence of  
awhite Geliy, like Other nutritious Juices.

**Of** all sorts Of Spit, the most Vapid and feculent is of **a**Cineritious dirty Colour, like moist Clay, which is, also, the least  
adhesive,' that is excreted by consumptive Persons, and is **a**Symptom Of the Detect of natural Heat, and of the Approach  
os Death. All the other Sorts are, in some measure, affected  
by Warmth, and from it derive their Figures and Consistences;  
this only stagnating in its Lodgments, can scarcely be ex-  
pectorated unless forced up by the Greatness os its Quantity; it  
is produc'd by extreme Corruption, and natural Decay.

Is you fill two Acom Cups, of equal Bigness and' Weigher-  
One with the dirty Spit, and the other with any other Specjcs,  
the dirty Spit will weigh down the other, as it is heavier than  
any of the other Sorts. ' .

This Clay-like Spit happens only to those who are hastening  
- to their latter End, and are out" of all Hopes r Their Lungs, upon  
. Dssection, have been found only a Mass of stinking Corruption.

*Bennet. Theat. Tabid.*

**OBSERVATIONS RELATING TO THE DIAGNOSTIC SIGNS.**

The Approach Of this Distemper may be discovered, when  
. rhe saline Blood is carried towards the Breast with a flower Or  
quicker Motion.

Its flower Affiux is discernible,

i. By bloody and saline Spittings, at stated Periods, about  
four, five. Or six, in the Morning, or Afternoon, sooner or  
later, and more or less, according to the Irritations they occa-  
sion, or aS they are determined by the Exercise os the Body.  
That which is inspissated out Os the Vessels, is not excreted  
at the accustomed Periods, because they abound in the Body  
at those Times, as is the common Opinion os Physicians, but.  
hecause, in some measure, it transpires through the Skin, while  
the thicker Parts are deriv'd to the larger Vesseis.

2. By more frequent Spitting and Hauking.

3. By an Interception Of the cutaneous and Other Excre-  
.tions.

4. By Spit of a light unequal Substance.

5. By globular Spit convolved like Hail-stones, and expct'd  
at the above-mention d Hours,, by sudden Coughing Or Hawk-  
ing.

*6.* The Truth of these Symptoms is confirmed, when, from  
any Carse, there happens a Defluxion of a saline Matter upon  
the Joints Or Extremities of the Body, and the Breath in that  
time gets Strength.

More Violent and copious Affluxes are known,

.. I. By a more plentiful expectoration Of frothy Blood Of **a**- Gay-colour, with Hanking and Coughing less painful,if from  
the Lungs, but Of a blackish or redish Colour, if from the  
Cavity of the Thorax, if from the great Arteries, it is attended  
with regurgitating Repletions Of the Mouth at Intervals; but  
gradually, and with a Sense Of Titillation, is from the Fibres.

. a. By an heavy Pain in the Breast, which is periodically pun-  
gent.

3. By a periodical Difficulty of Breathing.

4 By a manifest Relies of the other Parts.

The Signs Os a Phthisis from a thick and Cold Phlegm,  
falling from the Head, and collecting in the Breast, is apparent,  
when the like Matter being secreted, in some manner, at the  
Extremities Of the Carotid Arteries, and Contaminated by a Cold  
Brain, makes its Way into rhe Aspera Arteria, which is always  
accompanied with the Discharge Of a similar Matter into the  
Thorax from the common Vesseis; Of which a distinguishing  
Symptom is an Erection or Opening of the Larynx, with its  
alternate Closure, Or falling again, and causing a Sound like the  
Ticking of a Watch beating Seconds, to which daily are joined  
the following Symptoms.

I. A Torpor of the Spirits.

2. An Heaviness Of the Head, with Pain, increasing periodi-  
Caliy at the full Moon.

3. Longer Sleeps, with Dreams Of Drowning.

4. A general Coldness os Temperature

5. The Pores Contracted with Cold.

. 6. A Flaccid by Of the Lungs, and all the pectoral Muscles,  
and a flow Expectoration, which is known by a frequent En-  
deayour to hauk up something in Vain

*η.* A thicker Spit, which is easily evacuated after a good  
Meal, when the Breast has heen warmed with suitable Food.

8. An heavy and oppressive Pain of the Breast.

9. A Cough which, at intervals, threatens Suffocation, and is  
aggravated by Exercise, and drinking Cold Liquors.

Io. A frequent Difficulty Of breathing.

II. A Catarrh stowly, but Continually, moistening the Aspera  
Arteria-

li. Difficult Expectoration in a cold Air, but a Readiness  
to sweat.

I3. The Flesh becomes flaccid and soft in a moist State Of the  
Air, and hardens in dry Weather, which is a Symptom that  
almost always attends a consumptive Patient. Whence,

**I4** A Disposition tO he affected with every Inclemency Of  
Air or Wind; the moist. Or Cold, being most injurious.

The Signs of a Phthisical Consumption, from what Source  
soever derived, but deeply rooted, and eluding all the Art Of  
Medicine, with regard to a perfect Cure, are,

I. Α severe Cough, the Violence Of which streaks the Spit  
wish Blood; then a nasty Pus Of a ciueritious Colour, which,  
put into Water, easily mixes with it, and falis to the Bottom,  
there are, also, expectorated Fragments tom Off from the Lungs  
themselves, the V-stals, and Membranes.

2. A fetid Breath, and the greatest Difficulty in Refpi-  
ration.

3. A Pain of the Breast, and a pricking Soreness of the Nip-  
pies; especially in the rime of Coughing.

4. A Defect in all the Functions. ° ‘

. 5. A putrid Fever from the Blood, universayy tainted by the  
Pus, and inducing preternatural Metiers, as Fermentation r  
Whence the Fluids or the Body are discharged by Colliquative  
Sweats, especially in the Morning.

6. A Diarrhoea, and at last, a Lientery, occasioned hy a  
weak Stare of the Liver, and all rhe Parts tubservient to Nu-  
trition.

These are necessarily attended with,

7. A Driness Of the Flesh, from the Defect Of a due Degree  
Of Moisture.

8. A Scurf upon the Extremities, and whole Epidermis, from  
the same Cause.

9. A Pain accompanied with Tension, in lying down on the  
Right Or Leftside, Occasion'd by the Adhesion Of the Lungs to  
One Side or other Of the Pleura.

Io. A weak, small, and frequent Pulse, from a languid MO.  
tion Of the Blood to the extreme Para.

II. A shedding Of the Hair, and the Nails dead.COloured and  
hooked.

TO winch, lastly, may be added.

The *Facies Hippocratica,* Or the Very Image Of Death, the  
Face ghastly, the Eyes sunk, the Nose pinch’d, the Cheeks hol-  
low, the Temples collapsed, and the whole Body stiff, and re-  
sembling a Skeleton.

A Fluxion, Of whatever kind, from the whole Body into the  
Breast, is more dangerous than one from any particular Part.

A Fluxion from a Stagnation of the Blood, or a Diminution  
Of its Motion near the Heart, is more dangerous than one pro-  
ceeding from a more distant Part. Λ....

There is less Danger from Blond gushing by fits into the  
Breast, than when it flows slowly and constantly for though there  
is a greater Flux upon a periodical Bleeding, there is a time of  
Refection. - '

Extravasation Of Blood from Redundance and Tension is  
much more easily cured, than one proceeding from itSDistempe-.  
rature and Acrimony.

There is greater Danger to the Lungs from the Pressureocca-  
Coned by an Obstruction in the LiVer,than from a Regurgitation  
by the broken Vessels.

If a Spitting be Critical, and from Transtation, it often goes  
Off with Safety and Advantage.

Those who have had the Pulmonary Veiseis Continually en-  
larged, by the Afflux os Blood, and Expressions Os viscid Matter,  
accompanied with an Asthma admitting Of no Remissions, have  
mostly, either, by a Rupture Of the Lungs, thrown up Blood  
into the *Trachea,* mixed with sordid Matter; Or have died with  
a sudden Aggravation of the Asthma.

In all Fluxions, if, upon the Use of Remedies, the Intervals  
are lengthened, and Paroxysms remitted, it promises Recovery,  
and *vice versa.*

A larger intermission, between milder Fits, is still more en\*  
Couraging. . \*

Phthisical Patients bear long, and easily, the Afflux and Ex-  
pectoration os mild watery Humours, but Of bilions Excre-  
tions, with Difficulty, and for a short time; but by a Discharge  
Of thick, ssline, fetid Matter, they are immediately destroved.

From a Suffusion there Is the greatest Danger, but frntn ah  
instillation the leash

Those who are crooked, and have had Limbs Cut off, are  
most subject to Fluxions, and in greatest Danger from a Phthisis, j

Aster the Spitting of Blond has Ceased, if the Lungs are less  
sensible. Or the torpid State of the Parts prevents a total Dis-  
charge, the Putrefaction of the retained Blood, and of the  
Lungs themselves, will endanger a Phthisis.

A free Respiration, a Cessation Of Coughing, and a Conti-  
nuance of Strength, after Bleeding, are good Symptoms, and  
*vice versa*

If after Blood-spitting, a mucilaginous, blue, and light Spit  
succeeds, and if it continues, it foretels a Return Of the *Haemo,  
ptysis* in young and hot Constitutions; but, if purulent, **a**Phthisis, both to Young and Old; if none at all, and other Cirn  
Cumstances be favourable also, it denotes Recovery.

SpitterS of Blood are most uneasy in Snow, Hail, Or Rain.

The Bronchia are least obstructed by an extravasated Blood,  
that putrefies, by a nutritious Juice,when it become; mucilagi-  
nous, moreand mostly by Phlegm falling down the Trachea, if  
it be concocted into a tough Viscidity.

Lastly, if the Organs of Respiration retain Matter, of any  
Kind, long upon them, it forebodes a difficult Cure.

That Languor which flowsy steais upon consumptive People,  
without any Decay os the Lungs, or other Bowels, is most  
dangerous to *Englisu* Constitutions; and, unless Remedies im-  
mediately take Place, which they seldom do, is mortal. -

A Phthisis which finks a Person suddenly, when attended with  
Coldness os the Extremities, especially os the Feet, is moss  
dangerous, although it does not so severely affect the LungS 5 for  
it is a Symptom, that the nutritious Juice is Very much Vitiated,  
and the Strength exhausted.

\*

. Phthisical Patients are in a most d.sperare Stare, who have  
stony and osteons Concretions of unequal Surfaces lodged upon  
their Lungs.

In :rofe who are accustomed to Intemperance, if they are  
seined with a Phthisis productive of Languor, they are in the last  
Extremity of Danger.

A copious and frequent Flux of Matter uoon a corroded  
Part is dangerous 7 for internal Ulcers are seloom cured when  
they emit a plenritul Discharge of Sanies, aS those externally  
are hardly ever healed.

Perrons Of lax Habits, though they sooner droop and langniih,  
yet they soonest feel the Benefit of Medicines, if they be trmeiy  
applied at rhe Beginning of the Disease.

Those who are phthisically inclined,'and frequently spit'rnsi-  
pid Matter, are longer in wasting, although from the Beginning  
the Lungs were affedied.

These who labour under an hereditary Phthisis, though they  
are incurable, yet their Life may be of forne Continuance.

The Lives of Phthisical Patients are prolonged by **fre-**quent, but moderate, Hzrnorrhagcs at the Nofe.

The Danger of an Effusion of Blood from rhe Pulmonary  
Artery is lessened, when it is attended with an Hemorrhage from  
**the** Nose. .

If, aster a protracted Phthisis, **them** appears a chylous Flux it  
is a seal Symptom.

lf an Ephemera, or Hectic, often returns at unequal Periods,  
it indicates dismal Consequences.

When Phthisical Patients have a keen Appetite, and acquire  
**no** Strength from their Food,their Caso is desperare; for it shews,  
that the vital juice is degenerated ro a corrosive Fluid.

When Virgins, who are ptetry fat advanced, but never had  
ibe menstrual Flux are affeded with a Phthisis from a Transta-  
tion of the menstrual Matter to the Breast, it produces a most  
disinal Alteration, and **a** hidden Wasting, whichiare followed  
**by** Death.

If a Contraction of the Nosttilea Strairness and Sinking in of  
the Breast, happen suddenly, they prognosticate immediate  
Death.

Oedematous Swellings of the Feet, in a Phthisis of long Du-  
ration, is a mortal Symptom.

Almost all Phthisical Patients perish, who are seized with **a**putrid Or malignant Fever, Occasioned by the Taint of the Mat-  
ter lodged in rhe Breast.

When a freer Respiration is obtained by the Assistance of  
Remedies, and a Change of Air, then the Patient feels himfejs  
enlivened, his Strength is increas’d, and his Colour becomes  
florid; lastly. Health returns, and the vital Heat is rekindled all  
over the Body.

When,, in Phthisical Patients, - a copious Discharge of stimy  
and falioe Sordes is procured by Cathartics, the Breast is greatly  
relieved, and there appear Hopes of a Recovery.

If Pedtorals of a thin Substance, which stimulate, are ex-  
hibited in a longcontinued Phthisis, without exciting a Cough,  
the Sign is tatsl.

Is, by the Assistance Of Art, the Spit, which was variegated,  
**be** brought to one Colour; if from nasty it becomes depura-’  
ted; if, from having an unequal Surface, it becomes smooth ;  
.fromfaline, insipid; from fetid, inodorous; and lastly, if it be  
easily expectijrated; all **there** are Signs of Recovery. *Bennet  
Theat. Tabid.*

ΡΗΤΗΟΕ, φθοη The same as PHTHIsIS.

PHTHOlS, *apiis. A* Pastil, Or Troche.

PHTHOR.A, φίορά. Corruption, in *Hippocrates,* it imports  
a Miscarriage.

PHTHORIAS. An Epithet *of* **a** Medicine producing Abor-  
tion.

PHTHOROPOEOS, φθοροποιόσ. Deleterious, Or destructive.

PHU. A Name for several Species of *Valeriana.* It gene-  
rally imports the Garden *Valerian.*

PHUSCA, φύσκα. The same as *Pofca.* There are severed  
compound *Poseas* describ’d by *Aetins, Tetrabib.* I. *Serm.* 3.‘  
*C.* So, 8I. and by *Paulus yEgineta, L.* 7. *C.* II. -

PHYC1S, *Phyada, paca,* a Sea-siso resembling the Sea Perch;  
with a long sharp Snout, thick Head, large Teeth, and bis Body  
covered with Scales. It is Of several Species and Colours, and is  
taken among the Sea-weeds near the Shore, in rhe Sand and Mud,  
where ir brings forth its Young; it is good to eat, and eafy os  
Digestion; purifies the Blood, and provokes Urine. *Lem ery des  
Drogues.*

PHYGETHLON, φὑγεβλον,ΰ abroad,but not much elevated  
Tumor, in which there is some RefembIance of a Pustule. The  
Pain and Distention with which it is attended, are violent, and  
greater than in proportion to the Bignest of the Tumor; and  
loraetimes there is a small Fever. This Tumor is slow in ripen-  
ing, and is not much converted into Pus ; It generally rises in  
- the Neck, in the Armhits, and in the Groins.' Our Countrymen-  
call it *Partus,* from some Similitude in its Figure [spoken with  
relation to *Pams,* a I.oaf of Bread). *Celsos, Lab.* 5. *Cap.oli.*

io the Account above given, *Celsus* describes a bilious Tumor,  
agreeably to whet *Galen* fays of it, *lab. st. ad Glaus.* « An in-

" sis minatory Erysipelas, Or an erysipelatous Inflammation, is  
“ caLed a *PhygeshlenS* The fame Author, in other Places,  
reckons this Turner among inflammations and Affections of rhe  
Glands; and distinguishes it from otherTumors by its Heat, and  
speedy Generation; and fays it arises in the Armpirs, and in the  
Groins, from an inflammation of the indurated Glands in those  
Pans. *Poestus.*

PHYTICA. A Name for the Alaternus-  
- PHYLLIREA The same as **PHrLLrREA.**

PHYLIJTIS. A Name for several Sorts of LINGUA CER-  
YINA. '

. PHYLLON. A Name for the *Mercurialis , fouticofas in.  
caena; testiculata. . ..’*

PHYMA, φυμα, from φύιμαιν to grow. Or he generated from,  
in its general Signification, comprehends all Kinds of preternatu-  
ral Tumors, in whatever Part of the Body they appear; and cspe-  
cially fueb as astedt the external Parrs, and Superficies of the Skin,  
and arise without an extemal Cause, and are generated, increased,  
inflamed, and suppurated, in a short Period of Tone. *Galen,  
Com. in 6 Epid.* Agreeably to this Description, thofe Eruptions  
ot’ Tubercles, whictr are generated of vicious Juices, and excited  
by an heated Blood, are called *Phymata,* I3. *Apb.ao.*and *Lib. de Alim. Phymata, qdurara,* are, alfo, inflammations of  
the Glands, which suddenly break forth, and hasten to a Suppu..  
ration, *Gal. slab.* 2. *ad Glauc. & Paulus, Lib.* 3. *Cap.* 23. and are  
reckoned among Affections and inflammations Of the Glands,  
*T.ib. de Turn, prasernat.* differing from a *Furunculus* only in  
Hardness. In *Prorrhet.* a. we also we meet with τἀ χοιρώδεα  
φὐματα. “scrophninus Tumors,” incident to Children? Φυμα  
sometimes signifies an Abfcefs, or vitiated Juices lodged in some  
Part of the Body; as 4 *Aph.* 44,45. & 7 *Aph.* 65. *&. Coac.* I I 8.  
So *Celsas, Lib.* 2. *Cap.* 7- renders φὑματα, from 4 *Aph.* 44. by  
*abscesses. Φΐμα,* also, takes the Signification Of εμπὑημα, and  
every inflammation which is converted into Pus, as 7 *Aph.* 8.  
according to *Galums* Comment on the Place. So we read of  
φὑματα ἔμπυα, *Prorrhet.* a. And, *Coac.* 4O4. we read of *Phy-  
mata* in rhe Lungs discharging Pus, which are opposed to hard  
and undigested *Phymata. Celstus* renders φὑματα, sometimes,  
*orientis Tubercula,* and sometimes *Tubercula,* as in *Lib.* 5. *Cap.*I 8.^28. *Seneca de Beneficiis* renders φυμα by *Tuber,* where  
he relates, that a Person had *aTuhcr* opened by the Sword ofa  
Tyrant, who aimed to take his Life. *Pliny,* relating the same  
Story, calls it *Vamica.*

PHYMATA, in *Celsas, Lib.* a. C. 8. seems to imply a Carun-  
cle in the Urethra.

PHYMOSiS. The same as Phimosis ; or as ΡηυΜΑ.  
*Blancard.*

inTHYMUS. The seme as Ρητμα. *Blancard.*

PHYPELLA. The fame as PANUs.

i PHYRAMA, φύραμα, from φυράω, to mix, is a Species of  
Arnmoniacum, so called from its being mixed with Earth, Sand,  
and Gravel. *Gorraus.* See A.MMoNIAcUM. But it signifies any  
Mass whatever, moistened with a Fluid, and worked.

PHYSA, PHYSE, φὑσα, *asta»,* signifies a Flatus, or gross Wind  
in the Body, or the fetid Wind discharged by the Anus, according  
*to Erotian,* from several Places in rhe Aphorisms, and from  
I *Epid* where we read of φὑσαι σιγώδιες *{Physae stgadees}* and  
ψοφώδεες *(psepkoslferi* Flatuses discharged withand without Noise;,  
the Word bears the same Sense in rhe *Prognost.* and *Coac.* Φὑσα,  
also, is very often ufed by *Hippocrates,* to signify a grost Wind, or  
Flatulence, colle&ed in any Cavity of the Body. Thus, *Lib. x-.ri  
arAuri,* he fays, thatMeats, light of Digestion, generate no Fla-  
tulences (φὑσας); and, *Lib.de Flatibus,* it is raid, πνεὑματα'3 τἀ  
μέν εν τοῖσι σώματι φὐσαε καλέονται. τἀ δέ ἔξω τοὗ σώματος ἀ;:ρ.  
“ The Winds which are in Bodies, are called *Physae*; those w.tb-  
"" Out the Body, Air.”

PHYSALIS. ' The Hop, Or rather its Flowers, which **are**boiled in Beer. Ir js, also, a Name for the **ALKERENGI.** *Blancarel.*- PHYSALOS. The Toed. *Plancard.*

PHYSE.MA, φύσσμα. The fame aS PHrsA. It, also, signifies.  
the Resin of the Fir.

". PHYSES1S. The seme asPnvsA; that is, an Inflation.

- PHYSICA REMEDIA are Remedies which do Service  
without any minifest Reason.

PHYS1NX, φὐσιγξ, is a little Bladder ; but σκορὄδκ φὐσιγξ, in  
*Hippocrates, Lib. dsBistulss,* **is the** Sralk or Stem of Garlick,  
which he uses instead of a Probe for searching the Depth of **a**Fistula. *Galen, fa* his Exegesis, where we read φύσιγρα *{Phystgrd}*corrupily for φὑσιγγα (Phyquig#), aS, also, in *Parinus,* makes **the***Phystnx* to he what we east rhe Stalk, and especially its Cavity.  
The Scholiast of *Aristophanes* makes, the *Phystnx* to he the outer  
Rind of Garlick; and so does *Erotian,* on *Hippocrates,* contrary to  
*Galen* tho’with relation to the same Place. *Hespehius* makes  
the *Phystnx* a Species of Garlick, Or an Head of Garlick: Whence  
some, by *Phystnx,* in *Hippocrates,* understand an Head or Clove of  
Garlick, and expound it by a Probe with a Button at the End of  
it, in the Figure of a Clove of Garlick;’ but *Hippocrates,* in that  
Place, directs the Use of **a fresh** Stalk of Garlick rn the Sesreb of  
2. Fistula. Some, for φὐσιγρα, io the Exegesis, read φὐσητα,  
(Ρίονγνια) others φὑσιτρα *{Physctrde.*

PHYSIOGNOMIA, βυσιογνωμία. The Art of judging of **a**Person's Nature, Fortune, Or Disorders, by the Lineaments os  
his Face , from φύσις, Nature, and γινῶσκω, to know.

PHYSIOLOGIA, φυσιβλΔγία, from φυσις. Nature, and λέγω,  
to treat Of Physiology. That Branch Os Medicine, which con-  
siders Nature, with respect to the Cure of Diseases, particularly  
the human Body, its Parts, Structure, Health, Lise, Functions,  
and Oeconomy.

PHYSOCELE, from πόσα, a Flatus; and κήλη, a Tumor.  
A Wind-rupture.

PHYSTE, φύστκ. A Mass Of Meal macerated, in **a** Vestel, in  
Wine, hut not worked.

PHYTALIA, φυταλία. The latter Part Of the Winter. But  
it, also, signifies, a Place where Vines are planted.

PHYTEUMA. A Name for *fisc Reseda, minor , vulgaris.*PHYTOLACCA.

The Characters are ὁ

The Flower is rosaceous, poly petalous, and disposed in Bunches;  
the Berry is soft, globular» and full of Seeds disposed in Orbicular  
Order.

*Boerhaave* mentions two Species of *Phytolacca,* which are,  
I. Phytolacca, Americana , majori fructu. *Tourn. Info.* 299.

*Boerb. Ind. A.* 2. 70. *Phytolacca.* OssiC. *Solanum racemosum  
Americanum.* Raii Hist. I. 662. *Solanum magnum Virginianum  
rubrum.* Park. Theat. 347. *Solanum racemosum Indicum.* Hort.  
Keg. Pari I6I. PORK-PHYSIO

it was brought from *Virginia* and *Nevi England,* and is Culti-  
vated with ns in Gardens. The Leaves are used in Medicine,  
and esteemed an excellent Anodyne. *Dale.*

2. Phytolacca ; Americana; fructu minorh T. 299. *Solanum  
Barbadens.e, racemosum, minus, tinctorium, Circaeae foliis mollibus et  
incanis.* Plukn. Aim. 353. Phytogr. T. II2. Fig.2. M. H. 3.522.  
*Boerh. Ind. ah. Plant. Pol.* 2.

This Kind Of Plant is Called *Phytolacca,* from φυτὸν *sphytnd),*a Plant; and *Lacca,* hecause it gives a red Colour like *Laccae.* The  
Virtues are yet unknown. *Hist. Plant, adscript. Boerh.*

PHYTOLOGIA, φυτολογια, from φυτὸν, a Plant, and λέγω, to  
treat of. That Part Of Pharmacy which treats Of Plants.

PHYXlMOS, φύξιμος. An Epithet of Diseases in *Hippocrates,*importing salutary. Or of which a Person is likely to recover.

PIA MATER. The thin Membrane which immediately in-  
volves the Brain. See CAPUT.

PIANTERlA, πναντήρια. Aliments which increase Fatness,  
- and Corpulence.

PIATTONES. Crab-lice.

PICA. Ossie. Schroff 5.323- SChw. A. 333. Met. Pin. 172.  
Charlt. Excr. 75. *Pica varia cordata.* Will. Ornith. 87. Raii  
Ornith. I27. Ejufd. Synop. A. 4I. AldrOV. Omith. I. 784. Gesh.  
de Avin. 623. JOnsi de AVib. 27. THE MAGPYE, Or  
PIANET.

This Bird is Very much commended against Dimness, Redness,  
and Pains Of the Eyes, being eaten, or incinerated, and the Ashes  
'put into the Eyes, Or any Other way apply'd , the Ashes are, also,  
exhibited in the Manis, Epilepsy, and Melancholy. *Dale.*

*PICA* GLANDANA, Or *Glandaria,* is another Species Of Mag-  
pye, supposed to be the *Pica Graeca*, to which the same Virtues  
are ascribed, as to the preceding.

. PicA is, also, the Name Of a Distemper, in *Greet, usrses,  
(Cited)* heing a depraved Appetite principally incident to Women  
with Child, to the end Of the second Or third Month of their  
Pregnancy. They who are affected, have absurd Longings aster  
. sour, sharp. Or acrimonious Things, and sometimes after Earth,  
Shelis, Coals, Old Rags, rotten Pieces Of Leather, and other  
things abhorrent to Nature. Men are sometimes molested with  
the like Vitiated Appetite, which in supposed to proceed from **a**Collection Of depraved Humours in the Stomach.

. The Disease is called *Pica,* either from the Variety Of absurd  
Longings, which hears Analogy to the Variety *sas* Feathers ob-  
served in the *Pica,* or Pye, or because, perhaps, ’that Bird is sub-  
ject to the same Disorder. The Scholiast of *Aristophanes* gives  
another Reason, for he says, the Pye is a Bird of a voracious and  
universal Appetite, and difficult to be pleased, that he longs after  
Fruits, but is soon diigusted, and, when be has eaten of this or that  
. kind Of Apple Or Berry, he is presently lariated with it, and flies  
from Tree to Tree in Search Of new Varieties: SO that Woman  
are properly said to he affected with the *Pica,* when they long for.  
this and that kind Of Food, and? when they have tasted it, con-  
ceive an Aversion to it, which Kind Of Loathing is called  
ἀψικορία, *Hapsicoria.* But however κίττα may signify the Bird.  
*Pica,* aS well aS a Disease, we have no Authority for affixing that  
double Signification to the Word *Pica;* for none ever called a Dis.  
ease, in proper *Latin, pica. Pliny,* therefore, always calls this Diss  
order *Malacia Gravidarum, in Greek (juLhaccia,* from μαλακὸς  
*(siialacos),* soft, languid. It is defined, like the κιττα, Or Pike, .to  
he a languishing Disorder incident to pregnant Women, in which  
they long sometimes for One thing, sometimes for another; some  
desire to eat Earth, dead Coals, Or Terra CimOlia, as *Paulus* says.  
*Lib.* I. *Malaria* is, also, a Disorderor Weakness Of the Stomach ὁ  
in winch Sense ir is used by *Pliny, Lib.* 28. *Cap.* 7. *Lib.u.'s,. Cap. 6.*Μαλ.άκια *(Malacia)* are expounded in *Galen's* Exegesis, aqua-

**/**

tile Animals having ho Spine, as **the** Polypus, Loligo, Sepis,  
and Urtica ; these have neither Blood nor Viscera*ana. Lib.* 3.  
*de Alim.Pac.* he describes them as having no Scales, nor rough  
Or testaceous Skin, but soft like the human. *Pliny, Lib.* 9. *Cap.* I 8.  
calls them *Mollia,* by a literal TranilariOn Of **the** *Greek,* and gives  
the same Description Os them. The Place in *Hippocrates,* to  
which *Galen,* in his Exegesis, had a respect, since we can only con-  
lecture,in this Oafs,appears tome, *sxqsFoefius,* without alldoubr,  
IO he that, Ιείῦ.πνριγυναικ. *gula,* where we read, καὶ σιτίοισι μαλ-  
βακοῖσι, καὶ τὸῖσι πολύπβισι, καὶτοῖσιν ἄλλοισι μαλθακοῖσιν, C.with  
\* soft Foods, as Polypuses, and Other soft (aquatile Animals).''

The *Pica,* according to *Bsverius, in Lib.* 9. *Cap. 2. Prax. Med.*is such a Depravation os the Appetite, aS excites the Patients to  
an uncommon and preternatural Fondness for absurd, useless, and  
hurtful Aliments. .

This Disorder is produced by depraved and corrupted Juices,  
either generated in the Stomach, in consequence of an undue  
Concoction, Or Convey’d to infrom Other Parts.

Humours Of this Kind are, for the most parr, generated in  
Persons Of phlegmatic and melancholic Habits, and especially in  
Women, to whom this Disorder seems, in a manner, peculiar,  
tho' Children and Men are sometimes, tho'.very rarely, afflicted  
with it. Humours of this Kind are principally generated by the  
Use of bad Aliments; a supptession of some natural Evacuation,  
and especially of the Menses, Grief, Disorders, Obstructions, and  
Weakness os **the** Liver and Spleert. and various Diseases Of **the**Uterus. ' . .

These Corrupted Humours are Os various Natures and Qualities,  
according to the various Degrees of their Corruption and In-  
temperature Hence arise various Inclinations to Various, absurd,  
and improper Aliments; for fince some of these Humours are  
crude and unconcocted, and others os an hot and inflammatory  
Quality, fo some are fond Of acid, austere, bitter, and highly-cold  
Substances, such aS unripe Fruits, Vinegar, Verjuice, the Juices  
Of Oranges, Pomegranates, and Lemons, cold Water, Snow, and  
Ice, whilst others covet earthy, dry, and hot Substances, such  
aS Cloves, Cinnamon, Nutmegs, and other Aromatics, Salt. Ashes,  
and Plasten’

This Disorder is familiar to young Women labouring under a  
Chlorosis, and to pregnant Women, on account of the Sup-  
pression Of the Menses, which, by remaining long in the Body,  
assume a peccant Quality, and heing Convey’d to the superior  
Pans, load the Stomach with that corrupted Humour which  
depraves its Actions, and perverts the Appetite Sometimes  
.Children, especially those born of Mothers labouring under a  
Chlorosis, are subject to this Disorder. Nor are Men totally  
exempted from this Misfortune, tho' they are hut rarely afflicted  
with it, and those Men are most subject tO it, who .are of a me-  
lancholic Hahin, labour under Obstructions, Or a Suppression of  
the haemorrhoids] Discharge.

- The Diagnostic of this Disorder is sufficiently easy. for by the  
hare Relation Of the Patient, 'tis Certain, that the Part princi-  
pally affected is the Mouth of the Stomach, which may be said  
to be the Seat Os Appetite. The Cause may, also, he conjectur'd  
at from their heing fond Of Substances Of a similar Nature with  
the peccant Humours in the Stomach; for if they are fond of  
Coals, Salt, and Other Things Ofa like Nature, we may Conclude,  
that saline and hot Humours produce the Disorder. But this  
Conjecture will he Converted into Certainty, if any Quantity of  
these Humours is thrown up by Vomit; Or discharged by Stool,’  
Or if acid. Or nidOrous Eructations are present. Or a bitter acid,  
Or saline Taste perceived in the Mouth.

As for the Prognostic os this Disorder; it is Of the Chronical  
Kind, but not Very dangerous; fince, in Process Of Time, the  
peccant Humour is removed by frequent Vomits, Or other proper  
Medicines, and the Menses, Or haemorrhoidal Discharge, a Sup-  
pression of which, laid the Foundation Of the Disorder, are at last  
restored. But if these are neglected till Nature is too much  
weakened, terrible Disorders may succeed ; for when rhe first  
Concoction is Vitiated, the second and third must necessarily be  
so too. Hence Violent Obstructions, Cachexies, and Dropsies  
happen. Or if the Quantity of the peccant Humour, lodged in  
the Stomach, in very great. Or its Quality highly malignant, it  
sometimes produces terrible CardialgiaS, which term inate in De-  
liquiums. Syncopes, and sometimes in Death.

. If Women, labouring under this Disorder, begin to abstain  
from the improper and absurd things they were fond os, and with  
less Reluctance use laudable and wholsome Aliments it is an in-  
fallible Sign Os a beginning Cure, and approaching Health.

Pregnant Women are generally freed from the Malacia about  
the fourth Month, because the Foetus, hecOming.at that time  
larger, consumes a greater Quantity os the Humours, and the Mor  
ther, by frequent Vomitings, throws up the Sordes lodged in her  
Stomach. But if the Disorder continues any longer, it is dan-  
gerous, for 'tis a Sign, that the peccant Humours are deeply  
rooted, and cannot he eliminated without Difficulty.

Tis better that Persons, labouring under this Disorder, should  
he fond Of acid and sharp-tasted Substances, than of fuch as are  
directly unfriendly to Nature, aS *Avicenna* informs us, in *Fen.* I3.  
*Lib.* 2. *Tracts. Cap.* 2o. for a Fondness for the latter indicates a

greater Recess from a natural State, not to he Cured without  
great Difficulty. .

The Cure Of this Disorder is to be varied according to **the**disserent Constitutions Os the Patients.

in pregnant Women, very few Medicines, are recommended  
as proper, for sear Of Abortion. However, even in these, gentie  
Medicines may he used for evacuating and corroborating the  
Stomach. Nor is moderate Venesection, frequently repeated, to  
he neglected, if there is a Necessity for it, fince it is Of great Effi-  
cacy in the Cure of this Disorder.

In young Women labouring under a Chlorosis, this Disorder is  
Cured by the sime-Medicines winch are Proper for removing the  
Chlorosis'

As the Pica in Men, which, however, rarely happens. Proceeds  
from Obstructions os the Liver and Spleen, it must of course be  
removed by every thing which removes these Obstructions.

: According to Doctor *Pitcairn,* in his *Element. Mees Lib. 2.  
Cap.* I8. in this Disorder, inch Things as Obtnnd Acids, are to  
be prescribed, fixed Salts; mucilaginous, OleOus, and pinguious  
Substances; the Effects of all which are to hinder the free Con-  
tact os the Coats of the Stomach with each Other. For answer-  
ing this Intention, he himself orders viscid Substances, and such  
aS remain long tn the Stomach.

Thus, for Aliments, he prescribes GellieS Os Hartshorn, Broths  
Of gelatinous Fleshes, and other things Of a like Nature.

For Drink, he Orders *Spanish* and *Canary* Wines, moderately  
drank, and especially *Brunsmick* Mum,Or *Dutch* Hydromel, pre-  
pared of one Part of Honey, and six Parts Of Water.

PICAClSMUS. The same **aS PICATIO. .**

PICANS. An Epithet for Wine, importing, that it is Of **a**sweet delicious Flavour. :

PICATIO. Pication. A Species Of *Dropax.* For this Pur-  
pose, dry Pitch is melted with a very small Quantity Of Oil, and  
applied to the Skin whilst warm. This Preparation adheres  
strongly to the Parts previousty shav'd, and. is to be pull’d Ost,  
‘before 'tis perfectly cold. Then it is to be warm'd at the Fire,  
applied in the same manner, and pull’d Off, hesore 'tis entirely  
cold. This Method is to he repeated Very often. This *Picatia,*or *Dropax,* is highly beneficial to Patients afflicted with Continual  
Vomitings, Crudities Of the Stomach, Indigestion, and the Cce-  
liac Passion. It is, also. Properly applied to Parts not duly nou-  
rished bythe Aliments. When his requisite this common Dro-  
pax should be heating, we add to it Pepper, Pellitory of *Spain,*Rosemary-seeds, and Bitumen : When we want it Os a drying  
Quality, we add to it native Sulphur, Salt, and the Ashes Of  
Vine-twigs If we intend it should he of a stimulating Nature,  
we add *Limnefiis,* Commonly Call'd *Ardace, or* Euphorbium.  
All these Ingredients, when triturated, "are to he sprinkled into  
the melted Pitch and Oil. *Aetius, Tetr. i. Serm. l.Cap.* I 80.  
- PICATIO, also, implies the same aS PIcA. .

PICATUM VlNUM. See **PISSITES.**

PICEA .See **ABIEs.** sir: - ' ' -

PICERlON, πικέριον. Butter. *Hippocrates, Galen.*PICINUM OLEUM. The same as **PISS ELAEUM.**PlCOTA. A Distemper,. Consisting Of an Eruption of very  
minute red Pustules. *Castellus.*

PICRIS. A Name for the *Cichoreum Sylvestres sive Offici-  
narum. -*

PICHROCHOLOS, πικροχβλος, from, πικρός, bitter; and  
χολῆ. Bile. A Person abounding with bitter Bile. *Hippocrates.*Sometimes it signifies a Person very subject to Anget.

PICTONUM COLICA, or **COLICA PICTONIA, Or PICTA-**vlENSIS. The Name Of a nervous Colic, generally called, in **the**West-indies, *the dry Pselly-ach.* This is fo popular a Disease in  
the *Leevcard* Iflands, that it may, very justly, he reckon’d an En-  
demic in them, most People there, at one time Or Other, having  
felt its Cruelty. '

; There is not, in the whole Compass of infirmities, to which  
Flesh is liable, any One that afflicts human Nature in a more ex-  
quisite Degree, than this unmerciful Torture. The Belly is seized  
with an intolerable piercing Pains sometimes in One Point Only,  
and sometimes in several Parts Os the intestines. In a short time,  
the Affliction becomes more diffusive, and stretches itself from  
the Point, where it was first felt, to a greater Distance , which is  
done in such a manner, that the Fibres Of- the Bowels seem to  
be contracted, and drawn up from the Anns, and the Pylorus,  
towards the Part primarily affected, as into the Centre Of Mi-  
sery : During This Scene Of the Distemper, which sometimes lasts  
eight, tea, or fourteen Days, the Patientis upon a perpetual Rack,  
with scarce any Remission from Pain. He undergoes all **the va-**rious Modifications efTorrnenty and the burning, lancinating, and  
biting Pain, by turns afflict him with a Diversity of grievous  
Sensations. The Belly continues, all this time. Obstinately Co-  
stive; Very littie Urine is made; the Strength is greatly impair'd,  
the Habit exceedingly wasted, the extreme Parts are cold; and  
the Patient frequentiy falis into Clammy Sweats and Deliquia.  
Tne Affections Of the Mind are much disorder’d; Grief, Anger,  
Rage, and Despair, usurp the Place of Reason; the Vital, na-  
tural, and animal Functions, are perverted - and the miserable  
Patient, at length, finks under the Agony Os his Affiiction.

The principal Causes concurring to the Production of this Co.:  
**lie are,** immature, austere, and astringent Fruits, eaten in **roo**great Quantities, debauching in strong Punch, highly acidulated  
with the Juice Of Lime; and UaVelling in the Night, aster too  
free ingurgitation Of spirituous Liquors.

When the Extremity Of the Pain begins to abate, the sick Per-  
son Often Observes a sort Of tingling Uneasiness through the spi-  
nal Marrow; winch propagates itself from thence to the Nerves  
of the Arms and Legs, which, at this time, are Yery weak and  
debilitated. This Weakness and Inability increases daily; till, in **a**short time, it terminates in a confirm’d Palsy Of the Extremi-  
ties.’ The sudden Transition from the Colic to a Palsy made  
DI. *Willis* conjecture, that the Nerves Of the Mesentery were  
principally affected in this Disease.

In order to.subdue this dire Distemper, and prevent the Para-  
lytic Consequences Of it, we must employ Our utmost Endeavours  
to remove the Constipation of the Bowels, and solicit them to **a**Discharge. But this *is* not, upon any account, to he attempted  
by strong stimulating Cathartics, which, by their forcible and  
repeated Irritations, would vellicate and contract the Fibres Of  
the Guts, enrage the Pain, Creare ConvulsiVe Motions Of the Bow-  
els, hasten On the Palfy, or change the Disease into a *Miscrore  
Mei* The mild, lenitive, detergent Purges are, therefore, ta  
be relied on in this Exigency, and they ought to he given in li-  
quid Forms, small Quantities, moderately warm, and frequently  
repeated, till they slide through the Intestines, and procure a Stool.

But it is almost impossible, that this should he effected, so long  
aS the Bowels continue under such spasmodical Disorders aS they  
are now in : We mush therefore, have a due Regard to the mi-  
tigating this InconVeniency. There is Dot any Preparation Of  
Opium so effectual in this Case, as the *Pil. Matthaei,* which re-  
ceives a prodigious Advantage from the aperient Quality Of the  
*Sapo Tartareus.*

It has been a received Opinion, that Opiates, in this Distem-  
per, have often proved the Occasion of the paralytic COnsequen-  
Ces which have ensiled -, but! am fully convinced from undoubted  
Experience, that this Observation is erroneous, having always  
found the desired Success from the Administration Of them, the'  
given with a liberal Hand. However, it may not be improper,  
in these Cases, to add three Or four Grains of Castor to each  
Dose Os the *Pil. Matthaei.*

The Method by which I have relieved many in this dreadful  
Distemper, is aS follows As soon aS l came to the Patient, **I**Order'd eight Or ten Grains of the *Pil. Matthaei* to he given him;  
and, about half an Hour astes, half an Ounce of Manns, two  
Drams of Cream Of Tartar, and One Ounce of Iolutive Syrup of  
Roses, in warm Water-gruel, and this is to be repeated every  
three Hours, allowing four Grains of *Pil. Matthaei* to he admini-  
ster’d in the Intervals But If the great Propension to vomit  
should render the Stomach incapable Os retaining the laxative  
Draught, so that no Operation is to he expected from it, then it  
will be necessary to appease that Symptom with thesollowing. Or  
some other Mixture of the like Kind, hesore we proceed, any  
farther.

Take Of Salt.Of Wormwood, One Scruple; pure Opium, **a -**Grain, Or a Grain and haff; strong Mint-water, an Ounce 3  
Syrup Of Lemons, a Spoonful. Mix them together.

A Clyster is, also, to be injected Once in four Hours, till the  
Body becomes soluble. These Clysters should always admit of  
BalsamicS in their Composition, and may he made in the follow-  
ing manner.

Take Of common Decoction, eight Ounces; Balsam Of CapiVi,  
dissolved in Yolks Of Eggs, two Drams, Soap of Tartar,\*  
one Dram; Oil of Anise, two Drams. Mix them together.

In the mean time, warm Fomentations are to be applied all  
over the Region Of the Abdomen, with Flannel Cloths.

Take of Chamomile-flowers, three Ounces ; Juniper and Bay-  
berries, each an Ounce; boil them in five Pints Os Spring-  
water, to three. At the End, add Of Carraway, Fennel,  
and Anise-seed, each half an Ounce, dissolve in the strain'd  
Liquor, a Dram Of Opium; and add a Pint Of Rum.

A SetniCupinm, or Bath, made with the Leaves of wild Sage,  
Lavender, Rosemary, Chamomile, and Other warm, nervous  
Plants, Often help to alleviate the Pain, and astord Considerable  
Relief to rhe distress’d Patient.

When the Pains begin to he mitigated, and the Body is some-  
what Open, it will he time to proceed to Purges of greater Ef-  
ficacy; and chiefly, such aS .are Composed within Mixture of  
Mercurial Preparations.

Take Of Calomel, a Scruple ὁ the smaller Pil. Cochiss, a Scruple,  
Opobalsamum, enough to make them into sour Pilis; to be  
taken in the Morning, and repeated every Day, till the Pain  
remits, and the Body becomes soluble.

Opiates may now he laid aside, unless the Urgency of **the**Symptoms still require the Continuance os them; or, at least,  
their Quantity may he lessened; and, in their stead, the Pa-  
tient is to take two Scruples of Balsam os *Peru,* with Loaf-  
sugar, or in any other convenient Form, every six Hours:  
This Medicine will rarely he found to fail, when given at a  
proper Time of the Disease, and in a sufficient Dos4; which  
has been too long neglected in Practice.

There is another Production of Nature, which Providence  
has plentifully bestowed on this Ifland, I mean the *Pesselaum  
Indicum,* or the *BarbadoesTur,* as it is commonly called: This  
indeed is not so elegant to the Taste and Smell, as the fore-  
mentioned Balsam; but, where the Stomach can comply with  
it, I am sure it is of much greater Efficacy in this Distemper.  
I need not, surely, use many Arguments, to prevail with **any**Person under these Circumstances, to divest himself of Preju-  
dices to a Remedy, which will so powerfully conduce to his  
Ease and Safety; for a Man must he strangely Palate-ridden,  
who will endure the highest Aggravations of Torture, and run  
the Riik of disabled useless Limbs, for the Gratification of  
Taste. I would, therefore, advise, that two Drams os this  
Pisselaeum be given three times a Day, till the Disease he totally  
Vanquished.

Upon the first Apprehension of the tingling Uneasiness along  
the Spinal Marrow, or the Numbness and inability of the  
Limbs, the whole Length of the Vertebrae, as well as the Limbs,  
ought to he well chased with a Mixture of this Tar, in double-  
distilled Rum, which will (if any thing in Nature can) avert  
the impending Paralysis.

This is a Method which I have successfully used, in a Mala-  
dy which was generally attended with such fatal Consequences,  
under a different Management; and I could not forbear making  
it public, sor the Benefit of an Ifland which has laid me under  
the strongest Obligations of Gratitude.

When the Palsy has been actually formed, either from  
injudicious Treatment, or the Violence of the Distemper, I  
have not been able to discover any means effectual enough to  
remove it, unless the Patient would be prevailed upon to leave  
the Ifland, and repair to *England,* where *Bath* Waters taken  
inwardly, and applied to the affected Parts by Pumping, with  
other proper Remedies, have often perfected the Cure. *Towne’s  
Diseases of the West-Indies.*

PlCUo MARTIS. The Woodpecker: A Bird of which  
there are many Species, besides that commonly known in *Eng-  
land.* It has the Reputation os being good for the Eyes, and  
to preserve and improve Vision : For this Purpose it is eaten  
dressed, or boiled in Soop : It is, also, applied to the Eyes ;  
and the Bleed is dropped into them,, with the fame View.

PIERRE DE COLIQUE. See **UMBRA.**

PIESMA, πὸεσμα, from πιέζω, to press. The *Magma,* or -  
Residuum, which remains after the fluid Part is presied out:  
Thus, in the Expression of Oiis, the Cake, or what remains  
in the Bag, is called the *Pies.ma* ; and in this Sense it is used  
by *Hippocrates.* But *Diofcorides, Lib.* i. *Cap.* I06. speaking  
of Bay-berries, calis their expressed Juice *Pies.mat* And it is  
used by *Galen,* in the same Sense.

PI ESTER, σττιεστῆρ, ΟΓπτίστήριβν, a Press; from ττιέζω, to  
press.

PIESTRON, πίεστρον, from πιέζω, to press. An Instrument  
recommended by *Hippocrates, for breaking* **the** Bones of **the**Head os a Foetus, when too large to he Otherwise extracted:  
It should seem to be a Sort of Forceps. . . .

PIGMENTARIUS. A Vender of Ointments. *Rhodens  
ad Scribon. Largum.* An Apothecary, or Druggist.

PILA. A Ball. **See** SPHAERA. It, also, signifies a Mor-  
**tar, . or a Pestle.**

P1LA MARINA. This is a Species of Alcyonium, or a  
round spherical Ball, found on the Sea-coast, among the Wrack.  
It is generally as large as a Personis Fist, but sometimes larger,  
and sometimes less - It is lanuginous, of a dark Colour, and  
formed by a Collection os Hairs, Sand, and other Impurities  
of the Sea, united by meansOf some glutinous Liquor. It is  
said to be proper for killing Worms, and preserving the Hairs,  
when applied externally. *Lerncry des Drogues.*

The Pila Marina cannot be reduced to a Powder, till it is  
thoroughly calcined. Authors are of Opinion, that this Sub-  
stance is good against scrophulous and strumous Disorders, not  
only on account of its drying Nature, but, also, in Consequence  
of some other latent Ouality. Neither can I totally reject this  
Opininn, since it is a Substance, whose saline Quality is not de-  
stroy’d by Calcination. *Twels.er.*

PILARELLA. The same **as PELADA.**

PILARIS MORBUS. **The same as TRICHIASIS.**

PlLATIO A minute Fissure of the Cranium, not larger  
than an Hair.

- PILEUS, *or* PILIOLUS. See **CUCUPHA.** In Anatomy,  
the Coif with which some Children are born, is called *Pileus,  
Pileolus, Galen,* an d *Pitta.*

PILI ZENIL The Hairs which grow about the Sent of  
an Hare. *Rulandus.*

PILIMICTIO. A Discharge of Substances resembling Hairs,  
with the Urine. See **TRICHIASIS.**

PILIPOC *Philippinarum Insularum.* Nieremb.

This Plant is of two Kinds, the Male, and the Female:  
The first is the greater, and has larger Leaves, and grows amono  
Rocks ; the other, or Female, is less, and grows in Plains r  
On the Roots of them both grow dark-coloured Tubercles, of  
the Bigness of a Manis Fist: The Trunks, which are os a  
dark-brown Colour, and without Joints, heing cut athwart,  
are divided into a sort of Pellicles, like the Membranes or  
Coats of Onions: The Leaves are like those of Bay, and are  
remarkably acuminated; are produced in a moist and shady Si-  
tuation, and roll themselves about the Trees. The Root is of  
Use for Venomous Bites, and in Potions; but is stow in Opera-  
tion. *Raii Hi P.*

. PILORIS. A very large Species of Rat, found in *Marti.,  
nice,* which smells like Music. The Inhabitants eat them: But  
they are of no Use in Medicine. -

PILULA. Pill.

The Form of Pills is principally designed for fuch Things aS  
are too nauseous to he taken any other Way; or are most rea-  
dily fitted, by their natural Texture, to this'Kind of Manage-  
ment: Of the first Kind are the Aloes, Colocynth, and tho  
like, which are thus best concealed from the Taste; and of the  
latter are most Gums, which, with very littie Trouble, are  
reduced into Pilis.

But this Form heing generally the most troublesome to take,  
as few Things should he contrived into it aS possible; that is,.  
fuch only aS, by their Irksomeness in going down any otherWay,  
make it. necessary to conceal them by this means. But this-  
Reason ought to extend only to such Things, which are os  
sufficient Efficacy, not to make above four or five small Pilis  
for a Dose. Thus, the Bark, in Powder, and all the lighter  
Species, which are given in the Quantity of half a Dram, or  
upwards, fur a Dose. If, to avoid the irksomeness of other  
Forms, Recourse should be had to this, a necessary Quantity  
of Moisture, to reduce them into it, would make one Dole  
into ten, twelve, or fifteen ordinary Pills, which are more than  
any one can he imagined well to get down; sor half a Dram in  
the Mass makes five middle-sized Pills, and half a Dram of dry  
Powder will take up above double its Quantity of Syrup, to  
bring it into a Mass of due Consistence. The gummy Sub-'  
stances, indeed, are thus reducible by Liquor, which will but  
littie increase their Bulks; and for this Reason, also, they have  
a peculiar Fitness for this Form. :

But there are fome Things absolutely unfit for Pilis, by rea-  
son of their natural Texture and . Properties, except, in small  
Quantities; and these are all the Volatile Salts, and most os the  
fixed ones. The first heave and ferment them into unreason-  
able Bulks; and the last render a Mass so brittle and crumbly  
as make it almost impossible to he worked into Pilis; though  
both these Inconveniencies may, in some measure, be avoided,\*  
by contriving to mix with either of these Salts other Things  
which are Very tenacious, as some of the Extracts and Gums ;  
and this makes the Piluhe Ecphractieas, now directed in the  
Dispensatory, at first of a tolerable Consistence.

One Very material Thing, likewise, to be consider'd in this' .  
Form, whether officinal or extemporaneous, is, that the Li-  
quor or Moisture, wanted to give a Consistence, have the most  
convenient Fitness to the Thing requiring it.' Thus dry light  
Powders will not make up with any thing thinner than Syrup;  
and some of the heavy ones, as Cinnabar, and most os the Mer-\*  
curiais, will hardly do with any Moisture of a lower Consistence  
than Honey or Conserve. But the gummy Substances, espe-  
cially those which most approach to an oily or refinous Texture,  
as Galbanum, Opopanax, Myrrh, and the like, will not so  
well make up with Syrups or Conserves, not only on account  
os increasing their Bulks too much, but because they will not  
so well incorporate with them, as with spirituous and more pe-  
netrating Liquors. As this Form, therefore, must have some-  
what in it adhesive and tenacious, where it is not in the dry  
Substances, it must be sought for in a proper Moisture to hold  
them together; and where it is sufficientiy already in those Sub-  
stances, as in the Gums, the thinner Liquors are best, to give  
them a Consistence, or such as are hetter suited to incorporate  
with them, than aqueous Moistures, aS the terebinthinous Bal-  
fams; for some sat Substances will refuse a Syrup, at the same  
time that they will readily take in Turpentine, or any thing of  
like Disposition..

Among the officinal Pills, there are but few that do not take  
in something purging, and those are as follow : The Piluhe  
Gummosae were never in the *London* Dispensatory before, tho\*  
long ago in some others; so that it may not, perhaps, he yet  
much brought into the Shops ; but it is a Very uniform Com-  
position : only the Mithridate will not so readily incorporate

with such Materials as Spirit os Castor, or any tetcbinthinous  
Substance. Such things are, likewise,' sooner brought' into a  
Mass, with a Mortar a little warmed. The Storax-pill has  
stood long approved for an excellent Composition;- by the fre-  
quent Prescription of it in Catarrhs, and such-like Defluxions;  
het the Texture of its Materials, though most of them gum-  
my, partake so littie of an oily Principle, that they readily  
make up with a Synrp into a very good Consistence. . The Pi-  
- Iuhe de Cynogloffo- are calculated for the same Intentions, and  
hardly to he known from this in theMass, The Ingredients be-  
ing nearly the same in both; but the Storax-pill is generally  
-preferred;.as a shorter and more uniform Composition. - The  
Laudanum is subject to grow-brittle, and sometimes a little  
mouldy at the Top;-both which are prevented by keeping it  
; close from the Air. The Quantity os Opium is much better  
ascertained in this, than in any liquid Forms ; and, with a little  
Trouble, this may be. dissolved into Draughts for extempora-  
neous Uses, though it is the'most ready sor a Bolus, or Pilis.

Among those which take-in Cathartics, some:do it so  
sparingly, that they ought rather to he deemed Alterants than  
Purgers; such as the Aloephanginae Foetidae, and Stomachicae  
. cum Gummi; all which so abound with Ingredients of other  
.Intentions, that the purging.ones areedmost lostin them. *Sase  
senus* finds great Fault with the.first osthese ;-but It isso very  
little used now, that it is hardly worth a critical Examination  
here ; ;and especially .aS the Tinctura Sacra is a Medicine much  
better contrived sor the same Intentions, on all Accounts, both  
for Taking and Efficacy. The Pilulae Foetidae cannot he justi-  
fied sor a very uniform Cornposition ; but,tin the main, it takes  
in so many Things which are efficacious in -hypochondriacal,  
hysterical, and other nervcus-Disorders,, that it is generally used  
with Success ; but.if so much os the.Juice os Leeks be applied  
in dissolving .the Gums, that it wants but little os the Syrup to  
bring it to a Consistence, it will, he very subject to grow mouldy  
with keeping. In this, and all other Compositions which take  
in ingredients'To different in Textures, all that. will powder,  
ought to he so reduced together; and, when the Gums are  
strained, aster dissolving them with a moderate Heat, in the  
Liquor directed, they are put together in a Mortar, and beat  
into a due Consistence, with a proper Quantity of Syrupr The  
Oil of Amber, or any thing else Os like Nature, is best rubbed  
first into the dry Powders. The Pilulae Stomachicae cum Gum-  
. mi continue to be sometimes ordered; but they are not so much  
esteemed as they were formerly; The Tinctura Sacra, also,  
taking place of it to better Advantage. There are; likewise,  
fome other Cathartics of weak- Efficacy, from their Mixture  
with other Things, winch are so little used, that they deserve  
hot much Examination; as the Piluhe sde Agarico, de Aloe  
lota, deAmmoniaco Magistrales, Cochise majores, Diambrae,  
and Mechoacanna; all which are hardly ever made or pre-  
scribed. The Pilnlte Ecphracticae, sor the Reasonsalready given  
about Salts contained in Pills, are of so brittle a Consistence,  
that they, likewise, are seldom Io be met with in the Shops,  
or in Prescription. The same Disadvantage, also, have the  
Pilulae de Rhebarbaro, de Scammonio, and. Tartareae.

- The Pilula Russi’ is the only one In this Rank, which is  
**much** approved in common Practice ; and indeed its Ingredients  
are so sew, and those so good in the Intention of a gently  
purging Stomachic, that they Very well deserve this Preference:  
iThis, and the Elixir Proprietatis, take in the same Ingredients,  
and differ in little else than their respective Formsj This Pill,  
’ as to its Goodness, is so much judged of by its Colour, which  
is coveted of a bright yellow,- that most, if not all. Com-  
pounders bring it to a Consistence with Syrup of Lemons,  
which much improves it in that respect, instead of Syrup of  
Wormwood, which would greatly hurt it. -

Among **.the.** most- efficacious Purges, and those most coin-  
monly in Use, are the Pilulae Cochiae minores, e duobus, and  
Pilulae Rudin... .The two first differ in little else, than in one's  
having the Aloes, and **the** other not, which makes the latter  
stronger, **the** Colocynth and Scammony heing most powerful  
Cathartics. The Goodness of both is judged by the strong  
Scent of the Oil of Cloves, which, being the most, chargeable  
Ingredient, is most.likely to be limited in its Quantity. The  
Pilula Rudii is of the same Contrivance as the Aloephanginae ;  
but is not fo crouded with unnecessary ingredients, and, there-  
fore, .takes in the efficacious, ones in larger Quantities, so that  
its Operation is brisk enough in a Dose of half a Dram. But,  
in the .common Way os making the Spirit, necessary to extract  
the Spices, and other hard Ingredients, most of i t is drawn over  
-before the Scammony and Aloes .are put in; and after that it is  
distilled, so that the Remainder is near in the State of an Ex-  
pact, or about the Consistence of a Syrup, the Aloes is melted  
in it,, and the Scammony sifted in,.when powder'd. The Pi-  
Iuhe de Gutta Gamandra have nothing difficult in their Com-  
position, but are of a more brittle Consistence, andinore liable

to gripe in their Operation, upon account of the yitriolated  
Tartar, than they would be without it . Though this seems to  
be put into many of this Class, which abounds with resinous  
Ingredients, aS a means to divide them; but it is extremely  
racking to the Stomach and Bowels, and seems to be well sup-‘  
plied by the common Salt of Tartar.

There is not much to be learned from Examples of occasional  
Prescription in this Form, besides what is common to every  
Form; sor there is required nothing particular here, more than  
whet hath been already taken notice osi concerning a proper  
Consistence, and the not exceeding a certain Number in a  
Dose.

**: - - PILUL.E Bin AGARICO** *Pills of Agaric.*

. -Take of the Troches os Agaric, one Ounce ; the Species of  
r Hiera, half an Ounce ; Myrrh, six Drams ; Syrup of

Buckthorn, a sufficient Quantity to make into a Mass sor  
-. Pills : The Dose is from a Scruple to a Dram;

**PILULAE ALOEPHANGINAE. See ALOE PH ANGINAE.  
. .-PILULAE DE ALOE LOTA. See ALOE.**

**. PILULAE DE AMMONIACO MAGISTRALES. See AMMO-  
silACUM. „ .**

**. PILULAE BALSAedICAE. See CYTIso-GENISTA.  
PILULAE CocHIAE MAJoREs .ET MINORES. See CocHIA»  
PILULAE DE CYNoGLosso. ; See CYNOGLOSSUM..**

PILULAE ' DIAMBRAE : *Pill Diambra.*

Take os new Gum Guaiacum, and the rosated Aloes,' each  
three Drams ; simple Hicra Piera, a Dram and half; Ma-  
\_\_ stich, a Dram; the Species Diambrae, without the. Per-  
- fumes, bals a Drain : Let thefe all be reduced into asine  
- - - -Powder; and,-with a sufficient Quantity os Peruvian Bal-  
sam, be made into a Mass of a due Consistence for Pilis.

**. .. PILULAE E DUOBUS :** *Pills of two Things:*

Take os Colocynth and Scammony, each an Ounce; Oil  
os Cloves, half a Dram ; Syrup of Buckthorn, a fuffi-  
... cient Quantity to make into a Mass of a due Consistence  
for Pilis. The Dose is from fifteen Grains to half R  
Dram.

**PILULAE ECPHRACTICAE i** *Ecphractic Pills.*

Take os Gentian, Rhubarb, Gum Guaiacum, Salt of Steel;  
and Salt of Wormwood, of each one Ounce ; of the Pi-  
lulae Aloephanginin, two Ounces ; Syrup of Buckthorn,  
'' a sufficient Quantity, to make all together' into a Mass of  
a due Consistence for Pilis. The Dose is from fifteen

**6 Grains to half a Dram. ‘ .**

**PILUL.E FoETIDjE :** *The fetid Pills.*

Take of Aloes, Trochisci Alhandal, Opopanax, Animo-  
niacuin. Sagapenum, Myrrh, and the Seeds of Rue, of  
each five Drams; os Scammony, and Asa-foetida, os each  
three Drams; of Turpeth-root, half an Ounce ; of the

. lesser Spurge prepared, and Hermodactyls, of each two  
Drams; os Ginger, one Dram and an half; of Spikenard,  
Cinnamon, Saffron, and Castor, os each one Dram ; of  
Euphorbium prepared, one Scruple; Qs rectified Oil of  
Amber, half a Dram: Let the Gums he dissolved in the  
Juice of Leeks, and strained ; then add the Powders, and  
mix them well together, and make into a Mass, with a suf-  
ficient Quantity os Syrup of Buckthorn.

These are the *Pilula fertida mayores* of *Mesuc,* and which  
our College transcribed exactly into their fust Dispensatory, as,  
also, it is in the *Augustan* in the same manner ; but, on a Re-  
view, the Bdellium hath been expunged, as having no Virtues  
corresponding to the Intention os theWhole ; the Euphorbium  
hath been, also, lessened by half its Quantity, because of .its  
excessive Heat and Pungency. Some other small Alterations  
are, also, made, that are not of Moment enough for any par-  
ticular Notice, *fisuercetan* hath a Composition under the Ti-  
tle of *Pilulee de Eaphorbio,* not greatiy unlike these, and which  
are transcrihed by *Schroder,* who hath, in Book 4. taught many  
Ways how Io correct the Euphorbium, aS by baking it in n  
Citron or Lemon, or dissolving and .washing it with Various  
Acids; which Means are imagined to abate its caustic, fiery Na-  
ture. The ‘*Augustan* Dispensatory, also, orders it, sor the same  
End, to be reduced to a kind os Pulp, or Mass, with Oil of  
sweet Almonds, and then macerated warm in any acid Juices ;  
but the Quantity it is here so reduced to, requires no such great  
Trouble. *Zwelfer* greatiy recommends this'Composition in ar- .  
thritic Affections, and cutaneous Fouineffes. besides many other

Cases ; and the present Practice gives some Reputation to its  
Virtues, by directing it sometimes in nervous and hysteric Dis-  
orders, to which last intention the College seem to have had a  
particular Regard, by the Addition of Asa-foetida, which was  
never in it before: But the Massis somewhat difficult to keep,  
without moulding; which seems owing to the Juice of Leeks  
used for dissolving the Gums, and not giving Body enough to  
keep it from drying : The best way is, to confine it in an oily  
-Bladder, and a leaden Pot. This is a well-contrived Purge, of  
all kind of Humours which lay a Load upon the Nerves, and  
the principal Spring of the Animal Machine; for it is full of  
hot and penetrating Parts 5 and, as the Scammony acts aS a Ca-  
thartic in the more open Passages, others carry the same Cara-  
lity into the remotest Recesses, and clear away watry and pitui-  
tons Humours from all the Glands and Capillaries ; but parti-  
cularly those mucous Foulnesses, which frequentiy disorder the  
Womb. For thefe Reasons this is a notable Purge in all Diss  
tempers of the Head, as Apoplexies, Epilepsies, Palsies, and  
the like, for hypochondriacal and splenetic Affections ; and pro-  
motes the uterine dealings, so as to assist in the Cure of most  
Complaints from that Quarter. Rheumatisms, Schrophulas,  
and the Gout, it is calculated for; and the most extreme Parts  
-will be drained of their .Superfluities by it. But, for these ex-  
traordinary Purposes, it is to he frequently repeated, and to he  
given in small Doses, that it may not run off too fast by Stool;  
for the more such things are brought to the Operation os Alte-  
ratives, the more effectual are they to answer any Intentions of  
Moment; an Alterative in the Bloothveffels operating by the  
same Means as a Cathartic in the Bowels: The general Dose is  
from one Scruple to sour Scruples. '

**PILULAE GUMM0SAE :** *The Gum-pilL*

Take of Opopanax, an Ounce; of Gum Ammoniacum, Gal-  
banum, and Sagapenum, os each half an Ounce ; os Myrrh,  
two Drams; of Asa-fcetida and Castor, of each three Drams ;  
of Oil of Amber, one Scruple ; of Mithridate, a suffi-  
cient Quantity to make into a Mass os a due Consistence  
for Pilis: The Dose is from fifteen Grains to half a Dram  
every Night, or Oftener.

**PILULAE DE GUTTA GAMANDRA :** *The GandogeepilL*Take os Rosin of Jalap, Scammony, Gamboge, and.Calo-  
. mel, of each half an Ounce ; of Gum Ammoniacum, dis-  
solved in the Juice of the English Orrice, three Drams ;

. osvitriolated Tartar, two Drams ; os Mastich, one Dram ;  
os Saffron, one Scruple ; os the Spirit of Turpentine, forty  
Drops: And make the Whole into a Mass of a fit Consist-  
ence for Pilis, with a sufficient Quantity of Syrup of Buck-  
thorn. . :

This is a Very rough Purge, and cannot safely be given from  
above ten Grains to half a Dram. It is reckoned a great Purger  
of Water, and is therefore principally given in Dropsies, and  
fuch-like Cachexies, that are attended with too great an Ex-  
cess of Bulk; in which Case it is a powerful Medicine, but  
is not often prescribed.

**PILULAE MECKOCANNAE** *z Pills of Mechoacan.*

Take of Mechoacan.root, halfan Ounce; ofTurpeth, two  
Drams; of the Leaves os Mesereon, macerated in Vine-  
gar, and dried, of Dwarf-elder-seed, and the Troches of  
Agaric, of each two Drams; of the Spurge-root prepared,  
and Mastich, os each one Dram and an half; of Mace,  
Cinnamon, and Sal Gem, of each two Scruples r Let all  
these, clean-powdered, be made into a Mass, with White-  
wine, and that dried and powdered again ; and lastly, be  
beat up into a Mass, of a Consistence fit for Pilis, with  
a sufficient Quantity of Syrup of Buckthorn.

**‘ PILULAE DE RHABARBARO :** *The Rhubarb-pills.*

Take of Rhubarb, one Ounce; os Refin of Jalap, and Tar-  
tar of Vitriol, of each two Drams and an half; of the  
chymical Oil of Nutmegs, half a Dram ; of the thinner  
Extract of Gentian, a sufficient Quantity to make them  
into a Mass of a fit Consistence for Pilis.

**PILULAE RUDII.**

Take of Colocynth, six Drams ; of Agaric, Scammony, black  
Hellebore-root, and Turheth-root,of each half an Ounce; of  
Succotrine Aloes, one Ounce ; os Cinnamon, Mace, and  
Cloves, os each two ScrupleS r Let the Colocynth he  
cleared from its Seed, and cut small, the Agaric shaved  
into Chips, and rhe Hellebore, Turbeth, and byices,  
he grosty bruised ; and, pouring upon them four times as  
much Spirit of Wino, let them macerate four Days toge-  
ther in a moderate Heat. rhen strain 2nd press 0Ut hard rhe  
Liquor, in which dissolve the Scammony and Aloes, after

they have been before duly cleansed ; last of all, pur the  
Whole into an Alembic of Glass, and draw off so much  
of the superfluous Moisture, as will leave the Remainder  
as thick as Honey, for a Mass to he made hjto pjijs.

It may he given from fifteen Grains to two Scruples, and is  
effectual for all the Purposes the *Aloephangina* stand recommended  
for. This, at present, is in great Esteem in the Shops fur an  
Head-purger; and it is, indeed, the principal Pill in Use in  
.most Cases where Cathartics are prescribed in this Form.

**PILULAE RUE FI five COMMUNES : Ruffy's,** *or the Common*

*: ... Fill.*

. Take of the best Aloes, two Ounces; of choice Myrrh, one  
Ounce ; of Saffron, half an Ounce .. And make them all  
together into a Mass, of a Consistence fit for Pills, with a

' sufficient Quantity of Syrup os Wormwood. ’

. This is accounted a good Stoniach-purge, and with good  
Reason ; for it greatly warms and strengthens it; and but very  
gently purges. It is peculiarly good in cold Constitutions and  
Indigestions, and will many times, without other Help, - cure a  
Green Sickness; in which Case it greatly promotes the men-  
strual Discharges, and opens uterine Obstructions; It may he  
given from fifteen Grains to one Dram; but this is not so sit for  
a Catarrh, as an Alterative ; and therefore ought rather to he  
given in moderate Doses, and he long continued;

**PILULAE DE SCAMMONIO:** *Pill of Scammony.*

Take of Jalap-root, one Dram ; of Scammony, and Vitriol  
of Tartar, of each one Scruple; of the chymical Oil of  
Nutmegs, six Drops ; the more liquid Extract os Gen-  
tian, a sufficient Quantity to make into a Mass for Pilis.  
ItsDose is from one to two Drams.

**PILULAE SToMACHICAE'CUM GUMMIS :** *Stomachic Pills  
with Gums.*

Take os the finest Aloes, one Ounce; of Sena-leayes cleansed,  
five Drams ; of Gum Ammoniacum, dissolved in Vinegar  
of Squills, half an Ounce; of Mastich and Myrrh, of  
each one Dram and an half; of Saffron, and. Salt of  
Wormwood, os each half a Dram : Make them into a  
Mass for Pilis, with a sufficient Quantity of Syrup of  
Buckthorn.

**PILULAE DE STvRACE »** *Storaxepill.*

Take of Storax, Olibanum, Myrrh, the inspissated Juice  
. Os Liquorice, and Opium, of each half an Ounce ;'of

Saffron, one Dram : Make them all into a Mass for Pills,,  
with a .sufficient Quantity of Syrup of white Poppies.

*Schroder* says, that *S. Clesseeus* used it, with great Success, to  
breeding Women, who were .in Danger of Miscarriage from  
the Trouble of frequent Coughing. It is much, that the *AU.,  
gustan* Dispensatory, as well as the *Pharmacopoeia Regia,* hath  
omitted it; as it is a Very good Medicine, and now much used  
in common Prescription against Catarrhs. There is one Grain  
of Opium in every six Grains of this Mass ; and therefore it  
ought, in the extreme Dose, not to exceed twelve or fifteen  
Grains. It has all the Virtues of the *Pilula de Cynoglesse,* but  
has somewhat more than double the Quantity of Opium in that.  
It is much more used, than any other of this Intention; but it  
ought to be with Caution.

**PILULAE TARTAREAE :** *The Tartar-pill.*

Take of the best Aloes, three Drams; of Gum Ammonia-  
cum, cleansed in Vinegar of Squills, half an Ounce ; of  
Tartar of Vitriol, half a Dram: Make them together into  
Pilis.

PILUM. A Pestle.

PILUS. An Hair. See CAPILLUS.

PIMENTA. *Jamaica* Pepper. See CARTOPHYLLUs,.  
PIMPINELLA.

The Characters are

The Flower is monopetalous,.rotated, and generally cut into  
four Segments, to the Very Centre, and adorned with sour or  
more Very long Stamina, and herbaceous, minute, and scarce  
Visible Bracteae ; for which Reason some pronounce it Apeta-  
lous. The Ovary becomes a Fruit, which is generally quadran-  
gular, acuminated at both ends, and consisting sometimes of  
one, sometimes of two Capsules, full of oblong Seeds.

*Boerhaave* mentions eight Species of Pimpinella; which are,

I. Pimpinella; maxima; Canadensis; alba; spicata. *Cor.,  
nut. I'Jqs.*

2. Pimpinella; spica. brevi, rubra. . *M. U. ζ’]. Sansuiforhet  
mayor, store spadices.* J.B. 3. I 20. *Sideritis,* II. *Dioscoridis,  
mayor.* ’Col. I. I 24.

3. Pimpinella; sanguisorba; minor ; hevis. *Co B. P.* I6O.  
*Tourn. Inst. tsy. Boerh. Ind. silt.* 2.94. *Pimpinella et San-  
guiforba.* Ossic. *Pimpinella hortensis.* Ger. 889. emac. 1045.  
*Pimpinella vulgaris sine minor.* Park. Theat. 582. Raii Hist.  
I. 4OI- *Sanguisorba minor.* J. *Β. Q.* 112. Raii Synop. 2.  
204. BURNET'.

It grows in hilly Passeres, and flowers in *fune,* and the  
Leaves are in Use. The Plant is alexipharmic. Vulnerary, and  
.pulmonic ; and is principally used in Catarrhs, Affections os the  
Lungs, a Phthisis proceeding from Erosion, in malignant Dis-  
eases, Loosenesses, and Haemorrhoids : It prevents Abortion,  
and is a Strengthener: Outwardly it is of Service in all Kinds  
**of** Haemorrhages. *Dale* from *Schroder.*

There grows to the Root of this Plant, in some Places, a  
red Grain, which is used in dying a crimson Colour: Whence  
. some take it for the Coccus, and call the Root by that Name,  
as we are informed by *Lacuna* and *Anguillara.*

What is related os the Virtues of this Plant, may be reduced  
to two Heads; first. That it is cardiac and alexipharmic; Hence  
the green Herb in put into Wine, to exhilarate the Heart, and  
to improve the Wine itself, by communicating to it an aro-  
matic Flavour and Taste, .much like thatfrs a Melon: It pre-  
serves, also, from the Pestilence, and other contagious Dis-  
eases, In the second Place, it is an Astringent: Whence it is  
of excellent Service in an immoderate Flux , of the Menses,  
Fluxes of the Belly, ail Sorts of Haemorrhages, and in drying,  
conglutinating, and healing Wounds and Ulcers. *Mt.froyle*used to exhibit the Powder of the dried -Herb or Root, with  
Sugar of Roses, for an Haemorrhage of the Nose, Spitting os  
Blond, and a Confumption of the Lungs ; the same, without  
the Sugar, sprinkled on cancerous Ulcers, restrains them from  
' spreading. *Solenander, Lib.* 3. *Consist.ΐη.* recommends a Con-  
ferve of the Leaves, with a Draught of the simple Water after-  
wards, for Pissing of Blood; for winch Purpose, also, the can-  
died Root, he says; may be used. An Huntsman belonging  
to *Henry* the Second, King os *France,* solemnly affirm’d, that  
' Pimpinella was of such Efficacy for preven ting an Hydrophobia,  
that whoever should eat it for some Mornings together, either  
in a Salad, or any other way prepar’d, would never be visited  
with the least Symptom of that Distemper. *Palmar, de Morsu  
Canis rabidi. Panchocius* relates, that a King of *Ghabam,*after a Battle, cured fifteen thousand wounded Men with the  
**Use** of Pimpinella. *Raii Hist. Plant.*

An Pimpinella; Sanguisorba; eleganter laciniate. *Hi R.  
Par.*

5. Pimpinella; Sanguisorba; minor; femine majore, &  
crassiore. *Bot. Mensip.*

6. Pimpinelis; Agrimoniordes; odorata. *IL R. Par.*

*Ji* Pimpinella; spinosa; feu sempervirens. *M.U. rsy. Po-  
terio asseris, foliis Pimpinellae, fpinofa.* C. B. P\*. 388. *Pote-  
rium quibusdam, sive Pimpinella fpinofa. j.* B. I. 2. 4Io.  
Χαλκεἴον *Anguillaree, Potcriurn Dalechampii.* Cl us. H. Iog.  
T. Voy. I. *I58.*

*8.* Pimpinella; major; Hispanica, altera ; conglomerato  
flore. *Hi R. Par. T.* I57. *Bocrh. Ind. alt. Plant. Pol.* 2.

These Pimpinellas have the Appellation of *Sanguisorba,* to  
distinguish them from the Pimpinellae Saxifragae; which are of  
**a** Very hot Nature; but the Pimpinellae Sanguisorbae are ashin-  
gent. The Plant is aromatic, gently astringent, and of excei-  
lent Service in a Relaxation of the Fibres, and a too thin and  
fluid State of the Blood: It is prescrihed in an immoderate  
Flux os the Menses, to be eaten with Bread and Butter, or  
drank like Tea; so used, it renders all manner of Poison of  
no Effect. The five first Species are commended as Preserve-  
lives against the Pestilence. Pimpinella is infused, also. In  
Wine, to he used where a Laxness os thePart requiresAstrictions;  
and there is scarce, among Vuineraries, a hetter Plant for re.t  
pressing the Flux of Blood in an Haemoptoe: It is of fingular  
Virtue in the Dysentery, both by correcting the Acidity *os* the  
dysenteric or peccant Matter, and by gently astringing the re-  
laxed Fibres of the intestines. There is prepared a Conserve of  
the Flowers, which is os extraordinary Efficacy in the above-  
said Disorders. The Leaves infused in Wine, or common Wa-  
ter, are good for the Stone and Gravel in the Kidneys. *Hist:  
Plant, adscript. Bocrhaau.*

**PIMPINELLA IS,** also, a Name for several Sorts of **TRA-  
GosETINUM ;** which see.

PIMPINICHI, *Arbor lactescens.* J. Β. .On all the Coasts  
of the *Indian* Continent, sayS *Monardes,* there grows a small  
Tree, like an Apple-tree; the *Indians* call it *Pirnpinichi,* from  
whose Branches heing cur off, there immediately stows a milky  
Humour, somewhat thick And viscous.

Tbree or sour Drops of tinis Juice, being taken inwardly,  
purge Very strongly. Bile and Water, by Stool: It is drank in

Wine; or the Powder of it, inspissated, jo swallow'd, het in a  
small Quantity, hecause of its Violence. Upon taking some  
Wine or Broth, its Operation is checked, and ceases on a sud-  
den: And the samejo reported os the *Indian* 'Ricinus. *Her.  
nandex. Raii Hi P. ... ..*

PINASTER. See PiNUsi . -

; PINDAIBA *nonnullis Ibira.* Pison. . *Arbor baccifera Bra~  
siliensis Fructu Piper resipiente.* A very tall Tree growing in  
*Brasil,* which, on account os its acrimonious Fruit, and other  
Qualities, much resembles the *Brasilian* Pepper*: The* Leaves  
are small, acuminated, and like those os the Olive-tree: The  
Berries are green in the rainy Months, but turn red in *Decem~  
her* and *January,* when they ripen, and fall off; but, being  
.dried, they Turn black, and bum the Tongue, and have an  
aromatic Taste, being separated from the black oblong Seed  
.contained in them, which smells of Juniper.

The Berries, eaten sassing, corroborate a weak Stomach, and  
discuss Flatulencies; bruised and applied, they heal the Bites of  
Serpents: Of the same, dried and pulverized, they prepare-a  
Gargarism against cold Affections of the Throat: They are  
boiled, in order to he kept in Shops, and serve instead of Pep-  
per, sor culinary Purposes. *Raii II. P.*

PINDOVA. The Name os a Species os Palm.

PINEA. A Name *sor* the *Ananas aculeatus , fructu pyra-  
rnidato ; Carne Aurea. \* .*

PINEALIS GLANDULA; The Pineal Gland. See Cher

**REBRUM. '. . .**

PINEATUM. A Name for Various Compositions, **the**-Basis os which are Pihe-nut-kernels,

PINEI *Nuclei Maluccanisive purgatorii,* J. B. *Pinus Indica  
Nucleo purgante, foe.* B. *Pinei Nuclei Maluccani. PRtk..* There  
- grows, says *Acosta,* in some Gardens of *Malabar,* and, also,  
wild in some Woods, a Tree of the Bigness of a Pear-tree,  
whose Leaves are os a Watry-green beneath, and of a Deep-  
green on the upper Face, and are Very tender and soft: They  
are of a Very acrid Taste, and Vellicate the Tongue for a long  
while afterwards: The Fruit is triangular, of the Size of **a**Filberd, and divided into many Capsules,. containing each **a**round Sort of white Seed, equal to a Pine-kernel, when taken  
out of its Shell. ' ...

We. are to consider, says *Jo Bauhine,* whether these are the  
Cathartic Pine-nuts, of which *Monardes* gives the following  
Account: There is exported, he says, from *New Spain,* a Sort  
os Pine-kernels, with .which the *Indians* purge. themselves,  
whose Example is imitated by very many in these Countries :  
They are like our Pine-kerneis, growing in large *Strobili,* like  
the beardless Ears of Mayz, with a softer and blacker Shell  
than ours, round, white on the Inside, fat, and sweet in Taste..

The *Indians,* as *Acosta* says, take a couple of the Kernels,  
peel them, and then pound them, and mix them in Clysters,  
against Difficulty of Urine, and the Pain of the -Sciatica; or  
exhibit them in Cock-broth, for the Evacuation of putrid,  
Ilimy, gross, and cold Humours, and particularly for the Cure  
of an Asthma: They anoint the Impetigo with these Kernels,  
bruised in Water; and so cure it; but they are very burning.  
The cathartic Pine-kernels, as *Monardes* says, purge Very  
strongly Bile, Phlegm, and Water ; and, though milder than  
Filberds, excite Vomiting: When roasted, they operate with  
less Violence, and fewer Gripes : They are exhibited in cbro-  
nic Diseases, and have a peculiar Virtue of evacuating gross Hu- .  
mours. *Raii Hi P.*

PINGUEDO, πιμέλη, πἰαρν πίειρον, λίπος. Fat. See  
ADE Ps. Officinal Fats are, also, called *Axungia.*

Fats in general are heating, moistening, emollient, absterg-  
ing, digestive, generative of Pus, and more or less anodyne.  
Every Fat in particular partakes of the Nature of the Animal '  
whence it was taken; the weakest is the Fat of Swine, be-  
cause that Animal is of a cold and humid Nature: The Fat of  
a Calf is somewhat stronger, next that of the gallinaceous  
Rind, and the strongest of all is the Fat of a Goose. It is to  
he observed, that whenever Fat is mention'd simply, or with-  
out any Note of Distinction, we are to understand it of the  
recent unsalted Fat of Swine.

*Pinguedo mineralis-,* what it is, fee *Theat. Chyrn. Vol.* 4.

PINGUICULA. A Plant so called by *Gefncr,* because its  
Leaves are sat to the Touch, as if rubbed over with Oil, or  
Butter. Of this *Ray* makes four Species; which are,

I. *Pinguicula Gesuoci. j.* Β. *Pinguicula sive Sarticula Ebo..  
racensis.* Ger. Park. *Sanicula montana Flore calcari donata.* C. B.  
BUTTERWORT, YORKSHIRE SANICLE.

The Leaves, which are six or seven in Numher, and some-  
times more, spread themselves upon the Ground, and are about  
two Inches long, and one broad, of a yellow Colour, inchning  
to a pale Green, sat to the Touch, and shining as if they were  
rubbed over with Butter or Oil. From amidst the Leaves arise  
Pedicles, a Palm or more in Height, and bearing at the Very  
Top a single purple,Violet, or white Flower, like a Violet, but

xnonopetaious, furnished with a long Spur, and divided into  
five Segments: It grows in moist and marshy Places, and on  
plashy Downs, where Springs of Water abound.

2. *P'tnguicula Flore albo minore. Calcari brevissimo.* This  
was observed by *Ray,* in moist Places on the Tops os Mount  
jsara.

3. *Pinguicula Flore amplo purpureo, cum Calcari longissimo.*This is sound in the same Places as the preceding.

*4. Pinguicula Comubiensis Flore minore carneo.* The Leaves  
of this Species have their Margin reflexed, and, as it were, con-  
volved ; are almost pellucid, and striated with red Veins. *Ray*observed this Species to grow in marshy Pisces, about *Kilhharn-  
ton,* and other Places in *Cornwall.*

The Leaves, bruised, and applied, are said to cure recent  
Wounds and Bruises : It is usual for the Country-people to cure  
Chaps in their Hands, and Tumors and Fiffures in the Ud-  
ders of their Cows, with the Fat and buttery Juice of this  
Herb: Hence it took the Name of *Yorkjhire Santcle.* The  
common Sort of People in *Wales* prepare from it a Syrup,  
with which they purge themselves, and thofe who belong to  
them; and, also, boil the Herb in Broths, for the same Pur-  
pose; for it purges Phlegm brifkly enough : They make, also,  
an Ointment of the same, which is of great Use in Obstructions  
of the Liver. *Dalechampius* affirms, that the Root baked, and  
applied in Form of a Malagma, cures the Sciatica on the third  
Day, and that the same bruised and applied, cures all Sorts of  
Pains. *Camerarius* assures us, that it is a vulnerary Herb, and  
is of excellent Service in Hernias of Children. It dyes Hairs  
yellow, and serves Women instead of Gum for curling their  
Hairs. *Raii Hi P.*

PINIPINICHI. The same **as PIMPINICHI.**

PINNA. A Wing. But the lateral and inferior Parts of  
- the Nose are called the *Pinnee* thereof; and the superior broad

Part os the external Ear is, also, called the *Pinna* thereof.

PINNA, or PINNA MARINA, is a Sea Shell-fish of a  
conical Form, and separated into two Parts, which are rough  
without; and'of a darkish Colour, but smooth, green, and  
resplendent within : Some of them are two Feet in Length, and  
about half a Foot in Circumference, towards the Middle. This  
Shell is found upon the Coast os the Sea, either among the  
Wrack, or the Sand. There are Various Species of them, which  
Contain a small Fish, which is an excellent Aliment, and in  
which there are sometimes found large Pearls.

. From the superior Part of the Shell, which terminates in a  
very obtuse Point, arises a sort of Cord, or small Portion of  
redish or dark-colour’d Silk, by some Naturalists, though, per-  
haps, not very properly, called *Byfsus;* This Cord helps the  
Animal sometimes to nx itself to the Rocks: This Silk, when  
taken from the Fish, and prepared, is made into Stockings, and  
other Cloaths. The Fish, when eaten, excites Urine; and the  
Shell, when reduced to a Powder, provokes Urine, and ren-  
ders the Patient costive. *Lemery des Drogues.*

PINNACULUM FORNICIS GUTTURALIS. The  
**UVULA.**

. PINO. The Name of a sort of Nettle, ’which grows in  
*Brasil.*

PINOGUACU. A Name sor the two Species *of MA-  
MoERA.*

PINUS.

The Characters are ;

The Leaves are longer than those of the Fir-tree, and al-  
ways grow by Pairs, out of one common Sheath: The Flower  
is male, amentaceous, consists os Stamina, and is produced at  
a Distance from the Fruit os the same Tree. The Fruit is a  
Cone, consisting of tetragonal Tubercles. Among the Squa-  
mae, which are excavated into two Pits, are two Stones, fre-  
quently winged, inclosing an oblong Kernel.

*Boerhaave* mentions three Sorts of Pinus; which are,

I. Pinus; sativa. *C. B. P.* 49I. *Raii Hist. Q.. Tourn. Inst.*

585. *Boerh. Ind. alt.* 2. I79. *Pinus.* Offic. *Pinusfativafive  
domestica.* Ger. I I 73. Emac. I 355. *Pinus urbana sive dome-  
stica.* Parin Theat. I354. *Pinus ossiculis duris, foliis longis.*J. B. I. 248. THE PINE-TREE.

This is a large spreading Tree, whose Branches are clothed  
with long, slender, sharp-pointed, green Leaves, two growing  
together in a common Sheath, which are somewhat hollow on  
the Inside; on the larger Branches grow large, loose, yellow  
Catkins, which come early in the Spring; and, aster them,  
large, oblong, round-pointed Cones, heavy and firm, composed  
os several high, brown, hard Seales, hetween which lie the  
Kernels, which are longish and white, os a pleasant Taste,  
included in an herd Shell, and covered immediately with a thin  
- brown Skin. The Pine-tree grows wild in several Parts os *Ltaly,*and is usually planted here in Gardens.

The Nuclei, or RernelS, which are principally used, are of a  
balsamic nourishing Nature, good for Consumptions, Coughs,

and Hoarseness, restorative, and serviceable after lr,n2 Ilinefi -  
and, likewise, help the Strangury Heat and Sharpness os'.  
Urine- *Moller's Bct. Off. ~*

It has been a Subject much disputed among the Learned, by  
what Name the *Pinus* of the *Latins vests* called among the an-  
tient *Greeks. J. Bauhine* is persuaded, that πεύκε» *(sceuce) is*the antient *Greek* Name for the Pinus ; 2nd his Brother *Lof.  
par,* with *C. Clusius, Bodaus a Stapel,* and other learned Mon,  
are of the same Opinion. For my parr, I am inclin-d to think,  
with our Countryman *Turner,* that the πεὑκη of *Theophrastus*is indeed the Tree which the *Latins* call *Pinus.,* but thatP/dury  
took the πίτυς *(Pitys)* of ,the *Greeks,* for the Pinus, because  
that Author renders πίτυοχάμπαι *(Pityocampa)* by *Eruca Psu  
riorum. The Caterpillars of Pine-trees,* not os the *Picea,* or  
Pitch-tree. AS sor the πίτυς *(Pitys)* os *Theophrastus,* we are  
not certain what Tree it was ; but J. *Bauhine* thinks it likely  
to be the *Pinastcr,* or Mountain-pine. The Occasion of this  
Uncertainty, and Mutation of Names, seems to be owing to  
the *Arcadians,* who, as *Theophrastus* writes, called πίτυς what  
the other *Greeks* called πεήκη. and gave the Name of πεύκη to  
what the rest called πίτυς.

The Bark and Leaves of all the Species of Pine-trees are  
refrigerating and ashingent; whence they are of Service in  
Dysenteries, and an immoderate Flux of the Menses. The  
Decoction or Infusion of Pine-tree-tops in Beer, or any other  
proper Liquor, is supposed to be Very effectual sor the Stone in  
the Kidneys or Bladder, and for the Scurvy, and other Affec-  
tions of the Thorax. *Hoffman, Meth. Med.* relates how a  
thousand Persons were cured of scorbutic Affections, by the  
young and tender Shoots of the Pine-tree.

Pine-kerneis are of a most delicious Taste, and even prefer-  
able to Almonds; whence, in *Italy,* they are served in at a  
second Course : They are moderately hot and moist, maturat-  
ing, lenitive, and fattening ; their principal Use is in a Phthisis  
and Tabes, because they are very nutritive, though not Very  
easy to he digested, as *Dodonaus* thinks: Taken either alone,  
or in Honey, or in any other Eclegma, they are good sor. a  
Cough, and inveterate Disorders os the Breast, because they  
are lenitive in Exasperations; they are, also, of Service in ne-  
phritic Disorders, the Strangury, Acrimony of Urine, and the  
like, because they mitigate and remove Pains\*: They increase  
Milk, and the Semen; on which Account they revive languish-  
ing Nature, and excite to Venery, especially when they are  
preserved in Sugar. The whole Cone, or Strobilus, boiled  
with fresh Horehound, and afterwards boiled a second time,  
with a moderate Addition of Honey, to a melleouS Consistence,  
is a proper Medicine, as *Galen* says, to promote Expectoration,  
is good for an old Cough, and consumptive Disposition, as we  
are assured, also, *\sy Dioscstrides.* The Water os the Cone is  
astringent, and, therefore, good to remove Wrinkles in the  
Face, to repress the Growth of the Breasts, and sor the Fall-  
ing out os the Matrix, and other Disorders of that Kind. .

*Coccalus, Acueaecu&,* according to *Galen, Com.* 4. *in Lib. de  
R. F. L A.* though used by *Hippocrates,* was not the Name for  
the Pine-nut, among the antient *Greeks,* but κῶνος *(Conos) ,*the modem Physicians, he says, almost universally call it gnitio.  
λος *(Strobilos)r* The Coccalus, together with Myrrh, made  
into an Eclegma with Honey, is advised by *Hippocrates,* in the  
Book hefore-mentioned, for a Pleurisy: And in the same Trea-  
tise, he directs an Eclegma to be prepared os the Coccalus and  
Galbanum, with *Attic* Honey, sor a Peripneumony ; to which  
last Place *Galen* had, undoubtedly, a respect in his Exegesis,  
where he writes. *That most take the Coccalus to be the Kernel of  
the Strobilus.* But *Diofcorides,* by way os Diminution, will  
have it to be the *Granum Cnidiutn.* Κόκκαλος, in *Hes.ychius,*is expounded by ῥόμβος *(Rhombus)* στρόβιλος *(Strobilusy,* and  
*eaitir.it (Peucesi* Pine-kerneis are called by *Diofcorides, Lib.* I.  
*Cap.* 88. πὸτυιδες *(Pityides),* by *Menesithus, in Athenaeus, Lib.*2. άστρακίδες *(Astracides),* also, πιτυινοι κῶνοι *(pityini Coni),*and πντυῖνα κάρυα *(pityina Carya), from Alexander Myndius,*and *Disc les Carystius. Foesius.*

2. Pinus; sylvestris. *Ger.* I I 75. *Emac.* I 356. *C. B. P.*49I. *Raii Hist.* 2. IY99. *Boerh. Ind. A.* 2. 179. *Pi-  
nus fylvostris. Pinaster.* Ossic. *Pinus fylvesiris vulgaris Ge-  
nevensis et T.ada. J. Β. I.* 253. THE MOUNTAIN  
PINE.

This Tree grows to be as tall, and as large,, as the former ;  
but differs from it, in having shorter and stenderer Leaves,  
smaller and sharper Cones, including smaller Kernels, much of  
the Nature and V irtue os the sooner: It grows in great Plenty  
in divers Parts os *Germany.*

From this Tree is gotten what is called *common Turpentine,***(See TEREBINTHINA)** which is whitish, thick, and opaque,  
like Honey, of a strong Smell, and used principally by’ Far-  
tiers: From this is distilled the Oil of Turpentine, the finer  
and more Volatile Part thereof, and what comes first, being called

**The** *Spirit:* What is left at the Bottom os the Still is the common  
Rosin, which, is taken out, hefore it be drawn too high, and  
then washed in Water by a peculiar Method, is whet we call  
*white,* or *yellow Rosin.* The black Rosin is the same, more  
evaporated, and not washed at all. See CoLOPHoNIA. The  
Common Frankincense is reputed to he the native Rosin os this  
Tree, or the *Resina Pint,* which is ofa whitish-yellow Colour,  
whereof some Pieces are sat, soft, and whitish, and others hard;  
brittle, and more yellow. There is but littie of this to he got  
pure at present, heing adulterated by common yellow Rofin, by  
seine way» that crafty Knaves have found out. See THUS. The  
black and yellow Rofin are much of a Nature, being used in  
Ointments and Plaisters. Mr. *Dale,* in the second Fart os his  
*Pharmacclogia,* affirms, from Dr. *Kreig,* that the *Pix Burgun-  
dica, Gt Burgundy* Pitch os the Shops, is made of this Turpen-  
tine, aster it has been boiled some time, and before it has arrived  
to the Hardness os Rosin : This isdone,sayShe,in.8axo»y,where the  
white Rosin is made by boiling the Turpentine in large Vessels,  
without Distillation. See **PIx BURGUNDICA.** *Millar's Bor.*

*°V. . -*

3. Pinus humilis ; Iulo purpurascente. T. 585. *Pinaster  
Aastseiacus, tenuis.olius.* J. B. I. 255.

. The Kernels, dried by the Fire, are good for an Asthma, and  
deterge Ulcers in the Kidneys. The Decoction of the thin  
Leaves is commended in the Scurvy, where the Acrimony of  
the Humours requires Demulcents, and where the Vessels are  
to be strengthened, aS the Cose is in a Phthisis. The expressed ‘  
Oil os the Kernels has the fame Virtues, as Oil of Almonds.  
*Hist. Plant, adscript. Boerhaav. -*

. PINUS AFRICANA. A Name sor the *Conocarpodendron;  
foliis argenteis, sericeis, latissimis.*

Besides the foregoing Species of *Pinus, Dale* mentions the  
following

*Pinus maritima.* Ossic. *Pinus silvestris montana.* Ger. II 75.  
Emac. 1357. . *Pinus maritima major.* C. B. P. 492.. *Pinus  
silvestris maritima, conis firmiter ramis adharentibus.* J. B. I.  
243.: Tourn. insta 586. Rail Hist.: 2.I400. *Pinus mari-  
tima major fructifera.* Park. Theat. I535. SEA PINE.

.. It grows in *Provence* and *Languedoc* in *France*; and the Bark,  
Leaves, and Resin, which are the Parts in Use, agree in Vir-  
tueswith those of the *Pinus silvestris, css* Mountain Pine.

Besides these, the following Species- are mentioned in *Ray ;*

I. *Pinus cui Osstcula fragili Putamine sive Cornbro'.* J. B.

*Pinus silvestris montana tertia.* C. B. *Pinus siylv. altera fructi-  
fera, Tada arbor fortes Pin. siyl.* 2: ’Ger. defer. - 2

.It grows plentifully in the Country of the *Gris.ons,* where the  
Peasants feed on the Fruit, which, though, in the Judgment of  
*Bellonius,* it has a softer, and more savoury Kernel, than the  
common Pine, it is yet so cheap, as not to be worth the Expor-  
tation ; it grows frequentiy, also, on-the-Mountains os *Gene~  
Ore,* and Mount Cains, in the Passage from *France* to **the**Duchy of *Melam,* where it is known by the Name os *Elui..  
Gesuer* fays, that it grows on the high Mountains os the *Gris.ons,*and os *Wallisserland*.; and that no Trees grow in higher Places.

.2. *Pinaster latifolius Iulis virescentibus aut pallescentibus.* **C.**

B. *Niger, latiora folio. Iulis pallescentibus.* Park. ‘

3. *Pinasicr Ausirtiacus ienatioliusgisp.* B. *Pinaster tenuis.olius,  
luso purpuraseente. C. B. Tada, /eu Pseudo-Pinus. Ger. Pi-  
naster p. Austri acus.* .Clusi

'. 4. *Pinaster comis erectis.* C. Β. *Pinaster Austriacus. Ger.  
Emac. Pumilus montanus.* Park. *An Pinus fylvostridurNlugsc*ho *sive* Krein. J. B. \_ *Pinus tibulus scit tubulus.* Plin ? *Sylu.  
Mugo.* Matth. . . ..

It grows on the Tops of the highest *Alps* in *Austria* and *Sti-  
ria,* among Stones and Rocks, where hardly any Other Trees  
will appear.

5. *Pinaster tertius Hispanicus humilis.* J. B. *Pinus mari-  
tima minor.* C. B. Park. *Pinaster rnarit. minor.* Ger. Emac.  
*Clusius* observed this Species only in the Kingdom of *Murcea* in  
*Spain,* and that Very rarely.

6. *Pinus fylv. maritima, conis firmiter ramis adhaerentibus.  
J.* B. *Sylu. altera maritima.* Lob. Obsi *An Pinaster Q.. Hise  
panicus.* Clusi ? . .

- 7. *Pinus maritima major.* C. B. *Maritima major fructifera.*Park. *Sylvestris montana.* Ger. *Pinus maritima Theophrasti.  
Lobelio.* J. B. In Trunk, Branches, and Leaves, it appears  
very like the *Pinastcr montanus*; only the Branches are glabrous,  
and blacker than the Trunk; and the Cone iS of a scarlet Co-  
lour; and shorter and broader at the Top.

8. *Pinastrum alterum Hispanicum, vel minus Hispanicum.*Clus. *Pinus maritima major fructifera altera.* Park. *'Marti,  
major.* This grows frequentiy in the Kingdoms of *Murcia* and  
*Valentia, in Spain.*

9. *Pinus siylv. foliis brevibus glaucis, cum parvis albentibus.  
Hortulanis nojiris.* THE SCOTCH FIR, ί. *e. Abies Scotica  
Perperam dtcta.* It grows spontaneoufly in the *Stirian Asm.*

This is now frequently cultivated in our Gardens and Groves,  
On account of its noble and beautiful Appearance. -

io. *Pinus siylwstrio, five, ut Bellenius, Plena jfrlgiestres Ida  
Troadis, cisius coni facile decidunt.* J. Β. *Raii Η. P.*

PIPA *arbor et fructus l. inensis.* Michael Boym. *in Flora Se-  
nensi.* Jonffan. Dendrolog. The Name of a Plum-tree, which  
grows in *China.*

PlPER ALBUM. Offis, Get. I353- Lmac. I53S. Park.  
Theat. I6o;. J. B. 2. I Si. *Pipor rotundum album.* O. Β. P.  
4tI. Raii Hist. 2. I3A2. *Piper album, Laeucopiper.* Mont. Exot. 9.  
WHITE PEPPER.\* See **PIPER NIGRUM-**

PIPER NIGRUM. Ossic. Get. 1353. Emate. M38. Path.  
Theat. I 60 3. J. B. 2. IS I. *Piper rotundum nsigrum.* C. B. P.  
4tI. Raii Hist. .2. I3.4I. *Ladas aliis Molanga five Piper aro-  
rnaticum.* Pis. Mant. A. 472. *Pipier rotundum ex Malabar afoliis  
lasts quinque nerviis alhecantibus.* Herm. Mus. Zeyl. 52. *Molagor  
coati* Hon. Mal. 7. 23. Tab..12. BLACK PEPPER.-

Tne Piant which bears Pepper climbs and twists itself about  
any thing that is put for its Prop or Support, bearing alter-  
nately large. Oval, ' but sharp-pointed Leaves, full of large  
Nerves, opposite to which grow long Spikes Ofsmall thonope-  
talons Flowers,, cut into three Parts, succeeded by Bunches of  
the Grains of Pepper, which are round. Of a dark-brown GO-  
lour, having a wrinkled Bar on the Outside. There has been **a**Dispute among the Writers of the Materia Medina, whether the  
white-and black Pepper are the Emit Of one and the frmePlant, Or whether they he two distinct Species. The more  
an linn-, aS *Garcias ab Horto, Parkinson, C. Bauhins,* were of  
Opinion, that they were different, but Pasco, in his *Maniifsu  
'aromatica,* and sincethis Time, *Herb,de Jager,* in the twenty-  
sixth Epistle of the *India literata,* in the Appendix to the  
*Museum Valentini,* plainly demonstrate, that they are hut one  
Species, and that the white is made of the ripest black Pepper,  
of which they put a Quantity in a deep Trench, where it lies  
for two or three Days, till the Bark is rotted, when they **pour**in a Quantity of Water, and, stirring it about, separato rhe  
Bark which swims a-top, and dry the Fruit with white Ashes,  
which they separate from, when dry, with large Fans, as' we  
with new Com. .

Pepper is heating and drying, expelling Wind, and of great  
Use against Coldness and Windiness os the Stomach, and the  
Colic; it strengthens the Nerves and Head, and helps the Sight;  
outwardly it is good for the Tooth-ach, and for cold Affections  
of the Nerves, and Pains in the Limbs. Pepper ought not to  
be powdered fine, but only grefly broken, when it is eaten  
with any Food, or used to season it. *Miller's Bor. Qsse -*

Pepper is an aromatic Fruit, of an heating and drying Qua-  
lity, produc'd in Grains Commonly, and us'd in Sauces and  
Seasonings. . '

This Fruit, so well known *in Europe,* is produc'd by a  
Plant or Shrub, which grows in various Parts of the *East  
Indies.* X

The Plant which bears it, is weak and creeping; a Circumi  
stance which obliges those who Cultivate it to plant it at the  
Foot os large Trees, such as the Areca, and Ccco-nut-tree. Its  
Leaves, in Figure,, resemble those os Ivy, but are less green,  
more, yellow, os a strong Smell, and pungent Taste. / ‘ ,

The Pepper comes forth in small Clusters, like our Goose  
berries, and the Grains of which these Clusters are Compos'd,  
at fust appear green , then they become red, in proportion aS  
they ripen ; and at last black, or such aS they come to us,  
after they are lest expos'd to the Heat of the Sun for some  
time. \* i . o :

There are not two Species of Pepper, one white, and the  
Other black ὁ and we have good Reason to embrace this Opi- :inion notwithstanding what Mr. *Pomes, in* his *Hifioire des*

*Or agues,* has said to the contrary, finCe Mr. *Dillon,* a celebrated  
Physician, and Author of the History of the Inquisition of *Goa,*assures as, that all the Difference between the white and black  
Pepper is, that the latter has its Skin, whereas the former wants  
the Skin; which in taken off by beating it hefore it is entirely,  
dry, or- by suffering it, after It is dry ro soak sor some time in  
Water. -si 7

Tho' Pepper is produc'd in various Parts Of the *Inches,* yet it  
grows most copioufly between *Rayapour,* and the Cape,of *Ca\*  
inarin.Tsae* Pepper Of *Malabarfot* that produc'd between Mount  
*Eli* and the Southern Extremity of the Coast, is somewhat smaller  
than the others but produc'd in such large Quantities, that  
*Europe* is principally supplied with it.

The black Pepper, consumed In Europe, is of three Sorts;  
that of *Malabar,* and that Os *Jumby,* and that of *Belipatham.*But this last is least esteem'd in *Europe,* On .account of its  
Smalness and Driness ; two Circumstances which recommend it  
to the *Indians,* who think small Pepper less hot than the large  
Kind. ‘

The white Pepper ought to be chosen large, well-nourlsh'd,’  
weighty, and without Mixture of black Grains or Rubbish ; which  
when reduc’d to a Powder, is Of a beautiful grey or a whitish  
- Colour.

*As* for black Pepper, which ought to he possess’d of almost  
all the Qualities Of the white already enumerated, we must,  
also, take care that the Grains he not wrinkled ; that there he  
**a** large Quanity of white Grains among them.; and that the  
largest Grains have not been separated, in order to he whiten’d,  
a Practice very common in *Holland, Ponere, and Paris.*

*As* a great Part Of rhe Pepper, whether white or black, is  
sold beaten, it is ease for Persons of a fraudulent Disposition to  
sophisticam it, which Retailers generally do by mixing, with the  
Nack Pepper, the grey Spices of *Auvergne, Maniguette,* a  
Species jof *African* Pepper ς the Dust of Pepper ; and the  
Crust Of Bread. With the white Pepper they mix white Spices,  
Or black Pepper whiten’d ; fo that it is very difficult to distinguish  
the sophisticated from the genuine Kind; for which Reason we  
ought to buy from Persons of Honesty and Skill. \_

Druggists and Spice-merchants sell various Other Kinds of  
Pepper, describ’d by Travellers in their Relations ; such as the  
Pepper Of *Madagascar,* that of *Mascarine,* or the Isiand of  
*Bourbon ,* the Pepper of *China-* the Long-pepper of the *Indies,  
Ethiopia,* and *America; Guinea* Pepper, *Jamaica* Pepper, the  
Pepper of *Thevei,* and that of *Africa.*

The Pepper of *Madagascar* is white, and grows on a Plant,  
which creeps on the Ground, and whose Stalk and Leavs have  
the fame Smell, wish the Fruit, which ripens in the Months of\_  
*.August, September,* and *October.*

The Pepper of *Mascarentseo* which is, also, produc'd in the  
Isiand of *Java,* is call’d Cubebs, or Pepper with a Tall. It  
exactiy resembles the black Pepper, except that it is larger, and  
has a Tail. The Plant which produces it, creeps on rhe Ground  
and its Emit, which ought to he chofen large, well nourish’d,,  
and without Wrinkles, adheres to it in the Form of Clusters.

The *China* Pepper, describ’d by Father *le Compte* in bis Me-  
moirs, has the same Proportion with that of the *Indies.* The  
Tree which produces it, is aS lame asaNut-tree. Its Fruit is as  
large as a Pea, and Of a greyish Colour, mix’d with red Streaks.  
When it is ripe, it Opens spontaneously, and contains a small.  
Nut, as black as Jet; aster it is gather’d, it is expos’d ro the  
‘ Sun, in order to be dried. The Nut, which is Of a very strong

Taste, is thrown away, and the Husk or Bark only kept. The  
Smell of the Pepper-tree is so strong, that the Fruit must, be  
gather’d at different Times, lest those employ’d in that Work  
should be injur'd by it

The Long-pepper, which is in kind Of Congeries of many  
small Grains, strongly hinted to each other, grows upon a  
Shrub, whose Leaves are stender, green, and placed upon a short

- Stalk.

This Pepper is Of three kinds, that of **the** *East Indies,* that Of  
*America,* and that of *Ethiopia,* which is call’d Grains of *Zelirn.*But that of the *Indies* is the only true Long-pepper, since the  
others bear but little Resemblance to iin

Good Long-pepper ought to he recent, well-nourish’d, large,  
weighty, difficult to he broken, not rotten, without Rubbish or  
**a** Mixture of Earth. It is us’d in Medicine, in various *Galenical*Compositions, and is an Ingredient in theTheriaca. It is, also,  
sometimes mixed with Sprees.

The *Guinea* Pepper is of a red Colour, resembling that of  
Coral. It is cultivated in *Languedoc,* and especially in the Vil-  
lages about *climes.* It is commonly found in the Shops of the  
Druggists and Grocers. The Vinegar-makers use it for making  
their Vinegar. Some, also, preserve it with Sugar; it ought to  
be chosen recent,, in Pods, which are beautiful, jiry, found, and  
very red.

There are sour Sorts of this Pepper: The first is call’d *Chit.  
chates-,* the second, which is very small, is call’d *Chilterpin-,* and  
these two Kinds are of an acrid and highly pungent Taste. The  
third is call’d *Tenalchiles,* which is moderately hot, and which  
the *Indians* eat, like other Emit, with Bread. The fourth is  
call’d *Chilpelagua-.* This last is neither so pungent as the two first,  
nor so mild as the thirdthis is the Species fo much esteem’d  
by the *Spaniards,* and generally us’d by them in preparing these  
Chocolate.

There is, allo, another Species of this Pepper, which Only-  
grows about *Peru,* where it is call’d *Azy.* A large Quantity of  
this Species is cultivated in a small Plain, about fix Leagues in  
Circumference, near, the Village of *Arica,* on the Coast of *Peru,*and in the Volleys of *Sama, Tacna,* and *Cocumba.* Tho’ these  
lour Places are of a fmall Extent, and there is a great Demand for  
this Kind of Pepper, yet they furnish every Year, as much as draws  
Inore than fix hundred thousand Piasters; which would appear  
incredible, if rhe Excrements of the Bird call’d *Guana,* with  
which the *Peruvians* dong their Land, did not render it fo  
fertile, that the Grains fowh in it, and especially **the** *Agy,* yield  
four or five hundred for one\_

The *Jamaica* Pepoer is the Fruit produc’d by the Tree  
which furnishes us with the *Indian Wood.*

The Pepper of *Thevet,* which the *Dutch* call *Amami,* on ac-  
count Of its Resemblance to the *Amomi,* or *Jamaica* Pepper, is  
a small round Fruit, as large as the white Pepper, a llrtle roundish,  
and with a Species of small Crowmat one of its Ends. ' It is,  
allo, called the fmall round Clove, hecause its Taste resembles  
that Of the true Clove. *Savary. Dict. de-Comm.*

*As* for the *Afoican* Pepper, which is call’d *Marionette, Mala-  
D'etre,* **Or** *Cardamoms,* fee rhe Article CntDnmva.

PIPER JAiUIcENSE. *Jamaica* Pepper. See CARroFar-  
LUs.

**PIPER INDIcUM.** *Guinea* Pepper. See CapsrcUM.

PIFER LoNOUM. Osfic. Ger. 1355. Emac. 1539. Park.  
Theat. Iced.. Ogiib. Chin. I. 226. J. Β. 2. Is,. Raii Hist. a.  
I 343. *Piper longum orientale.* C. β. P. 4I2.. *Piper longum Pists-  
lochia foliis absaue pediculis, Maderaspatana.* Plain. Phy tog. Tab.  
104. *Pirnpilini.* Pis Mam. A. 182. *Tlatlasicuay. five Piperic  
lsnsos Species* II. Hern. rain. *Catta-tripali.* Horn Mal. 7. ay.  
Tab. I4. *Arbor Piperiferafructu longo,* lonsi Dendr. I78. *Aca~  
pacts* LaeI. 23I. LONG-PEPPER.

This is a long Fruit, somewhat resembling the *lulus* or  
Catkin of the Hase], but bard and firm, consisting of several  
small roundish Grains, ret together in a spiral Order, os **a**brownish Colour, and an hot hiring Taste; they grow upon **a**Plant,, which twists and winds itself about any thing, that is in  
its Way, heving large, oblong, round-pointed Leaves, set alter-  
nately on the Stalks; and opposite to them grow monopeta-  
Jous Flowers, divided into five Segments, which are succeeded  
by this Fruit. It grows in *Java and-Malabar,* and other Parts  
of rhe *East Indies..*

As in Taste,fo in Virtue,it imitates the biack Pepper; warming  
and comforting the Stomach, expelling the Wind, and pro-  
moting Digestion. It is, likewise, accounted alexipharmic, and is  
an Ingredient in *theTheriaca Andromache. Miller’s Bos Osse*

PIPERELLA. A Name for *use Marum, Hispanicum, ni.  
crum s store purpureo.*

PIPERITIS. A Name for the *Lapideum,* Dittander.

PISCATORIS EMPLASTRUM. The Name of a Pleister  
describ’d in *Aetius Tetrabiblos,* 4. *Serm.* 3. *C.* 18..

PISCATORIS MEDICAMENTUM. The Name of **a**compound Medicine describ’d *by Actuarius, L.* 6. C. γ

P1SO. A Mortar. *Castellus.*

PISONIA. Fingrigo *vulgo.*

The Charasters are' \*

- It is male and female in different Plants; the male Flowers  
consist of a great Number of Stamina, and have no Petals: The  
female Flowers consist of One Leaf, which is Beil-shaped, and  
divided **at** the Top into five Parts; from whose Cup arises **the**Points), which, afterwards - becomes an Oblong, angular, cha-  
Del’d Fruit, containing oblong Seeds.

*Miller* mentions two Species. .

- I. *Piscnia aculeata mas.* Houss

a. *Piscina aculeata, fructu glutinose, &racemofo.* Hum.Nov.  
*Gen.*

These Plants are seminal Variations, which arise from, -the  
Seeds of the same Plant, but as they were not distinguished by  
any of the Botanists, till the fare Dr. *Houstsuss* observed their  
Difference; and therefore the different Sexes are here mentioned  
as separate Plants. ' ‘ .

The Name of this Plant was given hy Father *Planner,*in Honour to Dr. *William Pise,* who published a Natural  
History os *Brastl.* The Name of *Pingrigo* is what the Iubabit-  
anrs of *Jamaica* know it by. ' :

’ These Plants are very common in the *Savannahs,* and other  
low Places, in the Island of *Jamaica,* as, also, in several other  
Places of rhe *iVest Indies.,* where it is very troublesome to  
whoever passes through the Places of their Growth, by fastening  
themselves by their strong crooked Thorns, to the Cloaths of  
the Perrons;.and their Seeds, being glutinous, also, fasten them-  
selves to whatever touches them .. So that the Wings of the  
Ground-doves, and other Birds, are osten loaded with the Seeds,  
so as to prevent their flying; by which means they become an-  
eafy Prey.

it rifes about ten or twelve Feet high, with a pretty strong  
Trunk; but the Branches are long and stender, whereby being  
unable to support themselves, they generally twist about what-  
**ever** Plants are near them. *Miller's Dictionary.*

P1SSANTH0S. The fame as ORRHoprssA.  
PISSASPHALTOS. See **BITUMEN.**

PiSSE. πίσση. Pitch.

PISSELAEUM, πισσέλαιον, (from πίσοη. Pitch, and ἔλαιον.  
Oil) Oil of Pitch, is prepared of Pitch by Separation of its  
watry Part, which fwims thereon like Whey upon Millt. It is  
taken off while the Pitch is in boiling, by spreading Over it clean;  
Wool, which, aS soon as It is throughly moisten’d with the  
ascending Vapour, is wrung into a Vestel; and this is rep-ared  
as long as the Piich is in boiling.

The *Pisselaum* is effectual tor **the** same Purposes as Tar. **A**Cataplasm thereof, prepared with Meal of Barley, restores the  
Hairsin.sn Alopecia; Tar has thesssme Effeib;and, besides, cures  
Scabsand Ulcers in Cattle. *Dioscorides, Idle.* I. *Cap.* 95...

**PISSEL.EUM INDIcUM.** Ossie. *Bitumen Barbadeofe.* Bo-rhi  
Chetn. *Pix liquida Barbadensts,* Pharmacopolis. Lond. *Pin  
Berbades.* Boerh. Thefaur. Pharm. IoSi BARBADOES-  
TAIL \_ ' - .

This is brought from the liland, whose Name it bears; where  
it stoats on the Surface of the Water: It is of a blackilh-red  
Colour, of a disagreeable Smell, and of the Consistence of

liquid Pitch. It is possess'd of a fudorific Quality, And is. good  
for Disorders of the Lungs and Stomach. By adding a small  
Quantity of the Oil of Anise, to this. Bstumen, the .Ζφύμασπ  
Apothecaries prepare a Balsam, which they fell for the *Balsuan of*

*Boerhaave,* in his Chymistrv, teems to think *Parbadaes* Tar a  
Vegetable Preparation, since, line rhe *Oleum Terra* Of the *Indies,*it consists of the express’d Oil Of CocO-nu.s mix'd with meth-  
- cared Earths. ~ .

This, says *ssfoincy,* feems to be what passes in the Shops by  
the Name of *Parbadaes* Tar. It has a strong Scent, not un-  
. like the common Tar, and is not very pleasant to the Sight or  
Taste 5 hut'th Certainly a good Balsamic, and where the Sto-  
mach will dispense with it, will do groat Service in some Dis-  
. Orders os the Breast. It is effectual in Obstinate tickling Coughs,'  
and sometimes succeeds where more elegant Medicines have faired.  
Some, commend s in Burns, Scalds, and Inflammations; but  
' the regular Practice does not much justify such Use externally.

Among the Country.\*people, it is in great Request for scal'd -  
Heads, which is a Disease troublesome to cure, and often puz-  
zles a good Physician. It is with some, also, a Secret to apply  
to the Soles os the Feet in Agues, and, also, to the Wrists; and  
I have known Instances where it has succeeded. That Medicine  
commonly sold by the Name Of Oil of Spike, is nothing but  
Oil Os Turpentine tinged with this Simple. See **PICTONUM  
COLICA. μά δ᾽** χ ' --ἐν. οῦ- ἄκ '

PISSERO5, πισσηρὸς, from πίσσ», Pitch, is an Epithet of a  
Cerate, called by *Hippocrates* μασσηρῆ κηρωτῆς *(stiffere cerates),*pitchy Cerate, and order'd by him to be apply’d to Ulcers  
affected with an Inflammation, and as an Anodyne. It was  
prepared, as *Galen* writes. *Comment.* I. *in Lib. de Fract.* os Wax  
melted with Oil, Or Oil os Roses, and dry Pitch. *Hippocrates*sometimes expresses it simply by πισσηρῆ *(Pisserese* and some-  
times with the Addition of κηρωτιις *(Cerotes),* πισσηρἢ κηρωτής.

PISSITES, πισσίτης. Wine Of Pitch, is prepared Of Tar and  
Mush The Tar is first to he washed with Sea-water, or Brine,  
till It. becomes white, and the Sea-water runs Off pure , after  
which it is to he. washed with sweet Water. Then to eight  
*Chegiios Must,* put an Ounce or two of.this Tar, and suffer it  
- to ferment, and then IO settie, after which pour it. into  
. vessels. . -.-si squsta-et ; ’’δ᾽ - . ss

τ This sort Of Wine as Ofan heating Catality, helps Concoction,  
is abstersive and.pectoral, on which account, it is of efficacy  
in Pains/of the Thorax, Belly, Liver, Spleen, and Uterus, is  
unattended with a Fever, also, in inveterate Defluxions, and  
deep Exulcerations: It is, also, good against a Cough, Slowness  
Of Digestion, Inflations, and an Asthma ; and is of Service in  
Luxations, especially, if applied in raw .Wool ζοἰυπηρόςψ . *Diosc  
corides. Lib.* 5. *Cap.* 48. ' :.

- ' PISSOCEROS, -πισσοκηρος. The Wax with which Bees line  
their Hives, and which is the Foundation of their Combs.

PISSOSlS. Pication. **See PicATIO. -**

. “ PISTACHIA. : A Name for the *Terebinthus', Indica, Theo-.*

*- .phrastji. .. - .*

' PISTATIO, according to *Castellus,* is the covering any Ma-  
terials, included in a proper Vessel, with Paste, in order to their  
i- being bak’d. Or boil’d. .

. PISTILLUM A Pestle i = .....

so PISTOLOCHIA. See *Aristolochia,* and *Serpentaria Vir-  
girtiana. ’ . ....*-L-PISUM. -- ' . . ' - .

. The Characters are . / . .. - ; . .

- It has a iong inflated Pod, full Of roundish Seeds, the lower  
Part Of the Stalk is fistulous, the Leaves are some of them, aS

in were, perforated by the Stalk, the Other are pinnated, and end .  
in a Tendril. - .

*. Boerhaave* mentions twenty-six Species of *Pisum,* none Of  
which have any medicinal Virtues aseribss to them at present,  
that I know Of, except the sixth, which is,

Pifum, arvense, srnctu albo.Eurir». *Inst.* 394. *Boerh. Ind.*

'.ρί.2.4ο. *Pisunt..* Oshc. *Pisum arvense store candido, fructu ro-  
tundo, albo. C.* P. P.. 342. *Pisum minus.* Ger. I045. Emac.

I2I9. *Pisum vulgare parvum album arvenso.* J. B. 2. 297. Raii  
Hist. I. 89I. *Pisum scylvesire primum.* Park. Theat. XO57. Raii  
' Synop. 3. 3IS. COMMON WHITE PEAS.

’ Peas are more used in the Kitchen, than in the shop, being  
known to every body to have whitish-green Leaves, consisting  
Of two Or three Pair Of large Oval Pinnae, with Clalpers at the  
Ends; the Stalks arebreak, angular, and not able to support  
themselves. The Flowers are white and papilionaceous; and the  
Peas, when ripe, round and white: They are planted in Fields  
and Gardens, dowering in *May,* and the Fruit is eat in *June.*

. .. Peas, when green, are a pleasant grateful nourishing Food,  
but somewhat flatulent and\* windy, as well as when dry. They  
are good to sweeten the Blood, and correct salt scorbutic Hu-  
mours, either eaten raw, or boiled. *Millers. Bor. Offe*

Peas are a Puis much' used for Food; the smaller and  
greener they are, the better is their Taste. They are, also, dried  
for keeping; but then they have not the Taste they had be-  
.fore.

. They produce the greatest Part Of their gchd Effects by the  
Help of their Oily balsamic Parts, which, sheathing up sharp  
Humours of the Breast, stop Coughs; and, by easily conden-  
sing in the Vacuities of the solid Parts, repair arid nourish them.  
The first Porridge, .or boiling of Peas, is softening and laxa-  
tive, because 'tis filled with the more dissoluble Salts of this'  
Pulse; these Salts, irritating and pricking the intestinal Glands,  
cause them to let pass through their Pores a greater Quantity of  
serous Matter. Peas contain a viscous and. thick Juice, which  
causes Wind, and produces gross Humours ; and, therefore,.  
they are not good for those that are troubled with Gravel.  
*Lemery on Foods..* .. r . ‘. in .

Broth of Peas, not only renders the Body soluble, but, also,  
procures a.more free and copious Evacuation of the Lochia. It  
is, also, beneficial in nephritic Pains, according to *Simon Paulli,*in his *quadripartitum Botanicum-..* Some,. also; with Success, s  
use a Decoction of Peas, in order to cure cutaneous Disorders;  
and Pimples. *Hoffman. Prast. Rented. Domest.*

PITACIUM. A large Cloth, impregnated, or spread over,

with some Medicine, in order to he applied to a Part affected.

PITHA. A Name in *B'ocrhaave* for the *Cereus ; scandens ;  
minor trigonus , articulatus ; fructu suavissima.*

.PITINE. A Name for the APHAcA ; which see.

PITOMA. The Name of a large Tree, which grows in  
*Brasil,* bearing a kind of Apple; of an astringent, bitter Taste;  
but not eatable, and of no Use in Medicine.

PITTONIA.

' The Characters are ;

It hath a globular bell-filaped Flower, consisting of one Leaf,  
which is cut into several Segments at the Brim ; from whose  
Cup arises the Points!; which afterwards becomes a soft spheri-  
cal Berry full of Juice, inclosing two Seeds, which are, for the  
most part; oblong. .. . . . i '

*. Millen* mentions seven Species, all of which grow in the  
warmest Parts of *America,* where the first Sort grows to the  
Height of twelve or fourteen Feet, and divides into many  
Branches, so as to form a small Tree. The second, fifth, and  
seventh Sorts grow to the Height of eight or nine Feet, and  
produce many Branches near their Roots, so as to form thick  
Bushes. *Miller s Dict.*

PITTOSIS. The same as **PIcATIoi i -**PITUITA.' Phlegm. See **PHLEGMA.**

PITUITARIA GLANDULA. The Pituitary Gland.  
PITYIDES, πιτυίδες, a Name for the Fruit, or Kernels,  
Contained in the Cones of the *Pinus,* and *Picea.* These Ker-  
neis are of an ashingent and somewhat heating Quality, and  
are good for a Cough, and other Affections incident to the Re-  
gion of the Thorax, whether taken alone, or with Honey.  
*Dioscorides, L.* I. *G.* 87. . -

PITUINA, πιτυίνη. The Resin of the Pitch-tree.

PITYLISMA. A Species of Exercise mentioned by *Galen,  
de Sanitate tuenda. Lib.* 2. *Cap.* 10. It consisted in walking  
on Tiptoes, listing up the Hands above the Head, and moving  
them swiftly in different Directions.

PITYOCAMPE, πιτυοκάμπη. A Species of Caterpiller,  
which is found on the Pitch-tree, and to which *Galen* ascribes  
the Virtues of Cantharides, *de Simpl. Facult. L.* II...

PITYRIASIS. A scurfy Disorder of the Head, Chin, and  
Eye-brows, called, also. *Porrigo.* See LEPRA. From τίτυρον.  
Bran. ' - \_

PITYROIDES. An Epithet sor a sort of Sediment in the  
Urine, resembling Bran.- -

PITYS, πότυς. The Pine.

PITYUSA. See **TITHYMALUs.**

PIX. Pitch. This is a Species of Gum obtained from the  
Pine-tree, by making incisions in it. It receives different Names  
according to its different Preparations, Colours, and Qualities.  
When it first stows from the Tree, it' ia called *Parras,* but is  
afterwards distinguished into two Sorts, whichinave different  
Names : Thet which is most beautiful and clear, is called *Gali-  
pot* ; and that which is more full of Faeces, and of a worse Co-  
lout, is called *-Marbled Barras.* The former of these, or the  
Galipot, serves to make all the different Species of Pitch de-  
scribed in this Article.

The pinguious Pitch, which is, also, called *White Burgundy  
Pitch,* is *Galipot* melted with Oil of Turpentine. Some, how-  
ever, assert, that the *Burgundy* Pitch flows naturally from  
resinous Trees, in the Mountains of *Franche-Comte.*

Resin is, according to some Authors, a Gum discharged from  
the Turpentine-tree, the Larch-tree, the Mastich-tree, or the’  
Cypress . But rhe Opinion os others is far more probable, who,  
from Experience, assert, that it is Galipot, boiled to a certain  
Consistence, and reduced to a Mass os any determinate Weight.

The best Resin comes from *Bayonne* and *Bourdeaux.* It  
ought to be chosen dry, white, free from Water and Sand.

Black Pitch, which is properly that known by the Name of  
*Pitch,* is only *Gallpot,* prepared in a particular manner, by Pyt’

ting into it, when it is quite warm, a certain Quantity os Tar,  
in order to render it black. There are two Kinds of is, one  
hard, and another soft, which only differ in this Cucumstance.

Mr. *Whelcr,* in his Voyages, has given another Method of  
preparing black Pitch, used in **the** *Levant,* and which is not  
much different from that given by *Furetiere* in his Dictionary.

He orders us to prepare a Heap os Earth, in which we are  
to make an Hollow two Elis in Diameter at the Top, but which  
becomes gradually narrower, as it approaches to the Bottom.  
This Hollow is to be filled with small Portions of such Branches  
of the Pine-tree, as contain most Gum, laid above each other  
till the Hollow is full. Then the upper Part is to be covered  
with Fine, which bums to the Bottom : By which means the  
Pitch is discharged from a small Hole made at the Bottom sor  
that Purpose.

The heft black Pitch comes from *Norway* and *Sweden,* to  
which that made in *France* is by no means comparable.

The Goodness of hard black Pitch consists in being of a  
shining black Colour, brittle, dry, and forming, as it were, a  
Rays, when.it is broken. . -.

What is called the *Pix Navalis* in Medicine,, ought to he the  
Pitch scraped off from Ships ; but 'tis certain, that most Apo-  
thecaries use the common black Pitch in its stead.

From the black Pitch there is obtain'd an Oil, which, on  
account of its singular Virtues, is called the *Baum of Pitch.  
Diction, de Commerces*

PIX LIQUIDA. Tar.

Dr. *Berkeley,* Bishop of *Cloyne,* having lately published an  
Account of the Virtues of Tar-water, which has considerably  
raised the Attention os the Public, I think myself obliged to  
give a short Abstract of his Book upon this Subject, especially  
as the Author is a Person well known in the learned World.

In certain Parts os *America,* Tar-water is made by putting a  
Quart of cold Water to a Quart ofTar, and stirring them well  
together in a Vessel, which is lest standing till the Tar subsides to  
the Bottom. A Glass os clearWater, being poured offsor a  
Draught, is replaced by the same Quantity os fresh Water, the  
Vessel being shaken, and lest to stand aS before. And this is  
repeated sor .every Glass, so long as the Tar continues, to im-  
pregnate the Water fufficientiy, which will appear by the Smell  
and Taste. But as this Method produceth Tar-water os differ-  
ent Degrees of Strength, I choose to make it in the following  
manner : Pour a Gallon of cold Water on a Quart of Tar,  
and stir and mix them throughly with a Ladle, or flat Stick, sor  
the Space of three or four Minutes; aster which, the Vessel  
must stand eight-and-forty Hours, that the Tar may have time  
**to** subside ; when the clear Water is to be poured off, and kept  
for Use; Do more being made frorn.the same Tar, which may  
still serve sor common Purposes.

This cold Infusion of Tar hath been used in some os our  
Colonies, as a Preservative, or Preparative, against the Small-  
pox ; which foreign Practice .induced me to try it in my own  
Neighbourhood, when the Small-pox raged with great Violence.  
And the Trial sully answered my .Expectation ; all those with-  
**in.** my Knowledge, who took the Tar-water, having either  
escaped that Distemper, or had it very favourably. In one  
Family there was a remarkable Instance of seven Children,  
who came all Very well through the Small-pox, except one  
young Child, which could not be brought to drink Tar-water,  
as the rest had done.

Several were preserved from taking.the Small-pox by the Use  
**of** this Liquor; others had it in the mildest manner; and others,  
that they might become susceptible os the Infection, were ob-  
liged to intermit drinking the Tar-water. I have sound it may  
he drank with great Safety and Success sor any Length ofTfrne,  
and this not only before, but, also, during the Distemper.  
The general Rule for taking it is, to drink about half a Pint  
'Night and Morning on an empty Stomach; which Quantity may  
he Varied, according to the Case and Age os the Patient, pro-  
vided it be always taken on an empty .Stomach, and about two  
-Hours before or after a Meal.

It seemed probable, that a Medicine of such Efficacy, in a  
-Distemper attended with so many purulent Ulcers, might be,  
also, useful in other Foulnesses os the Blood: Accordingly, I  
tried it on several Persons infected with cutaneous Eruptions  
and Ulcers, who were soon relieved, and soon after cured. En-  
couraged by these Successes, I ventured to advise it in the foulest  
Distempers, wherein it proved much more successful than Sa-  
livations and Wood-drinks had done.

Having tried it in a great Variety os Cases, I found it sue-  
ceed beyond my Hopes, in a tedious and painful Ulceration of  
the Bowels, in a consumptive Cough, and (aS appeared by ex-  
pectorated Pus) an Ulcer in rhe Lungs, in a Pleurisy and Pe-  
Tipneumony. And, when a Person, who sor some Years had  
been subject to erysipelatous Fevers, perceived the usual fore-  
running Symptoms to come on, I advised her to drink Tar-  
water, which prevented the Erysipelas.

I never knew any thing so good sor the Stomach aS Tsr-  
water: It cures Indigestion, and gives a good Appetite. It is  
an excellent Medicine in an Asthma. It imparts a kindly  
Warmth, and quick Circulation, to theJuices without heating;  
and IS therefore useful, not only as a Pectoral and Balsamic,  
but, also, as a powerful and safe Deobstruent in cachectic and  
hysteric Cases. As it is herb healing and diuretic, it is Very  
good sor the Gravel. I helieve it to he of great Use in a Drop-  
sy, having known it cure, a Very bad Anasarca in a Person,  
whose Thirst, though Very extraordinary, was in a short time  
removed by the drinking of Tar-water.

The Usefulness of this Medicine in inflammatory Cases is  
evident, from what has been already observed. \* And yet some,  
perhaps, may suspect, that as the Tar itself is sulphureous. Tar-  
water must be of an hot inflaming Nature. But it is to be noted,  
that all Balsamics contain an acid Spirit, which is, in Truth, a  
volatile Salt. Water is a Menstruum that diflolves all Sorts of  
Salts,'and draws them from their Subjects. Tar, therefore,  
being a Balsam, its salutary Acid is extracted by Water, which  
yet is incapable of dissolving its gross resinous Parts, whose pro-  
per Menstruum is Spirit os Wine. Therefore, Tar-water, not  
being impregnated with Refin, may be safely used in inflamma-  
tory Cases ; and, in fact, it hath been sound an admirable Fe-  
brifuge, at once the safest Cooler and Cordial.

The Volatile Salts, separated by Infusion from Tar, maybe  
supposed to contain its specific V irtues. Mr. *Boyle,* and other  
later Chymists, areagreed, that fixed Salts are much the same  
in all Bodies; But it is well known, that Volatile Salts greatly  
differ; and the easier they are separated from the Subject, the-  
more they possess of its specific Qualities. Now the most  
easy Separation is, by Infusion os Tar in cold Water, which to  
Smell and Taste shewing itself well impregnated, may he pre-.  
fumed to extract and retain the most pure. Volatile, and active  
Particles os that Vegetable Balsam. ' - - ' - ‘ .

Tar was by theAntients esteemed good againstPoifons, Ulcers, .  
and the Bites os Venomous Creatures; also, for phthisical, sero-  
phulous, paralytic, and asthmatic Persons. But the Method of  
rendering it an inoffensive Medicine, and agreeable lo the Sto-'  
mach, by extracting its Virtues in cold Water, was unknown  
to them. The Leaves, and tender Tops, of Pine and Fir are,  
in our Times, used sor Diet-drinks, and allowed to be 'anti-  
scorbutic and diuretic. But the most elaborate Juice, Salt,  
and Spirit of those EVer-greens, are to be sound in Tar, whose  
Virtues extend not to Animals alone, but, also, to Vegetables.  
Mt. *Evelyn,* in his Treatise on Forest-trees, observes with  
Wonder, that Stems of Trees, smeared over with Tar, are pre-  
served thereby from being hurt by-the invenom'd Teeth of  
Goats, ρ and other Injuries, while every other thing of an un-  
ctuous Nature is highly prejudicial to them. . .

It seems that Tar and Turpentine may be had, more or less,  
from all Sorts os Pines and Firs whatsoever ; and that rhe na-  
tive Spirits, and essential Salts, of those Vegetables are the  
same in Turpentine, and common Tat. in effect, this vulgar  
Tar, which Cheapness and Plenty may have render'd con-  
temptible, appears to be an excellent Balsam, containing the Vir-  
tues of most other Balsams, which it easily imparts to Water,  
and by that means readily and inoffensively infinuates them into  
the Habit os the Body. ’ . -

The resinous exfudations of Pines and Firs are an import-  
ant Branch of the Materia Medica, and Dot only useful in the  
Prescriptions of Physicians, but have been, also, thought other-  
wise conducive to Health. *Pliny* telis us, that Wines, in the  
-Time os the old *Romans, swera* medicated with Pitch and Resin;  
and *Johnstonus,* in his *Dendrographia,* observes, that it is  
wholsome to walk in Groves of Pine-trees, which impregnate  
the Air with balsamic Particles, That all Turpentines and’  
Resins are good sor the Lungs, against Gravel, also, and Ob-  
structions, is no Secret. And that the medicinal Properties of -  
those Drugs are found in Tar-water, without heating the Blood,  
or disordering the Stomach, is confirmed by experience ; and,  
particularly, that phthisical and asthmatic Persons receive speedy  
and great Relief from tite Use os it.

Balsams, as all unctuous and oily Medicines, create a Nau- ..  
seating in the Stomach. They cannot, therefore, be taken in  
Substance, so much, or so long, as to produce all those salu-  
tary Effects, which, if throughly mixed with the Blood and  
Juices, they would he capable of producing. It must, there-  
fore, be a thing of great Benefit to be able to introduce any  
requisite Quantity of their Volatile Parts into the finest Ducts  
and Capillary Vessels, so as not to offend the Stomach; but, on  
the contrary, to comfort and strengthen it in a great Degree.

According to *Pliny,* liquid Pitch, (as he calis it) or Tar,  
was obtained by setting Fire to Billets, or old sat Pines or Firs.  
The first Running was Tar, the latter, or thicker Running,  
was Pitch. *Theophrastus* is more particular : He tells us, **the***Macedonians* made huge Heaps *of* the cloven Trunks of those  
Trees, wherein the Billets were placed erect beside each other:

That such Heaps or Piles of Wood were sometimes a hundred  
and eighty Cubits round, and sixty, or even an hundred, high ;  
and that, having covered them with Sods *os* Earth, to prevent  
the Flame from bursting forth, (in which Case tho Tar was  
lost) they fet on Fire those huge Heaps of Pine or Fin, letting  
the Tar and Pitch run out in a Chanel.

From the manner os procuring Tar, it plainly appears to be  
a natural Production, lodged in the Vesseis os the Tree, whence  
it is only freed and let loose (not made) by Burning» If we  
may believe *Plirty,* the first Running, or Tar, was called *Ce-  
drium,* and was os such Efficacy to preserve from Putrefaction,  
that in *Egypt* they embalmed dead Bodies with it. And to this  
he ascribes their Mummies continuing uncorrupted for so many  
Age5. . ’ . ..

Some modern Writers inform ns, that Tar flows froth the  
Trunks of Pines and Firs, when they are very old ; that Pitch  
’ is Tar inspissated; and both are the Oil of the Tree grown  
’ thick and black with Age, and the Influence of the Sun. The  
Trees, like old Men, being unable to perspire, and their secre-  
tory Ducts obstructed, they are, as it were, choked and stuffed  
with their own Juice.

The Method used by our Colonies in *America, for* making  
Pitch and Tar, is, in Effect, the same with that of the antient  
*Macedonians,* as appears in the Account given in the Philoso-  
phical Transactions. And the Relation os *Leo Africanus,* who  
describes as an Eye-witness, the making os Tar on Mount  
*Atlas,* agrees, in Substance, with the Methods used by the *Ma-  
cedonians* os old, and the People of *New England* at this Day.

Tar, and all Sorts of Exsudations from Ever-greens, are, in  
a general Acceptation, included tinder the Name *Resin.* Tur-  
pentine is a Restn, and on all hands allowed to have great Inedi-  
icinal Virtues. Tar, and its Infusion, contain these Virtues.  
Tar-water is extremely pectoral and restorative; and, if I may  
judge from what Experience I have-had, it possesseth the most  
valuable Qualities ascribed to the several Balsams of *Peru,* of  
*Tolu,* of *Capivi,* and even to the Balm of *Gilead*; such is its  
'Virtue in Asthmas and Pleurisies, in Obstructions, and ulcerous  
‘Erosions, of the inward Parts. ,

The Folly of Man rateth things hy their Scarceness, but Pro-  
vidende has made the most useful things most common. Among  
liquid oily Substances, which are termed *Balsams,* and Valued for  
'medicinal Virtues, Tar may hold its Place as a most valuable  
Balsam. Its Pragrancy thews, that it is possessed of active  
Qualities; and its Oiliness; that it is fitted to retain theim  
This excellent Balsain inay be purchased for a Penny a Pound,  
whereas the Balsam of *Judea,* when most plenty, was sold, on  
The very Spot that produced it, for double its Weight in Silver,  
If we may credit *Pliny.* . Now, comparing, the Virtues I have  
experienced in Tar, with those I find ascribed to the precious  
Balm of *Judea,* of *Gilead,* or os *Mecha,* (as it is diverfly  
/called) I am os Opinion, that the latter is not a Medicine of  
snore Value or Efficacy than the former.

' The medicinal Virtues of Amber are to be found in the bal-  
samic Juices os Pines and TirS. Particularly the Virtues of the  
most valuable Preparation, I mean Salt of Amber, are in a great  
Degree answered by Tar-water, as a Detergent, Diaphoretic,  
and Diuretic.

. It is remarked both by *Theophrastus* and *folrnstonus,* that  
Trees growing in low and shady Places, do not yield so good  
Tar, as those which grow in higher and more exposed Situations.  
And *Theophrastus* further observes, that the Inhabitants of Mount  
*Ida in Asia,* who distinguish the *Idaean* Pine from the Mari-  
.’time, affirm, that the Tar flowing from the former is in greater

Plenty, aS well as more fragrant, than the other. Hence it  
should seem, the Pines and Firs in the Mountains of *Scotland*might be employed in that way, and rendered valuable ; even  
where the Timber- by its Remoteness from Water-carriage, is  
of small Value. “ What we call *Scotch Fir,* is falfly so called,  
being,inTruth, a wild Forest-pine ; and, aS Mr. *Ray* informs  
us, agreeing much with the Description of a Pine growing on  
Mount *Olympus in Phrygia,* probably the only Place where it  
is found out os these Istands ; in which, of late Years, it is so  
much planted and cultivated with so little Advantage, while  
the Cedar of *Lebanon* might, perhaps, be raised with little more  
Trouble, and much more Profit and Ornament.

' At present the *Norwegian* Tar is the most liquid, and best  
for medicinal Uses, os any I have experienced. Those Trees'  
that grow on Mountains exposed to the Sun, or the North  
Wind, are reckoned by *Theophrastus,* to preduce the best and  
purest Tar : And the *Idaean* Pines were distinguished from those  
growing on the Plain, as yielding a thinner, sweeter, and bet-  
ter scented Tar; all which Differences, *I* think, I have ob-  
served between the Tar that comes from *Norway,* and that  
which comes from low and swampy Countries.

The less Violence is used to Nature, the better its Produce.  
Tne Juice os Olivesand Grapes, issuing by the lightest Pres-  
sure, is best. Refins, that drop from tire Branches spontane-

ousts, or. Ouse-from the Trees upon the (lightest Incision,, atd  
'the finest, and most fragrant. And Infusions are observed to act  
more strongly than Decoctions of Plants;. the more subtile and  
volatile Salts and Spirits, which might he lost or corrupted by  
the latter, heing obtained in their natural State by the former.  
It is, also, observed, .that the finest, purest, and most Volatile  
Tart is that which first ascends in Distillation. .And, indeed, it  
should seem the lightest and most active Particles required leash  
Force to disengage them from the Subject.

The Salts, therefore, and inore active Spirits, or the Tar  
are got by Infusion in cold Water; but the resinous Part is not  
ro he dissolved thereby. Hence the Prejudice, which some,  
perhaps, may entertain against Tar-water, as a Medicine, the  
Use whereof might inflame the Blood by its Sulphur and Resin,  
appears not well grounded ; it heing, indeed, impregnated with  
a fine acid Spirit, which is balsamic, diuretic, and possessed of  
many other Virtues. Spirits are supposed to consist os Salts and  
Phlegm, and probably too somewhat of a fine oily Nature, differ-  
ing from Oil, hecause it mixeth with Water; and agreeing with  
Oil in this, that it runneth in Rivulets by Distillation. Thus  
much is allowed, that the Water, Earth, and fixed Salt, are the  
same in all Plants: That, therefore, which differenceth a Plant,  
Or makes it what it is, the native Spark, or Form, in the Lan-  
guage of ChymistS and Schools, is none of these things; nor yet  
the finest Oil, which seeineth only its Receptacle orVehicle. It in  
observed by ChymistS, that all Sorts of balsamic Wood afford ah  
acid Spirit, which is the Volatile oily Salt os the Vegetable. Herein  
are chiefly contained their medicinal Virtues, and by the Trials  
I have made it appear, that the acid Spirit in Tar-water pos-  
- sesseth the Virtues, in an eminent Degree, of that os Guaiacum,  
and other medicinal Woods.

Qualities, in aDegree too strong for human Nature to subdue  
and assimilate to itself, must hurt the Constitution. All Acids,  
therefore, may not be useful or innocent. But. this seems ari  
Acid so throughly concocted, so gentie, mild, temperate, and  
'withal possessed os a Spirit so fine and Volatile, as readily to enter  
the smallest Vesseis, and be assimilated with the utmost Eases

If any one were minded to dissolve-some of the Resin, toge-  
ther with the Salt or Spirit, he need only mix siome Spirit of  
Wine with the Water. Butshch an entire Solution of Resins  
and Gums' aS to qualify them for entering and pervading the  
Animal System, like the fine acid Spirit that first flies off froni  
the Subject, is, perhaps, impossible to be obtained. It is an Apo-  
phthegm os the Chymists, derived sroin *Hilmont,* that whoever  
can make Myrrh soluble by the Action and Powers of the humaii  
Body, has rhe Secret os prolonging Lise ; and *Boerhaave* owns,  
that there seems to heTruth in this, from its resisting Putrefaction.  
Now this Quality is as remarkable in Tar, with which the An-  
tients embalmed and preserved dead Bedies. And tho' *Boerhaave*himself, and otherChymists before him, have given Methods for  
making Solutions of Myrrh, yet it is by means of Alcohol,  
which extracts only the inflammable Parts. And it does not  
seem, that any Solution of Myrrh is impregnated with its Salt,  
or acid Spirit. 'It may not, therefore, seern strange, if this  
Water should be sound more beneficial for procuring Health  
and long Lise, than any Solution *of* Myrrh whatsoever. .

Certainly divers Resins and Gums may have Virtues, and yet  
hot be able for their Groffness to pass the Lacteais, and other  
finer Vesseis, nor yet, perhaps, readily impart those Virtues to **a**Menstruum, that may with Safety and Speed convey theni  
throughout the human Body f Upon all which Accounts, I be-  
sieve Tar-water will be found to have singular Advantages. It  
is observed, that acid Spirits prove the stronger, by how mnclr  
the greater Degree of Heat is required to raise them. And,-  
indeed, there seems to be no Acid more gentle then this, ob-  
tained by the simple Affusion of cold Water, winch carries off  
from the Subject the most light and subtile Paris, and,, if one  
may so speak, the very Flower of its specific Qualities. And  
here it'is to be noted, that the Volatile Salt and Spirit Os Vege-  
tables, by gently stimulating the Solids, attenuate the Fluids  
Contained in them, and promote. Secretions, and that they are  
Penetrating and active, contrary to the general Nature of other  
Acids. . \*

It is a great Maxim for the Preservation of Health, that **the**Juices of the Body be kept fluid in a due Proportion. There-  
fore the acid Volatile Spirit in Tar-water, at once attenuating  
and cooling in a moderate Degree, must greatly conduce to  
Health, as a mild salutary Deobstruent, quickening the Circu-  
lation of the Fluids without injuring the Solids, thereby gently  
removing or preventing those Obstructions, which are the great  
and general Cause os most chronical Diseases, and in this man-  
ner answering to antihysteric Medicines, such as Asa-soetida,  
Galbanum, Myrrh, Amber, and, in general, to all the Resins  
and Gums os Trees or Shrubs useful in nervous Cases.

Warm Water is itself a Deobstruent: Therefore the Infu-  
fion of Tar, drank warm, is easier insinuated into all tlte nice  
CapillaryVesseis; and acts nor bn’v by virtue of the Balsam, bus.

also, by that of the Vehicle. Its Taste, its diuretic Quality,  
its being so great a Cordial, shew the Activity of this Medicine.  
And, at the same time that it quickens the fluggish Bleed of  
the Hysterical, its balsamic oily Nature abates the too rapid  
Motion of the sharp thin Blood in these who are Hectic.  
There is a Lentor and Smoothness in the Blood of healthy  
strong People ; on the contrary, there is often an Acrimony  
and Solution in that of weakly Persons. The fine Particles of  
Tar are not only warm and active ; they are, also, balsamic  
and emollient, softening and enriching the sharp and. Vapid  
Blood, and healing the Erosions occasioned thereby in the Blood-  
vessels, and Glands.

Tar-water possesses the stomachic and cardiac Qualities os  
Elixir Proprietatis, *Stoughton's* Drops, and many fuch Tinctures  
and Extracts; with this Difference, that it worketh its Effect  
more safely, as it hath nothing of that Spirit of Wine, which,  
however mixed and disguised, may yet be well accounted a  
Poison in some Degree. ..... -

Such Medicines are supposed to be diaphoretic, which, being  
of an activeand subtile Nature, pass through the whole System,  
and work their Effect in the finest Capillaries, and perspiratory  
Ducts, which they gently cleanse and open. Tar-water is ex-  
tremely well fitted to work by such an insensible Diaphoresis,  
by the Fineness and Activity os its acid Volatile Spirit. And  
surely those Parts Ought to be Very fine, which can fcour the  
Perspiratory Ducts, under the Scarf-skin, or Cuticle, *is It he  
true,* that one Grain of Sand would cover the Mouths of more  
than an hundred thoufand.

Another way wherein Tar-water operates, is by Urine, than  
Which, perhaps, no Method is inore safe and effectual for cleans-  
ing .and carrying off the Salts ofthe Blood\* But it seems th  
produce .Its principal Effectas an Alterative, which is sure,  
easy, and much safer than chose Vehement purgative, emetic,  
and salivating Medicines, which do Violence to Nature.

An Obstruction of some Vessels causeth the Blood to move  
inore swiftly in other Vessels which are not obstructed. Hence  
arise manifold Disorders. A Liquor that dilutes and attenuates,  
resolves those Concretions which obstruct the Veffels. Tar-water  
is such a Liquor. It may be said indeed of common Water, that  
it attenuates; also, of Mercurial Preparations, that they attenuate.  
But it should be consider'd, that mere Water only distends the  
Vessels, and thereby weakens their Tone; and that Mercury,  
hy its great Momentum, may justly he suspected of hurting the  
fine Capillaries; which two Deobstruents, therefore,, might easily  
over-act their Parts, and (by lessening the Force of the elastic  
Vesseis) remotely produce those Concretions they asc intended  
to remove.

Weak and rigid Fibres are looked on by the most able Phy-  
sicians, as Sources os two different' Classes Of Distempers; a  
sluggish Motion Of the Liquids occasions weak Fibres, there-  
fore, Tar-water is good to strengthen them, as it gently acce-  
lerates the Motion of their Contents. On the other hand, being  
an unctuous bland Fluid, it moistens and softens the dry and  
stiff Fibres; and so proves a Remedy for both Extremes.

' Common Soaps are Compositions of lixivial Salt and Oil. -  
The corrosive Acrimony of the saline Particles being softened  
hy the Mixture of an unctuous Substance, they insinuate them-  
selves into thss small Ducts with less Difficulty and Danger.  
The Combination of these different Substances makes up a  
very subtile and active Medicine, fitted for mixing with all  
Humours, and resolving all Obstructions. Soap, therefore, is'  
justly esteemed a most efficacious Medicine in many Distempers.

Alcaline Salt is allowed to be cleansing, attenuating, open-  
ing, resolving, sweetening; it is pectoral, vulnerary, diuretic,  
and hath other good Qualities, which are, also, to be sound in  
Tar-water. It is granted, that Oil, and acid Salts, combined  
together, exist in Vegetables ; and that, consequentiy, there  
are acid Soaps as well as alcaline. And the saponaceous Nature  
of the acid Vegetable Spirits is what renders them so diuretic,  
sudorific, penetrating, abstersive, and resolving. Such, forin-  
stance, is the acid Spirit of Guaiacum. All these Virtues seem to  
be in Tar-water in a mild and salutary Degree.

It is the general Opinion, that all Acids coagulate the Blood.  
*Boerhaave* excepts Vinegar,’ which he holds to be a Soap, inas-  
much as it is sound to contain an Oil as well as an acid Spirit.  
Hence it is both unctuous and penetrating, a powerful Anti-  
phlogistic, and Preservative against Corruption and Infection.  
Now, it seems evident, that Tar-water is a Soap as well aS  
Vinegar. For though it be tho Characteristic of Resin, which is  
an inspissated gross Oil, not to dissolve in Water, yet the Salts  
attract some fine Panicles of essential Oil; which fine Oil  
ferves aS a Vchicle for the acid Salts, and shews itself in the Co-  
lour of the Tar-water; for all pure Salts are colourless. And  
though the Refin will not dissolve in Water, yet the subtile Oil,  
in which the vegetable Salts are lodged,’ may aS well mix with  
Water as Vinegar does, which contains both Oil and Salt.  
And as the Oil in Tar-water discovers itsclf to the Eye, so the

acid Salts manifest themselves to the Taste. Tar-water, there-  
Tore, is a Soap, and as such, has the medicinal Qualities of  
Soaps.

It operates more gently, as the acid Salts lofe their Acrimony,  
being sheathed in Oil, and thereby approaching the Nature os  
neutral Salts, and are more benign and friendly to the Animal  
system ; and more effectually, as by the Help of a volatile,  
smooth, insinuating Oil; those same Salts are more easily in-  
troduced into the Capillary Ducts. Therefore, in Fevers, and  
epidemical Distempers, it is, (and I have sound it fo) as well as  
in chronical Diseases, a most safe and efficacious Medicine, be-  
ing good against too great Fluidity as a Balsamic, and good  
against Viscidity as a Soap. There is something in the fiery  
corrosive Nature of lixivial Salts, which makes alcaline Soapin  
dangerous Remedy in all Cases where an Inflammation is ap-  
prehended. And as inflammations are often occasioned by Ob-  
structions, it should seem, an acid Soap was much the safer De-  
obstruent. . ' ;

Even the best Turpentines; however famous for their vulne-  
rary and detergent Qualities, have yet been observed, by their  
. Warmth, to dispose to inflammatory Tumors. But the acid  
Spirit, being in *so great* Proportion in Tar-water, renders it a  
cooler and safer Medicine. And the ethereal Oil of Turpen-  
tine, though an admirable Drier, Healer, and Anodyne, when  
outwardly applied to Wounds and Ulcers, and not less useful  
in cleansing the urinary Passages, and healing their Ulcerations,  
yet is known to be of a Nature so very relaxing, as sometimes  
to do much Mischief Tar-water is not attended with the sanie  
ill Effects, which I believe are owing, in a great measure, to the  
ethereal Oil’s being deprived os the acid Spirit in Distillation,  
which, vellicating and contracting .as a Stimulus, might have  
Proved a Counterpoise to the excessive lubricating and relaxing  
Qualities of the Oil. r

Woods in Decoctions do not seem to yield so ripe and ela-  
borate a Juice, as that which is deposited in the Cells, or Loculi  
Terebinthiaci,and fpontaneouflyouses from them. And, indeed,  
though the Balsam of *Peru,* obtained by boiling the properWood,  
and scumming the Decoction, be a very Valuable Medicine, and  
of great account in divers Cases, particularly Asthmas, nephri-  
tic Pains, nervous Colics, and Obstructions, yet I verily think,  
(and I do not say this without Experience) that Tar-water is a  
more efficacious Remedy in all those Cases, than even that  
Costly Drug. ῖ ss ' " .

It has been already observed, that the restorative, pectoral, and  
antihysterical Virtues of the most precious Balsams and Gums  
are possessed in an high Degree by Tar-water. And I do not  
know any Purpose answered by the Wood-drinks, for which  
Tar-water may not be used, with at least, equal Success. It  
contains the Virtues even os Guaiacum, which seeinS the most  
efficacious os all the Woods, warming and sweetening the Hu-  
mours, and being diaphoretic, and useful in Gouts, Dropsies, and  
Rheums, as well as. in the Foul Disease. Nor should it seem  
strange, *if* the Virtues obtained by boiling an old dry Wood,  
prove inferior to those extracted from a Balsam. ss, '  
\* There is a fine Volatile Spirit in the Waters *of Geronster,* the  
most esteemed of all the Fountains about *Spa,* but whose  
Waters do not hear transporting. The stomachic, cardiac, and  
diuretic Qualities, os this Fountain somewhat resemble those of  
Tar-water, which, if! am not greatly mistaken, contains the  
Virtues of the best chalybeate and sulphureous Waters ; with  
this Difference, that those Waters are liable to affect the Head  
in taking, which Tar-water is not. Besides, there is a Regi-r  
men of Diet to be observed, especially with chalybeate Waters, \*  
which I never found necessary with this. Tar-water layeth  
under no Restraint either as to Dies, Hours,, or Employment.'  
A Man.may study, use Exercise, or repose, keep his o wn Hours,  
pass his Time either within or without, and take wholsome  
Nourishment of any Kind.

The Use of chalybeate Waters, however excellent for the  
Nerves and Stomach, is often suspended by Colds, and inflam-  
mator)’ Disorders, in which they are acknowledged to be very  
dangerous ; whereas Tar-water is so far from hurting in those  
Cases, or deserving to be discontinued on that Account, that  
it greatiy contributes to their Cure.

Cordials, vulgarly so called, act immediately on the Stomach,  
and, by a Consent os the Nerves, on the Head. But Medicines,  
of an Operation too fine and light to produce a sensible Effect in  
the *Primes Via,* may, nevertheless, in their Passage through  
the Capillaries, operate on the Sides os those small Vessels, in  
such a manner aS to quicken their Oscillations, and conse-  
quently the Motion os their Contents, producing, in Effect,  
all the Benefits *os R Cordial* much more lasting and salutary  
than those os fermented Spirits, which, by their caustic and  
coagulating Qualities, do incomparably more Mischief than  
Good. Such a cardiac Medicine is Tar-water. The transient  
Fits os Mirth, produced from fermented Liquors, are attended  
with proportionable Depressions of Spirit in their intervais. But

Opposite' Causes sometimes produce the same Effects,- sor In-  
stance. Heat by Rarefaction, and Cold by Condensation, both in-  
crease the Air’S Elasticity, so, on the Other hand, the same Cause  
shall sometimes produce Opposite Effects: Heat, for Instance, in  
One Degree thins, in another coagulates the Blood: It is not there-  
- fore strange, thatTar-warer should warm One Habit, and cool an-  
ther; have One good Effect on a cold Constitution, and another  
good Effect upon an inflamed one; nor, if this be so, that it  
should cure Opposite Disorders ;all which justifies to Reason, what  
I have often found true in Fact.Tne Salts, the Spirits, and the Heat,  
os Tar-water are of a Temperature Congenial to the Constitution  
os .Man, which receives from it a kindly Warmth, but no in-  
flaming Heat. It was remarkable, that two Children .in my  
-Neighbourhood, being in a Course Of Tar-water, upon an Inter-  
mission Of it, never sailed to have their Issues inflamed by an Hu-  
mour much more hot and sharp than at Other times. But its great  
Use. in the Small-pox, Pleurisies, and Fevers, is a sufficient  
Proof, that Tar-water is notos an inflaming Nature. ..... ‘

I have dwelt the longer On this Head, because some Gentlemen  
of the Faculty have thought fit to declare, that Tar-water must in-  
flame and that they would never Visit any Patient in a Fever, who  
had been a Drinker Os it: But I will Venture to affirm, that it is  
so far from increasing a feverishInflammation,that it is,On the Con-  
trary,a most ready Means to allay and extinguish it. - It is Of ad-  
mirable Use in Fevers, being at the same time the sorest, safest,  
and most effectual. Paregoric and Cordial; for the Truth Of  
which! appeal to any Person’'S Experience, who shall take a large  
Draught of it Mflk-warrn in the Paroxysm Of a Fever, even when  
plain Water Or HerbTeas shall be sound to have little Or no Effect.  
TO me it seems, that its fingular and surprising Use in Fevers Os all  
Kinds, were there nothing else, would be alone sufficient- to re-  
Commend it to. the Public. ss ss

The best Physicians make theldea of a Fever to Consist in a tori  
great Velocity Of the Heards Motion,-and too great Resistance at  
the Capillaries. Tar-water, aS it softens and gently stimulates those  
nice Vessels, helps to propel their Contents, and so contributes to  
remove the latter Part os the Disorder, and, for the former, the ir-  
ritating Acrimony, which accelerates the Motion Of the Heart, is  
diluted by watry. Corrected by acid, and softened by balsamic  
Remedies,\* all which Intentions are answered by this aqueous, acid,  
ba'samic Medicine. Besides, the: Viscid Juices coagulated *fry* the  
sel rile Heat, are resolved by Tar-water aS a;SOap, and not too far.  
retolved as jt is a gentle acid Soap ; to which we may add, that the  
Peccant Humours and Salts are carried Off by its diaphoretic and  
diureticQualiries. ' ''.... . ". so . - ψ

I found all this Confirmed by my Own Experience, in the late  
sickly Season Of the Year One thousand seven hundred and forty-  
One, having had tw.enty.fiVe Fevers in my Own Family cured by  
this medicinal Water, drank Copioufly. The same Method was  
practised On several of my poor Neighbours with equal Success-; in  
suddenly Calmed the feverish Anxieties, and seemed by every Glass  
to refreshjandinsuseLiseand Spiritinto the Patient. At first, some  
Of those Patients, have heen vomited; but afterwards l sound that  
without Vomiting, Bleeding, Blistering, Or any Other EvacuatiotI  
or Medicine whatsoever; very bad Fevers Could be Cured by the  
sole drinking Of. Tar-water Milk-warm, and in proper Quantities,  
perhaps a large Glass every Hour taken'in Bed ; and it was remark-  
able, that such as were Cured by this comfortable Cordial, re-  
covered Health.and Spirits at Once, whilst those who had been  
cured by Evacuations Often languished long, even after rhe Fever  
lest them, before they Could recover: of their Medicines, and  
regain their Strength. . ’ so-so. ....''

\_ In Peripneumonies. and. Pleurisies.- I have Observed Tar-water  
to be excellent, having known some pleuritic Persons Cured with-,  
out Bleeding, by in Blisterearly applied to the Stitch,and the CopionS  
Drinking of Tar-water, four Or five Quarts, Or even more, in  
four-antl-twenty Hours, and I recommend it to farther Trial,  
whether, in all Cases of .a Pleurisy, One moderate Bleeding, a Blis-  
ter on the Part affected, and Plenty of tepid Tar-water, may not  
suffice, without those repeated and immoderate Bleedings, the bad  
Effects Of which are perhaps never got Over. \_ I even suspect, that  
a pleuritic Patient, betaking himfelr to Bed betimes, and drinking  
very Copiously OfTar-water, may the cured by that alone, without  
Bleeding, Blistering, or any other Medicine whatever- Certainly  
I found this succeed by exhibiting a Glass every Half-hout. .

I have known a Bloody-flux of long Continuance, after various  
Medicines had been tried in Vain, Cured: by Tar-water; but that  
which I take to be the most speedy, and effectual Remedy in a  
Bloody-flux, is a Clyster Of an Ounce Os common brown Resin,  
dissolved over a Fire in two Ounces Of Oil, and added to a Pint os  
Broth; which not long ago I had frequent Occasion Of trying,when  
that Distemper was epidemical t Nor can I say, that any to whom  
I advised it, miscarried. This Experiment l was led to make by the  
Opinion I had Of Tar as a Balsamic, and Resmis only Tar in-,  
spissated. '

Nothing that I know corroborates the Stomach so much as Tar-  
water: Whence it follows that it must be Of singular Use to Per-  
sons afflicted with the Gout. And from what I have Observed tn  
five or fix instances, l Verfly believe it the best and safest Medicine  
either to prevent the Gout, Or so to strengthen Nature against the

the calm Chearfulnefs arising from this Water of Health (as it  
may justly he called) is permanent. Tar-water is so rar from  
hurting the Nerves, as common Cordials do, that it is highly  
useful in Cramps, Spasms of the Viscera, and paralytic Numb-  
ness. ’

emetics, are on certain Occasions) administered with great  
Success. But the over-straining and weakening of Nature may  
be very justly apprehended from a Course of Emetics. They  
are, nevertheless, prescribed and substituted for Exercise. But,  
*. in Plaids Timaus,* Vomits and Purges are said to be the worst  
Exercise in the World. There is something in the mild Ope-  
ration os Tar-water, that seems more friendly to the CEcono-  
my, and forwards the Digestions and Secretions in a way more  
natural and benign, the Mildness of this Medicine being such,  
that I have known Children take it for above six Months toge-  
ther, with great Benefit, and without any Inconvenience ; and,  
aster long and repeated Experience, I esteem it a most ex-  
cellent Diet-drink, fitted to all Seasons and Ages.

. It is, I think, allowed, that the Origin of the Gout lies in  
a faulty Digestion. And it is remarked by the ablest Physicians,  
that the Gout is so difficult to be cur’d, because heating Medicines  
aggravate its immediate, and cooling its remote Cause. But  
Tar-water, although it contain active Principles, that strengthen,  
the Digestion beyond any thing I know,, and, consequently,-  
must be highly useful, either to prevent or lessen the following  
Fit, os, by invigorating the Blood, to cast it upon the Extremi-  
. ties, yet it is not of so heating a Nature as to do harm even in  
the Fit. Nothing is more difficult or disagreeable to Men, than to  
argue them out os their Prejudices: I shall not, therefore,  
enter into Controversies on this Subject; but, if them dispute  
and object; shall leave the Decision to Timeand Trial. In the  
modern Practice, Soap, Opium, and Mercury, bid fairest for  
universal Medicines. The first of these is highly spoken of.  
But then those who magnify it most, except against the Use os  
it in such Cases where the Obstruction is attended with a putre-  
factive Alcali, or where an inflammatory Disposition appears.  
It is acknowledged to be very dangerous in a Phthisis, Fever,,  
and some other Cases, in which Tar-water is not Only safe, but  
useful. - . .. ’

. Opium, the’ a Medicine of great Extent and Efficacy, yet is

. frequently known to produce grievous Disorders in hysterical Or  
hypochondriacal Persons, who make a great Part, perhaps the  
greatest, os thofe who lead sedentary Lives in these Islands. Be-,  
sides, upon all Constitutions dangerous Errors may he Committed  
in the Use Of Opium.

.Mercury has. Of late become a Medicine of very general Use,  
the extreme Minuteness, Mobility, and Momentum of its  
Parts, rendering it a powerful Cleanser , *of* all Obstructions,  
even in the most minute Capillaries: But then we should be  
cautious in the Use of it, if we consider, that the very Thing which  
gives it Power Os doing Good above Other DeObstruents, disposes  
it, also, to do Mischief; I mem its great Momentum: The Weight,  
Or it being about ten times that Of Blood, and the Momentum  
being the joint Product Of the Weight and Velocity, it must needs  
operate with great Force. And may it not be justly feared, that Jo  
great a Force, entering the minutest Vessels, and breaking the ob-  
structing Matter, might also break or wound the sine render Coats  
Of those small Vessels, and so bring On the untimesy Effects Of Old  
Age, producing more, perhaps, and. worse Obstructions than those  
' .it removed? Similar Consequences may justly he apprehended  
from Other mineral and ponderous Medicines.: Therefore, upon  
the Whole, there win not perhaps be found any Medicine more:  
general in its Use, or. more salutary in its Effects, than Tar-waters

To suppose that all Distempers arising from Very different, and,  
it inay be, from contrary. Causes, can he cured by one and the .  
same Medicine, must seem chimerical: hut it may with Truth be  
. affirmed, that the Virtue os Tar-water extends to a surprising Va- .  
riety os Cases Very distant and unlike. This I have experienced in  
my Neighbours, my’ Family, and myfels, and as I live in a remote  
Corner among poor Neighbours, who, for want of a regular Phy-  
ficiau,have often recourse to me, I have had frequent Opportunities  
os Trial, which convince me it is os so just a Temperament as to  
be an Enemy to all Extremes.- I have known it do great good in a  
Cold watry Con st hut ion, as a Cardiac and Stomachic, and at the  
same time allay Heat,and feverish Thirst, in another. I have  
known it Correct costive Habits in fome, and the contrary Habit  
in others: Nor will this seem incredible,is it be considered, that  
middle Qualities naturally reduce rhe extreme; warm Water, for  
Instance, mixed with hot and Cold Waters, will lessen the Heat in  
that, and the Cold in this.

They who know rhe great Virtues Of common Soap, whose  
coasse lixivia! Saks are the Product of Culinary Fire, will not think  
it incredible, that Virtues of mighty Force and Extent should be  
found in a fine acid Soap, the Salts and Oil whereof are a most  
elaborate Product or Nature, and the solar Light.

. It is certain Tar-water warms, and therefore some may perhaps  
still think it cannot cool. The more effectually to remove this  
Prejudice, let it be farther considered, that, aS, on the one hand.

Ttr, as to drive 'It from 'the Vitals. Doctijr *Sydenham,* in his  
Treatife Ofthe Gout, declares, that whoever finds a Medicine rhe  
most efficacious for strengthening Digestion, will do inore Service  
in theCure of that and other chronical Distempers, than he can  
’even form a Notion of; and I leave it to Trial, whether Tar-wa.er  
the not that Medicine, as I myself am persuaded it is. by all the  
Experiments I could make. Bur in all Trials I would recommend  
Discretion ; for instance, a Man with the Gout in his Stomach  
Ought not to drink cold Tar-warer . ..

It is evident to Sense, that Blood, Urine, ana other animal  
Juices, being let to stand, soon conuedt a great Acrimony. Juices,  
'therefore, from a bad Digestion, retained and stagnating in the  
Body, grow sharp and paced; hence, a fermenting Hear, the  
.immediate Cause of the Gout: The curing this by cooling Medi-  
cines, as they would increase the antecedent Cause, must be a  
vain Attempt. On rhe‘other hand. Spices:and spirituous Liquors,  
while they continue to remove the antecedent Cause, or bad Di-  
gestion, would, by inflaming the Blond, increase the proximate or  
Immediate Cause of the Gout, the fermenting Heat: The Scope  
therefore, must be to find a Medicine that shall corroborate, but  
mor inflame. Bitter Herbs are recommended ; but they are weak  
in Comparison ofTut-water.

The great Force Of Tar-water to corresh the Acrimony of the  
Blond, appears in nothing more than in theCure of a Gangrene,  
from an internal Caule; which was performed on a Servant of  
my Own, by prescribing the copious and constant Use of Tar-  
water for a few Weeks. From my representing Tar-water as  
good for so many Things, some perhaps may conclude it is good  
tor Nothing; but Charity Obliges me to fay what I know, and  
what I think howsoever it may be taken; Men may ceofure and ob-  
**ject** as they please, but I appeal to Time and Experiment. Esseds  
tnrsitnputed, Cases wrong told. Circumstances overlooked, per-  
haps, too. Prejudices and Pardallties against Truth, may for a time  
prevail, and keep her at the Bottom of her Well; from whence,  
nevertheless, the emergeth sooner or later, and strikes the Eyes  
**of** all who do not keep them.shut.

*Boerhaave* thinks a Specific may he found for that peculiar  
Venom which infects the Blond in the Small-pox, and that the  
Profpea of S0 great a public Benefit should stir up Men to search  
for it. Its wonderful Success in preventing and mitigating that  
Distemper, would incline One to suspecti that Tar-water is such a  
Specific. Some think an Erysipelas .and the Plague differ only in  
Degree: Iffo,Tar-wateI should be useful in the Plague; for I have  
known it cute an Erysipelas.

Tar-water, as cleausing, healing, and balsamic, is good in  
ill Disorders of the Urinary Passages, whether obstructed or ul-  
cerated . Donor *Lister* fuppofes, indeed, that Τurpentines ach by  
**a** caustic Quality, which irritates the Coats of the Urinary Ducts  
to expel Sand or Gravel. But, it should seem, this expelling diu-  
**retic** Virtue consisted rather in Saits than the Resin, andconse-  
quently resides in the Tar.water gently stimolating by its Salts,  
without the dangerous Force of a Caustic. The violent Opera-  
tion of lpecacuanha lies in its Resin, but the saline Extraci: is a  
gentle Purge and Diuretic, by the Stainulus Of its Salts.

That which acts as a mild Cordial, neither hurting the Capillary  
Vessels as a Caustic, nor affecting the Nerves, nor coagulating-  
the Juices, must in all Cases he a Friend to Nature, and assist  
**the** *Vis* Fine in its Struggle against all Kinds Of Contagion; and,  
from what I have observed. Tar-water appears to me an useful  
Preservative in all epidemical Disorders, and against all other In-  
fection whatsoever, as well as that of the Small-pox. What Ef-  
fects the .Passions of the Mind, have in human Maladies, is well  
known; and consequently the general Benefit of fuch a Cardiac  
cannot be doubted.

AS the Body is said to clothe the Soul, so theNervesmay he  
said to constitute her inner Garment. And as the Soul animates  
theWhole, what-nearly touches the Soul relates to all: Therefore  
the Asperity of tartarous Salt, and the fiery Acrimony of alcaline  
Salts, irritating and wounding the Nerves, produce Passions  
and Anxieties in the Soul, which both aggravate Distempers, and  
render Mens Lives restless and wretched, even when they are af-  
fiithed with no apparent Distemper. This is the latent Spring of  
much Woe, Spleen, and Uneasiness of Life. Small impercep-  
tible Irritations of the minutest Fibres or Filaments, caused by  
the pungent Salts of Wines and Sauces, so shake and disturb the  
Microcosms of high Livers, as often to raise Tempests in Courts  
and Senates; whereas the gentle Vibrations, that are raffed in the  
Nerves, by a fine fiibtle Acid, sheathed in a smooth volatile Oil,  
softly stimulating and bracing the nervous Vessels and Fibres, pro-  
motes a dueCirculation and Secretion of the animal juices, and  
-creates a calm, satisfied Sense of Health; and accordingly! have  
often known Tar-water procure Sleep, and compose the Spirits, in  
cruel Watchings, occasioned either by Sickness, or by too intense  
Application of Mind.

"In Diseases sometimes Accidents happen from without by Mis-  
management:, sometimes latent Causes operate within, jointly with  
the specific Taint, or, peculiar Cause of the Malady The Causes  
ofD?sternpers are osten complicated, xed there may he something  
in the Idiospncrafy of rhe Padent that puzzles the Physician; It  
Eray,therefore,be presumed, that no Medicine is infallible, not **even**

in any one Disorder: But as Tar-water possaSes the Virtues cf  
fortifying the Stomach, an well as purifying and invigorating he  
Slood, beyond any Medicine that 1 know, it ma}’ he presumed of  
great and general Efficacy in ail those numerous Illnesses, which  
take their Rife from foul or vapid Blond, or from a bad Digestion.  
TheAnirnal Spirits are elaborated from the Blood: Such,therefore,  
as the E.ood is, fuch will he the Animal Spirits; more or less,  
weaker or stronger. This thews the Usefulness of Tar-water in  
all hysteric and hypochondriac Cases, which, together with the  
Maladies from Indigestion, comprise almost the whole Tribe of  
.chronical Diseases.

The Scurvy inay be reckoned in these Climates an universsl  
Malady, as People in general are subject io it, and as it mixes,  
more or less in almost all Diseases. A Cachexy, orissHabir, is  
much of rhe fame Kind with the Scurvy, proceeds from the  
same Causes, and is attended With ths like Symptoms, which are  
so manifold and various, that the Scurvy may well he looked  
upon as a general Cachexy, infecting the whole Habit, and vi-  
tiating all the Digestions.

The Cure of the Scurvy is no more to be attempted by strong  
active Medicines, than Pitch on Silk is to be removed by Force:  
The viscid Humour must he gently reiolved and diluted, tbeTone  
of the Vessels recovered by a moderate Stimulation, and the ten-  
derFibreSjandCapillaryVesielssgradually cleared from the concreted  
Stussthav adheres to and obstructs them; all which is in the properest  
manner performed by a watry Diluent containing a fine vegetable  
Soap. Andaltho’ a complete Cure by Alteratives, operating on  
the sinall Capillaries, and by insensible Discharges, must require  
Length ofTime; yet the good Effeit ofthisMedicine on cachectic  
and scorbutic Persons is soon perceived by the Change it pro-  
duces in their pale discoloured Looks, giving a florid healthy  
Countenance in lessTime than, perhaps, any other Medicine.

It is well known how extremely difficult it is to cure an invemi  
rate Scurvy; how many scorbutic Patients have grown worse by  
an injudicious Course of Evacuations; and how difficult, tedious  
and uncertain the Cute is, in the Hands even of rhe best, who  
are obliged to use such .Variety and Change of Medicines, in the  
different Stages of that Malady; which, nevertheless, may be  
cured (ifI may judge by what I have experienced) by the sole,  
regular. Constant, and-copinss Use of Tar-water

. Tar-water moderately inspissates with its balsamic Virtue, and  
renders mild the thin and sharp Part of the Blood ; the fame  
Water, as a soapy Medicine, dissolves the grumous Concretions of  
the fibrous Part. As a Balsam, it destroys the ulcerous Acrimony  
of the Humours; and, as a Deobstruent, it opens and cleans the  
Veffeis, restores their Tone, and strengthens the Digestion,whole ‘  
Defects are the principal Cause of a Scurvy and Cachexy-

In the Cure of the Scurvy, rhe principal Aim is to subdue the  
Acrimony of the Blood and juices. But as this Acrimony pro-  
ceeds from different Causes, or even opposite, aS acid and alcaline,  
what is good in one Sort of Scurvy proves dangerous, or even  
mortal, in another. If I may trust whst Trials I have been able to  
make, this Water is good in the several Kinds os Scurvy, acid, ale  
daline,and muriatic; and! belleve the only Medicino that cures  
them all without doing Hurt in any As it contains a volatile Acid  
with a sine volatile Oil, why may nor a Medicine cool in one Part,  
and warm in another, be a Remedy to either Extreme ? I have  
observed it to produce a kindly genial Warmth without Hear, a  
Thing to be aimed at in all Sorts of Scurvy. Besides, the Balsam .  
in Tar-water sheathe all scorbutic Salts alike; and its great Vir-  
tues, as a Digester and Deobstruent, are of general Use in all  
scorbutic, and, ! may add, in all chronical Cafes whatsoever.

I cannot be sure, that I have tried it in a serophulous Case, tho\*  
I have tried it successfolly in one that I fospe&ed ra be fo. And  
I apprehend it would he very serviceable in such Disorders. For  
altbo’ Doctor *Gibbs,* in his Treanse of the *Kings Evil,* derives  
that Disease from a coagulating Acid, which is, also, agreeable  
to the Opinion Of some other Physicians, and althol Tar.water  
contain an Acid, yet, as it is a Soap, it resolves instead *of coagu-  
lating* the juices of the Body.

For hysterical and hypochondriacal Disorders, so frequent  
among us, it is commonly supposed, that all Acids ate had. But  
I will vemure to except the acid Soap of Tar-warer, hsving  
found, by my Own Experience, and that of many others, that it  
raises the Spirits, and is an excellent Aniihysteric, nor leis inno-  
cent than powerful; which cannot be raid of those others in com-  
mon Use, that osien leave People worse than they sound them.

Many hysteric and scorbutic Ailments, many Taints contracted  
by themselves; or inherited from their Ancestors, afflidt the Peo-  
ple of Condition in thefe Islands ; which Aliments might he  
safely removed. Or relieved, by the sole Use of Tar-warer.

As the Nerves are the Instruments os Sensation, st follows, that  
Spafins in theNerves may produce all Symprontatand,therefore,  
a Disorder in the nervous System shall imitate all Distempers,  
and occasion, io Appearance, an Asthma, for Instance, a Pleu-  
risy, or a Fit of the Stone. Now, whitever is good for the  
Nerves in general, is good against alifuch Symptoms. SutTar-  
water, as it includes, in an eminent Degree, rhe Virtues of warm  
Gums and Resins, is of great Use for comforting and strengthen-  
ing theNerves, curing Twitches in the nervous Fibres, Cramps,

also, and Numbness of the Limbs, removing Anxieties, and pro-  
moting Sleepin all which Cases I have known it Very successful..

This safe and cheap Medicine shits all Circumstances, and all  
Constitutions, operating easily, curing without disturbing, raffing ,.  
the Spirits without depressing them ; a Circumstance that deserves  
repeated Attention, especially in these Climates, where strong Li-  
quors so fatally and fo frequently produce those very Distresses  
they are designed to remedy and, if I am not misinformed., even  
among the Ladies themselves, who are truly much to be pitied.  
Their Condition Of Lise makes them a Prey to imaginary Woes,  
which never fail to grow up in Minds unexercised, and unem-  
ployed.. To get rid ofthese, it is said, there are some who betake  
themfelves to distilled Spirits. Thus are many Lives rendered  
wretched. But the tender Nerves, and low Spirits of such poor  
Creatures, would be much relieved by the Use of Tar-water,  
which might prolong and cheat their Lives.

- I Verily think, there is not any Medicine whatsoever, so ef-  
fectual to restore a crazy Constitution, and cheat a dreary Mind,  
Or so likely to subvert rhe gloomy Empire of the Spleen.

- It must be owned, that Tar-water is not so Violent and sudden a  
Medicine, as always to produce its Effect at once, (such, by irri-  
tating, often do more Mischief than Good), but a safe and mild  
Alterative, which penetrates the whole System, opens, heals, and -  
strengthens the remote Vessels, alters and propels their Contents,  
and enters the minutest Capillaries, and cannot, therefore, other-  
wise, than by degrees, and in time, work a radical Cure in chro-  
nic Distempers. It gives, nevertheless, speedy Relies in most  
. Cases; as I have found by myself, and many others. I have been'  
surprised to fee Perlons fallen away, and languishing under a bad  
Digestion, after a few Weeks, recover a good Stomach, and with  
ir Flesh and Strength, so aS to seem renewed by the drinking Of  
Tar-water. The Strength and Quantity Of this Water to be  
taken by each individual Person, is best determined from Expe-  
rience. And, as for the Time of taking, T never knew any Evil  
ensue fromIts being continued ever fo long, but, on the con-  
trary, many and great Advantages, which sometimes would not,  
perhaps, begin to shew themselves, till it had been taken two or  
three Months. νύ

. Sir *John Ployer* remarks, that we want a Method for theUfe of  
Turpentine: And again, he who shall bit, says he, on the pleasantest  
Method of giving Turpentine, will do great Cures in the Gout,  
Stone, Catarrhs, Dropsies, and cold Scurvies, Rheumatisms, Ul-  
Gers, and Obstructions os the Glands. Lastly, he subjoins, that,  
sor the Use of altering and amending the Juices and Fibres, it  
-must be given frequentiy, and in filch small Quantities at a time,  
and in so Commodious a manner, as will agree best with the  
.Stomach, stay longest in the Body, and not purge itself off ὁ  
for large Doses, says he, go thro’ too quick, and, besides, offend  
the Head. Now the Infusion of Tar, or Turpentine, in cold  
Water, feems to supply the Very Method that was wanted, as it  
leaves the more unctuous and gross Parts behind, which might  
offend, the Stomach, Intestines, and Head, and, aS it may be easily  
taken, and as often, and in such Quantity, and in such Degree Of  
Strength, as suits the Cafe Os the Patient. Nor should it seem,  
that the fine Spirit, and Volatile Oil. Obtained by infusion OsTar,  
is inferior to that os Turpentine, to which it fuperaddS the Virtue  
Os Wood-soor, which is known to be very great, with respect to  
the Head and Nerves; and this appears evident from the manner  
Of Obtaining Tar. And as the fine volatile Parts OsTar, Or Tur-  
pentine, are drawn Off by Infusion in cold Water, and easily  
convey'd throughout the whole System of the human Body;  
so, it should seem, the same Method may be used with all Sorts  
Of Balsams, Or Refins whatsoever, as the readiest, easiest, and  
most, inoffensive, as well as in many Cases the most effectual  
Way Of obtaining and imparting their Virtues.

. After having said so much of the Uses of Tas, I must farther  
add, that, being nibbed on them, it is an excellent Preservative  
.Os the Teeth and Gums, that it sweetens the Breath, and that  
it clears and strengthens the Voice. And as its Effects are various  
-and useful, so there is nothing to be feared from the Operation  
Of an Alterative fo mild and friendly to Nature. It was a wise  
Maximos certain .antient Philosophers, that Diseases Ought not  
to be irritated by Medicines. But no Medicine disturbs the ani-  
-Inal Oeconomy less than this; which, if I may trust my Own Ex-  
perience, never produces any Disorder in a Patient, when rightly  
taken. . '

I knew, indeed, a Person who took a large Glass Of Tar-water  
just before Breakfast, which gave him an invincible -Nausea and  
Disgust, althe’ he had before received the greatest Benefit from  
it. But if Tar-water be taken and made in the manner prescribed  
at the Beginning Of this Essay, it will, if I mistake not, have  
enough of the Salt to be ufesul, and littie enough Of the Oil to  
be inoffensive. I mean my own Manner Of making it, and not  
the *American.* Persons more delicate than ordinary, may ren-  
der it palatable, by mixing a Drop of the chymiCal Oil of Nut-  
megs, Or a Spoonful of Mountain-wine, in each Glass. It may  
not be amiss to observe, that I have known some, whose nice  
Stomachs could nor bear it in rhe Morning, take it at Night,  
going to Bed, without any inconvenience; and that, with some,  
it agrees best warm, with others cold. It may be made for brute

Beasts, as Horses, in whose Disorders I have found it very ostio  
sui, l believe, more so, than that bituminous Substance, called  
*Barbados Tar.*

tin very dangerous and acute Cases, much may be taken, and  
Often, aS far as the Stomach Can beat. But in chronical Cafes,  
about half a Pint, Night and Morning, may suffice; Or if so large  
a Dofe should prove disagreeable, half the Quantity may be taken  
at sour times, in the Morning, at Night going to Bed, and about  
two Hours after Dinner and Breakfast. A Medicine Of so great  
Virtue in so many different Disorders, and especially in that grand  
Enemy, rhe Fever;must needs be a Benefit to Mankind in gene-  
ral. There are, nevertheless, three Sorts Of People, to whom I  
would peculiarly recommend it; Sea-faring Persons, Ladies, and  
Men of studious and sedentary Laves.

To Sailors,and all Sea-faring Persons, who are subject to scor-  
butic Disorders, and putrid Fevers, especially in long *Southern*Voyages, I am persuaded, this Tar-water would he very be-  
nesicial. And this may deserve particular Notice in the pre-  
sent Course of marine Expeditions, when fo many Of Our Coun-  
trymen have perished by such Distempers contracted at Sea, and  
in foreign Climates , which, it is probable, might have been  
prevented, by the copious Use of Tar-water. \* /

This Water will, alsio, give Charitable Relief to the Ladies,  
who Often want it more than the Parish-Poor j being many Of  
them never able to. make, a good Meal, and sitting pale, puny,  
and forbidden, like Ghosts, at their' own Table, Victims of Va-  
pours and Indigestion.

Studious Persons, also, pent up in narrow Holes, breathing had  
Air, and stooping Over then Books, are much to be pitied. As  
they are debarred the free Use os Air and Exercise, this I will  
Venture to recommend as the best Succedaneum to both. My  
Own sedentary Course Os Life had long fince thrown me into an  
ill Habit, attended with many Ailments, particularly a nervous  
Colic, which rendered my Life a Burden, and the more so,  
because my Pains were exasperated by Exercife. But, since the  
Use of Tar-water, I find, tho’ not a perfect Recovery from  
my old and rooted Illness, yet such a gradual Return Of Health  
and Ease, that I esteem my having taken this Medicine, the  
greatest of all temporal Blessings, and am convinced, that,under  
Providence, I Owe my Life to it. .

in the distilling Os Turpentine, and Other Balsams, by a gentle  
Heat, it has been observed, that there rises, first, an acid Spirit,  
that will mix with Water ; which Spirit, except the Fire be Very  
gentle, is lost. This grateful acid Spirit that first comes over, is  
highly refrigeratory, diuretic, sudorific, balsamic, or preservative  
from Putrefaction, excellent in nephritic Cases, and for quench-  
ing Thirst; all which Virtues are contained in the cold Infusion,  
which draws forth from Tar only its fine Flower Or Quintessence,  
if I may so say, or the native Vegetable Spirit, together with a  
.little volatile Oil. *Siris.*

PLACENTA. A Cake. In Anatomy, *Placenta* is a Con-  
gerieSOf Blood-Vessels, adhering to the Uterus, during Gestation,  
which, together with the Membranes, and *Punis Umbilicalis, is*excluded generally after the Feems. See **SECUNDINAE.**

PLACENTULA. A Diminutive of the preceding Word.

PLACIANUM COLLYRIUM. The Name Ofa *Collyrium,*described by *Aetius, Tetrabib.* 2. *Sect.* 4. *Cap.* I I 3.

PLAClTlsq πλακίτις. A Species Os CADMIA , which see. It  
is, also, a Name for a crustaceous Sort Os Alum. . . \*

PLADAROTES, ιζτλαδαρότης. A Disorder Of the Eye-lids, .  
Consisting in an Eruption of small, soft, discoloured Tubercles,  
On their internal Surface.

PLADOS, πλάδος. A redundant and superfluous Humi-  
dity, rendering any Part lax and weak.

PLAGULAE. Compresses, or Bolsters.

PLANETES PYRETOS. An erratic Fever; that is, one  
which is anomalons, and preserves no regular Period, or Type.  
The Word is, like wife, apply’d to Other Distempers, aS the GOnt,  
when irregular.

PLANITIES. The Sole Of the Foot. -

PLANTA. A Plant, Or Vegetable. See BOTANY. *Plant a  
Noctis* is a minute itching Pustule, which breaks out in the Night.  
*Castellus..* The Sole Os the Foot.

' PLANTAG1NELLA. A Name Tor the *Plantago , aqua-  
tica ; minima.*

PLANTAGO.

The Characters are,

The Calyx is monophyllons, quadrifid, tubulous, and Very  
tender. The Flower in it is monopetalous, shaped somewhat  
like a Bason, quadripartite, and expanded in form of a Star: The  
Ovary is guarded by sour long Stamina; whence some take the  
Flower to be apetalous. The Fruit is a shell, almost of an oval,  
or conic Form, when ripe, opening transverfly into two Parts  
(one of which resta upon the other), and is divided by an lnter-  
closure into two Capsules, full os oblong Seeds.

*Boerhaave* mentions seventeen Species or *Plantago*. which are,

I. Plantago, latifolia, rosea, flore expanso. C.B.P.1S9. su

*B.* 3\* 7o3. ... . 1

a. Plantago, latifolia, rosea, floribus quasi in Spina dispositis.  
*-C. Β. Ρ.* I89. *Plantags, rosea.* J. B. 3. 503.

3. Plantago; latifolia; finuara. C.B.P. IS9. *Tourn. last.* 126.  
*Bocrh Ind A. 2..* ICO. *Plantago vulgaris stepttnervia.* Ossic. *Plan-  
tago lagrfoeia vulgaris.* Park. Theat. 494. Rah Hist- I.flyd. Synop.  
3.3I4. *Plantago latifolia.* Ger. 338. Emac. 4I7. *Plantago mayor,  
folio glabra, sstrn ladntaio, ut plurimum.* J. B. 3.502. GREAT  
PLANTAIN.

The Root of the Plantain is thick at the Head, having many  
Whitish Fibres growing from it. The Leaves are pretty, broad,  
large and Oval, somewhat waved about the Edges, and having  
seven large Nerves running through the whole Length os the  
Leaves, and even the broad hollow Foot-stalks, into the Root.  
The Flowers grow in long Spikes, above half the Length Of the  
thick Foot-stalk, being small and staminous, cut into four Parts,  
which are succeeded by two small oblong shining brown Seeds,  
hollowed in on the one Side, growing in little roundish Capsulas,  
which open horinontallyj'when the Seed is ripe. It grows every-  
where by the Way-side, and flowers in *May.* The whole Plant  
is used. .

Plantain is cold, dry, and binding, and useful in all Kinds Of  
Fluxes, and Haemorrhages, as spitting and Vomiting Os Blood,  
bleeding at the Nose, the Excess Os rhe Catamenta, or Lochia,  
as, also, for the involuntary making os Urine, its Heat and Sharp-,  
ness, and the Gonorrhoea. It is, likewise, good to stop the Bleed-  
ing of Wounds, and to consolidare their Lips.

The Only Officinal Preparation is the simple distilled Water.  
*Miller's Bor. Osse*

Its Leaves are bitter, astringent, and give a faint red Colour  
to the blue Paper , the Roots give it a deeper, and are Only  
astringent; which shews, that in the Leaves the Sal Ammoniac,  
and the tenestrial Parts Of this Plant, are clogged with a great  
deal Os Sulphur; thus the Plantain is vulnerary, resolving and se-  
' hrifugous. *Tragus* commends it Very much for the Phtific. - In  
rhe Country they drink the Juice, from two Ounces to four, at  
the first Access of the Paroxysm of intermitting Fevers ; two  
Drams os the Extract of this Plant, or a Dram of its Seed, reduced  
to Powder, cure a Looseness, and all Sorts of Haemorrhages. The  
Prifan and Water Of Plantain have the same Virtues. They are pre-  
scribed in the Dysentery, spitting Of Blood, in the immoderate Flux  
ofthe Piles, or Terms, sor the Whites, and Losses os Blood. In  
fine, the Plantain is used in all Vulnerary and detersive Potions.  
In the Inflammation of the Eyes, *Camerarius* made a Collyrium,  
with theJuice and Leaves of this Plant mixed with Rose-water  
and Sugar. *Simon Baulk* used the Extract Of Plantain, and rhe  
Decoction Of Sarsaparilla, to cure a young Man that made bloody  
Urine, after a Gonorrhoea. The Gargarifm Of Plantain is excel-  
lent for the Diseases Of the Throat, this Plant is an Ingredient  
in the, Powder which *Julian Paulmier* has prescribed to cure  
Madness. *Martyofs Tournefori. . ,*

. 4. Plantago ; latifolia incana. C.B. P.I89. *Tourn. last.* I26.  
*Boerh. Ind. Α. 2..* too. *Plantago incana.* Ossic. Ger. 338. Emac.  
4I9. RanHist.I. 877. *Plantago major incana.* Park. Theat. 493.  
Rail Synop. 3. 3I4. *Plantago major hirsuta, -media a nonnullis  
cognominata.* J. B. 3.504. HOARY PLANTAIN.

It grows in gravelly Places, and flowers in *June.* The Leaves  
are in Use, and agree in Virtues with those Of the *GreatPlantains*and may he substituted in their stead. *Dale.*

*S.* Plantago, latifolia ; hirfuta minor. C. Β. P. 189.

0. Plantago ; lato, sanguineo solio. *H.* K. *Mons.p..*

7. Plantago , latifolia, glabra ; pedunculi foliis, & Spica, lon-  
gissimis. . .

. 8. Plantago , latifolia ; Spica multiplici, sparsa. C. *B. Ρ.*189.

9. Plantago; angustisolia , major. C.B. Ρ. I89. *Totam. Inflo  
'V2.se Boerh. Ind. A.* 2. IoO. *Plantago angufiifosm. Glurnquenervia.*Ossic. *Plantago Gltsijiquencrnda.* Ger. 34I. Emac. 422. Rail  
Hist. 1/877. Synop. 3. 3\*4. *Plant a So ffluinquencrvia major.*Park. Theat. 495. *Plantago lanceolata.* j. B. 3. 5o5. RIB-  
WORT.

This Plantain has longer and much narrower Leaves than the  
common Plantain, sharp-pointed, and having five remarkable  
Ribs, Or Nerves, running quite thro them, to the Root, which  
is less, and more stringy, than the common Plantain. The  
Flowers grow at the End Of long flender Stalks, in Oblong  
Spikes, about an Inch long , they are small and staminous, with  
white Apices. The Seed grows like that Of the common Plan-  
tain, but is somewhat larger- It grows in Fields and Meadows,  
and flowers in *May* and *June,* the Leaves are used.

They are restringent and Vulnerary, and may he used to the  
same Purpose with the common Plantain. Some commend the  
Juice Of it, given before the Fit Of an Ague, to prevent its coming.  
*Millers Sot. osse.*

Mr. *Boyle* highly recommends a Dram of the Powder Of the  
Leaves given in the Conserve Of red Roses, for a Tertian.

io. Plantago', trinervia 5 folio angustissimo. C. *Β. Ρ.* I89.  
*Prodr.* 98.

II. Plantago; angustisolia 5 paniculis Lagopi. C. Β. Ρ. IS9.  
*Prodr.* 98. .

12. Plantago , angustffolis . albida - Hispanica. *Tourn. last.*I27. *Boerh. Ind. A.* 2. IoI. *Holoseium.* Ossic. *Holofiium Salman-  
ticum.* Ger. 342. Emac. 423. Parin Theat. 498. *Holofiium hir-*

*sutum albicans majus.* C. B. P. IoO. *Holofiium Plant agrari finale.*J. B. 3.508. Ran Hiss 1.83o. SPANISH PLANTAIN.

This Species grows in sandy Places, and flowers in *April* and  
*May.* It is a Vulnerary Plan:, and is principally of Ufe in Hernias.

**I** 3- Plantago, angustisolia, minima; Massiliensis, Lagopi ca-  
pitulo. *T. spri.*

I4. Plantago; Orientalis, folio Scorxonerae. *T. Cer.* 5..

15. Plantago, angustisolia; serrata; Hispalensis. C. *B. P.* I89.

I6. Plantago; Cretica, minima; tomentosa, caule adunco.  
*T. Cor.es. Holofleum, s.eu laontopadium, Creticum.* GRP. I90.  
*Leontopodiurn.* Alpin. EXOt. II4.

*Prosper Alpinus* takes this sor the *Leontopodiurn* of *Diofcorides,*and describes it aS a small Plant, two Digits in Height; which,  
from a long flender Root, produces five Or seven hairy Leaves,  
three or four Digits in Length, which, near the Root, are co-  
Vered with a thick Down. Among the Leaves, near the Root,  
are little Heads bending downwards from their Stalks, in a wreath-  
ed Posture, and bearing black Flowers, which are succeeded by  
Seeds, involved in so thick, a Down, that they can hardly be  
taken Out of it. I have often, says *Prosper Alpinus,* received this  
Plant dryd *itom Candy,* and, having produced it from the Seed,  
found none of its Characters disagreeable with thofe ofthe *Leon,  
topodium.* But one thing, he thinks; Ought to be observed, which  
is, what *Diofcorides* has written Os the *Catanance,* that when it  
is dry’d and withered on the Ground, it shrinks and contracts  
itself into the Figure of the Claws of a dead Kite. Now this  
Plant *Bellus* plainly proves to be the *Leontopodeum,* and not the  
*Catanance,* since it has neither the Leaves of the *Coronopus,* nor  
the Seeds of the *Qrobus,* which are ascribed to the *Catanance,*but rather of the *Psyllium.* But, I am inclined to believe, he fays,  
that either the *Leontopodium,* and *Catanance,* are the same Plant,  
Or, at least, are not different in Species and rhe rather, because  
*Diofcorides* fays Of both of them, that they are employ'd aS Phil-  
tres, or Medicines to procure Love. *Prosper Alpinus de Plantis  
exoticis. .*

17. Plantago , angustisolia5 maior; foliis non dentato, rigidiori,  
ac radice repente. H. C. *Suppi.* 3. *Boerh. Ind. alt. Plant. Vol.* 2. , .

Plantain has an astringent Virtue, without any manifest ACri-  
mony. It is Of Service in pissing or spitting Of Blood, and under  
an immoderate Flux os the Lochia; in which Cases it never sails  
the Hopes of the Physician. Externally, it is os Use in Inflam-  
mations, being apply’d to the Parts affected. It IS a Plant of ex-  
cellent Use in a Diarrhoea, Haemorrhages, and Diseases Of the  
Eyes. The bruised Leaves are good to' cleanse and consolidate  
old Wounds and Ulcers. ' Their juice is very proper in inter-  
mitting Fevers, and in a Phthisis; the distilled Water, mixed with  
Rose-water, is a good Remedy for Inflammations Of the Eyes;  
the Water injected is Of Service in a Gonorrhoea, and the De-  
coction of the Leaves makes a proper Gargarifm in Diseases of’  
the Fauces. *Hist. Plant, adscript. Beerhaav. /*

PLANTAGO AQUATICA.

The Characters are;

The Root is Very full of Fibres, which unite in a Bulb; the  
Leaves are like those os the *Plantagot,* the Stalk is erect, and bears  
something like an Umbella. The End of the Pedicle is unfolded  
into a monophyllous trifid Calyx, which is first expanded like a  
Star, and, afterwards, retracted backwards. Tbe Flower is tri.,  
petalous, rosaceous; the Petals proceeding from the Margin of  
the reflexed Calyx, the Stamina are six in Number, two from  
the Origin of each Petal. The Ovary becomes a Fruit, consist-  
ing Of a Congeries Os Seeds, collected, in the large Species, into  
a triangular Form, in the lesser, into an echinated, or prickly  
Ball, each Seed furnished with its proper Tube.

*Boerhaave* mentions three Species Of *Plantago Aquatica\*,*which are,

I. Plantago; aquatica ;. latifolia. *CrB.P.* I90. *Boerh. Ind.  
A.* 45. *Plantago aquatica.* Ossie. J. B. 3. 787. Raii Hist. ogy.  
Synop. 3.257. *Plantago aquatica mayor.* Ger. Emac.4I7. Parle.  
Theat. I245. *Plantago aquatica mayor. Limonium verum Diosc». .  
ridis et Antiquorum.* Phyt. Brit. 94. *Alis.rna.* Dill. Cat. (Jiff i26.  
*Alis.rna, Doronicurn Pannonicum.* Mont. Plant. Var. Ind. nsi.  
*Ranunculus palustris Plantaginis folio ampliore.* Tourn. Inst. 2o2.  
WATER PLANTAIN.

It grows in watry Pisces, and flowers in *June,* and the Root  
is in Use.

*Schvsenchfield feys,* that it cures the falling down of the Anus,  
and mitigates the Redness and Inflammation of the Gout, and  
the Pain Of the Head, proceeding from a cold Cause; and is a  
Remedy for pissing and spitting Of Blood. TheJuice, as *Bosun*says, consumes the Milk in the Breasta. *Hale.*

2. Plantago, aquatica, angustisolis. C. *β. Ρ.* I90. *Ranunculus,  
palustris. Plantaginis folio angusiiori.* T. 292.

3. Plantago; aquatica, minima. *Cluse Η.* IIO. *Ilantagrnella,  
palusiris.* C. B. P. I90. *Flumnunculus aquaticus. Plantaginis folio  
anSufiissijno.* T. 292. *Bocrh. Ina. alt. Plant.*

It is called *Plantago aquatica,* because its Leaves are like thofe  
Of the *Plantago terrestris.* Many think it the *Damasonium* of  
the Antients; but whar is said Of the *Damnsonium,* **does nor** seem,  
to me, to agree with this Kind. As for M. *Vartlarts,* he thought  
it the *Damas.ontum,* because *Label* calls one Species of the *Plan-*

*tags* by that Name. *Toarnofort* refers the whole Kind to the *Pa.  
nurtctdus,* but! know not for what Reason, for their Leaves and  
-Flowers are different.

Tne Taste shews this to be an acrimonious Plant, tho' she  
Generality of Botanists, among whom is *Matsheolus,* say, it is of  
a cold Quality. But this Error is corrected by *Gesuer, Bouhine,*and others, who make it a Plant of a Very beating Nature. The  
Reason why it was thought to he Cold was, I Conceive, because  
*ths Plantago* is refrigerating; whence they thought the *Plantago  
aquatica* to be of the same Nature. The Plant then is acrimo-  
nious and penetrating, whatever may have been said of its cool-  
ing 2nd drying Qualities. The Leaves braised, and applied to the  
Breasts, are a sovereign and approved Secret, as *Timach* assures us,  
for suddenly consuming and drying up the Milk therein.. *Hist.  
Plant, adscript. Boerhaav.*

PLANTARIS MUSCULUS, or TIBIALIS GRACI-  
LIS: ...... Ἕ . .

This is a fmall pyriform Muscle, situated Obliquely in the Ham,  
below the external Condyle of the Os Femoris, between the  
*Popliteus* and *Gastrocnemius Externus,* and its Tendon, which is  
long, flat, and very small, runs down on the Side Of the *Gastro-  
cnemius Internus,* all the way to the Heel.

The fleshy Body, which is only about two Inches in Length,  
- and One in Breadth, is fixed by a short, flat Tendon, above the  
outer Edge Of the exterior Condyle of the OS Femoris, on one  
Side of the *Gastrocnemius Externus.* From thence the fleshy  
Body runs Obliquely Over the Edge of the *Popliteus,* and termi-  
nates in a very small, long, flat Tendon.

- This Tendon runs between the Body of the *Gastrocnemius Ex-  
.terr,us* and *Soleus,* all the way to the inner Edge of the upper Part  
Of the *Tendo Achillis,* and from thence continuing its Course  
downward, it joins this Tendon, and is inserted together with it,  
in the Outside Of the posterior Part Of the OS Calcis, without coin-  
Xnunicating with the *Aponeurosis Plantaris.*

. Sometimes this Muscle is wanting, and sometimes it is situated  
lower down.

. From the Description of the *Ttbialis. Gracilis,* we see evidently,\*  
.that it can have no Use with relation to the Sole of the Foor,  
.The Use assigned to it by Others, Os extending the Tarsus, and  
thereby assisting the *Gastrocnemii* and *Soleus,* seems to me to be  
very uncertain, both because os the great Disproportion in its  
Size, and the Obliquity Of its Course. If the *Soleus* were not  
cover’d by the *Gastrocnemii,* the *Tibialis Gracilis* might be ima-  
gined to serve aS *R Fraenum,* in bracing down that Muscle, and  
hindering it from swelling too much, but the small Number and  
Direction of its Fibres would still render it unfit for that  
Function.' . ’

Till its true Use is evidently discover'd by some lucky Obser-  
vation, there is, in the mean time, some Ground to think, that  
is hinders the Capsolar Ligament of the Knee from being com-  
p rest'd in the Flexion Of that Joint, both because os its Adhesion  
to that Ligament, and because of the Obliquity of its Course .  
especially since the neighbouring Portion of the same Ligament  
-seems to receive the same Assistance from a tendinous Expan-  
fion of the *Semi-membranosus. . iViaflonds Anatomy.*

PLASTICUS, πλαστικὸς, from πλάσσω, to form. Formative,  
Or endued with a Faculty Os forming.

PLAT./E, πλάται. The *Scapula.*

PLATA MON, «πλαταμών. A smooth low Rock, promi-  
nent Out os the Sea. *Galen, Exeg. .*

- PLATANARlA. A Name for the *Sparganiurn, ramosum.*

\ PLATANUS.

The Characters are; ' - .

The Leaves are large, and laciniated ; the Flower is amenta-  
ceous, form’d into a globular Figure, and consisting of a Multi-  
tnde os Stamina. The Fruit, which is produced at a Distance  
from the Flower, is spherical, and contains Vast Numbers Of long,  
apiculated Seeds, intermixid with much Down.

*Boerhaave* mentions two Species of *Platanus -,* which are,

I. Platanus; Orientalis; verus. *Parh.Theat.* I427. *Raii Hist.  
2..* I 706. *TOUrn. Inst.* 590. *Boerh. Ind. A.* 2. 2O9. *Platanus.*Offic. C. B. P. A3r. J. B. I. I7o. Ger. I 504. Emac. I489.  
THE PLANE-TREE.

The *Platanus Orientalis,* so much celebrated by *Herodotus,* and  
other Writers, is, also, called *Platanus latus,* becaufe it extends  
its Branches to fuch a Compafs, as to be able to cover more than  
a thousand Men under its pleasing Shade. Under this Tree,  
*Hippocrates* found *Democritus,* and saluted him. *Hist. Plant,  
adscript. Boerhaav.*

The tender Leaves of the *Platanus,* boil'd in Wine, and ap-  
ply'd as a Cataplasm, stop DefluxionS upon the Eyes, and give  
Relief under Tumors and Inflammations. The Barsq bofl'd in  
Vinegar,' makes a Collutioh sor the Tooth-ach. The green Balls  
Gr Fruit, drank in Wine, cure the Bites os Serpents; and made  
into an Ointment with Fat, are a Remedy for Ambustions. The  
Dust, or Down, of the Print, or Leaves, falling ‘into the Eyes,  
or Ears, injures the Sight and Hearing. *Dioscorides, Lib.* I.  
*Cap.* Io7.

. 2. Platanus; Occidentalis. aut VirsiniensiS. *Park. Theat.* I427.  
*Boer he Ltd. alt. Plant.*

PLATANUS is, also, a Name for the *Papaya, fructu Meosu  
peponis essrtie.*

PLATEA. Tne Pelican.

PLATIASMOS, πλατιασμός. A Fault in Pronunciation,  
when a PerfOn opens his Mouth too wide,' which hinders him  
from speaking distinctly. *Gorraeus.*

PLATYCORlA, πλατυκορία. A preternatural Dilatation Of  
the Pupil of the Eye, from a paralytic Cause. *Aretaeus de Sig.  
et Cats. diutum. L* I. *C. J.*

PLATYOPHTHALMON. ' A Name for Antimony; so  
call’d, because it was used by Women, for rendering their Eye-  
brows and Eye-lashes black and beautiful.

PLATYPHYLLOS. A Name for the *ssfoercus, latifolia,*mas, quae brevi Pediculo est. And for the *sutercus, latifolia,  
foemina. ' ' -*

PLATYSMA, πλἀτυσμα. Any thing which is stat, and broad.  
Thus a Piece of Cloth, or Plainer, Or Plate Of Metal, are call'd  
by this Name. ‘ .

PLATYSMA MYOIDES is the Name by which *Galen* calls  
the muscular Expansion, call'd *sisuadrat us Gena.* See **CAPUT,  
and LABIA. - z - .**

PLATYSTERNOS. Broad-chested. An Epithet for a Per-.  
son possess’d os a broad STERNUM. .

P LECH AS, πληχάς. The Region of the Body, which is  
terminated on each Side by the Thighs; forward by the *Pudenda,*and backwards by the Anus. *Hippocrates.*

PLECTANE, πλεκτανῆ, Or πλέγμα. , A *Plexus,* Or Cossi.  
plication of Vessels. Plectanae, πλτκτἀνςκι, are the *Cornua* Of  
the *Uterus.*

PLECTRUM. A Name for the Styloide Process Of the *Qs  
Petrosum,* for the *Uvula,* and, in some Authors, for the Tongue.

PLEGMA. The same as PLECTANE. .

PLEGMARIA. See SELAGO.

PLElAS, πληιας. Or πλειὰς, in the Plural Number *Pleiades,*in Latin *Vergiliae, is R* Constellation .Of seven Stars in the Sign  
*Taurus,* but, in *Hippocrates,* it signifies the Fail of these Stars, which  
is at the End of Autumn, or about the latter End os *October.*This is what *Galen* intimates. *Com. 1. in 1 Epid,* where be says,  
Ci that *Hippocrates* plainly shews, that he knew the Fall Os the  
*" Pleiades* to be the End os Autumn; which, therefore, by a  
" compendious way Of Expression, he calls πληι'άς.” Thus *Ga-  
len.* And in Confirmation of what he says, we may often Observe,  
that *Hippocrates* uses the Words ὑπὸ πληιαδος, to signify the End  
os Aummn.

PLEMMYRIS, πλημμυρἰς, is, properly, the same as πλημμύρα,  
and signifies the flowing Of the Tide, aS *Hes.ychius* expounds it;  
but is, by a Metaphor, used to express a Redundance, or Over-  
flowing, of Humidities, or, as *Galen* expounds it, πλῆθος ὑγρόστ  
τητος, " Plenty Of Moisture.''

PLEMNE, πλήμνη, is expounded, in *Galen’s* Exegesis, by  
τροχῦ χοςνικις, " the Nave Ot aWheel.” The Word frequently  
Occurs, *Lib. de Bract. Plemnae, orlumscvcnt,* in the plural Number,  
aS expounded by *Hesechius,* are the Perforations round the Nave,  
or Axis, into which the Spokes Of the Wheel are inserted. *Foesius.*

PLENILIUNUM. The Full Moon. At this Time, many  
Distempers are said to be exasperated, aS Madness, the Epilepsy,  
and Disorders arising from Worms, See **AsTRONOMiA.**

PLENNA, πλέιτα, rhe same as BLENNA, Mucus.

PLERES ARCHONT1CON. . The Name Of a compound  
Cephalic Powder. *Lemery Pharmacopce Universal^ Blancard.*

PLEROSIS, πλήρωσις. Repletion, or a recruiting a Body,  
worn out. Or reduced, by Sickness, Or evacuations.

PLESMONE, πλίἰσμονή. Plenitude, Satiety, or Repletion.

PLETHORA, πληθώρα, from πλῆθος. Plenitude. A Pleni-  
tnde. Or Redundance of Blood, and Humours.

The Disorders arising from a Defect of the Circulation of  
the Humours, are, in Nature, pretty much the same with those  
spontaneoufly produced by their Stagnation. In this Cafe the -  
Air is Of great Importance, fince, when admitted, it accelerates  
spontaneous Corruptions, which would otherwise-be brought  
on more stowly ; *so* that the Knowledge and Cure os the  
former, are the same with those of the latter; and from all  
these, the Nature, Cause, Effects, Signs, and Remedies Os a  
Plethora may be duly understoodj provided the following Cir..  
Cnmstaucesare adverted to.

The Fluids Of the human Body, are either crude, and, in some  
measure, partake Of the Nature of the Aliments, Or they have ac-  
quired those Qualities which are peculiar to the human Fluids;  
Now, if we consider what happens both to the crude and assi-  
milated Fluids Of the human Body, whilst the Circulation is di-  
minished, it will evidently appear, that nearly the same Changes  
will happen to the Fluids, as if they had been lest to themselves,  
and in a State of Rest; for the human Blood, when suffered to  
rest sor a sew Moments, is separated into Serum, and a red coagu-  
lated Substance. ' Now, when the Circulation is considerably di-  
minished, a Misfortune os the like Nature, os Course, begins to  
be formed 2. and hence it is, that polypose Concretions are *so* fre-  
quently Observed after Chronical Disorders. But all crude Alt.«

tnents are, by the Efficacy of the Circulation of the Blood, as-  
similated to the human Fluids. Now if the Circulation os the  
Humours is diminished, the Aliments longer retain their on-  
ginal Quality, and are spontaneousty corrupted.

.. It must be observed, that a free Access of the Air accelerates  
all spontaneous Degenerations of the Humours; for no Fer-  
mentation happens without the Approach of rhe Air; and whilst  
the Atmosphere is excluded, a Putrefaction of the Humours is  
far more flowly formed, than it would otherwise be. Thus, in  
dropsical Patients, stagnant Water often remains for some’  
Months in the Abdomen, with scarce any Degree os Corruption ;  
but it soon becomes putrid upon the Access os the Air.

Whilst, during the last Months of Gestation, the Blood be-  
comes almost stagnant in the distended Vessels of the Uterus, it  
‘ does not become corrupted , but, after Delivery, upon the Ap-  
proach of the Ain, the Lochia are highly fetid. Aster Violent  
Contusions, when the Blood remains under the found Skin, it  
‘hardly becomes putrid ; but, being gradually attenuated and ab-  
forhed, as it were, disappears. But when Blood taken from the  
Veins is exposed to the free Air, it quicklv becomes putrid.  
Hence, whilst, in the interior Parts of the Body, the Humours  
either become stagnant, or move flowly, they do not suddenly  
degenerate into a putrid State, when the Air has not A free Ac-  
cess to them.

But as a Plethora, or increased Quantity os Fluids, retards  
their Circulation, so its Nature, Causes, Signs, and proper Re-  
medies, are to he deduced from the following Considerations:

A Plethora is a larger Quantity of laudable Blood, than  
. is capable of undergoing those Changes, which must necessa-  
rily happen for the Purposes of Lise, without inducing Diseases.

A Redundance of laudable Blood is what we call a Plethora :  
Hence this Circumstance can never, in its own Nature, be a  
Disorder; fince it only supposes a preternatural Quantity of lau-  
dable Humours, whilst, in every other respect, the Patient is  
found. Hence *Hilmont* imagined, that a Plethora was unjustly  
classed among the Number of Diseases, since, according ro  
him, what is laudable, cannot be peccant in Quantity. Now  
a Plethoric Patient is such an one, as is not as yet sick, but at  
the same time is in such a State of Plenitude, that, is the Hu-  
mours are more increased or rarefied by Heat, or any other  
Cause, the natural Functions are, hy these means, injured.  
Hence a Plethoric Person may be sound, though at the same  
time in the greatest Danger; for, by an increased Heat os the  
circumambient Atmosphere, the smallest Error with respect to  
the Non-naturals, or any violent Passion os the Mind, this sound  
State may be changed into the most dangerous Disease. But it  
is impossible to prevent fuch a Misfortune sometimes happening  
to the most healthy Person. Hence *Hippocrates,* in *Aphor.* 3.  
*Sect. i.* informs us, " That Persons in a. good Habit of Body  
" are in a State of Danger ; and that, since they cannot long  
" continue in the same State, nor change for a better, they  
" mush of course, decline into a worse-; *for* which Reason  
" such a State ought, with the greatest Expedition, to be re-  
. " moved."'

A Plethora, therefore, does not import every Increase os the  
Humours, but only an Augmentation of the laudable Juices.  
Hence *Galen,* in *Meth. Medend. Lib.* I 3. *Cap. 6.* informs us,  
" That a mutual and equable Increase os the Fluids is called a  
" Plethora ; whereas, when the Body abounds with yeflow or  
" black Bile, Phlegm, or serous Humours, the Disorder is  
" called a *Cacochymy,* and not a Plethora.".

A Plethora was, by the Antients, distinguished into that af-  
fecting the Vessels, and that influencing the Strength. When  
the Vessels are so preternaturally turgid with the laudable  
Juices, that they are ready to break, the Misfortune is called  
simply a *Plenitude, or Plethora of the Vessels.* But when the  
Vessels are not too fall of laudable Humours, hut yet contain  
more than the weak Vital Force is able to put into a due Circu-  
lation, the Disorder is called a *Plenitude,* or *Plethora, with re-  
spect to the Strength.* Thus *Galen,* in his Treatise *de Plenitu-  
dine, Cap.* 3. informs us, " That, there are two Species of Ple-  
" thetas, one affecting the Strength and Vital Powers ;and the  
" other the vessels,'' And in his Treatise *de Curandi Ratione  
per Vinasertionem, Cap.* 6. he tells us, " That the more heavy  
" a Person perceives himself, the more a Plethora, with re-  
" spect to the Strength, is increased; whereas a Plethora, with  
" respect to the Vessels, is discovered by a Sense of Tension."  
. But a Plethora, in the common Acceptation of the Word,  
is confined to the Vefleis, 2nd in this Sense we now consider it.

This Species of Plethora, then, is generated by every  
Cause which produces a large Quantity of laudable Chyle  
and Blood , and at the fame utue hinders these Attenua-  
tion. Consumption, and Perspiration.

By the Functions of Life, tho Solids are necessarily worn,

and the Fluids dissipated. Hence whet is lost, ought to he re-  
cruited by Aliments. Is every Day as much is restored to the  
Body aS is lost, there remains a perfect Equilibrium, the most  
perfect Sign of confirmed Health ; for *Sanctorius* has shewn,  
by his Experiments, that the Body is in the most perfect State  
of Health, when daily, after the Digestion of the Aliments, it  
returns to its usual Weight. Now the Restitution os what is  
lost, is produced by laudable Chyle, and the Blood formed of  
it. Is, therefore, by whatever Cause, there is a larger Quan-  
tity os laudable Chyle and Blood, than is sufficient for restoring  
what is lost, generated, there will he an Accumulation os su-  
perfluous Juices gradually produced, and such an Accumulation  
will be greatly increased, if the Efficacy os those Functions is  
diminished, by which the Fluids ought to he attenuated, con-  
fumed, and dissipated, by the usoal Ways of Excretion. '

Among the other Caufes of a Plethora, we may justly  
reckon the great contractile Force Of the chylopoetic Or-  
gans. Heart, and Arteries ; a lax Texture of the Veins, and  
other sinall Vessels ; mild Aliments, easily convertible into  
Chyle ; much Sleep ; an easy Mind ; a Want os due mus-  
cular Motion, and habitual Evacuations of Blood, whether  
natural or artificiali

*Ac for the contractile Force of the chylopoetic Organs ;*whilst the Vifcera, subservient to the Change of the Aliments  
into laudable Chyle, are sound and strong, there is a large Quan-  
tity os Chyle prepared from the Food and Drink ; and whilst  
the like Strength remains in the Heart and Arteries, a laudable  
Blood is generated from this large Quantity of Chyle ; whilst at  
the same time the Veins, being naturally lax, easily yield to the  
distending Fluid, and receive its superfluous Quantity, unless a  
Depletion of them is produced by proportionably greater Mo-  
tion and exercise ; for the more languid the Circulation is,  
the more Humours are accumulated in the Veins : Whereas,  
on the contrary, the brisker the Motion of the Bleed is, the  
Arteries become the fuller, and the Veins the more empty :  
Whilst Drunkards often destroy large Quantities of Liquor, they  
would be suffocated, unless the Veins were capable of receiv-  
ing the superfluous Liquor'; for. which Reason their Veins are,  
at such times, greatly inflated. When, therefore, the chylo-  
poetic Organs prepare a large Quantity of Chyle ; when the  
Viscera, subservient to Sanguification, convert this Chyle into  
Blood, and there is, at the same time, a Laxity of the Veins,  
there must necessarily be a Redundance of laudable Blood accu-  
mulated.

*As for mild Aliments* ; all acrid Substances, by their stimu-  
lating Quality, increase the Circulation of the Blood ; and an  
increased Motion Of the Blood diminishes the Quantity os the  
Juices: Mild Aliments, therefore, of the ripe, farinaceous kind,  
troths prepared of Flesh, the tender Fleshes of young Animals,  
and soft Pot-herbs, from all which a large Quantity of laudable  
Chyle is generated, have a Tendency to produce a Plethora.

*As for much Sleep* ; it is shewn, under the Article TiBRA,  
how plentiful Sleep conduces to the Relaxations of too rigid  
Fibres. Now the relaxed Vessels easily yield to the distending  
Fluids, for which Reason they are the more filled. .Besides,  
during Sleep,, what was lost by the Functions of Sensation, and  
Voluntary Motion, is restored. Ou the contrary, whilst we are .  
awake, what was accumulated during Sleep, is consumed.  
Hence those, who are fatigued by the Labours of the Day, rise  
brilk and Vigorous, aster a salutary Sleep. When, therefore,  
any Person indulges himself in a great deal os Sleep, the more  
the Humours are daily accumulated, and the less of them is  
dissipated. Hence arises a Plethora. Hence, also, it is, that  
Habits exhausted by violent Disorders are so happily restored  
by long Sleep; and Bears sustain Life all the Winter by steeping,  
without any manner os Food.

*As for an ease Mind-,* that Serenity of Mind contributes  
greatly to the Preservation of Life,is sufficiently obvious.- Now  
the Effect os the best Health is a Plethora: Besides, violent Pas-  
sions, and racking Cares, palpably prey on the Body. And *Ga-  
len,* in his *Method. Medend. Lib.* I.4. *Cap. i5. mentions* the  
Cares of the Mind, among the other Methods of curing Obesity  
or Fatness,

*As for a Want of due muscular Motion* ; aster Man, for the  
Punishment of his Sin, was sentenced to earn his Bread by the  
[ Sweat of his Brow, bodily Exercise became necessary for the  
Preservation of Health: Accordingly Persons, who led delicate  
, and idle Lives, are afflicted with the most terrible Disorders.

*Hippocrates,* in his Treatise *de Victus Ratione Sanorum, Lib.*

I. informs us, " That a Person, who eats heartily, cannot he  
' " sound, without Exercise ; for though Aliments 'and Exercise  
: " have different Effects, yet they mutually concur to the Pre-

" setvation of Health ; fince Labour consumes whet is super-  
" fiuous, whilst Aliments and Drink recruit what is lush"  
And in the same Treatise, *Lib.* 3. he orders us to confides.

ίι whether the Aliments surpass the Exercise, or the Exercise  
" the Aliments, fince, when either happens. Diseases are  
" produced; whereas, when they are equal, and duly pro-  
" portioned to each other. Health is preserved..

Such an Equilibrium, therefore, is requisitehetween theAli-  
ments and Exercise, that as much may he daily dissipated, as is  
taken in by way of Aliment. Whilst the same Quantity of  
Food is used, and the Exercise lessened, a Plethora hegins to he  
formed. When Horses are well-fed in Stables, they soon be-  
comefrt, but when exercised in hard Running for some Days,  
the additional Fat is soon dissipated.

*As for usual Evacuations of Blood, whether natural or artifi-  
cial ;* it is certain from Experience, that the oftenera Man is  
'blooded, provided he is not quite weakened by it, his Vessels are  
afterwards rendered more turgid with Blood. Women have every  
Month a natural Evacuation of superfluous Blood ; and Men, '  
accustomed to repeated Venesections, are, about the usual times  
of Venesection, assiicted with the fame Disorders Women la-  
bour under, in consequence of a Retention of the Menses :  
. Thus at last theStrength of such Men degenerates into the lax and  
feeble State of Woman. Mr. *Dodart,* in *Hist, de scAcademic  
des Sciences, An.* 1707. observes, that in a Man, not weakened  
by Venesection, sixteen Ounces of Blood taken from the Veins  
were restored in five Days time. Hence it is obvious, that re-  
peated Venesection disposes to a Plethora, whilst the Blood is,  
by that means, so soon regenerated, though the Body is ren-  
dered less firm, more lax, and consequently its Vessels more  
easily filled. I saw a Woman, who, on account of violent and  
often-returning Passions os Mind, was blooded above sixty times  
in a Year, and became so fat, that in a few Months she weighed  
one hundred and fifty Pounds more, than in her natural State ;  
hut the Blood, being daily regenerated, laid a Foundation for  
repeated Venesections, till, her whole Strength being destroyed,  
she sell into a Dropsy. It doth not, therefore, seem to be a lauda-  
ble Custom for healthyPersons to bleed frequently every Year, by  
way of Caution and Prevention ; fince, by that means, ’the  
Body is weakened, and disposed for the more easy Repletion.  
*Galen,* who, in *Meth. Mcdend. Lib.* 9. *Cap. 5.* in certain Dis-  
orders, recommends frequent and bold Venesections, till the  
Patient saints away, condemns this Custom in the following  
manner : 64 I hardly think it expedient to open a. Vein often  
" every Year ; because, in conjunction with it, the vital Spi-  
" rits are evacuated ; and, if these are greatly diminished, the  
" whole Habit is refrigerated, and all the natural Operations  
" worse performed.''

All the Effects of a Plethora depend upon that Rare-  
faction of the Blood, which is to be ascribed to its increased  
Velocity, and the Heat arising therefrom, or to other Causes,  
only to be known from Observation. Hence arises a Dila-  
ration of the Arteries, both sanguiferous and lymphatic, a  
Change of the Secretion, a Compression of the sanguiferous  
and lymphatic Veins, a Suffocation of the Circulation, an  
Inflammation, a Rupture of the Vessels, a Suppuration, a  
Gangrene, and Death.

*All the Effects of a Plethora depend on the Rarefaction os. the  
Fluids.* When the Vesieis are furnished with too. large a Quan-  
tity of laudable Blood, there may still be a State of Health pre-  
served : But when, by whatsoever Cause, the Blood contained  
- in the Vessels is rarefied, then the Functions begin to be injured  
and impaired; and when, on such an Occasion, certain Changes  
appear in the Body, these are cafled the Effects of a Plethora;  
though they do not depend upon this Cause alone, fince the  
Plethora is only the predisposing, and the Rarefaction the ex-  
citing or occasional Cause of them. From these two Causes,  
therefore, united, is formed the proximate Cause os these Pheno-  
mena ; and aS the exciting Cause, that is, the Rarefaction, puts  
the Plethora in Action, which alone, except in an high Degree,  
would not soon prove hurtful, hence, in that Sense, the effects  
Of a Plethora are said to depend upon the Rarefaction of the  
Fluids.

*The Rarefaction of the Blood is to be ascribed to its increased  
Velocity, and the Heat arising from that Circumstance.* When,  
in the same Time, a larger Quantity of Blood flows thro' the  
Vessels, its Velocity is said to be increased ; but this cannot  
happen, without an increased Attrition os the Fluids on the Ves-  
sels. Hence arises Heat, and the Heat produces Rarefaction:  
But all the Causes, which, from Experience, seem to rarefy  
the Blood, seem to produce this Effect, by increasing the Cele-  
rity os its Motion, and the Heat arifing from that Circumstance.  
Now a Rarefaction of the Blood is alone sufficient to produce  
all those Effects; which arise from a Plethora ; for if the Blood  
was doubly rarer than it is, it would he the same thing, with  
.. regard to the Vesseis, as if its Quantity was doubly increased.

Is, therefore, to a Plethora a Rarefaction os the Blood is added,  
all the Symptoms, capable of arifing. from a Plethora, will be

augmented. - Hence *it is* obvious, why all those Medicines and  
Diseases, which, in consequence of an increased Velocity of  
the Blood, induce Heat, and consequently Rarefaction, pro-  
duce the Symptoms of a distanding Plethora. When a pale and  
chilly Girl is affected with the Small-pox, there forthwith arise  
a Heat, Redness, and inflammatory Tension of the Vesseis, to-  
gether with an intolerable Head.ach ; not from on increased  
Quantity of the Blood, but from its Rarefaction, Produced by  
an Acceleration of its Motion, and a consequent greater Heat.

*Honce arises a Dilatation both of the sanguiferous and lym-  
phatic Artcries.* The Blood, when either increased in Quan-  
tity, or by Rarefaction, possessing more Spade than it did be-  
fore, will necessarily dilate the Vessels in which it is contained,  
more than before; and hence both the Arteries and Veins  
will be distended, and the Blood cannot be so easily propelled  
froth the Arteries into tho too much distended Veins: Hence a  
greater Resistance is made about the Extremities of the Arte-  
ries.. For this Reason tho Arteries will be more distended, thy  
the Blood forced into them from the Heart. Now since, among  
the Causes enumerated by Physicians, why, from the fame  
'Blood, so various Liquors are secreted in various Parts, we may  
justly reckon the various Proportions which the secreting Rami-  
fications hear to their Trunks, hence it is obvious, that, when  
this Proportion is disturbed by a Dilatation of the .Arteries, all  
the Secretions may, also, be disturbed by that means.

*As for a Compression of the sanguiferous and lymphatic Peins ;*in most Parts ofthe Body, Veins run along with the Arteries ;  
and, when the Arteries are too tumid, they compress the ad-  
jacent Veins, which are furnished with weaker Coats r The  
compressed Veins convey their contained Blood to the Heart;,  
the Heart forces it into the Arteries, and the Veins being com-  
pressed, are capable of receiving a smaller Quantity os it \*  
Hence a still greater Dilatation os the Arteries succeeds ; and,  
at last, almost the whole Blood is accumulated in them, whilst  
the Veins are more compressed and emptied.

*As for a Suffocation of the Circulation of the Humours ; this*must necessarily happen, fince, by these means, the Resistance  
made to the Blood, to be convey'd out of the Left Ventricle of  
the Heart, is every Moment increased. Hence the Pulmonary  
Veins cannot so easily convey the Blond into the Lest Ven-  
tricle of the Heart: For this Reason the Blood will begin to the  
accumulated in the Vessels of the Lungs ; the Resistance made  
to the Right Ventricle of the Heart will he increased, and, at Xlast, the Circulation of the Bloed suffocated. Hence we  
observe, highly plethoric Persons Very red, with their small  
Arteries dilated, and receiving the red Blood. At last fuch  
Persons, being, as it were, suffocated, begin to assume a livid  
Colour, and often die suddenly ; unless, either by Nature or  
Art, the Vessels are relieved, by lessening the Quantity os  
Blood, and, consequently, diminishing its Heat and Rare-  
faction.

*As for an Inflammation*; this must necessarily happen, od  
account os the gross Humours which have entered the too much  
dilated Orifices of the minute Vesseis, and which cannot pass  
through the narrowest Parts of them. , . . ss

*As for a Rupture of the Vessels* ; this happens principally in  
those Parts where the Vessels are most tender: Hence it is, that,  
in plethoric Patients, Arteries breaking in the Brain so often  
produce mortal Apoplexies: Hence, also, itds, that Spittings  
of Blood are *so* frequentiy observed to arise from a Rupture os  
the Pulmonary Vesieis, by the distending Blood in plethoric  
Patients.

*As for a Suppuration and a Gangrene* these are the com-  
mon Terminations of an Inflammation, which cannot he re-  
solved.

*As for Death*; this seems to happen, because the too much  
distended Vessels make so great a Resistance to the Heart, that  
it Cannot discharge its Contents. Hence the Circulation is suf-  
focated : Or, because the large Vesieis, being too turgid with  
Bleed, Compress the minute Vefleis in the Brain, Cerebellum,  
and Nerves ; or, when, in consequence of a Rupture of the  
Vesseis, the Humours necessary to Life are evacuated ; or,  
lastly, when, in consequence of a Rupture of the Vesieis, the  
extravasated Fluids destroy the Actions of the Viscera, Inord  
immediately subservient to Life.

A Plethora then, when present, is easily known; and iss  
future Effects readily foreseen.

A present Plethora is known, if the Causes which generate  
too large a Quantity of laudable Blood, and which are already  
enumerated, have preceded ; if there is a great Redness in rhe  
whole Body, especially in those Parts in which the Vesieis ap..  
pear naked, and uncovered with Skin, aS in the Corners of the  
Eyes, the Tunica Adnata, the internal Parts os the Eye-lids;  
the internal Parts of the Nostrils, the Mouth, Fauces, and  
Lips ; if a great Heat is perceived, even at the Extremities of

the Body; if the Veins are inflated, and the Pulse strong and  
full; if, after violent Exercise, an increased Heat os the Atmo-  
sphere. Wine, or any other bearing Substances, the Patients  
perceive, in all their Muscles, a soft, full, distending Tumor, to-  
gether with a certain Immobility, so that they can hardly Clinch  
their Fingers ; then they begin to he stuggtsh, lethargis, and  
have a Discharge of Tears from their Eyes.

In forming the Prognostic of a Plethora, we foresee, that  
all the Symptoms already enumerated will happen ; and particu-  
larly, that the Functions of the whole Brain will he disturbed,  
hecause, in the Head, all the Parts are naturally full. Hence,  
when the large Vessels fall of red Bloed are distended, the other  
smaller Veffeis will be compressed ; hecause the Bones of the  
Cranium cannot yield. Hence all the Disorders of the Brain,  
from the flightest Vertigo to the most fatal Apoplexy, may arise  
from a Plethora.

A Plethora is cured by Venesection, Exercise, Watchings ; -  
a sharp and acrid Diet, aster due Evacuations ; and by a  
gradual Omission of these Evacuations.

*By Venesection.* A Redundance of laudable Blood is the  
Cause of all the Misfortunes already enumerated. Every thing,  
therefore, which diminishes this Redundance, is beneficial. But  
this is hest done by Venesection, immediately after which all  
the Symptoms are relieved. A Physician never practises more  
rationally, than when he imitates the Ways and Methods,  
which Nature herself takes, in relieving Disorders. f Now we  
see, that heth in Health, and under Diseases, a Plethora, arise-  
ing either from a Redundance or Rarefaction of the Blood, is  
happily removed by a salutary Haemorrhage, especially from the  
Nostaiis. Hence, in young Persons, in a perfect State of Health,  
at that Period of their Lives, when their Veffeis, now become-  
ing stronger, begin more forcibly to resist the Fluids, such  
Evacuations of Blood are so frequently salutary, especially in the  
Spring, when the Heat increases. For the same Reason, also.  
Haemorrhages from the Nose have often proved salutary in the  
most Violent and acute Disorders: Now Physicians, imitating  
these Efforts of Nature, order the Quantity of Blond to be les-  
sened by Venesection ; and if Symptoms indicate, thet tho Ar-  
teries are only highly distended, and the Veins collapsed, be-  
cause the Blood cannot pass from the Arteries to the Veins,  
which frequently happens in acute, inflammatory Disorders,  
then some of them Venture to order Arteriotomy ; and, aS  
In large Arteries this cannot be done without Danger, the same  
Effect may more safely be produced by opening many small Ar-

- teries by ScarisiCationS. Hence *Prosper Alpinus, so* his Treatise  
*de Medicina AEgyptiorum,* informs us, that the *Egyptians,* among  
whom these acute Disorders are frequent, greatly esteem such  
Scarifications.

Some, especially os the Followers of *Helmont,* condemned  
\* Venesection, as a Practice both cruel and useless t They be-  
IieVed, thet, by Abstinence from Aliments and Drink, the Re-  
dundance os the Humours was more effectually lessened, since,  
by insensible Perspiration, and the other Excretions, several  
Pounds of Humours are daily evacuated ; which, however, are  
restored by Aliments and Drink. Hence they maintained, that  
.fince the natural Excretions continued to diminish the Fluids,  
- whilst what was lost was not restored by Aliments and Drink,  
there was a greater Diminution Of the Fluids, by Abstinence  
for twenty-four Hours, than by the boldest Venesection : But  
by this Method the most subtile Humours are only dissipated  
from the Body, whilst the red, thick Bloed, distending the lar-  
ger Veffeis, is hardly diminished ; which is' the Circumstance  
most required ; and all the Humours become more acrid, whilst  
**no** new Chyle is mixed with the Bloed.

But shod Venesection lessens the Redundance os'the Blood,  
yet it not only leaves the Body equally subject to Repletion,  
but even disposes more to the Generation os a fresh Plethora,  
as we have already observed. Hence it is necessary the Body  
should be rendered so firm, as that it may ’not easily, *for* the  
future, accumulate a Redundance of Blood.

*As for Exercise ,* this not only dissipates whet was retained  
during a. State os Rest, but, also, to corroborate the Solids,  
thet they do not easily yield to the Fluids they contain. Thus  
we rarely find Persons daily accustomed to hard Labour, ple-  
thoric, even chough they should be highly Voracious : But Ex-  
ercise is not proper, fill by Venesection theVeffeisare emptied;  
otherwise, being distended, a Rupture os them would Very  
readily happen.

*Ac for Watchings* J much Sleep is reckon'd among the Causes  
of Plenitude; so thet Watching must produce the opposite  
Effect.

*As for a jharp and acrid Dies after due Evacuations*; soft  
Aliments easily changed by rhe Chylopoetic Organs, afford a  
large Quantity of Chyle. Hence the Quantity of Blood is  
daily increased, unless, by Violent Exercise, the superfluous Hu-

motrrs are dissipated. Hence Nature has supplied new-born *in-*shuts with an highly soft Milk, already changed in the Mother's  
Body, because, in that Age, a very quick, and daily increase  
of the Humours is requisite. But when the contrary is re-  
quired, as in the Cure os a Plethora, for Instance, then herder  
Aliments .of a more difficult Digestion, and acrid, aromatic,  
and stimulating Substances, prove heneficial; hecause, by this  
means, less Chyle, and, consequently, all other Circumstances  
heing alike, less Blond will he generated ; and the Motion of  
the Humours being increased by acrid stimulating Substances, an  
Accumulation of them will not fo easily happen. But hesore  
the Quantity of the distending Fluids is lessened by Evacuants,  
acrid Substances are highly pernicious, lest a Rupture of the too  
full Vesteis should happen upon an Increase of the Motion of  
the Blood by means of stimulating Substances.

*As for the gradual Omission of usual Evacuations*; we have  
already observed how much frequent Venesections dispose to a  
frequent Plethora. Hence these Evacuations are to be omitted ;  
but this is not to be done all at once, becaufe all sudden Changes  
from usual to unaccustom'd things arebad, especially in this Case;  
for by frequent Venesections the Body is habituated to accumu-  
late a large Quantity of Bloed, which unless removed, will pro-  
duce all the Effects of a Plethora.. For this Reason, such usual  
Evacuations are to be gradually lessened as to their Quantity,  
and a greater Interval os Time put betwixt them, that they  
may be gradually diminished without any Danger. In taking  
such Measures, we imitate the salutary Method of Nature, about  
the Time when the Menses begin to prove defective in Women; ’  
for then this Evacuation is naturally and gradually diminished in  
Quantity, and its Returns appear at longer Intervals, till it at  
last totally ceafes. But, when the Menstrual Discharge ceases  
suddenly, it is generally productive of terrible Consequences.  
*Van Sweiten.*

PLETHORICUS. An Epithet for a Person abounding,  
with Blood, or labouring under a *Plethora.*

PLETHRON. The sixth Part os a *Stadium.*

PLEURA. The Pleura is a Membrane which adheres very  
closely to the inner Surface of the Ribs, Sternum, and Musculi  
Intercostales, Sub-costales, and Sterno-co stales, and to the con-  
vex Side of the Diaphragm. It is of a very firm Texture,  
and plentifully stored with Blood-veflels and Nerves, in all  
which it resembles the Peritonaeum, and, likewise, in that it is  
made up of an inner true membranous Lamina, and a cellular  
Substance on the Outside, which is a Preduction or Continua-  
tion of the Lamina.

The cellular Portion goes quite round the inner Surface of  
the Thorax, but the membranous Portion is disposed in a dif-  
ferent manner. Each Side of the Thorax has its particular.  
Pleura, entirely distinct from the other, and making, as it ’ Xwere, two great Bladders, situated laterally with respect to each  
other, in the great Cavity of the Breast, in such a manner, as  
to form a double Septum, or Partition, running hetween the  
Vertebrae and the Sternum, their other Sides adhering to the  
Ribs and Diaphragm.

This particular Duplicature of the two Pleura? is termed  
*Mediastinum.* The two Laminae, of which it in made up, are  
closely united together near the Sternum and Vertebrae ; but in  
the Middle, and toward the lower Part of the fore Side, they  
are separated by the Pericardium and Heart. A littie more  
backward they are parted in a tubular Form, by the CEsopha-  
gus, to which they serve as a Covering; and in the most poste-  
rior Part, a triangular Space is lest between the Vertebrae and  
the two Pleurae from above downward, which is filled princi-  
pally by the Aorta.

Before the Heart, from the Pericardium to the Sternum, the  
two Laminae adhere Very closely, and there the Mediastinum is  
transparent, except for a small Space near the upper Part, where  
the Thymus is situated; so that in this Place there is naturally  
no interstice, or particular Cavity. The apparent Separation is  
owing entirely to the common Method of raising the Sternum,  
as was plainly demonstrated by *Bartholinus,* in his Treatise of  
the Diaphragm, published at *Paris* in I676.

The Mediastinum does not commonly terminate along the  
Middle of the Inside of the Sternum, as the common Opinion  
has been. I demonstrated, says *JVinsiow,* in I7I5. to the  
Royal Academy os Sciences, that, from above downward, it  
inclines toward the Left Side ; and that if, before the Thorax  
is opened, a sharp Instrument be run through the Middle of the  
Sternum, there will be almost the Breadth of a Finger between  
the Instrument and the Mediastinum, provided that the Ster-  
num remain in its natural Situation, and the Cartilages of the  
Ribs be cut at the Distance of an inch from it, on each Side.

From all this we see, not only that the Thorax is divided into  
**two** Cavities, entirely separated from each other, by a middle  
Septum without any Communication ; bus, also, that, by the  
Obliquity of this Partition, the Right Cavity is greater than the  
Lest; and hence we may judge os the Uncertainty of Tre-

panning the Sternum, which-the Antients have recommended  
in some Cases.

The cellular Portion of the Pleura connects the membranous  
Portion to the Stemum, Ribs, and Muscles ; to the Diaphragm,  
Pericardium, Thymus, and Vessels ; and, in a Word, to whet-  
ever lies near the convex Side of the membranous Portions of  
**the** Pleura. It, likewise, insinuates itself between the Laminae  
of the Duplicature, of which the Mediastinum is formed, and  
unites them together. It even penetrates the Muscles, and  
communicates with the cellular Substance in their interstices,  
all the Way to the Membrana Adiposa on the external convex  
Sideof the Thorax. In this the Pleura resembles the Peritonaeum.

The Surface of the Pleura, turned to the Cavities of the  
Breast, is continually moisten'd by a lymphatic Serosity, 'which  
ouses through the Pores of the membranous Portion. This  
Fluid is said io be secreted by imperceptible Glands; but the  
Existence of these Glands has not heen hitherto demonstrated.’

The Arteries and Veins of the Pleura are principally Rami-  
fications os the Intercostals; and these Ramifications are ex-  
ceedingly numerous, and, for the most part. Very small. The  
Mammariae Internae and Diaphragmatice, likewise, send  
Branches hither,' which communicate Very frequently with  
those that come from the Intercostals.

The Mediastinum has particular Vessels called the *Arteria*' and *Fence Mediasiina,* which are commonly Branches of the .  
Subclaviae. The Mammariae Internae send, likewise, Ramisi-  
cations to the fore Part of it, the Diaphragmaticae to the lower  
Part, and the Intercostales and (Esophagasae to the back Part.  
' The Nerves are Ramifications of the true intercostales, call'd  
otherwise *Costales,* and *Dorfales.* Near the Vertebrae, they  
communicate with the great Sympathetic Nerves, improperly  
called *Intercostales,* and but very littie with the middle Sympa-  
thetici, or those of the Eighth Pair. '

The Pleura serves in general for an inner Integument to the  
Cavity of the Thorax. The Mediastinum cuts off all Comma-  
rtication between the two Cavities, and hinders one Lung from  
pressing on the other, when we lie on one Side. It, likewise,  
forms Receptacles for the Heart, Pericardium, and CEsophaguS;  
and is continued over the Lungs. ’

Before we leave the Pleura, it must be observed, that these  
Portions of it which adhere immediately to the Ribs, may be  
looked upon aS the Periosteum os their inner Sides. This Adhesion  
keeps the Pleura stretched, and hinders it from flipping or giving  
way. It, also, renders this Membrane extremely sensible of  
the least Separation caused by a coagulated Lymph, or accumu-  
lated Blood ; the nervous Filaments being, likewise, in this  
Case, Very much compressed in Inspiration, by the Swelling of  
the Intercostal Muscles. *Winsiousts Anatomy.*

' PLEURITIS, πλευρὶτις, from πλευραδ᾽^ε PLEURA. A  
Pleurisy, or Inflammation of the PLEURA. See PERIPNEU-  
MONIA. si

PLEURON, πλευροἐν. The same as PLEURA.

. PLEUROPNEUMONIA. The Name of a Distemper,  
consisting of a Complication of a Pleurisy, and Peripneumony.

PLEURORTHOPNCEA, according to *Blancard,* is a Pleu-  
risy, in which the Patient cannot breathe without keeping his  
Neck erect.

PLEXUS, in Anatomy, is a kind- of Net-work, or Com-  
plication os Vessels. Thus a Congeries of Vessels within the  
Brain IS call’d *Plexus Choroides, Reticularis, or Retiformis. A  
Plexuses Nerves is an* Union of two or more Nerves, form-,  
ing a sort of Ganglion, or Knot. -1 :

PLICA POLONICA. In *Poland* and *Lithuania,* this Dis.  
order is endemial, and well known. It consists in a preterna-  
Aural Bulk of the Hairs, which, being firmly conglutinated and  
wrapped up in inextricable Knots, afford a Very monstrous and  
unseemly Spectacle. When these are cut, the Blood is dis-  
charged from them, the Head racked with Pain, the Sight im-  
paired, and the Patient’S Lise frequently endangered. This  
Misfortune is principally incident to the *fesus* who live in those  
Countries. Though it seems difficult to account sor this Dis-  
order, and assign , its true Causes, we shall, nevertheless, make  
an Attempt os this Kind. What, therefore, contributes not  
a little to its Production, is the sordid and nasty manner of Life  
to which these People areaddicted ; for they rarely comb their  
Hairs, steep in low, moist Rooms, and drink large Quantities  
of Brandy. The Waters, also, concur and assist in the Gene-  
ration of this Disorder. Hence *Gehema, in Episi. ad Ponte-  
koe de Plica Polonica,* isjustly of Opinion, that the Causes of  
this Disease is lodged in some particular Waters of *Poland,*which, if either drank, or used for washing the Body, produce  
thePZim; which he confirms by the Fate of two Soldiers, who,  
when intending to wash their Bodies, had scarce immersed these  
Heads in the Water of a certain Pond, before their Hairs were  
contracted into many Folds. Besides these Causes, we suppose  
an hereditary Fault convey’d from the Parents, and which con-  
fists in too.great a Bulk of the Pores and bulbous Hairs under

the Skin Of the Head. Hence the thick and glutinutis nutri-  
tious Juice, produced by their coarse Aliments, and impure  
Waters, is, by the Heat excited by their drinking Brandy,  
forced into the Cavities of the Hairs, and, sweating through  
their Pores, produces this terrible Disorder. *Hoffman. de Morb.  
cert. Reg. propr.* ’ IV

This Disorder, unless the peccant Matter is convey'd to the  
Hairs, is Very dangerous ; and Violent Symptoms are produced  
in almost all the Parts of the Body, where it is deposited and  
lodged. - . .

But if Nature, in a salutary and critical manner, throws the  
peccant Matter to the Hairs, an unseemly Twisting os them is  
produced,- whilst the Patient remains free from every other  
Symptom ; fince Nature generally throws the Remains of the  
peccant Matter to the Hairs, the Disorder of winch is, by  
many, supported to the Ends of these Lives, without any in-  
considerable Inconvenience. -

If the folded or twisted Halts are rashly cut off. Blindness,  
and other terrible Symptoms, are excited, not because, as some  
think, the Head is by this means exposed to Cold, which might  
be prevented by wearing a Cap ; but because the Substance, in  
which Nature used to lodge the peccant Matter, is removed,  
and a free Evacuation os the sordid Humours by that means  
prevented. And in this Disorder the same happens as in old  
Ulcers, which, unless the Body is first well cleansed, cannot  
be healed up without the greatest Danger. N»r is it sash ro  
close Fontaneis, which have been kept open for a considerable  
time. . . -

When the peccant Matter is no longer lodged in the Body,  
the Plies, or Twistings of the Hair, are spontaneoufly re-  
. moved ; and if we are absolutely certain, that such a Mat-  
ter is no longer in’the Body,'which, however, is herd to be  
known, the Plicae, or Twistings, may be cut off.

. A perfect Method of curing this Disorder is, in my Opinion,  
unknown ; undoubtedly, because in those Parts of *Poland* in  
which this Disease is endemial, there have been few Physicians,  
who, from what is commonly known of the Nature and Cure  
of the *Plica Polonica,* have been able to lay down a rational  
and judicious Plan for treating it.

Tis certain, that Purging and Venesection aro so far from  
being beneficial in this Disorder,. that they often prove hurtful.  
Thus the Rector of. the Academy os. *Zamosca* informs the  
Physicians of *Padua,* that, is they attempt the Cure of this Disc  
order by- common Purgatives, the Patient will be render'd  
worse, because these,, instead of correcting and subduing the  
peccant Humours, throw them into Violent Commotions, and  
more effectually distribute them through the whole Body ; in  
consequence os which, intense Pains are produced -in all its  
Members. *Hercules Saxonia* is of the fame Opinion, and con-  
firms this Doctrine by Various Instances of Persons rendered  
blind, lame, and subjected to other Misfortunes, by ufing Pur-  
gatives in the Beginning of the *Plica Polonica,* as, also, in the  
Scurvy.

'Tis, therefore, most safe and expedient, aS soon as possible,  
to solicit the peccant Matter to the Hairs, to which it naturally  
tends. And this Intention, as we learn from Experience, is, of  
all others, the most effectually answered by Lotions prepared of  
Bears-breech. *Sennertus. ,*

PLICHAS, πλεχἀρ. The same as PL **E CHAS.**

PLINIA.

The Characters are j

It hath a Bell-shaped Flower, consisting of one Leaf, which  
is divided into five Segments at the Margin; from whose Cup  
. rises the Pointal, which afterward becomes a globular, soft»  
chaneled Fruit, in which is included One Seed of the same  
Form.

*Millcr'mentions* but one Sort Of *Plinia*; which is,  
Plinia fructu croceo odorato. *Plum. Nov. Gen.*

This Plant was discovered by Father *Plumier,* .in the *West  
Indies,* who gave, it this Name, in Honour to *Pliny* the famous  
Natural Historian. *’ Miller’s Dict.*

PLINTHIUM, πλινδίον. A Name of several Machines  
for making Extension. One of these is described by *Oribafius,  
de Laqueis, Cap.* I 3. He, also, describes two more, in his  
Treatise *de Machinamentis, Cap.* 8. One of winch he calls *Nilei  
Plinthium.*

PLINTHITIS, πλινθιτις. A Species of Alum, Called, also,  
**PLACITIs. . \* . 4**

PLOTES. A Name for the *Mussel,* in *Oribafius, Collect.  
Medicinal. Lib.* 2. *Cap. 58.*

*PLUMACEOLUS.* A Pledget, Bolster, or Compress.

PLUMACEUS. An Epithet for certain MagisterieS in  
*Tsweifer,* importing their being extremely fine, and soft as Fea-  
thers, or Down.

PLUMBAGO.

The Characters are, - '

The Root is fibrous, thick, fleshy, hot and perennial; the

I .eaves are alternate and entire. The End of the short Pedicle  
unfolds itself into a monophellous, quinquefid, and very hairy  
. Calyx, shaped like a Tube, in whose Centre is seated the Ovary  
furnished with its proper Tube. On the Apex of the Ovary,  
.grows a monopetalous Flower, coofisting of a long Tubc, which  
- has its upper Part expanded into a Circle, so as to resemble the  
Flower of Jessamin ; there Flowers are difpofed in Spikes.  
The Seed is oblong and acuminated.

*Boerhaave* mentions.two Species of *Plumbaga* ς which are,  
**. r.** Plumbaao quorumdam. *Turn. last.* r4o. *Boerh. Ind.*

*A. rffi. Dentcilarsa. O&c. Plumbago Plinii.* Ger. 0069.  
Emac. I254. Raii Hist. I. 394. *Dentellaria RcndeletH. J.* B.  
2. 94r. *Lepidium Dentellaria distant.* C. B. P. 97. *Lapi-  
deum Mnofpeliacum Dentellaria dictum.* Park. Theat. 885.  
LEADWORT.

- The Stalks of this Leadwort are but weak and slender,  
clothed with long, narrow, whitish, green Leaves, which  
cncompass them. The Flowers grow in short thick Spikes,  
small and purple, of a single Leaf cut into five Segments, which  
are succeeded by rough, hairy, naked, solitary Seeds. The  
Root is large and thick, and the whole Piant is het and biting,  
like Lepidium.

This is a Plant seldom or never used. It is of an hot, anst-  
even a caustic Nature, like Pellitory *of Spain* j and has heerr  
made usie of, like that, for the Tooth-ach ; it is said, that, even  
held in the\*Hand, it will cure the Pain of the Teeth. *Millers  
Bot.Osse , .*

**2.** Plumbago Ceylanensis, folio splendente Ocymastri, store  
lactso. ' . - -

**PLUMBAGO,** *Igiusnbage.* The same as MOLYBD.SNA.  
PLUMBUM. . Lead.

The *Greek* -Authors frequently ufe the same Name to express  
both Lead and Tin; and, accordingly, their *Latin* Translators  
interpret καωίτερος, herb hy Plumbum and Stannum. *Geo.  
Agricola* mentions three Kinds of Plumbum, one white, which  
**we** call *Tin*; another of an Ash-colour, which we call *Bsornuih;***and** the third livid, which is out Lead.

**THE FORMS OF ITS ORE.**

Lead is seldom found pure in the Mines, and has.different-  
coloured Ores, *viz.* biack, yellow, and ash-coloured; it is,  
also, found in red, or white rocky Stone, and sometimes in  
the Form of Dice,, with shining Lead-coloured Surfaces; and,  
sometimes mixed with white, yellow, or green Fluors. There  
**arc** many Lead Mines in *Spain, Italy,* and *Germany,* but the  
richest are those of *England.*

The .Ore is of a poisonous Quality, especially with regard  
to Brutes. “ They who live near where it is washed, fays  
ς" Mr. *Beaumont,* can neither keep Dog nor Cat, nor any  
“ Sort of Fowl, but they all die in a short time. ” He adds,  
that., " not only Calves, but even Children, have been known  
" to he kill’d, by only bring in Houses where Lead-ore bad  
" been kept some time; and that if any Sort of Cattle fed  
\*" often on the Grass, on which the Steam which rises from  
" the Smelting of Lead, falls, they all die soon after. *'\* Phil.  
Collect. ...*

Differences of its **ORE.**

There is a very considerable Difference hetween the Ores of  
different Mines. Some is fo like Steel, that the Workmen  
call it Steel-ore ; which being of more difficult Fusion than or-  
dinary, they mix other Ore with it. There is another, which,  
from its Readiness to vitrify, and its Ufe in glazing the Potters  
Vessels, is called *Patters Ore.*

Our *English* Lead-ores are reducible to three Classes ; the  
first, those which, in the ordinary ways ofMelting, afford from  
thirty to forty Pounds of Metal, for every hundred Weight of  
**Ore.** The second, from forty-five to sixty. The third, from  
sixty to eighty. . \_

**LEAD CONTAINs SILVER.**

The Leaf found in forne Parts of *England,* contains from  
fire to ten Pounds of Silver in a Tun Weight; which they get  
**.out** hy testing, and recover the Lead without any great Waste.

The Lead of many Mines, being fkllfully treated, affords  
Silver; hut the Quantity of Silver in the Ore, does not held  
in Proportion to the Quantity of Lead. Mr. *Boyle* caused  
some Lead-ore to be tried, which, being the most promising he  
had ever known, gave him Hopes of some considerable Quan-  
tity of Silver : But though it proved so rich in Lead, as to afford  
after the Rate of seventy Pounds to the Hundred ς yet one of  
the most expert Artists in *Europe* could not extracti one Grain  
of Silver from is. Yet a Piece of Lead-ore was brought from  
*Ireland,* which seemed so light in the Lump, that he thought  
it scarce deserved to he wrought for Lead ., which, however,  
was found upon Trial, so well stored with Particles of Silver,  
that he encouraged the Owner of the Mine to work, is.

**How SMELTED.**

Some Lead-ore requires no previous Preparation to its heing'  
smelted, unless by grinding. They barely throw it upon a  
Wood-fire, or a Forge-hearth', where the Metal running into a  
Bason in the Hearth, they ladle it out, and cast it into an iron  
Mould, which gives it the Form of what we call *Pigsso*

in the Lead-works at *Mendip, in Somersetshire,* the Method  
of procuring the Metal is thus delivered by Mr. *Gianvil,* in  
*Phil. Transect.* No. 39. “ When they have got the Ore they  
" beat it small, then wash it clean in a running Stream, and  
“ then sift it in iron Rudders. They next make an Hearth, or '  
“ Furnace, 0^ Clay, or Fire-stone; and therein build their  
“ Eire, which they light with Charcoal, and keep up with  
\*\* young oaken Gads, blown with Bellows. After the Fine is  
" lighted, and the Fire-place hot, they throw the Lead-ore  
“ on the Wood, which melts down into the Furnace; and,  
then with an iron Ladle they take it out, and cast it in

«" Sand into any Form they please. ”

Lead is the heaviest Body, after Mercury. Hence melted  
Lead constitutes a Fluid of the third Order of Gravity ; where-  
in all Bedies, whether metalline or not, excepting Gold and  
Mercury, might float, if there were no other Caufe to the  
contrary.

If all the Impurities of Lead could be persectiy purged away,  
its Weight might nearly approach to that of Mercury. Ac-  
cordingly, in analysing this Metal, jt is said to yield a con-  
siderable Quantity of Mercury ; though what the other Ingre.  
dient is, united with the Mercury, seems hard to say. *Lend,*though a cheap and common Metal, has yet a great Affinity  
with Gold, at least in point of Weight, which seems to be the  
most distinguishing and immutable Character of Gold; and  
what makes the Resemblance still closer is, that Lead does not  
mix with any Metais, except those allowed to be Mercurial ones.

Lead proves extremely simple in all Kinds of Trials. ' I .  
It is not fixed, but fumes in the Fire; and, after continuing  
long in Fusion, penetrates most of the Veffeis hitherto used.

It is the softest os all Metals, easily ductile, and the least  
elastic or sonorous. There is no Metal whose Figure is so  
easily changed; and hence it proves very ductile, and easily  
flexible, though not capable of being drawn out into fuch fun-  
ple, sine, coherent Parts, as Gold.

It diminishes the Sound of other Mends, when mixed with  
them. This Property follows from its Softness ., for, if two  
equal leaden Balls he struck with equal Velocities against each  
other, they will both remain fixed in the Point of Contacti with-  
out any Vibration orResilition; so that of , course no Sound  
can be produced. ?Tis on account of this Unelasticity of Lead,,  
that it has been used by Dr. *Wallis,* Mr. *Ha.jgens,* and others,  
for determining the Laws of Percussion. By this Property,  
also, lead should appear to be nearly allied to Gold, which- is  
the next least sonorous or springy of all Metals. Accordingly  
several Experiments have been produced, to prove that Lead,  
melted, always either contains, or generates, forne Portion of  
Gold. M. *Hamberg* assures us, that taking a Quantity of Sil-  
ver, and separating it from all heterogeneous Matter by testing  
with Lead, then putting a Piece of it in Aqua-fortis, a little  
Gold sell to the Bottom. And, upon adding Copper to the  
Aqua-fortis, the Silver was precipitated.

head melts the soonest of all Metals, except Tin, even long  
hefore it ignites; and thus grows scurfy, readily vitrifies,  
and, heing now fused, it passes through any Vessel. A  
Quantity of Lead, being set over the Fire in an iron Ladle,  
no sooner begins to run, than its Surface appears exceed-  
ingly bright, and shines like Mercury; but its Face soon  
alters, and you discern a Cloud in it, which gradually increases,,  
till the whole Surface appears darkened with a dusty Scoria.  
This Dust being blown away with Bellows, there strait arises  
a new Supply ; and so on till the whole Lead is. thus converted  
into Scorise, which are only the Matter of the Lead gently  
calcined. Α more violent Fire vitrifies them; that is, converts,  
them into an heavy, brittle, pellucid, elastic, sonorous Matter,,  
called *Giafs*; into which other Metals are indeed convertible,  
hut Lead the easiest; and which is of such a penetrating Na-  
tore, that it runs through all the common Crucibles, almost as  
Water through a Sieve.

. The Calx of Lead has nothing of the Appearance of lead j  
and yet by only exposing it to a strong Fire, and adding a little  
Iron-filings, or any unctirous inflammable Matter, the Lead is  
easily recovered. . ' '

And if, while the Lead is in Fusion, it he kept continually,  
stirring with a Spatula, it turn, into a red Powder, called Mo-  
*nium,* or *Red-lend,* in which Operation this is farther observa-  
hie, that the Lead augments in Weight.

Lead throws up' light Bodies that are cast into it; vitrifies  
with the baser Mends , and, having so done, carries them along

with *it* from the Cavity of the Test; thus leaving only Gold  
and Silver hehind, separated from the rest. Aster Fusion, it  
quickly returns, in the Cold, to a solid Mass, though more  
siowly than Tin. Lead dissipates all Metas tested with it, on  
" the Cupel, except Gold and Silver; which is a Property, that  
had we heen unacquainted With, all our Treasures ot Gold and  
Silver had lain in littie Compass; this being of principal Use -  
in obtaining those Metals.

The Foundation of the Process is this r Any Mass, of whet  
Kind soever, whether Metal or Stone, Salt or Sulphur, Gold  
and Silver only excepted, heing mixed with Lead, and exposed  
to the Fire, separates, and sties off.

Upon the Whole, there are three ways whereby all the Mat-  
. ters. mixed with Gold and Silver are destroy’d and lost, when cu-  
pel'd with Lead. i. By volatilizing and evaporating. 2. By turn- .

’ ing to Scoriae, and retiring to the Sides of the Test. 3. By pene-  
s' trating the Pores of thy Cupel; which only happens to such  
Bodies as can neither fly off in Fumes, nor work to the Sides  
in the way os Scorhe.

Lead dissolves in Aqua-fortis, not in Aqua-regia, and thus  
yields a sweet Salt. It dissolves in most os the weak Acids ;  
but very difficultly in the stronger, unless they be diluted with  
. Water. Thus in Aqua-fortis it dissolves (lowly; but very  
readily in Vinegar, small Aqua-fortis, *Rhenish* Wine, Spirit of  
Vineg r, and the like; and even in Oil os Vitriol well diluted  
with Water. Add, that,, in whatever Acidjt is dissolved, the  
Solution becomes considerably sweet like Sugat. The Fumes of  
Wine ot Vinegar dissolve it into a white Powder, or Calx,  
’ ’called *Ceruse,* or white Lead.

It is found plentifully in Various Mines of .Europe; being  
cheap, and the Consumption of it large: But 'tis in its Nature  
Very surprising, and for certain Purposes exceedingly useful,  
in the fabulous way,. it is called, the *Origin* and *Father, as*well as the *Devour er of other Metals.*

Its Ore is usually ponderous and shining, os a Lead-colour,  
which yield half the Quantity of Metal. Sometimes it is  
white, red, or yellow, which are poorer Kinds: It often con-  
tains a little Silver, by which the AffayerS, if not on their  
Guard, are liable to be deceived.

**ITS MEDICINAL VIRTUES.**

Both in its crude State, and in all its Preparations, Lead seems  
to be cooling, thickening, repelling, absorbing, and contracting,  
so as to retard the Circulation of the Bleed, hinder all the Se-  
cretions, and hurt the Nerves, thy causing Spasms, Convul-  
sions, Tremblings, Difficulty of Breathing, and Suffocation.  
Whence it appears unfit for internal Use in any large Dose;  
and, accordingly, its medicinal Uses are principally external.

**.. . ITS OTHER USES. .**

." Its Uses in the Hands of the Plumber, Glazier, Shot-maker,  
white and Red-lead-maker, Potter, Affayer, Jeweller, Painter,  
and others, need not he mentioned, as being commonly known.  
A Mixture of it with Tin is the Foundation of enamelling;  
and counterfeit Gems are made by its means.

**HINTS FoR ITS ALCHYMIcAL HISTORY.**

-Let the Saturnus Cornuus be examined for Mercurificatiom

What Vessel will hold the Glass of Lead in Fusion ?

Let the talky Nature os Litharge be examined.

As Lead fulminates with Nitre, and flashes in the Flame of  
a Candle, and burns blue, it may seem to contain a Sulphur.

. Is not the sulphureous Principle in Lead small in Quantity.,  
and but loosely joined ; since a small Degree of Fire is able to  
separate them ? ’ . ’ '

exposed upon a Tile to the Focus of a Burning-glass, it  
fumes and turns to a yellow or red Calx; then melts into a  
yellow Fluid, winch soon evaporates in Smoke ; but, if removed  
hesore this happens, it hardens to a yellow Mass like Orpiment,  
consisting of Laminae like Talc. This being again exposed to  
the Focus,ron a Piece of Charcoal, recovers the Form of Leadl  
But if the Lead he laid upon Charcoal, it thus totally dissipates in  
Fume, and leaves no Glass behind. Hence what Relation has  
it to Mercury, Gold, *etc. ?*

IS it not composed of a soft, talky, Vitrifiable Earth, arid a ,  
small Proportion of a Sulphur, or inflammable Substance, light-  
ly joined therewith ?

**THE CALX OF LEAD BI THE VAPOUR OF VINEGAR.**

Take a large glass Body, Cut so aS to have a wide Month,  
with an Alembic-head anlwering to it , in this Head put thin  
Plates of Lead, so as to stand somewhat erecti without tailing,  
all around the hollow Part Of the Ledge, put Vinegar into the  
Body, set kin a Sand-beat,put on the Head with its Lead-plates,  
apply a Receiver, and distil with R gentle Fite for twelve Hours;  
then leave Ossi and let all cool sor twelve Hours ; the Plates, be-  
ing now gently dried, grow white, or appear covered with a white  
. Powder, whichsoeing brushed off with a Haress-foot,is Called Ce-

russ, or'White-Lead. If the Operation he several times repeated,  
the whole Body of the Lead will be turned into the like perfectly,  
insipid, scentless, white Powder, the Vapour Of the Vinegar railed  
in the Operation con senses into a whitish, turbid, iweet, nauieoufe  
styptic Liquor, Called the Vinegar, or the Solution or Leath

RE MARKS. ;

Hence we may see how easily Lead is dissolved by a very mild  
Acid,and soon changed from its malleable State into a loose Pow-  
der or brittle scaly Plates, but the distilled Liquor, impreg-  
nated with dissolved Lead, is a true Solution of Lead, which,  
being inspislatededrordS the true Salt of Lead. This Operation is  
. continually made in Lead exposed to the Air, that abounds  
‘ with Acids ; whence Coverings of Lead, that are exposed to  
the Ain, resolve into a white Calx, and this the sooner, the  
more the Air abounds with Acids. If the same Operation  
he performed upon Iron Or Copper, these Metals, also, are dis-  
solved on their Surfaces, the Iron into a red Calx Of Iron cal-  
led Rust, and the Copper into a green Substance Called Ver-  
degrise , the Iron Into a gold.COloured Liquor, and the Copper  
into one that is perfectly green. TheCeruss thus prepared is  
likewise compounded of the Acid Of Vinegar, and the dissolved  
Body of the Lead, but the Acid is here latent. This Cerussis  
Os Use in watry, ulcerous, running Sores, Or Diseases of the  
Skin, heing sprinkled thereon. If this fine Powder he drawn  
along with the Breath into the Lungs, it causes a Violent and  
almost incurable Or mortal Asthma: If received into the Mouth,  
ι and swallowed along with the Spittie, it occasions inveterate \_

’ Distempers in the Viscera, intolerable Paintings, Weakness,  
' Pains, Obstructions, and at length Death itself. These terrible

Effects are daily seen among these who do any Work in Lead,  
- but principally among the Makers Of White-lead. Let Men,  
therefore, beware Of this Poison, which heing both without  
Smell and. Taste, prOVes the more pernicious aS it is the less  
discovered, and does not shew itself 'till it has destroyed the

\* Body. Hence we learn also how easily lead may he demetal-  
\* sized, and turned to a Calxand this appears upon all Experi- ’  
ments. lf Lead be melted over a gentle Fire, in a clean un-  
glazed earthenVessehit runs pure like clean Quicksilver, but soon  
grows dark upon its Surface, and gathers a Skin, which being  
carefully taken Off with an iron Ladle, proves a kind Of Calx:;  
Now, again, the Surface appears white, and again generates a -  
Skin, that may he taken off, 'till at length, the whole Body Of

' the Lead is changed into this Calx, which allo is poisonous.  
This Calx, and the former Ceruss, being long Calcined, and

. stirred over' the Fire, at length increase in Weighs, and rum of:  
a bright-red Colour; and the like is found in Lead-ore long  
calcined. - In the Smelting Of Copper, there rises a Scum, which ; ’  
principally consists Os Leaj; and, if of a Colour betwixt Red:and Yellow, it is called Litharge of Gold, if paler, the Litharge '  
of Silver, the’ both of them are nearly the same thing, and of

\*.the same Virtue? Lead-ore does not much differ from the  
-former. Hence the same Lead may exist under various Colours,  
Gravities, Malles, and Forms, and may he distolved in the

. same Liquors, and thus afford the same Productions; nor is it  
Of much Significance, whether Ceruss, Litharge, Red-lead,  
or Lead-ore be thus corroded by Vinegar ὁ for in each Case the

-same Salt of Lead is produced ὁ they have all Of them the same  
\* medicinal drying Virtue, and poisonous Quality. Red-lead  
gains Considerably in Weight from the Fire; this mayjperhaps,  
proceed from the Acid of the Pesselj imbibed by the Lead  
from the Fire. ... si ... -

**THE VINEGAR OF LEAD.**

. I. Boil Ceruss in a tall Bolt-head,with twenty times its Weight  
Of strong distilled Vinegar, in a little wooden Furnace, often shake-  
ing the Vessel for four Hours, then let all cool, strain off the pure  
Liquor, add more distilled Vinegar to the Remainder, repeat the  
Operation aS before, and continue thus, till the Ceniss is almost  
dissolved: Mix the several Solutions together, they will be found  
to have lost the Sharpness Of the Vinegar, and to have hecome  
sweet, nauseous, and styptic. This is Called the Vinegar of  
Lead, aS also Virgins Milk, because it Cures red Spots, Pimples,  
and little Ulcers in the Face. If this Vinegar he filtred, and di-  
stilled with a gentie Fire to a Fourth, there comes Over a nauseous  
Water, that is not acid, but of a disagreeable and particular  
Odour All the Acid of theWinegar is retained below, in the  
resolved Ceruss. Let it he preserved under the Title of Vinegar  
Of Lead, and it is to be esteemed Of the same Virtue with Vi-  
negar of Litharge.

2. If instead os Ceniss we take the Litharge Of Gold, Or Silver,  
Red-lead, or Lead-Ore, reduce them to Powder, and boil them  
with Vinegar aS above, they will afford the same undistinguishable  
Vinegar Of Lead. This only is particular Of it, that, when cold,  
it filtres with Difficulty, as then blocking up the Paper; hut, when  
hot it runs through easier.

5. When fresh-distilled Vinegar is pour'd to this inspissated  
Solution, and boiled,’ and again reduced almost to the COnsss-  
tenceos Honey, the Vinegar distilled Off loses much of its acid  
Virtue, leaving the acid Part in the metallic Liquor, the Part th3\*

floats above, being somewhat Oily, unctuous, and saccharine,  
is called Oil Of Lead, and consista Of the Metal and the Vinegar.  
The Oftener this Addition of Vinegar is repeated, the more un-  
ctuous the Liquor becomes, and the harder to dry.

**REMARKS.**

**Hence we have a new** Method Of calcining and dissolving **a ve-**ry ponderous Metal, and bringing it into a Liquor. Here **we**see a new Taste and Odour produced, by Acid and Metal,  
and an Attraction and Separation of the Acid by the Metal,  
till it is fully saturated and impregnated. This Vinegar Of  
Lead long preserves oncorrupted the Bodies Of Animals that  
**are** plunged therein. Or penetrated and dried therewith, it Co-  
agulates the animal Juices, and preserves them from PuUesac-  
tion ; if diluted and rubbed upon the Skin, it cures Breakings  
out. Redness, Inflammations, and the Erysipelas, it gives a  
Whiteness and Beauty to the Skin, but proves pernicious to  
**the** Body, at length Occasioning a Consumption, aS appears  
by many melancholy Examples. Is the inspissated Oil of Lead  
be mixed with an equal Quantity os Oil Of Roses, it makes a  
white Balsam highly Commended by the Surgeons.

**THE SALT OF LEAD WITH VINEGAR-**

I. Inspissate a Quantity of the Vinegar of Lead in a low glass  
Body, with a very wide Mouth, till it becomes almost aS thick aS  
Oil*, set* it in a quiet Cold Place, and a whitish-grey Mass will  
shoot to the Bottom, in small erect Spicuhe; pour off all the  
Liquor, and with a gentle Fire flowly dry the Remainder, which  
will now he white like Sugar, and is Called the Sugar Of Lead.

‘ 2. Dissolve this Sugar of Lead in fresh and sharp distilled Vi-  
negar; let it stand to depurate inspissate the Liquor to the Thick-  
Hess of OU; set it in a cold quiet Place, and there will shoot  
**at** the Bottom thick solid Crystals, perfectly resembling **the**Form Of vegetable Candy-sugar, and having nearly the same  
**Taste.**

3. If these Crystals he again distolved in fresh-distilled Vi-  
negar, and the Solution he depurated by standing, then inspis.  
sated by a soft Fire to the Thickness Of Oil, a Liquor will  
**be** Obtained which Can hardly he dried, and rendered hard  
by a small Fire, but it remains somewhat fixed, and may be  
liquified like Wax, with a gentie Hear. The Oftener this Im-  
pregnafion is repeated with fresh Vinegas, and the Matter  
dried, the more fixed It becomes in a small Fire, so aS not to  
smoke, but easily run. If now it he Committed to a moderate  
Heat, and afterwards suffered IO cool, but, while it remains Suid,  
**. it** he poured into another Cold Vessel in the Cold Air, it strong-

ly Coagulates in the pouting, and Concretes into fine Threads,  
lilte Cobwebs, perfectly resembling silver Thread, and afford-  
ing a very agreeable Sight\* This was published as a Secret by  
**a** Jesuit, though somewhat disguised in **the** Delivery.

**4-** AS soon as this Body, coagulated into Threads, is exposed  
**to a** greater Heat, it Presently runs again, **so** that it may be  
again poured Out. And if this Resolution and Inspissation he  
carefully and patiently repeated, each time separating the Fae-  
***ccs,*** and then, is the Matter he long, digested with a geode Heat,  
till it grows thick, and concretes, a Mass is at length formed,  
which to the unwary Eye resembles Silvers *Isaac Hollandas*deserves to be read On this Subject, where he speaks concerning the  
Stone from Lead. The Process, also, may be continued at Plea-  
sore, by those who define to see unusual Appearances Os Bodies.

**REMARKS.  
» ✓**

/The Production is called the Sugar, Salt, Magisters, Or Vitriol  
of Lead. It shews how a fermented Vegetable Acid may  
she Combined with Lead, into a Substance soluble in Wa-

ter. It is astringent, styptic, and presently coagulates the  
Blond. Being dissolved in Water, it affords the Vinegar Of

. Litharge, good against Inflammations, when externally used.  
Internally, it is recommended for a safe Remedy against Spit-  
ting of Blood, Bleeding at the Nose, making bloody Urine,  
the Gonorrhoea, the Fluor Albus, and the like, as, also, for a  
mollifying Remedy against the Acrimony of the Blond, but  
**I** never durst make Trial Of it, because I never saw it success-

. folly used by Othersand because there is scarce a more de-  
ceitful and destructive Poison than this Lead, which present- .

. ly returns to Ceruss, as soon as the Acid is absorbed from  
it, by any thing it may meet with, whence, it asterwards  
Proves an eyreeding'dangerons and almost incurable Poison

- to the Body. Is the Salt of Lead he gradually distilled in a  
Retort, and at length’urged with a Violent Fire, there Comes  
over a fiat inflammable Spirit, perfectly Changed from the  
Nature Of the Vinegar employ'd ; and there remains at the  
Bottom a Substance like Glass, which» when urged by  
a strong Fire, penetrates almost all the Vefleis that are  
known. Vitrifying all Bodies, and carrying them through with  
it, except Gold and Silver.

**THE SALT OF LEAD WITH SPIRIT" OF NITRE.**

1. Put an Ounce Of granulated Lead, Ceruss, Litharge of  
Red leash into a tall Bolt-head; pour thereon fifteen Ounces of

Spirit of Nitre, or Aqua-fortis, diluted with ten ’times thtrr  
Weight Of Water ὁ there arises a great Ebullition with a white  
Froth ; which being over, set the Glass in a little wooden Fur- \*  
nace, to boil for five or six Hours. Let the Liquor rest and  
Cool, then filtre it, and distil to a Pellicnle, a nauseous, but  
not acid. Water will Come over. Put the remaining Liquor in a  
Cold Place, and there will shoot white, solid, and .Very pon-  
derous Crystals, that do not run in the Air, but continue solid;  
they are os a sweetish Taste, and more austere than those os the  
preceding Process; the Liquor, also, after rhe Solution, or  
both before and after the Crystallization ,has a saccharineSweetness  
like the Salt. 2- If fresh Aqua-fOrtis be poured to this Sap,  
so as to diflolve it, and the Liquor he again inspissated, an  
Oil of Lead may thus, also, he prepared, which coagulates with  
Difficulty, but gradually sixes, so aS to run like Wax, with a  
gentle Heat. 3. This Salt, being dried,and thrown upon live  
Goals, does not take Flame, but Crackles violently in rhe Fire,  
and flies all around, with great Danger to the By-standerS;  
but, if red, used to fine Powder, it may he melted in a strong  
Fire.

REMARKS.'

Hence we have a new Method of producing a metallic Salt,  
and its Oil; a sweet Taste from an acid and an insipid  
Body ; a Glass from a Metal and of shewing, that Spirit of  
Nitre will not make an inflammable Salt with every Metal,  
as it does with Silver. The Salt here has the same Virtues  
aS that of the preceding Process, but it is more sharp and  
astringent. ”

**THE SALT OF LEAD TREATED WITH ALCALDES.**

TO two Ounces Of the Crystalline Salt Os Lead, made ac-  
cording to either of the two last Processes, thoroughly dried  
and reduced to fine Powder, add four Ounces Of OU of Tar-  
tar per Deliquium; set them in Digestion, where the longer  
they stand,the better, then add an Ounce Of Sal Ammoniac;  
mix them well, and digest again in a Close Vestel; pour back  
the saline Liquor that Comes Over in the Digestion, and digest  
again, which being twice or thrice repeated, dry the Matter  
thoroughly by a gentle Fire, and expose in to a moist Aina that  
it may diflolve; dry it again, and distil it in a Coated glass Re-  
tort, with Degrees of Fire to the highest that Sand will give,  
into a large Receiver Containing a little fair Water. Three  
Kinds Of Matter will thus come Over, which seems surprising,  
while another Of a particular Nature, and strangely Changed, re-  
mains at the Bottom of the Retort. - .. .

REMARKS.

Many very paricnlar Things are learned from this Experiment,  
and such aS are pleasant to behold ; for the Metal thus sue-  
CessivelV Opened, and distolved by Opposite Salts, then co-  
agulated, and dissolved in the Air, is highly changed, opened,.  
subtilized, divided, and separated from all that, is not purely  
Mercurial, Or metallic; and may thus exhibit its pure, metallic,  
- Mercurial Part, separated from the rest. If the industry of  
the Operator can reach so far.

**THE CALI OR THE VITRIOL OF LEAD.**

Take the Vitriol Os Lead, made according ro the two last  
Processes but One, dry it thoroughly with a gentle Fire, grind  
it.to fine Powder; put in'O a glazed earthen Dish, set It.OVer  
the Fire, and keep It continually stirring with a Tobacco, pipe,.  
till it yields.no more Fumes with a great Heat; a fine and  
almost insipid Powder will thus he Obtained, which is another  
Calx of Lead, made in the moist Way.

REMARKS.

All the Acid which was united with the Lead, in the Form of  
the Vitriol Of Lead, is here again separated from it by the  
Fire, except that Part, which, intimately adhering thereto,  
does not appear externally, and was therefore much more  
dosely united with it in this Operation.

**THE BALSAM OR LEAD WITH EXPRESSED VEGETABLE OILS.**

x. Put granulated Lead, any Calx thereof, Ceruss, Litharge  
or Red-lead, into a glazed earthen Vestel; add to it twice its  
Weight Of any expressed Oil; then gradually raise the Fire,  
and the Lead will begin to melt at the Bottom, before the Oil  
boiis, but if the Fire be gradually increased, so aS to make the  
Lead boil, the Body Of the Lead, or Calx, will begin to disap-  
Pear, and mix *so* intimately with the Oil, as to make a true  
Balsam, which, by longer boiling, may be brought to a Sub-  
stance that is solid in the Cold, femi-metallic, will melt in the  
Fire, and is ductile. 2. If instead Of Lead or its Calx, we use  
that Calx prepared in the last Process, Or the Salt of Lead,  
first dried, and meat it with expressed Oil, in the Manner above  
delivered, the like Balsam will he obtained aS from the true Me-  
tal, and the Osh

REMARKS.

Hence we see, that true and very ponderous Metals may, by  
the means Of Fire, he dissolved in vegetable Sulphur, and fo  
mixed, as to lie perfectly concealed therein : Whence we are  
often ignorant, whether Metals are Concealed in certain Bodies  
Or not, how wonderfully they may he disguised; and how  
often they may proceed from Matters not thought Io Contain  
them,. when they have been often falsely supposed to he oh-  
rained from them by Transmutation. All these Particulars  
admonish us to he cautious Of the Impositions Of the fraudu-  
lent Alchemists. These emplastiC Preparations of Lead are  
Of Use to strengthen and warm the Parts, whereto they are  
applied they, also, discuss, mollify, and absorb acrimonious  
Humours; in particular, they are excellent for fining Vesseis  
designed to Contain Water; for if Red.lead be boiled in Oil  
to a proper Thickness, and be exactly spread Over a Stone  
Wall made almost red-hot, so as intimately to penetrate and  
stick therein, it will danse the Wall to resist Water, as well  
as if it was built with Cement. This Mixture we use to  
prevent Worm-tubs from leaking.

**THE BALSAM OP LEAD WITH DISTILLED VEGETABLE  
OIL.**

.. Gently dry the Sugar Of Lead, prepared according to the  
third Of these Processes ,. put it into a tall Bolt-head, and add to  
it four times its Weight Of the ethereal Oil Of Turpentine, boil  
it for some time; which is easily done, ' if the Glass with  
this Mixture be put into a Vessel, in which' Linseed-Oil grows  
just hot enough for the Purpose, which happens long before  
Linseed-Oil Of it self will boil: Thus the Oil Of Turpentine  
will , almost wholly dissolve the Sugar Of Lead, whereby the  
Balsam is Obtained.

R E M A R K.

This Process has the same Use with the former.

**THE GLASS OF LEAD.**

‘ i. Mix two Parts Of Red-lead, with one Of Clean Sand, re-  
duced to fine Powder, by grinding them long together, then  
. put them into a Clean Crucible; set it in the Fire, so that the  
Matter may melt, and continue in Fusion for some time," till,,  
when examined by dipping a TobaoCO-pipe therein,-what sticks  
thereto appears transparent, then pour it Ont upon a Marble: A  
brittle, yellow, transparent, inodorous, insipid Mass will be thus  
Obtained, that proves hard in the Cold, and melts in the Fire ;  
whence it is called Glass of Lead. This Matter, when fused in  
the Fire, passes through all the known Veffeis, as Water through  
a Sponge, and Converts almost all Bodies into Glass, with itfdf  
in Fusion, carrying them through the Pores Of the Vessels, ex-  
cept Gold and Silver. ’ In Order to make the Mixture of the  
. Red-lead and Sand run sooner into Glass, some add Nitre,  
and others Sea-salt, and keep the Crucible in the Fire till the  
Salt is melted. 2. If the Sugar Of Lead be put into a Crucible,  
and urged with a gentle Fire, successively increased, the Vinegar  
flies Off, and the Matter is so changed, as to run into a yellow  
Class, at the same time that wonderful pleasing Colours appear  
in the middle, like those Of the Rainbow, Or the Peacock's  
Tad. 3. If Lead itself be long kept melted in the Fire, it becomes  
drossy at Top, which increases till the Lead is almost wholly  
donVerted into the same kind Of Matter, and this, being again  
titged with in strong Fire, turns Of itself into Glass, but this is a  
laborious Operation, and requires much Caution. The easiest  
Methodappears to be the following. 4. Take four Parts Os  
Ped-lead, One Part of Sand, and two Parrs os dry decrepitated  
Sea-salt ὁ grind them together, the longer the better , put them  
into a close-covered Crucible, melt them together, and suffer  
the Whole to Rest, the Salt will be found melted in a Glebe at  
Top, and the Glass below, when the Crucible is broke, and

should he separated from the rest, for the Purposes Of Metal-  
Inrgy, where it is extremely useful. ’ 5. These Glasses, being  
mixed with a little powdered Charcoal, and melted in the Fire,  
easily turn to Lead again.

REMARKS;

. We have a . wonderful Change os this Metal (by means Of Fire’  
. and the Discharge of a metallic highly poisonous Vapour)  
. from a perfectly malleable State, to an extremely brittle,  
and true glassy Matter. Whence we see .how wonderfully,  
ι and under what various Forms, Metais may lie concealed,  
and how easily they may again appear And hence, -per-  
haps, Metais Vitrify in the Fire, aster heing separated from  
. a certain sulphureous Part. This seems to appear from the  
making os the Glass Of Antimony, and Other Experiments.

: And, upon restoring this Sulphur, the metallic Form begins  
to return, as may he seen in many Instances, especially in

. Lead. This Glass of Lead is the true Test Of Metals, and  
destroys every thing io the Fire, except Gold and Sil-  
ver, which it leaves untouched, without any Diminution

Os their Weight. And upon this Foundation depends the  
whose Art OsAssaying and Refining, which is os so great Uin  
in Civil Affairs. -Whoever would know more os the Subject,  
may Consult *Boyle, Bohn, Hotnberg,* and *'Giestesy.* But let  
it be Carefully remember'd, that the Fume, the Powder, and  
all the Parts Os Lead are carefully to be avoided, as highly  
poisonous. *Boerhaave^ Chemistry.*

The burning Spirit and Oil Of Lead are Obtained from the  
Sugar Or Salt by Distillation , but the Virtues of these inflam-  
mable Substances are the same with those Of Spirit Of Wine,  
whatever Chymista may presend to the Contraryj for the Spirit  
is Only the Spirit of Wine, Concentrated in the Vinegar disen-  
gaged by this Preparation, and the red Oil is likewise extracted  
from the Vinegar. - ' ... -

The mineral Mummy Of Lead Of *Potorias* is the Calx Of  
Lead and Quicksilver amalgamated together, made in this  
manner:

Take Of Mercury revivified from Cinnabar, two Parts, and  
One Part Of Lead. . Amalgamate them together, and con- .  
tinne to shake them strongly in an earthen Vessel over a  
CharCOal-fire, (ill the Whole he reduced tO a black Powder.  
Bake this Powder in a Sand-heat, In a glasa Matrass, tin  
it turns yellow, and keep it for Use.

This Mummy cures, in a Very small time, the Irch, Tetters,  
and other Diseases of the Skin, cleanses callous Ulcers, and  
dissolves the Callus, and dissipates Swellings in the Glands os the  
Breasts, being mixed in any Ointment or Plaister. It is, likewise,  
of Service in Cancers, which are not arrived at their last Stage.  
It must, however, be cautiousty and sparingly used, lest the  
Suppuration prove too great. But, if a Carcinoma, for In, \*  
stance, be not ulcerated, a Dram Of this Mummy, accurately  
mixed with an Ounce of Emplastrum Magneticum of *Angelas  
Sala,* and applied to the Tumor, will gradually dissolve it. But,  
if there he an Ulceration, then a small Pencil os Lint dipped  
either in the Mummy alone. Or. mined with Powder of Myrrh,  
is to be thrust into the Ulcer, the Emplastrum Magneticum  
heing applied upon it. .By this means the hard Tumor gradually  
resolves by a gentle Suppuration; and, by proper internal Reme-  
dies used at the same time, the Carcinoma is healed. *Geoffrey.*

PLUMIERIA. M J

The Characters are;

It has the Appearance of the *Apocynum,* and abounds with a  
lacteous Juice. The Endos the Pedicle pastes into a littie short  
monopbyllous Calyx, Ont of which grows the Flower, as in the  
*Ncrium,* but wants the petaloid Crown. The Ovary, which  
grows in the Bottom of the Calyx, becomes a long, filiquons,  
double Fruit, when Opening lengthwise, and pregnant with a  
Multitude of Seeds, placed as in the *Apocynum,* but foliated.

*Boerhaave* mentions but one Sort *osPlurmeria',* which is, /.  
Plumieria , .store roseo, Odoratissimo. *T.* 659. *Doer hi Ind. Alt.*

*Plants ’*

Besides the foregoing Sort Of *Plumieria, Millar* mentions the  
five following ,

I. Plumieria flore maiore odorato & incarnato. ;μαόσ Plumieria flore niveo, soliis longis angustis & acuminatis.

3. Plumieria flore niveo, foliis brevioribus & obtusis, *last.  
R.H.*

4. Plumieria foliis longissimis, minus socculentibus, fiore pale  
Udo. *Hoast. . ss :*

5. Plumieria folio latiore Obtuso, store luteo minore.

This Name was given to this beautiful Species Of Plants, by  
Dr. *Tournefort,* in Honour to Father *Plunder,* who was Botanist  
to the late King Of *Prance,* and along time in *America,* search-  
ing after new Plants, and who has published a Catalogue of the  
Plants, with the new Genuses he constituted; and two Volumes  
in Folio, with Figures and Descriptions Of many Of thePlants..

These Plants grow wild in the *Spanish West Indies,* from  
whence some of the most beautiful Kinds were brought into  
the *Englisu* Settlements in *America,* and are Cultivated in their  
Gardens for Ornament. The first Sort here mentioned is the  
most common Kind, which is preserved in the Gardens Of the  
Inhabitants Of *Jamaica* and *Barbadaes.* The Flowers of this  
kind nearly resemble those Of tho red Oleander, but are larger,  
and have in agreeable Odour. These are produced in small  
Bunches, at the Extremity Of the Shoots, and generally appear  
in *July* and *August* in this Climate ; bur in the *Wost Indies* they  
flower a great Pan Of the Year. ε

The milky Juice of these Plants is very Caustic, and reckoned  
very poisonous. In Cutting off any of the Branches of tho  
Plants, if the Knife be not immediately Cleaned, the Juice will  
Corrode it, and turn the Blade almost black in a very littie  
time, so aS not tO he cleaned Off again ♦ and, if dropped on  
.Linen, will cause it to wash in Holes, equal to Aqua Fortis.

*MillePs Dictionary, Vol.* 2.

\* PLUMOSUM. An Epithet for a Species Of Alum.

PLUTEA, in *Acvicenna,* is a Reduplication of the Dura  
Mater, as in the Formation Os the Longitudinal Sinus..

. PLIJVIALlS. **The** Plover; of which **there are** two Sorts.  
The first is the *Glattis.* Ossie. Gens, de AVib. 450. *Limosa Ve.  
netorum.* Ejutd. *P'uvialis mayor.* Aldrov. Ornith. 3. 535. Wilt  
Ornith. 22o. Raiy Ornith. 298. Charlo ExeI. II4. JOnL de AVib.  
114 *Chloropus Germanis Gult sieu Glattis.* Aldrov. 3.452. THE  
GREAT PLOVER.

The Gall Os this Bird is recommended aS a Remedy for Dis.  
orders of the Eyes. A Jelly of the Flesh is recommended aS a  
good Analeptic, Or Restorative.

The other Species is the *Vanellus.* Offic; Charin Exer. 113.  
Mer. Pin. I82. Gefn. de Avib. 692. Jons, de AVib. II3. *Capella  
sive Vanellus.* Aldrov. Ornith. 3. 523. Raii Ornith. 3O7. Ejuscl.  
Synop. *A.* I Io. Will. Ornith. 228. *Vaneau.* Bellon. deS Oyfe.  
209. THE LAPWING, Or BASTARD PLOVER.

This Animal delights in marshy Places ; and its Ashes, Heart,  
and Skin, are us'd for medicinal Purposes. The Ashes drank in  
**Wine,**are beneficial in Colics; and, when applied by way Of  
Cataplasm, cure the Bite of a Mad-dog. The Heart alleviates  
Pains Of the Loins, and the Skin is esteem'd good in Cepha-  
salinas. *Dale.*

They create an Appetite, yield pretty good Nourishment,  
digest easily, and are look’d upon to be good to provoke Urine,  
to strengthen the Brain purify the Blood, and for the Falling  
Sickness.

They are not very solid Food, bur soon waste; and therefore  
Persons accustomed ro great Exercises, or hard Labour, are not  
to use them. *Lernery on. Poods.*

PLUMA, πλῦμα. The Water wherein anything is wash'd.

PNEUMA, πνεῦμα, in *Hippocrates,* sometimes imports  
Spirit, Air, or Vapour, and frequently It signifies the Breath,  
that is, the Air drawn in by Inspiration, and expel’d during  
Expiration. But *Pneuma,* hy the above quoted Author, is Otten  
Us o to express a difficult, short, and laborious Respiration.

*Pneuma halipomenon, ornopea iKilsiprivw,* from άλτζομαι, to  
he coacervated, crouded, means a railed, dense, and full Respi-  
ration. *Coac.* 339.

*Pneuma hos.per anacalumeno, rneuplia llarep dvaxoAcniferpe,*from ἀνακαλεω, to recal, I *Epid. Alg.* I. imports a brokcn  
. Respiration, as when a Person, aster a short Expiration, seems to  
call back his Breath, and to expire with a renewed Force, in  
order ro supply ther Defects of the former Expiration. The  
same IS called πνεῦμα προσκοπτον (prosiopto»), and προσπταῖον  
*(pros.ptaeoes,* an impinging Breath, which strikes in its Passage, and  
is interrupted by the Elision, lt is otherwise described, 2 *Epid.*.and *Coac. 260.* by διπλῆ ἔσω άνάκλησις ῆςον ἐπεισπνέουσιν, a dou-  
" ble Revocation inwards, as in thoso who fetch their Breath  
« double,.” and by πνεῦμα ενεδιπλασιάζετο, " the Breath was  
double," that is, aS *Poesius* endeavours to explain it, was  
doubled. Or sounded double, oy suffering an elision in its Passage.

*Pneuma anapherein,* πνεῦμα άναφέρςιν, from ἀναφέρω, to exalt,  
is to have a great and full Respiration, OI to expire Vast Quan-  
tities of Breath, which is esteemed a Symptom of an internal  
Inflammation, 2 *Prorrhet. Coac.* 486. But πνεῦμα ἀνω φερόμενον,  
*in Lib. de* R *Vi l.A* is no more than the Breath discharged by  
Expiration.

*Pneuma anelcomenon, acriopeA deslumoprivov,* from ἀνέλκω, to  
draw upwards, to raise. Or elevate, in I *Porrhet.* 87. imports a  
Respiration performed with a great Elevation of the Thorax, in  
fuch a manner, that even the Scapulae seem to be moved thereby,  
aS *Galen* explains the Word , who, also, takes it to be used by  
*Hippocrates* in the same Sense aS μετέωρον and πρόχειρον, which  
see below.

*Pneumd anespasutenon aUtica, arfiVplat drumsaoifertif* ἀύτίκα  
Isrom ςένασπάω, to retract) the Breath immediately Or at every  
Turn retracted, imports an interrupted or intercepted kind Of  
Respiration, which fails On a sudden. It seems to be much the  
same with the πνεῦμα *otev* συσπνῶντός τινος, *Coac.* 266. and  
*Prorrhet.* 87. a short and convulsive kind OfRespiration, as is  
usual with those who fetch their Breath under ConVulstonS.

*. Pneuma ar aeon, mega, antvpea tseeuar, siloyes,* is a rare and  
great Respiration, Or a full Respiration Perform'd at long Inter-  
vals (see ARAEoN), such as is proper to those who labour un-  
der a Delirium, as *Galen* observes. *Lib.* 2. *de Hys.pn.* and *Corn.*i. *its Prorrhet.* and aS it is confirmed by many Instances in the  
first and third Books Os the *Epidemics.*

*Pneumata asema, ariietiscdsu Annua.,* signifies an obscure Respi-  
ration, or such aS is small, interrupted, and hardly perceptible,  
which is usual in Hysterics, a Syncope, and in dying Persons.  
**See** ASEMOS.

*Pneuma bechodur, -orfivaa lpin/lsusei,* from βὴξ, a Cough, is a  
Respiration attended with Coughing, from something derived  
into the Aspera Arreria. *Coac. 62. 6^2.*

*Pneuma dia pollou Chromou, rnviupeo.* διὰ πολλῦ χρόνου, aS ex-  
plain’d by *Galen, Ltb.* 2 *An Dyson,* is the same as the *Pneuma  
ar aeon* hesore. The πνεῦμα διδ χρόνου, 3 *Epid,* imports the same  
*Pneuma manoteron, orvtZpea* μανῶ-ερον, from *pearbi,* rare, loose,  
*Coac.* 2II. imports an Alteration from a short, difficult, and  
turbulent, tO a more remiss, rare, and easy Respiration. .

*Pneuma megaes vsaiispea. saaya.,* a great Respiration, *Coac.* I Ad-  
an d aoo. is when, in breathing, the Tho.ax is Very much enlarged  
in its Dimensions.

*Pneuma rneteoron, wibpea* μετέωρον, a sublime and elevated  
Respiration, imports such a Respiration aS is performed with an  
Elevation Or the whole Thorax, and an .Erection of the Neck,  
under a great Straitness and Oppression, as is often rhe Case in  
a Quinsy, Peripneumony, Pleurisy, and Asthma. Thus *Galen,  
Corn.* I. *rn Prorrhet,* explains the Epithet, and je’in m, mar  
πρόχειρον ano φαινομενον πνεῦμα are used by *HppOcraie!* in much  
the lame Sense. And, *Com.* 2. *in* 3 *Epid,* he further observes,  
that τὸ μετέωρον πνεῦμα may import, that the Patients under toe  
sore.mentioned Disorders desire and endeavour μοτεωρίλειν *naviis,*to raise themselves up: Whence he says, μετέωρον πνεῦμα, in 3. \_  
*Epid,* is the same aS ορθοπνοια(Οτιιθσμαπα)ίΠ *Prognosi.* There is an-  
other Signification οίμοτἐωρονπνευ'μα quoted *byGalen fsomSabinus,*who delctibes it by την ἄκρατδ ῥινι γηνομένὴν ἀναπνοάστ,α Re-  
“ fpiration performed at the Top of the Nose;" that is, when  
the Passages for Respiration being almost stopped the Patient,  
in drawing hi. Breath, moves the Pinnae Of the Nostrils, aS is  
the Cale with those who are suffocated by a Quinsy, Peri-  
pnenntony Or *Empyema,* or when the Strength is quite exhaust-  
ed, as in dying Persons. This Sense of the Phrase, tho' criti-  
cited by *Galen,* seems, to he in some measure, imply’d in that of  
*Hippocrates,* in 7 *Epid,* where, speaking of the Wise of *Olympiads,*aS almost expiring; he says πνεῦμα μετέωρον κατὰ ῥίνα σπώμενον,  
“ Respiration was such as is called sublime, and perform'd  
" through the Nose/ *Galan,* at the End Of *Liir.* 3. *de Bys.pn.*proves this μετέωρον πνεῦμα, or sublime Respiration, to he, also,  
sinall and quick, or short. \

*Pneuma minuthodes, orviopea.* μινυθῶδες, from μινήθω, to dimi-  
rush, is a small and weak Respiration, *Lib.* 2. περὶ γυναικ.

*Pneuma mychtbodes, orviv pea pevysiiSJ'is, Coac.* 5I9. and 540,  
is a broken, and most painful Respiration, winch is interrupted  
in the midst of Expiration, aS is Observable in the sobbing Re-  
spiration of Children.

*Pneuma prose opt on, arvzvpect majocrnoxjos,* from προσκόπτῳ, .to  
impinge, 4 *Aph. 6y.* is expressed in *Celsus,. Lib.* 2. *Cap.* 7. by  
*Spiritus in Faucibus elisus.* Breath suppressed or intercepted by  
Elision in the Fauces. This impinging kind Of Respiration is  
explain’d by *Galen, Lib.* 4. *de Doe. affect,* in the following  
manner r “ There is another Species Of Dyspnoea, he fays,  
" which is, when the Action Or the Thorax is interrupted by a  
“ short Rest, sometimes in Inspiration, and sometimes in expi-  
C‘ ration, whether this Symptom proceeds from a spasmodic  
" Disposition Os the Muscles Of the Thorax, or from an Abuti-  
“ dance of Heat, which constrains the Patient to continue his  
" Inspiration or Expiration”.

*Pneuma prosptaeon,* πνεῦμα προσπταταν, from πταήου, to impinge  
Or strike against. *Lib. de R. V. I. A.* is the Breath impinging or  
interrupted in Expiration, as *Galen,* in his Comment in the Place,  
explains it. ’ - ' so se

*Pneuma prochiron., arrtiism. majoxsctgos, quasi or for* χεῖρα, ready  
at hand, or obvious, is a confpicuouS Respiration, inch as IS  
the sublime and elevated Respiration accompany'd by an Ele-  
Vation os the upper Parts Os the Thorax and the Scapulas, as  
may be. Observ'd in Asthmatic Patients, and those who die of a  
Suffocation. Hence it appears to be the same as μετέωρον. See  
I *Prorrhet.* 25. It is also called φαινόμενον *{phaenomenon)* ryisi-i  
ble, apparent; because the Patients, *as Galen* Observes, are plainly  
perceiVed, through their Clothes, to move the whole Scapulas,  
when they draw their Breath. ‘ .

*Pneuma pycnon, otviusm. xvrtivo* .is a quick and frequent Re-  
spiration, and a kind Of Dyspnoea, which in *Hippocrates* isofien  
accompany’d with a Greatness Or Smalness Os Respiration, as is:  
observed by *Galen, Lib. i.deDyspn.* See **RESPIRATIO.**

.’ PNEUMATIZE, πνευματίαι. .See **PNEUMAToDES.**

PNEUMATICI. An Appellation Os certain Physicians, who  
constituted rhe Pneumatic Sect. See the **PREFACE;**

PNEUMATOCELE, from πνεῦμα, wind, andinilon. A  
' Tumor. A flatulent Hernia, Or Wind-nipture.

PNEUMATODES, πνευματώδης, in *Hippocrates,* is one  
who fetches his Breath short and quick, otherwise called  
*Pneumatias, arvivpeesliaa,* aS in *Lib. de"R.V. 1. Α.* This is the Ex-  
plication which *Galen, Lib.* 3. *de Dyjpn.* gives Of the Word;  
where he also observes, that it sometimes signifies One who has  
his Belly Or Ilia distended with Flatulences ; and proves it from  
the fourth of the *Epidemics. Pneumatias* and *Pneumatumenos,  
ntyivsm.snpe.trof,* are med in the same double Sense. *Foesius.*

PNEUMATOMPHALOS. An umbilical flatulent Rup-  
tnre.

PNEUMATOSIS, **πνευμἀτωσις.** An Inflation **Of** the Sto-  
mach, Or a Collection of Flatulences in the Stomach.

PNeUMENOS, πνεήμενος. Asthmatic, or breathing with  
Difficulty.

PNEUMON, πνεύμων. The Lungs.

PNEUMONANTHE. A Name tor *theGentiana3 angusti..  
folia. Autumnalis, mayor.*

PNEUMONICUS. An Epithet for Medicines destin'd to  
the Lungs.

PNEUMOPLEURITIS. The same **as PLEUROPNEUMO-  
NIA PNIGALION, πνιγαλἁον. The** *Incubus,* **or** *Ephialtes.*

PNlGlTES. Offic. Charit. Foss 3. Worm. *^.Terra Pnigites,*Aldrov. Musi Metall. 259. Mattb. I592. BLACK EARTH.

Tt is a sat, dense, soft,- black, astringent,’ and Very acrimod  
nious Substance, os the Taste os Vitriol. To these Marks  
*Diofcorides* adds, that in Colour it somewhat resembles the  
*Eretria Terra,* is cold to the Touch, and so glutinous as to  
adhere to the Tongue. - The same Author says, that it has the  
same Virtues as rhe Cimolia, only is weaker: Some, he says,  
sell it sor *Eretria Terra. Diofcorides, Lib.* 5; *Cap. sspy.*

PNIGMOS, πράμός. The same as PNIx.

PNIGOS, μάῖζος. A sultry' suffocating Heat. ...

PNIX, πνίξ. Any Suffocation; particularly that which  
happens in hysteric Fits. With an Addition os the. Epithet  
*Hysteric,* ittmplies an hysteric Fit.

POA A Name for the *Gramas’, pratense; majusy latiore  
solio.* . See MILIUM. .i ss -

POCANs. A.Name sor the *Phytolacca, Americana , majori  
fructu.*

- POCATSJETTL Η. M. The Name of a small: Shrub  
which grows in *Malabar.* The Leaves powder'd, and sprinkled  
upon Ulcers,, repress luxuriant and fungous Flesh; and, taken  
internally, they excite a-Sweat, and diminish the Paroxysm of  
an intermitting Fever. ss \_ - .......

Of the Bark, and' Root, powder’d, and mined with Oil,  
an Unguent is made, said to be good for the Itch, and. Other  
cutaneous Disorders. *Raii HistAPlant.*

POCO SEMPIE. The Down or Moss growing upon the  
*Agnus Scythicus.* Thisis esteemed good for stopping of Blood,  
if given in the Quantity of fix Grains, See AGNUS ScYTHi-  
cUs. .

PODAGRA, πβδἀτρα, from πὸς, a Foot; and. sqet, a  
Prey. The Gout in tho Feet. See ARTjiRiTis.

. PODAGRARIA. See ANGELICA. It is, also, a Name  
for the *Myrrhisy, folia Angelicae rugoso , hirsuto.*

PODEON, ποδἐωὰ, is the prominent part of a Vessel,-or  
Dottie, made of a Skin, - by which the Liquor is poured in and  
out, and which used to he tied with a String, in order to keep  
in the contained Fluid: Thus *(Lib.* περἰ παθῶν) πρὶς ποδεῶνα  
ἀσκίου, *etc.* To the Extremity, or prominent part, of the Vestel,  
Or Bottle, a Pipe is tied, for introducing the Ain, and distending  
the Intestines, in order for their being washed with a Clyster,  
in: the Cure of the Ileos. *Foesius.*

POERINSIL A Name for the **ARBOR SAP0NARIA.**

POINCIANA. Flower-fence, .. - " ' ‘

The Characters are 7 - ' i

The Calyx is pentaphyllous; the Flower polypetalous, and'  
furnished with numerous Stamina; the Pod is flat, hard, gap-  
ing into two Parts, and divided into Capsules, or Celis, con-  
taining roundish: Seeds. -

*Boerhaave-* mentions but One Sort of Poinciana ; which is,.

Poinciana;, store pulcherrimo.. T. 6 T9. *Frutex, Pavoninus,  
sive Crista Pauonis..* Breyn. Cent. I. 6I. *Acacia Orbis Ame-  
ricani, altera, flore, pulcherrima.* H. R. Par. - *Crista Pavonis.*H. L. *Erythroxylon, Indicum, minus spinosum. Colutea foliis,  
siliquis angustioribus, store ex luceo et rubro elegantor variegatis.*Pat. Bat. Prodr. 333. *Boerh. Ind. also. Plant, siol.* 2.

. - Besides this Sort,\* *Mellen* mentions three more ;

I. Poinciana flore luteo. *Hionst. . .*

2. Poinciana flore'rubente. *House. - .*

' 3. Poinciana spinosa, \_ Vulgo *Tara. Feuil.*

. -The Seed-pods of the-last Sort are used by the Dyers in the  
*Spanish West-Indies* dying of Black*y.* and' they are, also,

used for making of Ink. The Infusion of these Pods with Galls  
affords the most beautiful black Inin in the World.

7 POLEMONIUM; \ .

The Characters are

' The Leaves are alternate, and pinnated'; the Flower is mo-  
nopetalous, rotated or wheel-shaped, and pentapetaloidal; the  
Fruit is round, rricapshlar, gaping, and ' full of oblong Seeds.

*Boerhaave* mentions four Species of Polemonium; which  
.are, ............

' I. Polemonium; Vulgare; coeruleum. *Tourn. Last.* 146.  
*Boerh. Ind. A.* 252. *Raii Synop.* 3. 288.' *Poleirionturn.* Ossic.  
*Falcriana Greeca.* Ger.orS. Emac. IO76. Park. Theat. I22.  
Raii Hist. 2. IIO2. *Valeriana Grczca quorundamflore caeruleo.*J Β. 4. 212. *Faleriana coerulea*. C. B. P. 164. *Vulneraria  
alata Blattaria flore Caeruleo.* Hist. Oxon. 3. 605. GREEK'  
VALERIAN, or JACOB’S LADDER.

\* ThisPlanttS produced-in Woods, and flowers in Summer:  
The Herb itself, and its Root, are used. The Root, drank in  
Wine, is good- against the Bites of venomous Animals, and  
Dysenteries. When drank in Water, it is beneficial in Dysu-  
Ties, and ischiadic Pains. A Dram os At exhibited in Vinegar,  
. proves serviceable to Patients labouring under Disorders of the  
Spleen: When chew’d, it mitigates Tooth-ache. *Dioseor.*

- The Heth is vuinerary. *Sim. Pauli.*

' This Plant is so - imperfectly described by the Antients,. that  
we are as yet Ignorant whet it really is; since some of them  
make it a Species of the Valerian; and Others of the Lychnis.

But I have chosen to *scsslssunTournofort,* who ascribes this Name  
to this Plant, which is described by *Diofcorides* in the follow-  
ing manner: " The Polemonium is a Plant, with small Branches,  
" pinnated on both Sides: Its Leaves are a little larger and  
" longer than those of Rue ; greatly resemble those of Cala-  
" mint.,' or Blood wort; and have Clusters, in which are con-  
tained black Seeds, hanging froth them Tops.” *Dale.*

2. Polemonium; vulgare; album/ *T.* I 46. *Valeriana Grana  
'quorumdam, flore alba.* j. B. 3.' 2I2. *Valeriana alba.* C.B. P.

164. .. ί *.sc. .... a .. ..... . :*

3. Polernohiuth; vulgare ; flore variegato. *T.* I46. *Villen  
iiana Greeca, store ex albo et coeruleo variegato.* H. L.

4. Polemonium ; vulgare 7 foliis eleganter variegatis. *Boerh»  
ind.ali. Planti Volis. so.*

Po**LEMONI**6.Μ is, also, a Nanin for the *Lychnis; fylunstrisg  
quest Been album vulgo.* **See BE HEN. .**

**POLEMONIUM,** *Monfpeliensiumi Α* Name for the *fasini'  
num, luteum, vulgo dictum baociserum. . '*

POLENTA. See **ALPHITA. ‘**

POLETIS SAL. A compound Salt, described, by *Aetius,  
Tetrabib.* 3. *Sernt.* I. *Cap.* 24. S

POLIATER. A Physician in ordinary to a Town.

" POLIUM. ; si '. - -

The Characters’ are ; ,

The Leaves are, for the most part, hoary; the Stamina sup-  
ply the Place of ths Galea; the Beard is quinquefid, like that of  
the Chamaedrys; the Flowers grow in Heads, on the Tops of  
the Stalks and Branches. \_ ' '

*' Boerhaave* mentions ten Species of Polinin; which are,

I. Polium ; Davenduise folio. *Co B. P.* 22o. *Tourn. Last.*2O6. *Boersi. Ind. alt.* I83. *Polium alterum.* Ossic. *Polium  
montanum, setffiC. Polium montanum Lavendulae folio.* Parin.  
Theat. 25. Raii Hist, i. 525. *Polium Lavendula folio flore  
albo.* Ger. Emac. 635. *Ayuga folio integro.* Rivin. Irr- M.  
POLEY-MOUNTAIN WITH LAVENDER-LEAVES.^

This Plant is found in the Gardens Of Botanists, and flow-  
ers in *June.* The Herb is only used, and is said to agree Iin  
Virtues with the other Species, though in a lower Degree.  
*Dale.* v

2. Polium; montanum; luteum. *Co B. P.* 220. *Euii*Hist. 1.525. *Ger.* 528. *Ernac.* 653. *Tourn. last.* 206. *Bocrh.  
Ind. A.* I83. *Polium montanum.* Ossic. Chom. Pl. Usu. 352.  
*Polium montanum vulgare.* Parin Theat. 24. YELLOW  
POLEY-MOUNTAIN;

This Plant is produced in *Provence* in *France,* and in *Spain:*It flowers in *June.* The Herb is used ; and is said to agree in  
Virtues with the white Poley-mountain. *Dale.*

3. Polium; Lavandulae folio angustiori. *C. B. P. ttfcC.*

An Polium 5 montanum; repens. *C. S.* Ρ. 22I.

5. Polium; Pyrenaicum, supinum; Hederae terrestris folio.

T. 2Ό6. *An Charncsdrys montis Sumant.* J. B. 3. 28o.

6. Polium ; montanum ; luteum ; dasyphyllum ; serratum ;  
tomentosum. *M. Hi* 3. 355. . ' ’

7. Polium; montanum; luteum; serratis, angustioribus, in-  
canis, soliis. *Barrel. Ic.* 34. . .

8. Polium; montanum; album; supinum; folio ad supre-  
ma crenato ; capitulis multis, globosis.

9. Polium , maritimum ; supinum ; Venetum. *C. B. sP. «*221. *Polium Venetum.* J.B. 3. 300..

To. Polium; Hispanicum; fruticosum; maritimum ; Roris-  
marini folio; flore rubro. *T. ioy. Bocrh. Ind. ah. Flant..  
Vol.su \ ‘ ' νὰ . / si\*

This Plant resists Putrefaction, and with it the Sea-Ikink is,  
for that Reason, preserved ; because Vinegar and Salt are not  
thought good enough for the Preservation of so delicious and  
costly an Animal: This Plant is bitter, and approaches much  
to the Nature of Germander r It provokes Urine, removes  
Obstructions os the Menses, and cures the Jaundice. An In-  
fusion of the Leaves and Flowers is beneficial in lethargic Diss  
Orders, and, consequently, in Epilepsies: Whet the Polium of  
the Antients was, we know not. This Plant is an Ingredient  
in Various Confections, Opiates,' and in the Theriaca. It is  
said to be heneficial against the Bites of poisonous Animals.  
*Hist. Plant, adscript. Bocrh.*

**POLIUM CRETIcUM.** A Name for the *Toucriurny calice  
campanulato; stachadosfacie. Ί*

**POLIUM GNAPHALODES.** A Name for the *Gnaphalium^  
maritimum. . . \**

Besides the foregoing Species of Polium, *Dale* mentions **the**two following, ' .

I. *Polium montanum.* Ossic. *Polium montanum alburn.*C. B. P. 22I. Ger. 528." Emac. 653. Raii Hist. i. 524.  
Tourn. Insta 206. *Polium montanum Monspeliacum.* Park.  
Theat. 24." WHITE POLEY-MOUNTAIN.

Thia Plant is produced in *Italy* and *France,* and stowers in  
the Summer: The only Part of it used is the Herb itself, which  
ought to be chosen recent and odorous: It provokes Urine and

**the Menses,** assists dropsical and Icteric Patients, -and is bene-  
ficial in the Bites of venomous Animals. *R. Hi.* It is, also,  
of an inciding and aperient Quality.

*Dioscorides* makes two Kinds of Polium ; one of which is  
the Poley-mountaln, which he describes in the following man-  
ner: " It is, *soys he,* a small white Shrub, nine Inches long,  
" and full of Seeds ; which, on their Tops, bears a small  
" Head, resembling a certain Species of Clusters, or the grey  
" Hairs of a bald Person: This Head has a disagreeable Smell,  
" but is somewhat sweet to the Taste. The other Species of  
" Polium is more of the Nature of a Shrub, and is not so .  
" strong, with respect to its Smell, and other Qualities." The  
above-quoted Description of Poley-mountaln is so short, that  
Botanists, in different Countries, have taken it, some sor one  
Plant, and some for another. *Toumefori* and *Chomel* have  
given the Poley-mountaln, both white and yellow, of *C. B. P.*a Place in the Materia Medica. *Horman* and *Rociccrus*think, that the white is the *Polium Officinale* ; and *Commelin*and *Philip Mellor* take the yellow *Polium* to be the *Polium  
Officinale.-* But *Ruppius* takes the *Folium Lavendula Foliar.*Pin. for the *Polium Montanum.* And *Joseph Miller,* and  
*Rand,* take the *Polium Maritimum crectum Mons.peliacum* of  
*C. B.* for the Poley-mountain: Concerning which *MagAol*informs us, that the *Polium montanum alburn* os *C. B.* is much  
smaller, and not of fo grateful a Smell. For this Reason, tho'  
the *Polium montanum album* ought to he preferred in the Shops,  
yet I have not omitted the other Species.

Besides the Species already mentioned, there is another, tho’  
not so frequentiy found in the Shops: It grows in *Crete*; and,  
hecause it is os a more grateful Smell', and more efficacious,  
than the others, is, therefore, preferable to them. *Dale.*

2. *Polium montanum.* Offis, Mill. Bot. Offic. 352. Rand.  
Ind. Plant. Offic. 69. *Polium maritimum crectum Mons.pelia-  
cum.* C. B. P. 22I. Raii Hist. Il 524. Tourn. Inst. 206. *Po-  
lium Monfpesisulanum.* J. B. 2. 299. *Polium montanum mi.,  
nusa* Parle. Theas, 23. .ERECT, or MOUNTAIN PO-  
LEY.

This Polium grows to he about a Foot high, much branched  
with squarish woolly Stalks, having two small, white, woolly  
Leaves at a Joint, not above half an inch long, and scarce half  
fo broad, blunt-pointed, indented about the Edges towards their  
Ends: The Flowers grow at the Ends of the Branches, in  
roundish, woolly, thick Spikes, small, and of a white Colour,  
labiated, but haying no Galea, being set in white, hoary, five-  
pointed Calyces. Both Leaves and Flowers have a pleasant  
aromatic Scent. It grows in *Italy,* and the Southern Parts of  
*France,* and flowers in *fuse.* The Tops and Heads are used.

Mountain-poley is opening and attenuating, good for Ob-  
structions of the Liver and Spleen, helps the Dropsy and Jaun-  
dice, provokes Urine and the Menses, and is good against the  
Bites of venomous Creatures; and is an Ingredient in the The-  
riaca Androinachi. *Mellors, Bot. Oss'.*

POLLEX. The Thumb. *Pollen Pedis* is the great Toe.

It often happens, that the Nail of the great Toe, on one  
Side, turns in, and enters the Flesh, thereby occasioning Vio-  
lent Pains and Inflammation, so that the Patient cannot walk  
without the greatest Difficulty. The most general Cause of  
this Disorder is wearing strait Shoes: Whence it is plain, that  
the properest Method of preventing it is to wear Shoes suffici-  
ently wide and easy. If the Nail is already fixed in the Flesh,  
let the Patient keep his Foot in warm Water sor half an Hour,  
till the Nail hegins to soften; and, to make it yield the more  
easily, scrape it with a Knife, or Piece of Glass; then, gently  
raising the Nail with the Finger, or a proper Probe, interpofe,  
between the Nail and the Flesh, a littie scraped Lint, and  
dress with warm Spirit of Wine. This must be repeated, till  
the Pain is removed.

If this Method proves .ineffectual, we must have recourse  
to the Knife. For this Purpose, let the Foot be some time bathed  
in warmWater, for the Reason already given; then place it upon  
a Seat, where it must be firmly held by an Assistant: Then let  
the Operator carefully infinuate a Pair of strong Nail-scissars  
(see *Tab.* LVII. *Fig. 12.* I3.) under the injurious Part of the  
Nail, to cut it off; and, if it does not fall off of itself, it must  
he extracted by the Forceps. Though the Patient will feel the  
Operation extremely painful, yet he will soon be sensible of  
the Ease it has procured him. Let the Part be then dressed  
with scraped Lint, or Compresses moisten'd in Oxycrate, or  
warm Spirit os Wine, or Lime-water; and it may he fomented  
twice or thrice a Day, till the Inflammation and Pain cease.  
In the mean time, the Patient should rest sor some Days,  
till all. Danger of the Pain and Inflammation be removed.  
Sometimes proud Flesh sprouts up, which may he safely con-  
sumed with burnt Alum. In order to prevent the Natl from  
growing again into the Toe, and producing the same Trouble,  
*Dionis* recommends, that the Shoes should be made easy;  
and the Nail should be every Month scraped so thin, with a  
Piece of Glass, or sharp Knife, that it may not have Strength

to ran into the Flesh, by the Pressiire of the Shoe. *Hiisugic  
Surgery.*

POLLINCTURA. The embalming of dead Bedies.

POLLUTIO. An incontinence of the seminal Juices; a  
Species of GONORRHOEA ; which.see.

POLPHOS, πόλφος. A Bulb, or bulbous Root.

POLY.EMIA, πολυαιμία, from πολὑς, much ; and ἄιμα,  
Blood. A Redundance of Blood, or **PLETHORA.**

POLYANTHOS. A Name son the **PRIMULA VERIS.**

POLYANTHUS. **A** Name for the Acarna. See CAR-

**DUUs.** A . '

POLYARCHION. The Name of a Malagma; thus called  
from *Polyarchus,* its Author. It is described by *Galen, Lib.* Β.  
*de Comp. M. S. L. Cap. S.* and *Lib. I. de Comp. M. S. Gen. .  
Cap. y.* From whence *Aetius* and *Paulus AEgfineta* have tran-  
scribed it. .

POLYCHRESTOS, πβλὑχρηστος. An Epithet for many  
Medicines,, importing their being good. Or useful for many  
Disorders; from πολὑς, much, and χρηστὸς, usefid.

The **BALSAMUM POLYCHRESTON is** described under the  
Article **BALSAMUM.**

In *Lerners.s Pharmacop.ee Univerfelle,* we find the following  
Pilis described: . .

*Pilulae Polyclit esicz.* Mesne.

*— Polychrestee.* Qpercetani.

*— Polyehresta.* Qnercetani Reformatae.

*— Polyehresta Mayores.* Mefue. .

*Polychrestee Mayores Reformates.*

*— Polyehresta Minores.* Mesne. ‘

*Polychrestee Minores Reformata.* i

POLYCLONOS. Ramose, or abounding with Branches.

An Epithet for the *Artemisia,* Mugwort.

POLYCNEMON. See **CALAMINTHA PALUSTRIS..**

POLYETES ANTIDOTUS. The Name of several An-  
tidotes described by *Nicolaus Myreps.us.*

POLYGALA. . . . .

The Characters are; ...

The Leaves are alternate; the Calyx consists os five Leaves,  
the two larger of them expanded like Wings, and the three  
lesser acute ; the Flower'is monopetalous, anomalous, person-,  
ated, with itsthinder Part perforated, and its fore Part bilabiated,  
the upper Lip bifid, and the lower beautifully fimbriated, or  
fringed: It is furnished with eight Stamina, and disposed in  
loose Spikes. The Fruit, which is embraced by the quinque-  
phyllous Calyx, as with Wings, is compressed, gaping into two  
Parts, and divided into two Capsulas, or Celis. \* '

*Boerhaave* mentions fix Species of Poly gala; which are,

I. Polygala; Vulgaris. *Co B. P.* 2I5. *Tourn. Inst.* I74.  
*Bocrh. Ind. A.* 236. *Polygala.* Offic. Ger. 448. Emac. 563.  
Raii Hist. 2. I335. Synop. 3. 287. *Polygala minor.* Park!  
Theat. I332. *Polygalon multis.* J. B. 2. 386. *Flos Ambarsi  
valis vulgo.* Herm. Cat. 5oo. MILKWORT.

*Gefner,* who, in his Letters, calls this Plant *Amarella,* af-  
firms, that an Handful of it, infused in a Glass of Wine, purges.  
Very well, and without any ill Consequence. *'Martyofs Tourn..  
fort. .. .*

This Plant is most frequently found in dry Meadows, .and  
flowers in *fuse.* The Herb itself is only used. Its bitter  
Taste proves it to be of an hot and drying QualityIts Leaves,  
boiled in Wine, purge Bile, by Stool. . Gestes.

This is the Polygala of the Shops of *England,* and of the.  
modern Botanists: But that it is the Plant to which *Dioscorides'*gives the same Name, neither its Description nor Virtues will  
suffer us to believe; fince it has neither the Leaves of the Len-  
til, nor. a Power of increasing Milk, both winch are ascribed  
to the Polygala. *Dale. .. .*

2. Polygala; flore rubro; purpurascente. *Hi East. Pern.*

o. 6. *F.* II. *Fig. u.. - -*

3. Polygala; alba. *Tabem. Ic.* S3I. -

4. Polygala j carnea. .. .... - - ...

5. Polygala; Violacea.

6. Polygala; frutescens; folio Buxi; flore maximo. *Oldens.  
T. Vihe Charnmnaxus, store Colutece ex purpura rubescente.*C. Β. P. 47I. *Anonymos, flore Colutea.* Clus. H. IO5. *Pfeudo-  
Chamabuxus.* Η. Eyst. Vera. o. 6. F.I2. F. 3. *Boerh. snd.\  
alt. Plant. Pol.* i.

**PoLyGALA is», also, a** Name for several Sorts.of **CoRoNIL-**LA; which see.

Besides the foregoing Species of Polygala, *Dale* mentions .  
the following ;

PoLYGALA vERA. Offic. *Polygala mayor Mafsilioiica.*C. B. P. 349. *Polygala Valentina maritima.* Park. Theat.  
228. *Colutea caule Genista fungoso.* J. B. i. 383. Raii Hist.  
I. 925. *Coronilla caule Genista fungosc.* Tourn. Insh 650.  
*Astragalus MatthioU.* Ger. Ioco. Emac. I 2 an. MILK-  
VETCH.

This Plant is cultivated in Gardens, and flowers in Summer..  
The Only Part *of* it used is the Herb itself, winch, according

*in Diofcorides,* increases the Quantity Of Milk, is drank in some  
proper Liquor.

The *Polygula* was so common and well-known a Plant among  
the *Greeks,* that *Diofcorides* has only given a very short Descrip-  
tion of it, which has laid a Foundation for various Disputes among  
the Botanists. . The *Polyuria* here spoken of, seems to be the ge-  
nuine *Polygula* of *Diofcorides* ; because, as *Matt hiatus* justly ob-  
serves, it exactly agrees with the Description of that Piant. *Cal-  
ceolarius* assirms, that be has often found from Experience, that  
It augmented the Milk of Nurses. *Dale.*

POLYGALON.. A Name for the *Carcmilla', minima,* and,  
also, for the *Polygala vulgaris. .*

POLYGANON. A Name for the *Polygala, craulgaris',* and,  
also, for the *Onobryciiis major, stliculis echinatis, cristatis, in  
Spica digestis.*

POLYGLOTTA. The Name of a beautiful *Indian* Bird,  
remarkable for its Song, but of no Use in Medicine.

POLYGONATUM.

The Characters are ;

The Flowers are monopettious, Bell-shaped, tubulated, naked,  
' divided into six Segments, and furnished with sixSramina, which  
grow out of the insides of the Divisions. The Ovary, which  
grows in the Centre of the Flower, produces a long Tube, fur-  
nished with a fimbriated Apez; and becomes a soft, globular  
Fruit, full of roundish Seeds.

*Boerhaave* mentions seven Species of *Polygonatiims* which arc.

I. Polygonatum; latifolium; vulgare. *C.S.P.* 303. Γοιιτκ. ’  
*lest.* 78. *Boerh. Ind. Ac. 2. 6^. Polygonatum, Sigillum Selomonts.*Ossic. *Polygonatum.* Ger. 756. Emac. 903. Raii Hist. I. (An.  
Synop. 3: 263. *Polygonatum vulgaret* Park. Theat. *696. Polygo-  
asatum, vtApoSigillum Salomonis. J.* Β. 3. 529. SOLOMON’S  
SEAL. 1 . . ’

The Root of *Solomiasu seal is.* abotrt a Finger thick, white  
and woody; sull of flat, real-like Impressions, creepingupon the  
Surface of the Earth, with many pretty large Fibres. .The Stalks  
grow to be about a Foot high; single, and-not branch’d; round  
and slander; cloathed with pretty large, oval, nervous Leaves, of a  
bluish-greed shining Colour,set alternately on rhe Sralks,. and in-  
dining all to One Side, and having the Top flowing that way.  
The Flowers come from the Bosoms of the Leaves; on pretty  
long Foot-stalks, generally two together; being hollow and cy-  
lindrical; of One Leaf; parted, at the Ends, into five Segments;  
thefe, allo, bang all one Way, and are of little or ho Scent. They  
are succeeded by round Berries, green at first, and black when  
ripe; divided into three Parts; containing small oblong Seeds.  
It grows in Woods and Copses, in divers Parts of *England,* and  
flowers in *May.* The Leaves and Root are used.

Solomon’s Seal is vulnerary and restringent; good to stop all  
Kinds of Fluxes and Haemorrhages; helps to consolidate Wounds,  
Fractiures, and Ruptures; especially the Root, which, preserved  
in Sugar, is commended by *Mattlnelus,* as *of* great Service against  
the Fluor Albus. A Cataplasm Of the Root is good to take  
away, black and blue Marks, arising from Contusions. *Millers  
Bot.Qsse. :.*

The Fruit of the, Polygonatum is black, and cover’d with a  
Meal like, fresh Plums; which, perhaps, deceived *Caselpinus,*who assirms it to be whitish.

*Puchstus,* to accommodate himself to *Dioscorideys* Description  
of the Polygonatum, fancied he found something like the Taste  
of Pomegranates in this Species, lt might be so, perhaps, in  
*Greece,* but *Galen* found nothing in it, fave an unpleasant Bit.  
terneis. ’ . ' .....

The Leaves os our Solomon’s Seal are insipid. They have  
something glutinous in them, which gives flight Nauseas. The  
Roots are fweet, a little acrid, and glutinous; they give a faint  
red Coloitr to the blue Paper; and the Leaves more faint. This  
Plant teems to contain a viscous Phlegm, mix’d with a great  
deal of Oil. For, by the chymical Analysis, it yields little besides  
some acid Liquor and Oil; a little Earth, and fix’s, but no  
volatile Salt. *"s'*

*Schroder* assirms, that fourteen or fifteen Berries of Solomon’s  
Seal provoke Vomiting ; and they fay, that one Dram of its Root  
has the fame Effecti Some macerate half an Ounce of it all  
Night in a Glass of White-wine, and give the Infusion of it to  
drink, for several Months together, to thofe that have Ruptures.  
The Patients never vomit, and find great Relief; especially if  
the Roots are applied to the Part ar the same time. They are  
very good, also, for all sorts of Contusions. The distil’d Water  
clears the Face, and beautifies the Complexion. The Decoition  
of the whole Plant cures the Itch, and the like cutaneous Dis-  
eases. *Martyris Tournofort.*

a. Polygonatum; latifolium; vulgare; cauliculis rubentibus.

3. Polygonatum, latifolium, maximum. *C. B.P.* 303.

4. Polygonatum; latifolium; flore dtrplrcr; odoro. *Ps. R. Par.*

5- Polygonatum; latifolium; Heilebori albi foliis. C. *Β. P.*3o3.

*6.* Polygonatum; latifolium; minus; flore majore. *C. Β. P.*303.

7. Polygonatum; angustifolium; non ramosum. *C.S. P.* 303.  
*Polygonatum, angustifolium.* J. β. 3. 53I. *Polygonatum, alterum.*Ded.p.345. *Boerh. Ind. ule.Piant.*

POLYGONUM.

The Charadiers are , . ... .

The Root is creeping, and very fibrous; the Stalks and Branches  
are very full Of Joints. The Calyx in deeply cut into five Seg-  
ments, which, io their lower Part, are herbaceous; but, above, .  
os a flosculous Colour; when ripe, the Calyx becomes a Cap  
rule of Seed. The Flowers are produced at the Wings of the  
Leaves, and are conced’d, in their first Rise, finder a very thin  
Membrane; the Seed is edactiy triangular.

*Boerhaave* mentions two Species of *Polygrniim*; which are,

I. Polygonum; latifolium. *C. B.* P. 201. *Tourn. Inst. 5I0.  
Soerh. Ind. Λ.* 2. 2S. *Centinodium, Polygonum.* Offic. *Polygo-  
num mas vulgare.* Ger. 45I. Etnac. 565. Raii Hist. I. 184. *Po-  
lygonum mas vulgare majus.* Park. 4.13. *Polygonum dure CentinOr  
ilia.* J. Β. 3.374. COMMON KNOT-GRASS. -

Tire Stalks of this Plant recline pretty, much to the Earth, be-  
ing smooth, and finely chaneled, slender, and branched, full of  
Knots or Joints, at which grow long oval sharp-pointed Leaves,  
set alternately on short Foot-stalks. In some Plants these will be  
broader, and more oval, in others longer and sharper ; whence ।  
Authors have made two Sorts. At the joints, with the Leaves,  
grow several small, staminous, blinking Flowers; sometimes of '  
a white, and sometimes of a redish Colour - in each of which'  
grows a small black triangular Seed. The Root is long and large,  
and strikes deep in the Earth. It grows every-where by Way-  
sides, and in waste Places; flowering in Summer; the Herb is  
used. ; - .

Knot-grass is cooling, drying and binding, a good Vulnerary, .  
and helpful against all Kinds of Bleedings, either external or in-  
ternal, as against Fluxes; and outwardly applied, is good for Blood-  
shot, inflamed Eyes. *Millers Pot. Osse*

This Plant has an herby, glutinous Taste, and a little Acid; it  
gives a deepTinsture of Red to the blue Paper; it is likely, that  
the Salt of Koot-grafs resembles Alum, but is mixed in this  
Plant with a little Sal Ammoniac, and a great deal of SulphuI.  
For,

By the chymical Analysis, it yields a great deal of Acid, Earth,  
and Oil, a little volatile, concrete, and very lixivial fixed Salt.

Knot-grass is very vulnerary and astringent; the Juice,  
Ptifan, or Infusion of it in Wine, is given to drink for the Dys-  
entery, Piles, Spitting of Blood, and all Sorts of Haemorrhages ;  
the Extrait has the same Virtues , the Leaves, bruised, cure  
Wounds. *Martyris Toarnefort.*

*2.* Polygonum; oblongo; angusto; folio. c.B. P. 28I. *M.  
Pl.* 2. 59 I. *Boerh. Ind. alt. Plant.*

*Polygonum* is, also, a Name for several Sorts of *Herniaria.*

*Polygonum hacciforum.* A Name for the *Ephedra s mars,  
sima ; minor. .*

*Polygonum CocPoferuin.* See Coccus and KNAwsL.

*Polygonum Germanis.* See KNAwEL.

*Polygonum maritimam.* A Name for the *Ephedras mari-  
tima ; maser.' ' .*

*Polygonum minimum.* A Name for the *Pioravselfosio Ala  
fines, gilabro, stsseulis plurimis. '*

*Polygonum montanum.* A Name for the *Paronychia., Hi.,  
spastica* ; and for the *Paronychias Hispanica; nivea polyanthosc*

*Polygonum, perenne.* A Name for *thaTelephiurn, Dioscoridis.*

POLY1DAE SPHR AGIS. The Name of a Pastil, deserihed  
by *Celsas, Lib.* 5. *Cap.* so. It consists of scissile Alum, four  
Drams; Vitriol, two Drams; Myrrh and Aloes, five Drams; of-  
the Heads of Pomegranates, and Bulls’GaIl, each six Drams: All  
which, when triturated, are to be mixed with austere Wine.

POLY MORPHOS. Multiform an Epithet for the *Os Sphe-  
nOides.* See CAPUT.

- POLYNEURON. A Name for Plantain.

POLYOSTEON. A Name for that Part of the Foot which  
consists of a great Number of Sones.

POLYPHARMACOS. The fame as **PoLycHREsToS.**

P0LYPHOR0S. An Epithet of Wine,- importing strong  
and generous.

POLYPODES. The fame as MILLESEDEs.

P0LYP0D1TES. An Epithet for Wine impregnated with  
*Polypody.*

POLYPODIUM.

The Characters are;

The Plant is not ramous; the Leaf is cut to the very Rib, into'  
narrow Oblong Parts, not adhering to a Pedicle, but with a wide  
Base embracing the Rib. Oftentimes the Lobes, or Segments,  
are not divided as far as the Rib, but are continuous, or joined  
by a leafy Struiture. The Fruit grows on each Lobe, in a double  
Row, parallel to the Rib of that Lobe, and are membranaceous,  
covered with a chin Pellicle, and surrounded with an elastic cre-  
nated Circle, which explicating itself into a strait Line, discharges,  
with some violence, angulons Seeds, growing within two very  
tender Membranes.

*Boerhaave* mentions fix Species of *Polypodinm.,* which are,

I. Polypodium, vulgare. *C.* R. P.357. *Pork.* Ince. *Tourn. Inst.*54o. *Eosrk.lnd.A.* 24. *Polypodium,^uercinum:QSic. Polypodium.*j.'B. 3.746. Ger.972. Etnac.II3a. Raii Hist. I. I37. Synop.45.  
*Filix Polypodium dicta.* Herman. Cat. as 8. POLYPODY OF  
THE OAK.

This is a capillary Plant, Consisting only of pretty large, long.  
Unbranched, pinnated Leaves, whose blunt Pinnae, are very finely  
indented, and grow not directly Opposite to one another on **the**Stalk, but alternately, a littie above one another; the Leaves ter-  
minate in a sharp Point, having no Pinnae on the lower Part Of  
the Stalk: On the back Part of each Pinna, come forth the  
Howers and Seed, in double Rows of round Tubercles, Of a  
redish-brown Colour- The Root is {lender, and full Of small  
Knots, winch appear like the Feet Of an Insect, whence it takes .  
the Name of *Polypodium* , it is of a brownish Colour on the  
Outside, and greenish within, of a sweetish styptic Taste. It  
grows upon Old Walls, and at the Roots Of Trees, and in the  
decayed Bodies Of them; that which grows on the Oak, is most ’  
esteemed. The Roots only are used.

They are accounted opening, and gently purging, but are rarely  
given by themselves, but put among those purging Simples, which  
are stronger , they are supposed to purge biliose, melancholic  
Humours, and to open Obstructions Of the Liver, and to help  
the Jaundice and Dropsy, and provoke Urine ; they are good  
. sor the Scurvy, and are frequently an ingredient in antiscorbutic  
Diet-drinks. *Miller's Bot. Off.*

The Root, heing analysed, yields several acid Liquors,'a little  
urinous Spirit, no concreted Volatile Salt, a good deal of Oil, and  
a moderate Quantity Of Earth. The Antients believed this Root  
was purgative. *Mwardes* was the first among the Moderns, who  
knew that it loosened the Body but Very gently. And *Dodonaeus*Confesses it does not purge at all, unless it is boiled in Cock, broth,  
with Mallows and Leeks. It sweetens the Blond, and removes  
Obstructions of the Bowels. It must he used in a dry Cough,  
when the expectorated Matter is saltish, in the Asthma, Scurvy,  
and hypochondriac Affections. It is an Ingredient in several  
Compositions. *Martyris Tournofort.*

*- 2.* POlypodinm , minus. *An.* C. *Β.* Ρ. 353. *Hod. p.astAn*

3. Polypodium, sensibile, autPOlypodium Virginianum. *Munt.  
H.* 289. *Herba viva, foliis Polypodii.* C. β. P. 359. *Filix Indies,  
Polypodii facie.* Menczel.

4. Polypodium, Cambro-Britannicnrn ; pinnulis ad margines  
laciniatis. *Raii* Η. I 3 7. *Filix, amplissima* 5 *lobis foliorum laciniatis,  
: Cambric a.* Plukn. Phytogr. *T.* 3o.

5. POlypodinm, tenerum minus. *Boerh.Ind. A. i.’sc Dryopte-  
ris.* Offic. *Dryopteris Adversariorum.* Get. Emac. I I 35. *Dryop-  
teris sive Filix sisuerna reperti.* Park. Io4I. *Filix ssltecrna.* C.B.  
358. *Filix minor non ramosa* LB. 3. 746. To urn. Inst. 727.  
Rail Hist. 1.46. Synop.48. OAK-FERN.-

This Plant, the Whole of which is used, grows in marshy and  
putrid Places: When triturated with its Roots, it takes Hairs Off  
the Body. It is to be apply'd by way of Ointment, and, when the  
Body is in a Sweat, the Sweat is to be wip'd Osh and the Ointment  
apply’d again. *Dioscar.* It is possess'd Of a septic Quality.

*Bondeletius* affirms, that he has sound had Effects produced  
by this Plant, when mixed with Medicines instead of Polypo-  
dinmj hy forne ignorant Apothecaries Of *Dauphine.* I have some-  
times found it in the Shops Of some Apothecaries under the Title  
of *Adianthum album. Dale.*

*.- 6.* Poiypodium ; angustifolium; folio vario. *Tourn. Inst.* 54o.  
*Boerh. Ind. A.* 25. *Lonchitis.* Offic. *As.pcra.* Ger. 978. Emac.I I40.  
Raii Hist. I.I3S.Synop. 45. *Aspera minor.* Parle. Io42. .Minor.  
**C.** B. 359. *Lonchitis altera foliis Polypodgi.* j. B. 3.744. *Lonchitis  
altera foliis Polypodii, As.plenium siylveflre nonnullis.* Chain 556.  
*Filix Jive Lorichitis altera foliis Polyp odei.* Pluk. Almag I52.  
ROUGH SPLEENWORT.

This Plant grows in moist, woody, rough, and Uncultivated  
Places. The Herb is proper for agglutinating Wounds, without  
suffering an inflammation to Come On. When drank in Vine-,  
gar, it consumes the Spleen. *Dioscor.* The Root is aperient and  
diuretic. *Boerhaave.*

POLYPOSIA, πολυποσία. A copious drinking Of Wine.

POLYPUS, πολὑπος. A Name for any. Animal possess'd Of  
many Feet. But it is generally apply'd to a large Sea-fish, resem-  
bling a Cuttle-fish. It has eight Claws Or Legs, which serve it:  
to swim, walk, and Convey its Aliments to its Mouth. These  
Claws, the' distant from each Other, are, nevertheless, joined by  
a large Membrane, winch runs between them. The four middle.  
Claws are the largest, in Bulk surpass a Man’s Arm, and are all  
along adorned with a double Range of Tubercles, like small  
Horns. The sour Other Claws are Call’d Brachia, Crura, Cirri, and  
Barba. The Eyes of this Fish are lodged at the Root of two Of  
these Claws, anti its Mouth, which is furnished with Teeth, is  
situated in the Middle. It has upon its Back a long Body, which,.  
like a Rudder, It turns sometimes one way, and sometimes an-  
other, according aS it intends to steer its Course. Its Flesh is not  
Covered with any apparent Skin, hut is Ipongious or porous, hard,  
and of difficult Digestion. This Fish is sound in the *Adriatic*Sea, and feeds upon Shell-sish, human Flesh, when it can find it.  
Fruits and Herbs: It, also, loves Oil; it has, like the Cuttle-fish,,  
near its Stomach, a Bladder full of a black or redish-brown Li-  
quor, which it discharges, when it intends to Conceal itself. Its  
Eggs are like those Of the Cuttle-fish, but of a whitish Colour..  
It contains a large Quantity Of Oil, Phlegm, and Salts, both ofa’  
volatile and- fixed Kind. Its Flesh, when roasted and earen, is good  
against a windy Colic. *Lemery Trait f des Drogues.*

POLYPUS.

That Men in the Flower of therr Age, and blessed with anaturally sound and robust Constitution, often die suddenly and  
unexpectedly, is sufficiently confirmed by Experience. Nur  
are the Vulgar ignorant, though Physicians cannot often account  
for the Thing, that there are some chronical and Violent Dis-  
orders, whose Diagnostics and Prognostics are highly difficult,  
and winch are in themselves so obstinate, aS to prove mortal.  
But, the more frequent these Diseases are, and the more s0nd  
People are of knowing their Natures, the more surprising it is,  
that the genuine Causes of such Effects have so long remained  
latent, till luckily the modern Physicians began to make Anar.  
tomical Dissections *os* the Persons who have died of fuch Dis-  
orders, with a View to discover the genuine Condition of their -  
Viscera ; for Medicine has made more Advances in this present  
Age, by means of Anatomy alone, then were made in all pre-  
ceding Ages, in which it was neglected ; for as, by dissecting  
Bodies, many Causes of sodden Deaths, and dangerous Dis- .  
eases, have heen detected, so the most considerable of these  
are the Coagulations and Concretions of the Blood, firmly im-  
pacted in the large Veffels os the Heart and Lungs, and known  
by the Name of *Polypuses* ; which, by intercepting and oh-  
structing the *free Circulation os* the Blond, are capable, not  
only of destroying all the Functions,but, also, Lise; for which  
Reason they are with Difficulty cured, and ought to have their  
fatal Causes in due time prevented, or removed by proper Medi-  
cines.

But that we may prove, that such Polypose Concretions  
have frequently heen sound, in dissected Carcases, to he the  
Causes of Death, and incurable Diseases, we shall enume-  
rate a few Instances of this Kind, from the Writings of mo-  
dem. Authors. Thus *Bartholine, in Lib. de Lacteis Thoraci-  
cis. Cap.* I4. informs us, that in those who died suddenly,  
he, upon saying them open, found the larger Veffeis of the  
Heart filled with a ConCretedBlood. This is, also, evinced ,  
by *Bonetus, in Anatom. Pract. Lib.* 2. *Sect.* 2. *Obs. esc* where  
he treats at large of sudden Deaths produced by extraneous bo-  
dies found in the Sinuses of the Heart. And *Frdcricus Lose  
situs, in Lib.* I. *Qbs.* 15. mentions a Boy of three Years of  
Age, who, though seemingly robust, and in good Health, yet  
died unexpectedly in his Mother's Arms : Upon dissecting the  
Body, the Viscera appeared perfectly sound, so that, besides an  
highly coagulated Blood in the Ventricles Of the Heart, no -  
other Cause of Death could be discovered. *Carolus Fracasto-  
rius,* who had many Opportunities of dissecting those whodied  
suddenly, found nothing as the Cause, but Blood concreted and  
impacted in the Ventricles ofthe Heart, and in the pulmonary  
Vessels. And, that many died suddenly from an Infarction of  
the Vessels, is fufficientiy evinced by *Panarolius,* who informs  
us, that, in the Year I656, when sudden Deaths raged so  
much, many were suffocated by too large a Quantity of Blood .  
retained within .the Heart; so that, upon laying Open the Bo-  
dies of these Persons, he hardly found any other Cause for their  
Misfortune, thana remarkable Infarction Of the Vessels. *Jo-  
annes Daniel Horstius,* in *Manuduct. ad Med.* informs us; that  
in a Person who died suddenly, he found a whitish Phlegm in  
the Lest Ventricle of the Heart. And *Rscvcrius, in. Cont.* I.  
*Obs.* 82. telis us, that, in the Left Auricle of the Heart ofa  
Man who died suddenly, he found a-thiek, compact, anden-  
tirely white Matter, resembling boiled Bacon. ,\* -

From what has been said, it is sufficiently obvious, that in all  
Ages such Concretions of Blood have been formedin the Heart,  
and larger Veffeis, as have produced sudden Deaths, and Other  
incurable Disorders. Bot fince, in the Writings of the Antients,  
the Word *Polypus* does not occur, we may reasonably conclude,  
that the Modems have bestowed this Name upon such Concre-  
tions, because they generally send off many Ramifications, di-  
sperfed here-a nd-there among the adjacent Vessels-; but, not-  
withstanding this Interpretation, it is to he observed, that .the true .  
Polypuses are only such Concretions, as consist of a whitish,  
fibrous, and pretty compact Substance, and are widely different  
from grumous or coagulated Blood.; which, though it may  
create various violent Disorders in several Parts, especially when  
lodged in the. Heart and Uterus, yet it hardly deserves the Name  
of a Polypus, but is, for the most part, by Authors called a  
*Pseudo-polypus.*

. We now come to consider, why polypofe Concretions are  
so fatal to Mankind. Now these Concretions are principally  
the Causes of violent Disorders, and of Death, when their  
Bulk is so increased, or, which more frequentiy happens, when  
they are, either by a slight internal, or external Cause, so re-  
moved from then Seat, as to intercept and disturb the free Cir-  
culation of the Blood from one Ventricle of the Heart, through  
the Lungs, to the other ; or when, by blocking up the Ori.  
sices of the Veffeis, they entirely destroy the Circulation ofthe  
Blood; for so long as small polypose Concretions onlv adhere to  
the Sides of the Veffeis of the Heart, and of the other Vessels,

they do not much retard the Circulation of the Blond 5 and for  
that Reason do not manifestly injure the Functions. This is  
confirmed by Experience, which teaches us, that such Concre-  
tions may he formed in the Auricles and Sinuses of the Heart,  
on account of the Various Windings, and fleshy Fibriis, about  
the Divarications of **the** Vessels, and, also, in other Parts of **the**Body, whilst, at the same time, the Blood is, notwithstanding,  
suffered to circulate freely. Thus *Vifalius, in Lib.* I. *Cap. 5.  
de Corporis humani Fabrica,* informs us, that, in the Left Ven-  
tricle of the Heartofa certain Man, he found almost two Pounds  
of glandular, but blackish Refit, the Heart being extended like  
**the** Uterus ; and he adds, that though the Patient's Pulse was  
surprisingly unequal and Various, yet he walked about like a  
found Person for several Months before his Death, till at length,  
.during the last Weeks of his Life, his Pulse became so greatiy  
intermittens, that, during the Time usually requisite for nine  
natural Strokes of the Pulse, only two or three could be perceived  
.in him.

We next come to consider what Diseases are produced,, obsti-  
. nately sustained, or disposed to in unhappy Termination, by  
means of polypose Concretions: Among these, the most consi-  
derable are various Disorders of the Breast, such aS Pleurisies and  
Peripneumonies, among the acute kind ; and, among the chro-  
nical kind, all sorts of Asthmas, the suffocative Catarrh, the  
Chin-cough, the Phthisis, and a Spitting ofBlood : AS for this  
lash it is certain from Experience, that, in consequence of a  
- Stagnation of viscid and congested Blood, it easily disposes to po-  
lypose Concretions, which, in their Turn, produce a Spitting  
of Blood ; for if, by means of these polypose Concretions, the  
free Passage and Repaflage of the Blond through the Pulmo-  
nary Vefleis is disturbed, the Blood must necessarily be accumu-  
lated in the capillary Veffeis of the Pulmonary Artery ; and at  
last, upon the breaking of some Ramification, expectorated by  
way of Spit, especially in Persons disposed to an Haemoptysis.  
For this Reason it is no unusual thing for Polypose Concretions  
' to he found in dissecting Persons, who have died of Spitting of  
Blood : Thus, in *Hioffmarsts Consult. Med. Tom.* I. *Sect.* 2.  
*, Obs.* 73. we have an Instance of a young Man of seventeen  
Years of Age, who died of a Spitting of Blond, accompanied  
.with a flow Fever j and, upon laying open his Body, there was a  
callous Concretion sound in ins Pulmonary Artery. *Bonetus, also,  
\ in Anatom. Pract. Tom. i.. Lib.* 2. *Sect.* 5. *de Sputo Sanguinis,*.gives ut an Account of the Dissection of a Person who died of a  
Spitting of Blood, made by *Sylvius* in the Hospital of *Leyden,* in  
; the Year I664. In both Ventricles os this Person's Heart there  
. was found a thick, fibrous, and, as it were, fleshy Matter, extended  
. into all theVeffeis running off from the Heart. But, particularly,  
.fuch in Concretion, above three Spans long, was extracted from  
’: theIieft Jugular Vein J but this Matter, to which much gru-  
.mous Blood adhered,, was, in the Ventricles of. the Heart, of a  
..Considerable Thickness, and, in a fingular manner, interwoven  
’ -with the fleshy Fibres of the Heart, which Sts Fibriis, as it were,  
embraced. Besides, in the Middle there appeared a grumous  
Blood, and it seemed to have minute Vessels. I have, also,  
.Teen polypose Concretions in those who have died of a Phthisis.  
-And *Bauhins,* as we are informed by *Georgius. Horstius, in  
Dp. Tom.* I. tests us in express Words, that he almost always  
found polypose Concretions in those who died of a Phthisis and  
Dropsy. -The Curious may, with .respect to this, consult *Need.,  
ham de Formatione Foetus, Cap.* 2. *Malpighius, de Polypo Cordis*and *Harderus,* in *Obs.* 45,|46, and 47.

' . An Asthma, especially that which is of the incurable kind,  
arid on which depends a Dropfy of the Breast, is almost always  
generated and sustained by polypofe Concretions. I have often  
'had Opportunities of dissecting the Bodies os such as have died  
of this kind of Asthma; and found either Polypuses in the Heart,  
jand Pulmonary Veflels, or a fetid Serum extravasated in the  
-. Cavity of the Thorax. Nor are there wanting a sufficient Num-  
her of Observations to confirm this. Thus the celebrated *Gra-  
vius,* a Physician to the Army, in his *Dissertatio de Asthmate  
Convulsuso,* informs us, that, upon laying open the Bodies of  
fifty Soldiers, who died of Dropsies Of the Breast, and Asth-  
mas, he found Polypose. Concretions in theVentricles of all their  
Hearts. *Lancisi,* also, in his Treatise *de Motu Cordis,* gives  
\* aIs the following memorable Case: A Man of twenty-four Years  
of Age, of a stender Habit, and accustomed to a gross Air, and  
coarse Aliments, was seized with frequent Anxieties about the  
Heart, and Paintings, accompanied, with a Violent Difficulty of  
Breathing, and a Refrigeration of the Extremities. His Pulse  
was small and unequal, and his Jugular Veins and Abdomen  
were surprisingly tumid, till ar last he died of a stow Fever.  
Upon laying open his Body, his Heart was found wonderfully  
flaccid and small, with polypose Concretions filling both its Ven-  
tricles, and the Pericardium firmly adhering to it. More Ob-  
servations, with respect to that Asthma which iS generally ac-  
companied with a Dropsy of the Breast, may he seen in *Digmer.-  
heseck. Anatom. Lip. ya. Cap. o. Bartholin. Epist.* 2. *Gent.* 4.

and *Epist.* 56. *Cent.* 2. *Harderus, Obs.* 56. *Larder de Cords,*Cap. 2. *Pezaldus, Obs.* 58. and 6I. *Ruyfch, Obs.-ig.*and in the *M. N. C. Dec.* 2. *An.* 9. *Obs.* I74. and a.  
*AnA.Oif.sm. . .*

A Dropsy os the Pericardium and Thorax not only frequentiy  
accompanies an Asthma brought On by polypose Concretions ;  
but, also, dropsical Tumors of other Parts of the Body derive  
their Origin from the same Cause. Hence nothing occurs more  
frequently in Practice, than to observe a spasmodic and convul-  
-five Asthma, arifing from polypose Concretions, succeeded  
.by a cachectic Habit of Body, cedernatous Swellings of **the**Feet, and sometimes an Afcites j for when the Circulation  
of the Blood, from the Right Ventricle of the Heart, through  
the Lungs, to the Left Ventricle, is hindered by such a poly-  
pose Concretion, the whole Circulation of the Blood, thro’  
the Vena CaVa, must necessarily he rendered flower; and Vio-  
lent Stagnations by this means must he produced here-and-there  
in the inferior PartS, and particularly in the Liver, which  
when obstructed or indurated, the Blood hegins to stagnate in  
the Mesentery, and all the Ramifications os the Vena Porta:  
Whence the Serum, heing secreted, regurgitates to the lympha-  
tic Vefleis, which, when too much distended, are formed into  
Hydatids, the Breaking of which produces a fatal Extravasation  
.os Serunt. Memorable Observations of this kind occur in  
*Rhodius, Cent.* 3. *Obs. An* and *Peyer, in Hist. Anatom. Capo*6. *iPeps.er,* in his *Excreitat. de Apoplexia,* informs uS, that  
he observed fibrous and pituitous Concretions in the Bodies of  
those, who, during their Lives, had been for along time cache-  
ctic, or often afflicted with Diseases. *Smetius, in MisceL Me.,  
-die. Lib.* IO. gives us a singular Instance os an oedematous Tu-  
mor in both Legs, arifing from, a tense and somewhat hard  
Polypus, and which, reaching as far as the Thighs, formed a  
full and hard Tumor in the lower Belly between the,Pubes and  
the Navel, and which at last filled all the Region of theAbdo-  
men. *Bonetus,* from *Boyle, Obs.* 9. makes mention of Poly-  
puses in the Hearts os two Women, one of whom died of a  
Dropsy, and the other of a Cachexy... *AndAlbinus,* in *Dessert,  
.de Polypis, These* 5. mentions a memorable Species of Dropfy  
in a Man for some time afflicted with a Difficulty of Breathing,  
Palpitations and Anxieties of the Heart, who had Tumors in -  
his Arms, and his Veins tumid, and protuberating into Knots,  
inconsequence of a pretty large Polypus ascending from the  
: Right Auricles *of* the Heart into the Trunk of the vena Cava,  
and sending off Ramifications; but, in fuch a Situation, **the**Dropsy infallibly proves mortal.

But, waving the farther Consideration of an Asthma, and of **2**1 Dropsy, which often accompanies it, we now come to investi-  
gate the other Disorders *of* the Breast, which arise from poly- .  
pose Concretions. The most considerable of these may be justly  
accounted the suffocative Catarrh; for, upon laying open the  
"Bedies os such as have died os this Disorder, polypose Concre-  
. tions have, sor the most part, been sound to be the principal  
Couses os Death, as. is obvious from *Bartholini Cent. st.. Obs.*86. *Greiselius, in Me N. Co An. Obs.* 74. and *Mal-  
pighi de Polypo Cordis* ; for the last-mentioned of these Au-  
others informs us, that in all those he had laid open, who died  
either of an Apoplexy, or os a suffocative Catarrh, he found  
callous, Vifcid, and glutinous Bedies in the Heart find Brain,  
and frequently in both. Nor must we overlook a Palpitation of  
the Heart,, which is, for the most part, and, when of the chro-  
nical kind, almost always, produced by polypose Concretions.  
But, referring the Curious to the Article **PALPITATIO, we**come to consider those inflammatory and highly acute Disorders  
of the Breast, a true Pleurisy, and Peripneumony, which often  
arise from Stagnations of the Blond, produced by polypose Con-  
cretions.. Thus *Malpighi,* in his Treatise *de'Polypo Cordis,*affirms, that the Bodies of pleuritic Persons, when laid open, are  
found to contain a large Quantity Of white Portions os concre-  
ted Matter, not only in the Praecordia, bus, also, in the Liver  
and Veins. *Willis,* in his Treatise *de Febribus, Cap.* II. in- .  
forms us, that; upon laying open the Bodies of those who died  
of Pleurisies, the Blood has been found concreted into long Por-  
tions in the Sinuses of the Heart, and every-where about the  
Cavities of the Veffeis. *Peycr,* also, in his *Excreitat. Anat.*mentions a Man os Sixty, who died of a Pleurisy changed into  
a Peripneumony ; and, upon opening his Body, there appeared  
in his Heart large and tenacious polypose Concretions, resem-  
bling Portions of Fat.

Polypose Concretions prove the Causes of incurable Diseases,  
not only in the Hears, and annexed Pulmonary Vessels, but,  
also, in other PartS, especially the Veins, as is obvious from  
Dissections. Thus various Observations *in Wepfer, Peycr,  
Willis, Blasius,* and in *M. N. Co* sufficiently evince, that violent  
Cephalalgias, Apoplexies, and Deliriums, have heen excited by  
Polypuses found within theJugular Veins, and in the Sinuses of the  
Brain; butnoPartofthe Body is moredifposed to theGenerationof  
Polypose Concretions, than theUterus.in whoseVeins, onaccount

of their winding Complication, ’and the consequent flow Circu-  
lation of the Blood through them, such Polypose Concretions  
**are** easily formed, which afterwards lay a Foundation for free  
quent Abortions, immoderate Hzmorrhages of the Uterus, co-  
pious Effusions of Serum and Lymph from it, a Dropsy thereof,  
and Barrenness.

Having thus considered those incurable Disorders, and such as  
cannot he cured without- the greatest Difficulty, which arise  
from Polypose Concretions, we shall now subjoin some Pheno-  
rnena, by means Of which it may be known ^whether these Poly-  
pose Concretions are lodged in the Praecordia, where they have  
their principal Seat. But, among all the Signs which evince  
this, the most considerable are, a long-continued Palpitation of  
**the** Heart, often excited by a flight Cause, fuch as **the** Com-  
motions of the Mind, flatulent Aliments, and such as render  
- the Patient'costive; for such is the Nature Of these things,  
that, by disturbing the equable Circulation of the Blood, they  
produce a greater Impetus thereof to the Heart, where, being  
preternaturally congested and accumulated, on account of the  
obstructing Polypus, it cannot find a sufficient Space for expand-  
ing itself, but Violently distends the Hears, and its Vessels ; by  
which means it produces a Vinlent Anxiety, and convulsive Mo-  
tion of the Hears, which is called a Palpitation.. Immediately  
after this, arises another Sign, which is, the Inequality and In-  
termission os the False, often accompanied with Faintings; for  
as the Pulse is generally the best Circumstance, by winch we  
can judge of the Motion of the Hears, and of the Circulation  
of the Blond through all the Parts of the Body; so, if it is irre-  
gular, Or plainly intermittent, it, if other Circumstances Con-  
cur, lays a Foundation for suspecting, that some Polypose Con-  
cretion, by its Bulk, disturbs, or, for some time, intercepts, the  
due Constriction of the Hears, and other Vesseis, on which the  
Circulation os the Blond depends. Nor must we exclude, from  
the Signs which manifest a Polypus, a frequent Obstruction of  
Breathing, without a manifest. Cause; a Compression of the  
Praecordia, in consequence of spasmodic Strictures of the Breast,  
and, what most generally accompanies this, a fixed Pain about  
the Heart; for each of these, if they are almost perpetual, are  
palpable Signs, that the Circulation of the Blood is Obstructed by  
some foreign Body. ....

We now come to Consider Polypose Concretions in a more  
particular Manner, and account for their Generation and Pro-  
duction. First, then, 'tis to be observed, that all Polypuses are  
not Of the same Texture, Colour, and Bulk ; for some are  
found so solid, hard, and so compacted Of Fibres, that they seem  
to resemble small Tendons; whilst others are soft, composed Of  
mucilaginous and thin -Pellicules, and externally coveted with  
a Membrane. Some are so large aS to weigh a sew Ounces;  
some. On the Contrary, are smaller, and have sometimes many  
pingnious Parts intermixed with them. That the Colours Of PO-  
lypose Concretions, are widely disterent, is sufficiently obvious,  
from the Various Denominations given them by Authors, especi-  
ally those of a preUy antient Date , for sometimes they are  
represented under the Idea of Fat, which, according to some, is  
white, and resembles’Candle-tallow, and, according to Others,of  
a whitish yellow Colour, resembling that Of the heated Marrow  
of Bones,'at other times they are said to resemble Flesh, and at  
Other times Other Substances.*: Polypuses also differ in this,*that some Of them heing rooted in the Right, and Others in the  
Left Ventricle os the Heart, send Off more Or fewer Ramifica-  
tions to the adhering Arteries and Veins; aS also, in this, that  
some are by their Own Bulk sufficient to prove mortal, by  
blocking up the Mouths Of the Vesseis, whilst Others only  
produce that Effect, by being moved Out Of their Pisces.

But from .sufficiently important Considerations, . I am induc'd  
to think, that the Matter Os Polypose Concretions is supply\*d  
by the more weighty. Viscid, and fixed Particles of the Chyle  
.and Lymph,, which by their Motion are easily united, and so  
form'd into one Mass, aS to form a fibrous and membranous Bo-  
dy. This is sufficiently Confirmed by Various Experiments,  
made with respect IO the Generation Of these Substances,  
Thus *Buyschf* that incomparable Anatomist, in his *Tbesuur.  
Anatom. 6.* informs us,that of his own Blood, only by shaking,  
he formed **a** kind Of spurious Membrane, which was furnish’d  
with many Stamina Or Fibres, and so much resembled a genuine  
Membrane, that it was universally believed to he the Work  
of Nature: And in his *Thejaur. Anatom, i.* in. 3. he telis us,  
that by strong Conquassafion alone, continued for the Space Of  
one Hour, he produced a Polypose Substance from the Blond  
of a newly killed Sow: Hence, we are enabled to form a  
distinct Idea of a Polypus; which may justly he defined, a Cer-  
rain solid, fibrous. Concretion, formed Of the more Viscid Parts  
Os the Lymph, by means of a strong Motion, Or Impulse.

They Polypuses are formed in both Sinuses of the Heart, and  
**in the** Arteries aS well aS the Veios, yet 'tis certain from ac-  
curate Observation, that they are more easily and frequently  
formed in ssbe Right Auricle and Ventricle os the Heart, than  
in the Left, as, also, more commonly in the Veins than in **the**

Arteries: Noris this hard to he accounted for, since the Chyle,  
which, hy means Of the Subclavian Vein, is convey'd to the  
Vena Cava, and the Right Ventricle of the Heart, heing full of  
gross Panicles, and moving flowly, easily deposits Its heavy  
Pans, by which the *Columnae of* the Heart - heing embraced.  
One Substance, or Body, aS it were, is produced. Then the  
Blood Convey'd to the Veins, by means Of their too weak  
Contractile Force, circulates more flowly, is os a thicker  
‘Consistence, and more weighty, than the arterial Blood: Hence  
it easily deposits its thick Parts; but especially, when these,  
not being intimately mixed. Coherd stightly, they, by the Force  
Of their Gravity, tend most to the Bottoms and Sides os the  
Vesseis. But it is otherwise with the arterial Blond, for, aS  
this is not only Considerably promoted in its Course, by the  
‘elastic Motion of the Arteries, but, also, in the Lungs, impreg-  
nated with an highly subtile aereo ethereal Matter”, and inti-  
mately mixed, by being forced through very minute Vessels,  
'fo 'tis by these means rendered more light and red: Hence  
the Reason is obvious, why the arterial Blood is less fit sor the  
'Generation of Polypuses, than that of the Veins.

Not only those advanced in Years, but also Children and in-  
fonts are sound subject to Polypose Concretions. That sech  
Misfortunes are incident to Adults, is universally allowed; for  
which Reason we shall here give a few instances, in which  
such Polypose Concretions have been found in Infants Thus  
*Albinus,* in his *Dissert, de Polypo Cordis,* gives us an instance of  
. a Polypus blocking up the Auricle Of the Heart, in a very  
. young Boy. *Bones us,* in *Sepulchres. Anatomicum, fab-2.. Sect.*II. *Qbs.6.* mentions pretty large PolypuseS sound in rhe Si-  
nuses Of his young Son's Heart. *Snell,* in his *Dissertatio de  
-Cordis Polypo,* tells uS that in a Boy os six Years of Age, who  
. died *os* an Atrophy, he sound a Polypus in each Sinus of the  
Heart. *Dorsienius,* in *E.A.C. Dec.* 2. *An. 2. Obs.* I53. mentions  
sour extraneous Bodies, sound in the Left Ventricle os the Heart  
of a Very young Boy; and in JE..4.6. *Dec.* 3. *An. u. Obs.* IS. an  
enormous Polypus, found in a Youth, is described. This might  
he proved by a great Variety of Instances. \_ Tis not, however,  
to be denied, that Adults, and those pretty far advanced in  
' Years, are more diiposed to the Generation of Polypuses than  
those .who are younger, for the Blood peccant both in  
Quantity and Temperature is more easily accumulated, when  
\* the Work of Nutrition is over, than when it is carrying on,  
' especially, when, in consequence Of numerous and large Vessels,  
'and 3 diminished Elasticity Of the Solids, anyone is disposed  
' to a Plethora, addicted to an idle Lise, without Exercite, or  
has the Misortune Of an improper Diet. \*

We almost always find Men more subject to PolypuseS, and  
the Diseases produced by them, than Women, the Reason  
.Of which is, in my Opinion, this, that in the Female Sex, whilst  
:the menstrual Evacuations are duly Carried on, the Quantity  
' Of Blood is not so easily increased ; and, in Consequence of the  
Laxity Of the Fibres, and greater Fluidity, of .the Humours, or  
ι a Blood more abounding in Serum, it more difficultly happens,  
that the gross Panicles unite, and form themselves into. Con-  
CretionS. Tis, also, to be Observed, that in marshy Places, and  
.Northern Countries, sar more din of Polypose Concretions,  
.than in the hotter Climates: Which, in my Opinion, besides  
. the Cold Air, and the more obstructed Perspiration, is principally,  
.. to be.ascribed to the gross Aliments,.fuch as Sea Pith, coarse  
.Bread, imoked and salted Flesh,, from which **a** tenacious  
-Chyle, full of terrestrial Particles, **and** Consequently **a** .thick  
Blood, is generated. '. . "Y

We now Come to Consider the procatarctic Causes Of Poly-  
pose Concretions, the most considerable of which is a Redun-  
dance Of Blood; for, in consequence of an increased Diastole  
Of the Vessels, under a plethoric State, the Fibres lose their Elif-  
ticity, by which means, the Systole Of the Vesteis is diminished,  
’the Circulation of the Blood surprisingly retarded, and a palpable  
Foundation for the Cohesion of the terrestrial Particles laid.  
Besides, in consequence Of this, an Obstruction of the Vefleis  
happens, the great Tendency of which to the Generation of  
Polypuses is sossicientiy Obvious from an Experiment made by  
*Lancisi, in Lab. de Aneurijmatibus, Propose* 38. where that  
Author informs ns, that with a waxed Thread he tied a Certain  
Ramification of the Iliac Artery Of a live Dog; and that,- upon  
Cutting the Ramification, without the Ligature, about fifteen  
Or twenty Days after, he found a Polypose ConcretionNoris  
it difficult to account for this, fince, by making such a Com-  
pression, the more tenacious and least moveable Parts’ of the  
Blond, being mutually united, begin gradually tO adhere **ro**the Sides of the Vessels, fill at last their Bulk being increased,  
they constitute a thick and fibrous Substance, called a Polypus.  
But not only a Redundance, but, also, a Penury Or Scarcity, Of  
Blood lays a Foundation for Obstructions, and consequently  
for Polypose Concretions. Hence I have frequentiy observed  
copious and frequent Haemorrhages suceeded by the same. Diss  
orders, which are produced by PolypuseS . for fince, in conse-  
quence Of the Distention, the Fibres are rendered more lax,  
and the Pores larger, they transmit all kinds os thick and Viscid  
Humours, which are sit for generating Polypose Concretions. .

***As* Length** er Tain ess Of Body disposes to various **Diseases,**so it, in a particular manner, contributes to the Generation of  
Polypuses, and all the Disorders arising from them; for, in tall  
Persons, the perpendicular Ascent of the Fluids is difficult:  
Hence, the Circulations in all the Parts Of the Body become  
flower, and Stagnations and Obstructions Of the Vsscera are  
easily formed, hut especially Of the Lungs, where the BlOnd  
circulating with Difficulty, stagnates in the minute Veffeis, and  
the secreted heavy Parts are, in Process of Time, Condensed in-  
**to a** thick Mass. If this Account Of the Matter is not suffici-  
ent, it may he still farther confirmed by Experience, which  
teaches us, that excessively tall Persons are not only inferior  
in Gaiety of Temper, and Strength Of Body, to such as are os  
a lower Stature, but,also, far more subject to the Diseases arifing  
from a stow Circulation, and Stagnation Of rhe Blood, such aS  
Polypose COncrefionsja Phthisis, an Asthma, and a Difficulty of  
Breathing.

But nothing is more injurious to the human Body, Or has  
a greater Tendency to occasion sudden Death, than large Draughts,  
of cold Liquors, hastily drank after any Violent Commotions  
or OVer-heating Of the Body. Thus *Galen,* in his Book *de Sac.  
tea ate tuenda,* justly thinks that such a Practice induces a Cough,  
and Difficulty Of Breathing, weakens the Brain, and excites  
Defiuxions from it; impairs the Strength Of the Stomach, and  
injures the Nerves, for such is the pernicious Nature Of Cold,  
that, by stopping the intestine Motion of the Fluids, it not on-  
ly Coagulates the Blood, but, also, precipitates the terrestrial and  
gelatinous Parts, Hence 'tis not to he wondered at, if Obstruc-  
tions, Inflammations, and Polypose Concretions, should he pro-  
duced , which last may he Observed, when Blood stowing warm  
from the Veins is suffered tO fall into cold Water; Or, when  
warm Water, in which.such Blood has fallen, becomes Cold;,  
for, in this Case, the fibrous and more heavy Part will he sepa-  
rated and precipitated from the Other, in a most beautiful  
manner. Many Instances might be alleged, in winch **the**drinking cold Liquors has suddenly proofd mortal.

Both Experience and Reason Concur IO evince how effectu-  
ally Acids, and spirituous Liquors, Contribute to induce violent  
and dangerous Coagulations of the Humours, for, according to  
a known Experiment, Blood which IS sufficiently fluid, when  
taken from the Veins, is by an Affusion Of any acid Liquor,  
or rectified Spirit Of Wine, forthwith coagulated into an ’ hard  
Mass. Now none who accurately advert to this Circumstance,  
**can** doubt but the same may happen in the human Body, tho'  
not in the same Time and Manner. But is they should doubt  
of this, let them remember into what violent and Chronical  
Disorders, arifing from Obstructions in the Vsscera, such aS a-  
Phthisis, a Cachexy, **a** Dropsy, a Convulsive Asthma, and ex-  
cessive Haemorrhages, great Drinkers Of Brandy, and spirituous'  
Liquors, .bring upon- themselves.

. Nor are we to overlook the Affections of the Mind, espeei-'  
ally Anger, Frights, and Sorrow,: which lay a sufficient Foun-  
dation for Polypuses, and the Disorders arifing from them.  
Without making a curious inquiry into the latent Causes of so  
singular an Effect, we shall only give some memorable Instances  
**of the** Facts. Accordingly, the celebrated *Malpighi* gives us  
an Account ofa Patient, otherwise sufficiently robust, who, by.  
means of a Fright, was seized with a great Inequality and-  
Obscurity of the Pulse, especially in the Left Wrist, without  
any Fever, and a recurring Difficulty *of* Breathing. But soon '  
aster he expectorated.by Spit, sometimes a Portion of red Blood,  
and at other times a large Quantity of sinall white Portions of  
Matter, not unlike Polypuses. But afterwards his superior Parts  
became turgid, and he was suffocated by the Redundance of  
confined Binod. *Riverius,* also, in *Cent.* 4. *Obs. 2.* gives uS  
an Instance of a certain Man of Distinction, who, having the.  
Misfortune of a sudden and unexpected Fright, complained os  
a Violent Tremor of hisHeart, a Difficulty of Breathing, toge-  
ther with an unequal and intermittent Pulse, till he soon aster  
died; when, upon laying open the Cavity of his Breast, the-  
Heart, and larger Veffeis,. were full ; and in the Left Ventricle  
**of** the Heart were found round Caruncles, resembling the Sub-  
stance of the Lungs, the largest of which, approaching to the.  
Size of an Hazel-nut, blocked up the Mouth .Of the Arteria-  
Aorta. . .

Nor must it he forgotten, that the preposterous Methods *os.*curing Violent Haemorrhages, and intermittent. Fevers, by  
Astringents, Opiates, Chalybeates, and even the Peruvian  
Bark, greatly, contribute to bring on Violent chronical, and  
even incurable Disorders, which are produced and supported by  
Polypose Concretions. And I can, aster a Practice os more  
than fifty Years, affirm, that I have known more Mischief  
done by no Medicines, then by the unseasonable and incautious  
Use. of these; since I have seen, not only acute and mortal  
Disorders, such as Apoplexies, Epilepsies, and suffocative Ca-  
tarrhs, bus,, also, long and chronical. Disorders, such aS a  
Phthisis,. A convulsive Astluna, hypochondriac and hysteric Dis-  
orders, violent Haemorrhages, flow and hectic **Fevers, pro.**

duced by this means. If we inquire whence so many Missor-  
tunes arise, it is to he observed, that the Cause of these terrible  
Disorders is principally to he sought for, in the flow and re-  
tarded Circulation of the Blond and- Humours .through **the**minute and capillary Veffeis of the Body; for, by this means,  
the natural Secretions and Excretions, which are, also, made  
through minute EmunctorieS, composed of subtile Vessels, are  
surprisingly retarded-: Hence arise Various Stagnations in differ-  
ent Parts, Infarctions and indurations of the Vsscera, together  
with a large Train of other Symptoms. Now if a Physician,  
in such a State where there is already a Thickness of the Blood  
and Humours, and a flow Circulation, or where Violent Spasms  
strongly compress the Veffeis, should exhibit .astringent and in-  
craflating Medicines, or even those Of the sedative Kind, he  
must necessarily do his Patient a considerable Injury, by ren-  
dering the Disorder more terrible. This, happens the more in-  
fallibly, if the preposterous Use of these Medicines is too long  
persisted in: Nor can it he doubted, that such Polypuses as may  
prove the Causes of incurable Diseases, may be -produced by  
these means; and I have had Opportunities, in many Diseases  
arising from this preposterous and empirical Method of Cure,  
sometimes of prognosticating Polypose Concretions, from pretty  
certain Signs; and sometimes of seeing them, in dissecting such  
Patients after Death. .

Thus we have consider’d the principal Causes which concur  
to the Generation of Polypuses: And, with respect to the other  
Causes, as they rarely occur, so they may be easily reduced to.  
some one or Other of those already mentioned.

*The* **C U R E.**

So obstinate are most Persons, that they rarely think of ate  
tacking the Beginning of Diseases, but call for the Physician,  
and the Assistance of his Art, when, their Disorders being in.-  
creased by Delay, they have a near Prospect of Death : But,  
by this means, they only hasten the fatal Day, which, by **a**speedy Use of proper Medicines, might have been totally avert-  
ed. Persons afflicted with polypose Concretions are the more  
culpable in this respect, since it is certain from Experience,  
that their Cure is, at best, difficult and dubious, and, when  
the Disorder is of long Standing, absolutesy impossible; for, if  
any Assistance is to he expected in those Diseases arising from  
an intercepted Circulation by means of Polypose Concretions, .  
great Expedition is absolutely necessary : And the principal in-  
tentions of the Physician Ought to he to hinder the Generation  
of such Concretions, and to prevent their Increase, and inju-v  
rious effects, where they are already present. ,

First, then, in order to prevent the Generation os Polypose  
Concretions, Our principal Care ought to he, to dilute and re-,  
solve the inspissated Blood, and duly to diminish its. Quantity  
in plethoric Habits. In order to obtain this End, nothing is of  
more Importance than a right Regimen, and Method of LiVing;,  
for which Purpose let their Diet be spare, stender, and moist-  
ening; and let the Patient abstain from all hard, acid,, saline  
Aliments, and such as afford much .Nourishment: Let his ,  
Drink he of a proper Quality, and Very thin. Tor this Pur....  
pose he may Very commodioufly ufe small and pure Beer, or  
Spring-water, either alone, or mixed with a due Quantity of  
Wine, or a Decoction prepared of mild and aperient Ingre-  
dients ; among winch the most considerable are the Roots of  
Vipers-grass and Sarsaparilla, together with *China* Root,, and -  
the Bark Of Saffafras-wood ; for, by these-means, the Purposes,  
of Dilution and Resolution will be excellentiy obtained. TO;  
these Measures let the Patient, also, add frequent Exercise, *by.*which the Fluidity and equal Circulation os the Bloed through  
all the Parts are greatiy promoted. But all Persons, especially .  
those of frit and plethoric Habits, ought carefully to guard  
against Violent Exercise suddenly begun, since, by this means,  
too much Blood is projected to .the Lungs, where circulating  
fiowly, it is easily coagulated. In order to prevent this, it is  
expedient forthwith to drink some warm Liquor; .which is still  
the more necessary, is, aster the Body has been over-heated by  
Violent Exercise, it is suddenly cooled; or, which is worst of all,  
is large Quantities of any cold Liquor have been drank. Besides,  
the Air the Patient breathes ought to he pure, serene, and tem-  
perate, neither too hot, nor too cold, nor too moish \_ But, is  
the Patient cannot have the Benefit of such an Air, sued Infu-.  
fions as promote Perspiration, have an excellent Tendency try  
attenuate the Fluids, and disjoin the united Molecules.

The Patient ought, also, to guard against Violent Affections  
of the Mind, especially Grief, Anger, and Frights: But if at.  
any time a Change is induced on the Body by these, such things  
are with all Expedition to be used, as allay violent Commo-  
fions, and render the disturhed Circulation of the Blond again  
regular and equable. Thus, if the bad Effects of a sudden  
Fright are to he removed, such Medicines are most efficacious  
as are gently resolvens, and promote a mild Perspiration; be-  
cause, perhaps, by this means, that Part of the Mass of Blood

which was beginning to he coagulated, is most commodioufly  
resolved r For this Purpose I always, with great Success, exhi-  
bited the *Pulvis Moirchionis,* either alone, or with a few Drops  
of the anodyne Liquor, taken in Cinnamon-water, or Baum-  
water prepared with Citron-juice and Wine; after which I or-  
der some Cups of a warm Infusion to he drank : And this Me-  
thod I, also, found highly beneficial in thofe wasted by long Grief.  
Besides these Measures, in violent Frights, moderate Exercise  
is greatly to he commended; .since by it the Heart is enabled  
more easily to free itself from the Quantity of Hoed congested

. to it, in consequence of which the Disorder becomes less ter-  
rible. Those, therefore, but ill consult their own Advantage,  
**whe,** immediately after a Fright, betake themselves to a Sure  
of Rest, or endeavour to sell into ia profound Sleep.

Care must, also, he taken, that the Body he duly soluble ;  
and, if the Patient is costive. Clysters, or balsamic Pills, are,  
with all Expedition, to be used, in order to remove this Mis-  
fortune. Nor is Jefs Care and Prudence requisite, that the  
other Passages fubservient to the Secretion and Excretion of  
the Humours, he kept free and open, lest, as it generally hep-  
pens, these being obstructed, the Mass of Blood should he con-  
tarn mated, and rendered impure: But it ought, in a particular  
manner, to he the Physician’s Care, that no natural Evacua-  
tion Of Blood, such as the Hzmorrhoids in Men, and the  
.Menses in Women, he either totally suppressed, or too long  
retained; for, in this Case, there easily happen dangerous Con-  
gestions of Blond to other Parts, which, by the skilful Physi-  
cian, may be commbdiously prevented, by proper Venesection,  
Pilis, and other Medicines of a gently balsamic and temperate  
Quality. Nor are artificial Evacuations of Blond to be neglects  
ed ; but these are still more strictiy to he regarded, if the Pa\*  
tient is plethoric, and has, by long Cullom, render’d them  
natural to him.

Having laid down these Rules, with respeA to Regimen, we  
must, among **the** Class of Medicines calculated for inciding  
and resolving the inspissated Fluids, recommend Salts of a neu-  
tral and alcaline Nature, such as the Arcanum Duplicatum,  
vitriolated Tartar, Nitre, the digestive Salt of *Sylvius,* **the**aperitive Salt, Oil *of* Tartar per Deliquium, the Terra foliata  
Tartari, and the Liquor of fixed Nitre. Among spirituous  
Preparations, this Intention is answer’d by the Essence of white  
Burnet, the *Tinctura Antimrnii Acres,* and others of a like  
Nature. But, among all the Med icines, I know none is” so  
powerful in dissolving those Parts of the Blood which are fi-  
' brous, and disposed to Concretion, **as** mineral Waters, **espe-**cially those which are impregnated with an alcaline Salt, and  
of a mild and temperate Quality; such as the *Embsen* and *Sel-  
teran* Waters, those *cAAix la Chapelle,* but especially the *Caro-  
line* Springs, which, by their Salt, open all the Emunctsries of  
**the** Bedy, wash **away** and evacuate **the** impute Sordes, and  
resolve and dilute the thick and viscid Blood. .

- Having already shewn the Method of preventing Polypuses,  
**we** now come to inquire what Measures are to he taken, when  
there are any Signs of a Polypus already formed in the Heart,  
or larger Vessels, and by whet means its farther Growth may  
he prevented: It is, therefore, to he observed, that whilst **a**Polypus is only beginning, and, as yet, pituitous, we are not  
to lose all Hopes of resolving it, which may be done by alcaline.  
and neutral Salts, which excellently resolve the viscid Humours;  
by a slender Diet; by a sufficient Quantity of Drink of fuch **a**Nature as to dilute the Humours ., but, especially, by the *Ca-  
reline* Waters; by the prudent Use of which I have known  
many cured, who had strong Symptoms of a Polypus formed  
within. But if the Polypus has already degenerated into a  
fibrous and bard Substance, all possible Care is to he taken, lest,  
becoming bigger, or, being moved out of its Place, it should  
totally block up the Vessels, and suddenly destroy the Patient.  
For answering this intention, it is of the greatest Importance to  
prevent a Redundance of Blond, and to preserve its Fluidity, by  
the Medicines Already recommended for that Purpose. But,  
when a Difficulty of Breathing arises from a Polypus, we must  
by no means use Vencfection in the Arm, since, by thet Prac-  
tioe, a greater, and even a suffocative Congestion is produced.  
Besides, let tho Patient avoid all spirituous Liquors, too much  
Exercise, and Perturbations of Mind,' all which, partly by co-  
. agulating the Blood, and partly by throwing it into too violent  
Commotions, render rhe Disorder worse.

W\* shall now subjoin fome Cautions with respeft to **the**Treatment of Hemorrhages, and Intermittent Fevers. **We**have already shewn how faulty Physicians are in this respeit ., for  
which Reason I sincere]y advise, that, in stopping Haemorrhages,  
the Physician would nor attempt the Cure by Astringents alone,  
but rather by a proper Evacuation of Blood, and gently ano-  
dyne Medicines; as, also, by Frictions of the inferior Parts, to  
restore the equahleCirculation Of the Blood. With respeS to the  
Cure of intermitting Fevers, the greatest Care is to he taken,  
chat-they he not too soon suppressed; for which Reason it is ex-

pedient prudently to use gently aperient and evacuating Medi-  
cines ; to which we may commodioufly fubjoin,and even interpose,  
resolvent, ternperating, and corroborating Medicines.-sAestesnr.

POLYSARCIA, πολυσαρκεα, from πολὑς much, and μὲνξ.  
Flesh. Corpulence.

This is a superfluous Increase of Flesh, by the *Greeks st,*called, on account of its Excess. It is a Disorder directly oppo-  
sito to that, in which Nutrition ceases, and in which the Body  
hecomes tabid and consumptive. Too large a Quantity of Nou-  
rishment conveyed to the Parts, is the Reason, why an exces-  
sive Quantity of Flesh is generated, and the Patient, by that  
means, oppressed. We may justly reckon this to he a Species  
of Cachexy ; for the Patients are afflictsd with several terrible  
Symptoms, .such as a superfluous Quantity of Flesh, an Excess  
of prominent Fas. Slowness of Motion, Oppression, Weak-  
ness, Difficulty of breathing, and Sweating upon the least Exer-  
else; fo thet the Patient becomes apprehensive os Suffocation,  
and can hardly wear the slightest Garments. Many Physicians  
have, therefore, given Rules for diminishing the Quanrity of  
Flesh, or preventing an increase of the Body. But their Do-  
ctiine is refuted by *Soranus* ; for, if the Habit of Body is good,  
a moderate Quantity of Flesh, accompanied with Strength, is  
rather to he preserved, than destroyed. But the *polysarcia* we  
call a Disorder, which may he justly accounted a Cachexy, and is  
accompanied with many dangerous Symptoms ; for all the Miss  
fortunes, which attend voracious Animals, or these fattened for  
Use, such as inflation, Extension, and Prominenceof the Body,  
also, attend those afflictsd with a *Polysarcia.* The like hap-  
pensin ulcerated Bedies, in which the luxuriant Flesh is either  
consolidated, or springs up afresh on the Lips of the Ulcers,  
after it has been removed.

There are two Methods of curing a *Polysarcia,* the one by  
preventing too copious Nourishment, and which consists in quick  
Gestation, and theUfe of such mild Aliments, as do not nou- ,  
rish much, or have a Tendency to increase the Body ; the  
other consists in the Observation of certain Rules, and laborious  
Exercife, in order to induce a Change on the Body r But, for  
the sake of Distinctness, we shall give more particular Dire,  
ctions with respeol to the Cure. It is, therefore, expedient to  
exercise the Patient much and long, either on Horseback, or in  
Coach ; to order him to fail, to read, and ofe his Voice ; to  
wrestle, and walk quickly, that bis Legs may be the more ex-  
ercised : He must, also, run, and have the Pans of his Body  
rubhed with the Hands dry, or with a rough Linen Cloth,  
and some Sand sprinkled on the Parts ; then he is to use va-  
rious Palestrian Exercises, such as that which the *Greeks*call |κελαδία and *Chericomachia* (perhaps χειρομαρέα) ; which  
Exercises are dineoled by their respective Masters : Then  
he is to use what the *Greeks* called όπλομαχία, thet is,  
**a** Mock-sighting with Arms : Then he is to use the Exer-  
cise of Wrestling, which the *Greeks* called ἀτἱροκοπία, οΓτρο-  
χἱλισμος. He is, allo, to use the longtractsry Machine, called  
by the *Greeks stiacro-fpartim,* and the *Italians Sphere,* and Wre..  
filing; as, also, quick, hard,long-continued, and dry Frictions; for  
if the Parts are rubbed with Oil, the Hands flip, and the Patient  
cannot perform his Exercife with due Vigour. The Patient’s-  
Body must, alfo, be exposed to the Sun, a Practice which the  
*Greeks* call ὐλίωσις. Then a Sweat is to be excited by means  
of a Flame, live Coals, and dry Steams. Sometimes Hot-  
baths, which diminish the Body, and, at other times, Cold-  
baths, which condense it, are to be used ; for the Bodies of  
fuch as have ufed the Cold-bath are perceived to he thick, and,  
as it were,, testaceous. It is, alfo, expedient toapply hot Sand  
to the Body, and to swim in the Sea, or in Medicinal Waters.  
After Sweating in the Bath, the Body must be sprinkled with  
Salt, by which the Fleshes ofAnimalsare preserved dry, denfe,  
and free from Withering. Then the Patient is to ofe whet the  
*Greeks* call *zegma,* (perhaps *smegma}* a Friction of Nitre reduced  
to Powder, and, after Bathing, Meat and Drink are to be  
long abstained from; for then the Appetite begins to languish,  
and its Edge is obtunded by the Delay; the Keenness, also,  
of the Digestion languishes, when the Fomes, which sustained  
it, is withdrawn. Drinking before Eating is to be forbidden,  
and very little is to he drank at all, though the Patient may  
drink most at Meals , for, by drinking much, the Aliments  
are .rendered fluid, the Flesh softened, and by Digestion, the  
Fond is rendered capable of adhering to the Solids, and, coofe-  
quently, of increasing the Solids : But if. the Patient is afflictsd  
with an insatiable Thirst, he may drink **a** fmall Quantity of  
moderately sharp Wine, But Puis, Alica, Flour, Milk,  
Nuts, the Brains of Animals, Eggs, tender Fishes, and all pin-  
guious Substances, are to be abstained from ; but the Patient  
may eat Bread that is cold, fermented, and prepared with the  
Bran; for such Bread nourishes but little, especially if it is  
old. Dry Aliments are, in a particular manner, beneficial j  
Pot-herbs, and. Fishes of hard Digestion, are to he used ς as,  
also, the drier Sorts of Birds, and wild Aliments, such as Hares,

*and wild* Goats ; as, also. Pork long dried in the Salt. The Pa-  
tient ought, also, to use but one kind of Aliment ata Meal, and  
keep from steeping a great while after it; for, by Watching and  
Restlessness, theBulk of the Body is much impaired by Exhala-  
fion ; whereas it is fattened, and its Bulk increased, by Sleep.  
Besides, the Body is, by Sleep, rendered more moist. Cold  
Liquors are to he drank, and, during the Conti—mce of the  
Polysarcia, the Metasyncritic Cyclus is to he begu.I; for some-  
times the Patient is to use total Abstinence, and sometimes to  
take but a small Quantity of Aliments and Water, which is to  
he regularly augmented, as the Situation requires. We are to  
begin the Cure by Vomiting, the Patient fasting, or by an  
Exhibition of proper Roots. Then the Patient is to use acri-  
moniout Substances, Things of a neutral Quality, Binds, and  
wild Animals. These Measures are the more expeditioufly to  
he taken in a few Days, the more severe and Violent the Begin-  
nings of every Cyclus are. Diuretics are, also, to he exhibited  
among other Pot-herbs ; such as Asparagus, Carrots, Parsneps,  
Smallage, Fennel; Leeks, and other Things of a like Nature;  
sor by this means a Change may be induced on the Body by the  
Use of common and ordinary Aliments. We must, also, have  
a due Regard to the Various Symptoms in the Cure Of this Dis-  
order. Some Physicians recommend Phlebotomy,, purgative  
Medicines, Clysters, the Use of Venery after Bathing, and be-  
fore Meals, and on tile same Day a small Quantity os Nourish-  
mens, and Water for Drink: They, also, recommend Vomit-  
ing after, Supper. Some, also, as contrary to the *Polysarcia,*recommend Exercising the Body by Pandiculation, aster fifing  
out of Bed, which they call άντιπατοι1 ;as, also, the Drinking  
Night-dew, before the Rising of the Sun. But the Madness and  
Absurdity oslatePhyficians is sufficiently obvious ; for, by Phle-  
botomy, the Strength is impaired, and the Patientis Body rendered  
flaccid, which the *Greeks* call ῥάκωσις. Purgative Medicines, such  
as Clysters, and those above-mentioned, corrupt the Fluids, and  
induce a bad Habit of Body, by the *Greeks* called *Cachexia.* Ve-  
hery,also, renders the Patient effeminate, and destroys his Strength.  
Some, also, order Bathing twice a Day, and Sleep before Meals ;  
but this is .very improper, since Sleep rather renders the Pa-  
tient sat, than lean. Vomiting, also, aster Supper, destroys  
the Strength; and though it diminishes the Flesh, yet it filis  
the Head with Fumes, disturbs the Organs of Sensation, ren-  
ders the Gums putrid, corrupts the Breath, corrodes the Sto-  
mach, and renders the Patient disagreeable to himself, which  
the *Greece* call Δυσαρέσκησις, and which is accompanied with a  
fitate of Inequality,. resembling that of Fevers. Besides,, Vo-  
, miting is improper, and justly to be condemned, because, by

corrupting the Juices, it does more Harm to the Body. But  
if the Patient has eaten too large a Quantity of Aliments, **then**a Vomit is to he exhibited ; for the Uneasiness arifing from **the**Excess is greater than that produced by the Vomit. Close  
and violent Application of Mind, also, contributes greatly to  
the Cure of the Polysarcia; for which Reason we observe **the**Bodies of close Students more thin and Ilender, than those of  
Persons who lead alazy and indolent Life, whose Bedies are more  
full and solid. *Caelius Aurelianus. Chron. L.* 5. *C.* I I .

POLYSOMATlCA. **The fame aS POLYSARCIA.**

- POLYSPASTON, from πολὑς, much, and *axdta,* to draw.  
The Name Of a Machine for making Extension, in Case Of  
Fractures, or Luxations.. See the Article FRACTURA, and the  
Explication of Table XXIX.

POLYTRlCHUM; **see TRICHoMANES.**

‘ POLYTRlCHUM AUREUM ; see **ADIANTHUM AU-  
REUM.**

. POLYTROPHIA. Abundant Nourishment.

POMACEUM. Cyder.

Cyder is the Juice Of Apples, made spirituous by Fermenta-  
tion; the Apples are gathered in Autumn, when they are ripe ;  
then they are ground in a Mill, the Juice is Pressed Out, and left  
10 ferment in Hogsheads.

There may he asimany Sorts of Cyder made, aS there are differ-  
ent Sons of Apples. -Apples that are Commonly eaten, and are  
os a sweet pleasing Taste, produce Cyder that will not keep; and  
therefore others are preferred for this Purpose. These Apples  
are Of a Curious Colour, but they have an harsh, bister, and  
styptic Taste; which makes the Cyder pungens, strong,  
and to keep long. Cyder Ought to he fine. Of a curious  
gold Colour, having a pleasant Smell, and a pungent sweet  
Taste.

Cyder is pectoral; fortifies the Heart and Stomach; moistens,  
and quenches Thirst; and is looked upon to he good for scor-  
butic and melancholy Persons. When drank to Excess, it Occa-  
fionS Drunkenness of longer Continuance, more dangerous,  
and Of more pernicious Consequences, than is produced by  
Wine.

By an exact Analysis of Cyder, **a** sulphureous Spirit is first  
drawn from it, and then Phlegm; afterwards, by the Help Of **a**great Fire, a little thick Ost is extracted, and a Spirin, which is  
nothing but essential Salt, dissolved in the Phlegm. What

restrains will yield a little fixed Salt by Calcination, Lotion, Fii-  
tration, and Evaporation.

When the Juice of Apples has not been well purified, it soon  
corrupts, because the Dregs, winch remain mixed with the  
Liquor, are small Pieces of the Apples, which are as subject to  
rot, aS the Apples themselves, and give the Cyder an unpleasant  
rotten Taste In order to Purify it, some use Water-glue dis-  
solved in Wine, and,to prevent the Cyder from growing sour»  
they put Mustard into it. Others draw Off what is Clear, into  
earthen Or glass Bottles, which are afterwards well Corked.

Apples Or an harsh and bitter Taste are best for Cyder, be-  
cause they contain much essential Salt, proper for separating the  
Oily Parts from the Dregs. Besides, these Apples supply the  
Cyder with a sufficient Quantity of tartarous Parts, to hinder  
the Spirits from evaporating; and hence this Cyder is stronger,  
more pungent, and will keep the longer. On the Contrary, sweet  
Apples being deficient in these Particulars, the Cyder made from  
them quickly dies.

Cyder is good and wholfome, provided it he used with Mo-.  
deration, and may he said, in general, to be better for the Health  
than Wine, because its Spirits are not so impetuous, nor **so**much agitated, aS those of Wine; and are, besides, detained and  
moderated by a great Quantity Of Viscous Phlegm, which still  
Contributes to make this Liquor moistening and cooling. We  
know by Experience, that most Of those who drink nothing '  
but this Liquor, are stronger, more healthy, and look bet-  
ter, than those who drink Wine; of which Lord *Bacon* gives  
us a remarkable Instance: Of eight Old People, says he, **some**were near,and Others above an hundred, who, during their whole  
Lives, drank nothing but Cyder, and were so Vigorous, that they  
danced and jumped about like young Men. s

Cyder, drank to Excess, does not intoxicate so soon aS Wine ,  
but the Drunkenness caused by it Continues longer, because its  
Spirit conveys along with it, into-the Brain, a great many heavy  
and viscous Particles, which hinder its sudden Dissipation. .  
These Viscosities, dispersing themselves afterwards, into all  
the Substance of the Brain, stop the Chanels Os the Nerves,  
and oppress the animal Spirits, in such a manner, that they xrequire some time to1 recover themselves, and to expel that  
which detam'd them in a kind Os Repose and Unactiviry. Hence  
proceeds that Sleepiness aster Drunkenness.

By letting the gross Substance of the Apples ferment in  
Water, a moistening and Cooling Liquor, called small Cyder,  
is made. This Liquor will not produce Drunkenness, and many  
Women in *Normandy* make it their common Drink.

Os the Juice Of Pears extracted and fermented, is made a kind  
Of Cyder, Or vinous Liquor, Called Perry, , which, in Colour and  
Taste, resembles White-wine. Bitterish and harsh Pears are best  
for this Purpose. As the Fermentation of both Liquors is the  
same, and aS the Virtues Of Perry are nearly allied to those of  
Cyder, what has been said may he sufficient.

Many Other spirituous Liquors may be made of the ferment-  
ed Juices Of several Fruits, but the greatest Partins these Li-  
quors never become spirituous, aS Wine, or Cyder, and will not  
keep so long.. -

The Juice Of Quinces, after it has been fermented, becomes  
viscous, lit fortifies the Stomach, works by Urine, is good for  
the Colic, Spitting of Blood, Dysenteries, and qualifies **the**Motion of sharp and bilious Humours, which Cause Evacuations  
upwards and downwards. As thin Liquor soon grows sour,  
and decays, they min Honey, Sugar, Or the like, with it, to  
preserve it.

Ananas is a Joicy and delicious Fruit, that grows in the *West ’ -  
Indies,* whose Juice the *Indians* extract, and make excellent  
Wine Of it, which will intoxicate. Women with Child dare  
not drink it, because they say it will make them miscarry. The  
*Ethiopians,* also prepare a sort of Wine, Called *Sebans.cou,* from  
a certain Fruit that grows among them.

*Pliny* says, that they made a Liquor in *Egypt,* which was some-  
what spirituous, of the juice os Sebetes, which produced good  
Effects in Persons Of a bilious Constimtion.The Juice Of Jujubes,  
prepared in the same manner, has, also, Ihe same Virtues.

From some Trees they draw Liquors, which are almost  
aS spirituous and pleasant, as those we make from Fruits.  
A kind Of a large and strait Palm-tree grows in the *Indies,*called *Coquo,* in whose Branches they make Incisions, and  
extract a Vinous Juice, which the *Indians* Call *Sura,* or *Tadds,*and from which they distil a good Spirit. They, also, make a  
sort of Vinegar with this Juice, by exposing it tO the Sun t  
Others boil it upon the. Fire, to make a sweet Wine Of st  
Called *Grraca.*

The first Juice being drawn out *saf* the Branches of **the**Tree, there comes Out a second, that is not so spirituous aS the  
Other, which they suffer to evaporate, in Order to make a kind  
Of Sugar Of it, which they call *Ju sir a.*

The Fruit of this Tree supplies them, also, with a sweet  
and well-tested Liquor, which is Very Cooling and moistening.

The Birch-tree yields a Sap, which, heing drank, is Of an  
opening Nature. *Van Helmont* Values lt much for its Virtues  
**in Curing the Stone. Several Physicians, also, use is, for the**

fame Distemper, sor the Strangury, and scorbutic Hu-  
InourS.

The Body, Branches, and Root os the Maple yield a sweet  
and pleasant Sap: This Liquor, .Mr. *Bay* says, is more abound-  
ing in Cold and rainy Weather, than in any other ; whilst the  
Birch, on the Contrary, yields more in hot and dry Weather.

The Root os the Nut-tree, also, yields a Juice, which  
*Boyle* and *Schroder* Value much, they having observed it to have  
Produced good Effects in the Gout, and several other Distem-  
pers.

Several other Trees supply different Nations with pleasant  
Drinks. *Lesnery an Foods.*

The Countries in *England,* most Celebrated for the Produc-  
tion of Cyder, are, *Eerefordscire, Worcfssersspriesuui. Devonsoire.  
MuJgrave* informs ns, that the *Drvonjbire* People are Vent sub-  
ject to the Gout, which he attributes to the copious Use of  
strong Cyder. \*1 have sometimes known an habitual Colic re-  
mov'd by an entire Change of Malt Liquor, or Wine, for  
Cyder, by way of common Drink.

POMAMBRA. Apples of Amber; these are made of Odo-  
Ions Powders, to which Oiis may he added; and these Pow-  
ders, being receiv'd in Wax, liquid Storax, Or Mucilage Of  
Tragacanth, with a little Turpentine, to render them tenacious,  
. is it is necessary, and intimately incorporated, by an Addition  
os a proper Quantity Os Rose-warer, or some Other such Li-  
quor, are to be reduc'd to Balis of any Size, which shall be  
judg’d most expedient.

. .. They derive their Name from Amber, not because that  
Substancn is always and necessarily an ingredient in them, but  
because they have a grateful Smell, and in that respect resemble  
Amber: Thus, fora Preparation Os this Kind, we may take the  
Odoriferum Crollianum, which is prepar’d in the following  
manner: . ' .

- Take of Mace, Cloves, Cinnamon, Or the Cassia Lignea,  
each two Draths, Of Muth, Civet, and Gum Arabic, each  
One Dram, and Of Tragacanth dried in a Furnace, two  
Drams.

Let these two Gums he triturated with the Musk; and, when  
all the Other Ingredients are carefully triturated, mix the Civet,  
with them, and. add a .sufficient Quantity Of Water prepar'd  
from the Flowers Of the Orange-tree, Or the Water Of Damask  
Roses, prepar’d with Odorous. Specifics, and Rose-water, in  
winch has been digested for eight Days a small Quantity Of the  
Garbo Paracelsi, or the Zihetta Occidentalis, all these are to be  
incorporated together.

i The Carbo Or Zibetta Occidentalis, fo far aS we may Con-  
Jocture from the *Arcbidox a* of *Paracelsus,* is nothing else buthu-  
man Dung, or Sulphur plac'd in Digestion for some time, till,  
instead of its fetid Smell, it assumes one highly grateful and  
agreeable. See *Hartman in Croll.*

This Medicine may, also, be prepared by pulverizing theMn-  
cilage Of Tragacanth, dissolv'd in Odoriferous Water, and mixing  
the- Other Ingredients with it. - - . -.. . - - .

This Medicine, when applied to the Nostrils, by its grateful  
Smell, conveys a brisk Motion to the Blood, and surprisingly  
Comforts the Heart in Apoplexies, Epilepsies, Colics, Suffoca-  
tiOns of the Oteras, .and Plagues, - . .

A small Quantity of it may he min'd with express'd Oil of  
Nutmegs, in order to make a Liniment, to he us'd in the above  
mentioned Diseases. *' Croll. - - .......*

*: Schroder,* in this *Pharma cop.* gives three other Formulae of the  
*Pomambra,* but, aS they are of little Importance in Medicine,  
we refer the Reader to that Work without inserting them.

. POMATUM UNGUENTUM. Take of fresh Hog'edasd,  
three Pounds; of fresh sheep'S-snet, nine Ounces; Of.the Apples  
Coinincnly’ Called Pome-waters, pared and fliced. One Pound

- nine Ounces, of the most fragrant Rose-water, six Ounces, of  
Florentine Orrice-roor, grofly powdered, six Drams; let these  
boil together *in Balneo Mariae,* till the Apples are dissolved;  
then strain without Expression, and keep for Use: Heat it then  
over again, and wash the Whole with Rose-water.

Almost all the officinal Dispensatories abound with Prescriptions  
for this Ointment. The Pharmacopoeia Regia has one, con-:  
tinning these Ingredients, but crouded with many more, aS has  
the *Augustan* Collection, One yet more loaded ; but that, also,.  
gives another from *Amatus Lusitanus,* much more contracted;  
and from thence, likewise. Our College seemed first to take it,  
but yet with a farther’ Abridgment of Superfluities. *Zvteifer*takes great Pains, in his Animadversions, to teach the most Con-  
venient Manner Of Composition, and Mixture of so many things  
Of different Texture. Bur, 35 short a Compass as it is reduced  
to here, seemingly to avoid thch. Difficulties, the common’  
Practice os the Shops has of late sound out a much nearer way,  
which is by buying it os Persons, who make it their sole Busi-  
ness to beat up fresh Hogs-lard wiut Rose-water, into a kind  
of Curd; and scent it with any of rhe aromatic Oiis, most  
suitable to the Liking of their Customers. *G)uincV*. POMPHOLYGODES. Frothy. - 7 . .. -

P0MPH0LYGER0N, πομφολυγηραν. The Name of a  
**Piaister describ’d by** *Paulus Aigrneta, L. J. C.* Iy.

POMPHOLYX, πομφόλυξ, is a Bubble excited in a liquid  
Substance, by some flatulent Spirit, Or. Air, contained therein  
Thus πομφόλυγες are expounded in *Hes.ychius, dtlvravosoelli  
ygulopriveu otpnaitc,* ἤ φυσίνματα ύδἀτος, « Tumors arising on the  
" Water, Or Swellings of the Water." Bubbles, πομφόλυγες,  
appearing on the TOP Of the Urine, indicate a Disorder otthe  
Kidneys, and that the same will be of long Continuance. *Hipo-  
crates, y Aph.'iAn .*

POMPHOS, πομφός. Πομφος, jin *Galeofs* Exegesis, are ex-  
pounded; ἐπαναστάσεις σου δέρματος ἰχθώδεις τε ἄμα καὶ πλαδαρρὶ  
καὶ ἐνερυθεῖς, “ scaly Eminences Or TumorS on the Skin, which  
" are at the same rime red, and full Of Moisture.” In the Words  
*Galen* seems to have an Eye to that Passage of *Hippocrates,  
(Lib. 2..* περί γυναικί καὶ εν τησι κνήμησι πομστὴ ἀνάστανται,  
" and *Pontphi* arise in the Legs.” The Word Occurs, also. *Lib.*2. *de Morbis,* where we read καὶ καταπίμπλάτὰι πομφῶν ώς ὑπὸ  
κνίδης, « and she was full.of *Pornphi* [red, watry Tumors], aS  
" thO' she had been rubbed Over with Netties.'' . .

POMUM. See **MALuS. ♦**

**’ POMUM AMORIS. See AMORIS PO11A. \_**

**POMUM ADAMI.** A Name for the *Limon, fructo Aur antic.  
Pomum Adami* is, alsio, a Name for a Protuberance in the an-  
terior Part Of the Neck, form'd by theTbyrOide Cartilage  
**- POMUM ARENOSUM.** A Name for the **GUAJAVA..**

**- POMUM CITREUM. See CITREUM.**

**Po.MUM HIERUCHUNTANUM.** A Name for **The** *Solanum,  
sipirfosum , fructu rotunda. -*

**PoMUM sPINoSUM OPUNTIATUM.** A Name **.for the** *Meld-  
cactus, Indiae Occidentalis.*

**POMUM SYLVESTRE. See AGRIOMELA.**

PONDO, or PONDU6. A Weight. See **DRACHMA** and  
**LIBRA.**

AS it is necessary to be acquainted with the Weights us'd by  
different. Nations, at different times, in order to understand  
their Practice, I have given Tables of the principal antient and  
modern Weights; and, after these. Table of their Measures.

PONGA. H. M. *jaca minor siylveflris Malabarica.* D. Corn-  
rnelin. *Tataisbae Brasiliensium* Pifon. *similis.* It is a tall evergreen  
Tree, growing in *Malabar,* and bearing no Flowers, at'least  
none which are conspicuous; hut the Fruit adheres to the  
Branches in the same manner aS that Of the *Juca,* whence the  
*Portuguese* call the Tree the *vdild Juca.* The Calyxes are echinated,  
first green, and afterwards redish, and containing Multitudes of  
roundish-oblong, acuminated, and redish Seeds. . .

A Cataplasm prepared Of the green Fruits Of the Tree bruised,  
being apply’d to Tumors, potently promotes their Suppuration. .  
Of the Bark and Root boiled in Water, is prepared a Fomen-  
ration for cedematOuS Tumors of the Legs, an endemic Disease  
among the *Indians,* and called by the *Portuguese Paedo*.. 5.  
*Thoma, .* which preserves them from an inflammation. Rus  
*H.P. sm ...*

PONGAM. See **MINARL**

PONGELION *five Perimaram.* .H. M. *Arbor Indica sili-  
stuos.a, Bloribus racemosis, pentapesalis. Siliquis foliaceis,ad singulos  
Flores ternis.* It is.a tall large Tree, growing in several Parrs os  
*Malabar.* The Oil, prepared os the Bark first bruised, and then  
boiled, heing rubbed On the Body, extracts Vicious Humours.  
The J nice which distils from the Tree, heing drank with But-  
ter.milk, discusses Flatulencies. The Fruit, triturated with *Manga,*and mix’d with az Decoction of Rice, being instilled into the  
Eyes, cures the Cephalalgia and Ophthalmy.

. PONNA. H. M. *Prtenifera sou Nu cisera IAalabarica Foliis  
Nymphaea, Eructu rotundo. Cortice pulvinato.* It is a vast Tres,  
thirty Yards in Height, and four in Thickness, bears ripe Fruit  
in *March* and *September,* and continues fruitful for the Space of  
three hundred Years; it grows in sandy Places almost, every-  
where in *Malabar.* ' s

From the dryscl Kernels, of she. Fruit, they express an Oil,,  
which is used in Lamps, and cures Pains in the Limbs, being  
anointed therewith- Os the Bark Of the Root macerated in  
Vinegar, they prepare an Extract, which, rubbed on the Head,  
Cures the *Cephalaea.* The Tear which distils from rhe Tree,  
and its Fruit, being Collected and exhibited, excites Vomiting,:  
prOVOkes-to Stool, and violently purges corrupt Humours both  
upwards and downwards. *Raii Hi Ρ.*

*Tsierou Ponna,* H. M..is the *Malabarian* Cornel-trCe, with  
Leaves..like those Of the *Nymphaea.* This is accounted a  
smaller Species Of *Ponna,* and bears Emit like that of Our Cor-  
nel-tree, m Shape, Size, and Substance: This Fruit is eaten by the  
Natives, and from its Kernels they express an Oil, which is  
used in their Lamps, but is Of no Service in Medicine. Rtii  
HP. fe

P0NNAGAM, H. M. is a tall bacciferous *Indian* Tree  
with a smooth tricapsnlar Emit, containing in each Capfula a  
single Seed. It is always Cover'd with Leaves, Flowers, and  
Fruit. ... ......

: Or the Leaves and Fruit bruised, with Honey, is prepared a  
.Cataplasm, which, heing apply’d, is a sovereign Remedy for  
the Bue and Stings of Serpents, and Other Venomous Animals.  
The Root, bruised, and apply’d in tho Form or a Caraplofin m  
Contusions, dissolves the coagulated Blood and cures the part  
affected. *Raii H.P.*

*... PeeTsjerou-Pomtagam,* H. M. is a larger Species of *Ponnagam,*which grows to a greater Height than the former ; but, in all  
other respects,-is very littie different from IL *Raii H.* P. .

. PONNAM. A Name for the *Senna - orientalis, fruticosa  
Sophera dicta. so. '*

PONS VAROLIl. The Name os assort Os Arch in the  
*Cerebellum,* form’d by two medullary Processes, call'd thus  
from *Varolius,* the-first Observer Of it.

P0NTAGIA. A Term in *Paracelsus de Tartars,* import-  
ing, as is said, a Mixture Of saline Substances with those which  
..are bitter. Or styptic. . ~ . .

.. PONTICUS, an Epithet in *Paracelsus,* expressive of a cer-  
tain saline Taste, resembling that Of Sea-water.

*Pontica Vina* are acid, feculent, and rartarous Wines.

*Ponticum Mel* is a sort of poisonous Honey. See ssGOL2.

**.TURON. ... ' ; - - -** . ' i

POPONAX; The same as **OPOPANAx. '.**

POPLES. The Ham, Or Joint Of the Knee. *e*POPLITEUS MUSCULUS. .. . . ἐνι

εἴ This is a small Muscle Obliquely pyramidal, situated Under the  
Liam , from whence it has itS Name. , . .

It is fixed above by. a strong narrow Tendon to the Outer  
Edge of the inner. Condyle Of the OS Femoris, and to Yhe  
neighbouring posterior Ligament Of the Joint. Thence it runs  
obliquely downward,.,under the inner Condyle of the OS Fe-  
moris 5- its flat, and pretty thick, fleshy Body,, increasing gra-  
dually in Breadth, till It infixed in the backside of the Head  
Of the Tibiajall the Way to the oblique Line.or Impression ob-  
servable on that Side. . .

The Popliteus performs the Rotation Of the Leg, when bent,  
in a Direction contrary to that Of the Biceps. ' The Biceps  
turns the Leg from before outward , the Popliteus from hesor,  
inward. This Rotation, therefore, answers to the Pronation Of  
the Radius, by the Pronator Teres, as that made by the Biceps r  
Tibia? does to the Supination made by the Biceps . Of the  
Arm. 1 .

This Muscle is Commonly reckoned among the Flexors Of  
the Leg ; but it seems .Very ill Contrived for such a Function,  
because Of the Obliquity Os its Situation, and because it; Inset-  
tion is in near the Centre of Motion of the Joint. By its Con-  
nection with the Capsular Ligament, it may serve to prevent its  
being catch’d between the two Bones in the Flexions of the  
Leg. *Ntifero.’ \* \ '\**

i POPULAGO. Marsh-marigold. i ; I c;\_ mil

The Characterssare,.; - , ?.a

The Root is perennial,, the Leaves are entire and roundish.  
The Flower is rosaceous, like that Of the Ranunculus, and  
naked. The Fruit Consists Of a Multitude of littie Sheaths in-  
fiected downwards, stellated, and full. os. many oblong Seeds.- .

*Boerhaave* mentions two Species of *Pop. la co,* which are,  
, i. Populago; Sore majore. See **CALENDULA** *Palustris.  
si 2..* POpulagO, flore pleno. *T.* 173. *Caltha paluforis, flore pleno.*C. B. P. 276. *PJeudo-hsllsborus ranunctiloides, pratensis, rotunda,  
solius, multiplex.* M. Η. 3.461. *Boerh. Ind. Plant. Fol. i.*

This Plant is said to be of a refrigerating Quality, like, the  
*Nyrnpheemaj* but it is really of a Very caustic.. Nature, so that  
'Cattie avoid it, tho' in the greatest want os Grafs ; hus, if they  
happen to eat it, they are first seized with an Inflammation Of  
the Fauces, Oesophagus, and Stomach, and at last die. .Hence  
it appears to be a very acrimonious Herb, , and of rhe Nature of  
Hellebore, *Hist. Plant, adscript. Isoerhdeav. . ,* . S

POPULARIS. Endemial, Or Epidemical. j

POPULUs. -

The Characters are;., .

The Leaves are roundish. The Flower in the male Tree is  
amentaceous, and confists Os apiculated Leaves; from the  
-squamous Calyx shoots forth a long Axis, IO which grow on  
every Side masculine PloseuleS so disposed, aS by their Union  
\* to resemble a Cat'S Tail ; each Of these FlOscules consists, of a  
thin, caducous Membrane,furnished witban hairy Margin, and,  
under this of another less caducous Membrane, from which.  
On the supine Part, arise eight Stamina, furnished with red.  
Oblong Testiculi: This Membrane, when mature, has its Margin  
indented, and adorned with a lanuginous Fimbria, or Fringe.

*Boerhaave* mentions five Species of *Populus*; which are,  
i. Populus; alba; majoribus soliis. *Tourn. last.* 592. *Boerh.*

*Ltd. A.* 2. 2II. *Papulus alba.* Ossie. Ger. i3oi. Emac. I486.  
Park. Theat. I4ro. Rail Hist. 2. I4iS. Synop. 3. 446. *Populus  
alba* λεκυη. J. B. I. x55; *Populus alba sauce* λεύκη *ab albedtne  
dicitur} majoribus sulpin.* et β. ρ. 420. TUE ABELsu Or  
WHITE POPLAR. ..

It delights in watry Places, and the Bark is of Use both in-  
wardly and outwardly in the Sciatica, Strangury, and Am-  
bustioni.-

- 2. POpulns; alba; minoribus foliis, c. Β. Ρ. 42p.

3. Populus, nigra. *Ossic. Ger.* ryot. *Emac.* I486. C. ST.  
429. *Parle. Theat.* I4Io. Ran *Hiss.* 2. I4I9. *Synop. 4. et  
Tourn. Inst.* 592. *Boerh. Ind. A.* 2. 2iI. *Populus nigra sive  
Ntyatp&ei* J. Β. I. I55. THE BLACK POPLAR.

The black Poplar grows frequentiy to be a large Tree, having  
a whitish Bark, and smooth shining green Leaves, growing On  
long Foor-stalks; they -are broad and round toward the Bottom ,  
ending gradually in a narrow sharp Point. The Stalks and  
Leaves have frequentiy large Swellings, or Tumors on them,  
made by small infects. The Catkins ate long and loose. Coming  
.Out early in the Spring. It grows by watry Places and Rivers,  
-the Leaves and Buds are used.’

The Only Use that they are put to, .is to make the Ungtien-  
tum Populeum ; but, as rhe black Poplar is hot, the Ointment  
cannot receive its cooling Virtue from those Leaves Or Buds,  
-but from the other Ingredients which are put in it. *Schroder*says, the Women in *Germany* use the Buds to make their Hair  
grow thick and ornamental. *Millers Bot. Gaps.*

' The Buds Of this Tree are used in the Ointment Of Poplar ;  
to which *Tragus* adds. the Root of Bryony,- and the Tops of  
the Bramble: -It. is .Very lenirying, and is used with - Success in  
the Inflammation Os the Piles; but.a good Quantity Of Opium  
must be added to it: The Tincture Of the Buds with Spirit Of  
Wine, is excellent for old Loofnefies, and internal Ulcers; the  
Dose half a Dram, .Or a Dram, taken Morning and Evening in in  
spoonful Of warm Broth. *Martyr?s Tournofort..*

The Eyes, Or young Buds, gather'd in *April,* are used in  
Medicine: It is disputed whether they are of a "cold or hot.  
-Quality, but the most probable Opinion is, that they are mo-  
derately hot. *Dale. ’ \_ . - -*

**- - POPULEoN, or POPULNEUM UNGUENTUM. ss** l

Take Of the fresh black Poplar-buds, a Pound and an half;  
the Leaves Os Violets, and Navelwort of the Wall, each three  
Ounces , fresh unfalted Hogs-lard, cleared from its Membranes,  
and washed, sour Pounds. Braise, mix, and macerate these toge-  
ther, and then add the tender Tops Of rhe Bramble, Leaves  
of black Poppies, Mandrake, Henbane, Nightshade, Lettuce,  
te greater Houfleek, and the greater Burdock, each throe  
Cuncesi - Bruise again, and mix all together'Very well , and  
then after ten Days standing, pour On them One Pound 6f  
Rose-water; after which boil over a gentle Fire, continually  
stirring with a Spatula, until all the superfluous Humidity is eva-  
porated ὁ then strain and squeeze out with a Press, so as to obtain  
an Ointment, -according to Art. \*

This is Originally ascribed to *Nicolaus.* The Pharmacopoeia  
Regia giyesa Prescription Of it, aS, also, does the *Augustan*Dispensatory; but the latter comes, much the'nearer to what  
sis here retained. The new College Dispensatory has corrected a  
Mistake, which the former’ Editions were liable to, in expres-  
sing the HOusteek to be the greater Sort, because the lesser,  
commonly called Stone-crop, which was liable to be put in its  
stead, is Of a -very Opposite Quality to the Intention of the Me-  
dicine. *sisicincy. . ' ?\* - .- ’*

4. Popmus, tremula. - *Ossic. C. Β.* Ρ. -429. *Tourn. Infl.* 592.  
*Boerh. Ind. A.* 2.4II. *Populus Libyca.* Ger. I3O2. Emac. I487.  
Park. Theat. -I4II. RaiiHist. 2. I4T9- Synop. 3. 446. *Populus  
Libyca Plinii, Reprio Theophrasti,* jo B. I. I63. THE ASP or  
AsPEN-TREE. , Ἀπὸ :

It grows in Woods, and in'moist watry Places, and the  
Leaves are supposed to agree in Virtues with those Of the black  
Poplar-t-ree. -- . \_ —

5. POpulO similis arbor; resinosa altera. *C. B. P.* 430. *Ta-  
carnahaca.-scrtA:. Bcer. Ind: alt. Plant .Vol. 1. :*

The Bark of the Poplar is, a very good Detergent, and the  
tender Buds are used by the Women in adorning and promoting  
the Growth Of their Hair; they have, also, an anodyne Virtue,  
heing externally apply'd ; for which purpose they are an Ingredient  
in - the *Ungugritvra Populeum,* fo named from them: This Oint-  
rnent is of excellent Service in the Haemorrhoids, especially if it  
be prepared with a good Quantity of Opium. The Tincture of  
the Buds is Very good for an inveterate Diarrhoea, and internal  
Ulcers. The bruised Leaves are by some apply’d with good  
Success in the Gout; and the Liquor, which is collected in the  
Cavities of the Poplar, is believed to cure Wans and the lrnpe-  
.tigo. *Hist. Plant, adscript. Boerhaav.*

PORCELLIONES. The same **aS MILLEPEDES.**

PORCELLUS INDICUS. The *Guinea Pig.* The Flesh of  
this Animal has not much Taste, and is hard Of Digestion. Some  
are Os Opinion, that Broth prepared of it is good against Dysen-  
teries, and proper sor exciting a Discharge Of the Urine. *De..  
mery des ThrOgtiesj ’ ς '*

PORCUS MARINUS. The Sea-hog. This is a Species of \*  
Dolphin, Or large oblong Fish, whose Nose resembles that of  
the Land Hog, and it digs up the Earth in the same Manner. '  
This Fish is frequently’ carried up with the Tide into Rivers,  
and is very -commonly seen ar *Bo an,* in the River *Seine.* It  
is of a yellowish Colour and Very sat; its Flesh is eaten, but  
is not very delicious, and is, besides, lomewhat hard of Digesy  
tion.- When the Greafe of it is melted, and Perfumed with

some odorous Plant, it is called the Ost of the Porpoise, or  
Sea-hog. It is of an emollient, resolvent,, and anodyne Quality,  
and good in Disorders arising from a Coldness of the Humours.  
*Ljemery des Drogues.*

**PoRcUS.** Ossie *Porcus domesticus five Sus.* Raii Synop. A 92.  
*Sus.* Aldrov. de Quad. Bssul. 937. Geso. de Quad. 872. Jons, de  
Quad. yo. Charle. Exer. I3. Schw. de Quad. I23. *Mas* Aper,  
**the** BOAR. *Fomina* Sus, the SOW. *Foetus*Porcellus, **a** PIG.  
THE TAME SWINE, Or HOG.

The Parts of this Animal, used for medicinal Purposes, are  
the Lard, the Gail, the Excrement, the Lungs, the Astragalus,  
and the Bladder. As the Lard is not Of a Very hot Quality, it  
is, therefore,made an ingredient in refrigerating Ointments, and  
used for alleviating inveterate Pains of the Loins and Joints.  
*Diofcorides* informs us, that the Gall of this Animal is used with  
great Success against Ulcers Of the ears, and os all other Parts.  
It is, also, said to prevent the Growth of the Hairs. The Ex-  
crements are Of an emollient and discutient Quality, and for  
that Reason heneficial in Itchings, Exanthematous Eruptions,  
Corns of the Feet, and other hard Tubercles - the Excrements  
of this Animal, also. Cure the Bites of Venomous Animais, and  
stop Haemorrhages Of the Nose, the Lungs are highly bene-  
ficial, if applied to Abrasions Of the Skin Contracted by **the**Shoes. The Astragalus is recommended for Fractures Of the  
Bones, aS also for Pains of the Neck and Head. The Bladder  
is beneficial to those who discharge their Urine involuntarily.  
*Schrod.* It produces **the** same Effects, when applied to the  
Pubes, and is said to provoke Urine. *Pliny. Dale.*

There are two Sorts Of Hogs, the wild and the tame. Of  
**the** tame Hogs, those are the properest for Fond, which are  
neither too Old, nor. too young, which are large, sat, tender,  
and have been well fed, aS with Acorns, Mast, Beans, Tur-  
nep, and the like.

*Pork* is nourishing Food, and renders the Body soluble , but  
it is difficult to digest. Produces dull. Viscous, and gross Hu-  
mours, and is improper for gouty Persons.

It contains much Oil, Volatile Salt, and Phlegm.

It agrees principally, in Cold Weather, with young, hot and  
bilous Constitutions, with those who have good Stomache, and  
**are** used to labour, and exercise ; but it has bad Effects upon  
old, weak, and tender Habits.

When an Hog is about a Year old, he is gelded, and in *Latin*Called *Maialis.* He then grows fatter, and the Flesh is more juicy,  
and better tasted, than before. A Sow is in *Latin* Called *Porca,*or *Scropha,* and not so much fed for Food as the Hog, because ns  
Flesh does not taste so well.

A Pig, in *Latin* Called *Porcellus,* is esteemed an excellent  
Dish, and. that which is neither too young, nor too Old, is  
most wholsome, when too young, it abounds too much with  
Humidity, and, when coo old, it becomes hard of Digestion.

An Hog is subject to the Messes, Leprosy, and many Other Dif-  
tempers, hecause it is full Of gross Humours, and such aS are liable  
to produce the like Diseases in those who feed upon them.

Pork affords a Food that does not easily waste, hecause it Con-  
tains oily, balsamic, and Viscous Principles, which easily stick to  
the Fibres Of the Parts, in such a manner, that they are not  
without Difficulty separated from them. Pork is, also, laxative,  
because the Oily and phlegmatic Principles, with which it abounds,  
loosen the Fibres Of the Stomach and Entrails, and dilute the  
gross Humours Contained in those Parts. -

*Galen lens,* that Pork is not Only better tasted, than the Flesh  
of other Animals, but, also, that it is more wholsome. He adds,  
that it nearly resembles human ...Flesh, which he proves, in his  
third Boek, and second Chapter, Of the Nature Of Foods, by  
an Account of Certain Persons, to whom he Ordered human  
Flesh to he presented instead Of Pork, which they eat without  
being able either by Taste, Or Smell, to discover the Fraud.  
Lastly, he assures us, that Pork, when well digested in the Sto-  
mach, affords more Nourishment than any Other Food and  
says, that the Athletes, Or Wrestlers, and such as were inured  
to hard Labour, were never so strong and Vigorous, as when  
they fed upon Pork, and that when those People, who were  
used to this Food, lived but only One Day upon the Flesh Os  
.another Animal, and still continued the same Exercises, they  
found themselves weaker the next ὁ and when they Continued  
several Days to disuse Pork, their Strength sensibly decayed, and  
they became lean.

We readily agree with *Galen,* that Pork may he very nou-  
rishing and wholsome, for those who are used to Fatigue and  
hard Labour; because it is durable Food,' and not soon wasted.  
But Pork in general is not wholsome, and Ought to he used  
moderately; sor this Animal’S Way of Living is lazy and unac-  
five, and the Filth it continually feeds upon, plainly shews, that  
- its Flesh is full of Viscous and gross Juices, fit to produce HU\*  
mours Of the same Nature, in those who eat it, to cause Indi-  
gestions, and several other Inconveniences,

Some Nations never eat Pork, aS the *Tevis, Arabs, Maho-  
metans, Moors, Tartars,* and others.

- If we reflect upon the Distempers swine are subject to? in”  
disputably from their habitual Way of living, and their noxious

JmineS thence contracted, we may, perhaps, find Reason to ad-  
mire the Legislator Of the Jews, who forbad the Use of it .  
and to Commend the Wisdom Of the Eastern Nations, who  
esteem it their Duty to Observe this Prohibition. It is not  
**at** all improba He, that the Scurvy, **a** Distemper to which the  
Northern Nations are extremely subject, may he excited by  
the habitual eating of Swines Flesh, especially when hardened  
with Salt and Smoke.

*Aper.* Ossie. Schrnd. 5. Ἀ68. Schw. de Quad. 54. Aldrov.  
deQuad. Bssul. IoI3. Gesn. de Quad. oI8. JonS.de Quad.  
74 Charlt. Exer.I3. Rail. Synop. A.06. THE WILD SWINE,  
or BOAR.

The Parts Of this Animal used for medicinal Purposes, are  
**the** Lard, the Teeth, the Penis, the Gall, the Excrements, and  
the Urine. The Lard is possess’d Of the same Qualities, tho'  
in a stronger Degree, with that Of the tame Swine. The Teeth  
are exhibited aS a Specific in the Pleurisy, and are said to cure  
the Quinley. The Penis and Testicles are said to remove Im-  
porence and Barrenness. The Gall discusses strumous Swellings..  
The Excrements, when dried, are thought beneficial in stopping  
-Vomitings of Blood, and Haemorrhages, when applied externally.  
The Urine is a Specific for resolving and expelling the Stone  
of the Bladder. *Schrnd. Dale.*

A wild Boar that is young, fat, well-fed, and tender-fleshed,  
is best for Food; he Ought, also, to he hunted, and well rum  
This Food is very nourishing, and does not soon waste, hut jo  
easier Of Digestion than common Pork. It produces gross Hu-  
mours, and is not good for sedentary and tender Persons.

All the Parts Of a wild Boar contain much volatile Salt and  
Oil. Its Flesh is good principally in Winter, for young Peo-  
ple *Of an* hot bilious Constitution, for those that have a good  
.Stomach, and are used to Fatigue.

The wild Boar is so called, because it is Of the same Shape  
and Size with the tame Hog, Only that it lives in Woods. It  
is fiercer, more nimble, and rougher bristled, than the other ;  
and is usually Of a black, or dark red Colour: *Pausanias*says ho had seen white ones. *Pliny* and other Authors, assure  
us, that there were no wild Boars in *Candia, Africa,* and the  
*Indies,* and κΕΖνὰπ Observes, they had none in *Macedonia.* The  
*Spaniards* have found some in *America,* which were much  
smaller, had a shorter Tall, and their Feet made Otherwise than  
those Of our wild Boars; and their Flesh was also more deli.  
Cate, and easier os Digestion, than ours, and they sound Others  
in some Places with a Pair Of Horns on their Heads.

The wild Boar in *Latin* is called *Verres Sylvaticus,* and the  
Sow *Sus sera* Or *Scropha Sylveflris. Pliny* says, that, *Servilius  
Rufus* was the first who introduced Hunting the wild Boar among  
the *Bomans.*

The Flesh Of all wild Boars is not equally good. Those  
that are pent up in Parks are inferior Food to those that range  
atlarge, and feed upon Roots, Swine-bread. Corn, and Fruits.

' The wild Boar is not Of so moist a Nature aS the common  
Hog? by reason Of the Exercise, and different Food it lives  
upon, its Flesh is, therefore, less viscous, more agreeable to  
the Taste,and easier Of Digestion. This Flesh is Very nourishing,  
because it Contains Oily and balsamic Juices ; but it is proper  
Only for those who are of robust Constitutions, and inured to  
Fatigue, hecause, being very compact in its Parts, it requires **a**.strong Stomach to digest it, and aS Persons who are used to  
much Exercise, lose much Of their Substance, they must have  
gross Foods, which adhere to the Parts, and are not so easily  
spent. *Lernery on Foods.*

*Porcus* sometimes imports the female *Pudenda.*

PORFILIGON.The Seales which fall from Iron upon being  
hammered. *Palandus.*

PORFIRETICUM, Α Brass Mortar, or a Rasp. *Rulandus.*

POROCELE, πωροκἤλη. A callous Hernia, from πῶρος, **a**Callus, and κήλη, a Rupture or Tumor. ~ . . -

POR0MPHALON-, πωρομφαλον, from ποὐρος, a Callus, and  
μμααλος, the Navel. In the .Definitions ascribed to *Galen,* it is  
the Concretion of a Toph, or Callus, in the Navel

ΡΟΡΟΡΟΕΙΑ,ποροποιία, fromnryor, a Pore, or Passage, and  
π-οιέω, to make. An Opening, or Reseratiom of the Pores, cr  
Passages. , . '. 1

**POROS, πόρβς. A Pore, or Passage. See CUTIs, and PER-**

**SPIRATIO.**

**POROS, πῶρος. A TOph, Or Callus. See PORUS.**

POROSIS, The Generation Of a *Callas.*

POROTlCA, Medicines which generate a *Callus.*

PORPHYRA, See **PURPURA.**

PORPHYRIO. A Bird so called on account of its Colour,  
which resembles that Of Purple, it is a Water-fowl, as large as  
a Cock, Of a bluish or diversified Colour, with a large, lharp,  
and purple-coloured Beak. It has a Comb On its Head; its  
Legs are long, and its Feet divided into five Claws; its Tail is  
pretty short, and the Fowl itself feeds upon any Kind Of Fish  
it Can Catch. Its Fat is of an emollient, resolvent, and anodyne  
Quality. *Laernery des Drogues.*

PORPHYRlTES. *Ossic. Worm.* 44. *Charlt. Poof.* 2o. *Boet.*5o5. PORPHYRY, Or RED MARBLE.

This is a Species of Marble highly hard, and of a red Colour,  
it is brought to ns from the Confines of *Egypt,* the Red-sea,  
and *Ethiopia.* It is thought to he possess'd or a Lithontriptic  
Quality, and to agree in vinueswith the OPHITES. Tneprin-  
cipal Use Of Porphyry, in Medicine, is to levigate hard Substan-  
ces, so aS to reduce them to an impalpable Powder. *Dale.*

PORRACEUS. Os the Colour of Leek--.

PORRIFIGL In Surgery, is the same as FICUS.

PORRIGO. A Disorder Of the Skin; **the** same aS **FURFUR.**See **LEPRA.**

PORRUM

The Characters are.

The Bulbs, Or Roots, are Oblong, narrow, almost cylindrical,  
and Coated: The Leaves grow out of the Coats Of the Roots,  
are plain, and sometimes Carin a- ed.: The Flower is hexapetalous,  
as it were Bell-shaped, and adorned with broad and flat Stamina,  
ending in three CapillamentS, the middle of which is adorned  
with an Apex, the Flowers are disposed in almost globular  
Bunches: The Ovary becomes a roundish, triCapsolar Fruit, full  
of roundish Seeds.

*Boerhaave* mentions four Species os *Porrum* which are,  
1 I. Porrum; commune; Capitatum. C. B. *P. -sm. Tourn. Jnfi.*382. *Boerh. Ind. A.* 2. I43. *Porrum.* Ossic. Park. Parch. 5I2.  
.Ger. I38. Rati Hist. 2. II36. J.B. 2. 551. LEEKS.

Leeks are well known to have long, ’ white, round Roots,  
*..with several* white Fibres shooting from theBOUOm, the Leaves  
are long and broad, encompassing the Stalk, which grows two  
or three Feet high, smooth and round, having at the Top a  
large, round Head, Composed Os a great Numher os (mall,  
greenish, purple, six-leaved Flowers. It. is sown in Gardens,  
and flowers in *June* and *July,* they have a strong Onion-like  
Scent. .. . \_ . . . .

Leeks are more .used in the Kitchen among Soops, and Broths,  
than in Medicine; they arc warming and attenuating, and good  
- to Cleanse the Lungs from tough Phlegm, and to help Short-  
ness os Breath, and Stoppage os the Stomach; they are, like-  
wise, reckoned good against the Bites os Venomous Creatures/  
The Juice os them is used to dissolve the Gums in the *Pilula  
foetida. Millers 3ot. Osse.*

2. Porrum, Commune, Capitatum. *C.B.P. sir. MH 2* 39O.  
*Capite, sphaerico, minori, flosculis, et pedunculis florum, carneis.*

asc Porrum, Commune, Capitatum. *G.D.F.yz. MH.2.* 390  
*Capite sphaerico, maximo, flosculis candidis, podanculis siorum peni,  
tus viridibus.* . . 1

4. Porrum, Commune, Capitatum. *C. Β. Ρ.* 72. *Capite, sphae-  
rico, minori, flosculis albis, in podanculis penitus viridibus. Boerh.  
Jnd.alt. Plant.* Po/.2. " ' . . ..

This Plant Contains a fetid, oily, volatile. Salt: Whence its  
Bulb heing bruised, causes a Distillation os Tears from the Eyes  
and Nostrils. For this Reason it is proper in Cafes where  
Heat is required. Or where an Excess Os Heat is not seared;  
but is injurious to those who abound too much with Blond, or  
whose Blood is Of too loose a Contexture ; aS when it is Void-  
ed by the urinary Passage, by an Haemoptoe, or by the bre-  
morrhoidai Veins. It Provokes the Monies, and Urine; and is  
very good for the Bites of Serpents, and Combustions. . *Hist.  
Plant, adscript. Boerseaav.*

Besides the foregoing Species of *Porrum, Dale* mentions rhe  
following. ... ... .'.

*Porrum vitigineum.* Ossic. Get. Emac. I 76. *Porrum tonsile.*Ger. I 39. *Allium siylvesire Amphicarpon, foliis Porraceis, flori,  
bus, et nucleis purpurati.* R. Synop. Edit. 2. p. 230. VINE-’  
LEEKS. - - -

. They have been observed by Mr. *Laanson,* to grow on the  
Mountains of *Westmorland,* and to flower in *June.* The Leaves  
are used. . . . ! ’ ’ .

*.Dale* takes this Plant for the *Ampeloprastern* of *Hioscorides ’*the Virtues of which see under the Article ALLIUM, from *Diosc  
corides, Lib. J .Cap.* I8o. .

PORRUM, Or PORRUS, in *Pallatises sis* a Species ofrough  
Wart, which resembles the Root Of a Leek, On account or a  
great Number of Filaments On the Surface.

PORTA See **HEPAR.** The Female *Pudendum* is sometimes  
**thus called.**

PORTAIGUILLE. TheNameofa Chirurgica!Instrument.  
See the Explication of *Pig.* 2. and 3. Of *Tab.* XXVIl.

PORTATILE. In the *Collectanea chyrnica Ley densi a,* there  
is a Preparation Of Tartar, intituled. *Acetum in Sacco Portattle.*

Take Of white Tartar, half a Pound; after it is carefully wash’d  
and dried, reduce it to a Powder, infuse this Powder in  
. strong Wine-Vinegar. Then dry the Powder again, and  
infuse it a second rime in Vinegar. Let these Measures  
he repeated .ten times, and an highly acid Powder will  
he obtained, which, when dissolved in any Water, renders  
- it acid ; and this is called *Acetum Portabile,* Or, *Portable  
Vinegar. Collect. Chytn. Leyden.*

**. PORTORARlUM. The** *Duodenum* **or the** *Pylorus.***PORTULACA**

**The** Characters are ;'

Leaves are somewhat thick and sircculent. the Calyx is  
monophyllous, bifid, and closely adheres to the Ovary; the  
Flower is rosaceous and pentapetalous. The Ovary in the Bot-  
tom of the Calyx becomes an oval Vestel, consisting os twoShelis, one within the other. Half the outer Shell, when ripe,  
bursts herinontally, or leaving an horizontal Opening, over the  
inner Shell, winch afterwards sties open in the same horizon-  
tal Manner, discovering a Multitude of small Seeds.

*Boerhaave* mentions six Species of *Portulaca*; which are,

i. Portulaca; latifolia; sativa. *CoB. P.* 288. *Raii Hist,*2. 1039. *Boerh. Ind. A.* 22o. *Portulaca.* Ossic. Park. Paratio  
499. *Portulaca domestica.* Ger. 4I8. Emac. 52 I. PURS-  
LANE.

This Plant is well known, and has round, smooth, reddish,  
and succulent brittle Stalks, with sat, thick Leaves, round,  
and broader at the End, then next the Stalk. The Flowers  
grow on the Tops of the Stalks among the Leaves, heing small,  
five-leaved, and yellow, succeeded by roundish Seed-vefiels, in-,  
eluding small, black, rugged Seed. The Root is small and  
fibrous. It is sown in Gardens ; the Leaves and Seed are used.  
The Seed is one os the Four lesser cold Seeds.

. The. Leaves are much used aS a Salad, being cooling, and  
good for the Scurvy, attempering the Heat of the Bile; and  
help the Strangury, Heat of Urine, and Gonorrhoea. The Seed  
is cooling and restringent, and good to kill Worms. *MellerA  
Bot.Qsse*

. 2. Portulaca; sativa; latifolia; soliis flavis. .MJZ2.57O.

3. Portulaca; angnstifolia; sive fylvestris. *C. B. P.* 28Β.  
*Tourn. Ind. 236. Bocrh. Ind.* .δι 22O. *Portulaca fylvestris.* Ossic.  
Ger. .4I8. Emac. 52I. Park. Theat. 722. Raii Hish 2.

*Portulaca silvestris minor sive fpontanea.* J. B. 3. 678.

It grows frequently in sallow Grounds, and by the Sides of  
Paths. The Herb is used, and agrees in Virtue with the  
Common or Garden Purslane.

. .4. Portulaca; Curaflavica ; lanuginosa; procumbens. *Par.  
Bat.* 2I5. . .

**5. Portulaca; Africana; fempervirenS; flore rubicundo.***Ho A. Ϊ. Ayy. so*

*6.* Portulaca; Curaflavica, folio Capparidis. *Par. Bat  
Bocrh. Ind. alt. Plant.*

This Plant affords an excellent Aliment and Medicine ; its  
Parts are Very succulent, and the Juice astringent, remarkably  
aperient, expulsive, and cooling in inflammatory Diseases, and  
very good to wash the Guins, .when affected with a Gangrene.  
A Decoction of the Leaves makes an excellent Gargarism for  
the Quinsey, and is no less serviceable in the Phrensy, Pleurisy,  
Peripneumony, Scurvy, and Inflammations of the Viscera and  
Intestines; it tempers Bile, and jo corroborative, especially if  
the Plant he boiled with Whey. The Juice is somewhat acid,  
nitrous, and Very viscid: Whence it has the same Virtues as the  
*Sempervivum, or Nummularia,* which renders it qualify’d to coed  
rect an excessive Motion, or Volatility of the Spirits, a Putre-  
faction, and a Rigidness of the Fibres ; whence it is of Service  
in all acute Diseases. .Being eaten in Salads in the Summer-  
season, it mitigates Bile, and prevents Disorders which may be  
justly apprehended from an Excess of that Humour; ft destroys  
Worms, and is of Service in malignant putrid Fevers, Heat of  
Urine, and the Nephritis. The Leaves, applied to the Head,  
ease the Pains thereof; the distilled Water is Very good sor an  
excessive Fluxos the Menses, and for Haemorrhages ; the Juice  
is of great Efficacy in a Consumption. The whole Plant is  
extremely full of Juice ; *so* that is you compress and rub the  
Leaves hetween your Fingers, they will almost spend themselves  
wholly in Juice; fo that if you bruise a Pound of the Leaves,  
and squeeze out all the Juice, there will scarce remain a Dram  
of solid Substance.- *Hist. Plant, adscript. Boerh.. -*

*Portulaca maritima.* Offic. *Portulaca marina nostras.* Park.  
724. *Halimussive Portulaca marina.* C. B. I2o. Raii Hist. I.  
195. *Halimus vulgaris sive Portulaca marina.* Ger. Emac. 523.  
*Atriplex maritima angustissimo folio.* Tourn. Inst. 5O5. COM-  
MON SEA PURSLANE.

It is commonly found, in the salt Marshes, and flowers in  
*scfuly* and *August.* The Leaves, and tender Branches, pickled  
after the manner of Samphire, are used by the *Englisu* aS well  
as the *Dutch,* hi Sawces, for exciting an Appetite. *Raii Gai.  
Angl.* It is an hot Plant. *Magnol. Bet. Menps.* Mr. *Stubbs*commends it for a Cosmetic. *Craig.*

PORUS. See POROS. E

) PORI BILIARIL The Biliary Ducts. See **HEPAR. -**

PORUS. *Pliny,* in the seventeenth Chapter of his thirty-  
sixth Book, after he has spoken of sarcophagous Stones, which  
soon consume dead Bedies, which are laid in them, speaks of  
others which have a contrary' Property of preserving them:  
Such, he says, was the *Chemites,* very much much rescmbling  
Ivory, in which it is reported *Darius* was laid ; and fuch an-  
other is the *Porus,* which, for Whiteness and Hardness, he de-

spribes to be like the *Parian* Stones, but less ponderous. *Pliny*is so brief in his Description, that we are not certain whether  
he speaks os the Stones which we now call *Pori.* Thefe have  
their Name from the Multitude os their Pores, or Perforations;  
ip Substances they resemble Coral, and only differ from it in their  
Poroshess. Some of them are near akin to Coral , others are  
widely different from it., Those of the whitest and closest Sub-  
. stance much resemble Coral, and spread themfelves in Branches  
aster the same manner; but it must he observed, that they are  
all white in general. Those which are wrinkled have striated  
Lines, winch run along theTrunk, and eyen to the Extremities  
of the Branches lengthwise; and they are, also, furnished with-  
in their internal porous Substances with Meatuses, which pro-  
ceed according to the Longitude of the Branches; being sepa-  
parated by the Interposition of a fort of Thread. Those winch  
have Punctations in their Superficies, have their Meatus inter-  
rupted by Rays proceeding from a Centre in the interposed  
Thread to the Circumference. *Ray* from *Jo Bauhine.*

POSCA. . Oxycrate, that is. Vinegar and Water.

' POSSETUM. A Poffet. The foreign Writers mention  
this as a fort of Fond, or rather Medicine, peculiar to the *Eng-  
lijh.* The Serum of a Posset, or Posset-drink, appears to be  
an excellent Liquor, either considered as a Medicine, or All-  
ment, from what is said os Whey, under the Article LAc.

POSTBRACHIALE. The **METACARPUS.**

POSTHE, πο«θη. The Prepuce..

POSTHIA, ποὀτια. A Disease of the Eye-lidS; the same  
**as CRITHE, or HORDEOLUM.**

POSTPOSITIO. When the Paroxysm of an intermittent  
Fever comes on later than it is expected, this is called the *Post-  
position of the Paroxysm* ; as when it seizes sooner, it is called  
the *Anticipation.* The first is esteemed a good Sign ; the latter,  
the reverse. ' . . .

POTABILE AURUM. See **AURUM.**

POTABILIS MARS. In the *Collectanea Clismica Leiden:,  
sta,* we find three Preparations of Iron under this Tile, from  
*de Marts r* The first of them is thus prepared:

Take os the Filings of Iron finely triturated, and of the  
whitest crude Tartar obtained from *RFenijh* Wine, each  
as much as you please ; and of filtrated Rain-water, a  
sufficient Quantity to form into small Balis r Dry these  
Balis in the Sun, and bake them along with Loaves in an  
Oven. Then reduce them to a Powder Again ; and with  
a sufficient Quantity ofRain-water, as before, form them  
into Balls, and again bake them in an Oven. These  
Measures are to be repeated, till the Iton is found to he  
soluble in any Liquor. Tins Medicine is to the exhibited  
in a Spoonful of Rain-water. The Dose is from six to  
fixtech Grains, and one Scruple.

os, ' ; E „

Take of the finest Filings of Iton, one Part; and *of she*, Flowers of Sulphur, two Parte. Triturate theni toge-  
ther, and add a sufficient Quantity of Rain-water to *re-  
duce* them to the Form of a Poultice. Let them stand  
in a moderately warm Digestion for twelve Hours. Then  
pour as much Rain-water upon them as rises three or four  
Inches above them, and . boil all together, till a yellow  
Tincture is extracted. When this Tincture IS poured off,  
and filtrated, inspissate it till only a fourth Part os it re-  
mains; for by this means it will in a few Days assume  
an highly red Colour\* '

Put the .most simple Method of exhibiting Jron,sor removing  
any Obstructions, and especially for promoting the Menses,  
and destroying peccant, acid, and austere Ferments, is the sol-  
**lowing: ' . - .......**

. Take os well-washed Pilings Of Iron, triturated in Alcohol,  
and passed through a fine Sieve, one Part; of the finest  
Sugar, half the Quantity;'and os Mace, a fourth. Part:  
Mix them intimately together. The Dose. os this Pow-  
der, is as much as may be contained fin the Point of a  
Knife.

POTAMOGEITON.

The Characters are; -ψ-

‘ The Root is fibrous and perennis!; the Leaves are disposed  
alternately. on the Stalks, and arise at the Origin of the  
Pedicle of the spiked Flowers. The Calyx is tetraphyllous,  
the Flower tetrapetalous, and disposed in Spikes. - The Seeds  
are angulous, naked, four in Number, each succeeding its  
Floscule. The Plant is produced in the Waters, and grows  
under them.

*Bocrhaave* mentions eleven Species of this Plant ; which are,  
I. Potamogeiton; rotundisolium. *Co B.P.* I93. *Raii Hist.*

I. I88. *'Synop.* 60. *Towrn. Inst.* 433. *Bocrh. Ind. A.* 196.

*Potamogeiton.* Offic. *Potamogeiton rotundiore folio.* J. R 3.  
776. *Potamogeiton latifolium.* Ger. 675. Emac. 82I. *Eon.  
talis mayor latifolia vulgaris.* Park. I254. POND-WEED.

This Plant IS frequentiy found in stagnant Waters and Fish-  
ponds. It flowers in the Months of *fune* and *fuse.* The only  
Part os it used is the Herb, which is of a refrigerating and in-  
fpisiating Quality. It is, also, beneficis! against Itching, in-  
veterate Ulcers, and Nomae. *Dioseo. Dale.*

This Plant receives the Name *ci Potamogeiton,* from the  
*Greek* Worth *aeroralpine,* a River, and γείτων, adjacent, because  
it grows about Fountains ; *Millefolium,* from theSmalness ofits  
Leaves ; and *Viola Aquatica,* from the Colour of its Flowers.  
*Hist. Plant, adscript. Boerhaau.*

*o..* Potamogeiton; foliis latis ; **splendentibus.** *C. B. P.* 193-

3. Potamogeiton; longo; serrato; solio. *Co B. P. sD-sa  
Lapathum, fluitans, longo, serrato, folio. J. Β.* 2. 988.

4. Potamogeiton.; foliis crispis, conjugatis. *Trtbulus aqua-  
ticus, minor, altor.* Clus. H. 252.

5. Potamogeiton ; seu Fontalis crispa; foliis alternis; cau-  
liculis compressis. *Tribulas, aquaticus, minor.* Clus. Η. 252.

6. Potamogeiton ; aquis immersum; folio pellucido, lato,  
oblongo, acum. *Raii Synop. C.* I.

7. Potamogeiton; caule comprefio ; foliis graminis canini.  
*Raii Synop.* 6I.

. 8. Potamogeiton ; pusillum ; gramineo folio ; caule rotundo.

*Raii Hist.* I9o. -

9. Potamogeiton.; flosculis ad foliorum nodos. Ὑ 233.  
*Melles.olium, aquaticum flosculis ad foliorum nodos.* C. B. P.  
I4I. *Myriophyllurn, aquaticum, minus.* Clusi H. 252. ὓ  
- IO. Potamogeiton; soliis pennatis. T. 233. *Millefolium,  
aquaticum, pennatum, spicatum.* **C.** B. Prodr. 73.

II. Potamogeiton ; ramosum , arrgustifolium. *Co B. P.*I93. *J. B.* 3. 778. *Pocrh. Ind. alt. Plant.*

**\*- POTAMOGEITON, SALICIS EOLio.** A Name for **the** Per-  
*ficaria, salicis folio, perarmis.*

- POTASH. See ALCALI. :

POTENTILLA. A- Name sor the *Pentaphyllo ides, Ar.  
genteum ; Alatum; seu PctentiUa.*

TOTERIUM. See **TRAGACANTHA. "**

POTERIUM, πὸτήριον, is, also, a Name for a *Malagma,*recommended by *Galen* for a Dropsy, L.9. *de Comp. M. S. fa  
Gap. & .' . . ’ ‘*

. POTIO. A Potion; a liquid Form of a Medicine, don-  
fisting os as much aS can he drank nt one Draught. ‘ The  
Writers on Pharmacy distinguish Potions into Cathartic, Carr  
diac, and Alterative.. .... \* ' "  
.... POUST. The *Indian* Name *far* a base Kind off Opium,  
procured by boiling the LeaVes and Stalks os. the Poppy. -

POUTALETSJA.'. The Name of a low Berry-hearing  
Shrub, which is Very common in *Malabar. .... ......*. Of the Leaves of this Tree boiled in Mille, they prepared  
Drink, which prevents Sleep, and is of Service in a Lethargy,  
and Other soporous Affections. . The ..Leaves, Flowers, Bark,  
Root, and other Parts boiled in Water, i make a Bath, which is  
of Efficacy in the Epilepsy, and other spasmodic Disorders.  
*KaiiHist. Plantso . . .. ... .*

PRssEBIUM. A Dose; the Quantity of a Medicine.esthi-  
bited at one time. s - 6 Ί

PRrECIPITANTIA. Precipitating. Medicines; (that-her  
Medicines'which moderate-the Motion and Heat of the Blood)  
as was supposed, by absorbing and correcting the Acid: con-  
rained therein. *Praecipitans Magnum* is a Name for the DI  
*Sepia: ' ... -* s- l

PRAECIPITATIO. Precipitation is that Process, bywhich  
Particles, after haying .floated, and been suspended same 'rime  
in a' Menstruum, at "length sink to the Bottom. .. These  
Particles sometimes precipitate of. .their? own Accord, shut  
Oftener by the Assistance os' some other Liquor added Io' the  
Menstruum. The Reason of' the Descent in both' CaseSas "the  
same. ' . - z- .:,- x

It may he easily conceived, that Fluids rnayhe made to sus-  
tain Bodies specifically heavier than themselves; by making the  
Resistance, arifing from the Cohesion ofthe Parts of the Fluids,  
equal to the Excess which there is of specific Gravity-in those  
Bodies above the Menstruum. And it has been shewn, that this  
Resistance is proportional Io the Surface of the Corpuscles.  
Therefore a contrary Condition to this, is all that is requisite  
to their being sustain’d no longer ; or; which is the same thing,  
to their Precipitation :. That the Tenacity of the Menstruum  
be not proportional to the Gravity of the Corpuscles: And this  
may be Trod need two Ways. I

In the first place. Precipitation generally follows upon drop-  
ping in a Liquor specifically lighter: For, by this Mixture, the ‘  
Gravity of the Menstruum, which always is proportional to the  
compound Gravities osboth Liquors, become lighter. The Men-  
struum being thus diluted, the Force os Cohesion is, also,-weak-  
en'd, so that it is not able to resist, or bean up; the.Bodiesdistbived

init: Hereupon, the Equilibrium being taken off, they are pre-  
cipitated by the Force of them own Gravity, just in the same  
manner as Hydrometers, which are easily sustain'd in Water,  
upon pouring in a good deal of any inflammable Spirits, sink  
to the Bottom of the Glass. And this does not only agree Very  
exactly with the Laws of Mechanics, but, also, with Experi-  
ments themselves. Thus Spirit of Sal Ammoniac does Very  
plentifully precipitate the Filings of Metals, which are dissolved  
in acid Menstruums, though it he abundantiy lighter than any  
of them. The same thing is done quicker by Spirit of Wine,  
whese Gravity is known to he almost the least of any. By  
this Spiris, also, all Salts which are suspended in Water, are  
precipitated, and afterwards unite into Crystals: So, if you drop  
**in** distil'd Vinegar **the** Dross of Antimony, diffused in Water, it  
salis to the Bottom, and affords the Golden Sulphur. After the  
same manner. Water, Vinegar, *etc.* make a Precipitation from  
Acids, tho' more sparingly. Acids themselves, heing poured  
upon others which are heavier, will precipitate whatever is  
swimming in them. Thus Spirit of Salt precipitates either  
Lead, Copper, or Tin, dissolved in Oil of Vitriol. So littie  
need is there for Alcalies in this BufinesS, though all the Chy-  
mista have unanimously contended for them as absolutely neces.  
^In the second place. Precipitation will succeed as well, if  
there he added an heavier Liquor to the Menstruum: For **the**Particles 'of this Liquor, what with their Weight, and whet  
with the Impetus they acquire in their Descent, carry down

\* and sink all the solid Corpuscles they meet with in their Way :  
So that the Corpuscles, being thus forced down, and kept there  
by this adventitious Liquor, cannot mount up into their former

' Situation. And, is any one has a mind to try the Truth of  
this Reasoning by Experiments, there are enough to confirm  
it: For not only acid Spirits, but Water alone, will precipi-  
tate Tinctures os Vegetables extracted by Spirit of Wine. And  
the Very same Tinctures, extracted with Water or Wine, are  
precipitated Very copioufly by acid Spirits, which are heavier.  
After this manner. Metals which are dissolved in Spirit of Sal

' Ammoniac, are precipitated with Oil of Vitriol, or Spirit of  
Nitre. The fame Bodies, though suspended in Aqua-fortis,  
are easily precipitated with Oil of Vitriol, or BezoarticSpirit of

i Nitre. And this Very Oil, if poured upon Sal Volatile Ole-  
osum, or any other Solution of Salt, ever so much saturated,  
does not only sink the smaller Particles, but converts almost the  
whole Liquor into Salt. For when these Liquors are poured  
upon one another, the Salts with which they abound, being put  
into Motion by their attractive Force, run mutually towards  
one another ; and, because they don’t recoil far back after the

\* Shock, they are at length so united, as to hecome like a Solid,  
‘ there heing Very little Phlegm remaining. The same may,  
also, be observed in *Tantarum Vitriolatum.* in making all these

. Experiments, there happens such a Conflict and Effervescence,  
~ as evaporates almost all the Moisture, with which the Salts are  
..diluted. And upon this depends the Rationale of chymical  
*y* Coagulation, a thing of Very great Consequence in the Business

of Precipitation. Nor can we account for Oil of Tartar's pre-  
. eipitating Bodies dissolved in Acids, any otherwise than from

its making a kind of Coagulation with these Corpuscles, which  
thereby hecomes too heavy for, and exceeds the Tenacity of the  
Menstruum. .. ’

Nor does Coagulation succeed only upon the mixing os heavier  
\* Fluids, but it, also. Very often promotes Precipitation, when  
the Gravity of the infill'd Liquor is entirely equal so that .of  
the Menstruum, or but Very little different from It. And this  
Agglutination of Parts is to he seen in many Liquors, but most

i of all in saline ones. Thus Spirit os Sal Ammoniac, Spirit of  
Hartshorn, that of human Blond, and Sal Volatile Oleosuin,  
whose Gravities are nearly the fame as that of common Water,  
precipitate the Solution of Sublimate very plentifully, as you

. may observe in making white' Precipitate os Mercury : In  
which Experiment, the Increase of the Weight gives sufficient

i Indication of an Union of those Salts,, which are pretty copious  
' in the Sublimate, and Liquors which are poured upon it: For

that which subsides at the Bottom, exceeds in Weight the Sub-  
limate which was at first put. in. Also, the Magisteries.of Ve-  
getables, extracted by Precipitation, .Confirm this Account  
" os Coagulation ; for these have a greater specific Gravity than

the Powders of the Plants they are made from. This addi-  
tional Weight, therefore, is to he imputed to the Particles Of

. theLiquor, with which Precipitation is performed. *istaincy..*

PRJECORDLike The Diaphragm. The Word, also, very  
commonly imports the same as *Hypochondria,* which, according

*‘ tu Galen, in Prorrhet.* are those Parts above the Navel, which  
on both Sides are subjacent to the spurious Ribs; for the *Epi-  
gastrium,* or *Abdomen,* says the same Author, *Corn,* in 2 *Apis.*35. is divided into rhe Hypochondrium, the Parts about the  
Navel, and the lower Belly, (which the *Greeks* call ἤτρον,  
*(Etron)* which lies hetween the Navel and the Pudenda [See

**a** Very accurate Division of those Parts under the Article AR  
DOME NJ. The *Praecordia,* or *Hypochondria,* then, may he  
more fully described, as that external Part of the Abdomen,  
which extends itself above the Navel on both Sides, from the  
*Ilia,* under the cartilaginous Parts called the *spurious Ribs,*(situated above the empty Places called the *Ceneones}* and com-  
prehending, in the Right Side, the Liver; and, in the Left, the  
Spleen. But the Word, in a larger Sense, is used to signify all  
the inferior Parts comprehended within this Region, as the  
Stomach, Liver, Spleen, and Diaphragm ; which is the Signi-  
fioation of the Word ὑποχονδρίων in that Sentence, I *Prorrb.*56. where it is said, that " Fevers proceeding from Pains of.,  
"the *Praecordia,* or *Hypochondria,* are of a malignant Nature.”  
And let this suffice sor adjusting our Notion of the *Praecordia,*by which we mean that Part os the Abdomen which is situated  
above the Navel, and extends itself to the Right and Lesttinder  
the spurious Ribs. r "

The *Pracordea* (which we shall henceforth in this Discourse  
call *Hypochondria}* may be regarded, first, as in a State .which is  
usual to Persons in Health, and is best for the Patient ; Or they  
may be considered aS in a bad Condition, and unlike that os  
healthy Persons; as when, for Instance, they are affected with  
Tensions, Pains, Tumors, and Suppurations. On this Sub-  
ject we may observe *Hippocrates* speaking in his *Prognostics,*where he says, " The Hypochondria are in the best State when  
" they are free from Pain, and are soft and equal both on the  
" Right and Left Side." And he might justly fay so ; for, when  
the Hypochondria are in such a State, we are satisfied, that no  
Part contained within their Region, aS, for Instance, the Sto-  
mach, or Diaphragm, have received any Injury. And the  
good Stare os those Parts under acute Fevers is of no small  
Moment towards prognosticating an happy Event; and it is im-  
possible for any *of* those Parts to he injur’d, and the *Hypochon.,  
dicta,* at the same time, to he soft, and free from Pain. In  
acute Diseases, therefore, it is os extraordinary Moment to-  
wards predicting a Recovery, for the Hypochondria to appear  
in a Very good Condition, as, when they are soft, equal, and  
free from Pain, both on the Right and Left Sides.

With respect to the Thickness or Carnosity, and the Thin-  
ness or emaciated State, of the *Hypochondria, Hippocrates,* 2  
*Aph.* 35. commends the former, in pronouncing, that, ea Under  
" all Diseases, it is better for the Parts about the Navel, and  
" the lower Belly, to appear thick and fleshy; het when they  
" are remarkably lean and extenuated, it is a had Sign."  
Whence it follows, that the *Hypochondria* when thick and car-  
nous, have a promising Aspect. But the best way will he sor us,  
first, to procure a thorough Knowledge of the Patient's *Hypochon.,  
dria,* and of the State, whatever it he, in which they usuallyap-  
pear; for, oftentimes, they are perceived to be unequal, and not  
alike soft, in Persons enjoying a good State of Health ; for which  
Reason, not only those *Hypochondria* which are in the best State,  
but sometimes those which are unequal and tense, provided they  
were so when the Patient enjoy'd Health, afford a good Pro-  
gnostic. It is not, however, as good a Sign to have the *Hypo-  
chondria* tense and unequal, though it be no more than whet  
was usual in Health, as to have them foft, equal, and free from  
Pain. But those tense and unequal *Hypochondria,* which are  
elevated into a Tumor attended with Pain, are always bad,  
unless they appear as Signs of a Crisis, at the Approach of which  
there is frequently a Tension, Tumor, or Pain, os the Hypo-  
*chondria. . .*

Of critical Tensions of the *Hypochondria,* the Author of  
I *Prorrhet.* I44. thus speaks : " Palpitations about the Belly,  
" with .an oblong Tumor and Tenseness of the *Hypochondria,*de indicate an Haemorrhage." And a littie after. *Text, tgrsu*" A Tension os the *Hypochondria,* with an Heaviness of the  
." Head, Deafness, and ConsusednesS of Sight, prognosticate  
" an Haemorrhage..". *Galen,* also, in his third Book of *Crises,*fays, that a Tension of the *Hypochondria* without Pain is a  
proper Sign os an approaching Haemorrhage from the Nose;  
but when the Tension is accompanied with Pain, it is no Pro-  
gnostic of an Haemorrhage, but indicates an Inflammation.  
Hence we. infer, that a Tension of the *Hypochondria* without  
Pain, and sometimes, from the great Degree of Tension thro\*  
. the Redundance os the Blood, with Pain, a Dulness of the Sight,  
or Scintillations stalking on theEyes, an Heaviness of the Head,  
with a Redness, or high Colour, of the Face, are all critical;  
and, in particular, are Signs .of an approaching Haemorrhage  
from the Nose.. For which we have the Authority os *Galena  
Lib.* 3. *de Crisibus, et Lib. de Prafag. ad Posthumum,* and theAuthor os the *Prorrhetica, Lib. i. et sii* But a Tension os  
-the- *Hypochondria,* accompanied .with a Coma, Anxiety, and  
Pain of the Head, are Signs os the Parotides, according to the  
Author os the *Coac.* 289. And *Hippocrates, Lib. Prognosi.*teaching ut to prognosticate suture critical Abscesses from Ten-  
sions orthe *Hypochondria* An TharInflammation about  
" the *Hypochondria* is .succeeded by an Abscess in the inferior

\*\* Parts ; het if the *Hypochondria* he soft, and free from Pain,  
\*\* you may expect an Abscess in the superior Parts os the Body."  
Hence it plainly appears, that even a Tension of the *Hypochon-  
dria* is sometimes Very good and salutary, as it is an Indica-  
tion os an approaching critical Evacuation.

We may reafon in the same manner with respect to *Tumors*os the *Hypochondria,* though rarely any good Event may seem  
to he prognosticated from Tumors in those Parts. *Hippocrates,*however, in his *Prognostics,* speaking os those Tumors, says,  
\*" Thet soft Tumors, which are free from Pain, and yielding  
" to the Touch, remove the Crists to a greater Distance of  
" Time, and are less to he dreaded. '' And more plainly to  
the same Purpose, a little aster, he says, " Soft Tumors, in-  
’ " dolent, and yielding to a Pressure with the Finger, are flower  
" in coming to a Crisis, and less dangerous." Again, in the  
same Book, he telis us, that " Tumors of the Belly are less dis-  
." posed to form Abscesses than Tumors of the *Hypochondria,*“ and Tumors helow the Navel least of all; but an Haemor-  
" rhage may he expect d from the superior Parts." And, *Coac. .*29O. " A Tumor of the *Hypochondria,* succeeded by a great  
or full Respiration, and an high Fever, in bilious Patients,  
" occasion the Parotides; " hecause in such Constitutions the  
bilious Humours take their Course upwards.

There are, also. Pains of the *Hypochondria,* which are criti-  
cal ; aS, when they are occasioned by a Redundance os Blond  
distending theVeffeis: The Signs concomitant, and indicating a  
Crisis, are, as we said hesore, an high Fever, an Heaviness os  
the Head, or Deafness, or Dimness of Sight, or a Redness of  
the Face. To this we may add, that Pains of the *Hypochon-  
dria* are not bad, when succeeded by a Fever. Of these Pains  
we find *Hippocrates,* 6 *Aph.* 40. thus pronouncing : " They  
" who are afflicted with Pains about the *Hypochondria,* with-  
" out an Inflammation, are relieved from them by the coming  
" on of a Fever." And, *Coac.* 28I. we read, " That Pains  
" send Tumors of the *Hypochondria,* if recent, and not attend-  
" ed with an Inflammation, meet with a Solution from Rum-  
\* " blings arising in those Parts, and especially from their Erup-  
" tion together with Discharge by Stool and Urine."

Of Abscesses affecting the *Hypochondria,* the Author of **the***Coac.* a8I. pronounces, that, " As to those which breakout-  
" wardly, it is hest, that they should he contacted into a Very  
" small Space, and to a Very sharp Head." And, continuing to  
speak of the same Abscesses, he says, " For those which tend  
" inwardly, they areto he accounted the safest, which shew no  
" outward Markos themselves, neither by Tum.r, nor Pain,  
" nor Colour; but the contrary to these are of the worst  
" Kind.”

*TheHypochondria,* in acute Diseases, tense, hard, pained, and  
unequal, are bad, as we are taught by *Hippocrates* in the Pro-  
*gnostics*; and the same Author, 2 *Aph.* 3 I. passes a like Judg-  
ment on a remarkable Emaciation or Extenuation of those  
Parts. Bus, in order to a clearer and more distinct Notion of  
These Disorders, which affect the *Hypochondria,* and are all of  
them bad Prognostics, if attended with other had Signs, **we**shall choose to treat of them all fingly, and of their Caufes,  
before we inquire whet Prognostics may he formed from them ;  
for without a just Idea of those Disorders, and some Knowledge  
os the Causes from whence they proceed, we shall never he  
able, with any tolerable Certainty, to form Predictions from  
them.

We shall hegin, then, with a Tension of the *Hypochondria\*,*which Disorder is sometimes accompanied with a rumor, and  
an Hardness which resists the Touch. Sometimes there is a Tense-  
ness os the Parts without aTnmor, in fuch a manner, that  
though they appear distended, yet they are empty ; and such  
. Tensions as these, are what *Galen* calis *empty, sefiisu,* and ta-  
*rnorles.s Tensions. Hippocrates* has sometimes Occasion to speak  
of these Tensions, as in 3 *Epid. Algr.* 2. where he says of  
*Hermocrates,* that " He had a soft Tension os'the *Hypochon..  
\*\* driaP* Sometimes he Calis those Kinds os Tensions ὑ πολαπἀρους,  
" softish ;" and the *Hypochondria* thus affected, μετέωρα,  
" elevated;" as he does in the Case of *Erasinus,* I *Epid.  
AE.gr.* 8. In such Cases there is indeed a Tension of the *Hypo-  
chondria,* but such a Tension as is empty, and free from any  
hard Tumor. As to their Figure, these Tensions are some-  
times oblong, according to that of the *Musculi Recti Abdomsu  
- nis* ; sometimes broad, and sometimes round like a Crescent,  
in winch Shape Tumors of the Liver are represented.

A Tension of theHypochondria is attended with an Hardness,  
Or an hard Tumor, from an Inflammation affecting either the  
Muscles, or the convex or gibbous Parr of the Liver, or the  
Spleen, or even the Stomach. There is, also, a Tension with-  
out Hardness, as from a Repletion of the Muscles with a star  
talent Spirit; and a Tension with an Hardness, but no Tumor,  
as from a Redundance of Blond ut che Vessels. A Tension  
without Hardness is, also, without Pain, as in frequentiy ob-  
served, where a copious Haemorrhage from the Nose fucheeds ;

a Tension from a Flatus is without Hardness, and without  
Sense of Wcight ; a Tension from a Redundance of Blood is  
attended with both ; and, lastly, a Tension from an Inflamma-  
tion is attended with a Tumor, if an Inflammation affects the  
external Part of the Muscles, or the convex Part of the Liver,  
or the Spleen, or the Stomach. And this is the Doctrine ofTen-  
fijns in general. But we think ourselves obliged to he more ex-  
plicit, because it has been said, that a Tension of the HVpo-  
chondrin, attended with an Hardness, proceeds from an Inshm-  
mation of the Viscera hesore-mentioned ; whence we may he  
inclined to conclude, that this kind osTension is always from **the**same Cause. This, indeed, is true; for all Tensions, attended with  
aTnmor, or Hardness, and Pain, indicate an Inflammation of  
the Viscera: Yet it is as true, according so the Doctrine of *Ga-*len, thet there are several Sorts of Tensions, winch are not hard,  
but soft, or, as the same Author explains it. Void, empty, and  
sublime ; and these Tensions may not he accompanied with an  
Inflammation of the V iscera ; for which Reason they deserve  
our more accurate Examination. Those Tensions, then, which  
are soft, or empty, or tumorless, which Words all signify **the**same thing, are caused either by an Inflammation of the in-  
ternal Parts of the Viscera, or by a Driness in the Origin os the  
Nerves, which supply the Diaphragm. Hence the Hypochon-  
dria are attracted upwards, and, on that account, are some-  
times, by *Hippocrates,* call'd properly μετέωραν " sublime.'' In this  
Case the Hypochondria are, indeed, distended; but the Inflam-  
mation heing seated in the internal Parts of the Vsiscera, remote -  
*from* our Notice, there is no concomitant Tumor, nor Hard-

. ness. *Galen,* in 3. *Epid. Com.* 2. *Text.* I. tells us, that " a  
\_ " soft Renitency of the Hypochondria indicates an Inflammation  
fa of some Part of the Viscera, as the Liver, Diaphragm, or  
" Spleen." And the same Author, on I *Epid,* treating os the  
Tension which affected the Hypochondria of *Silenus,* says,  
that " through an inflammation of the Diaphragm, the Hypo-  
" chondrium, by Virtue of its Continuity, was attracted up-

‘" wards, and distended, without a Tumor.'' Again, on 3 *Epid.*. speaking of this kind osTension, he has these WordsAs if he

*" (Hippocrates')* had said, the Right Hypochondrium was dis-  
" tended, but without a Tumor, either because the Inflam-  
" mation of the Liver was not great, or affected only the lowest  
" Parts, by which it is united to the Belly; the gibbous Part  
" thereof, in Conjunction with theinserior Parts, being not aS  
" yet elevated into a Tumor:'' And this was the Case os*Her-  
mocrates.* TheHypochondria, then, may he affected withaTen-  
sion or a soft kind, thatis, without a Tumor, from anInflamma-  
tion of the Diaphragm, Spleen, or Liver, provided this last-  
mentioned he not wholly nor Violently affected, but in a small  
Degree, or only in its lower Parts; whence the gibbous or con-  
Vex Part of the Liver being free from an Inflammation, the  
Tension will feel soft to the Touch, and appear without a Tu-  
mor ; but this Sort of Tension will never happen, when **the**Liver is either wholly or Violently inflamed.

It was said hesore, that fuch a soft kind of Tension may  
proceed, not only from an Inflammation of the Viscera, but  
from a great DrinesS. *Galen, Com. in Prognosi, nasi* compre-  
bends both these Causes under the following Expression:  
" Sometimes, says he, there is a Tension of the Hypochon-  
" dria without an Inflammation, properly so called, either from  
" an immoderate Driness, not only in the Parts themselves,  
" but in the Diaphragm or Pleura ; or from an Inflammation  
" with a Tumor affecting the Muscles of the Hypochondria,  
" without an Inflammation, properly speaking, winch is aTu-  
" mor attended with a Pain." And those Causes of a soft Ten-  
sion are expressed yet more plainly by the same Author, *Corn.*2. in 3 *Epid. Cap.* 4. where he says, " There is a Tension  
" os the Hypochondrium, when the adjacent Parts are attracted  
" by the Diaphragm and there is a Tension of the Dia-  
" phragm itself in a Pleurisy, sometimes from a Violent Inflate-  
" mation os the Pleura, sometimes from a Retraction os the  
" Nerves helonging to the Diaphragm towards the Origin of  
the Nerves, and sometimes from an Inflammation of the Part

" itself." , ' . Ἀ

Having said thus much of the Causes os a Tension of the  
Hypochondria, we proceed to inquire, whet may he predicted  
from it. And here we are told by *Hippocrates,* in *Prognosi.*" That an herd and painful Tumor in both the Hypochondria,  
" or only in the Right Hypochondrium, is a very bad Pro-  
" gnostic ; for such Tumors, appearing in the Beginning, sig-  
" nisy, that Death is not far off'' *Galen,* commenting on  
this Pisce, by Tumor understands an Inflammation os the Liver,  
Stomach, or Spleen, which often proves mortal in a short time,  
especially when Violent; tho' our Prognosticating from this Synt-  
ptcm must he confirmed by other pernicious Signs. But when  
the Tumor proceeds from an Inflammation of rhe Muscles, it is  
seldom accounted mortal. And *Hippocrates* himself, a little -  
afterwards, seems to limit the Judgment he had passed on hard  
and painful Tumors os the Hypochondria, in saying, that their

Appearance in the Beginning prognosticates Death in a short  
time, in fuch a manner, as if none but great Tumors, and thofe  
not always, portended fo fatal an Event, by raying, “ When-  
" ever, therefore, a Tumor (thus circumstanced) is painful,  
" hard, and large, it signifies, that the Patient is in Danger  
" of dying in a short time as if he bad said. Those Kinds of  
Tumors, that is. Inflammations of the Viscera, if they prove  
mortal at all, destroy the Patient in a short time ; for if they  
continue long, they indicate a Suppuration, rather than Death ;  
agreeably to that of *Hippocrates,* delivered a little before, where  
he fat's, “ If the Fever continues above twenty Days, and  
“ the Tumor subsides not, the Disease changes to a Suppura-  
" tion.” Tumors, therefore, of the Hypochondria, attended  
with Pain, and not procceding from an Inflammation of the  
Mufcles, but of the Liver, or Stomach, are dangerous, efpe-  
ciallyif the Inflammation be violent.

But our Prognostications in there Cases will be confirmed by  
the Pathognomonic Signs of these Inflammations, which indi-  
cate their Nature, and, if pernicious,- portend a fatal Event.  
Such were the Signs observed by *Hippocrates* in *Apollonius,* ,3  
*Epid. Sea.* 3. *Aigr.* I 3. of whom he says " that be was as-  
" flified with Want os Sleep, and a bad kind of Inflation ;  
" had a great Thirst; laboured under a Coma, with a Tumor  
" of the Righ: Hypochondrium, attended with a Pain ; that  
" his extreme Parts, on all Sides, were somewhat refrigerated ;  
" talked a little irrationally ; forgot all he had said ; and was  
" delirious.”

No less dangerous are sofrish Tensions of the Hypochondria  
without a Tumor, since, as we have shewn, they indicate either  
an Inflammation of forne one of the principal Viscera, or a very  
great Driness of the Origin of the Nerves which descend to the  
Diaphragm, or of the Pleura. But these Tensions, it is to  
be observed, though always bad, never of themselves portend  
Death, but only in Conjunction with other bad Signs appear-  
ing at the fame time; for not all who labour under an In-  
fiainmatron of the Liver, Stomach, or Diaphragm, die. It will  
he necessary; therefore, to consult the rest of the Signs ; and if  
these, too, are bad, and ofthe Number of those which are fa-  
tah we maj’ safely venture to predict the Death of the Patient.  
Thus fatally circumstanc’d were the Tensions observed in *Sile-  
nus, Hermo crates, Philistes,* the young Man *of Meliboea,* and  
the young Man who lay in the *Forum Mendacium* [επί ψἱυ-  
δεων άγορρ] who all, as,you may read in the first and third  
Books of rhe *Epidemics,* had this sofrish Tension of the Hypo-  
chondria, attended with other bad and deadly Signs.

On the fame account Pains *of* the Hypochondria, attended  
with the aforesaid Tension, and other had Signs, are usually  
mortal. Thus it was in the Case of the Wife of *Drameades,***I** *Epid. Aigr.* II. who, on the third Day, was feized with a  
Pain of the Hypochondria ; and made thick, turbid Urine,  
which had no Settlement; and had cold Sweats ; which were all  
mortal Signs. And, *Aigr.* Ia. it is related, " that a certain  
" young Man, heing feverish, went to Supper, and drank  
" pretty freely ; at Night he vomited up all, and was feiaed  
" with an high Fever, attended with a Pain of the Hypochon-  
" drium, and a sofrish Phlegmon tending inwardly ., and he had  
" a troublesome Night; his Urine, at first, was red and thick,  
" and deposited no Sediment ; his Tongue was very dry, hut  
" he was not very thirsty.” All these were very pernicious Signs,  
and very fatal to the Patient, who died on the eleventh Day.  
The Author ofthe **I** *Prorrhet. est. says,* " that Fevers, pro-  
" deeding from Pains in the Hypochondria, are malignant.”  
But *Galen* fays, that all Fevers from the Hypochondria  
are not malignant, since there are several Parts feared therein ;  
but only filch as are excited by an Inflammation of the Dia-  
phragm, Stomach, and Liver ; nor are even these all malig-  
nant, nay, perhaps, not fo much as acute, fo far are they from  
Malignancy : Thus *Galen.* But the Malignancy of acute Fe-  
vers is to he demonstrated from other bad Signs. It may be  
added, that thofe Kinds of Tensions and Pains are bad and mor-  
tal, if they continue long attended with some pretty copious  
Evacuation. Of these it is said, *Coat.* 2S4. " that Pains an-  
" sing in the Hypochondria are bad in every Circumstance,  
" but especiallv if accompanied with a Looseness.” This ap-  
pears from the Cases of the Sick, to which we just now referred ;  
particularly that *oi Silenus,* I *Epidi Aigr.* 2. who laboured un-  
der a Tension of the Hypochondria, accompanied with thin  
blackish Stools: And in rhe Case of *Erastnus, Acgr.* 8. who  
had a painful Tension of the Hypochondria, attended with  
Sweats.

We have spoken enough on the Subject of Predictions from  
bad Tensions of the Hypochondria ; and proceed to fpeak of Sup-  
purations affecting the fame Pans, which are bad, if attended  
with a great Looseness, Nausea, Syncope, Vomiting ; and worst  
of all, when the Fever is not ar all remitted, nor the Patient  
relieved thereby. We said before, that Tumors, which conti-  
nue long with a Fever, past into an Abseefs, 0ς Suppuration,

on the Authority of *Hippocrates,* who, in his Prognostics satat  
" That, if the Fever holds the Patient above twenty Dary,  
“ and the Tumor does not subside, there is a Conversion into  
" a Suppuration and a little after, " If the Fever goes be-  
" yond the Rounds of sixty Days, and the Tumor, in that  
“ nine, does not subside, it indicates a Suppuration, both in  
" this Cafe, and, asso, when the Tumor affects any other Part  
" of the Abdomen.” Of the Prognostics, which may he  
drawn from thefe Kinds of Suppurations, the Author of *Coac.  
281. treats, where he says,* Among mortal Abscesses are to  
“ he esteemed those which break inwardly-; but, of those1" which break outwardly, the most laudable take up the least  
“ Space, and gather to the sharpest Head. Of these Abscesses,  
" which tend inwardly, the best are thofe which shew no out-  
" ward Marks of any Tumor, Pain, or Heat; but thecontrary  
" to those are very bad.” Hence we learn to know hed.Sup-  
porations ; and that, to he sensible of a Tumor. Pain, or Hear,  
in the Hypochondria, is an Indication ofa latent and not ele-  
vated Inflammation. If, therefore, this Tension of the Hypo-  
chondria continues after the Suppuration, without in the least  
relaxing, it is a pernicious Sign ; but if there he, also, a Pain  
and Heat, it is a worse and more fatal Prognostic ., but there is  
the greatest Reason for predicting the Death of the Patient, when  
a copious Evacuation of Pus gives him no Relief; and when he  
finds himself the worse aster such Excretions, his Case is esteemed  
desperate. For fuch an Evacuation is one of these critical Sym-  
ptoms, which determine nothing, and, consequently, are fatal ;  
and the more fo, if attended with a Decay of Strength, or some  
other bad Sign.

These are the Predictions we have Reason to make from a  
Suppuration in the Hypochondria ; but, before we conclude  
this Discourse, it will be fit to observe, that *Hippocrates, in*his *Prognostics,* tells us " That if there be a Pulsation in the  
" Hypochondria, it indicates a Disorder of the Rearon, or a  
" Delirium.” But, in this Cafe, we are to observe the Eyes  
of the Patient ; for, if he frequently moves his Eyes, and casts  
his Looks from Place to Place, Madness is to be expected ;  
agreeably to that in *Coac.* 282. “ A Pulsation, in the Hypo-.  
“ chondria, with a Perturbation or Disorder of the Senses,  
portends a Delirium ; and the more, if it he attended with  
“ frequent Motions of the Eyes.” And such an Event reems  
probable, either from an Inflammation of the Diaphragm, or  
an Effervescence of the Humour, by which a Multitude of  
Flatulencies are generated ; which, ascending in great Quan-  
itics to the Head, by heating and stimulating the Membranes of  
the Brain, excite a Delirium. This Pulsation of the Hypochon-  
dria is generally bad ; though sometimes good, when it precedes  
a Crisis ; in which Case it is distinguished from a bad Pulsation  
by critical Signs. But when a Pulsation in the Hypochondria is  
attended with other bad Signs, it ought to he esteemed a mortal  
Prognostic; agreeably to Cstfi.aSg. where we read, that " A  
" Cardialgia, [ καρδίης πόνος ] attended with a. Puliation of the  
" Hypochondria, and a Fever, in which the external Parts are  
" refrigerated, is bad, both on other accounts, and the more,  
" if it be attended with an EPHiDRosis” [See that Word].  
And let this sijssice to be spoken concerning Predictions from,  
good or bad Hypochondria. *Prosper Alpinus de Praesag. Vit.  
et Marls. Ac grot.*

PRAECURSORES, in *Paracelsus,* are the Signs of an '  
approaching Distemper.

PRAEDICTIO. A Prediction; that is, a Prognostic.

PRAEFOCATIO. A Suffocation. It is applied to hy-  
steric Fits.

PRAEFURNIUM. The anterior Part ofa Chymical Fur-  
nace, by which Coals are conveyed to the Grate, or Fire-  
place.

PRAEGNATIO. Impregnation. 5’ .

PRAELINGUA. The anterior .Part, or Tip, of the

Tongue. ... 1

PRAELUM. A Press, in Pharmacy, for .the Expression  
of Oiis and Juices.

PRAENOTIO. **A** Prognostic, or Foreknowledge.

PRAEOPINATIO. An Uncertainty in the Mind of aPhysician, in prognosticating the Event of a Distemper.

PRAEPARANTIA MEDICAMENTA. Preparing Me-  
dicines ; that is, such as prepare the morbid Humours, and dis-  
pose them to separate from the healthy, and pass off by **the**Help of Evacuants.

PRAEPARANTIA VASA are the Spetmatio Vessels..

PRAEPUTIUM. The Prepuce, or Foreskin. See Ga ΚΕ-  
**RATIO.'**

PRAESAGIA. Presages.

Three Things principally contribute to tender a Phi.fi-  
dan perfast:: The fust is, that, from accurate , Observa-  
tions, he he able to trace and investigate rhe Origins and  
Causes of Disorders, in order to oppose them in their Begin-  
nings by proper Remedies; or that, known» these Causes, he

may give salutary Precepts for preventing their Effects : The  
second is, that he accurately know the various Natures of Dis-  
eases, and their Differences, with respect to different Consti-  
tutions, that he may be the better capable of discovering Me-  
dicines proper and adequate for removing them. The third  
is, that he may he able to form a right Judgment concerning  
the Event of Disorders; aS, also, concerning the Operation and  
Effects os Medicines. But though this last does’ not contribute  
directly to obtain the End of the Healing Art ; yet it is certain,  
that it greash promotes the Certainty of Medicine, and the Re-  
putation os the Physician. For this Reason *Hippocrates,* in the  
very Beginning of his *Preenotiones,* speaks in the following man-  
ner : " It is, in my Opinion, most expedient sor the Physician  
" to form a Prognostic; fince, when he declares, not only  
what is past, present, and to come, but, also, what escapes  
" the Patient himself, he must, by these Very means, procure  
" the greater Confidence and Trust." And in *Prorrhetic.  
Lib. 0.. Sect.* 3. he telis us, " That the Physician ought to be  
“ mindful of this; that, is his Prediction succeeds, he will be  
admired by the Patient; whereas, is he falls in his Progno-  
" stic, he will be hated, if not looked upon as a Madman.'' But  
this exalted Art of Prognosticating is so difficult, uncertain, and  
precarious, that we find, from Experience, the most sagacious  
Physicians have failed in it ; fince we often see the Patient die.  
Of whose Recovery they were certain. *Hippocrates* confesses  
this, and pronounces all Prognostics in acute Diseases fallacious.  
In consequence of this Difficulty in forming Prognostics, **the**most sagacious Physicians have placed Medicine among the con-  
jectural Sciences ; and the Vulgar have not only deemed the  
salutary Art uncertain, bus, also, despised its Professors.

But, though no Part of Medicine is incumbered with more  
Difficulties, than the Prognosticating Art, yet I do not despair  
. to reduce it to the Form of a Science, and to establish it on  
'certain general Axioms, and even Definitions ; provided we as-  
sume what is necessary for this Purpose : But we shall first in-  
quire into the Causes which may have so long hindered this Part  
os Medicine from being established into a Science. The most  
considerable, therefore, of these Causes is a Defect of Observa-  
tions ; for, as accurate Observations, and Histories of Diseases,  
are the first Foundation of Medicine, from which we - learn  
whatever happens in Nature, what effects are produced in this  
or the other Disorder, and what Changes are induced on human  
Bodies by particular Substances ; so such Observations supply us  
with the Circumstances, the Matter and Opportunity os form-  
ing right Prognostics. The Physician, who duly compares  
. these Things, and has a sufficient Knowledge of Natural Philo-  
sophy and Anatomy, is able accurately to investigate the true  
and adequate Causes of what is past, present, and to come ;  
from which he can afterwards form a right Judgment of the  
Danger of a Disease, and tell, whether it will terminate in  
Death, or Recovery. But, aS the Antients drew their Progno-  
stics, not from entire Histories os Diseases, but from particular  
Circumstances, Numbers os which are collected by *Hippocrates,*and others, who have trod in his Steps, so it is not surprising,  
that they should rarely answer, but frequentiy prove fallacious.  
"Besides, as the Antients wanted a rational Medicine, neither  
understood the true and genuine Natures and Causes of Life,  
Diseases, and Death, and were grofly ignorant of the Structure  
of the human Body, and the Various Motions depending upon  
it; so they could not, even from the fullest and most circum-  
stantial Observations, deduce the .true Causes and Signs of **the**.future Event of a Disease, with respect to Death, or Recovery r  
Much less could they comprehend and account for the different  
Operations of Medicines. Hence it is obvious, that the Antients  
treated, not only this, but all other. Parts of Medicine, in an  
empirical manner. Thus, for Instance, if any one laboured  
under an acute Fever, and died under a particular Train of  
Circumstances, and if this happened sor several times, they  
forthwith laid it down for a Rule, that these Symptoms were  
Signs of Death. -. But, hecause these Symptoms Vary Very fur-  
prismgly, according to the Diversity os Patients,. Diseases,  
Countries, and Seasons, hence numberless Precepts are laid down,  
especially by theAntients, which rarely hold good; so that *Hip-  
pocrates* confessed, that the Prognostics, with respect to Life  
and Death, were .Very uncertain in acute Diseases.

That this Art of Prognosticating may receive more Ad-  
vances, and, in. time, find a Place among the Sciences, all  
Circumstances are to be carefully consider’d, and adverted to,  
in the Progress or History of the Disease: Nor is it sufficient to  
know the Disease, and its Causes, since, in order to form a  
right Prognostic, it is absolutely necessary the Physician should  
. have a perfect Knowledge of the Constitution os the Patient;  
for it is os great importance, to know the Age and Strength of  
the Patient, the State of his Viscera, the Condition of his  
Blood and Humours, his previous Method of Life, the Season  
of the Year, whether his Body is strong or weak, and whether  
his nervous System is disposed to anomalous and spasmodic Mo-

tions. It is, also, necessary the Physician should know the  
several Stages of the Disease, in which certain particular Sytn-  
ptoms happen: He must, also, inquire in what Method the  
Cure has been carried on, that thus he may know, whether  
any Error has been committed by the Patient, or by any other  
Physician. From these Things, duly consider'd, he is to form  
a Judgment, what Sgns or Symptoms, under these or other  
Circumstances, in this or the other Patient, prognosticate a sain-  
tary, or a fatal Event: For it often happens, that a particular  
Symptom of the same Disease proves fatal to one Patient, and  
not so to another. Thus we frequently observe, that when  
infirm and old Persons, those wasted with Hunger, or previous  
Diseases, or long Grief, are seized with a Fit os the Stone or  
Colic, they generally die under the (lightest Train *os Sym-  
ptoms,* whichsseem to portend no Danger, and which are easily  
supported by the Robust and Vigorous. In acute Disorders,'the  
same is, also, observable: Thus, in acute Fevers, those who are -  
os a flender Habit, and whose Parts are exquisitely delicate and  
sensible, are racked with Violent Pains, Anxieties, Watchings,  
a Delirium, and insatiable Thirst, and yet escape; whereas,  
when those who are of a spongious Habit of Body, or whose  
Strength isimpaired, are seized with the same Kind os Fever,  
they do not complain of any great Uneasiness, Pain, or vio-  
lent Heat; yet die delirious, in the Height of the Disorder,  
upon the least external Refrigeration. The Stages of the Dis-  
order are, also, of great importance in forming a Judgment  
of its Symptoms : Thus it is certain, that an Epilepsy, espe-  
cially in Children, often happens without any Injury, in the  
Beginning of the Small-pox; whereas an Epilepsy, in the  
Height of this Disease, infallibly proves mortal. In the Begin-  
ning, also, os the Small-pox, a Phrenitis is in young Persons  
often observed to be without Danger; but, if it seizes the Pa-  
tient about the ninth or tenth Day, it is a certain Sign, that  
Death is not far off: For this Reason, in forming Prognostics,  
all Circumstances are duly to be separated, distinguished, and  
considered : Hence *Hippocrates,* in his *Prorrh.* justly advises  
Physicians to Caution, aS in all the Parts os Medicine, so more  
particularly, in forming Prognostics; for a Physician in no  
manner opens the Mouths of People against him, and exposes  
himself to Contempt, more effectually and shamefully, than by  
salse and ill-founded Predictions; especially when a Patient is  
left for irrecoverable, and afterwards recovers; or, tvhen tite.  
Patient dies, though the Physician was absolutely certain os his  
Recovery: For I have known some Physicians affirm, that their  
Patient would not die, when a sew succeeding Hours have put  
an End to their Lives.

Thus, though the Prognosticating Art is very difficult, yet  
the Physician ought to do all he can, to have some certain Signs  
and Marks of future Recovery’, or Death, which, in my  
Opinion, may be obtained; for it is certain, that all Events,  
whether with respect to Lise or Death, proceed from certain  
adequate Causes, without which they cannot happen. Is,  
therefore, the Physician thoroughly knows the Causes why a  
Patient must necessarily die by a Disease; and is he observes  
these Causes in the Patient, by their usual and infallible Signs;  
he may certainly, from their Presence, predict and soretel the  
Event they will produce. In the same manner, is a Physician  
knows in what Manner, at what Time, by what Ways or Ex-  
cretions, a Disease is terminated, and the Patient recover'd ;  
from the Presence os these Circumstances, he may confidently  
and reasonably predict future Health. We must, also, con-  
demn the Practice *of* those Physicians, who, in the Beginning  
or Progress of a Disease, before they either have, or can have,  
certain Signs, either os Health or Death, rashly sorm a Pro-  
gnostic, with respect to its Event: For we are by no means, \*  
from the Beginning os a Disease, to form a Judgment of its  
End ; for a Disorder winch begins gentiy, and proceeds mildly,  
often rages with Violence, when arrived at its Height.

I am not os Opinion, that a Physician can, in -the Begin-  
ning or Progress *os* a Disease, form a Prognostic, either with  
respect to the Life or Death os the Patient, as the Vulgar be-  
lieve, and, therefore, demand a satisfactory Answer from the  
Physician. . I assert, however, that both in acute and chronical  
Disorders, there are certain Signs and Marks by which we may  
both foresee and predict a fatal, or a salutary Event ; but, be.'  
fore we can do this, we must wait sor the Times in which these  
Signs discover themselves. Besides, it is one thing to pronounce  
a Disease dangerous, and another to prognosticate suture Death;  
for the former may be conjectured as, eVen in the Beginning of  
the Disease, from the Nature and Strength of the Patient, and  
the Genius os the Disease ; whereas the latter cannot be pro- \_  
gnosticated, except when the true Signs os Death are present.  
But, before we consider the Signs by which we may be sure of  
a suture Death, in any Violent and dubious Disorder, we shall  
give a Theory of Death, and investigate its true Causes, that  
what we are afterwards to advance, may be the better under-  
stood. ' 7

As the Antients were entire Strangers to solid Reasoning in  
medicinal Affairs, so it would be to no Purpose to endeavour  
from them Works, to discover wherein the Nature and Essence  
os Death consists ; for they, assert nothing mors, than that Lise  
consists in a due Temperament of the innate Heat, and the  
radical Moisture; and Death in the extinction os these : But as  
these Words convey no clear Idea to the Mind, so nothing solid  
or satisfactory can be deduced from them r But after, in our  
Times, by the Study and Contemplation of Nature, and by a  
careful Discovery’ of the Structure os the human Body by Ana-  
tomy, Light and Truth began to diffuse their genial Rays on  
Medicine, and the Circulation os the Blood was discovered,  
the Reasons and Causes of Lise and Death can no longer re-  
main in the Dark; *sor as by* the constant and free Circulation  
of the Blood and Humours, the Body, in itself subject to Putre-  
faction, is preserved from every Degree of Corruption, all the  
Actions, whether natural or animal, remain entire, and Vigour  
is imparted, both to the Mind and Body; so, when this Circu-  
lation is totally destroys, we observe, that the Force os the  
Mind and Body is cancel*’d,* all their Functions cease, and the  
Body itself is forthwith converted into Putrefaction : Hence  
we understand, that Death is present, when the Circulation os  
the Blood is so effectually stopped, that, it can by no Means or  
Art be restored. Now, as this Circulation os the Fluids de-  
pends on the Motion, Impulse, and Tone os the Heart, Ar-  
teries, and all the Vessels furnished with nervous moving Fibres,  
To the Cause os Death is only to be sought sor in a total De-  
struction os the Pulsation os die Heart and Arteries, and an  
effectual Abolition os the Motion os the Thorax, so subset-  
went to Respiration. We now come to explain, how in Dis-  
eases these Motions or the Heart and Thorax are totally in-  
tercepted.

The Seats, therefore, of Diseases, and, consequently, the  
Causes os Death, can in no manner be more accurately in-  
vestigated, than by Anatomy, or the Inspection of Carcases :  
Now, upon laying open Carcases, taken off by any Disorder,  
the evident Causes os the Patient's Death are forthwith sub-  
jected to our Senses ; for whether the Patientehas died of an  
acute, or a chronical Disorder, a putredinous Corruption os some  
Part or other, accompanied with an highly fetid Smell, is al-  
ways observed; for always, in some of the nobler internal Parts,  
either in the Stomach and Intestines, er within the Brain, and  
its Membranes, or in the Liver, Uterus, Kidneys, Spleen,  
or Lungs, there is a certain putrid -and sphacelous Corrup-  
tion, hardly tolerable on account of. its fetid Smell; and  
this is found to proceed either from a Stagnation or Inflamma-  
tion of the Blood, which, in acute Disorders, produces Death;  
or from a Stagnation and Extravasation of the Blood and Hu-  
mours into the principal Cavities of the Body, such aS the  
Head, Thorax, or Abdomen. This last principally happens in  
chronical Diseases, where the Viscera, especially in the Thorax  
- and Abdomen, are sound corrupted by extravasated Pus, or  
Serum. Upon dissecting the Bodies os those who have died of  
any Violent Disorder os the Head, an Apoplexy,- sor Instance,  
or a Lethargy, there is always an inflammatory and sphacelous  
Stagnation of Blood, in the Meninges, observed : The like  
happens in those who die of violent Disorders of the Breast;  
for in Patients taken off by a profound Pleurisy, or Perioneu-  
mony, the whole vascular Compages of the Lungs is found in-  
farcten and obstructed, by-corrupted Blood. In Patients who  
die by a Phthisis, the Lungs are sound full of purulent Tuber-  
cleS, or a great Part of them are corrupted, and corroded with  
Pus. In convulsive.Asthmas, a large Collection os Water in  
the Thorax generally destroys the Patient ; and in a suffocative  
Catarrh, which soon proves mortal, there is a Collection of  
Blood orherum in the Bronchia of the Lungs, which hinders  
the free ingress and Egress of the Ain In investigating the  
Causes os Death, in those Disorders which have their Seat in  
the Abdomen, we find in a Cachexy and Dropsy, that the  
Liver and Omentum are indurated, or corrupted by a large  
Extravasation of Serum. In the Morbus Niger of *Hippocrates*the Spleen is generally large, insarcted, and corrupted, whilst,  
at the same time, there is an Extravasation of Blood in the  
Cavity of the Stomach and Ileum. In those who die of violent  
Iliac Passions, Colics, Choleras, Dysenteries, and Cardialgias,  
the Parts os the Stomach and intestines, are sound inflamed,  
sphacelated, and corroded, so as to diffuse an highly fetid Smell.  
The Patient who dies of a violent Pain arising from a Stone  
firmly impacted in one os his Ureters, has his Stomach princi-  
pally inflamed, the Kidneys, and urinary Ducts and Passages,  
bring at the same time affected, and corrupted. In such Dis-  
orders os the Uterus as prove mortal, the Womb is either in-  
flamed, exulcerated, sphacelated, or corrupted by extravasated  
Serum.

As sor acute Disorders, the most considerable of which are  
Fevers, which destroy so many in the Flower of their Age,  
’ and are so unfriendly to the human Constitution, they prove

fatal in no other manner than by an Inflammation, which ter-  
minates in a Sphacelus os the internal Parts, especially of rho  
Stomach, Intestines, and Meninges; for these Phenomena are  
universally observed in those destroyed by Fevers. Poisons of  
every kind prove mortal by a sphacelous inflammation, espe-  
cially os the Primae Vise, which, upon opening the Patient  
immediately aster his Death; is subjected to the Senses ; so that  
such an Inflammation is, among all others, the most certain  
Sign os having taken Poison. In Patients destroyed by Worms,  
the Intestines are Visibly corroded and inflamed. From all  
which I think it sufficiently obvious, that Death cannot readily  
happen, without the Putrefaction and Corruption of some in-  
ternal Part; so that Putrefaction may be justly said to be highly  
unfriendly to Lise, and fatal to Mankind; for, as the Putre-  
faction os the human Body quickly succeeds a total Destruction  
os the Circulation os thesslood, so it is generally the adequate,  
true, and almost perpetual Cause os Death, and which attacks  
either the external Parts, though rarely, or, which happens most  
frequently; those os the internal Kind; so thet we may truly  
affirm, that hardly a Patient among a thousand dies without a  
Sphacelus.: Only we must except such aS die violent Deaths,  
and those who are suddenly taken off by a Polypus blocking up  
the Mouths of the Vessels. But, in all other Subjects, when  
opened aster Death, a fetid Putrefaction, highly ungrateful to  
the Smell, is perceived.

.. But though the Casses of Death are most evidently disco-  
vered, by dissecting Persons aster Death ; yet we must here  
give a Caution, not to confound the Causes of Death with the  
Causes os Diseases, which we see frequently done; For I have  
observed, that several Physicians, when a Patient dies- os a  
dangerous Disorder, immediately order his Body to be laid open;  
and, when the internal Parts are sound sphacelated and cor-  
rupted, they shew them to the By-standerS, and inform them,  
that the Patient could not possibly be saved, in consequence of  
so violent a Disorder, thus manifestly confounding the Causes  
os his Death, with the Causes of his Disease; whereas it ought  
principally to he consider'd, whether those Causes which pro-  
duced Death, might not, by proper Measures, taken in due  
Time, have heen prevented. By these means they endeavour,  
artfully, to palliate and cover their errors, is they have, possi-  
bly, committed any. Since, therefore, the Nature and Es-.  
fence os Death consists in a putrid Corruption; hence we may  
justly infer, that the Physician, who intends to preserve his  
Patient, ought carefully, by proper means, to prevent and re-  
move this sphacelous Corruption, which always proceeds from  
a Stagnation of the Humours, and strictly forbid him the Use  
os every thing which can, in the least, promote such a Putre-  
faction.

But, that we may more accurately consider this Subject, and  
be able, from certain Signs and Marks, to foresee and predict  
such a suture Corruption, we are to investigate the Causes by  
which it is generated in the human Body : For as no Effect in  
Nature is produced without certain and adequate Causes, so,  
we may affirm; that there are certain Causes os this Corrup-  
tion, from which, when present, a’right Prognostic is to he  
deduced.. But,; before we attempt an Explication of these  
Causes, we shall briefly shew, why Putrefaction is so unfriendly  
to the human Constitution, that a (light and gentle Sphacelus, in  
a small Part os the Stomach and Intestines, is sufficient to destroy  
the Patient suddenly. This, therefore, in my Opinion, hap-  
pens in the following manner : The Circulation os the Blood,  
on winch depends the Soundness os all the Functions os the  
Body, is supported by the Impulse, Strength, and moving  
Force of the Solids. But this depends not, aS some imagine,  
on any. immaterial Being, but, rather, on the highly subtile  
Fluid of the Bloed and Nerves, and its Influx into these Parts,  
as is sufficiently obvious from this Experiment, thet when the  
Nerve, or Artery, which runs to any Part is tied,, or cut, all  
Sensation, Motion, and Nutrition, are destroyed in that Part;  
Besides, that the Strength of the Parts depends on some mate-  
rial Principle, is certain from this, that, by Hunger, Strength  
is impaired; but immediately restored by the Exhibition os pro-  
per Aliments. Now there is nothing, in Nature so prejudicial,  
and which so soon destroys Strength, as Putrefaction; as we  
observe in a Sphacelus, or in an exulcerated Cancer, which  
soon destroys, not only Strength, but Lise. It is, therefore,  
certain, that Putrefaction conceived in the Body, especially  
when it increases and diffuses itself, intimately mixes its m2-  
lignant Vapour, principally with the nervous Parts, and moving  
Fibres; and being highly unfriendly to the Fluid, which is theOrigin of the Motion os the Solids, it.corrupts it, as it were,  
extinguishes the Systole and Diastole os the Heart, and totally .  
destroys the Tone and Motion os the Fibres.

\_In Diseases there are, therefore, two Methods by which  
Death is brought about ; one of these is sudden and precipitate,  
and this is produced by violent Constrictions of the nervous  
Parts, which either arise from Inflammations, and sometimes.

rn the Vigour of the Disease, generate fresh inflammatory  
Stagnations, which tend to a Sphacelus, and tho Death of the  
Patient, which principally happens in Fevers, and acute Dis-  
orders: The other Method is more stow, and happens gradual-  
IV, from a Corruption of the Vifcera, and a Stagnation and  
Extravasation of the Humours; and this principally happens in  
chronical and long-protracted Disorders. AS for Death, in  
acute Disorders, or Fevers, it generally proceeds from Violent  
Spasins, which bring on an Inflammation of the Stomach, In-  
testines, or Membranes of the Brain, together with a mortal  
Corruption *s* for Spasms are universally hurtful, and unfriendly  
to the Constitution, because they direct the Motion of the  
Blond and Humours from the Circumference of the Body to  
the internal Parts, and. obstruct the salutary Secretions, so ne-  
cessary to Life and Health. Besides, such is the Force and  
Power of Spasins, that they hinder the free Circulation of the  
Blood, in which the very Essence of Health consists; and, by  
rendering its Motion unequal, produce Congestions of Blood  
in the nobler Parts, especially in the Head, Stomach, and In-  
testines, which, if not surmounted by Nature, by means of an  
happy Discussion and Resolution, infallibly bring on Corrup-  
tion and Death : For in every Commotion of Nature, or Fe-  
Ver, there are two Kinds of Motions, which ought to be duly  
adverted to, and carefully distinguished from each other. The  
one is highly pernicious, and performed from the Circumference  
to the Centre: This is that spasmodic, and always morbid  
Motion, which tends to the Destruction of Nature, and the  
Vital Motions, and discovers itself by Coldness, Rigor, Horror,  
Anxiety, and a small and weak Pulse. The other is of the  
salutary Kind, succeeds the Spafms, is contrary to them, di-  
rected from the Centre to the Circumference, and discovers  
itself by Heat, and a brisk and strong Pulse : And this is, as it  
were, the Medicine of Nature, which frees the Body from De-  
struction, and by means of which these spasmodic Strictures are  
resolved, the inflammatory Stagnations discussed, and the excre-  
tory Ducts, before closed up and constricted, happily open’d.  
This is that Motion which the Antients called *the healing Power  
of Nature,* by the Efforts of which Diseases are subdued,  
the Patient recovered, and the Danger of Death averted:  
This is, also, that Motion under which no ones dies, which  
rather happens under a spasmodic Motion directly contrary to  
it. The Physician, therefore, who duly knows the Genius,  
Power, mutual Actions, Effects, and Relations, of these two  
opposite Motions, is .able to act with Prudence in the Manage-  
ment of Diseases, to foretel their Dangers judiciousty, and  
with Reputation to prognosticate their happy Terminations:  
finch a Physician is, also, qualified for understanding the seem-  
ingly uncouth Phrases of the Antients, when they tell us, that  
a Fever is the Struggle of Nature with a Disease ; and that the  
Patient recovers, when Nature gets the hetter of the Disorder:  
For if Spasms, Inflammations, Congestions, and Stagnations of  
Blood, in themselves mortal, are not in a certain Period of  
Time, by the hot, resolvent, and febrile Motion, digested and  
discussed, but remain in their full Force and Vigour, then Na-  
ture finks, and the Patient must necessarily die. But since  
there are certain Signs, by which the Victory both of Nature  
over the Disease, and of the Disease over Nature, may he  
estimated, it is sufficiently obvious, that the Prognosticating Art  
depends upon certain Principles and Foundations.

We shall, therefore, here briefly consider those Effects and  
Signs of fetal Spasms, as rarely prove fallacious in acute Disor-  
ders ; and Inch aS, if they appear about the critical Days, aster  
the Patient is weaken'd by the Disease, and either are not re-  
moved, or increase, may render the Physician pretty certain,  
with respect to the fatal Termination of the Disorder. Nor  
are these fatal Spasms observable in one, but in many Parts of the  
Body. If, therefore, a Rigor, accompanied with Coldness, is  
observed shout the Height of the Disease, *or* recurs often ; if  
the Body is not equally soft, but herd, dry, and rough; if ex-  
anthematous Eruptions are, by the Spasms os the Skin, repel'd  
or diminished ; if the external Parts are seined with an Horror  
and Coldness; if Fontaneis, or Ulcers, discharge no more  
Matter; these are bad Signs, and prognosticate the greatest  
Danger of Death ; because, in consequence of the Spasms of  
the Skin, the Motion of the Blood and Humours to the in-  
ternal Parts exates dangerous inflammatory Congestions, and  
hinders the peccant Matter from being expelled by Perspiration.  
In acute Disorders these Spasms generally affect the Parts sub-  
servient to other Excretions. such aS those by Urine and Stool,  
..by constricting which, rhe Urine is render'd thin and aqueous,  
the Patient costive, and afflicted with an Hardness and Tension  
of the Abdomen. Some Patients, in consequence of the Vio-  
lence of these Spasins, are afflicted with a frequent Define of  
discharging their Urine and Excrements.

But the Danger is still greater, when these spasmodic Con-  
tractions affect the internal and more noble Parts, subservient  
to the vital Motions ; for the finall, the contracted, rhe quick

and hard, aS, also, the unequal and intermittent Pulse, pro-  
ceed from no other Cause than the spasmodic and convulsive  
Stricture of the Nerves, which terminate in the Fibres and  
Coats of the Heart, and always, in the Height of the Disease,  
prognosticate great Danger. Equal Danger is indicated, by a  
frequent, uneasy, and difficult Respiration, happening about  
the critical Times; for, *asHippocrates,* in his Prognostics, justlv  
observes, that aS in all Diseases an easy Respiration is *of* great  
Importance to Recovery; so in acute Disorders, a. frequent and  
difficult Respiration is always an unlucky and inauspicious  
Omen. If the Nerves of the Praecordia are affected with vio-  
lent Spasins ; insupportable Uneasiness,: Inquietude, Tossing,  
and Change of situation in the Bed, happen ; is the nerveo-  
muscular Membranes os the Oesophagus and Stomach are  
seized with Spasms, Efforts to vomit. Regurgitations of the  
Liquors drank, frequent Discharges of" a limpid Serum from  
the Fauces, Difficulty of Deglutition, a Driness of theTongue  
and Mouth, afflict the Patient; and if the Duodenum is drawn  
into Consent; the whole Body, and especially the Face, is  
tinged with a yellow Colour: But when more excessive and  
universal Spasms shake and rack the whole nervous System,  
the certain Death, of the Patient may be prognosticated from  
the Pinching of his Nostrils, his collapsed Temples, his cold  
and flaccid Ears, his hollow Eyes, the Coldness and Tension  
of his Skin about the Forehead, and his black or highly pale  
Colour; all which make up the *Facies Hippocratica,* an in sal-  
lible Prognostic of Death. Convulsions os the Nerves, which,  
according to *Hippocrates,* in *Sect.* 4. *Aph.* 6. are always bad  
Signs in acute Disorders, are indicated by the following Signs:  
If the Patient lies on his Back, with his Knees contracted ; if  
he falls downward Io the Feet of the Bed ; *is* he makes bare  
his Arms and Legs, and tosses them irregularly about him; if  
his Nails and Fingers are pale ; if he gathers the Knaps, or  
Fingers the Edges, of the Bed-cloaths; if he picks off the  
Eminences from any adjacent Wall, and is afflicted with a  
Twitching of the Tendons : When all these appear, they pro-  
gnosticate a speedy Death. -

The' most acute Disorders have, sor their Cause, an Inflam-  
mation of some internal Part, and, for that Reason, are not  
free from Danger; yes, in the Height and Violence of the  
Distemper, fresh Inflammations are frequently formed, espei  
cially in the Stomach and Membranes os the Brain, and such .  
Inflammations are always terrible and sore Prognostics of  
Death: These Inflammations, whether separately or jointiy,  
infallibly destroy the Patient, if they appear on the seventh,  
ninth, or eleventh Day, not only os malignant, petechial,  
contagious, and Camp-fevers, but, also, in other acute Fe-  
Vers, such as the Synochus, Burning Fevers, the Purple Fever,  
the Small-pox, and Measles: An Inflammation os the Stomach  
is known, if there is a Violent Heat, and, as it were, a Sense  
os Burning, accompanied with an acute Pain about the Prae-  
cordia; is these Parts are hard to the Touch; if the Extre-  
mities are cold ; if the Patient is uneasy and restless; and is  
every thing he takes, whether Medicines or Drink, is imme-  
diately either thrown up by Vomit, or, if retained, creates  
great Uneasiness, and increases the Anxiety; Sometimes, also,  
the Inflammation is so great, as to pass through the Oesophagus  
to the Fauces, which, in this Case, are.sull of burning pain-  
ful Pustules, and continually covered with a viscid and putrid  
Mucus: All which are Prognostics-of a quickly approaching  
Death. Another more dangerous Inflammation, which is ge-  
nerally Joined to this, and happens a littie before rhe Death of  
the Patiens, is, that of the Membranes of the Brain, by the .  
*Greeks* called *Phrenitis,* which generally succeeds an obstinate  
and continual Watching, and an intense Pain of the Head :  
Its Approach may be predicted from a previous Rigor, thin and  
copious Urine, a Ringing os the Ears, a strong Pulsation in the  
Head, and a Discharge os a few Drops of Blood from tho Nofe r  
Its Presence is known from the following Signs; The Eyes are  
red,.fiery, and stern; there is an Alienation of Mind; the  
Words are senseless and incoherent; the Patient makes impro-  
per Answers to the Questions put to him, often discharges  
Tears involuntarily, gnashes his Teeth, and has no longer any  
Appetite for Drink. If the Phrenitis is succeeded byl Con-  
vulsion, it is a pretty infallible Sign of a soon approaching  
Death. Thefe are the principal Causes which, in acute Dis-  
orders, take off the Patients. Persons of sanguine Tempera-  
ments, those of choleric or sanguineo-choleric Habits, young  
Persons and Adults, those of delicate Constitutions, those prone  
to Anger, those *of lean and* constricted Habits, or who have  
indulged themselves in high, rich, and spirituous Living, are  
principally subject to these acute Disorders, which are produced  
by violent Inflammations and Spasms.

But, in acute and continual Fevers, there is another Couse  
of Death, in those who are of a plethoric and sponevious Habit  
of Body, who are phlegmatic, or whose Strength is exhausted,  
cither by Diseases, Hunger, long Grief, or Haemorrhages; sor

**these** are not so much destroy'd by vehement Spasms, and -a turri-  
hie Train of Symptoms, as by an Imhecilliry and Defect, of the.  
Motions, **a** Want of due Tone in the Parts, and a Lols Of Srrenrvtn.  
In Cases of this Nature, the Stagnations os the Blood and Ho-  
mours,in the very Beginning os the Disorder, dispose to a putrid '  
Corruption. And aS these Disorders are attended with mild sVm-  
roms.they osten deceive the Physician, and elude nis Prognostics.  
Hence, because their Nature is not so evident, but occuli, their  
events are, with Difficulty, prognosticated, and they am gene-  
rally classed among the Fevers os the malignant Kind. Such  
Fevers are known by the following Signs: They appear with a  
flight Coldness and Horror; bat, in the very Beginning of the  
Disease, there is an Uncommon Loss of Strength, and a' languid,  
frequent, and Contracted Pulse. In an erect Posture the Patient  
easily faints away ; the Urine is thin, and without a Sediment ;  
the Patient cannot steep, though he has a perpetual Propensity  
to it. This Condition is succeed by a still greater Loss os St rength,  
**and** an Alienation of Mind , he complains of no Pain, Thirst,  
or any great Uneasiness, he is, however, pretty restless,and tosses  
in Bed; and is his Extremities become cold, and his Pulse be-  
gins to he defective, and can no longer be felt in his Wrists, **we**may justly prognosticate, that the Death of the Patient is not  
far off. But tho’ such Patients are not taken off without an In-  
summation of the Stomach, and Membranes of the Brain, yet  
this inflammation is not accompanied with violent Spasms, or  
terrible Symptoms. But a Corruption is easily brought on,  
which accounts for their Death.

. But fince all Inflammations generally terminate in a Monifica-  
tion, or sphacelous Corruption, we shall subjoin some Marks or  
Signs,by which theTransition from the Inflammation to iheSpha-  
lcelus may be known, ln this Case, therefore, a Certain internal  
Sense of Coldness is perceived; rhe before-intense and acute Pain  
about the Head, or inferior Parrs, suddenly ceases; the Mind  
hefore disorder'd, in some measure, resumes the Eyercise of  
Reason the Defect of Strength is increased, and the Pulse Is  
either totally deficient, or highly unequal. Contracted, and inter-  
mittent: The Patient, though before excessively costive, has his  
Body rendered soluble, or discharges his Excrements involunta-  
rily, his Countenance is unseemly and pale, his Temples, Neck,  
and Breast, are moist, with chilly Sweat - his Extremities are Cold,  
his Pulse begins to be palpably defective. Rumbling and Noise  
arise in his Belly, and when the Liquids be drinks descend, they  
make a Noise, aS if they were poured into a deep Vessel: All these  
are Prognostics os a quickly approaching Death; because, in con-  
sequence os the Increase os the Sphacelus, the Tone os the Parts,  
is incredibly destroy'd, and the Strength wonderfully impaired.  
When plethoric Patients suddenly die of an internal Sphacelus,  
a few Hours after their Death, their Abdomen becomes surpri-  
singly tumid, large Vesicles arise upon the Surface of the Body,  
the Face becomes hard and green, the Corps is intolerably fetid,  
and an ill-smelling Blood is frequently discharged from the Mouth  
and .Nostriis.

There is another Kind of Death incident to those who labour  
tinder violent Disorders of the Breast; and that is. Suffocation;  
which generally rakes off those afflicted with a Quinsey,a Peri-  
pneumony, a suffocative Catarrh, a convulsive Asthma, and a  
Dropsy os the Thorax, for these Disorders not only totally inter-  
cep: the free ingress and Egress of the Air from the Lungs, hut,  
also, destroy the Circulation os the Blood from one Ventricle of  
the Heart, thrss rhe Vessels os the Lungs, to the other. Thus  
an Angina, possessing the internal Mdscles of the Larynx, when  
there is neither any Pain nor Redness in the Neck and Fauces,  
but, at the same tithe, an intense Pain, and Violent Fever, quickly  
destroys the Patient by Suffocation. In this Case, aS *Lomnnus,*in *Lib.* 2. *Obs. Medic,* has observed, the Eyes are distoned, red,  
and prominent, aS in these who are strangled, the Voice is in-  
articulate, small, and resembling the Squeaking of Puppies; the  
Month gasps eagerly for the cold Air, a frothy Saliva is discharged  
from it, and rhe Tongue hangs out, Liquors drank regurgitate  
through the Nostrils, the Patient is totally uneasy, frequently  
leaps out of Bed, and at last dies of a Suffocation and Syncope.  
A Peripneumony, also, destroys the Patient by Suffocation, for, if  
nothing is expectorated, is there is a great Difficulty os Breathing,  
and Restlessness, if the Matter os the Spit is perceived to make a  
. Noise in the Breast, if the Pulse is unequal, and intermittent, if the  
Strength is impaired, and the Patient seized with a Flux, is what  
is thrown up on Coughing is frothy, and sometimes bloody, and  
sometimes yellow, if there is a continual Watching, if a Phreni-  
**tis** succeeds, is the Desire of drawing in the cold Air is excessively  
great, if the Patient is fond os lying on his Back, and in an erect  
Posture, for when he lies reclined upon his Face, he is ready to  
**be** sufioeated; and in this Cafe the Patient infallibly dies on the  
fifth, or, at most, on the seventh Day.

Those who die os a convulsive Asthma, are, also, destroy'd by  
Suffocation, for this Disorder generally arifes from a Dropsy os  
the Thorax, suddenly produced by a Rupture of the Hydaiides:  
When, for Instance, a largo Quantity os Water, by its Weight,  
hinders the Motion os the Diaphragm, and rhe free Expansion os  
the Lungs, so that the Air can neither enter them, nor the Siood  
pass freely through them. A suffocative Asthma is, also, pro\*

duCed, when the interior glandular Coac os the Bronchus, which  
is fin pished with many large Glands, is so contracted, that theAir contained in the Lungs can neither be expelled, nor fresh  
Air reCeiVgni Convulsive Spasms, aiso, frequently contract the  
Bronchia so powerfully, that the Patient miserably dies ofa finish-  
kation. In all these Disorders, there is the greatest Anxiety and  
Restlessness, a tremulous Breathing, an irregular and unequal  
Pulse, a Rattling and Noise are perceived th the Breast ὁ the  
Patient cannot rest in One Place,’ a certain frothy,.or bloody Mat-  
ter is expectorated; andjatlast, the Extremities becoming hold;  
the Patient dies os a Suffocation and Syncope. The like hep-  
pens in a suffocative Catarrh, which is principally incident to old  
Persons, those Os weak Habits, and infants, and generally arises  
from a Palsy of the pneumonic Nerves. In this Disorder, also,  
the Breath is drawn with the greatest Difficulty and Uneasiness,  
the Bronchia are filled with an Hdmoiir secreted from the Blood ὁ  
and, because no Spit is expectorated, the received Air makes a  
great Noise in the Breast, till at last the Patient is suffocated *for  
want of* Air. Besides the Signs already mentioned, there are,  
also. Other infallible Marks.ol Death , such as ah intermittent,  
small, and totally defective Pulse, which frequentiy happens a sew  
Hours before Death. It, also, often happens, that a violent Un-  
easiness, accompanied with a Coldness of the Extremities, comes  
On. ln Phthisical Patients, when a considerable Cavity, Cer-  
roded in the Lungs, contains a large Quantity Of Put, and the  
Pus, in consequence of a Defect of Strength, Ceafes to be ex-  
perforated. Death soon succeeds.

Having considered those Disorders, which destroy by Sussc-  
cation, together with their mortal Signs, we shall now treat of  
some other acute Diseases, which destroy the Patient, both by  
Inflammation, and violent Spalins; and consider by what Signs  
Death may be foreseen and prognosticated in rheth. If, therefore,  
a white Purple Fever, which arises from an highly vapid and cor-  
rupted Lymph, appears in the End of other Fevers, the Meastes,  
or Smali-pox, Or in Childbed, after the Lochia are suppressed, it  
is always dangerous, and generally destroys the Patient by an ln-  
stammation Of some of the internal Parts, especially Of the Sto-  
mach and Intestines. It is a mortal Sign, when a Violent Heat of  
the Praecordia, and ’a great Uneasiness, are succeeded by a Sense  
Os internal Coldness, accompanied with a small, weak, and un-  
equal Pulse, when the Purple Eruptions disappear; when the Pa-  
tient saints away, has his Mind disturbed, and his Respiration  
difficult. I have rarely known any young Person, to escape in the  
Small-pox, if the Disorder seizes him with a Violent Pain of the  
Loins, and a Delirium ; is, on the second Day, rough Efflorescences  
and Spots, like the Purple Fever, appear on the Skin, if, on the  
fifth and sixth Days, after a total Eruption, the Pulse is not more  
moderate, but continues equally quick; and is the whole Body is  
Covered with Pustules. But, about the ninth Day, a burning in-  
tense Pain *of* the Hands, produced by the Exulceration, frequently.  
changes all the Symptoms which promised the Recovery of the  
Patient; for this intense Pain, affecting the whole nervous System,  
produces the greatest Uneasiness, Tossings, and a subsiding of the.  
Pustules; and afterwards a difficult Reipiration, a Disturbance of  
Mind, Convulsions, and a small languid Pulse, coming on, soon  
put an End to the Patient'S Life.

Those who die by any highly emetic. Or purgative Poison, are  
destroy’d by a sphacelous Inflammation, aS is obvious from  
dissecting their Bodies. The Signs os an approaching Death, in  
this Case, are, when internal Heats, and Violent Uneasiness, are  
succeeded by a small, unequal, or totally defective Pulse, accom-  
prnied with a cold Swear, a Delirium, and Convulsions; which,  
when brought on by a purgative Medicine, are by *Hippocrates,  
ihAph.* 25. of *Sid. J.* and, in several Other Parts, pronounced  
mortal. Those who die os the Stone, are generally taken off by  
an Inflammation of the Stomach and Meninges; for, isa Vomit-  
ing, and acute Pain, are succeeded by a Fever, accompanied with  
great Uneasiness, and an insatiable Thirst, and if afterwards an  
Hiccup, a Delirium, and a Coldness Of rhe Extremities, come On,  
the Patient will not live long. In a Cholera, is acute Pains and  
Gripes happen; if Humours, especially of a green Colour, are im-  
petnoufly discharged by Vomit and Stool, it there is an insatiable  
Thirst, if the Counrenance is yellow or pale, and the Pulse small  
Or contracted? the Disorder is not without Danger. But if the  
Pulse is totally defective, if the Legs are contracted, the Body  
Covered with a cold Sweat, and thePatient seined with Deliqui-  
bins, these are pretty sure Signs, that the Inflammation is dege-  
berated into a Sphacelus. Now the most certain Signs ofa Spha-  
celus are, when the acute Gripes suddenly cease, when the Extrec  
mities become cold, and the Strength is greatly impaired. An  
Hiccup, a Cardialgia, Heat, and Uneasiness about the Praecordia,  
generally precede this Condition, and indicate a fatal Inflamma-  
tion of the Stomach. In the lliac Passion, where the Pains are  
intense, and accompanied with Costiveness, and a continual VO-  
miring of fetid Matter, is an Hiccup, a Delirium, cold Sweats, Re-  
frigeration of the Extremities, and ConVulsions ofthe NerveSjcoine  
on, these are certain Signs os an approaching Death, as *Hippocrates,  
in Sect.* 7. *Apis* Io. has justly observed. Violent convulsive Co-  
lies take the Patient Ost in the same manner; for, in this Difor-  
der, there is Often such an intense Pain in the Intestinum Rectum,

produced her the stagnant hremorthoinal Blood, that this sort (line  
is not only served with an lnfiimrnIrion, hu\*, also, a merroftipba- 1ceius , under wnich, in consequence or the putrid S am of the  
Intestine, highly serie Excrements are discharged ῆ a frequent and  
weak Pulse, accompanied with a great Loss of S rength, mcceeds ὁ  
and the SpbIcein? often spreads to the extern st Parts, and the  
Scrotum Taster which, the Patient is seiird with Dcliquiums, and  
soon dies.

Tis certain, that many Women die cither curing, or aster  
Labour - for which Reason we shall consider some of the  
most fatal Presages and Prognostics, in Cases of this Nature.  
If, therefore, a Woman, in hensequrnee cs an unnatural S;:u2-  
tion os the Foetus, especially when too large, is, for some  
DIys, successively racked and fatigued with Violent Pains, ac-  
compmied with in'ern.l Heat, which may be known by the  
Celerity of the Pu’se, infrequently happens, that in Labour, or  
after it, the Strength being-suddenly lost, she falls into a kind  
es Del’.quium, or Disorder resembling an Apoplexy, and can  
by no means have Strength and Lise restored to her -. in such  
a Situation, ft is a Sign os Death, when the Disorder lasts for  
some Hours, and the Patient cannot be roused hy the most  
penetrating Medicines, such as Spirit os Sal Ammoniac, pre-  
pared with Quick-lime, and mixed with Gil of Rus, put into  
the Nostrils. If the Face, during the Paroxysm, remains red, it  
is a Sign, that the Bleed, too impetuoufly convey’d to the Brain  
by rhe Spasms, has produced this Disorder, in every respect so like  
an Apoplexy, and, after the Death or the Patient, a bloody fetid  
Serum is generally discharged from the Mouth and Nostrils. Is,  
after theFoetu. is dead in the Uterus, the Mother dies in Labour,  
the Child is frequently expelled, in consequence os the Relaxa-  
tion os the Passages, and the internal fermentative Motion.  
Those Women who die in Childbed, for the most part, puffer  
great Pains from a Retention Of the Lochia, but if these Pains  
are not succeeded by the Lochia, but rather accompanied with a  
Flux, a fatal Inflammation os the Uterus, and a Fever, generally  
succeed. Such an lnfl.mmaiion is. known stoma burning Heat,  
reaching from the inferior Parts to the Region of the Heart, and,'  
is it is accompanied with great Uneasiness, Loss Os Strength, .Rest-  
lessness, and a total Loss brAppetite, if afterwards there is an in-  
rernal Sense of Cold, with an Horror, a frequent, small, and weak  
Pulse, and if the Sight begins to grow dim, these are Signs, that  
Death, proceeding from a Sphacelus, is not far off. Many Wo.  
men in Childbed die with the full Use of their Reason, which  
frequentiy returns to them a few Hours before their Death , so  
that unskilful Persons conclude them to he in a fair way os Re-  
covery, whilst the more Skilful and Judicious know, from the  
State os the Pulse, that Death is approaching. If,, in consequence  
Osa large Effusion Os B'ood, aster Labour, and in Childbed, a  
stow Hear, accompanied with a frequent and weak Pulse, and  
which is not allay’d in the Morning after Sleep,, is brought On,  
and attended with a total Loss of Appetite and Strength, the Pa-  
rient generally dies of a Syncope, about the End of Childbed,  
that is, in the sixth Week.

In an exulcerated Cancer, scarcely any Patient is preserved. On  
account of the Violent Corruption, which is indicated by the  
black, thin, and highly fetid Sanies. In this Case, the Patient is  
afflicted with a flow Fever, and the Strength daily decreases; the  
Sleep, also, is uneasy, restless, er none at all, rill, at last, a Deli-  
quium and Death ensue. Persons are sometimes suddenly taken  
Off by the Retrocession Of inflammations of the external Parts,  
such aS. Erysipelas, and the Gout, either in the Feet Or Hands.  
Nor does this happen in any other manner, than by an Inflamma-  
tion of the Stomach and intestines. But 'tis still more danger-  
Ous, is, in the Plague, Carbuncles and Buboes recede. Or are not  
sufficiently expelled for» in this Case, the Death Os the Patient is  
Certain, since he is seized with an Horror, becomes restless and .  
uneasy, an Heat seizes the Region Os his Stomach, whilst his Ex-  
tremities are cold; he has a Desire to Vomit, oris seined with an  
Hiccup, after which, the Patient is afflicted with a Perturba-  
tion Ot Mind, and dies of a Syncope. If any one dies of an ex-  
cessive Loss ofBloodiwhich may happen in MtscarriageS.a Spitting  
of Blood, a Vomiting Of Blood, the Morbus Niger of *Hippocrates,*or violent Haemorrhages in Fevers, such a Patient is taken off by a  
Deliquium and Syncope. But ’tis to be observed, that, for the  
rnost part. Death is preceded by an insatiable Thirst, an Inclina-  
fion to vomit, a weak and lrequent Pulse, and Convulsions of the  
Extremities, which are Signs, that the Blood, stagnating in the inter-  
nal Parts, such as the Head and Stomach, still excites some  
Spasms, for Thirst generally arises from a spasmodic Stricture  
Ot the glanduloui Coat of the Oefophsgus. The Disorders of  
wnich Children die, are generally of the spasmodic and convul-  
five Kind, and bring on an inflammation and Sphacelus, espe-  
cially of the Stomach, Intestines, or Head ; for, in consequence  
os the acute Pains, they easily sail into Epilepsies and Convulsions,  
Fevers and Asthmas, if one epileptic Pit succeeds another, and  
if the Patient was before very costive, he fponianeouily discharges  
highly fetid and black Excrements; Is the Voice becomes shrill  
and interrupted, and the whine Body in intensely het, we may  
prognosticate, that Death is not sar css

We now come to consider the Presages of Death in some  
chronical Disorders, the most considerable of Which are the  
Dropsy, a Cachexy, th- Scurvy, a Consumption, an Hectic,  
a Phthisis, and a Tabes. Those who are destroyed by these Dis-  
tempers, die slowly, but certainly ; because, though the Cor-  
ruption osrheV libera, from a Stagnation or Extravasation of the  
Humours, proceeds flowly, yet it cannot he removed bv anv \*  
means. The Signs of a Corruption os the Abdominal Viscera,  
and, consequently, os approaching Death, are, a Loss os Ap-  
petite, and a Loathing of fuch Aliments, as the Patient was  
fond of, when in Health. Is the flow Fever increases, and the  
Pulse hecomes quicker, these Signs always denote an internal  
Corruption ; which is, also, indicated bv a Loss of Stren-th,  
a great Difficulty os breathing, and restless Sleep, which rather  
weakens, than refreshes. Is these Symptoms afflict the Patient  
long, and yield to no Medicine, they are certain Prognostics of  
Death, especially in old Persons, or those, who, in consequence  
of a previous Disorder, have fallen into such a chronical Disease.  
These are some os the most common Signs of Death in chronical  
Disorders. But we shall add some, peculiar to certain Diseases of  
the chronical kind. As for a Phthisis, then, the Signs of Death  
in this Distemper are; is the whole Bodyisconsumed ;ifa continual  
Hectic Fever assiicts the Patient ; if the Face is red, and the  
Bedy preternaturally soluble ; is there are colliquative Sweats,  
and oedematcus Swellings of the Feet ; if the Spit is suppressed,  
the Nails pale, the Eyes funk, and theNostrils sharp and pinched.  
In case a Dropsy succeeds a long-continued Asthma, and Palpi-  
tation os the Heart, or an Induration of the Liver, a Quartan,  
we may pretty certainly prognosticate, that the Patient cannot  
be preserved ; and is the Urine is small in Quantity, turbid,  
and red, it is a very bad Sign. Isthe superior Parts hecome lien-  
der, and the Face assumes a yellowish Colour, we may pretty  
infallibly prognosticate Death some Months before it happens ;  
but the Patient is infallibly destroyed, is the Fever is increased,  
and the Respiration rendered more difficult. Those who fre-  
quently, and especially after violent Exercise of - the Body, or  
Commotions os Mind, perceive an obstinate Palpitation os the  
Heart, and afterwards fell into a convulsive Asthma, a Spitting  
of Blond, or a Dropsy, may have their Death prognosticated a  
longtime hesore it happens, especially is they are afflicted with  
DeliquiumS ; for the Cause of ail these Disorders is a polypose  
Concretion in the Veffeis of the Heart, which cannot be re-  
moved by any Medicine; and which, with the Concurrence of  
other Causes, generates these terrible Disorders ; and is Deli-  
quiums, also, produced by the Polypus, happen frequently, and  
without any manifest Cause, the Patient generally dies suddenly  
ThisDoctrine is, also, confirmed by the Authority of *Hippocrates.*

When a sphacelous and mortal Corruption affects the Liver,  
therein a great Loathing of Food, especially of Flesh ; therein  
a frequent and insatiable Thirst, a Fever, a Loss of Strength, an  
Hiccup ; now-and-then Serum, or yellow Bile, is discharged by  
Vomit, and the Bedy is gradually consumed. In such Cases,  
after Death, I have observed the Liver evidently sphacelous  
and black. An Exulceration of the Stomach,, also, produces  
a long and mortal Disorder, and is known, if a great Unea-  
siness and Vomiting succeed Eating : And these Misfortunes  
are increased by any acrid and saline or -spirituous Medicines ;  
the Body is wasted, tlie Pulse is always quick, the Extremities  
seized with a Rigor, and sometimes with an Horror; Fontaneis are  
dried up, and the Sleep is little and restless; fuchPatients die in the  
third or fourth Month, and their Death may be prognosticated a  
long time hesore it happens, in a Cachexy, is the whole Body  
hecomes tumid, inflated, and pale ; if therein a Loathing os  
Food ; is the Patient frequently vomits a setid Matter, and dis-  
charges little by Stool; is the Urine is crude, and in small Quan-  
tit}’ ; is the Respiration is difficult, and the whole Bedy setid ;  
is afterwards a frequent Pulse, and a more difficult Respiration,  
happen, the Patient's Death, in some Monti», may be progno-  
sticated ; and it happens the more infallibly, the more Errors in  
Diet, or excessive Drinking, the Patient commitsor the more  
he is assiicted with long Grief.

We shall, farther, subjoin some useful Cautions with respect to  
forming Prognostics. Spasmodic chronical Disorders are, there-  
fore, to be carefully distinguished from those of the aoute Kind;  
for, in hypochondriac and hysteric Disorders, such Symptoms  
occur, as in acute Disorders prove mortal, but are less dan-  
gerous in the former ; sor nothing is more frequent in hypo-  
chondriac and hysteric Affections, than for the Patient to he  
affiicted with Violent Uneasiness, a Difficulty of Breathing, a  
Coldness *of* the Extremities, a thin and watry Urine, a small  
and weak Pulse, and frequently violent Deliquiums; which  
Symptoms are, however, soon carried off, without any Dan-  
ger. The Sttges of Distempers are, also, to be carefully di-  
stinguished ; sor, os all the mortal Signs already enumerated,  
if some, or even a considerable Number, should appear in the  
first Days os a Disorder, those would act inconsiderately, who

should thence conclude, that Death was st hand. But it  
is otherwise, is, - aster the Strength is, fur several Davs,  
exhausted by excessive Heat, Want os Appetite, AnxietV  
and Parn, those fatal Spasins, and the Symptoms produced  
by them, appear ; especially at those times, on which- the  
Disorder is generally terminated in a salutary manner ; which  
is, for the most part, on the odd Days, that is, the seventh,  
ninth, and eleventh Day. Great Regard is, also, to be had  
to the Habits of Patients, whether they are or weak and lan-  
guid, or of vigorous and robust Constitutions, since the former  
are always in greater Danger, then the latter. Among the  
Weak , we reckon old Persons and Infants, those of spongious  
full Habits, those who have small Vessels, those sprung from  
weak and infirm Parents, and those weakened by previous Dis-  
orders, immoderate Haemorrhages, long’Hunger, the Affections  
os the Mind, Grief Care, and Thoughtfulness. Among'this  
Class we, also, reckon Childbed Women, and those, who; in  
consequence os a bad Regimen, and a Suppression of the Excre-  
tions, have contracted'^ Redundance os impure Juices in their  
Vessels ; for, in all these tender Habits, the Painsand Inflam-  
mations easily degenerate into a mortal Sphacelus. We ought,  
also, carefully to observe, whether the Symptoms, which appear,  
are excited by external Causes, such as Anger, a. Fright, Re-  
frigeration of tire Body, improper Aliment, or Medicines os a  
drastic or virulent Quality ; all which, in dangerous Diseases,  
and in Persons of weak Habits, are of such a Nature, as to nrove  
mortal, and accelerate the Death of the Patient. But is, in  
less dangerous Diseases, and in robust Habits, these terrible  
Symptoms appear, they are. not forthwith to be pronounced  
absolutely mortal. And, lastly, in order to form a right Pro-  
gnostic, it is os grcatTmportance, duly to consider the Begin-  
ning os the Disorder; for every Disease, which,' in the Begin-  
ning, destroys.thc Strength, and is accompanied with a frequent  
Pulse, portends no Good, because it clearly disco versa Loss  
of Strength, an Impurity of tile Juices, and a fatal Dyscrasy  
os the Blood. *Frederic Hofsinan.*

PR4ESCRIPTIO. A Prescripion. ’

PRTESEPIA, or PRESEPIOLA. The Sockets in the Jaw-  
bones, tn which the Teeth are contained. ’ '

PR/FSERVATIVAREMEDIA. Remedies, which pre-  
serve Health, .and prevent Diseases.

PRat.SERVATORIA INDICATIO.' The Preservatory,  
or Prophylactic Indication. Sec INDIcATio,’ and FiBRA. ' '

PRAMNIOS:, πράμνίος. A Sort ofblack and austere Wins,  
mentioned by *Hippocrates,* in his Treatise of the Disorders of  
Women. ‘ ' ' ..' " - - ‘

PRASINUM VIRIDE, is the same as FAr xErsu See  
*AEs. - - . -*

PRASINUS, or PRASOIDES ; the same aS PORRACEUS;'  
PRASIS is explained by *Pulandus, Creta viridis. .*

PRAS1TES. An Epithet for a sort of Wine described by  
*Diosc verities, L. ζ. C.* 58. It is made by infusing the Leaves  
of Horehound in fermenting Must.

PRASlUS. Offic. Churlt. Fossi 33. Calc. Mus. 2ry.  
Kentm. 47. Boet. 203. Worm. 95. Aldrov. Mus. Me-  
tall. S97. *Prasus five Prasius.* De Last. 42. *Lapis, Pra-  
nas dictus, aliis, Plasina, aut Nfliuni, alet Leda. Lapis Ne~  
tshriticus viridis Mali Aurantiifoliorum vicere.* Cup. Hort.  
Oath. Supp. 2. 5r. THE GREEN STONE.

It is green for the greatest Part of it, but is feldom without  
rlack, and sometimes white Spots. Many take it for the Mo-  
her of the Emerald, because this Gem is sometimes found in it.  
The *Prasius* has the Virtues of the Emerald, but in a lower  
Degree. . - .ss.

PRASION, πράσιίνἀ White Horehound.

PRASUM, πραίσίνν. A Leek. . ί

PREHENSIO. A Name for the CAT At.EYSIS. 'si  
PREMNON, 'πρἐαιβ.’. The Extremity of the White'of  
the eve.

PRESBYTJE. Vision is commonly divided into three  
Sorts; the good Sort,-that of the Myopes, and that of tho  
Presbvta.

A Person is said to erjoy a good Sighti when he can see to  
read at a Foot Distance r In this Case the Crystalline Humour is  
in its most perfect State, and fuch People can distinguish .distant  
Objects, like the Presoy tat, but more accurately. This Species  
of Vision has three Degrees, or Focuses ; one at the Distance  
oshals a Foot, another ata Foot Distance, and a third a .little  
farther.

Tile Sight Of the Myopes has a very short Focus ; they can  
see distinctly, when the Object is near, and require little  
Light to read. At a Distance they see confusedly, and Objects  
considerably remote they cannot perceive at all. This Defect  
of the Sight is attributed to the too great Convexity of the Cry-  
shthine.

The Myopes have, also, three Degrees or Focufes. ’The  
' fust is, when they cannot read, without bringing the Book

close to’the Nose ; the second held it two er three Pinners-  
Breadth farther ; and the third hold *it* at half a Foot Distance,  
or inore. In order to distinguish distant Ol-jedb, the Myopes  
should use concave Glasses.

. The-Presbytae have their Focus very long ; they observe re-  
-mote Oljucts distinctly, but those which are near, confusedly :  
This Defect of the Sight is imputed to the too great Flatness of  
the Crystalline. The Presbytie have, also, three Degrees. or  
Focuses ; one at the Distance of a Foot and an half ; another  
at two Feet and an half ; and the third at a greater Distance:  
Upon this account they cannot read without Spectacles’. This  
Species of Vision is common among the Aged, and is directly  
contrary to that, ofithe Myopes. . .

Of these three Species os Sight, two of them are subject to  
Alteration. The good Sort may sometimes .he changed into  
that os the Myopes, especially in those who read much, *or* ap-  
ply themselves to sine Work; and in Old-age it is liable to  
change to that os the *Prestytcz.* Tlte Sight os the Myopes-ad-  
mi ts osmo Variation ; and..that of the Presbytae sometimes be-  
comes good. These disterent Changes of Vision proceed from  
the different Degrees-of Convexity, of which the Crystalline  
Humour is capable. . When the .nutritious Juice, necessary to  
maintain the-Convexity os the Crystalline, is sufficiently- fluid  
ro pafs through the. Extremities of the finest Vesseis belonging  
tort, then the Sight is perfect. But, if the Juice is too thick,  
it cannot enter these Vessels in a sufficient Quantity ; for which  
Reason the Convexity will be diminished, in. proportion to the  
Tenacityofthe Juice. *SC Tiles. c. .* i.. - . : ,

‘ FRESIS, or PRESMA; Ηρῆσις, ΟΓ Ηρῆσμα. *Galen* explains  
this Word, Inflation. -"εἴ ί' 1 '

-TRESMUCHUM, or PRESMUKI6. Ceruss, *Rulart-  
dust . . .-*

PRESSORIUM. A Press. *Rulandus.*

‘ PRESSURA. Pressure, or Compression. *Prejsura Gen-  
tium,* ,in *Paracelsus,* is the VenerealDiseass, V ~ -

PRESTER, Ηρηστήρ. The external Part ofthe Neck, which  
is inflated by Anger. *Gorraus.* But *Prester* is, also, the  
Name of a Serpent,, the fame as *Disafas.*

‘ PRIAPEIA.- A Name for the NIcoTiANA MINOR.

: PRIAPISCOS, πριαπίο\*ις. The Name os a small Piece of  
Wood, which constitutes a Part os the *Scamnum Hippocrati-  
cum. Priapis.cos,* also, imports a Tent-made of Linen, rolled  
tip in the Form of a. PENIS. *Paul. AEgineta, Lib.* '3. *Cap.*

6" E - .

PRIAPISMUS, πριαπισμος. A Priapism. Soo SATYRI-  
**ASIS. '' . ....**

PRIAPOLITHUS. The Name of a Stone mentioned by  
*Borelli,* found about *Castro* in *Italy,* resembling in Shape the  
Penis.. . . . \* ' --

'. PRIAPUS, πὸιάπος. A Penis.

PRIM/E VLss, The first Passages; that is, the Stomach,  
and Intestinal Tube. - ' I

PRIMITIVE; The Waters which precede the Foetus at  
the Birth. ι — '  
' PRIMORES. A'Namefor the *Dentes Incisiores,* or Fore-  
teeth.

' PRIMULA VERIS.

. The Characters are;

The Root is perennial ; the Leaves are oblong, and wrist,  
kledthe Calyx is truinquefid, pentagonal, and soft : In this  
Calyx is seated a monopetalous Flower, shaped somewhat like  
a Salver, with its Margin divided into five Heart-shaped, bifid.  
Segment's; this Flower is furnished'with five Stamina, which  
arise fioin the Inside os its tubulous Part. The seminal Vessel  
is an oblong Shell, concealed in a Calyx, furnished with a long  
Tube, and gaping at its Apex ; the Seeds are roundish.

*Boerhaave* mentions twenty Species os *Primula Peris* ; the  
first twelve os which aro of the Class os those which bear a sin-  
gle Flower on every Stalk, and are enumerated as follows ;

I. Primula Veris; pallido flore ;thumilis. *Bocrh. Ind. A.*I98. *Primula Viris.* Offic. *Primula Foris minor.* Get.  
'636. Emac. 78I. *Primula Viris vulgaris.* Park. Theat.  
535. -Raii Hish 2. Io8o. Synop- 3. 284. *Primula Veris,  
floribus escsingularibus, majoribus, simplidnus. J.* Β. 3. 497.  
Tourn. Insta I 25. *Verbas.culum silvarum majus, singulari stare.  
C.* R R 24I. .THE PRIMROSE.

The common Primrose has large wrinkled Leaves, of-a dark  
Green above, and whiter underneath, broad and round at the  
End, and growing narrower towards the Roots ; the Flowers  
airse directly from rhe Root on long flender Foot-stalks, consist-  
ing os single Tubes spread out at Top, and cut into five large,  
round Segments, of a pale-yellow white Colour, set in loose  
Calyces.. The Root is sinall and fibrous. It grows in Thickets,  
and under Hedges, and flowers in *March* and *April.* The  
Flowers and Roots are used, though hut seldom.

The Flowers are commended by some, as good against Dis-  
orders arising from Melancholy, and phlegmatic Humours , the

Juice of the Root is sometimes used aS an Errhine sto Turge the  
Head os tough (limy Phlegm. *Melleofs Bott. Osse*

L. Primula Veris ; Constantinopolitana ; store albo. *T. ϊΊζ.  
Fcrbaseutn Jurci cum sive Carchicec Turearum.* M. Η.2. 555.  
- 3. Rimula Veris ; Constantinopolitana '; store dilute cameo.  
T. r25.

4. Primula Veris 3 Constantinopolitana ; store dilute purpu-  
reo. T. I75..

5. Primula Veris; Constantinopolitana; flore majore pur-  
puree. T. I 25.

6. Primula Veris ; Constantinopolitana ; store ininore -pnrpn-  
reo. .T. 125.

7. Primula Veris ; Constantinopolitana ; flore miniatot T.

**I2S. ...**

8. Primula VerisConstantinopolitana; store luteo. T.  
125.

9. Primala Veris; Constantinopolitana ; flore flavescente.  
Τ- I26- . . , -

IO. Primula Veris ; Constantinopolitana ; flore obsolete pal-  
lido. T. I26. .

II. Primula Veris; Constantinopolitana ; store obsolete,  
T. I2si.

52. Primula Veris ; flore pleno. *Hi East. Vern.* o. I. Fl I.  
*Fig. 3. Virbaseuluns, fsmostre, magno, plendque-siore.* C. B. P.  
242.

The second Class contains those Species, which, on one Sialk,  
hear a Multitude of Flowers, disposed somewhat in the Form  
of an Umbella \*; they are as follows :

I. Primula Veris ; umhellata; odorata ; pratensis. *Bocrh.  
Ind. A.* 199. *Paralysis.* Ossic. *Paralysis vulgaris pratensis,  
store .flavo, simplici odorata.* Park. Paratio 244. *Primula Fe-  
ris mayor.* Get. 635. Einac. 78o. Raii Hist. 2. Io8*1.* Sy-  
nop. 3. 284. *Primula Vcris odorata, store luteo simplici.* J.B.  
3. 495. Tourn. Inst. 124. *Ferbaseulum pratense odoratum.*C. B. P. 24I. COWSLIPS, or PAIGLES.

The Cowflip is well known to have somewhat soft, large,  
wrinkled. Leaves, green above, and whitish and hairy under-  
neath, and full os Veins,.broadest at the End, and growing  
narrower towards the Stalk; among these arise one or two  
round smooth Stalks, five or six inches high, bearing on the  
Top several yellow Flowers, in a kind os Umbel, each! on a  
long Foot-stalk, and set in a loose whitish pentangular Calyx;  
the Top being round, and cut into five Segments, with Saf-  
fron-colonred Spots in the Middle os each ; the Part inclosed-  
in the Calyx being hollow, and Pipe-fashioned ; they are of a  
pleasant sweet Scent. The Root is composed of several Strings  
or Fibres, arising from a small Head ; it grows in moist Mea-’  
dows and Marshes, and flowers in *April.* Tlte Leaves some-  
times, but the Flowers are mostly used.

They are accounted cordial and- cephalic, and henesicial to  
the nervous System, and serviceable against the epilepsy. Pal-  
sy, Apoplexy, and Pains in the Head ; they are anodyne; and  
supposed to have a Tendency to procure Sleep, sor which Pur-  
pose a Tea is sometimes made os the Flowers. The Leaves  
are used in warming, strengthening Ointments, particularly the  
*Unguentum Nervinum.*

Officinal Preparations from Cowflips are, the simple Water,  
the Syrup, and the Conserve. *Millen's Bot. Osse*

The Flowers of this Plant, being analysed, yield a good deal  
of Acid, a littie urinous Spirit, no concreted Volatile Salt, and  
a pretty deal of Oil and Earth ; these Flowers have a volatile,  
aromatic, oily Salt, pretty much tempered. They are Very  
aperitive, and good to restore the Course of the Spirits. In the  
Apoplexy and Palsy, *Tragus* prescribed the Conserve, or distilled  
Water, os these Flowers. To draw the Spirit from them, they  
must be sprinkled with common Salt, lest to ferment seme  
Days, and then distilled ; this Spirit has the fame Virtues. The  
Leaves and Roots are Very aperitive. *Martyn's Tournefort.*

The Plant is heating and drying, and has something of an  
acrimonious and bitterish Taste, it is, also, somewhat astrin-  
gent, and has an anodyne Virtue. The principal Ufes, to  
which it is applied, are in cephalic Disorders, andtheArthritis,  
and other Pains and Affections of the Joints.

2. Primula VeriS ; pallido flore; elatior. *Boerh. Ind. A.*19g. *Tourn. Inst.* 124. *Hcrba Petri.* Offic. *Primula pra-  
tensis inodora lutea.* Ger. 635- emac. 780. Rati Hist. 2.  
IoSI. Synop. 3. 284. *Primula Viris caulifera, pallidastore  
inodoro aut vix adora.* J. B. 3. 496. *Paralysis altera odo-  
rata, flare pallida polyanthus.* Park. Parad. 244. *Virbascu-  
eam pratense aulsilvaticum inodorum.* C. B. B. 24I. GREAT  
COWSLIPS, or ORSLIPS.

They grow in Woods and Thickets, and flower in *April.*The Leaves, infused a Night in White-wine, are recommended  
against the Anasarca. *Dale.*

3. Primula Veris ; geminato Bore. *Hi East. Fem.* o. **I.***F.* 5. *Eig. p- Fcrbafculam prol'iferum,* C. st. P. 242. AL  
H. 2. 554.

4. Primula Veris ; Anglicana; flore pleno. *Hi East. Pern.*Ο. 9. *F.* 3. *Fig.* 2. *Virbasculum, hortense, multiplex.* C. B.  
P. 242.

5. Primula VeriS; hortensis ; innbellata ; cause & store fo-  
lioso, coccineo, majore.

6. Primula Veris ; hortensis ; umhellata ; flore folioso ; lu-  
teo, minoro.

7. Primulae Veris ; innhellate ; odoratae ; hortensis ; simpli-  
cis varietas uberrima pro ‘Varietate jucundissima coloris multi-  
plicis.

8. Primulae Veris ; umbellate ; geminato flore abundans 6.  
grata ratione pigmenti discrepantis copia. *Bocrh. Ind. all.  
Plant.*

It is called *Primula Ports,* because it flowers in the Spring  
before all other Plants. It is recommended in a Palsy proceeding  
from Want of Spirits. The Leaves are eatable in Salads, or  
helled with other Greens; and their expressed Juice is good  
against the Palsy, sor it is restorative ; the Flowers have a very  
sweet and innocent Smell, and are dissolvent, without Danger  
os an inflammation. The Leaves and Roots are aperitive, and  
effectual in Apoplexies and Rheumatisms, , heing comfortable and  
strengthening to the Nerves and Joints ; externally used, they  
are os Service in Tumors arising from the Bites or Stings os Ve-  
nomouS Animals, and in the Gout. Vinegar impregnated with  
the Roots, and attracted into the Nostriis instead of an Errhine;  
is an admirable Remedy for the Tooth-ack A Conserve of the  
Flowers is Very good for the Palsy ; *Willis* and *Sydenham* pre-  
scribe it in acute Diseases. The Flowers, when young and  
tender, are used instead of the Flowers of the Tilia ; for they  
procure Sleep, and are of an anodyne Quality. *Hist. Plant,  
adscript. Boerhaau.*

PRINCEPS. A Name for the *Intestinum Rectums Prin-  
cipes Dies* are Critical Days.

PRINCIPIA. The Principles, or Elements, of Bodies.

It is impossible to discover the Virtues of any Body, or how  
mixed Bodies of different Kinds stand related to the human Bo-  
dy, either for the Preservation of its Functions entire, the re-  
storing them when lost or impaired, or for the total Destruction  
thereof, till we know the Principles of which they consist, and, -  
likewise, the Mixture and Proportion of such Principles in Bo-  
dies, to which their Effects are principally owing. Wherefore;  
having discovered, by Various Ways, the Parts into which a  
true chymical Analysis resolves Bodies, we must look upon,  
such simple Parts, into which all mixed Bedies are capable os’  
being resolved, and of which they seem to he compounded, as.  
their true and genuine Principles. The Antients, having ob-  
served, that, in analysing all Bodies whatever, they obtained a  
Spirit, or Mercury, Sulphur, Salt, Water, and Earth, concluded  
the Number *os* Principles to he five.

If Wine, for Instance; he distilled in a proper Alembic, a  
burning Water, or Spirit, will first arise, next an insipid Wa-  
ter, which they call *Phlegm,* a thick. Viscid Mass alone re-  
maining in the Still. This they put into another Vessel, or  
Retort, which being exposed to a more intense Heat, a small  
Portion of Phlegm comes over fust ; then an acid Water, which,  
according to them, is still Spirit, or Mercury ; next, a sat, oily  
Substance, called *Sulphur.* What remains still in the Retort,  
is burnt to Ashes in an open Fire. These Ashes are thrown  
into an earthen Vessel, with a proper Quantity of helling Wa-  
ter, which they impregnate with Salt. This Water, heing  
tred through Cap-paper, and afterwards evaporated, leaves  
the Salt at the Bottom. The other Part of the Ashes, which  
the Water does not take up, is termed *Earth,* or *Caput Mor\*  
tuurn.*

Of these five Substances the Chymista have reckoned two to  
be passive. Water, and Earth; and three active. Spirit, Sul-  
phur, and Salt; and on these last they thought the whole Vir-  
tue and Efficacy of the mixed Body depended. In this Analysis  
we may observe, that there is a twofold Spirit ; one oily and  
inflammable, which rises first by a gentie Heat, and is termed  
*Spirit of Wine* ; another acid and penetrating, like that os Vi-  
negar. Besides, these Chymista give the Name os *Spirit* to other  
penetrating. Volatile, or urinous Liquors, obtained from the  
Parts os Animals, fuch aS the *Spirit os.Urine, Hartshorn, Blood,*and such-like Substances : But the later Chymista have banished  
these Spirits from the Number os their Principles, as bring no-  
thing else than Sulphur, or Salt, dissolved in Water. Thus Spi-  
fit of Niue, and others os that Kind, are only acid Salts in  
Water; Spirit os Hartshorn, or Urine, alcaline Salts ; and  
Spirit of Wine, or of Turpentine, an ethereal, attenuated Oil.

Some os the Moderns deny, likewise, that either Sulphur or  
Salt deserve the Name os Principles, or Elements ; as not being  
the most simple Substances producible by Chymistry. For Sul-  
phur, when treated with due Care, may be resolved into Salt,  
Water, and Earth ; aS is evident by distilling fetid distilled Oils  
several times with Quick-lime; which, by this Treatment,

yield, in large Quantities,- a volatile Salt dissolved in Phlegm,  
together with a Caput Mortuum, or Earth. Likewise ethereal  
Cols are only sat, thick Oiis like that of Olives, attenuated by  
Salts, and dissolved in Wares, as may he proved by the two  
following experiments : If-Oil os Olives, or any other of  
that kind, be mixed with a fermenting Liquor, such as a So--  
lution os Honey in Water, the Whole will he converted into  
an inflammable Spirit. .And if a Quart of Spirit os Wine, di-  
luted with six Quarts of common Water, be exposed in a cold  
Place to the open Air, the volatile Salts will fly off, and leave  
Drops Of Oil - swimming at the Top, winch are, in every rer.  
spect, the same as Oil of Olives, or AimondS.

Salt has no hetter Tide to a Principle, than Sulphur, because  
it may, by proper Management, he at length reduced to Earth  
and Water. Thus Nitre, by Distillation, may he almost wholly  
reduced man.acid Spirit; but, if It he burnt with Tartar, or  
Charcoal-dust, it becomes an alcaline Salt,, called *fixed Nitro..*

This,: if suffered to run per Deliquium, and afterwards fil-  
tred through Cap-paper, will leave a large Quantity of earth  
behind ;. .and;, if the same Liquor be distilled to Driness, a large  
Quantityos insipid Water-will come over, and the Salt remain-  
ing at theJSottom of the Retort will have lost a great Past of  
its first Quantity." Is this Operation be repeated, nothing will  
at length remain, but Earth. Again, the Vitrification of alca-  
line Salts seems to he nothing, but the Conversion of them into  
Earth ; for Glass has no Qualities different from those of Earthi

What we have proved by Experiments made by resolving Bo-  
dies, may be further confirmed by others relating to the Forma-  
tion and Composition of them, and particularly by. *van Hel-  
monrs* famous Experiment on the Willow, which has been often  
?noted by succeeding Authors. He took about two hundred  
ounds os Earth dried in an Oven, and put it into a Vessel co-  
vered with an iron Lid full of Holes.' In this Earth he seta  
Branch of Willow, weighing about five Pounds, which soon  
took Root, and grew'so much, that in eight Years time it  
weighed an hundred and sixty Pounds, the Earth it stood in,  
haying, duringall this Tithe, Jost only a sew Ounces ; so that  
the -whole Increase of the Tree must have heen owing to Rain-  
' water, and a Very sinall Proportion of Earth, and the Salts and'  
Sulphur therein must have heen composed of these two Elements  
alone. The Experiments of this kind, made by the illustrious  
M4. *Boyle* on small Sprigs of Mint, Marjoram, Penyroyal,  
Baum, and the like, fet in Phials filled with clear Water, are  
inore to be depended on. They increased in a short, .time to  
double their first Weight, and, being afterwards distilled, they  
' yielded the Very same Principles, as they would have done; had  
they grown in the most proper Soil ; from whence it is plain,  
that Salt and Oil owe their Original to Water and Earth.

Water and Earth, in the strictest Sense, deserve the Name -  
of *Principles -,* but; in the Formation of mixed Bodies, a third  
Principle must necessarily concur with them ; for as they are of  
themselves wholly inactive, something must be supposed to give  
them their Motion and Activity. Without this. Water would  
immediately turn to Ice ; and as there are sew Bodies, out of  
which Fire may not be drawn, it is evident, that there must be  
some active, moveable Principle lh them all, to which the Mo-  
tion os the other Parts is to be ascribed. Therefore, though  
this Principle should not sall under our Senses in the same man-  
ner as the others, that can be no Reason for doubting of its  
Existence, since it must concur in the Composition os all Bodies,  
which, if they were made of Water and Earth alone, would  
remain sor ever without any Virtue or Energy’. This they must  
receive from another Principle, and, according to the different  
Combinations of all the three, Bedies are formed with different  
Properties and Powejs. We acknowledge, therefore, three sim-  
ple Substances in Bodies, which are properly Elements, or Prin-  
ciples : One active, which may be termed *Fire* ; and two pas-  
sive, Water, and Earth. From the most simple Union, or  
Connection of these three. Salt arises, which is to be looked upon  
aS the most simple of all mixed Bedies. The next to that is Sulphur,  
or Oil, made by the Union os the three Principles, and of Salt.

Thus far concerning the Principles of Bedies in general: **We**now proceed to consider each of them in particular. .

**FIRE CONSIDERED As A PRINCIPLE.**

**We** reckon elementary Fine the first Principle of Bedies, as  
being that, from whence all the rest receive their Activity. It  
is a simple and most subtile Body, in a continual swift Motion,  
filling, and easily permeating, the Pores of all other Bodies.  
Its immense Subtilty is evident from this, that it penetrates all  
Bodies whetsoever ; and ita swift Motion, from that Rapidity  
which it is capable of communicating to them. Its Force is in  
proportion to the Quantity of it any-where collected. In the  
Sun, which may be looked upon aS a vast Congeries of this Sub-  
stance, its Motion is most violent. In culinary Fires, **the**Quantity and Motion of it are not so great, but still greater,  
than in spirituous and Volatile Liquors, where it is.hardly to he

perceived, except when they are set on Fired :. Not only all  
Motion, but, also. Heat, proceeds from is, which, aS It exista  
in Bodies, is nothing but the excessive Motion os their Parts,  
It is, also, too subtile and active ever to he collected pure in  
Chymical Analyses ; where-ever it is found, it is always united  
with Water and Earth, inSaltsand Sulphurs ; and is sometimes  
concentred with Bodies in so great Quantities, aS considerably  
to increase their Weight, aS is evident in calcined Antimony,  
in which, there is an Addition made of almost a Fifth Part.'

**WATER CONSIDERED AS A PRINCIPLE.**

Elementary Water is a simple, liquid, insipid, inodorous, pel-  
lucid SubJance. Its Fluidity is owing entirely to the Action of  
Fire, and, when that Action is Very great, its Parts are actually  
divided, and the Whole turned to Vapour; but, when it is  
Very small, they cohere strongly, and turn to Ice. This Ele-  
ment the Chymists call *Phlegm,* and it may he conceived to  
consist os small, smooth Particles, of an oblong or oval Figure,  
and perfectly rigid or inflexible. From the Minuteness of its  
Particles, it easily penetrates the Pores of almost all Bodies.  
An oval Figure seems more agreeable to the Fluidity and Mo-  
tion of Water, than a spherical;: and, likewise, to the Solidity  
we observe in Ice ; the Points of Contact being too sew, in  
spherical Bedies, to form so strong a Cohesion. Were its Parti-  
cles angular and flexible, they would be too weak .to penetrate  
and dissolve Salts, and would, likewise,' he too much resisted ;  
but, as their Surface is smooth, they can easily enter the Pores  
of Salt, and afterwards they easily separate their PartS, that is,  
dissolve them by their Rigidity, and oval Figure. The Want  
of Taste or Smell in Water seems to proceed from the Smooth-  
ness. Obtuseness, and Smalness of its Particles, which cannot  
vellicate the Nerves of the Tongue and Nostrils. The Fluidity  
of Ware? arises from the Sinalness, Smoothness, and Figure of  
Its Particles, and from the easy Motion thereof by the Fire con-  
tamed in their Interstices. Without the Action of Fine sepa-  
rating these Particles, and keeping them in continual Motion,  
their Fluidity would presently he lost, how much soever their  
Structure may dispose them to it, and they would become one  
solid Mass, On the other hand, ifthe Action of Fire upon them  
he very greets they are farther separated from one another, and  
sty off in Vapour or Smoke. In fine. Water is transparent,  
because itSTores are so disposed, as readily to transmit the Rays of  
Light. \*. . .. ..

**EARTH CONSIDERED As A PRINCIPLE.**

Elementary Earth is the fame with the *Terra Damnata,* or Caput  
Mortuum, os the Chymists ; bring a simple, friable, porous Sub-  
stance, with out Smell orTaste, consisting os Particles of no regular  
Figure, and altogether unfit for Motion. The Porosity of Earth  
seems to arise from the irregular Figure of its Particles ; and as  
these Particles often touch one another only by their Angles,  
the whole Mass must necessarily be friable. The Want of Taste  
and Smell seeins to be owing to their Inaptitude sor Motion.

In the Analyses of Bodies, the last Thing is always this Plin-  
ciple os Earth ; and, in their Composition, it seems to serve as  
a Basis or Foundation for the other Parts of the Mixture ; and to  
it the Driness, Solidity, and Hardness, os Bodies are, in a great  
measure, to be ascribed.

**SALT CONSIDERED.**

Salt, as has been said, is a mixed Body ; but I chuse to in-  
troduce it immediately’ after the Principles, because, in all the  
common Analyses of Bodies, it is obtained entire, and a great  
deal of Pains and Accuracy is required to decompose it, or re-  
duce it to its Principles. It is, also, the sole Origin, of the ;  
Taste, Smell, and many other Properties inf Bedies. It may  
be defined to be a mixed Body, formed by the Concretion of '  
Fire, Water, and Earth, into a solid rigid Substance, soluble in  
Water, and fusible by Fire. AS its Particles may be conceived  
to cohere by large Surfaces only. Salt cannot he friable like  
Earth, but requires a considerable Force to separate its PartS,  
winch fly off from One another, like those Of Glass, with a  
sensible Noise. It becomes the Cause Of Taste and Smell, be-  
cause its Particles terminate in strong Points, which Vellicate  
the nervous Membranes os the Tongue and Nose-

Salt is os three kinds, acid, acrid, or alcaline, and a third.  
Compounded Of the Other two, called, in *Latin, Salsalsus.*

... Acid Salt is a Congeries of inflexible solid Parts, of an oblong  
Figure, and pointed at both Ends. .That its Particles are rigid  
and hard, appears from the Force, with which it divides and  
distolves solid Bodies; and its Sharpness and Pungency are evident  
from the Effect it has on the Tongue, different from the Corro-  
sion of acrid Salts. Acid Salt is easily dissolved by Water, and  
after this Solution its Particles are equally dispersed thro’ that  
Fluid, and have the same Motion with ir. Hence it appears,  
that the Particles of both Substances have nearly the same spe-  
cific Gravity, and likewise that the Motion of the aqueous  
Parts is great enough to overcome the Cohesion of the Parts Of  
Salt.

; Concerning the Manner, in which the Particles of acid Salt  
are compounded Of Fine, Water, and Earth; nothing can with  
Certainty be determined. It may be Conjectured however, that so-  
veral Particles of Water, heing collected into One little Mass, are  
Cemented together by some Particles of Fire and Earth, lodged  
in the interstices left between them, and that all these, taken toge-  
ther, are disposed in an OVal Form, or that Of two Cones joined  
by their Basis. This Configuration, however, is not the same  
in all arid Salts, but the Differences may all be reduced to three;  
the nitrous acid, the muriatic, and the Vitriolic.

The Word *Alcali* is derived from *Cali,* the *Arabic* Name Of  
a Plant, from the Ashes Of which a Salt is Obtained, proper for  
making Glass: And thence it came to be used for all Salts, got  
from the Ashes os Plants, and afterwards for all Salts, and . Other  
Substances whatever, that fermept with Acids,

Acrid or alcaline Salt seems to be a Congeries Of spherical  
Panicles, with rough prickly Surfaces, because Of their great  
Disposition to Motion, and their corrosive burning Taste, the  
Points os their Surfaces acting On the nervous Papilla Of the  
Tongue, like so many Files, whereas acid Salt is Only pungent.  
But then, by these Points, a larger Surface is exposed to the  
Action of Fire, than could Otherwise be , and thus the Particles  
of alcaline Salt are Very Volatile, or easily raffed by a geode  
Heat.. The Origin Of their Salt is probably from a certain  
Connection of acid Points, and terrestrial Particles, because, in  
many Operations Of Chymistry, such Salts arise from the Mix-  
ture Of acid Salts, and Earth, as we see particularly in the Pre-  
paration Of fixed Nitre,. and Fomentation Of Urine. Nitre,  
heing distilled, leaves a Compound fixed Salt behind, of the  
fame Naurre with Sea-salt, out of which, by a nicer Distillation,  
an acid Liquor may be extracted, without any Volatile Salt, Or  
at least, but a Very small. Quantity, but *if* the fame fixed Salt,  
be previousiy fermented, and then distilled, it yields a large  
Quantity Of Volatile Salt, and Very little fixed Salt, Or Acid,  
because by Fermentation Or Calcination the acid and terrestrial  
Particles are intimately mixed, the acid Spicula entering the  
Pores Of the Earth, and so forming new Molecules, which are  
dense and close towards the Centre, and prickly On the Surface,  
by the acid Points sticking Ont. Such are the Particles Of Vola-  
- tile Alcalis, Of which if a great Number be Joined together,  
they must cohere very strongly, by means Of their Points, and  
form Molecules Of irregular Figures, in the Pores of which  
watry, earthy, sulphureous. Or acid Particles may he received'  
and absorbed. Hence jt is that acid Salts are seldom pure;  
and aS they are Very Often filled with Particles-Of Earth; they  
resist the most violent Degree Of Fire, and will sooner melt  
than be raised by it. This is the true Nature Of fixed alcaline  
.Salt, such aS Salt Of Tartar, Or the Salts got froth the Allies Of  
Plants Called Lixivial Salts. If they he impregnated with sul-  
phureous Particles,. they continue Very Volatile, and are raised-  
by a small Degree Of Fire, as we see in Salt Of Urine, Hans-  
horn, and others got from Animals. Acrid Salts easily melt,  
when exposed to a moist Air, because the Panicles Of Water  
Contained in it readfly enter their Pores When thus melted,  
' they become properly LtxiVia, and are commonly termed Oils,  
as Oil Of Tartar per Deliquium. Volatile alcaline’Salts, diluted  
with Water, are called Volatile urinous Spirits, such aS the Vola-  
tile Spirit of Urine, Of Hartshorn, Blood, and Others.

. The *Sal Salsus,* Or third Kind, is Compounded of acid and  
. alcaline Molecules united together; and the Figure os its Par-  
ticles is principally produced by the Kindsos Acid that enters  
its. Composition. The Impression these Particles make on the  
Tongue, is more dull and languid, than that made by acid Or  
acrid Parts alone because the Molecules formed by the Union  
of these are larger in Bulk, and consequently less disposed sor  
Motion, and therefore, though there is a greater Quantity Of  
Aculei, Or Points, in One of these Molecules than in the for-  
rner, yet their Bulk makes them less Capable of entering the  
Pores Of the Skin, and vellicating the nervous Papillae, than  
when they are in a disjoined State: The Taste Of these Salts  
is termed saline, and varies according to the Thickness of the  
Spicula, their Number, and the Other Parts that may be mixed  
with them. That this is the true Original of this kind OfSalts, is  
evident, both from the artificial Composition thereof, from  
acid and acrid Particles blended together,' and from the Reso-  
lution of them into the same. Thus, by pouring Spirit of Nitre,  
of Sea-salt, or of Vitriol, on Salt of Tartar, new Salts are pro-  
duced exactly of the same Appearance with Nitre, Sea-salt, Or  
Vitriol, and, by analysing these three Salts, the essential Salts Of  
Plants, Sal Ammoniac, and Others, an acid and alcaline Salt  
may be Obtained, in some fixed, in others volatile.

**OrL, OR SULPHUR, CONSIDERED.:**

What the Chymista call op. c,,. Sulphur, is not a simple Suh-  
stances hut a Body compounded of Fire, Water, Earth, and  
Salt , but we chute to introduce it here, as it is most commonly  
separated entire in the Operations of Chymistry, and is not re-  
solved without Difficulty inm component Principles. It  
ssss be denned to he a fluid. Viscid, inflammable, transparent  
Body, without Taste or Smell, (though, by mixing is differently

with Salts, these sensible Qualities are produced) Compounded  
Of Fire, Water, Earth, and Salt, and it may he conceived to  
consist Of many Hakes, or Flocculi, each of winch is again  
made up Os very small flexible Filaments, formed of the sour  
Principles before-mentioned, by Fermenrarinn, aS well ut rhe  
Boweis of the Earth, as in the Bodies of Vegetables and Ani-  
mals : Thus an aromatic Plant, growing in Water, will, by Distil-,  
lation, yield an Oil, which Could never have been obtained  
from the Water, in which it stood; and all Oiis may by Art he  
’efolVed into Water, Earth, and Salt. From these Filaments  
variousty Concreted arise the Flakes already mentioned, which  
are of different Thicknesses, and in the Pores thereof is lodged  
the Element Os Fine, which, also, runs in Rivulets through their  
Interstices. Upon these depend the specific Levity, inflamma-  
bility, and Fluidity Of Oil; but, as, notwithstanding the intestine  
Motion caused by the Element Of Fire, the small Flakes still  
adhere, in some measure, together, this Fluid must be more  
viscid than any Other.

- From what has been said concerning the Nature of alcaline  
Salts, and the Figure and Structure Of the oily Flocculi, it is  
easy to conceive, why all AlcalieS dissolve Sulphurs, for since  
the alcaline Particles are spherical and prickly, they Cannot en-  
ter the Interstices Of the Flakes, without Carrying away some of  
them from the rest; and thus, by degrees, throughly dissolving  
them. But the dense, rigid, and pointed Molecules Os Acids,  
heing forced into these interstices, increase the Density, and  
strengthen the Texture, of the Flocculi ὁ and from the DiVer-  
fity Of these, and of the acid Spicula mixed with them, arise  
the different kinds Of Sulphurs. Sulphurs formed in the Earth  
Of Fire, acid Salt, Water, and a Very fine Earth, are termed Bi- -  
tumens. Thus Bitumens dissolved in a large Quantity of Water  
form the mineral Oiis, or Petrolea. But is they are mixed with  
Earth and Salt, the solid Bitumens are produced, differing from  
One another in Degrees of Purity, according to the Quantity or  
Grofihess of the Earth, Or different Degrees Of Mixture. Thus  
fossil Coals, Jet, Amber, and the common Bitumens, and bitn-  
minons Earths, are produced. If there be hut a small Quantity  
Of Earth, and much acid Salt, the common mineral Sulphur,  
Or Brimstone, is formed. If the mineral original Bitumen is  
Joined to a fusible Earth, Capable of Vitrification, it comma-  
nicates to it a metallic Form; that is, the Sound, Brightness,  
Softness, Ductility, Malleability, and all the other sensible Qua-  
lities of Metals. . .

This Origin Of mineral Bitumens may be Confirmed by many  
Experiments: If a Mixture of equal Parts Of Oil of Vitriol, -  
and Oil of Turpentine, he digested together, fora Considerable  
time, in a very gende Heat, and afterwards distilled in a Retort,  
there will Come Over first a yellowish Liquor, resembling Pe-  
troleum, both in Smell and Consistence. What remains in the  
Retort, is, at first, **a** soft Bitumen, and afterwards turns into an  
hard black Mass, easily inflammable, and, when burnt, smelling  
exactly like a fossil Coal. But if the Distillation be continued,  
**a** white acid Liquor will next he obtained, which, by standing,  
lets fall a grey Powder, which is true Common Brimstone, a  
yellow Substance Of the like Nature adhering likewise to the  
Neck Of the Retort what is left behind beino a black, shining,  
light Substance, disposed in thin disgregared Strata, like Talc,  
in which, by the Help Of the Loadstone, Iron may be disco-  
vered. Thus, therefore, all these Bitumens may be artificially  
produced, and the Analysis of the natural Ones further con-  
firm. the Manner of their Formation. Thus the Chymista  
have shewn, that Metals are nothing but bituminous Sub-  
stances, which have undergone a long Digestion; for, by de-  
priving them of their Sulphur, they are reduced to Ashes, and  
then to Glass. This is easily seen hr the imperfect Metals; for -  
if any Of them be exposed to a long Heat, and especially to '  
**the** Rays Os the Sun, collected by a large Burning-glass, the  
sulphureous Principle sties off, and only a Calx, or Ashes, will  
he left behind, which, in a more vehement Degree os Fire, are  
presently vitrified ; and, by restoring the Sulphur, this Glass may  
be again reduced to Metal.

The inflammable Substances in Animals and Vegetables con-  
sist Of a different Combination *of* the Principle OfSulphur, and  
acid Salt, for the Oil, or Sulphur, in these, is formed by a small  
' Portion Of Earth joined to the elementary Fine, acid Salt, and Wa-  
ter : This Oil, when joined tO an acrid Salt, produces Gums ;  
when joined to a fine Acid, and a new Accession of fiery Par-  
tides, it produces essential Oiis, and inflammable Spirits; but if  
the Acids are more gross, by reason os a larger Quantity of  
Earth joined to them, it forms Resins, aS we learn from the  
artificial Composition of all thefe Substances. By mixing Spirit  
Of Wine with volatile Spirit Of Urine, we Obtain a mucilagi-  
nous Concretion, Or thin Gum. Oil Of Olives, and Salt of  
Tartar, melted together, makes a kind of Soap, Or thick Gum;  
and if Spirit of Wine be digested for a long time with Oil of  
Vitriol, and then distilled, an inflammable Oil is obtained, re-  
sembling in Smell, and Other Qualities, the essential Oils of  
Plants, a true Resin being left behind in the Retort.

In Animals this same oleaginous Principle forms the Fat,  
and other glutinous or gelatinous Substances, these last being

COmpofed os an acrid volatile Salt and Oil, as appears from their  
"stEkam,. c het t5 made Of the same On, and acid Salt, for if  
α j\* oVCSj Spirit Of Nitre, be mixed together, and di-  
gested, a Substance wdi h- formed in every' thing resembling  
the Fat Of Animals. .

Sulphureous Substances found in Bodies are either fixed,or  
ynistile. The fixed Sulphurs are either solid, such as Fat,  
Renn, and the Bitumens; or fluid, as Oils. Volatile Sulphurs  
are such as fly- off with a small Degree of. Fire, and have an  
Appearance compounded of tbar op 0st and Water. Such are  
Inflammable Spirits Obtained from the Flowers and Fruits of Plants.

**THE MIXTURE OF ELEMENTS.**

- All Bodies consist Of the five Principles above-mentioned;  
and the Diversity os Bodies ariscs entirely from the different  
.Combination of them. These Combinations, or Mixtures, of  
the five Principles are produced by Motion, and that Motion  
entirely by-he Element. Of Fire. This Motion-is sometimes  
stow and insensible, aS in the Growth and-Maturation of Fruits,  
more lively and quick, aS in the Fermentation of Must; or Very  
vehement, as in the Deflagration of Bodies. All these Motions go  
by the general Name os Fermentation, and if they tend to the  
Destruction or Dissolution os Bodies, they arc termed.Corruption.

The. most simple. Or least. Compounded, Mixture os Princi-  
pies is seen in the Fermentation Os Salts, which Consist principally  
os Water, and Earth, next os Sulphur, made .up of Water,  
Earth, and Salt, then Os the acrid Salts, both fix’d andvoinrile,  
with the essential Salts OTPlants, and sulphureous Bodies, whe-  
ther. solid Or liquid. The Manner how these Mixtures are  
brought about, and the Changes arising from thence, will best  
he understood by Examples. : '

The Ftint of the Vine, just beginning to put On the Fotin Of  
Grapes, is insipid. Or, at least, tastes only like Grass. As it  
grows, a certain Acidity is discovered in it, which at first pro-  
duces an austere Taste; then an acerb one, in which State the  
Juice is termed Omphacium, which, in Distillation, yields a  
great Quantity of Water, some acid Liquor, and a small POr-  
tion Os Oil, a large Proportion of Earth being left hehind. ln  
this Juice, therefore, .the austere and acerb Tastes are owing to.  
the acid Spicula, just breaking out through the earthy Parts, shut  
not wholly disengaged from them. When the Grapes Come to  
he ftxily ripe, the austere Taste is Changed to a sweet one, be-  
. Cause the Juice, being more thoroughly, penetrated by the Ele-  
ment os Fire, is rarefied, and put in a more Violent Motion,  
by which lthe Salts throw Off their earthy Involucra entirely,  
and by a new Combination of these Salts, Water, and Earth,  
are formed Sulphurs, or Oiis. But if any Of the acid Salts re-  
main after the Composition of the Sulphurs, they Continue still  
entangled by the Filaments thereof; and their sharp Points, velli-  
eating the nervous Papillae Of the Tongue, create that agreeable  
Taste, which is perceived in Must. This Must in Distillation  
affords a great Quantity Of Phlegm, next a pretty large Por-  
tion of an acid Water, some acrid or Volatile urinous Salt,  
and a Quantity Of thick Oil,- much beyond what was gained  
by the former Distillation. Lastly, from the Mass tint remains  
in the Retort, an acrid fixed Salt may he Obtained by the  
Common Method- However, eVen in this Juice of ripe Grapes,  
Or Must, the Salts and Oils are not carried to the greatest De-  
gree of Fineness, and Part Os them remain still involved in  
the earthy Irrvolucra. But if a large Quantity of it be set  
to ferment, the igneous Particles begin to act again, and by  
them this intestine Commotion is Continued, till all the gross  
Parts are either attenuated, or thrown Out from the Liquor, and  
fee Salts and Sulphurs perfectly set free from the earthy Parts,  
and intimately mined with One another. The Liquor in this  
State is Wine, and the gross Parts, that fall to the Bottom Of  
the Vessel,- are termed Lees. The Briskness and penetrating  
Quality Os the Wine seems to be Owing tO the large Propor-  
tion of the Element of Fine, which harbours among the Fila-  
ments of the sulphureous Flocculi, and this Liquor heing distilled,  
we obtain, first, a great Quantity Of inflammable Spirit, then a  
copious Phlegm, next an acid Liquor with some Portion Of an  
oily Spirit, a thick Oil, and, lastly, a small Quantity of Caput  
Mortuum, which will yield a little fixed Salt. In this Distilla-  
tion a-far less Quantity of acid Liquor is Obtained, than from  
- Must, which, on theSmer hand,' yields no inflammable Spirit.

If the Lees Of Wine be well dried, and then distilled, they  
yield a Very large Quantity Os .volatile urinous Salt, the acid  
Salts, combined with the sulphureous and earthy Particles, being,  
by Fermentation and Heat, converted into alcaline Salts.

In the fame manner, if green Peas Or Beans be distilled, they  
yield a great deal Of acid Liquor and Phlegm, with a small Pro-  
. portion of Oil. If they are "fust fermented with Common Wa-  
ter, an inflammable Spirit is got from them in the same manner  
aS from Wine; and if they are kept for some Months in a dry  
Place, they yield a volatile alcaline Spirit, without any acid  
Liquor, Or, at least, but very little. Whence it. is evident, that  
acid Salt, by its Union with Other Principles, is changed into'  
Sulphur; and, by its Union with earthy and sulphureous Parti-

Oles, becomes an alcaline Volatile Salt, as, by being drived, inter  
earthy Particles, alone, by the Force of Fire in Calcination it  
is Changed into a fixed Aldali. ; -

It may he proper, upon this Occasion, to Observe, that the  
Salts of all Plants are not entirely alike, but differ from one  
another, not only aS the Quantity of Sulphur, Water, Or. earth,  
which is joined to the Acid, is greater or less, but, also, ac-  
cording to the Original Nature of the Acid which enters their  
Compositions Acid Salts, as we have already said, are Of three  
Kinds, muriatic, nitrons, and Vitriolic. Muriatic Salts, such aS  
Sea-salts, and Sal Gemmae, being crystallised, put on a cubic  
Figure, the. Particles thereof appearing to be formed Of two  
quadrilateral Pyramids, joined together by their Bases. Nitrons .  
Crystals represent Prisms with six Sides, formed by the Jnxta-  
positions Os two triangular Pyramids; and Crystals Of Vitriol  
seem to consist of two hexagonal Pyramids, aS far as can be  
judged by the Particles thereof, when carefully separated from  
all Metals. These original Salts, combined with others, form  
compound Salts, of almost all Kinds. Thus, in the Vegetable  
Kingdom, the disserent Sorts of Vinegars are nothing but some  
Original acitl Salt dissolved in Phlegm. The essential Salts of  
Plants obtained -without Fire consist Os some Acid joined with  
Particles os Earth, Or os the other Principles. Sal Ammoniac  
arises from the Union of acid and volatile alcaline Salts. Fixed .  
AlcalieS are Only the acid Spicula struck into earthy Molecules ,  
and Volatile AlcalieS Consist os the same Acid, joined to Very  
fine Particles of Earth and Sulphur, so aS Io form prickly  
Globules. Moreover, the same Varieties Of acid Salts are to  
be met with in Vegetables, that are found in Minerals. Thus  
the essential Salts of Pellitory Of the Wall, Borage, wild Cu-  
Cumber, and the like, are nitrous, and, when thrown upon burn-  
ing Charcoal, they fulminate like Nitre. The fixed Salts Os  
Carduus Benedictus, Glasswort,- and Spurge, are like Sea-salt,  
their Particleshaving the same cubic Figure , and, when thrown  
upon bussing Charcoal, they decrepitate. The Crystals Of  
Tartar are like those of Vitriol; and that they are formed by a  
Vitriolic Acid, appears from the sulphureous Smell Os Tartar,  
when artfully calcined. Besides the saline Compounds already  
mentioned, other Mixtures are formed in Plants, such as Gums,  
Resins, Honeys, and the like. Gums are something between  
Acid and Oil, being an acid Salt, so fixed in the Earth, as that  
the greatest Part Of It is changed to an Alcali, the other into  
Oil, so that the Mixture arising from thence is an oily Salt,  
resembling the saponaceous Concretes os the ChymistS, made  
os Oil of Olives, and a Lixivium of Tartar, or the mucilagi-  
.nous Bodies formed of Spirit os Wine, and the Volatile Spirit  
Of Urine. And thus we see, that all Seeds which are oily when  
ripe, are in the Beginning only a Mucilage, Or imperfect Oil.  
Resins consist os Oil and Acid, and accordingly are artificially ’  
produced by mixing Spirit of Vitriol with Spirit of Wine, Or  
of Turpentine. They are either solid. Or liquid. hut these differ'  
from' One another only in the Proportion of Earth, that enters  
their Composition.. Melleons Juices, which eitherwxude spon-  
taneoufly from Plants, such aS Manna, or are obtained by Art,  
aS Sugar, are essential Salts, consisting Of a Mixture of Acid and  
Alcali, with a large Proportion of Oil.

The Mineral Kingdom furnishes uS with a great Variety of  
Instances, of the way how the Principles Of Bodies may be  
combined together. The Lime-stone and Parget are so framed,  
that, by being calcined, a Vast Number of Celis are Opened by  
the Fire, into which Water easily enters, with an Hissing Or  
Collision of the included igneous Particles. If the Water re-  
main long in these little Receptacles, nitrous Parts are formed,  
aS we see in old Walls, built with these Materials, from which  
Nitre may always the Obtained. The greatest Part of this. Nitre,  
by Distillation, is changed into an acid Spirit; but, by Calcina-  
tion, turns to an alcaline Salt. And it may he, that the Nitre of  
the Antients,or that alcaline mineral Salt,which was dug out Of the  
Earth in *Egypt,* and Other Countries, and is obtainable by Art  
from mineral Waters, was nothing but Nitre calcined by the-  
Heat Of the -Earth, and so converted into a fixed alcaline Salt.  
The viniolic Acid, joined with different metallic Substances,  
produces all the Kinds Of Vitriol, with an astringent Earth, it  
forms Alums; and with the Principle Of Fire, Common Brim-  
stone, which, by Deflagration, may be again converted into  
Oil or Vitriol, the Other Principles flying off. Brimstone may,  
likewise, be artificially produced by uniting the Principle of Fire  
to any Vitriolic Acid.

The like Mixture Of the Principles of Bodies may be oha  
served in the Animal Kingdom. Chyle and Milk contain a  
latent Acid , which easily discovers itself by Putrefaction, but  
this acid Salt, having undergone a due Fermentation, or some  
Other Action analogous to that in the animal Body, is chen:red  
into a Volatile Alcali, obtainable in great Plenty fromrhe Blood,  
Serum, Bile, Urine, and other juices. In an healthful Body,  
however, these Volatile AlcalieS are never perfectly formed, the  
animal Salts being more of the Nature Of Sal Ammoniac, with  
a Mixture Of earthy and oily Parts, to which Mixture the  
glutinous Quality Of the Blond and Serum is owing. By Pune-  
taction- or Calcination, all animal Liouorsare changed, so as to

?ffbrd perfect volatile Alcaldes, as has heen evidently shewn hy  
Exoerimenr. *Geossroy.*

PRION, πρίων. A Saw, or *Torebra.*

PRISIS, πρίσις, from πρίω, to saw. A Saw, or *Torebra* of  
the Trepan. A Sawing. Or a Grinding of the Teeth.

PRISMATA, πρίσματα, from πριω, to saw. Saw-dust, or  
Raspings.

PROBARBIUM. The first Appearance of the Beard on  
the superior Lip.

PROBLEMA, πρόβλημα, from προβάλλω, signifying, among  
other Actions, to object, or lay some Hindrance in the Way,  
is any kind of Obstacle laid to obstruct an Entrance into any  
Place, or guard the Avenues leading to it. In thi ... \_\*e the  
Term προβλημα is used by *Hippocrates,, Lib. xcci estesceun. dur.*and Lib. 2. περὶ γυναικ. to signify the Membrane which, grow-  
ing to the Neck and Orifice of the Uterus, obstructs the Pas-  
sage of the Semen, and fo prevents Conception. This Mem-  
brane, he says, will offer itself to the Touch os the introduced  
Finger.

PROBOLE, προβολὰ, from πραβάίλ», to project, is a Pro-  
jecture, or Prominence,- of any kind. Thus, *Libs de Artic.  
Hippocrates* observes, that, in other Cottie hesides Oxen,  
προβολῆ σίν χείλεος λεπτὴ, " The Prominence of the Lip is but  
thin," and the upper Jaw is but thin, and therefore they can  
seed upon short Grass; but in Oxen it is quite otherwise. And,  
*Lib. de Fulnerihus Cap. cr&Ihlumb* τῆς κεφαλῆς ἐκ σου ἔμπρασθιν,  
" The Prominence of the Head towards the anterior Parts,"  
is explain'd by the Author to he when the round Eminence  
[ἐξέχονστρίίγήλβιΐ of the Bone Juts out heyond the rest.

PROBOSCIS. The Trunk of an Elephant, and of some  
. Insects.

PROCARDION, πρανιάρδιον. The Pit of the Stomach.

PROCATARCTICA CAUSA. The antecedent, pre-  
.’ existent, or predisposing Cause of a Disease. See **CAUSA.**

PROCESSUS, in Anatomy, is a Process, Protuberance, or  
Eminence os a Bone. In Chymistry, a Process is properly a Se-  
ties of Operations, tending to the Production of something new.  
‘ PROCHEILA, προχειλα. The Extremities os theLips.

PROCIIYMA, πρόχυμα. Must which flows from the  
Grapes spontaneoufly, before they are pressed.

PROCIDENTIA. The falling of any Part out of its pro-  
per Place. It is the same as **PROLAPSUS. ,**

PROCLESIS, πρόκλησις, from προκαλέω, to provoke, call  
forth, signifies, in *Hippocrates,* a provoking or inviting the  
Senses to the extemal Parts, in order for their Gratification.  
Thus we read. *Lib. de Liquid. Us.u, dfid riflo καὶ dose* sa θίρμοῦ  
ήδοναἰ καὶ πρακλήσιες, ἀπὸ δέ του ψυχρῆ ἀλγηδονες καὶ άποτρέψιες\*  
" For this Reason, hot Water gives Pleasures and Allurements  
" to the Senses; but cold Water, on the contrary, creates  
" Uneasiness and Aversions.” Here ἀπότρίψεις, which im-  
port a Retreat, Shrinking hack, and Retirement, as it were, of  
the Senses inwards, is set in Opposition ΐοπροκλώσιες in the Sense  
hefore given. The Word occurs, also. *Lib. orati* εήσχημ. in the  
following Passage; νομίζ« γή fine βίου *lorus* ἐς πρόκλησιν θεραπηιης.  
" For he thinks this necessary towards the inviting or pro-  
" curing Health.” But it is here to he observed, that the  
printed Copies read προσκλησιν, which cannot much alter the  
Sense.

PROCONDYLOS. The first Joint of every Finger.

PROCONIA ALPHITA, προκώνια ἄλφίίαῖ *Lip.* 2. περὶ  
γυναικ. aS explained in *Galen's Exegesis,* signifies Meal of Barley  
prepared while the Grain is new and tender; and the Reason  
why it was so called, was, hecause it was prepared πμά τῆς τή  
κώνου στάσεως, " Before the Erection of the Cone,\*' or before  
the Barley was erected into Piles of a conic Figure. For κῶνος,  
- according to *Galen,* is a wooden Structure erected in Areas,  
and especially in humid Places, about which the Corn and Fruits  
were piled up in a tapering Figure, or in the Form of a Cone.  
Some, however, aS *Galen* says, in *Exeges.* by προκώνια ἄλφίτα  
understand τὰ τῶν άφρύκτων *flova,* " Nothing but Meal made of  
" Barley not torrefied-''

PROCTOS, πρωκτός. The Anus.

' PRODROMUS, πμάδρομος, from πρὸ, before, and τρέχω,  
to run. It imports the same as PRocH YMA. Certain Winds  
which blow hefore the Dog-days, are called *Prodromi.* See  
ETESIA. *Prodromus* is, also, any Circumstance which pre-  
Cedes a Distemper, and indicates its Approach.

PROTGUMeNE. See **CAUSA.**

PROFLUVIUM. A Flux of any kind.

PROFUNDUS MUSCULUS. A Name of the Muscle  
\* otherwise called **PERFORANS MANUS.**

PROGERMINUS ABSCESSUS. An Abscess arifing from  
a viscid, and almost corrupted Phlegm. *Castellus* from *Metres  
Aurel. Severinus.*

PROGLOSSIS, πρβγλωατις. The Tip of the Tongue.

PROGNOSIS, προγνωσις, from πρὸ, before, and γινώσκω,  
to know. The Prognostic of a Distemper, see FIBRA.

PROHIBENS. The same as CONTRAINDICANs. See .  
**ANTENDEIxIS.**

. PROJECTIO. Projection. A chymical Term, import-  
ing the casting of any Substance, to he calcined, into a Crucible,  
by a Spoonful, or a small Quantity, at a time. Projection is,  
also, an Addition of a small Quantity of something to a greater  
Quantity of a Metal, in order to meliorate the MetaL *IVil-  
forft Chemistry.*

PROJECTURA. Ah *Apophysis. Blancard.*

PROLABIA. The same as **PROCHEILA.**

PROLAPSUS ANL See ANUS.

PROLAPSUS UTERI. See **UTERUs.**

PROLECTATIO, is defined, an Extraction, by the Exte-  
nuation of the most subtile Parts, in such a manner, that these,  
heing rarefied, separate spontaneoufly from the more gross Parts.  
*Rulandus.*

PROLEPTICOS, προλεπτικός. Anticipating; an Epithet  
os tile FeVer, the Paroxysms *Os* which return sooner than they  
ought to do regularly.

PROMALACTeRION, προμαλακτήριον. The first Apart-  
ment in the antient Baths, where the Body was softened, before  
going into the Batin . .

PROMANU6. The Thumb

. PROMETOPIS, προμετωπίς. The Skin of the Fore-  
head.

PRONATORES; The Name of two Muscles of the fore  
Arm. One is the

**PRONATOR TERNS, SIVE OnLIQUUS;**

This is a small Muscle, broader than it is thick; situated on  
the upper Part of the Uina, opposite to the Supinator Brevis,  
with which it forms an Angle like the Letter *V. .*

It is fixed to the internal Condyle of the OS Humeri, partly  
by fleshy Fibres, and partly by a Tendon common to it with  
the Ulnaris internus; thence it passes obliquely before the Ex-  
tremity of the Tendon of the BrachheuS, and reaches to the  
middle Part of the convex Side of the Radius; where it becomes  
flat, and is inserted below the Supinator Brevis by an Extremity  
almost wholly fleshy.' . ‘

It is called the Teres, to distinguish it from the Quadratus.  
The Name os Pronator Superior would he more proper, het  
that of Pronator Obliquus is the most proper os all.

This Muscle can have no other Action but that of Pronation,  
in the different Situations os the Radius, whether that Bone he  
in a middle State between Pronation and Supination, or in the  
greatest Degree of Supination: And, in this Case, though it is  
but a small weak Muscle, it overcomes the Supinator Longus.

**PRONATOR QUADRATUS SIVE TRANSVERSUS.**

This is a small, fleshy Muscle, nearly as broad aS it is long,.  
lying transVerfly on the Inside of the lower Extremity of the  
sore Arm.

It is fixed by one Side, or Edge, in the long Eminence, at the  
lower Part of the internal Angle of the Ulna; and,by the  
other, in the broad, concave'Side of the lower Extremity os the  
Radius.

It is wholly fleshy, without any Mixture of tendinous Fibres.  
It is situated transVerfly, but that Extremity Which lies on the  
Radius, is nearer the Carpus, than that on the Ulna. It is of a  
moderate Thickness, and the Fibres nearest the Surface are the  
longest, the rest decreafing in proportion as they lie near the  
Interval hetween the two Bones, and the interosseous Ligament.

It has a ligamentary, or tendinous Fraenum, belonging to it,  
one End of which is fixed in the interosseous Ligament, the  
Other in the inner Edge of the Basis of the Radius.

The Pronator Quadratus is capable of no other Motion but  
Pronation, and it acts with much more Force than its Con-  
gener, the Pronator Teres ; both hecause of the Number and  
Direction os its Fibres; and because it acts upon the Radius  
near the lower Extremity, where its Effects, in Pronation, are,  
much greater, than if it acted near the Head of that Bone.  
The Fibres he almost in the same Direction in which the Bone  
moves; and in this it has the Advantage, not only over the  
other Pronator, but over all the Supinators, the Biceps itself  
not excepted.

The Fibres, of which this Muscle is composed, are so disposed,  
'as that the longest adhere to the internal Angles of both Bones  
of the fore Arm; the shortest He nearest the interosseous Liga-  
ment ; and the intermediate fibres are longer or shorter, ac-  
cording to their greater or less Distance from the Ligament.

By thefe different Degrees of Length, the whole Number of  
Fibres Jis advantageoufly disposed, and their Action rendered  
uniform. In the greatest Degree of Supination, the Extremity  
of these Fibres, inserted in the two Bones, make a very oblique  
Plane, which becomes almost strain, in the greatest Degree of  
Pronation. *LVinsiousts Anatomy.*

PRONERVATIO. A Tendon, or tendinous Expansion.  
*Castellus.*

PRONOMJEA, -προνβμαία. The same as PROBOSCIS.  
' PROPHASIS, πρόφασις. The Cause, or Occasion, of a  
Disorder. ' \* . .  
' PROPHYLACE, προφυλαπέοὐρ PROPHYLAXIS, Ηροφύ-  
λαξις; and PROPHYLACTICE, «-ροφυλακτικἤ, yfroin ητρο,  
hefore, and φυλάανω, to preserve. The Method of preserving  
. Health, and averting Diseases. See INDICATIO.

PROPOLIS. Bee-bread. This is a rude, wax-like, and  
thick Matter, or Glew, found in **the** Entrance of Bee-hives.  
It is gently heating, abstergent, and attracting: It softens in-  
durated Parts, alleviates Pains, and induces Cicatrices on Ulcers.  
*Schrod.* See AMBRA. .

PROPOMA, πρόπομα, or προποτισμός. A Potion pre-  
pared *of one* Sextary of despuma ted Honey, and four of Wine,  
boiled together. *Paulus Asgineta, Lib. J. Cap.* I5.

PROPTOSIS, ττρὸπτωσις. The same **as PROLAPSUS; a**falling out of the natural Situation ; from προπίπτω, to fall  
**out. ' '**

PRORA. The Occiput. *Os Prora* is the *Os Occipitis.  
Sutura Prora* is the Lambdoidal Suture.

PRORRBeSIS, *'agulsm.ti,* from net, hefore, and ῥέω, to  
tell. A Prediction, or Prognostic.

PROSARMA, π-ρ/σαρμα, from προσαίρω, to offer. Aliment;  
' PROSARTHROSIs, προσάρδρωοςς. The same as ADAR-  
**TICULATIo.**

PROSCARABrEUS. Offic. Monff. Insect. 162. Joss,  
'de Insect. 74. Mer. Pin. 20I. *Scarabous unctuosus.* Schroff  
5. 345. *Pinguiculum.* Agricol. *Melon.* Paracels. THE  
OIL-BEETLE

It is to be found creeping about every-where by the Sides of  
Paths, and in Woods, in the Months of *May* and *fune ,* and  
the Parts used in Medicine are the Insect itself, and its oily yel-  
lowish Liquor.

The Oil-beetle is much of the Nature of Cantharides, forces  
Urine and Blood, and is of extraordinary Efficacy against the Bite-  
of a mad Dog. Taken in Powder, or preserved, it cures the  
Vari, or wandering Gout, aS we are assured by *iVierus.* The  
.Liquor is, by some, esteemed of Efficacy in Wounds ; it is an  
Ingredient, also, in Plaisters for the Pestilential Bubo and Car-  
thuncle, and in Antidotes ; an Oil is prepared by Infusion of  
the living Animals in common Oil, which some use instead of  
Oil of Scorpions. *Dale* from *Schroder.*

‘ PROSCEPHALjEON, προσκεφάλαιον, from πρὸς, to, and  
κεφαλῆ, the Head. A Pillow, to support the Head, oradifor-  
. dered Limb. .

Y PROSCLYSMA, πρόσκλυσμα. An Aspersion, or Sprinkling,  
Of any Part with a Fluid.

PROSCOLLEMA, προσκόλλΐίμα. An Agglutination...  
PROSCRIPTIO. *-A* Retardation. *Palandus.*

τ PROSeCHES, 'Ζφφύ^χής. The same as SINECHES, or  
**CONTINENS. \* .**

' PROSERPINACA. A Name for *CaecPolygonurn Latifoliumi*' PROSeRPINALIS HERBA. A Name, in Adarra/Zus Ftn-  
*piricus,* 6.10. for the *Dracontium.*

PROSOEMA, Ηρόσοιμα. The same as PROSARMA.

PROSOPITES, προσωπὸτης. The fame as ARCION. The  
Burdock. *Paulus AEgineta, L.y. Co* 3.

\ PROSPHEROMENA, Ηροσφερόμε.’α, (froth προσφέρω, to  
string, or offer; properly, in a medicinal Sense, Food, or Ali-  
ment) are usually spoken of fuch Things as are offered to the  
Sick for their Support and Nourishment; but, however, often  
'signify the external Apparatus necessary to the due Treatment of  
**a** diseased Part; or, in short, wherever a Surgeon ought to be  
'provided with when he undertakes a Cure. *Hippocrates, Lib.  
de Medico. Hfoopisopriya,* in the more usual Sense, as signify-  
ing Fond offered, are also called προσοισμάία *{Prosuis.matasu* and  
προσοιστέα *feProfoisteap*; as in that\_ Passage, *Lib. de Locis he  
Homine,* καὶ ὁποταν κρατέηται τὸ σῶμα ὑπὸ τῶν προσοισμάτων.  
" Whenever the Body is overcome by (is too weak to concoct)  
" the Foods exhibited ;” προσοισμα, a few Lines farther, is  
also spoken in the other Sense Of a hot Bath ; and *Lib. de R. Vi  
'L A.* near the Beginning, παρειστἐα comprehends all manner of  
Assistances offered to the Sick, whether of Food, or Medicine,  
'Again, *Epid.* 3. *Sect.* 3. we read, τεἴσιδι πρβσφερομένοισιδυσκο-  
λως ὑπακοῦοντα. *(i They* [the Bedies of the Patients] were not  
" easy to he affected, or wrought upon, by the Things which  
" were exhibited;" where *Galen,* on the Place, fays, that by  
προσφερόμενα we are to understand all manner of Helps, and  
Assistances, in general; and, particularly. Meats and Drinks.  
In 2 *Aph.* 33. προσφοραῖ are expounded, by *Galen, rav artitas  
eopvscpoeti,* Exhibitions of Food.''

PROSTASIS, πρόστασις, from προάσταμαι, to preside in  
Power or Dignity, is used, by *Hippocrates,* in a particular  
Sense, for that Humour, which prevails and predominates over  
the rest. Thus, we rend, 6 *Epid. Sect.* 5. *Aph.* I 5. γλώωη  
ὁμόχρους τῇσιπροστασεσι, « The Tongue is of che Colour of the  
" prevailing- Humour." *Galen* here consestas it to be an ob-

scure Word, but understands it of the Humour with which **the**Tongue appears, chinfly, impregnated. *Prostasis, Lib. de Locis  
in Humin,* as derived from .προσίστημι, to stand by, to adhere j.  
signifies no more than an Adhesion, or Accreseence, inthat Ex-  
pression, άι τομαἰ πυκναἰ ἐοῦσαι πρόστασιν πωέουσιν τῆ σαρκὸ πρὸς τἅ  
όστέον, " Often-repeated Sections cause Flesh to come, or grow  
" up, about the Bone.''

PROSTATE. The Prostate Glands; from προσίσταμαι,  
**to he** adjacent to. See **GENERATIO. . .......**

PROSTETHIS, προστηθάστ. The anterior Part of the Thua  
*rax,* or'the fleshy Parts in the Concavities of the Hands, and  
Feet, and betwixt the Fingers. - .. ..

PROSTHESIS, πρόοθεσις, from προστίθημι, to add. That  
Part of Surgery which supplies whet is deficient.

PROSTHETA, προσθετὰ,. from προστίθημι,- to apply, sig-  
nify, in *Hippocrates,* fubdititious Medicines, whether Supposi-'  
tones, or Pessaries. *Prostheton,* προσθετὸν, frequently signifies a  
Suppository j and προσθάστ, or προστιθέναι ἐν εἴρίῳ, is often spoken  
of a Pessary, applied in Wool, throughout the whole Treatise  
*de Morb. Mul.* Sometimes, instead of προσθ-τὸν, we read .  
πρόσθεμα, in the same Sense; and onoe. *Lib.* j. περίγυναικ.  
we meet with πὸοσθέσιας, for προσθετὰ ; tho’ προσθέσιες, in other  
Places, signify Exhibitions *of Food; and arpliFtderae* is often used  
with relation to the same. “ ' V

PROSTHeMENE, προσθεμένη, in *Hippocrates,* is a Wo-  
man under the Application of a Pessary. Thus, i *Epid. AEgr.*4. προσθεμένη δέ ταῦτά μὲν εκουφίσθη; " Being treated with R  
" Pessary, these (Symptoms) were alleviated." *Galen,* on this  
Place, says, " The Signification of this Word, 'προσθεμένη,  
" when it is joined with βάλανος *(Balanus),* a Glans, or Sup-  
" pository, is obvious; but when it is used without an Addi-  
" tion, we are either to understand it of Βάλανος, as some will  
" have it; or of a lenitive and antiphlogistic Pestary.'' '

PROSTHION, πρόΔιον. The Penis.

PROSTOMION, -προστόμιον; The Part where the Lips  
meet, when closed.

PROTARCHI MEDICAMENTUM. The Name of **a**Medicine, recommended by *Celsius,* against the *Scabies, L. c.  
Cort. Sect.* I6. r

PROTASIS, προτασις, from πρότεἐνω, to stretch; or put  
forth, or propose, is, properly, a Proposition, or Problem, of-  
fered to be discussed; but προτάσιες πνευμἀτων. *Lib. de R. Vi  
I. A.* " Stretchings’ of the Spirits (Breath)," are expounded,  
thy *Galen,* on the Place, by Obstacles and Interruptions of Re-  
spiration. For τὰ προτεταμένα πνεύματα, " Breath drawn out  
"in Length,'' he fays, are τὰ όιονἐγκοπτομεςα, " such as is;  
" in a manner, interrupted;" and which, in another Place of  
the same Book, is oescribed as πνεῦμα προσπτἀῖον ἐν τῇ ἄνῳφορῆ.

Breath which .strikes, or impinges, in its Passage upwards.”  
' It is to be observed, that all the vulgate Copies of *Hippocrates*read *majoc-datsi (Prostasiesp*; but those of *Galen* have it, προτάΛες,  
*(Protasies)* as above.

PROTEUS. The Name of a *Collyrium,* described by *Palum  
las AEgineta, L.* 7. *C.* **I6. -.-ἐν...**

*Proteus* was represented, by the antient Poets, as a God, the  
Sonos *Oceanus* and *Thetis,* who could transform himself into  
any Shape. Hence *Morton,* in his *Pyretolossia,* casts the irre-  
gular Appearances of intermitting and remitting Fevers, *Prar  
triform.* And certain it is, that, in consequence of the Vio-  
lence of the Symptoms, when almost the whole System is brifldy  
stimulated to a Conflict with the peccant Matter, these Fevers  
often resemble most other Diseases, especially of the acute Kind,  
but yield to the Efficacy os the Bark; tho', at the sama time,  
they often prove fetal, if ’that Medicine is not exhibited s For,  
among the Various Symptoms which generally accompany these  
Fevers, there is not one, which does not, sometimes, rage with  
such Violence, as not only to endanger the Lise of the Patient,  
but,' also, so totally to conceal and oppress the Form of **the**Fever, in its Various Stages, of Chilnefs, Heat, and Sweat,  
' that it can neither be distinguished by the Urine, the Tempe-  
rament, the Pulse, or any other usual Method; but, appearing  
under the Mash, as it were, of a terrible Chiinefs, an incessant  
Vomiting, a Diarrhoea accompanied with Gripes, a Cholera  
Morbus, a Colic of the Stomach, a periodic Hemicrania, an  
Apoplexy, a Syncope,- a Rheumatism, universal- Spasms, **a**Pleurisy, a Peripneumony, a punctory Pain of the Side, or  
fome other Disorder, frequentiy misteads the Physician from  
' the true Intention of Cure. In this Case, an Attempt may,  
indeed, he made, to remove the Symptoms, by proper Medicines,  
but all in Vain; for, as the febrile Ferment is neglected, on the  
‘ Approach of the next Paroxysm, the former, or worse Sym-  
ptoms, unexpectedly recur, the Physician labours in vain,and **the**Patient falls a Victim, or, at least, sustains a considerable Injury,  
by the Ignorance or Carelessness of his Physician.

When, in consequence of the highly deleterious Quality os  
the Poison, the animal Spirits are so weakened, that they can by  
no means expand themselves, after the first Shock, the Shivering,

which, generally precedes the first Approach of these Paroxysms,  
*is so* long protracted, that the Patient, spent with frequentiy  
**recurring** Deliquiums, at last salis a Sacrifice to his Disorder.  
Internal and external Medicines, are, in the mean time,, used  
in vain, to rouse the languid Principle of Life; but the Fever  
cannot, even by the most accurate Observer, he discovered, from  
any Signs, either in the Urine, the Heat, or the Pulse.

In like manner, when, in the fust Stage of the Paroxysm,  
**the** poisonous FomeS only oppresses the Spirits, so that they  
cannot expand themselves heyond their usual Sphere, the Pa-  
tient without any Signs of a present Fever, complains of a  
.Nausea, Sickness, and Vomiting, till the Poison being subdued  
by the *Peruvian* Bark, or some other Antidote, the Spirits **are**restored to their natural State.

Sometimes, about the Beginning of the Paroxysm, the febrile  
Poifon is convey'd to the Glands os the Intestines, and excites  
.a Flux, accompanied with Gripes, or a Dysentery. Put when  
the Spirits are long oppressed in an uniform manner, these Sym-  
iptoms, though continual, are at stated Periods augmented, he-  
Come per in dical, without any manifest Signs of a Fever, and  
cannot he removed by the Efficacy of Opium and Astringents,  
till, by a Mixture of the *Peruvian* Bark with Laudanum, the  
Cause, or febrile Ferment, which contaminates the whole Mass  
of Blood, is removed, together with all the Symptoms arising  
thorn it.

When the Poison partakes of an emetic, and at the same  
**time, a** cathartic Quality, the Patient is seized with frequent  
Vomitings and Purging ; and, unless the Spirits, by their due  
Expansion, throw off the Virulence of the Poison in the first  
Stage of the Paroxysm, a Cholera Morbus is by that means  
formed, whilst **the Fever, in** the mean time, can neither he  
discovered by the Pulse, the Urine, nor the Heat. The  
Stomach,'in the mean time, or the Intestines, or both toge-  
ther, heing sphacelated by the intensely poisonous Acrimony of  
the Humours, the Patient soon dies; or, at least, aster a delusive  
and fallacious Respite, when the next Paroxysm approaches,  
**the** same Violent Symptoms are again produced by **the** Poifon,  
unless such a Misfortune is prevented by a seasonable Exhibition  
of the Bark.

By the like **Degree** of Virulence in this Poison, I **have fre-**quently observed Patients, especially such aS laboured under  
long and confirmed Fevers of this Kind, alter the Form of  
**. the** legitimate Fever was lost, so spent with **a** perpetual Nau-  
sea, Sickness, Vomiting, colliquative Sweats, hysteric Suffoca-  
tions, and other like Symptoms, affecting the nervous System,  
that they seemed just about to die; and these, though incura-  
ble by any other means, I have speedily recovered by a due  
Dose of the Bark. /

Every one conversant in the Practice of Physic knows, that  
violent spasmodic and -lancinating Pains, equal to those excited  
hy Poison, frequently accompany the first Attacks of legitimate  
intermittent Fevers, especially those of the quartan Kind, during  
**the** Shivering and RigOr, till the Spirits, being forcibly expanded  
and agitated, become capable of eliminating the acting Poison.  
The febrile Flame heing by this means roused in the Mass of  
Blood, the painful Spasms gradually cease. But, when the  
.Spirits are not only depressed by the Force of the Poison, but,  
allo, forced into a kind of explosive Stare, I have, in conse-  
quence of this, found the whole Body not only for a long time  
continually cold, and without any Mark os a Fever, but, also,  
.Vellicated and twitched by universal Violent and flitting Spasms.  
Nor is it to he wondered at, if, as it often happens, the Pa-  
tient spent with perpetual Sicknefs, Vomitings, and Deliquiums,  
soon becomes desirous of Death, unless languishing Nature is  
seasonably assisted by Art.

The Spirits, also, in consequence of their natural Weakness,  
.an Obstruction, **and** especially Cold, or any other evident Cause,  
.are frequentiy forced into a kind of explosive State ; by which  
**means,** some particular Parts, especially those os the Thorax,  
such as the Pleura, the Diaphragm, or the Stomach and In-  
**testines, are** vellicated **and afflicted** with spasmodic Pains. The  
**patient, in** consequence of the intense **Pain,** shivers perpetually,  
and is spent with frequent Deliquiums, Suffocations, and **Vo-**minings, without any ardent Mark of a FeVer; he discharges  
clear Urine, and without any Pulse **he is at the** Point of Death,  
till the Spirits, affected by **the** Poison, being expanded either by  
Nature or Art, again rouse the Principle of Life in the Body.  
This Disorder can only he distinguished from a Cholera Mor-  
.bus, a Pleurisy, or a Peripneumony, by the want of a Cough,  
.and the Privation of the Pulso, by the excessive Vomitings and  
Pain, by the Deliquiums, and the Coldnessof the Extremities.

**I** .have, also, frequentiy known Patients complain of **a**punctory Pain in one or other of their Sides: But, in these, **I**.could not for several Days discover any of the Marks oft a  
Fever, except that the Pulse was somewhat too quick. But  
.after by Venesection, and the Use of Laudanum mixed with  
AleXipharmics, these Spasms were mitigated, and by that means  
ehe natural elastic Force Of the Spirits inrrcasod th.- Qinne ιγτ a

febrile Flame in the Mass of Blood soon discovered themselves,  
The Urine was tinged and turbid, the Pulse became equally  
strong and quick, the whole Body was render'd hot, a violent  
Thirst seized the Patients, and Aphthae covered their whole  
Tongues and Mouths. But directing my intentions to the fe-  
brile Flame, and the Exacerbation of the periodically returning  
Pain, by a sufficient Quantity of *Pcruvian* Bark mixed with  
Laudanum, and exhibited in the Intervals between the Pa-  
roxyfms, I subdued the Poison, and totally freed the Patients  
from their FeVer and Pain.

I have often with Surprize observed, that, after the subduing  
of the febrile Poison, in some measure brought about *by* the  
Expansion of the Spirits, when by a strong and quick Pulse,  
'an intensely red and turbid Urine, the Heat of the Body, and  
other Signs, the Fever manifestly discovered itself, the Joints  
were affected with these spasmodic Pains, which returned ar  
stated Periods, like a Rheumatism removed from Place to Place,  
and produced a Tumor and Heat in the Parts affected, hy means  
of the Efforts of the Spirits endeavouring to expand themselves  
in these Parts: But I always heppily removed these Pains by  
due Venesection, and a copious Use of the *Peruvian* Bark, ex-  
hibited hetween the Paroxysms.

Every Physician knows, that, on the first Approach of legiti-  
mate intermittent Fevers, the Brain is affected, not only from  
.the Vertigo, and the Oppression and Disturbance os the Spirits  
by the active Poison, but, also, from the acute and Violent  
Pains arising from the Effort of the Spirits endeavouring to ex-  
hand themselves in the Membranes os the Bram. But some-  
times the Spirits are at this Period os the FeVer so oppressed and  
disturbed, that the Patient, like one under an Apoplexy, lies,  
during the whole Paroxysm, without any Signs of the FeVer ;  
and the same Syrn'pt.oins 'osten return with the succeeding Pa-  
roxysm. But, though we are to endeavour the Mitigation of  
these Symptoms by Venesection, Veficatorses, and the other  
Remedies appropriated to the Cure of Apoplexies, yet their  
Return cannot be prevented without the Use of the Bark.

I have, also, observed a per indie Hemicrania .produced by ae  
Effort of the Spirits to expand themselves in the Membranes *sX*the Brain. But this Symptom I totally removed in two Days  
rime by Venesection, and the Use of the Bark; though, for its  
Removal, I had, for some Weeks hefore, in Vain used Vene-  
section, VesicatorieS. Emetics, Cathartics, Errhines, and Masti-  
eateries. *Morton. Pyretologia.*

The aboye-quoted Author gives a great Number os Cases, in  
Confirmation of this Doctrine, which are Very much worthy os  
Perusal, because this Subject is of infinite Importance in the  
Art of Healing. See *Exercitatio* I. *‘Cap.* 9. and *Exercitatio*2. *Cap.* 9.

PROTMESIS, πγήτμασις. The Navel of a Child, when  
first ent. According to *Pollux,* it signifies the same as *Lumbies,*a Loin.

**PROTOGALA. Beestings; the first Milk, after an Ain-**

Inal has brought forth Young.

PROTOPATHEIA. A primary, or idiopathic Affectkin. -  
PROTOPLASTUS. The first Man. *Paracelsus.*

PROTORRHYTOS. See **CAPNELAEON.**

PROTOS POROS, Πρῶτος πἀρος. The internal Mouth  
of the Uterus. *Russeus Ephesius, de Appel. Corp. Human. Lib.* I»  
Cap. 3I.

PROTOSMA. The first Woman. *Paracelsus.*

PROTOSTACITON, προτόςιχκτίν. A Lixivium from  
Ashes, with an Addition of Quick-lime.

PROTOTOMI, πρβντότβμβι. The tender Stalks, or Aspa-  
ragi, of Cabbages.

PROTROPON, πρὶτροόάν. The same as PROCHyMA.

PROULIMATESIS, in *Forestus,* is a Disorder os the Sto-  
mach, consisting in its Prominence, exciting an external Tu-  
mor. *Castellus.*

PROVOCATORII DIES are the same as the *Dies In~  
tercalares*; that is, those which fall betwixt the Critical Days,  
and the *Dies Indices.* They are the third, fifth, ninth, this-  
teenth, and nineteenth.

PRUINA, in *Paracelsus,* is a sandy Sediment in-the Urine-  
According to *Rulandus, Pruina* is the first Species of Tartar.  
*Pruina Chymicee,* are Sublimates.

PRUNA. **See** PRUNUS.

PRUNELLA. Ossic. Ger. 577. Emac. 632. Raii Hist. I-  
55I. Synop. 3.238. *Prunellavulgarii.* Park. Theat.526. *Pru-  
nella store minore vulgaris. J.* B. 3. 428. *Prunella major  
folio non dissecto. Q.* B. P. 260. Touan. Inst. 182. Booth.  
Ind. *Α.* I69. SELF-HEAL.

The Roots of Self-heal are flender, creeping, and fibrous *i*the lower Leaves grow on long Foot-stalks, beset with a sew  
Hairs, as is the test of the Plant; they are broadest in the Mid-  
dle, and narrower at both Ends, less than Betony, and not at  
all indented about the Edges. The Stalks are square, about a  
Foot high, with two Leaves set opposite at a Joint, which are  
not many on **a** Stalk ; the nearer they grow to the Top, the

shorter are their Foot-stalks. The Flowers are set on the Top  
of the Branches in thick Verticillated Spikes, of a purple Co-  
lour, having an hollow Galea, and a three-iipt Labella, stand-  
ing in brown fiatish Calyces, six standing round the Stalk in  
.a Wherle; each Flower is succeeded by sour longish brown  
Seeds growing in the Bottom of the Calyx. It grows every-  
.where in Meadows and Pasture-grounds, flowering all the lat-  
ter Par^of the Summer ; The Leaves and Flowers are used.

Self-heal is reckoned among the Vulnerary Plants, and is ah-  
counted serviceable for all Sorts of Wounds, and putrid Ulcers.  
-It is restringent, and good fur inward Bleedings, and making  
bloody Water ; and is much used in Gargles, for Ulcers in the  
Mouth, Throat, or Gums, either the Juice, or a strong De-  
cectiort. *Miller\* s Bat. Off. ;*

Self-heal gives a pretty deep red Colour to the blue Paper ; it is  
of an herby, styptic, and glutinous Taste, mixed with a Very  
little Bitterness; from which we may conjecture, that the acid  
Part of the natural Salt of the Earth is in this Plant disengaged  
'from a good deal os the acrid Part; and that, being united with  
inbundance os Earth and Sulphur, it produces there a Salt which  
resembles Alum. This Mixture os Principles renders Self-  
heal Vulnerary, astringent, and detersive; and is an Ingredient '  
in the Arquebufade Water, and in Vulnerary Potions. *N. 'Bau-  
hine* esteems a Lotion of it for Gunshot Wounds. It is pre-  
'scribedin Ptisans, Broths, and Apozems, for spitting of Blood,  
. for bloody Urine, for the. too great or too frequent Flux of  
the Menses, for the Bloody-fiux, and for all Sorts of Haemor-  
rhages. It is used by way of Injection in deep Wounds, and  
by way of Clyster in the Bloody-stux. For Diseases of the  
Throat, Gargarifms of it must he frequently, used. They  
lrathe the Gums of scorbutic Persons with it, adding, some  
Grains of Mastich. The distilled Water of the whole Plant,  
and the Conserve os its Flowers, may he used for the same Pur-  
poses. *Casulpinus* used the Leaves bruised, and applied in  
.form of a Cataplasm, to suppurate Boiis, and to heal Wounds.  
He used the Juice for the Ulcers os the Mouth, and, in great  
.Rains of the Head, he bathed the Temples withjt, after haying  
mixed it with Oil of Roses and Vinegar. *J. Bauhine* added  
to it a little Rose-water, and gave it to drink to those who had  
been bitten by any Venomous Creature. *Martyofs Tournesort. ,  
.. Prunella* absterges and consolidates.; its principal Use is in  
Wounds, especially of the Lungs, and in Coagulations of Blood.  
It is, also, frequently employed outwardly in WoundS, and in  
the Quinsey, and other Affections of the Mouth and PanceS.  
*Euxh.* This Plant is, also, of excellent Virtue in all inflam.  
matory Distempers, Haemorrhages, and Dysenteries, and in  
shitting or pissing of Blood. *Hist. Plant, adscript. Boerhaave.*

PRUNELLUS. See **PRUNUS.**

PRUNUS.

„ The Characters are;. .

The Calyx is monophyllous and quinquefid ; the Flower ro-  
saceous, pentapetalous, and furnished with thirty"or more Sta-  
Inina. The Ovary in the Bottom of the Calyx becomes an  
oVated.br globous Fruit, containing under a thin, smooth Mem-  
brane, or Skin, a soft Pulp, in the Middle of which is in-  
closed an oblong or oval flatish Stone, acuminated . at both  
' ends, and containing a single Kernel; the Pedicle of the Fruit  
is os a good Length. -

*Boerhaave* mentions seven Species of *Prunus*; which are,  
. I. Prunus; sylvestris.G.?r.T3i3. *Emac.* 1497. *Park. TlreatI*1033. L\* *V\** 444» *J' Et* 2» I93\* *East Hoist.* 2. I527.  
*Synop.* 3. 462. *Boerh. Ind. A.* 2. 24I. *Prunellasfylgiestris.*Ossie. *Acacia Germanica.* Schrod. THE SLOE-TREE,  
or BLACK THORN.

This is a Bush, or small Tree, whose tough Branches are  
full of hard sharp Thorns, fending forth Its white five-leaved  
Flowers early in the Spring, before the Leaves appear, which are  
small and oblong, finely indented about the Edges. The Flowers  
are succeeded by small round Fruit growing on short Stalks,  
green at first, but, when ripe, of a fine purplish-black Colour,  
of a rough, sour, austere Taste, and not sit to he eaten till  
mellowed by the Frosts. .The Sloe-bush grows every-where in  
**the** Hedges.. . κ. \*

. . The Frulr is principally used, being restringent and binding,  
and good for all Kinds of Fluxes and Haemorrhages. It is,  
Iikewise, ofServsee for Gargarisms for sore Months and Gums,  
and to fasten loose Teeth. .... .

The Juice of Sloes, being boiled to a Consistence, 'is the  
*Acacia Germanica,* Off. which is now used instead of the true,  
and put into all the great Coinpositions. It is of a darkish Co-  
lour on the Outside, and redish within. *Miller's Bot. Oast.*

The Leaves of the Sloe-tree are bitter,-a little styptic, glu-  
tinous, and give a .saint Tincture of Red to the blue Paper ;  
but the Fruits give jt as deep aRed as Alum.; they are a little,  
sour, and extremely styptic: Thus it is likely, that the natural  
Salt of the Earth predominates in the Leaves, where it ismix'd  
with a little fetid Oil -; but char its acid Parr, being disengaged  
in the Fruits, is united with the Earth, and forms a Salt resem-

bling Alum. *Tragus* found by several Experiments, that **the**dishlled Water of the Sloe-tree is an excellent Remedy for the  
Pleurisy, and for the Oppressions of the Stomach : When this  
Author had not the dishlled Water of these Flowers, he gave  
Wine, in which they had been macerated, to he drank by his  
Patients, or else made use of the same Wine distilled in Baineo  
Marne. He affirms, that those Fruits, preserved with Honey,  
are very good for the Dysentery, and all Sorts of Loosenesses.’  
The Wine made of Sloes has the same Effect, *J. Bauhine*fays, that in *Als.atia* they day the Sloes in an Oven, and put.  
them into their Must ; and that renders them agreeable and  
astringent. *MAtthiolus* made use Of the Decoction of **the**Prints hnd Roots for Ulcers os the Mouth and Throat. The  
Juice of the Fruits affwages the Inflammation Of the Eyesi  
the same Juice, thickened, is called *Acadia Recentiorurn,* or  
*Gcrnlanorurn,* becauso it is substituted in the room of the Aca-  
cia of the Antients, to cool and bind. *IVitiichius* prescribes aS  
a good Purgative, the Syrup made with several Infusions of the  
Flowers of this Tree. *Schrodcr*mentions it also. *Ettmuller*relates; that a Very strong Vinegar is obtained from the Juice  
of the green Fruits by distilling them in Baineo Marine. *Mar\*  
testess Tournofort. . ' - ~ -*

2; PrunuS ; fructu cerei coloris. T. 622;

3. Prunus; fructu majore; rotundo; rubro. *T. ssdaei*es. Prunos; fructu maximo ; rotundo; staVo & dulci. T. 622.

5. PrunuS; fructu parvo, ex viridi flavescente; Ὑ623.

6. Prunus; fructu parvo prtecoci. T. 623.

. y. Prunus ; fructu magno, dulci, atro-coeruleo. *Tourn. Inst:*622. *Bcerh. Ind. A. Q..* 24I. *Prunus Damascena.* Offic;  
*Pruna, magna, dulcia, sttro-cderulea.* C. B. P. 443. *Pruna  
atro-ccerulea, Theocrito Partsia, aliis Damascena dicuntur, foesffi.*Dendr. 77. THE DAMASK-PRUNE. : .

The best Plums, or Prunes, being formerly brought from  
*Damascus,* the Fruit has kept that Name ever since; though it  
is seldom or never brought from thence now, we making use  
os the Fruit that is brought from *France,* or the *Pruna Gallica\**Offic. which I take to he the Fruit os the *Prunus Damascenae*Or Damson Plum, *Gar:* the great Damson or Damask-Pluin  
of *Park. Pardd.* They are brought oyer dried in great Quan-  
tities from *France,* being a larger find sweeter Plum than **the**common Damson. ....

Prunes are cooling and moistening, rendering the Body loose  
find soluble; they anwage Thirst, and mitigate the Heat **and**Acrimony os the Bile; A good Quantity of here. Pulp is put  
into the lenitive Electuary.

Medicines deriving their Name from Prunes; are the *Electuas.  
riurnDiaprunurn, Lenttivurn, et Solutivdm.* See DIABR UN UM.  
*Millen's Bot. Off".*

Besides the foregoing Species ofPrtheus, *Dale* mentions **the  
two** following;

**i. PRUNUS GAtLTCA.** Offic. *Prunus.* C.B. P. 443. *Prdur  
nus fatiua.* J. Β. I. *Prunus domestica.* Ger. I3I1. emac.  
**I497.** *Prunus vulgaris.* **Park. Theat. I5II.** *Prunusstructu,  
parvo, dulci, atro-c&rslleo. Τόαια.* Inst 6.22. THE COM-  
MON PRUNE. κί.

This Plant is frequentiy cultivated in Gardens, and flowers  
*in April.* It is transported dry to us from *Prurience* and *Lans,  
guedoc,* and its Gum is hard and pellucid. It is thought to he  
possessed of the fame Virtues with the former. *Dale, '*

**2. PRUNUS BRIGNOLENSIS. Ossie/** *Primus Rrissnanienism  
fructu fuaapifsirno.* Tourn. Inst. 632. *Prunus Briolcnsia aut  
Brignolensia.* Raii Hist. 2. I 526. *Pruna ex flavo rnsis.secntia,  
inixtisuporio, gratissima.* C. B. R 443. THE PRUNELLO.

These are sinall yellow Plums, brought over from *France in*little longBoxes; they are moist, flat, and without. Stones. .

They are seldom prescrihed by Physicians ; but heing os **a**pleasant grateful Taste, and not subject to purge, -they are fre-  
quently eaten by Persons in Fevers. *Miller’s Pot. Ost.*

PRURIGO. The Itch. SeeLEPRA. Or an Itching.  
PRURITUS. The same as PRURIGO;

- PSAISTE MAZA, ψαισίν μάζα, is expounded in *Galeisd.*Exegesis, by " a *Maxa* worked up with Honey and Oil, be-  
" cause, says he, the *Ps.aista* were so prepared." **Now the***Pfaista,* according to *Hisechius,* were *Alphita* wet with Oil,  
or, as *Suidas* fays, with Oil and Wine, which they burnt in  
Sacrifice to the Gods. *Pfaista* was, also, a Name *for* a sort  
of wide and round Cakes, by.soine called, also, Ἴεστὰ *(fofestdseb*agreeably to which, all the-Copies read μάζαν ψεστἡν, *Lisi.*περὶ τῶν ἐἀτὸς παθῶν, tho' *Calvus* seems to have read ψαισίνν,  
which occurs in another Place of the same Book, where **we**find μάζαν δἐ ψαισίνν *de lentores,* "a Maaa Very well work'd  
" up with Oil and..Honey*but Aldus* reads it here, too,  
ψβσῆν, aS the does, also» imanother Place os the same Book.

PSAGDAS, ψάγδας, is expounded in *Galenso Exegesis* by'  
ειδός τι.μήροῦ, " a kind of Ointment," which is, also, the  
Exposition which *Erotian* gives of It, andifor which he quotes  
*Euholis.* But fome Copies Of *Erotian* read ψάδαι; and Fse\*  
*fychius* expounds ψάδας, ψαγδῆς, by μήρον πβιὸν, **‘‘.some**

" sort of Ointment.” Upon the Whole, it seems to he a foreign  
and barbarous Term. *Foesius.*

PSALACANTHA. ψαλακἀνθα. *Saidas* informs us, that Pto-  
*Lernaeus Cytherius sncoae 2.* Poem on the *Psulacantha,* which he said  
was an Herb possess'd of many extraordinary Virtues. *Pbonus,*from *Ptolemaeus Nephasiionis,* mentions it as an *Egyptian* Plant,  
with some sabulous Circumstances, not worth relating. Some,  
he says, represent it to he like the *Artemisia* ; others like *Melilot.*

PSAMMlSMOS, ψαμμισμός. A sort os Cure of the Dropsy,  
by covering the Body with Sand.

PSAPHEROS, ψαφερός, is expounded in *Gallum*S Exegesis by  
ψαθυρὸς, *(ps.athyrus)* and ψαφερὸν, ψαφαρὸν, are the same as ψα-  
θυρὸν, ψαδυρὸν,ψαδαρὸν,ψαδηρὸμό and all signify brisde, ovfriable,  
and are applied to such Foods aS contain nothing os a sat or  
viscous Substance, but are render, friable, or incoherent. *Galen,  
Lib.* 3. *de Alim.* The same Author, *Lib. de Discs. Puls,* op-  
Poses their Signification to γλισχρός, *iglifiloros)* viscid, or glu-  
tin ous, and. *Lib. si. de M. M.* expresses it by κραυρὸς *fer aurati,*aS *Aristotle, Lib.* 4. *Meteor,* does by θραυςὸς, *(shrausiosso* Words  
importing Friability, and Looseness of Contexture: ψαφερὸν,ίη  
*Coac.* 6oe. is joined with μαλθακὸν, and both are apply'd to Ex-  
crements of a loose and soft Contexture, which are condemn'd ;  
ψαθαρὸν διαχώρημα is the same aS ψαφαρὸν, and signifies loose,  
incoherent Excretions by Stool, and, in an Epithet, joined with  
ξηρὸν, dry,, ψαφαρὸν is expounded also by ξηρον, ἀυχμηρὸν,ἀσθενάστ,  
«λοφρὸν, dryο squalid, , weak, sight. In *Coac.* 583. we read ῦρον,  
υδατῶδες, ἥ τεζαραγμένον ψαφερῇ, τρηχήτητι. " Urine like Wa-  
" ter, or disturbed with a loose, or rough, and sand-like Substance."  
. PSARON: The Name of a Powder described by *Aetius.  
Tetrabib.* 4 *Serm.* 2. C. 36.

PSATHYROS. ψαθυρός. The same **aS PSAPHERos,**PSEGMA. ψῆγμα. A Name for the *Flos Aris. Dioseorides,*PSELAPHIIE, ψηλαφί», (from ψηλαφάω, properly, to touch  
the Strings, in [flaying on a musical instrument, aS *Eustathius in  
Iliad.* observes; but commonly signifying to feel or grope like  
Persons in a Delirium) in *Hippocrates, Lib. orifi sva^ytpli* signifies  
Friction with the Hands, and is reckoned Part of the Office of  
a Physician, which he should always he in a Readiness to per-  
storm, when the Subject requir’d it.

PSEUDES, ψευδής. False, or Bastard. Hence the following  
Articles, beginning with *Pseudo,* are derived. -

**PSEUDo-AcAciA.**

The Characters are,

Ithas apapiiionaceuS Flower, from whose Calyx rises the Ovary,  
involved in a fimbriated Membrane, and becoming, at last, a stat  
Pod, opening into two PartS, full of Kidney-shap’d Seeds.

*Boerhaave* mentions two Species Of *Pseudo-Acacia,* which are,  
- I. Pseudo-Acacia, Vulgaris. *Tourn. Info.* 649. *Poerh. Ind. A.*2. 39. *Pseudo-Acacia.* Ossic. *Pseudo-Acacia Americana Pohini.*Park. Theat. I55°. *.Acacia Americana Foliis colutea, monococcos,  
filiauis echinatisi* Raii Hist. 2. I7I9. BASTARD ACAC1A.

This Plant is naturally produced in *America,* but is with ns  
found in the Gardens Of the Curious. I know nothing Os its  
Life and Virtues; at *Paris,* however, a distilled Water is pre-  
pared from its Flowers. *Dale.*

According to *Pobinus,* the Leaves of this Plant when boiled  
and expressed, purge in the same manner with Sena. Others  
recommend a Decoction of the Leaves, for its corroberating  
and refrigerating Quality. It is exhibited in Dysenteries, but  
excites Violent Pains and Flatulences. *Hist. Plant, adscript. Boorh.*

2. Pseudo-Acacia ; siliquis glabris , *Acacia Virginians, siliquis  
glabris.* Raii Hist. I7I9. *Boerh. Ind. alt. Plant. Vol.* 2.

PSEUDO-ACORUS. See ACoRUS **ADULTERINUS.**

**PSEUDo APoCYNUM,** *hederaceum,Americanum,tubulofo Flore  
phoenicio, Fraxini Polio.* A Name, in *Boerhaave,* for the *Big..  
nania Americana, Fraxini FolioFlore amplo, phceniceo.*

*Pseudo-Apocynum, Americanum, capreolatum, tetrapkyllam,  
tubuloso Flore, Foliis longioribus.* A Name, also, in *Boerhaave,*for the *Bignonia, Americana, capreolis donata, siliqua breviori.*

PSEUDO-AsPsseDTLUs. *EaJi in Uist. Plant,* takes notice of  
three Plants under this Name. The first is the.

*Pseudo. Asphodelus minor, five Pumilio,Folio Iridis, fives.* Clusi  
*Pseudo..Asphodelus Alpinus,* C. B. *Minor, Folio Iridis.* THR  
LESSER BASTARD ASPHODEL. Park. *Asphodelus Lanea.,  
striae,* Lancashire Asphodil.

I find no medicinal Virtues ascribed to this Plant.

The second is the.

*Pseudo.Asphodelus palustris 'vulgaris nostras. Asphodelus Lan.  
enstria verses.* Cer. Emac. defer. TRUE LANCASHIRE AS.  
PHODEL. *Pseudo-Asphodelus primus.* Clus *Palusirts Anast cur.*C. B. *Luteus, acrifolius, palustris Anglicus.* Lobelii I. B.

This is said to he an excellent Application for the Cure Of  
Wounds. Women dye their Hair with the Flowers of this Plant,  
macerated in a *Lixivium.*

The third is the

*flolastrie, Scoticus minimus.* THE LEAST  
SCOTISH ASPHODEL

**NO medicinal Virtues** are ascribed to this Species.

**PSEUDo-ASTHMA.** *EDAsihma* excised ho anAbscels,orV0niics,  
in the Lungs.

**PsEUDO-BUN IAS.** See **BARB AREA.**

**PSEUDO-BUNIUM. See BUNIAS.**

**PSEUDO-CADMIA.** A Name for the **ANTICADMIA.**

**PSEUDO-CAPSICUM** A Name for the *Solantem, fruticosum,  
'bacciserum.*

**PsEUDo -CHAMAEBUxUS.** A Name for the *Polygala, frute-  
scens, Folio buxi, Flore maximo.*

**PSEUDO-CstNA.** A Name for the *Senecio, Asiaticus,Juco~  
baeae Folio, radice lignofa, China officinarum dicta nobis.*

PSEUDo-CoLocYNTHIS. A Name for the *Pepo,s.ruSu ovato,  
variegato.*

**PSEUDO-CoRALLIUM.** A Name **for** the **CORALLIUM NI-  
GRUM.**

PSEUDO CoSTUS. A Name for the *Pastinaca, Olusatri solio.*PSEUDo-CYTISUs. See CYTISUS. . .

**PSEUDo-DicTAMNUs,**

**The Characters are,**

. The Root is perennial, the Calyx is Orbicular, open, and  
Contains the ripe Seeds, under Covert, aS it were, in a Sawcer.  
The Galea is erect, fornicated, or arched, and bifid; and the  
Beard tripartite. The Whorses Oi the Flowers, resemble those  
of white Horehound and are disposed in close Order, with  
aculeated Apices.

*Bocrhaave* mentions eight Species of *Pseudo-dictamnus* which  
are,

I. Pseudo-dictamnns, acetabulis moluCCae. C. *B. P.* 222. *M*H.3.378.

2. Pseudo-aictamnus, VerticillatuS,inodorus. C.B.P.222. *Tourn.  
Inst.* I88. *Boerh. Ind. A.* I73. *Psendo.dictamnus.* Ossie. Park.  
Theat. 27. *Ps.eude'dictamnum.* Ger. 65I. Emac. *ycyy. Dictam-  
num adulterinum, qteibusclam verti cillat urn, vel potius Gnaphalium  
veterum.* J. B. 3.255. *Marrubium Pseudo-dictamnum dictum.*Raii Hist. I. 557. *Cynapiialium veterum. Centunculus, Dictamnum  
adulterinum quibufdam.* Chab. 4to. BASTARD DITTANY-.

This Plant - is cultivated in Gardens, and flowers in *July.*The Herb is Only used, and as in external Appearance, so In  
Virtues, it agrees with Horehound. *Dale.*

The Virtues of this Plant are by some said to be the same  
with those Of the Dittany; but this is by no means true, since  
the odorous Smell Or the former is not so strong aS that of the  
latter. It is by some thought to he the *Alypion* Of the An-  
tients, but unjustly. *Hiss. Plant, adscript. Boerhaav.*

& 3. Pseudo-dictamnus, Hispanicus, amplissimo Folio nigricante,  
.. 4. Pseudo-dictamnns; Hispanicus, FolioScrophularise. *T.* I83.  
*Galeopsis Angntllarae.* 278.

5. I,seudo-dictamnus, Hispanicus, amplissimo Folio Candicante  
& Villoso. T188. *Marrubium subrotunda Eolia.* Boc. Mus. 2. 167.  
Tab. I22.

*6.* Pseudo-dictamnns, Africanus, foliis subrotundis, subtus  
incanis. *H. A.* 2. I79. *Marrubium rotundisulium, Africanum,  
Polio Hederae terrestris.* Flor. 2. 67.

*J.* Pseudo-dictamnus, Hispanicus, Foliis Crifpis & rugosis. 7\*.  
188. *Marrubium, Dictamni spurii Foliis et Facie.* Pan Bat.

8. Pseudo-dictamnus, Hispanicus, Folio amplissimo, candi-  
cante & Villoso. *T.* 188. *Boerh. Ind. alt. Plant. Vol.* **I.**

**PSEUDO-D I GITALIs.** A Name for the *Hracocephalon ; Ame-  
ricanum.*

**PSEUDO-FUMARIA.** A Name in *Boerhaave* for the **CA-  
FNOIDES.**

**PSEUDO-GNAPHALIUM.** A Name sor the *Gnaphalodes,* LN-  
*sitanica.*

**PSEUDO-HELICHRYSUM.** A Name for the *Helichrysum, sil-  
Vestrei latifolium, capitulis conglobatis. .*

**. PSEUDO-HELICHRYSUM FRuTESCENs.** A Name **for** the Sr-  
*necio, Africanus, Folio retuso.*

**PSEUDO-HELICHRySUM VIRGINIANUM.** A Name for the  
*Senecio, Virginianus, arbores.cens, atriplicis Polio.*

PSEUDo-HELLEBoRUs. A Name .for the *Helleboro-Raenussu  
culus, Flore luteo globoso.*

*Ps.eudfo-Helleborus Banunculoides.* A Name for the *Fopulago,  
Flore majore* ; and for the *Populago, flore pleno.*

**PSEUDO-IPECACUANHA. See APOcvNUM.**

**PSEUDO-IRiS. See AcORUs ADULTERINUS.**

**PSEUDO-LIEN.** A Name for Certain Glands Observed by  
*Ruys.ch* adjacent to the Spleen.

**PSEUDO-LOTUS.** A Name for the **GUAJACANA.**

**PSEUDO-LYsIMACHIUM.** A Name for the *Salio aria, vulgaris  
purpierea, foliis oblongis*; and for the *Vcrontca, s.picata, lonst.  
folia.*

**PSEUDO-MARRUBIUM.** A Name for **the** *Lycopus, palustris,  
glaber* ; and for the *Lycopus, Poliis in profundas lacinias dissectis.*

**PSEUDO-MELANTHIUM.** A Name for the *Lychnts,s.egesunt  
mayor.*

**PsEUDO-MELISSA.** A Name for the *Melissea, humilis, latsu  
folia, maximo flore, purpurascente.*

**PSEUDo-MOLA.** A salse Mole, form'd by **a** Piece of the *Pla..  
cent a,* left in the Uterus after the Exclusion of the *Peetus.*

P**sEUDO-NARCISSUS.** A Name in *Bocrhaave* for several Sorts  
*of Narcisses.*

. Ps EUDo-NARDUS. A Name for the *.Lavandula . latifolia,*and for the *Lavandula, angufiifolia Flore albo.*

PsEUDO-ORcHiS. A Name in *Boerhaave* for the *Orchis ,  
tiliselia, minor q suboletoram "Zelandiae et Earavta.*

PSEUDO-PETAS1TES. . A Name for the *Betafites ; Asm.ccutes t.  
Caltha palafirts Eolia.*

PSEUDO-POLYPUS. A Bastard Polypus.

e. PsEUDO-RHABARBARUM. A Name for *ffiethaljctrum . fade  
sus, siliqua angulosa, autfiriata-* and for the *ThaliSlrum,mayus-,  
flavum',flaminibus.luteis-,.vel glauco Polia.*

. PsEUDo-RUsIA. A Name for the *Fcuheola-, latiore-Folio ,* and  
for the *Biebeola , angofiiore-Polio. .*

PsEUDO-SALVIA- A Name for the *Pblandis gifruticosa sulviee  
Polio latiorae .et -ratundiore'* for the *Phlamis, fruticoyacr,:safoia  
Eolia longiore etr angustiorec,* and for*thePhlomis,fruticosa', Folio  
subrotunda, breviores, Flore luteo. . ..*

**PSEUDO-SEL1NUM.** ANamefortheCbrurssin, *Semide aspero,  
Flosculis rubentibus. ...*

'PSEUDO.STACHys/ANamefor thestar^yr, *Cretica fpropseudb-  
fiachyde* I. *in prodromo desecebiturgiiosgiasc Stachys,Alpi7ia, magnae  
Flore ex albo rubescente*3 andforthe *Galeopsis, AlpinaqJSetonicae  
Folio, Flore variegato. " .si. ' . .*

. PSEUDO :STRUTHIUM. A Name for the *lrtiola IAorbaspsulicio  
Pdlio. ’ ..*

**PSEUDo-SYCOMORUs. See.AZEDARACH. . si.**

PsEUDo-VALERxANA. A Name for several Softs of VALE-  
Ej-ANELLA. - .....

., PSIDA. The external Rind of, the Pomegranates  
PSILOTHRON, ψίλωθρον. A Depilatory.

- PSIMMYTHION, ψιμμύθιον. Cemss. - I

PSlNKUS. Ceruss. *Rulandus. - - -.*

PSITTACION, ψιττάκιον. The Name ofa discutient Plainer,  
-described’by *Paulus AEginetAn L.J:C. tJ. Scribonius Largus* de-  
scribes *a. Collyrium* by the Name OfCaiZyrrnce *Psittacinum.* NQ 2Y.  
τι PSITTACUS. The Parrot. . J - 1

PSOAE, ψόαι. The Name of two Pair of Muscles *yds* .the  
Loins. . "ἐνiss".’.εἴ . ἐν. ‘

The first in the - . - ..

**psoAs, siW, LUMnAR IS INTERNUS. ...**

This is a long thick Muscle, .situated in the Abdomen, on  
the lumbar Region,, adhering to the Vertebrae Of the Loins,'  
.from the posterior Part Of the QS Ilium, to the anterior Part  
near the Thigh.

It is fixed above to the last Vertebra os the Back, and to  
all .those Of the Loins, that is, to the lateral Parts Of the Bo-  
dies of these Vertebras, and .to the Roots of their tranverle  
Apophyses. The Insertions in the Bodies of the Vertebras, are  
by a kind of Digitations, and are Very liftle tendinous.

. From thence, the Muscle Inns, down laterally Over the OS  
Ilium, on One Side Of the Iliac Muscle, and pastes Under the  
*Ligamentum Pallapii,* hetween the anterior, inferior Spine of the  
OS Ilium, and that Eminence, which, from-its Situation, may he  
termed *llia-Pectinea.*

Before it goes out of the Abdomen; It unites with *ffit Iliacus,*and is sometimes fixed hy a few fleshy Fibres, in the Outside  
of the Eminence last mentioned. It afterwards covers the fore  
Side Of the Head Of the Os Femoris, and is inserted in the fore  
Part of the littie Trochanter, by an oblique Tendon, which is  
folded double from behind forward.

This Muscle is sometimes accompanied by another smaller  
Muscle almost like it, called *Psoas parvus,* Of which hereafter.  
' The *Psoas* hands the Thigh On the Pelvis, or brings it sop-  
ward , It may, also, move the Pelvis On the Thighs., and hin-  
der it from being carried along with the rest Of the Trunk,  
when ' the Body is inclined backward, while we fit, having the  
lower Extremities fixed by some external Force. In this Situation  
utrnay, also, move the Vertebrae of the Loins. *IVinfidiclsAnatomfo.*

The second isthe

**PsoAs PARVUS.**

.. This is a long stender Muscle, lying upon the *Psoas mayor\*..*It is sometimes Wanting , and *Jiiolanus,* who met with it often in  
Men, takes notice Of his having found it once in a Woman, as  
a Thing very extraordinary. AS for my Part, I found it several  
times in Women, before I ever met with it in Men; and I  
still continue to Observe it most frequentiy in that Sex.

It is fixed above by a short Tendon, sometimes to the last  
transverse Apophysis Of the Back, Or higher; sometimes to the  
first Of the Loins, and sometimes to both: From thence it tuns  
down wholly fleshy, and more Or less complex. On the great  
*Psoas,* in a Direction a littie oblique.

Having reached the middle OftheRegfo *lumbaris* Or thereabouts,  
it forms a stender flat Tendon, winch, gradually increasing in  
Breadth, like a thin Aponeurosis runs Over the *Psoas mayor,* and  
*lEacus internus,* at their Union, and from thence down to the  
Symphysis Of the Or *Pubis,* and *0s Ilium,* and is inserted principally  
in the Crista of the *Os Pubis,* above the Insertion Of the *Pectineus,*sometimes sending an Aponeurotic Lamina farther down.

Besides the *Bfias parvus,* there is another still smaller, be-  
tween it and the *Virtebres,* inserted much in the same manner.  
This Muscle I discovered in the Year 1713»

The *Psms parvus,* when it is found serves to sustain the *pefnapi*much in the same manner with the *Musculi Recti* of the Abdo-  
men, in Climbing. But when we stand, we have no nee3  
Of such a Support, the-Po/lonr resting then upon the *Ossie prig..  
smarts,* in such a manner, as that the largest Portion thereof, and  
that which supports the whole Body, lies behind that *Fulcrum,*and the smallest Part before. It may, alsus serve to hinder the  
Vertebral Pillar from bending hackward on some Occasions, *fVin..  
sands Anatomy. ' . .* - ' ψ

PSOMISMA, ψώμισμα. Meat which is put into the Mouth  
.osa Child.- .f .' .. .

PSOPHOS, ψόφος. Α Noise, a Sound. Ἕοφόιεν τώ'.σίνθει, aro  
Noises, Or Sounds, proceeding from the Breast, Occasioned by  
flatulent Matter:attempted to he expectorated. Ψοφώδειςτρτσ-  
*phodicseaxe.*.those who start and tremble arevery Noise; such are  
they who labour under a Phrensy or Delirium, *ϊ Prorrhet. her.  
' Coac. c)6.* where the ψοφώδε/ς are expressed by ψόφοῦ καθαπτομεγέν.  
which *Galen,* in his *Exegesis* expounds by. ψόφουῥαδζως άισθανόμενοι.  
\* Such aS are Very quick in their Perception Of a Noise or  
" Sound.”' . ' so ,

TSORA, ψῶρα. A Species of Itch. See LEPRA.

PSORIASIS. A Species of ltch affecting the *Scrotum. Blaflo  
card. so ' l “*

PSORICA. .Medicines for the Itch.

; PSOROPHTHALMIA. .ATfers,Or scurfy Disorder :Gs the

Eye-lids..- . . . \* " \*.γ -

PSUCHAGOGICA ; froth ψυχῆ. Life. Medicines which  
' YecalDife in an Apoplexy, -Or Syncope. \_ ' .

PSYCHOTROPHON. Α Name for Betony. *Dioscorides.*

*L.An C.L. so s... . ' - y- si \_ ;-*

PSYCHROLUSIA, ψυχρολυσίαί or PSUCHROLUTROH, ψφόν  
σχρολουτρὸν, ΗοΏψυχρὸς, cold, and Adin, to wash. Cold-bathing,  
: Or a Cold-bath. Sir *John Player* has given this as a Title to a  
Book wrote upon the Subject of COld-bathing. ' \*

PSYCTICA. Refrigerating Remedies ..

.. PSYDRACIA. A Species Of Pustule, Of which *TraUian, L.* I;  
Cl. 5. gives the following Definition. These are small Tubercles  
of the Head, which "resemble Pustules, and corrode the Skin:  
Put Exanthemata are superficial ExiilceratiOnS of the Skin, Os  
a redish Colour, and rough to the Touch. Both these Disorders,  
especially when Os the moist ’Kind, are-Cured by an Ointment  
. .thus prepared: . ' . .

Take Of Litharge and Ceruss, each fons Ounces, Of Alum,  
and the green Leaves Of Rue, each two Ounces, and Of.  
Vinegar, and the Oil of Myrtle, a sufficient Quantity to make  
anointment.

1

PSYGMATA, Tuspaarmi Refrigerating Medicines, either  
internal. Or external. ' .

PSYLLL A People Of *Africa,* celebrated by the Antients, for  
curing the Wounds Of Venomous Bites by fucking them 5 hut  
*CelsufnE,. g.Ca* 27. -is of Opinion, that any One may do the same . .  
thing without any Injury to themselves. -

PSYLLIUM. ...

The Characters are;

It agrees, in all respects, with the *Plantago,* and *Xlaronopui* ; On-  
ly the Stalks are leafy and rarnous, Or divined into a Multitude  
Of Branches. - . - '

*Boorhaavc* mentions font Species ofthis Plant; which are,  
X. Psyllium; mains, erectum; latifolium ; annuum.. *Boerh. ind.*

Ac. 2. ToI. *Ps.yllium.* Ossie. *Ps.yllium vulgare.* Park. Thess. 277.  
*Ps.yllium majus erectum. J.* Β.3. 513. C.B. P. Io!. Tourn. Insta  
128. *PJyllitimfive Pulicario Hcrba.Ger.^yi.Etazc.ei^y. Plan-  
tago caulisera Ps.yllium dicta.* Rail Hist. 1. FLEAWORT-

Fleaworthas round hairy Stalks, a Foot Or more high, beset at  
the Joints with two, and sometimes three, long, narrow, sharp-,  
pointed, somewhat hairy Leaves, Often lightly out in about the,  
Edges. From the Bosom Of these, toward the upper Part Of .  
the Stalks, arise pretty long (lender Foot-stalks, bearing at the  
Ends round short Spikes Of small staminOns Flowers, Of four  
Leaves apiece, with Apices standing Out, and somewhat resem-  
bling the Heads Of the long Plantain ; and are snceeded by round  
Seed-veffeis, containing two round shining reddish-brown  
Seeds, that look like Fleas, whence it takes its Name. The  
Root is stringy and fibrous, it grows in the *Southern* Parts  
of *France, fsoai* whence we have the Seed which Only is Used;

. Some attribute a purgative Quality to this Seed, hut we use  
it only to extract a Mucilage for sore Mouths and Throats, and  
to help Thrushes and QtnnseyS. It is, likewise, useful to obtnnd;  
sharp acrimonious Humours, which Corrode the Bowels, and  
Cause Dysenteries. Outwardly it is good for sore, inflamed.  
Blood-shot Eyes. *MllrtisDot. Osse.*

’ The Salt Of this Plant resembles that of Coral, but is mixed  
with a littie Sal Ammoniadi a great deal of Sulphur, and terre-  
strial Parts.

By the chymical Analysis, it yields a great deal of Oil and  
Earth, no Volatile Concrete Salt, a littie urinous Spirit, and se-  
veral acid Liquors.

-Psyllium-seed is used in the *Electuary de Pfyllio\** but Its pur-  
gative Virtue ought to he attributed to the Scammony, and the  
other Cathartics. The Mucilage of Psyllium is very lenifying,  
and good to affwage the Inflammation of the Eyes: It is given  
in a Clyster, for the Dysentery, and Inflammation of the Kid-  
neys. *Martyr?s Tournefont.*

*u.* Psyllium; majus; supinum; angustisolium & perenne.  
. 3. Psyllium; maximum; ex LittoreVeneto.

4. Psyllium indicum; foliis crenatis. *J.B.* 3.5I4. *Bocrh.  
Ind. alt. Plant. Vol.* 2.

PSYTHIOS. An Epithet of Wine, importing Sweetness.

PTARMICA.I

The Characters are;

The Leaves are serrated, crenated, dissected, and void of  
Smell ; - the Calyx is squamous ; the Flowers are altogether  
. white, and generally disposed in Umbellas ; the Seeds are very  
’ thin and stender.

*Boerhaave* mentions nine Species of Ptarmica ; which are.  
' - i. Ptarmica; Vulgaris; folio longo, serrato; store alh  
7. A 3. I47. *Boerh. Ind. ah.* III. *Tourn. Inst,* 4q6. *Ptar-  
mica.* Ossic. Ger. 483. Emac. 606. Raii Hist. I. 344. Synop.  
9I. *Ptarmica vulgaris.* Park. 858. *Dracunculus ferrato folio .,  
pratensis.* Co B. P. 98. *Achillea foliis integris minutissime ser-  
ratis.* Act. Reg. Par. Ann. I720. 32I. SNEEZWORT,  
BASTARD PELLITOR Yss - ------

From a woody, creeping, fibrous Root, of an hot biting  
Taste, this Plant sends out upright Stalks a Foot or more high, ’  
stiff, and not much branched, having long narrow Leaves,  
finely serrated about the Edges, growing on them without any.  
Order: The Flowers grow Umhel-sashion, on the Tops of the  
Stalks, consisting of a Border of white Petala, set about a  
fistular Thrum; they are larger than the Flowers of Yarrow:  
It grows in moist Meadows, and in watery Places ; and flowers  
in/My-

itis of an hot biting Taste; and, therefore, it is sometimes  
: put into Salads, to correct the Coldness of other Herbs: The  
Root, held in the Mouth, helps the Tooth-ach, by evacuating  
the Rheum, like Pellitory of *Spain:* The Powder of the Herb,  
-snuffed up the Nose, causes Sneezing, and cleanses the Head of  
- tough flimy Humours. *Miller’s Bet.. Off".*

*0..* Ptarmica; Vulgaris; pleno store. *Cluse Hi 12. Dra-  
cunculus, pratensis, store pleno.* C. B. R os.

\* 3. Ptarmica; foliis profunde serratis, laete Viridibus; elatior.  
*II. L.* 694. *Flor.* 2. 5I. *Dracunculus Alpinus, latiore folio ser-  
ratus. SCsuB.P. εἴ -*

An Ptarmica; foliis profunde serratis, minor & humilior. ’  
*Flor.* 2. 5ιδ-

5. Ptarmica; Vulgaris; folio longo; fenato & humilior.  
*Flor.* 2. 51«

6. Ptarmica ; Alpina; incanis, serratis, soliis. *Hi L.* 694.

7. Ptarmica; incana; humilis; foliis laciniatis,. Absinthii  
aemulis. *Hi L. 5I0. Absinthium Alpinum, undocilfferum lati-  
folium.* C. B. P. I39.

8. Ptarmica; Alpina, Tanaceti soliis, flore purpureo. T.atisi.  
*Millefolium montanum, purpureum, Tanaceti foliis.* M. st.  
3. 39- ... ..

9. Ptarmica; Orientalis ; foliis Santolinae incanis; flore pal-  
lido. *Fails Bocrh. Ind. a ii. Plant. Vol.* I.

The first and second Species of this Plant are of an heating  
.and penetrating Quality. The Antients exhibited it in all  
Disorders, wherein was necessary to stimulate and open; for  
which Purposes it is Very proper. By its Heat it corroborates  
the Stomach: Its Leaves, if chewed, procure a copious Dis-  
charge of Saliva; for which Reason they are henesicial in Tooth-  
achs*: They* are, also, exhibited in mucous and Viscid Obstrue- ’  
fions of the Fauces, where Sweats are to he excited. The  
Juice of this Plant, when boiled, is proper in all those Disor-  
ders for which Feverfew is recommended; but does not contain  
fo large a Quantity of Oil, and, consequentiy, is not so ad-  
hesive. *Hist. Plant, adscript. Boerhaau.*

PTERIS, πτέρις. Fern.

PTERNA, πτέρνηι The **CALCANEUM.**

PTERTGION, πτερήγιον. A Film of the Eye. See  
**OcULUS.**

But *Pterygion, in Celsus, Lib.* 6. *Cap.* 19. is a Disorder of  
the Fingers; The Description and Cure os which he gives in  
the following manner t

Old Ulcers os the Fingers are most commodioufly cured by  
Lycium, or helled Amurca, with an Addition os Wine to  
each. In the Nads there sometimes arises a Species of Caruncle,  
accompanied with great Pain, and by the *Greeks* called πτερήζιον.  
In order to cure chin Disorder, we must dissolve ‘round Melian  
Alum in Water, rill it in ορ the Consistence of Honey. Then  
we must add a Quantity of Honey, equal to that of the Alum,  
and mix them with a Spatula, till the Preparation has affirmed  
a Saffron-colour. With this the Parts affected are to he anoint-  
ed. Some, for the same Purpose, rather choose a Decoction

of equal Quantities os dry Alum, and Honey, mixed together.  
Is the Pterygia are nor, by rfut means, removed, they are to  
he extirpated, and the Fingers are to he fomented with a De-  
coction of Vervain, and the following Medicine..

Take of Chalcitis, Pomegranate-peel,and the Squamae yetis,  
each a proper Quantity: Mix them with a fat Fig;  
boil gently in Honey, and apply to the Part affected. Or,

Take of burnt Paper, Auripigmentum, and native Sulphur,  
each an equal Quantity r Mix with a Cerate, prepared of  
Oil of Myrtle, and apply to the Part. Or,

Take of the Powder of Verdegrise, one Dram; and of the  
Squamae AEris, two Drams: Mix with a sufficient Quan-  
tity of Honey, and apply to the Part affected. Or.

Mix equal Parts of-Lime-stone, Chalcitis, and Auripigmen-  
turn, and apply to the Part.

These Medicines, when applied, are to be covered with a  
-Linen Cloth, dipt in Water. On the third Day, the Dressing  
is to be removed ; the dry Parts, if any, are to be cut off, -  
and the like Dressing.is again to he applied. If the Disorder is  
not removed by these means, the Part affected is to be cleansed  
with the Knife, Cauterized with small Irons, and. cured like  
other Burns.

PTERYGODEES, πτερυζώδεες, in *Hippocrates,* are those  
People whose Chests are narrow and stat, so that their Scapulas \*  
are prominent, like Wings. Such Persons have been always  
esteemed subject to Consumptions.

PTERYGOIDES PROCESSUS. The Pterygoide, or -  
Wing-like Processes of the Os Sphenoides. See CAPUT. .

PTERYGOPALATINUS MUSCULUS. A Name of  
a Muscle of the UVULA; which see. - . . ' Τ .

PTERYGOPHARYNGEUS MUSCULUS. A Muscle  
of the Fauces. See **OESOPHAGUS.'**

PTERYGOSTAPHYLINI MUSCULL Some Muscles  
of the Uvula are thus called. See UVULA.

PTILOSIS, πτίλωσις, from ρίτίλος, a Person who has lost  
his Eye-lashes. A Baldness of the Eye-lashes. *Paulus Ai pi-  
neta, Lib.* 3. *Cap.* 22. says, the Ptilosis and Madarosis are  
Disorders of the external Margins of the Eye-lids. The Ma-  
- darosis is only a Falling off of their Hairs, produced by a De-  
fluxion of acrid Humours; whereas, in a Ptilosis, the Margins  
‘of the Eye-lidS become thick and Callous ; so that it is a Dis-  
'order complicated of a Madarosis, and an hard Linpitude*: For*which Reason the Remedies proper for the one are, also, con-  
duciVe to the Removal of the other. For procuring the Growth  
of the Hairs, and preventing an Itching and Corrosion os the  
Corners os the Eyes, the best Medicine is that of *Philoxenes,*distinguished by the Epithet *dry.* . For removing a Dimness of  
Sight, the following Preparation is excellent :

Take of Cadmia, eight Drams; of Sal Ammoniac, two  
Drams; of Saffron, and Spikenard, -each two Drams ;  
and of white Pepper, one Dram: Mix all together for  
Use.' Antimony, also, answers the same Purpose. .

For a Corrosion of the Corners of the Eyes, and a Pe-  
losis : . -. . - :. ' .

Take of calcined Antimony, extinguished in Womens Milk,"  
thirteen Drams; of Aloes, Myrrh, and Spikenard, each  
two Drams; and of calcined Barley, Carefully triturated,  
four Dramsj Mix, and use dry.

Another Medicine for a Ptilosis, and Corrosion Of the Eye-  
lids, is thus prepared :

Take of the Marrow of an Ox's Right fore Leg, a sufficient \*  
Quantity ; triturate it duty with Soot, and use iit.

The Soot Intended for this Purposo is to he thus prepared:  
Immerse a sufficient Quantity *os* Paper in the Oleum Sesami-  
num : Put the Papes in a Lamp, kindle it, and hold above it a  
smooth Shell, or brazen Vessel, in order to collect the Soot,  
which,, when triturated with the above-mentioned Marrow, is  
to he used. The Rennet of a Calf is, also, excellent for the  
same Purpose. For a Milphosis, an Increase of Flesh in the  
Corners of the Eyes, and other inveterate Disorders os them,  
*Sofander* directs the following Medicine:

Take of Cadmia, Antimony, crude Chalcitis, and crude  
Misy, each eight Drams: Bruise these ; mix them with  
Honey, and torrefy them, after extinguishing them in  
Wine, and triturating them: Add to them, of Spikenard,

two Drams; of torrefied Saffron, two Drams; and *os  
Pepper, one Dram:* All these, when triturated together,  
are to be used.

The more simple Medicines contributing to the Cure os a  
Ptilosis, and a Corrosion of the Eye-lids, are boiled Amurca,  
*Indian* Lycium, and *Armenian* Stone, used thy the Painters ;  
which last, when mixed with Water, and used by way of Oint-  
ment, consumes the peccant Humours, and augments the na-  
tural Hairs ; the Rust of Iron, triturated for many Days in  
. the Heat of the Sun, and reduced to the Form of a Collyrium,  
with Wine and Myrrh ; and Spodium, mixed with the Juice  
of Onions. 7 . \_ - .

PTISSANA, *sive* PTISANA, ρὶτισσάνη ἤ πτισασίν, . frons  
ρίτίσσω, to decorticate, bruise, or pound. Ptiffan, or Ptisan, .is  
. properly Barley decorticated, or deprived of its Hulls; or, as  
*. Suidas* expounds the Word, ή κεκομμένη κριθῆ, " pounded Bas-  
" ley;” because the antient Way of clearing Barley from its  
Hulls was not by grinding, as it \_ is now performed, but by .  
pounding in a Mortar: For the Antients, in preparing their  
Ptiffana, first sprinkled their Barley with Water; then left it  
. to swell; afterwards dried it in the Sun; and then pounded It in  
a Mortar, with a wooden Pestle, till it was separated from its  
Hulls ; and then reposited it. Some, aster wetting their Bar-  
ley, and drying-it in the Sun; as before, pounded it in a Mor-  
tar till it was deprived os its’ Hulls; then ground *it* to a Meal;  
and,, afterwards, boiled it for a Very considerable Time; to de-  
; Prive it, as they imagined, of its Flatulency; thou they dried  
. It, and reduced it into small Lumps, or Balls, with which they  
~ made sorbile Liquors On occasion. Others, again, aS we are  
informed by *Constant. Cascr, Lib. 12. de Agricultura,* aster  
' macerating, cleansing, decorticating, and drying their Barley  
in the Sun, pounded it OVer-again ; and, aster giving it a second  
Drying in the Sun, hefore they reposited it, sprinkled it over  
with the thin Particles which they had beaten out in pounding  
it, hecause they had found them to contribute towards its Pre-

- servation.’ Ἀ *‘ i." '.si.: s* 7

' Though Ptisana was properly prepared only of. Barley, yet  
, It used to be made, also, of other Grain, as of Wheat, Alica,  
. Spelt, Rice, and Lentils; hut, then, it was not.called simply  
*Ptiffeana,* but. with an Addition, expressing the Grain of which  
**It** was prepared, as, when they called it πτισσάνην ιπυρίνην,  
" Wheaton Ptiffan ;/\* χονδροπτισσάνην', Frisian made of  
, " Alica;" πόνον.. ζἐνάς ἢ ῤῥύζης.πτισσάνην, " Ptissim prepared  
. " of Spelt, or Rice;" and so of the rest. Ptiflan., thus pre-  
pared, was reserved for Use, with a prudent Regard to Health,  
\* which deserves Imitation;, and, when Occasion required, was  
ready at hand, to be boiled in Water. There were different  
) Ways of boiling it; but tho most Common Method among the

*Greek was* that described by *Galen, LiL.s. de Alimentis,* -and  
-is as follows: They boiled a Portion of Ptisan, in ten; os, as  
*. Paulus* says, in fifteen times the Quantity of Water, taking  
care to make it swell as much aS possible, during the Time of  
boiling; sor what readily swells, and that to a considerable  
. Degree, is‘esteemed the best; as, on the contrary, what swells  
hut little and stowly, is accounted the worst. When it is  
. swelled up to a considerable Degree, they pour in a little Vine-  
gar upon it, and then a little Oil; but this last may be added  
at the Beginning When it is perfectly helled, they sprinkle  
it with powdered Salt, without .any Other Addition, ex-  
cept; perhaps, of a small Quantity of Dill, Or Leeks, Thus  
*Galen.* And this is the best Way of preparing Ptiflan; and  
far to he' preferred to that where many superfluous Ingre-  
- clients are unskilfully added; in order to season it; for some  
added Amylnm, others Sapa; and some put Honey and Cumin  
to it, making of it an Hotch-potch, rather than a Ptisan; and,  
perhaps, they had some Reason sor thus preparing it, which  
. might be with a View to attenuate its Grostness, correct its  
Viscidity, or discuss its Flatulences. We who far excel the  
Antients in Delicacy, and, in point.of Cookery, outdo *Apiceus*himself, (who. *Lib. An deCrbsoniis,* speaks of those superfluous  
Seasonings) despise them all, and are contented .with putting  
thereto some triturated Almonds and Sugar, with a moderate  
Quantity of Salt, which are indeed of some Efficacy against  
the Grossness, Viscidity, and Flatulency of the Barley; but  
far inferior, in that respect, to Leeks and Dill, which are  
not only grateful to the Palate, but not a little conducive 'to  
Health. \_ ‘ .

Ptissana, thus boiled, .aS aforesaid, is no longer called *Ptif-  
fana,* but πέίισσάνης χυλὰς ἤ ῥόφημα, " the Cream or Soop of  
" Ptilsan," or, what is the same Thing, *Ptijsianee Jus vel Suc-  
cus,* " the Broth, Gruel, or Juice of Ptiflan." *Celsius* usually  
calls the Broth of entire Barley,, boiled till it bursts. *Cremor  
Hordei,* " Cream of Barley;" and prescribes it in bilious and  
burning Fevers.

Πτισσάνη.Ptiflan used simply;" ολη ρίτισσἄνη, " entire  
" Ptissim;5\* and πτισσάνη κβιθώδης, " Barley Frisian;" in

*Hiipocriaies,* signify all three the same Thing, that is, Ptistah  
not strained: For If, aster heiling, you strain it, and sot aside  
the Liquor, this Liquor is neither called *entire Piijsian,* nor  
*Barley ptifsian,* nor simply *Ρlessen,* but only χυλός πτισσἀνης,  
’ " the Juice of Ptissim.” Thus *Galen, Coin, in Lib. de R. Vi*

*I. A.* In *Lib. 2. Epid,* near the Beginning, .this entire or  
unstrained Ptisan is called πτισσάιή παχείη, " thick Ptisan.'\*  
*Gorraati Foes.ua. si-si . . s... r.;*

See *Hippocratestb* Treatise, *de Ratione Victus in Acutis',* un-  
her .the Article ALcALI..

. PTOLEMTEI CHIRURGI MEDICAMENTUM. The.  
Name of a Medicine mentioned by *Cessus, Lib. s. Cap. J. ' .*

**PTOLEMAEI EMP LAST RUM.** \ The Name of a Piaister «  
mentioned by *Marcellus Empiricus, Cap.* 36.

PTOLEMari EuERGETAE SToMATiCA. The Name of  
a Medicine'calculated for the Mouth, and described by *Mapla*

*Aellus .Empiricus,. Case.* 14. ' ... .'sta

**PTOLEMAEI REGIS COLLYRIUM.'** The Name os a Col-  
lyriuin, mentioned *len-Aetius, Tetr.* 2. *Serrn.* 4. *Gap.* 110.

PTOSIS, πτῶσις, from πίπτῳ, to sail. This imports fall-  
ing down, and is a Disorder of the Eye-lid, consisting in the  
Descent of the superior Eye-lid, either on account of a Palsy  
of the Muscle, which should elevate it; or a Flux of Humours,  
which depresses it.

PTVALAGOGA, from πτύελον. Saliva, or Spittle; and  
ἄζω, io bring away;- Medicines which promote a Discharge os  
. Saliva. . . . ‘ .

PTYALISMOS, πτυἄλἰσμός; A frequent and copious  
Discharge of Saliva. *Hippocrates.* Among the Moderns, it  
generally signifies a Salivation excited by Mercury. .

PTYAS. The Name of a Species of Asp. See AsPIs,  
PTYELON, πτύελογ; The Saliva, Spit, Ur Spittle. Seo  
SPussuM. /. ' '' si,

PTYGMATA,. πτύζματα, shoni ρίτύσσω, to fold. Folded  
Cloths. *Ccelsics Aurelianus.* Perhaps what we call *Stuphs.*

PTYSIS, πτύσις.. A' Defluxion of Humours upon the  
Thorax, or Lungs. *Caelius Aurelianus, Chron: Lib.* **2;** *Cap. J.*

**PTYsIs,** also, implies Exposition, or Spitting.

PTYSMA, πὸύσμα. The Spit, or what is brought up by  
Spitting, or Expectoration.

. PTYSMAGOGA; Medicines which promote a. Discharge  
of Saliva. \_ - :

PUBES. See **ABDOMEN. -**

PUBIS OS. See INNOMINATA OssA. . ’

PUCHAMIAS. The Name of a Tree which ’grows in

*Virginia,* bearing a Fruit like a Medlar, extremely astringent,  
whilst immature; but, when ripe, of a delicious Taste. *Rdii  
Hast. Plant.si.*

PUDENDA... The private Parts in both Sexes'.

PUDENDA GRA. The Venereal Disease.

- PUERPERA. A lying-in Woman.

PUFFINUS. . A Sea-bind, which the *French* call a *Ma..  
creuse,* that is reckoned in the Number of wild Ducks: It  
is dark-coloured, and flies heavily ; but, when it has a  
mind to come hastily away from a Place, the Bind sustains itself  
upon the Ends of its Wings and Feet, and, in this manner,  
runs lightly and svviftly upon the Surface of the Water: This  
Bird feeds - upon Insects, Sea-weeds, and Fish: Its Flesh is  
hard, and like Leather, especially when it is old '; and, there-  
fore, it should not be eaten.but when young: This same Flesh  
tastes, also, of Fish; and the *Roman* Catholics allow the Use  
-Of.thin *Lent.*

PUGILLUS. A Pugil. The eighth Part of an Handful

PULEGIUM.. si \

The Characters are; . . ,

The Flowers, which are very small, are disposed in close  
thick Whorles, and their upper Lip is entire: In other respects  
this Herb resembles the *Mentha,* or Mint;

*Boerhaave* mentions four Sorts of Pulegiuin;. winch are,

I. Pulegium; latifolium. *CoB.P. Osip.. Boerh. Ind. alt.*186. *Pulegium.* Offic. Jo B. 3. 256. Ran Hist. X. 533. Sy-  
nop. 3. 235. *Pulegium regium.*. Ger. 545. Emac. 67I. ' *Pu\*  
legiurtiuulgare.* Parks. Theat. 29. *Mentha aquatica feu Pule-  
gium vulgare.* Tourn. Inst. I89. PeNYROYAD

Penyroyal has many creeping fibrous Roots; from which  
spring a great many smooth roundish Stalks, hardly able to sup-  
port themselves, hut leaning on the Ground, and sending out  
small Fibres, by which it roots Itself in the Ground : It bears  
two’small, round, but yet pointed Leaves, at a Joint: The  
Flowers grow towards the tipper Part of the Branches, com-  
ing forth just above the Leaves, in thick close Whorles ; they  
are of a pale-purple Colour, small and galeated, set in small,  
somewhat downy Calyces, in which grow four small Seeds,  
The whole Plant has a Very strong Smell, and an hot aromatic  
Taste : It grows frequently upon moist Commons, and in  
Places where Water has stood all Winter, and flowers in  
*July.* But what we use in the Shops is generally cultivated

in Gardens, where it grows tall and large : The whole Heth is  
It is het and dry. Of Very subtile volatile Parts, and is pe-  
culiarly appropriated to the Female Sex, being a good Uterine,  
provoking the Menses and Lochia, expelling the Birth and Se-  
Cundines: Is, likewise, warms and comforts the Bowels, and  
helps the Colic and Jaundice, and is good against Coughs and  
Shortness of Breath : The Juice, or a strong Decoction of the  
Leaves, sweetened with Sugar, has been accounted a Specific  
against a whooping Cough.

Officinal Preparations are only the distilled Water and Oil.  
*Millen’s Bor. Off.*

. This Plant, .which is very bitter, acrid, and of a Very pene-  
trating Smell, gives a deep Tincture of Red to the blue Paper;  
so that it is probable, it contains a Volatile, aromatic, and oily

' Salt, loaded with Acid ; whereas, in the artificial. Volatile, oily  
Salt, this Acid is detained by the Salt of Tartar.

' Thus this Plant is aperitive, hysteric, and good for the Diss  
eases of the Stomach and Breast; since it evacuates those glu-  
.tinous Sordes, \_ which fill part of the Bronchia, and Vesicles of  
the Lungs; especially if it is helled with Honey and AloeS 5  
for then (as *Dioseorydes* observes) it purges, .and procures Ex-  
pectoration. *Tragus* very much commends the Decoction of  
Penyroyal in White-wine, for the Suppression of the Menses,  
and. Fluor Albus. TheJuice of this plant, according to the same  
Author, clears the Sight, and removes Lippitude. *Montanus*prescribed the Powder of Penyroyal, mined with equal Quan-  
tities of Vinegar, Honey, and Water, for the Diseases of the  
Eyes. The Conserve of its Flowers and Leaves is good For  
the Dropsy and Jaundice. *Ray* affirms, from Mr. *Boyle,* that a  
Spoonful of the Juice of Penyroyal is a good Remedy for the

. Chin-cough of Children. *Chefneau* prescribes a Glass of its  
Decoction for Hoarseness; and advises to take is before going  
Io Bed. *MartynfoT.ournefort.*

2. Pulegium ; angustifolium. *Ger.* 546. *Emac.* A72. *Raii  
. Hist.* I. 534.. *Co B. P.* 222. *Boerh. Ind. alt.* I86. *Pulegium  
cervinum.* Offic. *Pulegium angustifolium sieve Cervinum.* Park.  
Theat. 3O. *Pulegium cervinum angsestffolium.* J. B. .3. 257.  
*Mentha aquatica Satureiat folio.* Tourn. Inst. zoo. HART  
PENYROYAL. \* ἵ

This grows inore erect .than the common Penyroyal, with  
much longer and narrower Leaves, somewhat like Savory ; the  
Flowers grow in thick Whorles, like the former, and the Smell  
is much alike; but this is. rather pleasanter. It grows in *Pro..  
lvence* and *Languedoc* in *France,* and in diVers Parts of *Italy.*

It has the same Virtues with the common Penyroyal, and is,  
hy the Physicians about *Montpelier,* preferred before it; but is  
seldom or never prescribed here, or brought into our Shops.  
*Mellccis Boi. Osse.*

3. Pulegium; angustisolinm; flore albo. *Hi. R. Par.  
Mentha, aqudiica, Saturtiee folio, store albo.* T. I90.

4. Fulegium;.latifolium; hirsutum; storeccenileo. *Bocrh.  
Ind. alt. Plant. Fol. I.*

*Besides* the foregoing Species Of Pulegiufn, *Dale* mentions  
the following;.

**PULEGIUM ERECTUM. Offic. An.** *Pulegium latifolium  
alterum.* C. Β. P. 222. UPRIGHT PENYROYAL.

This Plant grows in marshy Places: The Herb itself is used,  
and in Virtues agrees with the common Penyroyal. *Dales*

PULEX. A Flea.

PULICARIA. A Name for the **PSYLLIUM.**

PULMO. The Lungs.

The Lungs are two large spongy Bodies, of a redish Co-  
lour in Children, greyish in adult Persons, and bluish in Old-

’ age, filling the whole Cavity of the Thorax; One being  
.seated in the Right Side, the Other in the Left, parted by the  
Mediastinum and Heart, and of a Figure answering to that  
os the Cavity which contains them, that is, convex next the  
Ribs, concave next the Diaphragm, and irregularly flatted and  
depressed next the Mediastinum and Heart.

When the Lungs are Viewed out of the Thorax, they repre-  
sent, in some measure, an Ox's Foot, with the fore Part  
.turned to the Back, the back Part to the Sternum, and the  
lower Part to the Diaphragm.

They are distinguished into the Right and Lest Lung ; and  
each of these into two or three Portions, called *Lobi;* of  
which the Right Lung has commonly three, or two and an  
half, and the Lest Lung two. The Right Lung is generally  
larger than .the Left, answerably to that Cavity of the Breast,  
.and to the Obliquity of the Mediastinum.

At the lower Edge of the Lest Lung, there is an indented  
Notch, or Sinns, opposite to the Apex of the Heart, which is,  
therefore, never covered by that Lung, even in the strongest  
Inspirations; and, consequently, the Apex of the Heart and  
Pericardium may always strike against the Riba ; the Lungs  
not surrounding the Heart in the manner commonly taught.  
This Sinus is expressed in *Eustachian* Tables.

*6*

*The* Substance of the Lungs is almost all spongy, being made  
up of an infinite Numher of membranous Celis, and oTdinof-  
ent Sorts of Vessels, spread among the Celis, in innumerable  
Ramifications.

This whole Mass is covered by a Membrane, continued from  
each Pleura, which is commonly said to he double ; but whar  
is looked upon as the inner Membrane, is only an Expansion  
and Continuation of a cellular Substance.

**BRONCHIA. .**

The Veffels which compose part of the Substance-of the  
Lungs, are of three or four Kinds; the Air-Vessels, Blood-  
Vessels, innd Lymphatics: To which we may add the Nerves.  
The Air-VeffelS make the principal Part, and are termed Bron-  
*chia..*

These Bronchia are conical Tubes, composed os an infinite  
Number of cartilaginous Fragments, like so many irregular  
Arches of Circles, connected together by a ligamentary elastic  
Membrane; and disposed in such a manner, aS that the lower  
easily insinuate themselves within those above them.

They are lined on the Inside by a Very fine Membrane,  
which continually discharges a mucilaginous Fluid ; and in the  
Substance of the Membrane are a great Numher *os* small  
Blood-vessels, and, on its convex Side; many longitudinal  
Lines, which appear to be partiy fleshy, and partly made up of  
an elastic Substance of another Kind..

The Bronchia are divided in all Directions into an infinite  
Number of Ramifications, which diminish gradually in Size;  
and, as they become capillary, change their cartilaginous Struc-  
ture into that of a Membrane.. Besides these very small Extre-  
mitiesof this numerous Series of Ramifications, we find, that  
all the subordinate Trunks, from the greatest to the smallest,  
fend out, from all Sides, .a vast Number of shore capillary  
Tubes, Of the same kind.

**VESICULAE BR0NCNIALES.**

Each of these numerous Bronchial Tubes is widened at the  
Extremity, and thereby formed into a small rnembranousCell,  
commonly called a *Vesicle c* These Celis, or Folliculi, are closely  
connected together in Bundles; each small Branch producing a\  
Bundle proportionable to its Extent, and the Number Of its  
Ramifications.

These small Vesicular, or cellulous Bundles, .are termed Lo-  
bules , and as the great Branches are divided into sinall Ramifi-  
cations, so the great Lobules are divided into several small ones.  
The Celis, or Vesicles, of each Lobule have a free Communi-  
cation with each other; but the several Lobules do not commu-  
nicate fo readily. . r

The Lobules appear distinctly to he partedby another cellulous  
Substance, which surrounds each of them, in proportion to their  
Extent, and fills up the interstices hetween them. This Sub-  
stance forms, likewise, a kind of irregular, membranous Colis,  
which are thinner, looser, and broader,’ than the Bronchial  
Vesicles. - .

This Substance is dispersed through every Part of the Lungs;  
forms cellulous, or spongy Vaginae, which surround the Rann-  
fications of the Bronchia and Blood-Vessels; and is afterwards  
spread over the outer Surface os each Lung, where .it forms a  
kind of fine, cellular Coat, joined to the general Covering of  
that Viscus.

When we blow into this interlobular Substance, the Air com-  
presses and flattens the Lobuli; and, when we blow into the  
Bronchial Vesicles, they presently swell; and, if we continue  
to blow with Force, the Air passes, insensibly, into the inter-  
lobular Substance. We owe this Observation to M. *Helvetius.*

All the Bronchial Colis are surrounded by a Very fine reticular  
Texture Of the small Extremities of Arteries and Veins, which  
communicate, everyWay, with each other. The greatest Part  
*of this* admirable Structure is the Discovery of the illustrious  
*Malpighi. ‘*

**BLooD-v.EssELs,**

The Blood-Vefiels of the Lungs are of two Kinds; one  
common, called the Pulmonary Arteries and Veins ; the other  
proper, called the Bronchial Arteries and Veins.

The Pulmonary Artery goes out from the Right Ventricle of  
the Heart; and its Trunk, having run almost directly upward,  
as high as the Curvature of the Aorta, is divided into two lateral  
Branches, one going to the Right Hand, called the Right Pul-  
monary Artery; the other to the Lest, termed the Lest Pul-  
monary Artery. The Right Artery pastes under the Curvature  
os the Aorta,, and is, consequently, longer than the Left:  
They both run to the Lungs, and are dispersed through their  
whole Substance, by Ramifications nearly like those of the  
Bronchia, and lying in the same Directions.

The Pulmonary Veins, having been distributed through the  
Lungs, in the same manner, go out, on each Side, by two great

Branches, which open laterally into the Reservoir, or muscular  
Bag, of the Right Auricle.

The Ramifications of these two Kinds of Vessels in the  
Lungs are surrounded, every-where, by the cellular Substance  
already mentioned, -which, likewise, gives them a kind of Va-  
gina ; and the Rete mirabile of *Malpighi,* described above, is  
formed by the capillary Extremities of these Veffeis.- It must'  
he observed, thet the Ramifications of the Arteries are more nu-  
merous, and larger, than those os the Veins, which, in all other  
Parts of the Body, exceed the Arteries, both in Number, and  
Sine. . ” ;

Besides thefe capital Blood-Vessels, there are two others, cal-  
led the bronchial Artery and Vein ; the Artery has become very  
famous, of late, by the Description given of it by M. *Ruyseh.*The Vein was doubted of, for some time; but it exists as really  
aS the Artery, and may be easily demonstrated.

These two Veffeis are very small, appearing only like very fine  
Arteries and Veins coming from the Aorta, Vena Cava, and  
their Branches; and they seem to have no other Use, but that  
os nourishing the Lungs. ’

The Varieties in the Origins of the bronchial Arteries and  
Veins, especially of the Arteries, their Communications, or  
Anastomoses, with each other, and with the neighbouring Ves-  
sels, and, above all, the immediateAnastomosis of the bronchial  
Artery with the common pulmonary Vein, are of great Con-  
sequence, in the Practice of Physic. .

The bronchial Arteries come sometimes from the anterior  
Tart of the Aorta descendens superior, sometimes from the first  
intercostal Artery, and sometimes from one of the OEfophagasae.  
They go out, sometimes, separately, towards each Lung; some-  
times by a small common Trunk, which afterwards divides to  
the Right and Left, near the Bifurcation of the Aspera Arteria;  
and follow Ramifications of the Bronchia.

The Left bronchial Artery comes often from the Aorta,, and  
the Right from the superior Intercostal, on the same Side, be-  
cause os the Situation of the Aorta: There is, likewise, an-  
other, which arises from the Aorta posteriorly, near the superior  
Intercostal, and above the anterior Bronchialis. '

The bronchial Artery gives off a small Branch to the Auricle  
of the Heart, on the same Side, which communicates irnmedi-  
ately with the coronary Artery.

In the Year 1719. I observed a very plain Anastomosis be-  
tween some Branches of the Lest pulmonary Vein, and of one  
os the Arteriae OEsophagaeae, which came from the first Lost  
Intercostalis, together with a bronchial Artery of the same  
Side.

In that, or the following Year, I likewise Observed an Anas-  
tomosis between the Left bronchial Artery, and the Vena Ay-  
goS; and in *April* I72 I. I saw an Anastomosis between a Branch  
. of this Artery, and the Body os the just-mentioned Vein.

Sometimes'one bronchial Artery gives Origin to several-su-  
perior Intercostals, and sometimes several bronchial Arteries  
send off separately the same Number of Intercostals. The  
bronchial Veins, as well aS Arteries, were known to *Galen ;*these Veins are sometimes Branches of the Azygos, coming from  
the upper Part of the Curvature, or Arch. The Left Vein is  
sometimes a Branch of the common Trunk of the Intercost  
of.the same Side; and sometimes heth Veins are Branches of the  
Gutturalis. - '

**NERVES.**

The Lungs have a great many Nerves distributed through  
them, by Filaments which accompany the Ramifications of the  
Bronchia and Blood-vesseis, and are spread on the Cells, Coats,  
and all the membranous Parts os the Lungs. The Nervi Sym-  
pathetici medii, and majores, commonly called Nerves of the  
eighth Pair, or the Intercostals, form, behind each Lung, a par-  
ticular Intertexture, called Plexus pulmonaris, from whence  
nervous Filaments go out, which communicate with.the Plexus  
Cardiacus and Stomachicus.

**LYMPHATIC VESSELS.**

On. the Surface of the human Lungs, between the external  
and cellular Coat, we observe something that looks like lym-  
phatic Veffeis ; but we ought to take care not to mistake, sor  
such Vessels, a transparent reticular Substance, observable on the  
Surface of the Lungs, aster blowing strongly into the Lobuli;  
this Appearance being entirely owing to the Air which passes  
through the bronchial Vesicles into the interlobular Celis, and  
which, by separating a certain Number ofLobuli, finds Room to  
ledge between them. The true lymphatic Vessels of the Lungs  
are most visible in Brutes 5 and in an Horse, particularly, I have  
observed one of these Vessels Io run along a great Part osone Edge  
Of the Lungs.

**LIGAMENTS.**

Under the Root of each Lung,that is,under that Part form'd by  
**the** subordinate Trunk of the pulmonary Artery, by theTrunks

Of the pulmonary Veins, and by the Trunk *os the Bronchia,  
there* is a pretty broad membranous Liganrenr, which ties the  
posterior Edge os each Lung to the lateral Parts of the Ver-  
tebras of the Back, from that Root all the Way to **the**Diaphragm. . . . .

**TRACHEA, OR AsPERA ARTERIA. ‘**

The Bronchia, already described, are Branches or Ramifioa-  
fions of a large Canal, partly cartilaginous, and partly membra-  
nous, called Trachea, or Aspera Arteria. It is situated ante-  
Tiorly, in the lower Part or the Neck, from whence it runs  
down into the Thorax, between the two Pleurae, through the  
upper Space left between the Duplicature of the Mediastinum,  
behind the Thymus. .

Having reached as low as the Curvature of tho Aorta, it di-  
vides Into two lateral Parts, one towards the Right-hand, the  
other towards the Left, which enter the Lungs, and are .dis-  
tribnted through them in the manner already said. These two  
Branches are called Bronchia,and that on the Right Side is shorter  
than that on the Left ; whereas the Right pulmonary Artery is  
the longest.. . .. - \_ \_ σ -

’ " The Trachea is made up of Segments of Circles, or cartila-  
ginous Hoops, disposed in such a manner, as to form a Canal  
open on the hack Part, the Cartilages not going quite round ;  
hut this Opening is filled by a soft glandular Membrane, which  
completes the Circumference os the Canal. ...

Each Circle .is about the twelfth Part os an Inch in Breadth,  
and about a Quarter os that Space in Thickness ; their Extre-  
mities are round, and they are situated horizontally above each  
other, small Interstices being.lest between them, and the lower  
Edge os the superior Segments being turned toward the upper  
Edge os those next below them.

They are all connected by a Very strong elastic membranous  
Ligament, fixed to their Edges. I have observed the first three  
Segments united into one, bent alternately in two different  
Places, according to its Breadth *ς* Sometimes two are continuous  
in the same Manner. - 1

The Canal os the Aspera Arteria is lined on the Inside by a  
Particular Membrane, which appears to be partly fleshy, or mus.  
cular, and partly ligamentary, perforated by an infinite Number  
os small Holes, snore or-less imperceptible, through which a  
mucilaginous Fluid continually passes, to defend the inner Sur-.  
face of. the Trachea against the Acrimony of the Ain whiclr we  
breathe.

This Fluid comes from small glandular Bodies, dispersed  
through, the ‘ Substance of" the Membrane, but especially from  
Glands something larger than the former, which lie on the  
Outer or posterior Surface os that strong Membrane, by which  
the Circumference os the Canal is completed. The same Stru-  
cture is observable in the Ramifications of the Trachea, from  
the greatest to the smallest. . . .

All the Veffeis of which the Lungs are principally composed,  
that is, the Air-Vessels, or Bronchia; and Blood-Vessels, that  
is, the pulmonary and bronchial Arteries arid Veins ; accompany  
each other through this whole Viscus. . . -

They are disposed, commonly, in such a manner, even to the  
last Ramifications, as that a subordinate Trunk or Branch os  
the Bronchia lies between the like Trunks or Branches of. the  
pulmonary Artery and Vein; the bronchial Vessels being imme-  
diately joined to the Bronchis. In some Places these three Kinds  
of Vessels touch each other, in such a manner, as to leave a tri-  
angular Space in the Middle.

The Bronchia are divided into a very great Number of Ra-  
mifioations, and the last Branches are the Pedicles or Foot-  
stalks os the small Lobuli. All the Lobuli are angular, oblong,  
broad, and thin; the Foot-stalks send out other small membra-  
nous Pedicles, which are veryshort, and terminate in the bron-  
chial Vesicles, or Celis, of which they are Continuations. The  
subordinate Trunks and Ramifications detach a great Number  
of these Pedicles from their convex Surface.

When we blow into the Lungs, the bronchial Cells, nearest  
their outer Surface, appear like small Portions os round Ve-  
sicles ; and, from .this Appearance, all the bronchial Cells have  
got the Name of Vesicles, though they are all angular, except  
those which I have now mentioned.

When we examine a Lung, without blowing it up, we find,  
that the cartilaginous Segments of the Bronchia he so nearj aa to  
be engaged in each other; and, in drawing out any Portion of  
the Bronchia by the two Ends, these Segments are parted, and  
the whole Canal is increased in length; but it contracts\* again,  
by means of its elastic Membrane, aS soon as that Force sa  
taken off.

When we open, lengthwise, any Portion of the pulmonary  
Artery and Vein, in the same Lung, we meet with A great.  
Number of transverse Rugae, winch are destroyed when these  
Veffeis are elongated: This is an Observation made by *Hel-  
vetius.*

By virtue of this Structure, all the Ramifications, both of  
The Bronchia, and pulmonary Arteries and Veins, have con-  
stantly the (ante Direction, whether the Lung be inflated, or  
incllapfed ; and they contract in Length, without heing either  
contorted, or folded, in Expiration, these Vessels are elongated,  
and shortened in Inspiration.

These three Vessels lie in a sort of cellular Vagina, which  
'accompanies all their Ramifications, and is a Continuation of  
“the interlobular Colls, or cellular Substance in the Interstices of  
'the Lobuli. The Pelliculae which compose it, are, however, -  
’disposed there, in a more regular manner, and more longitudi-  
nally, than in other Places; and thereby appear to form a true  
Vagina.

When we blow through a Pipe, introduced so far as to touch  
Immediately a Trunk of the Blood-vessels, or Bronchia, the Air  
runs, ar first, through all the Cells that lie nearest that Trunk,  
or its Branches ; but if we continue to blow, It infinitates itself  
’through the whole interlobular Substance.

**BRONCHIAL GLANDS.**

At the Angle of the first Ramification of the Trachea Arte-  
Tia, we 'find, on both the sore and hack Sides, certain soft,  
roundish, glandular Bodies, of a bluish, .or blackish Colour,  
and of a Texture partly like that of the Thymus, and partly  
.like that os the Glandulae Thyroides. There are other Glands,  
of the same Kind, at the Origin of each Ramification of the  
Bronchia; but they decrease proportionably, in Number and  
.Size: They are fixed immediately to the Bronchia, and co-  
vered by the interlobular Substance; and they seem to commu-  
nicate, by small Openings, with the Cavity of the Bronchia.  
’.... The Trachea has several Coats; the outermost, or common.  
Covering surrounds that Part of the Trachea which lies in the  
t Thorax; but out of the Thorax, this first Coat is derived from  
- the aponeurotic Expansions of the Muscles of the Neck ; and it j  
-is between this, and the following- Covering, that the Glands,  
already mentioned, are situated.

The second is a proper Coat, heing a Continuation of the  
-cellular Covering os the Lungs; and the Pellicles thereof, near-  
**- est** the cartilaginous Segments, serve them for an external Peri-  
chondrium. The third Membrane lies on the Inside, adhering  
. closely to the same Cartilages, and supplying, to these, the Place  
-of an internal Perichondrium.

The fourth Membrane is that which completes the Circum-  
ference of the cartilaginous Circles of the Trachea: It consists,  
'principally, *of* two Laminae, or Strata, partly muscular, and  
partly tendinous ; the external, or posterior. Lamina being made  
up of longitudinal Fibres; and the internal, or anterior, of  
transverse Fibres. This Membrane is perforated by the small  
-Ducts of the above-mentioned Glands, which discharge a Fluid,  
.'when pressed;. and, heing examined through a Microscope,  
they appear Vesicular, or folliculous, much like those of **the**Stomach, 1 -

The Ligaments hetween the cartilaginous Circles are very  
strong, and elastic ; and each of them is confined to two Car-  
tilages, without communicating with any of the rest; being  
fixed to the Edges of these Cartilages, much in the fame man-  
’ ner as the intercostal Muscles are inserted in the Ribs.

AS the Bronchia penetrate into the Substance of the Lungs,  
- they gradually lose their Cartilages ; but the muscular Lines,  
or Columnae, of *Morgagni* appear aS much, and sometimes  
more than before. The two Planes above-mentioned con-  
tinue, likewise, to be visible; and we observe very distinctly,  
-sometimes, even without a Microscope, a great many small -  
’ - Holes in the Pedicles of the Lobuli, and bronchial Vesicles, or

Celis, which open from within outwards.

**' - . .. USES» .. .**

- Respiration is performed by Organs of two Kinds, one of  
. which may be looked upon as active, the other as passive. The

Lungs are of the second Kind ; and the first comprehends, prin-  
- cipally, the Diaphragm, and intercostal Muscles.

- As soon aS the intercostal Muscles hegin to contract, the  
Arches of the Ribs are raised, together with the Sternum, and

. placed at a greater Distance from each other ; by which means, .  
the Cavity os the Thorax is enlarged on the two. lateral and an-  
terior Sides. -

At the same Instant, the Diaphragm is flatted, or brought  
toward a Plane, by two Motions, which are, apparently, con-  
trary ; that is, by the Contraction of the Diaphragm, and the  
Dilatation os the Ribs, in which it is inserted. The external

- Surface of the Thorax being thus, in a manner, .increased, and  
the Cavity of the Bronchia being, at the same time, and by the  
same means, less resisted, or pressed upon, the ambient Air

. yields to the external Pressure, and insinuates itself into all the  
Places where the Pressure is diminished; rhar is, into the Aspe-

**. ra** Arteria, and into all the Ramifications of the Bronchia, all  
the Way to the Vesicles. This is what is called Inspiration.

*' Z* i

This Motion of Inspiration is instantaneous, and ceafes in a  
Moment, by the Relaxation of the intercostal Muscles; the  
elastic Ligaments, and Cartilages of the Ribs, bringing them  
back, at the same time, to their former Situation. This Mo-  
tion, by which the Ribs are depressed, and brought nearer each  
other, is termed Expiration.

The pulmonary Arteries and Veins, which accompany the  
Bronchia through all their Ramifications, and surround the  
Vesicles, transmit the Blood through their narrow capillary  
Extremities, and thereby change or modify it, at least, in three  
different Manners.

The first Change, or Modification, which the Blood under-  
goes in the Lungs, is to have the Cohesion of its Parts broken,  
to he attenuated, pounded, and, as it were, reduced to Powder.  
The second is, to be deprived of a certain Quantity of Serum,  
which transpires through the Lungs, and is what we commonly.  
call the Breath'. The third is to be, in a manner, re-animated,  
by the Impression of the Air, whether the whole Body of the  
Air enters the Blood, whether the common Air is only the Ve-  
hicle os some finer Parts which are conveyed to it, or whether  
the Air only compresses, or shakes the Blood, as it pastes round  
the .bronchial Vesicles in the reticular capillary Extremities of  
the Vessels. , ...

The Cartilages of the Aspera Arteria, and Bronchia, serve, in  
general, to compose a Canal, the Sides of which will not sink in,  
or subside, by Compression, but will, nevertheless, yield to cer-  
tain Pressures and Impulses, without breaking. As these Carti-  
lages are not complete Circles, or Rings, and as their Crrcum-  
ferences are completed by elastic Membranes, they allow of  
these Dilatations and Contractions, which modulate the Voice;  
and as they are connected by elastic Ligaments, of a consider-.  
able Breadth, the alternate Elongation and Contraction hs the  
Bronchia is facilitated, in the Motions of Respiration. *IVin-  
siovst's Anatomy. .*

PULMO MARINUS. *ssusic. Aldrov. Eaeang. Syy. C. B. Ps*369. *Jons. Exang.* 56. *Bellon. Aquat.* 438. *(sese. Aquat.* 76o.  
*Rondel. Aquat.* 2. I3I. *Charlt. Exer.6%.* SEA LUNGS.

This Substance stoats in the Sea ; is of a pellucid bluish Co-  
lour, resembling, in some measure, that os Crystal; and is so  
tender, that it can hardly be taken out of the Sea entire. When  
recently triturated, and used by way of Ointment, it cures  
Gouts and Chilblains. *Dioscor. Dale.*

This Substance, according to *Lemery,* in his *Traili des  
Drogues,* contains a large Quantity of Oil, and of Salts, both Gf  
the Volatile, and fixed Kind. It removes the Hairs, when ap-  
plied to any Part covered with them. ' A Lixivium, prepared of  
calcined Sea Lungs, with a large Quantity of Water; if drank;  
is proper to dissolve the Stone, excite the Menses, and provoke  
Urine.

.PULMONARIA.

The Characters are;

The Calyx is like a Tube, pentagonal, and quinquefid.  
The Flower is monopetalous, cylindrical in its lower Part, and  
shaped like a Bason above, with its Margin cut into five round  
Segments. From the Sides of the internal cylindrical Part,  
which-are neatly fimbriated, arise five Stamina.

*Boerhaave* mentions six Species of *Pulmonacea*; which are,  
I. Pulmonaria, Vulgaris ; latifolia ; store albo. T. 136; *Bocrh.*

*Ind. A.* I93. *Pulmonaria maculosa.* Ossic. Ger. 662. Emac.  
8O8. Rail Hist. i. 488. Park. Pared. 448. *Pulmonaria Itala,  
rum ad Buglosseam accedens.* J. B. 3.5o5. *Symphytum maculosum  
sive Pulmonaria latifolia.* C.B.P.aco. .SAGE OF JERU-  
SALEM. - -

The lower Leaves of this Plant are large and oval, five or sir  
Inches long, growing on broad Foot-stalks, thick-set with fine.  
Hairs, of a deep Green above, and spotted with white Spots ;  
hut of a paler Green, and unspotted, underneath. The Stalks  
rise to he near a Foot high, having several smaller Leaves on  
them; and on their Tops grow several Flowers together, each  
in a long hairy Calyx, having then Brims appearing but a littie  
above it, of a redish Colour, being single, and Cup.sashion,  
cut at the End into five round Segments ; and are each succeeded  
by four rough Seeds, growing in the Bottom of the Calyx.  
The Root is small and fibrous. It is planted in Gardens, and  
flowers in *May ,* the Leaves are used.

This is accounted a pectoral, balsamic Plant, and good for  
Coughs, Consumptions, Spitting of Blood, and the like Disor-  
ders of the Lungs : It is, likewise, put into Wound-drinks, and  
traumatic Decoctions; heing agglutinating, and good to heal  
Wounds and Ulcers, and old Sores. *Millers, Bos. "Off.*

The Pulmonaria has a saltish, herby, glutinous Taste, and  
reddens the blue Paper pretty much ; it is very sweetening. It  
is used in Ptisans, and Broths made of Calves Lungs, for the Dis-  
eases of the Breast, when the Spittie is salt, or purulent. *Mar-  
iyofs Fournefort..*

2. Pulmonaria; Alpina; foliis mollibus, subrotundis; store  
coeruleo. *T.* I36. *Syniphytum maculosum.* Dod. p. I35.

3.’Pulmonaria; foliis Echii. *Ger.* 662. *Emac.* 80\*8. *Raii  
Hist. s.* 489. *Synop.* 3.226. *Tourn. Inst.* I36. *Bocrh. Ind.A.*Io 7. *Pulmonaria angnstifoiia rubente caeruleo flore.* C. B. P.  
262. *Pulmonaria angasiifolla.* Park. Paratio 248. *Pulmonaria  
rubro sare, foliis Echii.* J. B. 3. 597. *Symphytum maculosum  
seu Pulmonaria maxima, foliis auasi Saccharo incrustatis.* Raii  
Hiss' 3. 266. NARROW-LEAVED SAGE OF BETH-  
LEHEM.

This Plant is cultivated in Gardens, and flowers in *May.*Its Leaves are only used, end, in Virtues, agree with those of  
*the Sage of Jerusalem.* Dale.

A. Pulmonaria; folio non maculoso. *Clus. Hi* I69. *Symphy-  
tum, minus, non maculatum, Gcrmanicum, angnsiifolium, sto..  
~ribus e rubentibus caeruleis.* M. H. 3. 444.

5. Pulmonaria, major; non maculosa, *si. B.* 3. 493.

6. Pulmonaria , Orientalis; calyce Vesicario; foliis Echii;  
flore purpureo, infundibulisormi. *T. Cor. 6. Boerh. Ind. alt.  
Plant. Fol.* I.

This Plant contains a mild, benign Juice; but is no more  
efficacious in Disorders of the Lungs, than Borage, or Hounds-  
tongue, since it is equally proper in all Disorders where Me-  
oleines os a demulcent, emollient, and relaxing Quality, are  
indicated. '

\* It is, like Mallows, of an emollient, conglutinating, consoli-  
dating, moistening, and inspissating Quality. The Flowers or  
Leaves are recommended in a Spitting of Blood, an Hectic,  
and a Phthisis.. It is classed among the Vulnerary Plants, and  
accounted highly beneficial in Hoarseness, and long-continued  
Coughs. Hence it is proper in a Pleurisy, a Peripneumony,  
sand Hepatides, where Expectoration is required. It procures a  
free Breathing, and is beneficial to the Kidneys. *Hist. Plant,  
'-adscript. Boerh. .*

**PULMONIA. The same aS PERIPNEUMONIA.**

PULPA. The Pulp os Fruits,  
PULPEZLA. An Apoplexy.  
PULS. The sam'eaSETNOI.

- PULSATILLA. \_ -

S The Characters are j . ' . -

The Root is fibrous and perennial; .the Leaves are jagged',  
‘and surround’the Stalk like a Crown, as in the *Anemonardei,*'and *Anemone.* The Apex of the Stalk is expanded into a Pla-  
oenta, whose Base has its Bottom surrounded with a naked, hex-  
apetalous Flower, furnished with very numerous Stamina, which  
arise from the Bottom of the Placenta within the Petals. The  
'Ovary becomes a little globous Head,Io which grow Numbers  
-of- little hairy Hulks, furnished with a long hairy Sheath, ending  
. in a sort of long flender Capillament, like a plninous Tall.

*Boerhaave* mentions two Species of *Pulsatilla:,* which are,  
r. I. Pulsatilla; folio crassiore; & Inajore florei *Co B.* Ρ. I77.  
*Tourn. Inst.* 284. *Raii Synop.* 3.260. *Bocrh. Ind. A.* 39. *Pul-  
faiilla.* Ossic. *Pulsatilla vulgaris.* Ger. 3I4. Emac. 385;  
Park. Theat. 34I. Raii Hist. 1.633. *Pulsatilla Anglicapurpu-  
'.rea.* Park. Parad. loo. *Puls.atilla purpurea ccoruleave.* J. B.  
.3.409. PASQUE-FLOWER.

- Tins Plant is *so acrid,* that the mere Vapour of its Leaves,  
'rubbed hetween the Fingers,‘seems to bum the Nose, and pe-  
. netrate to the. Very Brain: It might be made use of in the Le-  
thargy ; the Leaves bruised are applied to Ulcers, but especially  
to the Wounds of Horses.

By the chymical Analysis this Plant yields some Marks of  
Acidity, a great deal of Sulphur and Earth, and a little fixt,  
- and no Volatile concrete Salt. *Martyns, Tournefort.*

*“ 1.* Pulsatilla; flore minore; nigricante. *C. B. P„* Iyy.  
*Bocrh. Ind. alti Plant.*

PULSATIO. Pulsation; that is, a morbid Sensation of  
.something beating in any Part. Hence a sort of.Pain, attended  
- with this fort of Sensation, is called a pulsatory Pain.

PULSILOGIUM. A Pulse-watch, or instrument to mea-  
sure the Celerity of the Pulse.\* *Sanctorties* is said to.be the first  
Inventor of this Machine; and Sin *John Flayer* has wrote a  
Treatise exprefly upon this Subject.

PULSUS. .

No Doctrine has been involved in more Difficulties than that  
of Pulses; since, in giving a physiological Account of them.  
Physicians have espoused quite opposite Sentiments; whilst some  
- doubt whether the Pulse is owing to the Systole, or the Diastole ;  
as, also, whether the Motion of the Heart and Arteries is one  
and the fame sor a Moment os Time: Others, especially among  
' the Antients, mention an incredible Number of different Pulses,  
most of which can neither be felt by the Touch, nor compre-  
bended by the Mind. Others run into the opposite Error, and  
will only admit os two or three different Kinds of Pulses.

- Others take different Kinds of Pulses for one and the same Spe-  
. cies, whilst others aflert, chat thoir Distinction is absolutely ne-  
cessary, to prevent Confusion and Blunders in Practice. Thus  
marry of the Moderns affirm a quick and frequent Pulfe to he  
. the same ; whilst others maintain, that the Distinction between

them IS of the last Importance in Practice. A vehementi.strong,  
large, and quick Pulse, are now-and-then said m bo of the fame  
Species; whilst others: will, have them to he entirely distinct :  
And, indeed, if we consult Experience, we shall hardly ever find  
two Physicians agreeing in their Appellations of the Patient’s  
Pulse. The Opinions of the Learned areuro less Various, with  
respect to the Use os the Doctrine of the Pulfes in Practice ;  
whilst some assert, that they are highly, fallacious Signs in most  
Disorders, and can only be of Use jn some Fevers; whilst  
’ others assert the Knowledge os Pulses so necessary to a practical  
Physician, that he cannot, without it,, form a certain ProT  
gnostic; especially with respect to latent Diseases; for which  
Reason, they, with the *Chinese,* greatly esteem the Knowledge  
os the Pulfes; and maintain, that they ought to be; sor a long  
tithe, accurately explored, in various Parts os the Body. But,  
in all Probability, the Origin of those Differences is, that the  
Antients were ignorant of the Circulation of the Pined, and  
invented different Species of Pulses, from the speculative and  
abstracted Differences of any solid Body, at different Times,  
varioufly impelled. But as.the Moderns have rarely applied the  
Doctrine of the Circulation os .the Blood to Pathology and  
Practice, so they have rested contented with the Rules os the  
Antients, with respect to Pulses, without attempting a just  
Account of their Nature and Differences, from the Discovery  
of the Circulation .of the Fluids. But, to lay. a Foundation for  
Certainty in this Point; and prevent suture Mistakes, I shall,  
from the Laws of Mechanics, and especially from the Circu-  
lation of the Blood, shew .the Nature, Differences, and pra-  
ctical Ufe of Pulses. .....

. But, before we proceed to this, we shall, for the sake of Ac.a  
curacy and Connection, give the Physiology, or natural Consti-  
Iution, of the Pulse; that the Truths connected with it may  
he the better discovered and explained. But here a Controversy  
occurs; which is. Whether the Motion os the Heart be the  
.same with the Pulse; or whether, at the same time the Heart  
is in its Systole, the Arteries are so too, and the Systole os the  
Heart and Arteries is the true Pulse; or, rather, whether the  
Systole of the Heart,and Diastole of the Arteries,are not recipro-  
deal; or whet her, when theHeart is in its Systole, the Arteries are in  
their Diastole ; and whether the Pulse is not the Systole, but,  
rather, the Diastole, os the Arteries;- *Seancrtus,* in his *Institap.  
Lib. 3. Parti. Sect. 4. Cap.* I. embraces the former os. these  
Opinions; and informs us, that the Heart and Arteries are di-  
lated, and contracted, at one and the same time ; and that it is  
rash, not to acquiesce in the Evidence os Sense. . He seems,  
indeed, in the Part now quoted, to oppose his own Opinion,  
.by a Doubt conveyed to his Reader, in the following manners  
"Is, *at* the same, time in which the Heart is contracted, and  
." expels its Contents, the Arteries were also contracted, it  
μ would follow, that the Arteries could not receive the Blood ,  
.".and, on the contrary, that at The time the Heart and Ar-  
." teries are at once dilated, the Heart could not receive the  
Blood from the Arteries; because these mutual Attractions

6i would hinder each other." Yet he answers this Doubt, ill  
the following manner, by telling us,- " That no Disadvantage  
" arises from this, fince the Arteries are hot so compressed, and  
" shut up, aS that they are absolutely capable of receiving  
" nothing ; but still retain a sufficient Cavity sor receiving that  
iC which is transmitted by the Heart; as, also, that the Heart  
receives Blood from the Lungs; and that the Arteries not  
" only receive Blood from the Heart, but, also, from the ad-  
" jacent Parts, and the Veins; in their Dilatation." But 'tis  
.easy to perceive, that this Doctrine is entirely inconsistent with  
the justest Notions of the Circulation oi the Blood ; of which  
*Sennentus* was ignorant.

But it is furprifing,that some, sufficiently acquainted with **the**Circulation of the Blood, should tread in the Steps Os *Senner-  
tus,* ’ and assert, that the Motion of the Heart, in its Systole, is  
the same with the Motion of the Arteries perceived in the Pulse j  
and that the Systole of the Heart, by way of Eminence, denotes  
the Pulse: By this means, they pretend to.refute those who  
. assert,that the Motion of the Heart and Arteries is not the same,  
but alternate. It is, also, surprifing, that so great Men as  
*Galen,* and *Johannes Baptista Montanus,* in *Lib.* I. *de Pulsibus  
dignose. Cap. ζ.* should affirm, that the Systole, or Contraction  
os the Pulse cannot be perceived; but eyen reject the Opinion of  
those who believe,that when the Pulse Vibrates,theArteryis in its  
Diastole. But we assert,with almost all the Moderns, that the Pulse  
is nothing but the Dilatation or Expansion *os* the Arteries by  
the Blood, protruded, by the Contraction of the Heart, from  
its Lest Ventricle, into the Arteries, which are stretched and di-  
lated by the Impulse of the Blood coming from the Heart, and  
communicated to the whole Fluids; then, after their Dila-  
tation, they not only recoil, and are restated to their former Fi-  
gure, but are, also, in some measure, farther contracted, and,  
with a new Impulse, propel the Blood more into the minute  
Arteries and Origins of the-Veins: For, according to *Betties,*

in *Tract, de Pulsibus,* the Arteries have a double Motion, the  
one a Dilatation, or the Impressions they make on the Finger;  
and the other a Contraction, or receding from The Finger j  
which, according to *Galen,* is not tothe perceived without great  
Difficulty-: For the Circulation of the Blood, on which Life  
depends, is carried on, without Intermission, by the reciprocal  
Motions of the Heart and Arteries : Nor, without these, can  
the Motion of the human Fluids he accounted for. When;  
therefore, the Heart is in its Systole, and expels its Contents,  
the Arteries are in their Diastole, and receive them. So, also;  
when the Arteries, in consequence of the large Number of spi-  
ral and muscular Fibres, of which they consist, contract them-  
’selves, the Veins and Heart are in their Diastole, and receive  
the Blood from the Arteries. *Galen* entertained the same Opi-  
rtion, which excellentiy quadrates with the Circulation of the  
Blood. For, in *Lib. J. Anatom, administr.* he telis us. *That  
the Pulsation of the Heart and Artcries is such, that tvhen the  
-Fieart is silled, the Arteries are emptied’, and when the Heart is  
'emptied, the Arteries are filled. Fcrnelius* is, alsio, of the same  
'Opinion: *For,* says he, *the Pulse consists of a Systole and Di-  
astolethe latter is a Dilatation or Expansion os. the Amery every  
iferase, whereas the former is a Contraction or Subsiding of it in  
'every Dimension.*

With respect to Pulses, there is no small Difference of Opi-  
IrionS and Sentiments; for almost all the Antients maintained,  
that all the Species of them were distinct, and different from  
each other; whereas some of the Moderns take the quick-, and  
the frequent. Pulsis for one and the fame, aS is sufficiently ob-  
vious from their Works. Others, fond of being thought un-  
commonly wise,, dissent from them ; and affirm, that there is  
so great a Distinction between them, that a practical Physician  
would look upon the Man aS a Fool, who should give them out  
for the same Pulse. But, in order to get clear of all Doubts  
and Difficulties, we shall more accurately investigate this Mat-  
ter. The Antients, then, were unanimously of Opinion, that  
since the Pulse was a local Motion, whatever was requisite to  
the latter, or could be affirmed or denied of it, was, of course,  
applicable to the former. Now, according to *Galen* and *Sen:,  
'nertus,* five Things are requisite to local Motion: First, a  
moving Cause. Secondly, the Space through which the Body  
is moved. Thirdly, the Time consumed during the Motion.  
Fourthly, Rest, when Bodies, moving in opposite Directions,  
rneet. -And, fifthly, the Instrument by which the Motion is  
perionned. From these they deduce the simple Differences of  
Pulses. Upon the moving Cause depend Vehemence and Weak-  
ness ; hence a vehement, or weak. Pulse are produced. On  
the Space or Quantity of the Distention, or Dilatation, depend  
the Greatness and Smalness of the Pulse. On the Time in  
which the Artery performs its Motion, depend the Quickness  
and Slowness of the Pulse. Accordingas the Artery remains long  
. or short in a State of Rest, the Pulse is said to be frequent, or  
rare. And from the Organ of the Pulse, which is the Artery,  
. and which is sometimes harder, and sometimes softer, arises a

Toft and hard Pulse.

But though *Senncrius,* in hiS *snsilitut.* defines a quick Pulse to  
he, when the Artery, in a short time, performs its Motion ;  
yet he afterwards confesses, that the Celerity of the Pulse can-  
not be estimated by Space, because that Space cannot he known  
by the Touch; for which Reason, in defining a quick Pulse,  
he orders us to regard the Quality of the Motion ; whether, for  
Instance, it is brisk, or stow. Hence *Fernelius,* and some  
others, have defined a quick Pulse, such an one as, in a short  
**time,** distends the Artery; and a flow Pulse, that which pro-  
duces the same Effect in a long time. *Bellini,* in *Tract, de  
Pulsibus,* informs us. *That it is a quick Pulse, which, upon the  
Application of the Finger, persists a very suort time ', whereas a  
stow Pulse continues longer.* According to *Sennertus, Fernelius,*and others, it is a frequent Pulse which has a short Time of  
Rest, or in which there is but a short Time interposed hetween  
each Diastole; a rare False is that which has a long State of  
Rest, or in which there is a long Time hetween one Distention  
Of the Artery and another ; or a frequent Pulse is that which,  
in a short time, distends the Artery, and becomes perceptible to  
the Touch ; whereas a rare Pulse only produces thefe Effects at  
longer intervals. The Word Frequency cannot, however, be  
properly applied to Motion ; but the Celerity or Slowness, the  
Intension or Remission, of the moving Force are properly com-  
petent to Motion-; since every Degree os Motion is to be esti-  
mated by its Celerity or Intension, and its Slowness or Remis-  
fion : But one Motion, considered in itself, cannot be Paid to he  
frequent, or rare ; but this Difference only holds, with respect  
to the Plurality and Number os Pulsations happening in a cer-  
tain determined Time. Thus, for Instance, the Motion, or  
Impulse, is said to be frequent, when, in half an Hour, Water  
Is an hundred times forced from a Syringe j whereas the Motion  
is said to he rare, when the Water is forced from it only thirty  
rimes during half an Hour. Thus, when a Globe, for In-

stance, is impelled, the Celerity of the Impulse may justly take  
place, with respect to each Stroke ; and yet these Strokes heap-  
plied more rarely, or at longer Intervals; and tnu, any Stroke,  
applied to a Globe, may be remiss, or small, with resp-ct to  
Violence, and yet frequently repeated.

This Doctrine holds excellently in those Motions which are  
not continual, but have certain Intervals of Rest, and in which  
this Distinction is of singular Use ; so that quick and frequent  
Pulses ought not tobe joined and confounded with each other.  
But .'ha far otherwise in the Motion of the Arteries, which is  
continual, and requires no Rest, in order to carry on a con-  
tinual Circulation of the Blood from the Heart to rhe Arteries,  
from these to the Veins, and from these to the Heart again.  
It is not to be imagined, that, when after the Pulse, or Dilata.-  
tion of the Artery, no Motion or S.roke is perceived by the  
Touch, the Artery becomes inactive, and remains in a State  
.of Rest, since we.have already shewn, that, immediately after  
its Dilatation, it not only by its proper elastic Force, but, also,  
in consequence of the Influx of the Spirits into its muscular  
Fibres, recoils, and is contracted ; by which Contraction the  
Bleed is forced into the Veins, and a fresh Dilatation os the  
Artery immediately succeeds. Hence the Pulse may Justly be  
compared to a Pendulum, which performs a continual oscilla-  
tory Motion from one Side to another, without any percepti-  
ble Rest. With respect to this continual Motion, which the  
Antients did not understand, but which is sufficiently compre-  
hended by the Moderns, there arises a Dispute, whether Fre-  
quency, and Celerity, applied to the Pulse, are separate and  
distinct from each other. We shall now examine this Difficulty  
in order to prevent Mistakes : When, therefore, in a Quarter  
of anHour, a Physician counts two thousand Pulses in a Patient,  
he calis the Pulse preternaturally frequent; when, during the  
same time, he in another Patient counts only a thousand Strokes,  
he pronounces the Pulse rare. Now, is another Physician, be-  
ing call'd, should denominate the frequent Pulse quick, and  
the rare one flow, the Question is. Which of them is in the  
right? I answer. Both ; for, fince the Motions of the Heart and  
Arteries consists in their continual Systole and Diastole, it is  
impossible, that, during a small Portion of Time, theNumher  
of Pulses should increase, and be observed greater, unless every  
Systole and Diastole of the Arteries should become more .  
brisk and intense, that is, be performed in a shorter time; justas  
.we observe in the Vibrations os Pendulums, which, the more  
numerous they are in a certain time, the more short and quick  
they must os course be ; for 'tis to be observed, that the Ce-  
lerity of one Pulse by itself cannot he perceived, because it  
hardly lasts an Instant. Hence *Sylvius,* that happy Practitioner,  
in *Prax. Med. Lib. i. Cap.* Ig. informs us, " That the Ce-.  
" lerity of the Pulse can be conceived in the Mind, though .  
" not estimated by the Touch." *Bellini,* also, in *T.r. de Pul-  
sibus,* speaks in the following manner: " A quick Pulse, he-

" cause it affects the Touch but for an instant, in a State but a  
" little receding from a natural one, either does not happen at  
" all, or, if it does, cannot be distinguished by the Touch;  
" fince the natural Dilatation of the Artery hardly lasts an In-  
" stant. Much less can the Celerity of the Pulse be percepti-  
" ble in a preternatural State." Hence 'tis obvious, that a.  
Pulse cannot be called *frequent,* unless it is, at the same time,  
accompanied with Celerity ; nor *quick,* unless it is frequent ,  
because one Sroke cannot he easily distinguished with respect to  
Celerity. Hence *Schelhammer,* in *T.r. de Pulsibus,* justly ob-  
serves, that the Frequency of the Pulse is not to be found with-

. out a concomitant Celerity. Hence the Reason, is obvious, why  
in physical Authors we never read of a frequent and (low Pulse  
accompanying each other, or os a quick and rare Pulse going  
thand-in-hand; which Species os Motions may easily be con-  
ceived to happen in an interrupted Motion,. but can never *oc-  
cur* in one of the continued and uninterrupted Kind. Hence

. it follows, that the various Species os Pulses are by no means  
to be refin'd to the Nature os any local Motion, or Impulse of  
a Body, so aS to lay a Foundation for asserting that os the  
Palfe, which can be affirmed of such a local Motion; for the:  
Antients were ignorant of the Circulation of the Blood, from  
which all the Species and Differences of Pulses ought to he  
sought, and accounted for. »

. ’Tis sufficiently known, that almost all Physicians, both an-  
. tient and modern, constitute a peculiar Difference between a  
quick and a vehement Pulse, since they call the former *intense,  
quick,* and *brisk,* and its Opposite *remise* ; and the latter *strong*and *robust,* and its Opposite *vvealc* and *languid.* And as they  
deduce the Celerity of the Pulse from its. Motion performed in  
a short time, so they derive its Vehemence from rhe strong or  
-weak Force of the moving Cause. But a considerable Diffi-  
culty occurs here ; Which is, whether a quick Pulse may nos,  
also; he called *a vehement one,* and accounted aS such, fince  
Celerity, in the Opinion of all Mathematicians,' is nothing but  
an increased, or more intense, moving Force. Bur an Increase,

**er an** Intension of the moving Force, or Celerity, is capable of  
producing considerable Effects, or of overcoming a great Re-  
sistance. Now the Vehemence of Motion is only properly  
- applied with respect to the Effects, when, for Instance, by the  
Action of the moving Cause, a large Quantity os moveable and  
**resisting** Matter is removed. Hence all who are Masters of  
statical .and mechanical Learning, agree, that the Celerity of **a**small Bedy may he able to remove a large Weight or Balk os  
Matter, since 'tis certain, that a Globe of a certain Diameter,  
moving with double Celerity, produces more considerable Effects,  
**than** a Globe ofdouble the Diameter, moving with less Celerity.

Besides, 'tis remarkable whet furprifing Effects are produced  
by some of the most subtile Bodies, such as Air, Ether, and  
Tire, when in a quick and rapid Motion. *Galen, in Lib.* 3.  
*de Different. Puls. Case.* 5. seems to think, that the Celerity  
and Vehemence of a Pulse are not much different from each  
other, as he informs ns in the following manner: " The Word  
*" Vihemence,* says he, is commonly used in order to express  
" some strong, and, at the same time, quick Action ; and the  
“ Persons who perform inch Actions, .are called σφοδροί." The  
. same Author, also, informs us, in the Part last quoted, that if  
he had a Power of giving Names to the Pulses, he would call  
the simple Quality, or Difference, of such Pulses as resist the  
Touch, ‘‘.Force or *Strength,* or some such thing; and the Dis.  
" ference compounded of this Strength, and the Celerity, *Fe-  
" hernenceP* But because the Word *Vehemence* is, by most Phy-  
sicians, used to express one of the simple Differences of Pulses, he  
' thinks it IS to he retained, and not changed. But that this As-  
. shir may be rendered more clear and perspicuous, we are here,  
according to the Principles of Statics and Mechanics, to sup-  
pose that Vchemence may he considered in a double respect,  
either with respect to the Bedy in Motion, or with respect to  
the Augmentation of the moving Force. In general. Motion  
is said to he Vehement, when it has great Force, produces great  
Effects, or overcomes much Resistance.1 Hence a Pulse is said  
to he Vehemens, which makes a strong Impression on the Hand  
which feels it; whereas, that is called *languid* and *wale,*which affects the Hand in a faint and languid manner. But  
Vehemence, with respect to the Bedy in Motion, is, when either  
its Quantity of Matter, or its moving Force, is great. Hence  
a Bedy of great Bulk, and moving Force, is of great Force  
when put in Motion, or produces a Vehement Motion.

The Word *Vihemence* is, also, applied to the Increase of the  
Motion, that is, when it hecomes briIk, intense, and quick.  
Hence 'tis obvious, that a Very small Body may, *fry* being put  
into a quick Motion, produce Very considerable Effects; hut  
that a still more considerable Efficacy is exerted, when the  
Quantity of Matter, and the Celerity of Motion, concur.  
Though, therefore, according to *Galen,* a quick Pulse, con-  
sidered in itself, .is never free from Vehemence, yet that Pulse  
is only properly and strictly called *vehement,* where a large  
Quantity *os* Spirits animate the Fibres of the Heart. This  
Pulse, when without Celerity, is calsed*strong* but, when accom-  
panied with Celerity, *vehement,* and at the fame time large,  
when pot a small, hut a great Quantity of Blood is forced into  
the Arteries by one Systole of the Heart; and then, which is the  
Sign of a Vehement Pulse, it beats the Finger strongly, and  
with a kind of Violence. But because it is not necessary, that  
under a quick bystole- os the Heart there should always be a  
great Quantity of Strength or Spirits, nor that the Blond should  
always be expel'd copiously, but few Spirits are often sufficient,  
hence the Artery is not in this Case forcibly struck, though the  
Pulse is at the same time quick. .'

- Since the Antients, as we have already observed, deduced  
she Species of Pulses from the Nature of local Motion, and  
feigned as many Species of Pulses as there are Species of Mo-  
tion ; so there are, especially in *Galen,* numherless Differences  
of simple and compound Pulses described with respect to Time,  
Space, Instrument, Order, Equality, Proportion of Strokes,  
and moving Force. But afterwards, when they found these  
spec lossy contriVedDifferences either incomprehensible, or use-  
less in Practice, theyjustly exploded and discarded them. Thus  
*Job. Bapt. Montanus, in Coasts* 256. frankly confesses, that  
he was ignorant of the minute Differences of the Pulses ; and  
telis us, that he believed *Galen* had something of the *Greek*SUhtilty about him, and laugh'd in his own Mind, when  
he was reducing the Kinds of Pulses to their several Species.  
He afterwards adds, that though these Differences may possibly  
be conceived in the Mind, yet they are not all perceptible by  
the Touch. *Caspar Hoffman, in Institnt.* speaks in the fol-  
lowing manner: " The short Compendium of *Goldaldinus, de  
" Pulsibus,* is, in my Opinion, preferable to the three Vo-  
" lurnes of *Galen,* concerning the Difference, Causes, and  
" Prognostics, .os Pulses. These last Works I take to he  
*" Herophilcan* Subtilties, which he might have invented, not  
" only when young, hut, also, when he had the Advantage  
" of Experience and Practice. This Opinion I was induced

to entertain *by 'Montanus, iis Consol. 2SJ.”* I was told by d  
Friend in *Italy,* who heard the Account from the Mouth of  
*Bartholmuaeus Schwalbius* himself, **a** celebrated Physician of  
*Prague,* that this Practitioner was content with three Differ-  
ences of Pulses, an equal, and an unequal ; a quick, and a flow ;  
a strong, and a weak\* *Plempius,* also, in *Fundam. Medic. Lip-*5. *Sect.* 2. *Cap. 2.* telis us, " That Physician? trifle egregi-  
" ousty about Pluses, fince the Subtilty Of some of their Minds  
" had induced them to constitute Differences of Pulses, which  
" could not be perceived by the Senses.” The celebrated *IPese  
sehius, iuOpcr.* telis us, "That, in the whole Doctrine sqf  
" Pulses, many things uncertain, superfluous, and imaginary,  
" have long ago been discovered by the Learned, who have, oby  
" served a quite different Motion in the Circulation of the  
" Blood, which they ascrihe to the Pulsation and Vital Force  
" of the Hears, whilst others attempt to account for it by  
" Inventions of their own, rather than by mechanical Reasons.''  
*Sylvius* has reduced the numerous Differences of Pusses invent-  
ed by the Antients, to three Heads, that is, the Strength, **the**Largeness, and the Frequency, of the Pulse. By a strong Pulse,  
he means one of the Vehement Kind, which with a certain  
Force strikes the Finger that touches it. The weak Pulse is,  
when it gentiy, or flightly, affects the Finger. The large Pulse  
is, when the Artery is dilated much ; and the small, when it **is '**only a little dilated, or expanded. The frequent False is, when, -  
in the same Space of Time, the Pulsations happen oftener than  
atOther times, or more frequently than in other Patients. And  
the rare Pulse is, when the Strokes or Pulsations of the Artery, .  
happen less often than they used to do.

But, that we may reduce things to the hetter Order, and esta.t  
blish the genuine Differences of Pluses, which occur in Practice,  
both in a natural and preternatural Sure, we must, first, from  
the Principles of Mechanics, suppose that all Motion is quick  
or flow; for Celerity and Slowness are genuine Properties os  
Motion. Hence *Galen, in Lib. de Pulsibus ad Tyrones, Cap.* 3i  
justly informs us, that Celerity and Slowness properly helong  
to Motion; that the former is a brisk, and the latter a stow  
and remiss Motion ; and that from these we were to form **a**kind of comparative Judgment concerning the natural Pulse.  
Secondly, all Motion is performed in a large, or in a respect-  
IVely small Space , and is consequently either Vehement, or lan-  
guid. Thirdly, with respect to Order, Motion is either equal-  
or unequal ; and the Equality is to he understood, both with  
respect to Time or. Celerity, and with respect to Magnitude by  
Vehemence. And, fourthly, with respect to the moveable  
Body, Motion is either great or small.

Now we suppose, that the Motion of the Heart and Arteries  
is continual, and consista of the reciprocal Systole and Diastole,  
without any interruption ; for which Reason, every False in  
either large or small. The large is, when much Blood is by  
**one** Contraction of the Heart thrown into the Artery; in con-  
sequence of which, its Dilatation is large and full The small  
Pulse is, when,/ in consequence of little Blond forced into the  
Artery by one Systole of the Heart, the Expansion of the for-  
mer is but small and inconsiderable. Besides, the Pulse is either  
quick or flow. The quick is produced, when the Heart quick\*  
Iy, and in a short time, contracts itself, and throws the Blood  
into the Artery. The flow, on the contrary, is, when the Com.  
traction of the Heart requires a longer Time, or when **the**Conveyance of the Blood into the Artery lasts considerably  
Iong. But, as, in every Pulse, the Degrees of Celerity and  
Slowness cannot be accurately estimated and computed, because -  
they happen in a Moment, hence, from the Frequency, **that**is, when, during the same time, the Expansion of the Artery is  
Observed\* oftener than at other times, the Celerity of Pulses  
ought to be determined ; but in such a manner, that the Free  
quencybe only made the Sign, Characteristic, or Measure, of the  
Celerity, and the Rareness of the Slowness; because Frequency  
is not applicable to any Motion, considered in itself. Bus, in **a**continual Motion, which, however, consista of different Species,  
a Systole, for Instance, and a Diastole, where one is perceived, -  
and the other not, we ought in Justice to make an Estimate of  
the Celerity-from the large Number of the perceived Motions,  
or Strokes. Thirdly, .the Pulse is either equal or unequal j  
equal, when there is an exact equality with respect to the Ce.. -  
lerity or Frequency os the succeeding Pulses, as, also, with.  
respect to their Largeness and Smainess. The Pulse is said to  
he unequal, when one Stroke is large, and another small **and**weak ; or when one is quick, and the other Very stow ; so that  
the Pulse seems to he intermittens, though the Intermission of  
the Pulse may he more properly referred to that Species of In-  
equality which consista in a great Slowness. Fourthly, the Pulse  
is either Vehement and strong. Or weak : The Vehement Pulse  
is, when the Systole of the Heart is performed by a large Quan-  
tity of moving Force, or Spirits; and the weak, when the  
Heart Is contracted by a small Quantity of Spirits.

**The** Differences, formed by the Antients, Os the vermicular,  
-formicating, tremulous, serrated, and caprizating Pulse, de-  
**pend** partly on **the** Inequality of the Pulses, but, most of all,  
on the Convulsion os the Coats composing the Arteries; for  
which Reason they are almost always to he esteemed danger-  
ous in acute Disorders. AS for the hard and soft Pulse, these  
depend only on the State and Condition of the Artery; for,  
when, in consequence of an excessive Pain, Spasms, or Con-  
vulsions, the Coats of the Artery become hard, so that the  
**.Resistance** makes a strong impression on the Touch, the **Pulse is**said to be hard. The soft Pulse is, when the Fibres of **the**Coats of the Arteries are flaccid, relaxed, and moist. When  
**a** large and Vehement Pulse concurs With such a soft State rys  
the Arteries, it is called *an undulating Pulse,* which is the  
Forerunner of a prosufe and copious Sweat.

From these simple Differences, we may easily discover what  
Species of Pulses may be joined with each other, and what not.  
First, then, there is a Pulse compounded of the large and quick ;  
of the'large and Vehement; of the strong and qhick; and of  
the Vehement and small. Secondly, there is a Pulse compound-  
ed of the frequent and weak, and of the quick and small.

- There is, also, a stow and a large Pulse, ssuch as that which  
.. happens in a natural State, and in plethoric old Persons, aS,  
also, in some melancholic and scorbutic Patients. But there  
is never a quick and a flow Pulse, nor a stow and a rare, n0ra vehement and weak Pulse, unless we intend to confound  
Words. ;

’ - AS the Motion os the Heart and Arteries depends, first, upon  
the Quantity and Strength of the spirituous, elastic, and ex-  
pansive Substance, contained in the Blood, and nervous Fluid;  
secondly, on the' due Tone of the muscular Fibres of the  
Heart and Arteries ; and, thirdly, on the proper Temperature,  
.Quantity, and Consistence of the Blood, so it is to be deduced  
and accounted for from these Sources. Now 'tis certain, that  
Lise, Health, and the due Order of the whole Body, depend  
upon a proper and equable Circulation of the Blood and Hu-  
mours through the solid Parts; so that tho better regulated,  
and the more equable, the Circulation is, the mom perfectly  
Nature preserves herself, and cures the Diseases incident to her;  
and, on the contrary, the more this Circulation recedes from  
a due and equable State, the weaker Nature is said to be, and  
the more subject to Misfortunes and Diseases. 'Tis, therefore, of  
the greatest importance, that the Physician should knowtheCir-  
culation peculiar to eachPatientboth in a natural and preternatu-  
ral State, that he may he the better able to form a Judgment  
Of their Disposition to Diseases, and of the Nature and Event  
of their Disorders. Now everyone must own, that the Circu-  
lation of the Blood cannot be better investigated than by feel-  
ing the Pulse, not in a superficial manner, but frequentiy, and  
for a sufficient Time ; for the Pulse not only discovers the Im-  
perfections and Strength of the whole Body, but, also, the  
Nature os the Blond, and the State of the various Secretions.  
And, as a Pendulum of a Clock,- by its equable and regular  
Vibrations, manifesta the Worth os the Clock ; so the Pulse  
discovers the Habit os the Patient, and the Vigour orDepra-  
vation of\* all' his Functions.

- We now come to inquire what a moderate; constant, and  
equable Pulse is, since its is, as it were, the Rule and Measure  
by which we are to judge of the rest. A moderate Pulse,  
therefore, is that which is large, but neither quick nor flow,  
hard nor unequal. This is the Pulse with which all others ought  
ro be compared, and which denotes the best State of Health,  
**the** Absence of all preternatural and foreign Things, and a due  
and temperate Degree os Heat; for when such a Pulse is pre-  
fens, "the Fluids are duly spirituous, the Fibres possessed of  
their natural Tone, the Blood temperate and fluid, and con-  
sequently the Transpiration free, the Nutrition good, the ani-  
mal Functions. Vigorous, the Secretions duly carried on, and  
**the** Patient in a State of good Health. But when the Pulse is  
quicker,-and consequentiy more frequent than usual, it indi-  
cates a preternatural Irritation os the Heart, as **the** Antients  
express is, unless it proceeds from external Causes ; but if  
fuch a Pulse continues song, it infallibly denotes a Disorder ac-  
compansid with an Increase of Heat, and even a Fever. It  
is generally produced hy an inordinate intestine Motion of **the**Blood, and a Change induced on the Crasis of the Spirits by  
an Admixture os heterogeneous; and often caustic Particles.  
When the Pulse is vehement, and, at **the** same time, quick,  
it indicates a feverish Intemperature, an Admixture of some-  
thing heterogeneous with the Blood, Lymph, and Spirits ; but,  
at the fame time, a large Quantity of Strength and Spirits. If  
a vehement and quick Pulse is, also, large, the Circulation of  
**the** Blood is briik, **rhe** Heat and Thirst great, and the whole  
Habit red and turgid. Where the Pulse is small, and little  
Blood is conveyed from the Heart to the Arteries, and from  
the Veins to the Heart, the Circulation os the Blood is saint  
'and .languid- Hence the Transpiration and Secretions are but

small, and the Strength little: But, if a small PUhe is, st’the  
same time, weak and frequens, or quick, it denotes a'great  
Languor of the Strength, a preternatural intestine Motion,  
and a weak Circulation of the Blond; and, is this Species of  
.Pulse continues long, it indicates Malignity, and great Danger-\*

A flow Pulse generally denotes a Viscidity, Thickness, and  
weak Circulation of the Blued, together with a Languor of  
the Secretions; but if it is at the same time weak, it is dan.,  
gerous, and raises a Suspicion os a total Loss of Strength. But  
a Pulse which is flow and large, denotes sufficient Remains  
os Strength, Tension, and Thickness, of the Fibres, os the  
Heart and Arteries, and a Viscid and tenacious Bloed. All un-  
equal Pulses are very bad, since they denote, that there is  
neither a due Influx of the Spirits, nor a proper and equal  
Mixture of the Bloed ; bur, particularly, such Pulses always  
prognosticate unlucky Events, when they are weak. Intermit- .  
tent Pulses are, also, of a bad Kind, or generally accounted  
the Presages of Death. Bur it is not universally so; for ati  
intermittent Pulse frequentiy happens without Danger, where,  
for Instance, the Symptoms are of a bad Kind, and the Pa-  
tientis Strength still entire. Hence this Species of Pulse frequentiy  
happens in hypochondriac and melancholic Patients, where the  
intestine Motion of the Bloed is diminished by its Thickness.  
But when the Pulse is weak and quick at the same time, it  
generally prognosticates Death. An herd Pulse generally indi-  
cates PainS, Spasms, and Convulsions, because the Fibres os  
the Heart and Arteries are spasmodically constricted. The irre-  
fular, caprizating, and discontinued Pulses, denote a Very bad  
rate of the Body, both with respect to the fluid and solid

Parts. - '.

' "It is carefully to be observed, that one Kind of Pulse is not  
found in all Persons ; for as the Pulse depends on the Tone of  
the muscular Fibres; on the Influx of the Spirits, and the Na-  
ture and Temperament of the Blond, and as all these are fur-  
prisingly Various in human Bodies, with respect to Age, Sex,  
the Season os the Yeas, the Climate, the Method of Life, the  
Sleep, and the Passions of the Mind, so, also, the Pulses Vary  
from each other according as these Circumstances differ. Thus  
Men generally have a large and.vehement Pulse, and Womery  
one of a more stow and weak Kind; for the former, have  
stronger Fibres, and an hotter Blond, than the latter: For this  
Reason, also, the Circulation of the Bloed is briiker in Men  
than in Women, and the former do not generate such Loads  
of redundant Blond and Humours, as Women, who are gene-  
rally weaker, and more subject to Diseases. Choleric Persons,  
and those of sanguine choleric Constitutions, have a larger,  
quicker, and more Vehement Pulse, than phlegmatic and me-  
lancholic Persons; for which Reason the Fluids move more  
quickly, the Excretions are made more expeditioufly, and .the  
Blood is more fluid, in the former than in the latter; for the  
Blood of the former is impregnated with a larger Quantity of  
oleous and sulphureous Parts, which are, as it were, the Source  
and Matrix of Heat, and a spirituous Quality. Thus, also,  
those of a flender Habit, who have strong Fibres, and large  
Vessels, have a larger and stronger Pulse, than those who are  
sat, have lax Fibres, and narrow VefielS. Hence they are,  
also, 'sounder, more robust, and more capable of enduring Fa-  
tigue. This is, also, the Reason, why those who are natur  
rally thick and sat, are more readily seized with Sickness, **and**destroy’d by it, than those of flender Habits. . .

: In Infants and Children the Pulse is frequent and soft,  
whereas in old Persons it is stow and large, whilst in young  
Persons, and those full-grown, it is large and Vchement ; for,  
generally. Infants and Children generate a large Quantity of  
Humours, which are necessary to their Growth, and collect  
a great deal of Sordes, which is the Reason why Infants and  
Children are more generally seized with Sickness, and more  
readily die of it, than Youths and Adults. Old Persons have  
thick Bloed, but rigid Fibres; for which Reason their Pulse  
is hard, and makes a forcible Impression on the Touch.' But  
in Infants and Children the Pulse is soft, on account of **the**Tenderness and Laxity of the Fibres. The Pulse is, alfo,  
changed by the Season of the Year, the Exercise of the Body,  
the Aliments, and the Affections of the Mind. In the Middle  
of the Spring, the Pulse is large and Vehement; at this Season,  
also, the Strength is greatest; for which Reason Persons are  
at that time most rarely sick, and recover most easily. In **the**Middle of the Summer, the Pulse is quicker and weaker, he-  
cause, by the intense Heat, the Strength is impaired, whilst  
the intestine Motion of the Fluids is greater than it usually is.  
In Autumn the Pulse is flower, softer, and weaker, than at  
any other Season, and in the Winter harder, a little more Ve-  
hement, and flower. Among Kingdoms and Climates, those  
which are hot and sultry, may he compared to the Middle of  
the Summer ; those which are cold, to the Winter ; and fuch  
as are temperate, to the Spring.

Exercise increases the. Pulse, and consequently the Circula-  
non of the Blood, whilst an idle and inactive State renders  
the Pulse stow, weak, and languid, and diminishes the Circu-  
lation os the Fluids. Spirituous Aliments render the Pulse  
Erge, vehement, and frequent. The Pulse of such aS are afleep  
is flow, small, and languid ; but as soon as *they* awake, it  
forthwith hecomes large, quicker, and stronger. The False of  
those who are angry is large) Vehement, and quick, that of  
such aS are frighted, frequent, small, and inactive; and of  
those who are sorrowful, small, languid, and stow. So that,  
according to *Ferneliui, in Lib.* 3. *de Pulsibus,* " The common  
" and ordinary Affections of the Body change the Pulse; so  
" that, without duly adverting to these Affections, the Pulse  
" cannot he certainly understood,- nor can it he determi-  
“ ned how far, it recedes from a natural State, in conse-  
" quence Of Diseases." The natural Pulse is, therefore, to  
he felt and observed, not immediately aster Exercise, Bathing,  
immoderate Eating, drinking Wine, or other Causes, which  
exagitate the Heart and Spirits; for we are to determine no-  
thing about the Pulse, till the Force of external Causes has  
ceased, and all Perturbations of the Body are allay'd; for the  
Pulse is the most certain Sign and Criterion for judging os the  
Motion of the Heart and Bleed. But if the Pulse alone is ob-  
served, without paying a due Regard to other Circumstances,  
it may lay a Foundation for forming a false Judgment; because,  
aS *Celsus* says, in *Lib.* 3. *Cap.* 6. the Pulse may be disturbed by  
a thousand things. ‘ -

.There has almost always been a considerable Dispute among  
Physicians, what Pulse is essential to Fevers; or constitutes  
’ their pathognomic Sign. Many of the Antients, among whom  
Garde, was the first, inform us in their Works, that a quick I  
and frequent Pulse denotes a Fever. But many of the Mo-

, dems take a frequent Pulse for the genuine Sign and Characte-  
ristic ol a Fever. Thus *Sylvius,* in *Prax. Med. Lib.* **2.** speaks  
in the following manner: U A preternaturally frequent Pulse is  
" the Sign, which, at all times, belongs to a Fever alone,  
or and is consequentiy its pathognomic Sign ; so that, when this,  
" Sign is present, a Fever is present; and, when it is absent,

so is the other, also ; nor is. any other Sign universally pro-  
" per to all Fevers, hitherto discovered by Practitioners. ":For all other Signs do not so properly denote a Fever, as the.  
Species, the Degree, or the Time, of a Fever. *Ettmuller* telis  
us, " That a preternaturally frequent Pulse is, justly accounted  
" the pathognomic Sign of Fevers, by *Sylvius,* both in his  
*." Dissertatio de Natura Febrium,* and in his *Praxis,* whatever  
*Ca Deusingius, inTract.de Disquisitione Antis.sivana,* may affirm  
\*? to the contrary.'' *Decker,* a practical Physician of *Hol-  
lands Not. ad Barbette,* informs us, " That there is a Fever,  
" where-eVer a preternaturally frequent Pulse is observed."  
*Schelhammer,* In *T.r. de Puls,* telis us, that in all Fevers there  
is a frequent Pulse, which, when accompanied with Heat; is  
jtheir -pathognomic Sign.. The celebrated *Bohnius,* speaks in  
the following manner “ In a frequent Pulse, the Strength of  
" the Heart seems equal to the morbific Cause, is this fre-  
" quent Pulse -remains in an uniform manner, and is conse-  
". quentiy the pathognomic Sign of Fevers; but if a.Weak-  
" ness of the Pulse is combined with its Celerity, it indicates  
" Loss of the Strength more or less, as inore or fewer and  
" vehement Strokes are observed. " Other Authorities would  
he os no Use; only we must observe, that, upon a falseHypo-  
thesis, not only the Antients, but, also, many of the Moderns,  
made a Distinction between quick and frequent ; for they called'  
the *Pdisefrequent, is* within a certain , time frequent Pulsations  
**were** made, whereas by a quick Pulse they, meant one os **the**the ychement .Kind. Hence *lVillis,* in *Tr. de Febribus,* calls  
thatasirdni/e *Pulse,* in which the Arteries vibrate Vehemently  
herd quickly ; where he, also, asserts, that *if* the Pulse becomes  
more-vehement, the Fever is augmented.. *Caelius Aurelianus,*in durAI. *Acut.* tells us, “ That the Sign ofFeverS is an in-

tense Heat, and a vehement Pulse, unless it should be pro-  
p- duced by some externalCause." ί ’ 1

: r For .these Reasons *Brown, in Observationibus Medicin.*every-where asserts, that a quick and a. weak Pulse are con-  
trary to each other; so that by the Word *quick,* 'tis obvi-  
ous, he meant *vehement.* Tho' Authors hardly as yet seem  
Io have formed distinct Notions of Pulses, yet all, both antient  
and modern, seem to agree in this, that a frequent Pulse in  
**every** Species os Fever, whether continual, or intermittent,  
whether benign, or malignant, whether in its Beginning, or  
at its Height, proves fuch a Fever to he present: Hence they  
always join the frequent either with the quick, or with **the**weak. Pulse ; so that they agree, that the *frequent* Pulse is ra-  
ther to be called the *essential Sign of servers,* than the *quick,*which none of them, will hardly assert to be found, either in  
‘the Beginning or Honors os Fevers, orin any of the malig-  
**'nant**'Kind.

But, froth what we have supposed, it is sufficiently obvious,  
that these Differences may he excellently reconciled, since the  
quick Pulse is nothing else but the frequent, which is the true  
pathognomic Sign of Fevers. But this Frequency is either  
greater or less, and associates itself with the great or Vehement,  
or with the small and weak, according to the Diversity of Fe-  
vers, and the Times of the Disease. A frequent Pulse, when  
weak and small, is scarcely ever good, since it denotes a lan-  
guid and flow Circulation of the Blood. But a frequent, large,  
or Vehement Pulse, such as is generally observed in the Height  
of continual Fevers, denotes a briflt Circulation of the Blood,  
and an increasedHeat of the Body. In investigating the Cause  
of a frequent Pulse, which is generally preternatural,, and ac-  
companies several Disorders, we shall follow the accurate  
*Bellini,* who, in *Tract, da Pulsibus,* accounts for the Motion  
of the Heart from the influx of tho Blond through the.Coro-  
nary Arteries, and of the nervous Fluid through the Nerves  
into the Fibres of the Heart; from which he concludes, that  
the Muscles of the Heart are most frequently moved, when  
the nervous Fluid is most frequently convey'd into them, which  
happens when it is forced into them by a sufficient Quantity  
of Blood flowing, forcibly into the Brain. Now, thy a fre-  
quent Contraction of the Heart, a frequent Pulso is produced;  
which indicates, that a proper Quantity of Blood is convey'd  
to the Brain, and that the Brain is forcibly pressed ; which will  
happen, either when the Blood stagnates therein, in conse-  
quence of an Obstruction of its Veins ; or when the Blood  
contain'd in these Veins cannot stow into other Parts, the  
Blood, in the mean time, stagnating, either in the internal  
Parts, or in the LungSs; or when the Blond is thrown into  
a State of Effervescence, by which it assumes a Tendency to  
Inoye in every Direction with a greater Impetus, and by that'  
means presses tho Brain more powerfully. The Muscles of the  
Heart, also, move more frequently, when irritated by anyssti-  
mulus. If, therefore, the Blood is too acrid, or hot, so aS to  
stimulate the SinuseSOf the Heart, the Heart will be more fre-  
quentiy contracted, and the Frequency of the Pulse will indi-  
cate a stimulating Quality in the Blood. \* '

. Since we have shewn, that from the Pulse we are to form **a**Judgment; not only of the Circulation and Temperature of  
the Blood, but, also, of the Motion of the Spirits, and **the**Strength of the Patient; so the Knowledge of the Pulse, **and  
a** due Attention to it, must be os singular U se to the Physician,  
not only in investigating the Natures os Disorders, and forming  
a right Judgment concerning them, but, also, in prescribing .  
Medicines for their Cure. But it is to he observed, that **the**Pulse is to be carefully, and not superficially, consulted. **The**Physicians 'os *China* are far more careful in this respect, than  
those of *Europe so sot* those often spend a whole Hour in  
feeling the Pulse, whilst the Physicians of our Country have  
hardly Patience to seel above two Pulsations; a Practice highly  
culpable, since after ten Strokes of the Artery, an Inequality,  
or Intermission, often occurs *ῤ* which happens whilst the unequally  
mixed Blood passes through the Heart. The Pulse is; also, to he  
felt in both Wrists, in the Neck, and in'the Temples, since  
'tis certain from Experience, that the Pulse in the Wrists fre-  
quently varies, and may be more commodiouily felt in one than  
in another. We ought, also, to advert to the Pulses of other  
Parts. Thus, sometimes, hypochondriac Patients perceive **a ‘**large Pulse under the Ribs on the Left Side; which happens,  
when a quick, and Viscid Blood, .exagitated by Heat, or any  
other Cause, endeavours toi procure a quick Passage through  
the Pancreas and Spleen; but, stopping in their narrow Vessels,  
produces a Pulsation, and a kind of pricking Pain. Hence  
*Job. Ant. Vander Linden,* in *Select. Medic,* tells us, **." Thai**" the Blood, in this Case, raises a kind of Tumult within, by  
" pricking and striking on; the Spleen." How. intense the  
pricking\* Pains of the Spleen are, some found Persons experi-  
ence, as soon as they are over-heated. *Tulpius,* in *Cent.* **2»***Obs.* 28. mentions a Man who had a preternatural Pulsation  
in the Spleen... In continual and malignant Fevers, a large in-  
ternal Pulsation in the Veins of the Head generally denotes **a**subsequent Delirium; fince it is a Sign, that the Blood there  
congested circulates flowly, till at last, becoming stagnant, **it**produces a Violent Inflammation of the Meninges. *Hippocra-  
tes,* in *Coac. Prance,* informs us, " That if a large Pulse arises  
" from an excessive Ebullition of the Blood, so **that in Fevers**" the Veins of the Temples beat, and the Face is turgid,  
" without a Softness os the Praecordia, there is Reason to su-  
" spect, that **the** Disease will he long, and that it will **not**" terminate without a large Haemorrhage from the Nose, an  
t( Hiccup, Convulsions, or Sciatic Pains," The Reason of  
this, in my Opinion, is, that the redundant Blond seeks for an  
Outlet, either by the Nose, or the haemorrhoidal Veins ; and  
the sooner this happens, the sooner the Patient is freed from  
his Disorder. , '

When a Pulsation is observ'd in any Parr of the Body, where  
**at** other times it is not felt, we may certainly conclude, that  
the Part is inflam’d, **and** dispos'd to **a** Suppuration; especially  
when it is accompanied with Tumor and Pain. An hard Pulse  
is almost an infallible Sign of an Inflammation in the Membrar  
nous Parts, for this Hardness of the Pulse, or excessive Tension.  
**and** Vibration Of **the** Artery, indicates something of **a** spasmo-  
dic Nature, arising from the Consent of the Parts, and pro-  
duc'd by the Inflammation and Pain. The Pulse of Persons  
labouring under Disorders of the Breast, Or a Palpitation os  
the Heart, is generally frequent, unequal, and languid. But shch  
**a** Pulse, unless when vehement, is accompanied with nopreter-\*  
natural Heat; and happens because the Blond does not pass  
thro' the Sinuses of the Heart, and the Lobes of the Lungs  
In Weakness, and a Disposition to Syncopes, the Pulse is gene-  
rally small, rare, and languid; but if the Pulse is absolutely im-  
perceptible, the Body cover'd with a cold Sweat, and the  
Functions of the Mind are not totally destroy’d, I have frequently  
observ'd, that the Patient infallibly dies in fix Hours; and such  
**a** Situation I have seen twine produc'd by Corrosive Poison. It  
is to he Observ'd, that about the Critical Times in Fevers, when  
Nature endeavours to throw Off the superfluous and Peccant  
Matter by Stool Or Sweat, the Pulse, the’ languid, is yet more  
regular, and less frequent, which is a Certain Sign of Recovery..  
But if the Pulse is soft and undulating, in is **a** Sign, that **a** salu-  
tary Critical Sweat is juft Coming on.

It is, also, to he observ'd, that the Pulse is Chang'd by Medi-.  
dines. Thus, after drastic Purgatives, which Procure too many  
Stools, the Pulse is generally preternaturally quick. After  
Venesection, especially in plethoric Habits, the Pulse becomes  
quicker, a Sign that the Circulation Of the Blood, in Conse.  
quence Of its having a larger Space, is happily increas'd ; since,  
by this means, a Suppression Of the Menses or Haemorrhoids,  
is generally remov'd. Tis Certain, not Only from the Autho-  
rity of *Sydenham,* but, also, from Experience, that after the  
Use of Chalybeates, the Pulse is quicker, the Face redder, and  
the Heat greater. Strong Sudorisics, Compos'd of Volatile Oleous  
Substances, greatly increase the Pulsation Of the Heart and Ar-  
Aeries. On the contrary. Anodynes, Opiates, Preparations of  
Nitre, precipitating Powders, Acids, and sixth things as dimi-  
nish the intestine Motion of the Blood, and fix its Sulphur,  
render the Pulse calm and moderate in Pains, Inflamma-,  
tions, and **a** febrile Intemperature. Such an Effect I, also, once  
saw produc'd by a due Mixture of Nitre and Camphire. As  
Dr. *Willis* has justly observ'd in *Tract, de Pehribus, sotnt very*useful and important Rules for the Exhibition *of* Medicines  
**are** drawn from the State of the Pulse. Thus Purging and Vo-  
miting are Contra-indicated by a too quick and vehement  
Pulse, as, also, by a low and depress'd Pulse; for when the  
Blood is in a violent Motion and Ebullition, the Secretions are  
generally very languid. If the Strength is defective,, which  
may he known by the languid State of the Pulse, Emetics and  
Purgatives diminish the Strength still more; so that the Phyfi-  
elan ought Io Consult the Pulse, before he exhibits them, for  
when the Pulse is strong, and the Motion of the Blood regu-  
lar, these artificial Evacuations are most beneficial, and succeed  
best. The same Caution is necessary in. the Exhibition of Su-  
dorisics, and all Analeptics, which convey Heat aud Motion to  
**the** Blood , for if the Pulse is strong and frequent, soch spin-.  
tuouS Substances do more Injury than Good, because they  
rarefy the Blood too much, and accelerate its intestine Motion,  
by which means a Delirium, and other Inflammations, are fre-  
quentiy brought on. Great Circumspection, and Attention to  
the Pulse, is, also, requisite in the Exinbition of Narcotics or  
Opiates; set as these are,possess’d of a Power of stopping the  
Motion of the Blood and Spirits, and consequently of impair-  
ing Strength, so they ought never to he exhibited when the  
Pulse is weak, languid, and small» hut are to he avoided like  
Poison. But if she Pulse is unequal and intermitting. Opiates  
readily procure a perpetual Sleep. *Fred. Hostman.*

PULVERATIO, Or PULVERISATIO, Pulverisation, in  
Pharmacy, is the reducing any Substance to a Powder. See  
**TRITURATIO** and PULvIs.

**PULVILLUS, in Surgery» is a Pledget, Bolster, or Com."  
Press.**

**PULVIS. A Powder.**

. The Operation of reducing Medicines into Powders is fo  
very simple in itself, that it requires no other Skill, than having  
those Things which come under its Managements sufficiently  
dry, in order to he so divided.

In judging of the Fitness of Materials for this Treatment,  
only these two Considerations necessarily require Our Attention.  
The first is, whether the Things themselves are thus reducible,  
without any previous Management, that may hurt their rnedi-  
**‘cinal** Virtues, and, next, whether their Virtues **are** conveniently  
preserved in this Form, when reduced into in

Under the first Of these, it naturally Occurs, that viscid and  
otsy Substances cannot he thus managed, without first reducing  
. them to some Brittleness, which cannot he done without drying.  
It filch things» therefore, cannot he sufficiently dried for Triture,

without exhaling their better Parts, or destroying that particular  
Quality, for winch the Simple is Valued in Medicine, as is  
happens with many Seeds and Gums, they are much fitter for  
some Other Forms than for this, though these Inconveniences  
may he avoided, where shch Things bar so small a Proportion (  
to those winch are very dry and brittle, that they are so loft,  
and, as it were, absorbed by them in Triture, that all pass the  
Sieve well enough together. But this, however, should make  
the Prescriber wary Os crouding into any Composition, under  
this Form, too many Gums or Seeds, and the Preparer careful  
in giving them a requisite Brittleness by drying, which latter  
may, in some measure, he known by the Compositions preserving  
the Scent, or particular Qualities, of the Ingredients suspected.

The Other Requisite in this Form, relating to the Preservation ‘  
of Things reduced into ir, directs not to prescribe Materials  
therein, which are volatile, or will any other way Change in  
the open Air: Thus the finer Aromatics will decay, and every  
thing Very volatile, as the Radix Ari*, for* which Reason it is now  
Ord«ed to he mixed at the time Of taking. All rhe alcaline  
Salts, likewise, are not to Come into this Form, because they  
will dissolve in Air ; On which Account the Salt Of Wormwood  
is an improper Ingredient in the *Pulvis Radicum Ari compo.  
sites.* These latter Inconveniences may indeed he, io some  
measure, avoided, by keeping such Compositions as have in  
them these exceptionable Ingredients, in Vessels stopt close  
from the Air: But the Necessity Of frequently opening them in  
the Shops,for common Occasions, will subject them moreto  
shch Decay, than is Consistent with keeping them any long  
time good.

. Having a View of these two Requisites, we are better able  
to judge, both of Officinal and extemporaneous Prescriptions  
in this Form: And, for Our better Inquiry into the former, st  
may be, also. Of Use, as is already done in some Other Forms,  
to range them under such general Intentions, aS they seem Con-  
trived, by their first inventors to answer.

The *Species Dtambra, Pulvis Diacinnamemi, Species Dian,  
thus,* and *Pulvis laetificans Galeni,* seem, by most Of their in-  
gredients, to he intended for Cephalins and Cordials, as they  
Consist Of the warmer Spices, and Simples of similar Proper-  
ties , but in the *Pelvis Diacinnamomi* the Casia is much infe-  
rior to the Cinnamon in Flavour, and gives a Sliminess TO the  
moist Form; but the Elecampane-root is a powerful Detergent,  
and quite Out Of the Intention. The Sugar, likewise. Occasions  
an unnecessary Bulk in a Dose, when given in Powder, an  
Electuary, or a Bolus; and therefore would he hetter omitted .  
In the *Species Hianthut,* the Liquorice is blameable, on the  
same Account aS the Elecampane-root in the foregoing ; and in  
the *Pulvis laetificans Galeni,* the Rasurae Eboris, Epithyrnum,  
Os o Corde Cervi, and Margaritae, are Chargeable with contri-  
buting nothing to the main Intention of a Cordial, though the  
Leaf Silver and Gold are very beautiful Decorations, if rubbed  
but Coarsely in at last, that they may he seen to Advantage;  
but the Camphire, it is to he feared, will render it not so fra-  
grant while it lasts, though even very dose Keeping will not  
long retain its Volatility.

Some Others, near approaching to this Intention, take in Sim-  
pies, that give them, also, .an Astringency; soch aS the *Aro-s  
nsaticum Basiatum, Pulvis Granorum Bernies compositus,* and  
*Pulvis Cardiacus Magistralis,* none of which are Chargeable  
with an useless Or unsuitable Ingredient, unless the Bezoar be  
reckoned so in the latter: However, it is pretty Certain, that  
its Virtues do not Compensate for its Cost, and indeed not  
much Can he said flor the Saunders and AloeS-wOod, but **the**Custom Of mixing them with those things has long prevailed.

The *Pulvis Diacalominthes simplex,* thus intituled, in Di-  
stinction from a much larger Composition given in former Diss  
pensatories, and the *Species Diarrian* **and** *Piperean,* seem prin-  
cipally intended for Carminatives; though the former hath  
something in it limes, also, against Hysterical Affections, and  
is Pretty much used in both these intentions with Success..  
The *Pulvis de Gutteta* was heretofore a Composition, Consist-  
ing principally of such things, aS were sopposed to he very  
efficacious in some nervous Cases, by their specific and *secret*Virtues, aS the Visens Quercus, the Ungula Alcis, and Cra-  
nium Humanum; but there are now added many things of  
very manifest Properties, as the Radix Valerianae, Contrayervae,  
and Serpentarhe but whether the Calcined Hartshorn, Coral,  
Hyacinth, and BeLoars, will yet allow this to he duly reformed,  
and an uniform Composition, is much to he doubted; for if  
they Can, with the Specific before-mentioned, he supposed to  
Contribute any thing to the main End, yet it must he allowed  
to he so little, that they have not their Share, bur are **a** Clog  
upon the Efficacies Of some Others, which, by these means, can-  
not he so conveniently given in their due Quantities. By long  
Experience, it has, likewise, been found, that Musk does Harm in  
many nervous Cases: Where, therefore, there is Reason to judge  
it proper, it is very easily ordered at the time of extemporaneous  
Prescription. The Leaf Gold, aS was before observed, is air  
agreeable Ornament, and Can do no Harm, The *Pulvis Cepha-  
licus* is designed for **a** Snuff

"Stomach has .been dried with- much Heat, too, many os thesis,  
especially of. the warmer Alexipharmics, as the Contrayerva  
and Snake-root, are notutsually judged, so. proper aS the liquid  
Forms, and the Virtues os the same things drawn Out by Infusion. ,  
*Gsisincfs-Praelect. Pharm.* τ \* . am; -

**: PULVIS ANTILYSSUS. See ANTILYSSUS.**

**. PULVIS RADicUM ARI coMPoSITUs. See AHUM. . . .' f.**

**PULVIS CARDIACUS MAGISTRALIS :**

*The magisterial Cardiac Povsder.*

. Take of Oriental. Bezoar, and of calcined Hartshorn, Os each  
One Dram and an half; of white and red Coral prepaid,  
white Amber, prepared Pearls, Armenian Bole, japah  
Earth, and. of Torinentildroot, of each two' Drams , Of  
Aloes-wood. Citron-peel,; Angelica-root, and Zedoary,  
of each two Scruple;. And make them into a Powder  
together. - .

**PULVIS .j; .CnELIS ; CANCRORUM COMPOSITUS.** See  
**CANCER. - ' . ' '**

**PULVIs CEPHALICUS:***A Cephalic Povsder.*

Take of the Leaves Of Asarabacca, Marjoram; and Lilies '  
Of the Valley, each any Quantity : And make them into a ’

‘ Powder together. - - . - .

**/**

**- PULVIs CoRNACHINL**

*Cornachinds Povider.*

Take of sulphurated Diagrydium,ten Drams; of diaphoretic  
Antimony, fix Drains, of Cream Of Tartar, two OunceS  
and an half: Make them togetherintO a Powder.

*Schroder* telis us, its Author was so food Of is, as Io write aThole Treatise about it, wherein he recommends is in almost  
all Cases that require Purging. Its Dose is froth einht Grains  
IO One Dram..

**.’ PULVIS GRANORUM CheRmes coMPosITUI.**

*Compound Powder of leherrnes-bdrries.*

Take Of Chermes-berries one’ Dram, Of Nutmegs, twin  
Scruples; Os Tormeutil-root, and of yellow Sanders,.os  
each hast a Dram ,; os Cloyes, prepared Pearls, and both  
COrais PreparedjOfeach Ono Scruple. Let them all be made  
into a Powder together.

**.. . PULvIs DIACALAMINTHks SIMPLEX:**

*Simple Powder of bdldrnrnt.*

-Take Of Mountain Calamine, Peny rOyal, Origany, Seeds of  
*Macedonian* **and- Common Parsley, and of Hartwort, of**

; each two DramS y of Smallage and Thyine, Of each half  
- an Ounce ; of Privet-seeds, and white Pepper, of each  
one Ounce: And mix them into a Powder.

**PULVIS DrATURPETHI COMPOSITUS :**

*si. - Compound Povider of Turpeth.*

Take of Turpeth, Jalap, and Hermedactyl-roots, of Tartar  
Of Vitriol, each equal Quantities - and make into a Powder, .  
*S. A.* Its Dose is from half a Scruple to a whole Scruple. ."

*\* . . r . ' - r’ e .*

**PULVIS DIALTHAEAE. See ALTHAEAE.**

**‘ PULVIs DIACINNAMOMlr**

*Compound Pondder of Cinnamon.*

Take choiCeQnnamon, fifteen Drams; Of Cassia-bark, end:

... .; Elecampane-root,Of each halfanOunce, OfGalangal, seven  
Drams; Of Cloves, Long-pepper, both the Cardamoms,  
Ginger, Mace, Nutmegs, and AloeS-wond, .Of each three  
Drams, of Saffron,one Dram y Of white' Sugar-candy, fiv4  
Drams: Make them into aPowderi.

PULviss DIAsENAE. See SENA. ". Ἀ ' ’ . .

**‘ PULvIS ERYSiPELAToDEs. AMynsichn.**

Take of volatile Meal, half a Poundci *os* calcined Lead, and red

\* Bole, each two Ounces, and of Mastich, Olibanum, and  
Ceruss, each one Ounce: Mix all together, and reduce her.

**..a fine Powder.' t. . :**

Pulverize together the Bole, and the CerulS; Then pulverize,  
separately the Olibannni in a MOrrar, mb’d Over with some  
Drops of Oil, and the Mastich moisten’d with some Drops.

1 Oss Water. ' Then Inix these Ingredients,’ when pound ed.

The next Class of alterant Species -niay be reduced Under  
'the 1 ine of Alssipharmics, at the Head Of which hermay be  
thought Injustice not to put -the compound Powder of Crab’S-  
olawS: But'the Lapis Contraveryse seems to ootne under  
the lame Rank much more properry,. which the present Practice  
acknowledges, by taking notice Of it much Oftener'than The  
other, though the greatest Dependence upon this is from ths  
Comrayerva.roor, which, both in itS Smell and Taste, mini-  
sestiy discovers the Quality of an Alexipharmio, winch princi-  
panv consists in a volatile Pungency.. . ‘

The *Pulvis Radicum Ari compositus* is the only Composition  
In this Form, that aims at being an antiscorbutic, but its prin-  
cipal Ingredients. aS thas been already Observed, will not keep  
long in this Form, and, when mixed with Boluses, or Electuaries,  
.the Oculi Cancrorum,and Sal Absinthii, soon make:it ferment  
and sour. ’ ‘

Some of this Fotin are given for Emollients and Diuretics,  
as the *Species Diatragacanthae frigidae. Pulvis Nalsi Pulvis  
Saxifragia compositus,* and *Pulvis Dialthaeae.* But the principal  
Ingredients os these, especially of the former three, which are  
the cold Seeds, those os Poppies, and the like, are not only  
difficult to powder, but, when so reduced, will loon grow rancid.  
The Starch and Sugar are, indeed, fome Helps against the first  
Inconvenience, by assisting the Oily Seeds to pass the Sieve,  
and they seem intended for no Other Purpose; but they are not  
sufficient to preserve them, when *so* done. Besides, all these  
things are so much easier brought into Emulsions, and with  
such greater Advantages to the Patient, that these Forms are  
now little used. The *Pulvis Di althaea* does nbt, indeed, take  
in so many of these oily Seeds, and is inore agglutinant by rea-  
son Or the‘Quantity Os GnmS in it; but it is not Often met with  
in common Prescription. - ' Ἀ ’

All the rest Of this Division Os Compounds, unless the *Pulvis  
Amilyffes,* are Cathartics. The greater and lesser Compositions  
with Sena are so crouded with Seeds and Spices, under the  
Notion of Correctors, that a sufficient Quantity for a Dose  
makes the Bulk too large to take in any Form ; which seems to  
he the Reason, why they are Very seldom prescribed or made.

But the *Pulvis THasence* takes in Diagrydinm enough to avoid  
this Inconvenience. There hath been in some Of the old Dis-  
pensatories *Riulnds Arthe iiicus Turners,* os which the *Pulvis  
Dceturpethi compositus* seems to. be a good Abridgment, as  
taking in some Of the principal Ingredients, and leaving out  
many useless ones. With which that was crouded. The *Pulvil  
' Cornachini, ζηά PulenslComitissee Wartncensis,* are exactly the  
same, except in the Proportion Of ingredients, in which respect,  
they likewise differ but little. They are quick enough Of Ope-  
ration in small Quantities, which Occasions them to he given  
frequently to Children: '

What hath been already taken notice Of, aS necessary to be  
regarded' in the Officinal Prescriptions- of this Form, should,  
also, be equally- attended to in the extemporaneous Practice,;  
that is, not to direct-any thing in a Powder, winch win waste  
by its Volatility, or which is not reducible to it, without such  
previous Management, as will hurt its medicinal Virtues. All  
volatile Salts, in particular. Ought to be avoided in these Pre-  
scriptions, as that Of Hartshorn, Sal Ammoniac, and the like;-  
though, in the Salt of Amber, there is somewhat so. fixed, that it  
will remain a considerable time in this Form, without any dis-  
cernible Loss. Some regard, alsio, in common Practice, is to  
he had to the Vehicle, with which some things have, and others  
have not, a peculiar Fitness for Moisture. Thus ths .ZEthiops,  
and every thing that takes in Sulphur, when prescribed in Pow-  
ders, should be ordered to be taken in a Syrup, Or some Pulp,  
because it IS Very troublesome to mix with any thing thinner  
its Offensive black Colour is, also, best disguised with Prunes  
or any thing Os like Kind. Every Powder, likewise, that takes'  
in crude Antimony, any Of the Mercurials, Or Things Of light  
Weight, must he trusted in thin Vehicles, because they will  
immediately settle, and, by reason Os the small Quantities, be  
liable TO he left, at the Bottom Of what they are given in.  
Sufficient Notice hath been already taken Of the Unfimess Of  
all Salts, made by Incineration, for this Form, and every thing  
dissolvable. Or anyway changeable, by the Air. Powders, like-'  
wise, which take in any resinous Substances, aS Scammony,.  
Resin Of Jalap, Or any thing Of like Texture, should be directed  
in Vehicles Os some Consistence, and be Carefully mired, be-  
cause in thin Ones they are subject to run into Lumps, which are  
not easily again dissolvable.

The Doses Of most Powders Ought seldom to exceed half a  
Dram, because Of the- Difficulty Of taking them; and, rather  
than to put things together, which have not sufficient Efficacy  
in that Quantity, It is more eligible to have recourse to things  
of like Intention in some Other Form.

There is One Conveniency, indeed, in this Form, which in  
Common Practice may nor bo so duly Considered as it deserves;  
and that is, where Persons have a great Aversion to many Me-  
dicines, they are sooner decoyed into a Compliance wth POw-  
tiers, than as many Boluses or Draughts, because they do notjmake so formidable st Shew; hut in-acute Ches,, -wheref the

**with the Calcined Lead, and the sine Meal, for a Powder, to be  
Preserv'd for Use.**

It is proper to dry and cure the Tetter or Ring-worm: A  
small Quantity os it is to he laid on the Part affected, and  
cover'd with blue Paper, after the Patient is blooded and  
purg’d. This Powder may Cure a mild and simple Ring-worm:  
Bur, when it is Obstinate and rehellions, much lhappier Effects  
will he produc'd by the following Powder ; .

Take Of the volatile Meal Os Barley, half a Pound, Of dry  
Elecampane-root, One Ounce; of the Salt Of Lead, and  
white Precipitate Mercury, each three Drams: Mix all toge-  
ther. *Lemery Pharmacop.*

**PULVIs AD GUTTETAM. See GUTTETA.**

**PULvis HALT:**

*Po-voder of Haig.*

. Take of white Poppy-seeds, ten Drams; Starch, Gum  
Arabic, and Tragacanth, each three Drams; the Seeds.of  
Purstain, Marshmallows, and Mallows, each five Drams;  
Cucumber, Melon, Gourd, Citruls, and Quince-seeds  
Cleansed, each seven Drams; Liquorice, three Drams;  
white Amber, two Drams 5 Sugar-Candy, the Weight Of  
the Whole: And make them into a Powder. It may he  
given from half a Dram to two Drams.

**PULvis LAETIFICANS. GALENI:**

*Gallums (.ordeal povoder.*

Take Of cloved Basil-fiowers Or Seeds, Saffron, Zedoary,  
yellow Sanders, Cloves, Citron-peels, Galangal, Mace,  
Nutmegs, and Storax, each two Drams and an half.  
Ivory-raspings, Aniseeds, Thyme, and Dodder, each a  
Dram; the Bone of a Stag's Heart, Pearis, Comphire,  
Ambergrise, and Musk, each half a Dram; Leaf-gold  
and Silver, each half a Scruple: Make them into a Powder  
together, according to Art.

**PULvis MARCHIONIS. See MAR CHION Is PULvis,**

**PULVIS COMITIS WARwICENSIS.**

*» Earl of* Warwick's *Po-wdcr.*

- Take Of SCammony, prepared with.the Fumes Of Sulphur,  
two Ounces, diaphoretic Antimony, One Ounce, **the**- Crystals of Tartar, half an Ounce: Make them all together  
into a Powder. It is a smart Purge, and freqnentiy given to  
Children, against Worms,from five to fifteen Grains; and,  
to Adults, from fifteen Grains to half a Dram.

PUMEX. Ofific. Schrod. 355. Martin 137I. Kentm. 37.  
Boet. 4OO. Gefii. de Lap. 3I. De Laet. I3O. worm. 47. Charlt.  
Foss **2I.** *Scyrus Lapis.* Aldrov. Mus Metalh *Casts. Lapis  
Pumex doctus.* Cap. Hort. Cash. Supp, 2.53. THE PUMICE-  
STONE.

This is a porous and fpongious Stone, full Of small Cavities  
and Perforations, and found in *Germany,* whence It is transport-  
**ed** IO ns. It is os a refrigerating, drying, and extenuating Qua-  
lity. It gently Cleanses Ulcers, and renders Cicatrices full and  
'. seemly. *Schrod.* in Mount *Vesuvius, Actna,* and other burning  
Mountains, large Quantities Os this Species Of Stone are sound  
with the Sulphur. The Uses Of it are enumerated *XApWormius*. in his *Museum. Dale.*

**PUNCTA LACHRYMALIA. See FISTULA LACHRv-  
MAL is, and OcULUSt**

PUNCTICULARlS FEBRIS. An eruptive Fever, Or a  
Fever attended with Purple Spots.

PUNCTUM SALIENS. The first Rudiments Of the Heart  
in the Foetus.

PUNCTURA. A Puncture. *Punctura aurea.* **See HERNIA.**

PUNICA.

The Characters are.

The End of the Pedicle. pastes into an Ovary, On whose  
**TOP** grows a monophyllonS multifid Calyx, of a Eery florid  
red Colour, and shaped like a Bell. The Flower is rosaceous,  
polypetalons, growing on the Ovary within the Calyx, and fur-  
. nished with very numerous Stamina. The Ovary, after the  
Flower is fallen off, and the Stamina wither'd. Contracts the  
**Calyx** into an Umbilicus, and pastes into a Fruit, resembling ar  
Apple, and containing, under a very rough Rind, and Vinous  
Pulp, a Multitude os Capsules frill of numerous Seeds;

*1 Boerhaave* mentions three Eons of *Punicas,* which are,

**.. 1.** Punica; quae Malum Granatum fert. *Tourn. Inst.* 636

**BoerA** *Ind. A.* **2. 25O.** *Granata, Mala Punica.* **Ossie.** *Mala  
Punica.* **L B. i. 76. Raii Hut. 2. I462.** *Malus Granata siin*

1 Emac- L45o. *Malus Punicasutiva.***O B. P**

\*5I°\* Parad-4z8-THE POMEGRANATE

This Tree grows not to he of any great Bigness, even injta  
native Countries, having on its Branches here-and-there a sow  
Thorns; the younger Shoots are Of a redish-brown Colour,  
and have their upper End pretty lrhick-set with long narrow  
smooth Leaves, two inches in Length, *xq* half an Inch in  
Breadth; among these come forth the Flowers, of a glorious  
scarlet Colour, consisting Of five Leaves, set in a tough brown  
Calyx, which, in time, enlarging itself, becomes the Barlt or  
Covering of the Fruit, having a Crown on its upper parr,  
being, in Shape and Bigness, like an Orange, but with ά browner  
and harder Peel, in the inside of which grows a great Number  
Of corner’d ACina Or Kernels, compacted close together in a  
regular Order, Containing either a sweet Vinous Juice, or one  
more acid and acerb, with a little Stone in the middle of each  
Pomegranates grow in *Spain, Italy,* and many Other Countries,  
and flower in *June,* and the( Fruit is ripe in *September.* The  
Balaustines are the large double Flowers of the wild Pome-  
granate Tree; which differs not in its manner Of Growth from  
the Other. See **BALAUSTIA. .**

The Balaustines, aS well aS the single Flowers, and the Bark, .  
are very drying and restringent, good for all sorts os Fluxes, .  
Haemorrhages, and Bleedings, both inward and outward: They  
strengthen the Gums, fasten loose Teeth, help the Falling down  
Of the Uvula, and cancerous Ulcers in the Mouth and Throat.  
The Fruit is grateful to, and strengthening Os the Stomach;  
stops Looseness, and the immoderate Flux os the Terms; and  
is useful in hot bilious Fevers, and Gonorrhoeas

Officinal Preparations are Only the Syrup of the Juice. *Mil.  
ler s Sot. Ops.*

2. Punics, fructu dulci. *T.* 636.

3. Punica; flore pleno; majore. See **BALAUSTIA,** and *Pu.  
n'ca , quae Malum Granatum fert. Boerh. Ind. Alt. Plant.*

PUP1LLA. The Pupil of the Eye. A Dilatation of the  
Pupil of the Eye is-esteem'd a Sign os a general Relaxation os  
the Fibres, and a Contraction thereof, , a Mark os Stricture.-  
**See OCULUs.**

PUPPlS OS. The OS FRONTIS. The Suture in this Bone  
is Call'd the *Sutura Puppis.*

PUPULAL The Extremities of the Fingers.

PURETTA. An heavy sort Of Sand, or magnetic Powder,  
found near *-Genoa,* On the Sea-shoret It is not us'd in Me-  
' dicine.

PURGAMENTUM. The *Lochia,* Or the Excrements dis-  
Charg'd by Stool.

PURGAMENTUM STELLARUM. The same as CoE-  
**LIFOLIUM.**

PURGANTIA. Purgative Medicines. See CAT HART icA.

PURGATIO. See **CATHARSIS. .**

PURGATORlVM, in *Paracelsus, is* a Name for any  
Disease.

PURPURA. Offic. *Purpura nostras violacea.* Col. de  
Purp. 1. *Purpura violacea Fab. Columna.* List. Hist. Conch. 4.  
Sect 15. n. I. *ex Terentino Sinu allatae.* Bonam xyo. n. I72. ’  
THE PURPLE-FISH.

This Fish is frequently found in the *Mediterranean* Sea. in  
the Shops no Part of it is us'd, except the Shell, which is strong, ,  
furrow'd, striated,-and rough, with short Tubercles. Informer  
Ages the Sanies of this Fish was us'd for dying: The Shell is os  
an alcaline Quality, and in Virtues agrees with other testaceous  
Medicines.

In describing the Purple-fish, the Antients were! so short  
and jobscnre, aS to lay a Foundation for the. Moderns to  
dispute what kind of Shell-fish they meant by that Name,  
fince they describe Various Species, rhe Sanies of which dyed  
a purple Colour. But *Fab. Columna* has determined the Contro-  
versy, by discovering the true Purple-fish. But tho’ at present  
the true Purple-fish is hardly known in our Shops, yet, aS Dr.  
*Martin Lister* observes, an Account of its Juice has been Uadi-,  
tionally handed down from the earlier Ages to our own Times,  
but that this Juice was reckon'd among the Arcana, and cate-  
fully Concearcl, till Dr. *William Cole* discover'd it in *Act. Phi.,  
losoph. Land.* No I78. Besides, *Dr. Robert Southwell,.* Presi-  
dent os the Royal Society many Years ago, informed Dr. *Lessor,*that whilst his Mother liv'd *ia Ireland, ffie* was famous for stain-  
ing Handkerchiefs with the Juice of a certain Fish, the Colour  
of which could not he washed out. The Art of Dying Purple  
was, also, not only known, but highly esteem'd, in *England, in*the Times of *Bede,* for, says that Author, in *Hist. Eccles. Gentis  
Anglia, Lib.* I. *Cap.* I. there are large Number of Shell-fishes,  
by means of which a purple Colour is dyed so strong and beau-  
tiful, that, instead of being tarnish'd by the influence os the Sun,  
or the . injury os the Rain, the older it grows, the more beauti-  
ful it becomes. *Dale.*

PURPURA.

The Purples, a Disorder which at present rages universally, is  
**a** Disease os a peculiar Nature ; proceeds from a Scurvy ; and  
is accompanied with an Eruption os Efflorescences on the Snr-  
face of the Body, sometimes with a pretty acute and malignant  
**Fever,** and, at other times, without such a concomitant Sym-  
ptom, geqtly, though for **a** long time, disturbing the Fun-  
**ctions of the Body.**

AS the Purples is a peculiar Species of Exanthematons Dis-  
order, it is expedient to inquire, by what Circumstances it may  
he distinguished from other Diseases os the Exanthematous Kind.  
The peculiar and essential Characteristics, therefore, of the Pur-  
ples are these sollowing ; First, the Papulae, which appear, are  
accompanied with a Corrugation, Roughness, and Driness of  
the Skin. Besides, no Exanthematous Matter is so moveable,  
as that of the Purples, which frequently and quickly retire, to the  
internal Parts, and, after some time, appear again on the Surface  
os the Body. Nor is any of the Exanthematous Disorders so  
frequently attended with alternate Heat and 'Cold, Itchings,  
and pungent Pains. Besides, all the other Species of Exan-  
thematous Disorders appear equally on all the Parts of the Body ;  
whereas the Purples principally discover themselves on the Neck,  
Breast, Back, and Arms, rarely infesting the inferior Parts : By  
which peculiar Marks it may be easily distinguished from the  
Small-pox, Meafles, Petechial Fever, scorbutic Spots, Chicken-  
pox, that Fever accompanied with Efflorescences resembling  
those excited by the Stinging of Netties, the Herpes, the Itch,  
Phlyctaenas, and the Impetigo.

The Efflorescences os the Purples differ much with respect  
to Bulk, Figure, and Colour ; for sometimes the Papulae are  
red, and sometimes white. Hence the Purples are distinguished  
into those of the red and those of the white Kind. The  
former Kind has Vesicles more or less broad, which contain  
a Liquor; whereas the latter has no Vesicles, but only small  
Nodes, deep-seated in the Skin, resembling the Figure of a Grain  
of Millet, rough to the Touch, and insarcted with a thickish,  
. and, aS it were, purulent Humour. Hence the former Disorder is  
Called the *vihite Miliary Purples. z*

The Purples are, alio. Observed to he more Or less benign  
or malignant; those of the malignant Kind are more acute than  
the other, accompanied within Continual Fever,, and Symptoms  
highly Offensive to Nature. But the. benign Kind continues long  
without a Fever, is accompanied, with Symptoms less Offensive  
to Life, and seizes and proceeds principally with these Signs:  
This Disorder is preceded by a slight Horripilation, which is  
succeeded by an intense Heat, accompanied with a Languor, and \_  
Loss Of Strength, which, in weak Habits, PrOCeedS to a Deli-:  
qnium. The Praecordia are constricted, and the Breast Oppressed.,  
The Patient, is, also, afflicted with deep Sinhs, Anxieties, in-  
. quietudes. Watchings, Or laborious and disturbed Sleeps, an  
Heat, and pungent Pain, are perceived in the Back, whilst the Heat  
and Cold are alternate, and most sensible, in the Palms Os the  
Hands. In Child-bed Women, the Lochia are retained ; and the  
Milk in the Breasts, being resorbed. Ceases to flow from them.  
These Symptoms are succeeded by a ROughnefs and Corrugation Of  
**. the** Skin, like that Ofa Goose, with innumerable Papulae, either  
. red or white. Or both, mixed with each Other, in Figure and  
Smalness resembling Mtllet-seedS, and which first appear On the  
Neck, then On the Breast and Back, and, last Of all. On the Arms  
and Hands, and, upon the Eruption Of these on the Surface Of  
the Body, the. Symptoms, which were before Violent, especially  
the Anxiety Of the Praecordia, the Cardialgia accompanied with  
a Syncope, the Inquietude, the Compression of the Breast, and  
the Difficulty. Of breathing, are considerably mitigated. The  
Pulse, which was before hard and quick, is now soft, free, and  
flow, the depressed Vigour Of the Mind returns ; the dry Skin  
Becomes moist - and the Patient, who was before so Costive,  
that he Could discharge no Flatulences, has his Body rendered  
soluble, and sometimes not only the Flatulences, but, also, **the**Faeces, are spontaneoufly discharged.

There is a considerable Remission Of the Symptoms, either in the  
red Or white Purples, Or in a Mixture of both, if they Constantly  
‘ Continue after the Eruption ; for the Vesicles, which are full of a  
fetid Ichor, are gradually enlarged ’, Dor do they quit their Station,  
and retire : The Urine is, also, more saturated, the Sweat, which  
in this Disorder is highly fetid, breaks Ont, the Discharge of the  
' Lochia returns 5 and the Milk is restored to the Breasts; the Body  
being either spontaneonstly soluble. Or rendered so by a Clyster, or  
Suppository, the Faeces and Flatulences are discharged, and, in  
seven. Or more Days, the Pustules disappear, with a considerable  
Itching of the Extremities, and the Patient is gradually restored  
to Health: For all these Circumstances indicate, that the Patient  
is not excessively weak, but that the solid Parts as yet retain their  
moving Force and Vigour ; and that the whole Temperature Of  
the Blood, and lymphatic Juice, is not destroyed, in Consequence  
of winch, the adVentitious and unfriendly Matter is Continually  
and equably separated from the vital Juices, and Conveyed from  
the internal to the external Parts,

But it is otherwise in the malignant Purples, in which, aster a  
fufficient Eruption of the Efflorescences, the Pulse is preterna-  
turally quick , nor does the Sleep return, nor is the Inquietude  
allayed, nor the Respiration rendered free; besides, there are ge-  
nerally too copious Profusions of Serum by Sweat, which, if they  
happen in the Beginning of the Disorder, induce a great Loss Of  
Strength, and, as it were, a paralytic Resolution of the Skin.  
Purples os the malignant Rind may he, also, known by the Pale,  
thin, and copious Urine, or the continual Stimulus to discharge  
the Urine, aS, also, when the Urine, which was hefere high-

coloured and saturated, suddenly becomes pile, limpid, and thins  
in Consequence Os the spasmodic Stricture os the Kidneys, and  
urinary Passages.

Ir, also, frequently happens, aS a bad Omen, that in the Puts  
ples the Pustules sometimes appear, and at other times dissps.  
pear, whilst the Symptoms are always equally Violent; all which  
evince, that the Force Os Nature is impaired, the Strength dimi-  
nished, and the Tone of the Skim that nerveo.tendinous and  
porous Emnnctory,’ through which the whole Mass of Blond and  
Humours is purged, is destoyed, so that its most external,nervous,  
and sensible Portion is sometimes spasmodically Contracted, and  
sometimes relaxed. But it is skill a worse Sign, is the peccant Mat-  
ter, returning, is firmly lodged in the internal Parts, and resista  
all Attempts :O expel it again to the Surface of the Body; by which  
means the Symptoms are rendered more Violent; the Oppression  
Of the Breast, and Sighing, are augmented, the Loss Os Strength,  
and the Anxiety of the Praecordia, accompanied with Inquietude,  
increased, and all the other Circumstances rendered worse. Hence  
all, who are taken off by the Purples, die on account os the Recess  
Of the peccant Matter, and the Increase of the Symptoms produced  
by that Cause ,sor tho', hesore the Eruption of the Purples, the Mat-  
ter producing the Disorder is highly malignant and peccant, yet, -  
when it is separated from the Mass of Blond, -and placed with-  
out the Limits Of the Circulation, it, by its Continuance, assumes  
a far worse Nature; and; if it returns to the Parts subservient to  
Lise, especially those destined to the Purposes of Sensation and  
Motion, it Operates in a manner resembling that of Poison.’  
Hence, as, in all Exanthematous Disorders, such aS petechial Fe-  
vers. Small-pox, Meafles, Gutta Rosacea, ltch,Scal'd-head, Gout,  
and Arthritis, a certain Matter, unfriendly to Nature, and at the  
same time propelled to the external Parts, renders the Symptoms .  
more Violent Π it returns to the internal Parts, and mixes with  
the Vital Juices, so it is Certain from Experience, that; upon the  
Disappearance Os the Purples, the Sordes received into the internal  
Parts of the Body are Os a like hurtful and prejudicial Qua! ty.

That the Event will be fatal, and that the Death Of the Patient  
is not far off, may be known from the following Signs: If, in  
Consequence of a deleterious Matter firmly lodged within, the  
internal Parts are excessively hot, whilst the external Parts, being  
Constricted, are covered with a profuse Cold Sweat, or if an in.,  
tense Heat osine external Parts, and a considerable Sense Os Re-  
frigeration in the Abdomen, are alternated perceived, if there  
is a subsultory Motion Of the Tendons; if the Hippocratic Face  
appears, if the Defect Of Strength increases, if an uneasy Despair  
disturbs the Mind; and if the Pulse is hard, Unequal, and tremu-  
lous: For, if- these Symptoms happen, the Patient is generally  
soon aster seized with a Deliquium, which proves mortal.

Though the Purples, with or without a Fever, is often **a**primary Or idiopathic Disease, yet it is frequently, as a Syrn-  
ptom. Complicated with Other Disorders, especially Continual  
Fevers, when near terminating, and is then not without Dan-  
ger, for is very frequently happens, that the red or white Pur-  
ples. Or both together, happen in the Decline Of the Small-  
pox, Meafles, putrid Synoche, burning Fevers, petechial Fe-  
vers,, and those resembling them, and other epidemical Disor-  
ders, on which Occasion they induce a new Fever, accompa-  
nied with a violent Train Of Symptoms,’ so that when Persons,  
labouring under acute Fevers, are apparently Ont Os all Danger,  
they are suddenly seized with an Horror, Uneasiness, Inquietude,  
Watching, preternatural Heat, and Loss Of Strength, whilst the  
Purples, in the mean time, here-and-there appear On the Surface  
of the Body; and, by extinguishing the Strength exhausted by the  
preceding Disorder, generally put an End to the Patient's Lise.  
I have, in a particular manner. Often Observed, that the sympto-  
matic Purples were fatal to young Persons labouring under acute  
Fevers, who have before lived intemperately, indulged themselves  
in drinking to Excess daily. Consumed their Strength in Venery,  
and induced a foreign Crash and Disposition Os their Humours j  
aS, also, to Patients, who, during the Progress of the Disorder, have  
been so costive, as to discharge none of the Excrements for some  
Days, and to those, who have had too large Quantities Osrefrige-  
rating and acidulated Medicines exhibited to them, such aSJulaps  
and Potions. The Purples not Only frequently appear in the De-  
cline of acute Disorders, but, also. Often, in the Beginning and first  
Days of the Disorder, something like the Purples appear with **a**kind Of Roughness, especially in the Small-pox and Meafles,-tho\*  
very rarely with an happy Termination of the. Disease, for this  
Circumstance is an infallible Proof, that the Mass os Vital Hu-  
mours is filled and Contaminated with various excrementitious  
Sordes. The Purples, also, accompanied with a Cough, and Dif-  
ficulty Ofbreathing, a Vomiting, OrFlux, frequently attend the ca-  
tarrhons Fevers Of Children. In this Cale, is the Disorder is-in the  
Decline, the Purples are succeeded by a Swelling Os the Feet, and  
sometimes of the Abdomen, with Or without a Driness of **the**superior Parts» and the Purples, .as is Observed in the mountain-  
Ous Parts Of the upper *Black Forest,* are totally removed **thy**Sweats, either arifing ipontaneousiy. Or procured by Aft.

The red Purples are, from the Beginning, always accompanied  
with a kind of febrile Commotion, which is perpetually exaspe-  
rated towards the Evening: Yet, in Process os Time, the Fever,  
and Frequency of the Pulse, are mitigated, the Symptoms allayed ὁ  
and

and the Diforder assumes a benign Nature. Hence, if, in the Be-  
ginning, ths Disorder .is imprudently treated, and if the Body is  
cacochymic, or full Of impure Juices, it frequently continues for  
several Months, no: without great Uneasiness to the Patient, and  
frefh Returns Of the Symptoms, though the Disorder generally  
terminates happily.

The: the Purples are the Offspring of the Scurvy, we have al-  
ready Ooserved: But this will be more effectually evinced, if  
we diligently consider the material Cause os both Species Of  
Purples, which, aS well aS that of a Scurvy, depends upon a  
Dyicrasy os the Blood. But, in assigning this Cause, lam or Opi-  
nion, that our Sentiments quadrate with Truth, when we assi m,  
that the red Purples arise from an impure, saline, acrid, sulphu-  
reous, and excrernentitious Serum ; and the White Purples, and  
an acute Miliary Fever, from the Lymph, and nmritons juice, ap-  
proaching to an acid. Vapid, and putrid Nature; for both these  
Juices os the human Body are of a different Nature; for the Seram  
is called that Humour, which, being mixed with the Blood, and  
impregnated with many saline and mucid Parts, to be secreted  
and eliminated through numberless Emunctories and Strainers, is  
os a tbickish Consistence, and of various Colours and Tastes.  
But the Lymph is that pellucid, insipid, and pure Liquor, the  
snore subtile Part Of which affords the Matter Of the Fluid Of  
the Brain, Spinal Marrow, and Nerves, as, also, of the seminal Lt-  
quor. The gelatinous Parrs of this Fluid nourish all the Solids  
Of every kind, and its finer aqueous Parts are, through the  
lymphatic Vessels-by means of the Valves, and conglobate Glands,  
agiin conveyed to the Heart,. where, being again united with  
the sweet aereo.elastic Parts Of the Blond, and, as it were, ani-  
mated afresh, it is with it conveyed to all the Parts of the Body,.  
for proper Uses. Hence,\*when these Fluids recede from their  
natural State and Disposition, they acquire a peculiar kind of  
Corruption ; from which afterwards arises the different Genius Os  
the Disease, the different Violence of the Symptoms, and the  
greater or less Danger.

That, in the white Purples, the Lymph is tainted with a kind -  
of Acidity, is obvious from many Circumstances, and especially  
that a redundant Acid is contained in the Mass of Blcod and  
Lymph, we may know from the excessive Secretion os Serum, usual,  
if not essential, to this Disorder for such is the Force and Nature  
of an Acid, that, when it insinuates itself into the Blood, it co-  
agulates its thicker Parts, and produces a Secretion os Serum; wo  
may know by which means profuse Sweats are promoted, a copious  
Discharge ofthin Urine Occasioned, a Salivation excited,or aqueous  
' Stools brought On.

Having premised these things, we now come to inquire, why  
the white Purples are most incident, and generally satai, to Child-  
bed Women. AS, heresore, in general.,all those, whose Bodies  
Contain a Redundance os lymphatic and aqueous Humours, aS  
most Women do, are rather subject to anacin Vapescence, than a  
saline-sulphureous Corruption os the Humours, sor which Rea-  
son they are principally seized with rhe white Purples; and this  
is, in my Opinion, the true Cause os the Frequencyot this Miliary  
Fever inChild-bed Women, for, in thcUrcrus of pregnant Women,  
both the Progress and Return Or the B cod, by reason Os its too  
great Congestion in that Parr, and the Distention Os the Vessels,  
is Very languid, stow, and difficult ; hence, the Blood stagnating  
long there, the lymphatic Humour is copiousty secreted into the  
Vessels destined for its Conveyance 5 and, remaining, aS it were,  
pent up in their Cavities and Windings, by its long Continuance  
becomes Vapid, is corrupted, and contracts an Acidity, whilst  
the more subtile spirituous Parts, the best Preservers *Of* the due  
Mixture Os the Fluids, fly off When, theresore, after the  
Birth os the Foetus, the Uterus collapses, and is contracted,  
whilst the squalid lymphatic Humour, and feculent Blood, are  
not discharged and eliminated, on the third Day, generally, after the  
Labour, afebrile Motion happens, by which the peccant Lymph  
and Blood are repressed into the larger Vessels, conveyed to the  
Heart; and thence, like a malignant Leaven, diffused through the  
whole Body in such a manner, as to infect and contaminate the  
whole Mass Of Blood, Lymph, nutritive Juice, and nervous  
Fluid.

But if the Impurity and Dyscrasy of the Blood and Serum isos  
the saline, acrid, and sulphureous kind, the Symptoms are not so  
violent, but the Efflorescences are more chronical, the Face is  
inflated and high-coloured, the Eyes are sparkling , the itching  
Heat, and Sense Of Puncture, in the Skin, are greater, nor is the  
Patient afflicted with so great Inquietude, Anxiety, and Difficulty  
of breathing; which Circumstances lay a Foundation for greater  
Hopes of Recovery. He may, also, he presumed to he in a  
fair way, unless the white Purples succeed those of the red Kind,  
or the red should he changed into white, which frequently hep-  
pens in consequence os a bad Regimen, a preposterous Cure, Or  
theInfluenceos Violent Passions; whilst the superabundant Lymph  
is corrupted, and, at last, in the Fever, and hot intestine Mo-  
tion ofthe Parts, the spirituous, fine, and solphureous Parts, fly  
off, leaving behind those of a gross, acrid, and Vapid Nature.

Besides, if we more narrowly consider the Origin and Nature  
Of that Matter, which-produces Purples of a chronical and less  
dangerous Kind, we shall find, for several Reasons, that it princi-

pally Consists Os the sslinO-sulphureouS and acrid Particles er the  
Serum, which are no: eliminated through the Emunctories, espe-  
cially the Skin, but remain in the Habit, and, by the hot intestine  
Motion, assume a worse Quality. This is confirmed by Expe-  
rience, because the Purples Os a chronical Kind generally seine  
those, whose Bodies abound with impure Blood, such as scorbu-  
tic Persons; old People *Vl* omen whose Menses are suppressed i  
Men whose usual hsemorrboidal Discharge is Obstructed ; these  
who are accustomed to a saline. Vinous Diet, coarse Malt Li-  
quors, and smoking Tobacco; as, also, those, who have loose '  
Habits Of Body, and such aS lead too sedentary Lives. Besides,  
the Cause or this Disorder is generally a sudden Suppression Os  
Perspiration; and, by that means, a Repulsion Os the Sordes,  
either by a cold Air compressing the Pores, drinking too cold.Li-  
quors. Or sudden Frights. . I have known Instances, in which  
Persons Overheated, and Covered with a profuse Swear, have,  
aster a Train Os Violent Symptoms, been seined with an Eruption  
of the Purples, many, allo, upon exposing their Bodies to cold  
Northerly Winds, after they have been Overheated in Bed, by the  
Hear of the Sun in travelling, or that os dry Baths. The cold  
and tempestuous Constitution Os the Atmosphere long conti-  
nuing, and obstructing Perspiration; is the Cause that the Pur-  
ples so frequently recur, particularly after the Winter Solstice,  
especially in the Months os *sianuary* and *February.* The fur-  
Prising Influence os a cold and Northerly Wind, in intercepting  
and suppressing even the preternatural Excretions through the  
Skin, is, by a memorable Instance, confirmed by *Lazarus stiver  
rites,* who, in *Obs.* 53. informs ns, that a certain *Boy* was assisted  
with an Impetigo, which discharged an ichorous Matter ,\* bur  
that Northerly Winds coming on, this fetid Matter was suppressed,  
conveyed to the Lungs, and excited an Asthma, which did not  
cease till the Return os Southerly Winds. - -

But nothing more effectually discovers the salino-sulphurecns  
Substance, in the Purples Of the chronical Kind, than that those  
Medicines, which involve and correct the saline Spiculse, such aS  
Whey, together with Goats and Asses Milk, mixed with the  
*Selteran* Waters, aS. also, temperate Decoctions used for Ordi-  
nary Drink, not only afford Relies, but, also, totally Cure the -  
Purples. Besides, though this Species Of Purples is free from ’  
Danger, yet, if it is treated with too much external Heat, in-  
ternal heating. Or Volatile Medicines, in the same manner aS in  
the Itch, ulcerous Pustules, and Other DefedationS of the Skin,  
arising from a peccant and saline Disposition Os the Humours,  
the Heat, Pain, and itching, are increased, and frequently a Thirst  
and Fever excited, because the Salts, being, by these means,  
rendered more acrid, insinuate themselves deeply into the small  
Fibres Os the Skin, which they lancinate and Vellicare.

This chronical Exanthematous Disorder is more uneasy, and ace  
companied with a far greater Itching and Heat, than rhe white Pur-  
ples mixed with the red; which can only be ascribed to the saline  
and acrid Panicles pricking the sensible Substance os the Skim  
The saline Acrimony os the Humours is, also, evinced from  
'this , that salutary, sweet Waters, free from a saline Element,  
and a purgative Quality, such aS those os *Lauchstad,* when drank  
by those afflicted with the habitual Purples, have rendered the  
Body remarkably soluble, procuring daily six or eight Stools, the  
Matter Os which is so acrid, as to corrode the Anus, whilst, **a**sew Days aster, the purgative Effect gradually ceases, norjisnext  
Tear the Drinking these Waters is repeated, does the same purr  
gatwe Effect follow. It is, also, to be observed, that, in rhe.  
Purples, especially os the Obstinate, chronical, and scorbutic Kind,  
aster the Use os Milk, Or temperate mineral Waters, I have,.  
with great Success, Ordered **a** Bath Os sweet Rain-water, by the  
repeated Use of which all the Puncture, Heat, and Itching, of  
the Skin were removed, and the Efflorescences disappeared . an  
infallible Proof, that, by Correcting the Acrimony os the Hu-  
mours within, and eliminating the acrid Recrements lodged under  
the Skin, through the Pores relaxed in the Bath, the Disorder is  
removed, and the Patient cured.

We shall now specify the Reasons, why no Exanthematous  
Disorder, when Cured, so easily and frequently returns, aS the red  
. scorbutic Purples. This Effect, then, feems to be produced by  
two Causes : First, because, in tins Disorder, the Tone of the  
Skin is .considerably injured anddestroyed, and, secondly, because  
the Subject and Seat of frequently returning Purples are the  
Conglobate Glands; sor as the Skin is an universal Emunctoty  
to all the Humours, And Of singular Use in the Preservation of'  
Health, so the Injuries done to the Constitution by any Disorder  
in this Emunctory are Certainly Very great: But this Covering  
Of the Body is easily injured, by various Causes; since it is not  
only composed Of Ihe sensible Filaments Of the Extremities of the  
Nerves, but is, aim, totally tubulous and porous, because the small  
Mouths os the minute Arteries, which convey the subtile, esba-  
lable Matter, terminate in it, sor which Reason, bath with reipect  
torts Tubes and Pores, as, also, with respect to its Substance, it  
has not only a subtile Motion, and Tone Of Dilatation and Con-  
striction, but, also, an exquisite Sensation. Hence, the greater  
the Sensibility os the Skin is, the more subject to Injurios it is,  
and the more easily its due Motion is perverted. It is, in a par-  
ticular manner, easily altered and constricted by Cold Northerly

Winds, and relaxed by. moist warm Southerly Winds ; so that  
it constitutes a true microcosmical Hygrometer. External  
Causes, also, which hurt, prick, cut. Or are possessed of a cor-  
rosive Acrimony, as, also, acrid Medicines, those Of a too heat-  
ing Quality, and refrigerating, pinguiouS, and inspissating Sub-  
stances, are possessed os a singular Power, not only of impairing,  
but, also. Of destroying, rhe Tone of this Integument. But when  
this Tone is changed and destroyed, tho salutary Excretion Of  
Perspiration through the small Orifices Of this SUainer, must,  
at the same time, be greatly injured; ;

When, therefore, the vascular and fibrous Texture Of- the  
Skin is injured, and its Tone, by the Assistance of which the  
recrementitions Matter is eliminated by Exhalation, and laudable  
Juices restored, is destroyed, a bad Disposition and Weakness  
are induced, and more firmly take Possession of the Fibres,  
so that the impure Humours, easily conveyed thither, again .act  
upon this weakened Parr, and become stagnant. And certainly,  
this preternatural Disposition Os the Skin to Produce such Stag-  
nations, and the Difficulty Os removing them, are sufficiently Ob-  
vionsfrom the Gutta Rosaces, which, by injuring and depraying  
the tender and tubulous Texture of the Skin in the Face, fry a  
copious Congestion Of Ichor, **k** not to he cured, and totally  
extirpated, without great Difficulty. Hence, since, by a frequent  
Approach Of the purpuraceouS Matter to the Skin, its Tone,  
Motion, Strength, and tubular Texture, are greatly changed and  
- Corrupted, it is not to be wondered at, if, the excreme nations

Matter being again there Collected, the same Disorder should  
again happen, and an Efflorescence of the Purples be produced. ..'

Having thus explained what seemed necessary to point Out the  
material Cause of both Species of the Purples, we now come to  
. Consider what Circumstances contribute, in a more remote man-  
ner, to the Generation of these Disorders. First, then, the Pur-  
pies, especially Of the chronical and protracted Kind, are most  
incident to those, who abound more with Serum than Blood,  
such as Infants, and Women Of a spongious Habit, generally  
Called *phlegmatic,* and the more the serous Humours discharged  
recede from their natural Purity, and mild Temperature, and the  
more sordid they are, the more difficult is the Cure, and the

' more dubious the Success, Of the Disease.

It is, also, certain from Experience, that the Purples, both  
Chronical and acute, aS, also, malignant Miliary Fevers, are most  
incident to Women of weak and delicate Habits, to such aS-have  
- their Strength impaired by violent Passions, especially long Grief,  
orbyprofuie Haemorrhages during Abortion, Oran Excess Of the  
menstrual Discharge, or by a long-protracted previous Disorder ; ι  
for, in such infirm and weak Habits, the lymphatic, mild, and  
nutritive Humours easily contract a foreign Nature and Taint,;

’ because, in consequence Of the weakened Strength Os the Solids,  
the Circulation Os the Fluids is restored flower; and, the Secre-  
tions and Excretions being hindered. Crudities and Sordes are  
generated and accumulated in the Body.

But a Fever, accompanied with Miliary Purples, is principally  
incident, and Often fatal, to Child-bed Women. This generally  
appears about the third Day after Labour, when rhe Milk Fever  
generally Comes On , but it, also, sometimes seizes On the seventh,  
. and sometimes On the fourteenth Day. In order to investigate  
the Causes of this Disorder, we are to overlook no Circumstance  
which Can lead us to understand its Origin and Generation.  
Now it is certain from Experience, that poor Countrywomen Of  
robust Constitutions, and accustomed to Exercise, are not in  
Child-bed seized with this Fever, whereas rich, tender Women,  
addicted to a sedentary Life, much Sleep, Luxury, and high  
Living, aS,' also,, those, who are Of delicate Constitutions, and

\*. such aS are subject to tumultuous Passions and Commotions Of  
Mind, are easily obnoxious to the Purples after Child-birth: And  
it seems to be true, that, aS rich and easy Living, which, ex-  
cluding hard and saline Aliments, consists of light Aliments, sari-  
naceous Substances, light Cakes, Sweetmeats, fermentable Sub-  
stances, Summer Fruits, and palatable Meats and Drinks, as, also,  
an impure, vapid Ain, impregnated with sordid and putrid Exha-

. lationS, arising from adjacent Marshes and Standing-water, to-  
gether with the Impurity Of the Water, contribute greatlyto the  
Generation of all Diseases, so they,' in a particular manner, in-  
duce the Purples. From these Circumstances we are to deduce  
the Reasons, why this Disorder rages so much at *Leipsic,* which  
is situated low, and. On account of the adjacent Marshes, assessed  
by an insslntary Air, whilst, at the . same time, the Inhabitants live  
in a delicate and luxurious manner. For these Reasons, also, in  
*England* this Disorder first appeared in *London,* where the State  
of the Air, and the Method Os Living, are the same, nor is it  
to he doubted, but that, elsewhere. Women, who live in the  
same manner, and in unhealthy Places, are frequently subject to  
this malignant Fever.

It is, also. Observable, that pregnant Women, who are costive,  
use a sedentary Life, and, neither in the middle nor last Months  
of their Gestation, diminish the Plenitude of the Vessels by Ve-  
nesection, are, when in Child-bed, in a Very bad Condition, and  
generally afflicted with the Purples: For, since almost all pregnant  
Women contain a Redundance of Blood, and since, by reason  
Of the Distention and Relaxation of the Tone of the Vessels,

the Circulation Of the Blood and Humours is stow, and theEva^  
Citation Of the Sordes, by Secretion and Excretion, Tcanry, they  
successively Contract impure and peccant Humours; so, if jm\*  
proper Aliments are used, and the Elements necessary for the  
Support Of Health, are peccant, a far greater Corruption is induced,.  
insinuates itself into the internal Parts, and afterwards prOVeS  
prejudicial to Health, andssometimes produces mortal Diseases. . \

The. Purples, especially Or the Miliary Kind, generally seize  
Child-bed Women, if, in the first Days aster.Labour, the LO-i  
chia are not duly discharged,, but are . either totally suppressed, .  
flow too scantily, stop too flow. Or are. forthwith suppressed by.  
a sudden Fright, or the free Admission .Of Cold, for,, in pre- .

. gnanr Women, by means Of the Redundance Os Blood and Hu-  
mours, the Vascular and cellular Texture of the Uterus .is -sur--.„  
Prisingly distended and obstructed by the Congestion Of theHn-'  
moors; fo that-the Bloodchoulates' slowly and with DissiCulrysi  
there,, and, not being totally consumed for the Nourishment of"  
the Foetus, stagnatesin the uterineVessels, and becomes thick and fe-  
culent, till at last, theToetiss being excluded, the Lochial Blood);  
is discharged from the Veins, by which the Placenta adhered to  
the Uterus, . If, therefore, from a peccant Quality of the Blood :itself, or a, Defect os natural Strength, the corrupted Lochial.  
Blood is not sufficiently evaoua-ed, but, by an inverted Morion, .\*  
passes into the larger Vessels, and is conveyed into the nobler -  
Viscera,, such as the HeartjDungS, and Brain, it is not to be  
wonderid ar, that Fevers accompanied with a great Impurity-j  
and Corruption of the Serum, such as the Purples are, and X  
other Violent Symptoms Complicated with them, should, by these ' 1means, he produco, -si" -

Besides, ’tis constantly observ'd in Practice, that Women, in.  
consequence Of an Obstruction os their Menses, are far more  
severely and frequently afflicted with Purples, both of the acute  
and chronical Kind, than Men;, for the Uterus may be Justly;-  
accounted the Source os this Disorder, since according to *De-  
mocritus susEp. de NatHuapi nd Hippocrap, tbit* Part is the Source .  
Of a thousand WoestOWoman, and the Purples rarely happen  
to Women, if their menstrual Discharge is regular, sufficient in -  
Quantity, and continued for a due time, but, if otherwise,  
they are. frequently afflicted with this Disorder. Hence 'tis cer-  
tain from Experience, that Women who from advanced Age, or  
any Other Cause, have their Menses totally suppress'd, labour un-  
der this Disorder longer than Other Patients. Besides, if in  
young Women the Menses are not regular. Or discharg’d too  
scantily, especially if Other Causes concur, the Purples, accom-  
paused with a Variety of Symptoms, are generally produc’d. ;

'Tis, also. Certain from Experience, that Women subject to  
the Pluor AlbuS, when that Evacuation is too small. Or Cheek’d,  
Or totally suppress'd, by improper Measures, have been seiz'd  
with the Purples; and, when these have been Cur'd, the Fluor \*  
AlbuS has again appear'd ; and, when this has been remov'd, the-  
Purples have again succeeded. Hence ?tis sufficiently obvious,:that this Exanthematous Disorder is the Off-spring Of the Serum. ’  
Nor is it to be wonder'd at, is at present, when the Fluor  
AlbuS is more common than in former Ages, the Purples should,-'  
also, forthet Reason be more frequent. - -

Though the immoderate Redundance of Blood in those in  
whom it is not lessened by the menstrual or haemorrhoids! Dis-  
charge, or by stated Venesections, greatly contributes to the  
Generation, especially, of the chronical Purples; yet the Im-  
purity os a copious Serum, arising from the Penury of laudable-  
Blood, contributes still more to the Production of the fame  
Disorder. It is, also, frequently observed,- that by imprudent.  
Venesection, or immoderate Haemorrhages, in consequence of  
Abortion, especially with the Concurrence of a Violent Fright,  
Or Anger, Refrigerations Of the Extremities, Deliquiums, In-  
flations os the Stomach accompanied with Anxiety, an Oppres-  
sion of the Breast,. and an alternate Sense Of Heat and Cold in  
the Surface of the Body, have been produced; winch Sym-  
ptoms, upon the Appearance of the Purples on the third or  
fourth Day, are mitigated, and allayed: For nothing more ef-  
fectually destroys the Tone, Force, and Strength of the Solids, ’  
or has a more immediate Tendency to bring on a Virulent Qua-  
lity of the Fluids, already impure, than tumultuous Commo-  
tions of Mind, especially long-protracted Sorrow, and Grief;  
Hence, if pregnant Women, hysteric Patients, or those labour-  
ing under Irregularities of the Menses; are afflicted with Violent  
Grief, it is a pretty sure Sign, that they will, in Child-bed, he  
seized with Purples of a bad Kind : Besides, Purples of a mild  
and benign Nature, in weak Habits, and such as are often un-  
der the Influence of enormous Passions, easily acquire a great  
Degree of Malignity, and portend the greatest. Danger ; and it  
is certain from Experience, that studious Men, and those ad-  
dicted to a sedentary Life, aster obstinate Grief,haVe contracted  
the Purples, and struggled under that Disorder for a long  
**time.**

A bad State of the Air, the Use of which is continually ne-  
cessary to Life, and an irregular Constitution of the Weather;  
contribute greatly to the Production of the Purples ; for as the  
Influence of the Ain is very great, in perverting the State .and

Crasis Of **the** subtile, nervous, and membranous Fluids, and all  
the other Juices; so it is, also, *of* great Efficacy, in modifying  
and altering the Tone of the Skin, and the salutary Excretion  
of Perspiration t So that it is not to he doubted, but epidemical  
Diseases, and Purples, more or less malignant, are produced by  
the Impurity Of the Ain. Thus, some Years ago, the Purples,  
accompanied with a catarrhouS Fever, raged epidemically, espe-  
cially among the Children of the *Lower Saxony* ; and this Dis-  
order derived its Origin from a previous, long-continued, cloudy,  
and rainy State of the Weather, succeeded by cold easterly and  
northerly Winds; as we are informed by *Boettigcrus,* in his  
*Dissert. de Purpura rubra epidemica, in Mifcellan. Nat. Cu-  
rios. Dec.* I. *An.* 6. we are told,that, in the Spring succeeding  
an open and cloudy Winter, a malignant Purple Fever arose,  
which, through the whole Spring, had its epidemical Circuits,  
and was principally incident and fatal to Children. An impure  
Air, impregnated with foreign and active Exhalations, is, also,  
the Cause why this Disorder is not only more easily generated;  
but, also, more obstinately supported, in some Places, than in  
others. Thus, in large Towns, where the Ain is impure. Per-  
sons seized with the Purples are often cured by removing to  
more salutary Places; and again afflicted with the same Dis-  
order, upon their Return to such Towns, and staying in them  
for some time. Hence the Reason is to he deduced, why the  
Months Of *March* and *April* so much savour the Production of  
catarrhouS, exanthematous, and purple Fevers; for during these  
Months the Weather is generally heavy, rough, and changeable,  
whilst the Atmosphere is impregnated and contaminated with  
noxious Exhalations, arifing from the Rains, and melted Snow.

We have already considered the principal Causes,which, espe-  
cially in chronical Purples, have a great Affinity with those  
which generate the Scurvy ; for, in this last-mentioned Disor-  
der, there is an acrid, saline, and sulphureous Dyscrasy of the  
Blood, which, in the Purples, is only more exalted, and subtile.  
The Generation of the Purples is promoted by a lax Habit of  
Body, long Disorders os Mind, Obstructions of the natural  
Secretions and Excretions, a Vapid Intemperature of the Air,  
moist and low-situated Places, improper Aliments, and those of  
hard Digestion, a Defect or a Redundance of Blood, and other  
Things of a like Nature. Hence a difficult Question arises,  
which is. Why, the' all the Circumstances requisite to the  
Production Os the Purples were presens, this Disorder only  
began lately to. appear. In deciding this perplexing Que-  
stion, it must neceflarily he acknowledged, that the same Dis-  
order must have the same common Cause: Now we have al-  
ready shewn, that in the Purples, especially of the chronical  
Kind» there is an impure, saline, and excrementitious Serum;  
**that in** the Iniliary Purples there is a Redundance of putrid,  
vapid, and acrid Serum ; and that this Matter, contained in the  
Blood, whether acid, or acrid and saline, by the hot in-  
**testine** Motion, acquires **a** worse Nature, so as Violently **to as-**sect and irritate the nervous Parts, and, at last, to produce this  
Exanthematous. Fever, accompanied with Violent Symptoms.  
We must,..therefore,, direct our Views to other Circumstances,  
and consider whether, in Diet and Regimen, which afford the  
Matter, Temperature,and In temperature, os the vital Humours;  
there is. not some ..Error, winch about forty, and some more  
Years ago, .was unknown, or, at least, not so universally pin-  
ctised. This Error,, therefore. Is the almost universal Use, or  
rather Abuse, os.warm. Liquors, and especially of Coffee and  
Tea for. .in some Parts, especially he *Germany* and *England,*Women of all Conditions use .this Liquor, hath in the Morning  
and Afternoon 5 and think it unpoltte to send their Neighbours  
away without drinking large Quantities of It: And it is observ-  
able,, that the Purples reign and. increase most, since the drink-  
ing os theseLiquorS became so customary, and especially in those  
Pisces where it is most frequently used...

f Though this Observation is so supported by Experience, that  
It cannot he doubted.; yet its Truth may possibly seem to he  
weakened by this, that though in the hot *Asiatic* Countries  
Coffee in much, used, the . Purples are yet unknown in those  
Climates. But this seemingly specious Objection falls to **the**Ground, if **we** carefully Consider, that in **these** Places the **Re-**gimen is quite different from what it is in ours; that their in-  
habitants do not use Coarse, hard, and salted Aliments; that  
the Air is. purer and hotter, and Perspiration more copioufly  
and expeditioufly carried on ; and, which is of all other Cir-  
Cu instances of the greatest Importance, that the Inhabitants  
have no scorbutic Taint in their Bleed; for that a scorbutic and  
impure State of the Humours is to he class'd among the Causes  
which contribute to the Generation os the Purples, is suffi-  
Cientiy obvious from this, that the Purples rage most in Pisces  
most infested with rhe Scurvy, such as *England, Holland, Swe-  
den,* and *Germany c* Hence the Disorder is called the scorbutic  
habitual Purples. It is, also, observable, that where the Pur-  
ples already rage, and afflict the Inhabitants, the scorbutic  
**..lacerating** Pains of **the** Limbs, **the** malignant Ulcers, the putrid

and bloody Gums, the broad and livid Spots, which are the es.'  
sential and peculiar Symptoms of a Scurvy, are rarely after-  
wards observed ; or, at least, they are less frequent and violent, '  
as we shall afterwards shew.

AS, therefore, these Things which happen in other Climates,  
under another Regimen and Constitution of Body, cannot be  
transferred and accommodated to the Situation of *Europeans;*so this Subject will be niore perspicuous, if, from this Source,  
we explain the Method in which the Purples are generated  
Now it is sufficiently known, that the excrementitious Impu-  
rities of all Kinds, separated from the Blood and Humours,n  
especially die bilious Sordes, and the fermentable Juice os a ζ  
saliva! Nature, supplied from the pancreatic Glands, as, also, the  
mucid Humours secreted from the Blood,principally in the serge j  
Intestines,fall down into the Intestines: It is, also, certain,thatin  
this winding Canal Feculences are produced, from Aliments of ,  
Various Kinds, such as improper Acids, fermentable and half- ..  
Corrupted Substances, and Fish; and that. these Feculences; ...  
when mixed and collected, ought to be discharged by Stool, as.  
unfriendly and prejudicial to the Vital Fluids. Whatever Things,  
therefore, hinder the Discharge of these Sordes, and occasion  
their again entering the Mass of Blood, certainly «ready con- .  
tribute to render the Blood impure, by convoying into it these  
Sordes, which may he along with it propelled totheemun-  
ctory of the Skin ; the’ they cannot, like the Matter of the  
Sweat, he quickly dissipated; but, on account of their acrid  
Nature, destroy the sensible Skin, and, lodging there, form  
Spots, or Pustules: For it is dally observed, that if cachectic  
and scorbutic Patients are costive. Pustules, a Gutta rosaces,  
and ulcerous Defedations of the Skin, are produced. It is,  
also, observable, that,in acute and bunting Fevers, CostiVeness  
is succeeded by the Purples; whereas those who in the Decline  
of such Fevers have a critical Flux, are not seized with this  
fatal ExanthematousDisorder.

Now, upon an accurate Inquiry, we find it confirm’d, by  
Experience, that all warm Liquors, Tea, as well as Coffee, by  
increasing Perspiration, .and provoking Sweat, render most Per-  
sons costive; and that Violent Fluxes are stopped by Sudorifics,  
exhibited with a proper Regimen, and drinking some warm In-  
fusion. Hence, if Persons whose *Prima Via* are loaded with  
Impurities and Crudities,which ought to he eliminated by Stool,  
frequentiy use large Quantities os Coffee or Tea, it is not to he  
wonder'd at, if the bilious, saline, and sulphureous Sordes,  
heing attenuated by the Heat, and afresh dissolved with an  
aqueous Liquor, should return through the lacteal and lymphatic-  
Vessels, which eVery-where occur in the large Intestines,/ to the  
Mass of Blood, where, by reason of their Continuance and  
Commixture, acquiring a worse Nature, they induce a foreign  
and hurtful Intemperature of all the Fluids ; unless, by covering  
the Body well, or by the Advantages of a warm and temperate  
Atmosphere, they are duly and quickly eliminated by Perspi-  
ration. Hence we infer, that all Persons, whether Men or  
Women, who are costive, and drink these warm Liquors,  
especially Coffee, whilst the Skin, at the same time, does not  
duly transmit the Sordes, receive great Injury from such Li-  
quors ; fince, in such a Case, they greatly dispose to the Gene-  
ration of the Purples, especially if there is a previous scorbutic  
Disposition of the Humours; or if the Patient is under the  
Influence of Violent Passions, especially long-protracted Sorrow  
and Anger, which greatly savour the Accumulation of biliotis  
Sordes in the *Prima Via.* On the Contrary, these Liquors are  
' not only harmless, but salutary, to those whose Bodies they ren-  
der soluble, and who are disposed to Perspiration ; for, in such  
Persons, they contribute to the elimination of Sordes of Various

. Kinds..

Besides, Coffee-hemes, the Product os another Climate,  
contain something of a foreign Quality, unfriendly to the na-  
tural Temperature and mild Mixture of the Blood in our Parts  
, of the World ; and in burning these Berries, especially in a  
strong manner, which is usual, they contract something of a'  
saline. Volatile, and empyreumatic Sulphur, which is un-  
friendly to the Tone and Motion of the nervous Parts.  
Hence it happens, that in some rhe drinking of Coffee pro.  
duces a Tremor of the Hands, and Anxiety; and these Effects  
are produced the more, the more the Water is inspissated by  
the Powder of the Berries much burnt. Besides, in this Li-  
quor much Sugar is used, which, lodging in the Intestines, and  
not finding an immediate Discharge by Stool, ferments, and in-  
creases the mucous and acid Crudities. From whet has been  
said, it is not to he wondered as, if, by the common Abuse of  
Coffee, the natural Mixture and Crash of the constituent Parts  
of the Blood are greatly changed, and a foreign State of the Fluids  
induced ; which, heing conveyed to the Infants in the Uterus,  
along with the Blond, lays a Foundation for the Purples.

. Though this Doctrine, with respect to the Origin of the  
Purples, seems to he overthrown by an Assertion os *IVils.chius,.  
in Dissert, de Purpura Lips,* that this Disorder was known at

*Leipsic* above sixty Years ago, when the drinking Tea and  
Coffee was not used; yet it will be found not to be subverted  
by. this means, when we assert, that warm Liquors, especially  
Coffee, do not concur materially, but rather formally, to the  
Generation of the Purples; whilst, by the. frequent Use of  
scch warm Liquors, the Impurities of the Primae Viae, incon-  
sequence of the Patient heing rendered costive, infinuate them-  
selves into the Blood. Besides, is we carefully attend to the  
Living, Dies, and Regimen, used by pregnant and Child-bed  
Women at *Leipsic,* at the Time this Disorder appear'd, we shall  
find, that it proceeded from the Cause assign'd; for it is certain, .  
that the Women of that Town are much addicted to Pleasure,  
lead an idle Life, indulge themselves in steeping long, and ai-  
most daily use Sweetmeats, Summer Fruits, and farinaceous.  
Substances, fried with Butter and Sugar ; in consequence of  
which, they are costive, and, during their Pregnancy, collect a  
Redundance of Impurities: For which Reason they are fre-  
quentiy afflicted with the Fluor AIbus. It was at that Time,  
also, customary', not only to confine Child-bed Women closely  
to Bed, but, also, as it were, to macerate them in warm Rooms;  
and, during the first Days of Child-bed, to.exhibit only bossing-  
het Broths, and Drinks; whilst they did not Venture to remove  
the costive State of the Patient; by a Clyster, or Laxative; nor  
to use Venesection upon a Suppression of the Lochia. Any one.  
who duly considers these Things, and compares them with what  
has been already said, must readily perceive, that such Manage-  
ment was the Cause why, at *Leipsic,* this Exanthematous Dis-  
order appear'd before the Use of Coffee. This was, also, after-  
wards confirm'd by Experience ; for aster they discarded the hot.  
Regimen, with respect to Child-bed Women, and admitted the  
Use of Laxatives and Venesection, the Purples became far less  
frequent, less dangerous and satai. Though, therefore, the  
Use of Coffee cannot be accused of generating the Purples in  
*Leipsic*; yet it cannot be denied, that the Purpled, which for R  
Tract of Years were confined to that Town, upon the Intro-  
duction of Coffee appeared elsewhere: So that the more this  
Liquor was used, the more this Disorder raged, and. spread it-  
self; and, which was a singular Circumstance not hefore oh-,  
sens'd, it generally associated itself with acute Fevers.

These Things are sufficient to demonstrate, that, warm Li-  
quors contribute to the Generation of the Purples, or the Con-  
version of the Scurvy into the Purples. But this Doctrine will  
he farther illustrated by the following Observation: The City  
of *Hall, in Germany,* both on account of its low Situation,  
and the adjacent stagnant and saline Waters, which emit large  
Quantities of aqueous Vapours, is surrounded with a moist  
Atmosphere; for which Reason it appears all beset with  
Clouds, to a Person who Views it at a Distance. Hence the  
Reason is to be deduced, why, from the remotest Times, the  
Scurvy has raged in this City, so that the Inhabitants are fre-  
quently afflicted with the wandering Gout which they call  
scorbutic. Colics, Tumors, and scorbutic Spots; together  
with other Symptoms peculiar to the Scurvy ; especially theVa-  
nous Disorders of the Gums. This I learned, when young,  
partiy from Iny Father, and partly from other Physicians of  
that Town, who hardly prescribed any Medicine in which there  
was not some antiscorbutic Ingredient. And I myself, in my  
future Practice, observed the same Method with those who  
committed themselves to my Care, whose Disorders, on account  
of a scorbutic State of the Humours, I happily removed by  
Antiscorbutics. But, as soon as the Inhabitants began to use  
warm Liquors, especially Coffee, the Scurvy disappeared, and  
the Purples, hath os the malignant and benign chronical Kind,  
began to rage, and proved Very fatal at first, when the Nature  
of the Disorder was unknown. The same Effects were after-  
wards produced, by the same Causes, in *East Frifeland*; so that  
it is not to be doubted but the Scurvy lays a Foundation for the  
Purples.

The Scurvy is, also, frequently converted into the Purples,  
by means of a Regimen, or particular Choice of Aliments,  
which our Forefathers used, either not at all, or but moderately;  
for in our Days most Men, addicted to Idleness and Luxury,  
think of nothing but gratifying their Palates by Variety of  
new-invented Dishes: Besides, not content with the Various  
Products of their own Country, they are foolishly fond of Sub-  
stances brought, through dangerous Seas, from the remotest  
Parts of the *Indies.* Though I do not absolutely condemn  
exotic Aliments, yet I must find fault with the modern Taste,  
which relishes none but somewhat acid and gentiy-pungent  
Fond; which must, consequently, be prepared with large Quan-  
tities os Salt, Aromatics, Garlick, Onions, Pepper, and the  
various Kinds os Funguses : For such Aliments, by imparting  
a grateful Acrimony to the Tongue, partly make Persons eat  
too liberally, and, by that means, produce a Redundance of  
Crudities in the *Prima Via,* just as scorbutic Persons do, by the  
**Use** os coarse Aliments; and partly procure a greater Efferve-  
scence os the Blond; which greatly Contribute tothe copious

Generation os saline and sulphureous Particles r So that, with  
the Concurrence of other Causes, the Purples aro easily pro-  
duced. Besides, the Use os spirituous Wines is at present so’  
frequens, that in some almost the whole Mass of Blood is, as it .  
were, converted into Wine.

To this Luxury in eating and drinking it is to be ascribed, ‘  
that various Haemorrhages, especially the haemorrhoidal Dif-“T  
charge, are so familiar to many. Hence some Physicians, heing \*  
milled, derive the Origin of all chronical Diseases in Women jo  
from an undue Discharge os the Menses ; and in Men, from a  
Suppression of the Haemorrhoids: For which.Reason, if such. -  
Disorders happen, they order the whole Intention of Cure to he  
directed, to reduce these Evacuations to due Order ; and, partissi  
cularly, frequently, or even every other Day, exhibit Pills made  
after the manner of the *Pilala Becheriana,* with a finals  
Quantity of Aloes. But though this Hypothesis is less agree-",~  
able to Trinh, yet I shall nor hesitate to affirm, that the fre-  
?uent Use of these Pills, in other respects safe enough, in some '  
orsons.greatly contributes to the Generation os the Purples ;  
for if there is no natural Propensity to any Excretion of Blood,  
especially by the hremorrboidal Veins, it must necessarily hap- I  
pen, that.by these means the Mass of Blood must be exagitated, ‘  
and thrown into Commotions, and, by an Increase os the in-  
testine Motion, a greater Quantity of saline and sulphureous  
Particles produced, which are the material Cause of the Pur-  
ples: Soon after, all the Circumstances concur which accu- \* \*  
mulate the saline and sulphureous Parts of the Blood, render  
them more acrid, and fix them deeper in the Fibrils os the  
Skin. Hence it is not. to be wondered at, that the Scurvy,'  
which is. a saline Disorder, changing its Nature, should dege-  
nerate into another Disease, such as the Purples.

Though we have intermixed the Prognostics of both Species  
os the Purples with the History’ of the Disease; yet'we shall  
subjoin some Things with respect to the chronical Purples, j  
Since, then, this Disorder is not accompanied with a Fever, st  
is.not dangerous, unless when cured in a preposterous manner.:  
It is, however, an obstinate Disorder, and generally creates  
great Trouble both to the Patient, and the Physician ; for if the  
Fomes of the Purples fixes its Seat in the solid or internas  
Parts, it does not easily quit the Body, but, remaining within,  
generates Violent Disorders; if, on the contrary, it is too impe-  
tuoufly expelled, it produces no less terrible Misfortunes. But  
this principally happens to those who have weak nervous Sy-  
stems; or who, in consequence of an unequable Circulation os  
the Blond and Humours, are disposed to spasmodic Strictures ;  
by which, it happens, that a Redundance of impure Blood in with'  
impetuosity and Danger congested sometimes in the Head, some-  
times in the Breast, and at other times in the Joints. by  
which means, a Train of Violent Symptoms is excited ; For if  
the Matter Of the Purples retained in the Habit is conveyed to  
the Head, it produces Cephalalgias, Ringing of the Ears,  
Weakness os Memory, an Aphony, and sometimes Madness,  
apoplectic Fits, and Lethargies. If it is conveyed tothe sen-  
sible Membranes os the Lungs and Diaphragm, it produces,  
spasmodic Asthmas, and pungent lancinating Pains of **the**Breast. Ifit is deposited on the Membranes of the Stomach,  
Anxieties of the Praecordia, and Cardialaias, arise: If it seizes  
the Intestines, it produces Gripes, and Inflations of the Hypo-  
chondria, accompanied with an uneasy Sensation os Heat rTs  
it is lodged in the Joints, they are distorted by cruel and lari-  
cinating Contractions: And, lastly, if the malignant Matter  
acts upon the tendinous and nervous Ligaments os the  
Hip, ischiadic Pains are produced. But all these cruel Sym-  
ptoms lay aside their Virulence, and hecome milder, when'the  
acrid caustic Matter is expelled to the Surface os the Body.

**THE METHOD OF CURE.**

For preventing a Return of the Purples, whether of the chro-  
nical, or of the acute and miliary Kind, nothing is more ef-  
fectual, than Abstinence from all kinds of Malt Liquors, which  
are improper in this Disorder ; since all os them, when old,  
contract an Acidity, and become too spirituous; and, when  
recent, are not only feculent and fermentative, but, also, con;  
tain coarse find mucid nutritive Parts: But all such Substances  
are so far from promoting, that they rather obstruct the Depu-  
ration os the Blood and Lymph, on which, however, the Whole,  
both os rhe Prevention, and os the Cure, depends. Hence,  
In hot and Summer Weather, I advise the Use os temperate  
mineral Waters, such as the *Sell eran* Springs, and those of  
*IVildungen,* mixed with a small Quantity or Wine; butinche  
Winter, and to such Persons aS could not procure such medi-  
cinal Waters, Ί have ordered, for common Drink, either pure  
Spring-water, or Decoctions of the Roots of Vipers-grass, 'Sar-  
saparilla and Succory, Shavings os Hartshorn, and clean Barley,  
with the Addition of a few Fennel-seeds., taking a Pint os  
Water for every Ounce os the Ingredients, adding a little Wine,  
.if the Patient’s Situation can afford it. I have, also, on ac-

count os Custom, permitted the Use of small and well-defecated  
Beer, in some Cases.

In Purples os the Chronical Kind, I order Exercise, Travel-  
lings Change Of Air, by removing from low to higher  
Places, Diversion, and Tranquillity of Mind, a Freedom from  
Care, and profound Meditations: J, also, prohibit the Use os all  
such Things as render the Patient costive, obstruct Perspiration,  
and generate a Redundante os Blood. Nor is the Patient li-  
berally to use Flesh, especially Pork ; nor Aliments highly pep-  
pered, or prepared with aromatic Substances. In the Summer  
Months I have ordered the Cure to he totally performed by  
Asses Milk alone, or Whey os Cows, or Goats Milk, or by  
the *Selteran* Waters, mixed with a third Part of Cows or Goats  
Milk, and drank for a Month, or six Weeks, interpofing, now-  
and-then, a Bath of sweet Water, or of the *Lauchstad* Springs.  
And this Method, is the Disorder has been deep-rooted, I have  
ordered to he persisted in for three Years. In some Men, of  
- corpulent Habits, I have, also, ordered the Use of the *Sedlitx,*Waters ; by a moderate Draught of which, for seven or eight  
Days, in the Spring and Autumn, the Fomes of the Disease  
has heen carried off by Stool. I have, also, ordered many,  
afflicted with chronical, scorbutic, and habitual Purples, to  
drink the Waters of *Lauchstad,* by which the Sordes were co-  
pioufly eliminated, the Patient continuing the Use of them, till  
their purgative Effects ceased.

.When the Chronical Purples have been produced by a Dis-  
order os the Uterus, and an irregular Discharge of the Menses,  
thy principal Intention has been, to restore these to their na-  
tural State ; for. which Purpose, besides the Measures already  
prescribed, I have ordered the Powder os Rhubarb, the Elixir j  
viscerale, and washing of the Feet, to be daily used, a few Days  
before the menstrual Eruption. But is, as it generally hap- ι  
pens, they are accompanied with spasmodic Strictures, an In-l ς  
station of the Stomach, Anxieties of the Praecordia, and Pains i  
of- the Back, I have used Antispasmodics; such as the *Pulvis  
Marcbionis,* mixed with a little Nitre and Cinnabar, a Grain or  
two of Castor, and of the Extractos Saffron: This Intention  
is, also, answered by the anodyne mineral Liquor, mixed with  
the Essences of Castor and Saffron, and the bezoardic Liquor.  
The Patient must, also, use Bathe of sweet Water and Milk-  
In order to provoke the Menses, I have ordered weak Essence  
of Amber, extracted with an alcaline Liquor, by which means  
the Disorder was removed. In order to prevent the chronical  
Purples in plethoric Persons not subject to the Haemorrhoids,  
Scarifications and Venesections are of great Efficacy for dimi-  
nishing the Redundance of Blood; as, also, repeated Purgings,  
which may he most commodioufly obtained by a Solution Of  
Manna, which is in a peculiar manner adapted to Diseases  
arising from a saline Acrimony, adding to the Solution a saline  
Stimulus; such as the *Terra foliata Tartari.* The Night-  
fweatS, also, with which those disposed to the Purples are often  
much infested, I have happily removed, by frequent Purgings,  
brought on bygentie Laxatives ; such as Raisins, Rhubarb, the

*. Terra foliata Tartari,* and Cream of Tartar.

In the Cure of the chronical Purples, I order, that from the  
.very Beginning of the Disorder the Patient should not be kept  
-in too het a Bed, or Room, but in a moderate Heat, lying as  
littie in Bed aS possible; by which means, I have sound the  
troublesome Sweats prevented. Besides the above-mentioned  
Decoction for ordinary Drink, I have found no Medicine pro-  
duce better Effects than a diaphoretic nervous Powder prepared  
Of Hartshorn, both calcined and not calcined, Crabs-eyes,  
.Mother of Pearl, Amber, purified Nitre, and Cinnabar. I  
have, also, observed excellent Effects produced by the anodyne  
mineral Liquor; so that by these two Medicines, exhibited in  
proper Doses, either in Conjunction, or separately, without the  
Use of any other Remedy, I have happily cured Purples, both  
**of** the acute and chronical Kind.

' We now proceed to the Meshed of preventing and curing  
that bad Species of Purples generally incident to Child-bed  
Women in the Beginning, or about the Middle, of their lying-  
in. The Cause and Origin of this we have already derived  
from the improper Regimen of pregnant Women, and Errors  
committed with respect to their Diet; for which Reason **these**are carefully to he guarded against. In order, therefore, to  
prevent the Purples in Child-bed Women, the first intention to  
he pursued is, to take care, that, during Pregnancy, a Redun-  
dance of Humours, and much more an Impurity os them from  
their Stagnation about the Uterus, be prevented, and no Weak-  
**ness** induced on the nervous System. This effect, if the Body  
aS turgid with Blood, can in no manner he better obtain'd, than  
by Venesection three or four times, though not Very copioufly,  
performed in the superior Parts of the Body. The Patient must,  
also, abstain from Idleness, long Sleep, Commotions of Mind,  
Sweetmeats, fermentable and farinaceous Aliments ; **but she is**to use Aliments of a laudable Juice, and a pretty linge Quan-  
**tity of some salutary Drink: She is, also, to use moderate Ex-**

ercise, and keep her Body soluble, rather by Aliments, than  
Medicines; exhibiting RaifinS impregnated with Rhubarb, and  
prepared with or without Manna ; for these are of fingular Ser-  
Vice to pregnant Women. And fince Refrigerations of the  
Lower Belly are considerably troublesome to pregnant Women, ,  
and have a Tendency to generate Violent Disorders, I always  
advise them to fortify their inferior Parts against the Cold; and,  
for that Purpose, to wear Drawers. In order, also, to prevent  
noxious Stagnations of the Humours about, he Uterus, it is -  
expedient, sometimes, especially aster the middle of Gestation,  
to anoint and rub the Abdomen, hesore a warm Eire, with the .  
*Balsumum Embryonum,* or with old generous *Hungarian* or  
*Rhenish* Wine, made hot, dropping a few Drops of the Balsam  
of Life into it: And these Measures are carefully to he taken  
during Gestation.

We shall now inquire, what Measures are to he taken before  
and after the Labour, and during the first Days of lying-in, in  
order to hinder Women from sailing into Violent Disorders, and  
the Purples,\* both of the acute and chronical Kind. As, there-  
. fore, this Disorder is easily produced, and Women weakened,.  
by the imprudent Management of Midwives, who before the  
due Time solicit the Pains, and for that Purpose exhibit hot  
and spirituous Substances, I injoin great Moderation, with  
respect to every thing, lest the Strength should be impair'd, the  
whole Mass of Humours surprisingly exagitated by the violent  
Pains, and the Use os Analeptics, and the feculent impure -  
Humours about the Uterus put into a more violent Motion ;  
but the Discharge of the Lochia, and other Excretions, are to  
he duly promoted, that the Disposition to Diseases may be as  
littie aS possible.

The second Day after the Delivery, when all the Pains are  
over, it is necessary the impure Blood, .Collected in the Uterus  
during Gestation, should be evacuated, and the Vital Juices  
freed from the Cacochymy they have contracted. Hence the  
Excretions of all Kinds, especially those by Stool and Perspi-  
ration, are gradually, but not impetuouflyjto be promoted, and  
carried on; which may be most commodioufly done by the  
following means: Let the Patient carefully avoid the excessive  
Heat, either of the Bed, or Fire; and let her Drink be neither  
too hot, nor cold, but tepid. Let her guard againli all Com-  
motions of Mind, especially Dread and Sorrow; let her, also,  
every other Day, for four times, take balsamic corroborative  
Pills; such as those of *Becher* or *Stahl*; for these not .  
only evacuate the Sordes by Stool, but, also, provoke a Dis-  
charge of the Lochia, and bring on a Diaphoresis. But if, at  
the Beginning, all the Symptoms are not allayed, but a Quick-  
ness os the Pulse, and an external Heat, are perceived, these  
Pills may be mixed with a precipitating absorbent Powder,'  
which, for a Dose, may contain four or five Grains of Nitre. -  
In such a Situation it is, also, expedient, in weak Broth, to take  
such Medicines as allay the Spasms, resolve the grumous coagu-  
lated Blood, and procure a free Dissipation os the Sordes by  
Perspiration; .which Intentions are excellentiy answered by'  
Sperma Ceti, Oil of Sweet Almonds, Infusions os Elder-  
flowers. Chamomile-flowers, and the Tops of Yarrow,- a tem-  
perate Essence of Orange-peel mixed with Essence of Saffron,  
the anodyne mineral Liquor, and the bezoardic diaphoretic  
Powders, to be exhibited in some analeptic Water. A Mix-  
ture, also, of the analeptic and pectoral Waters, prepared with  
distilled Vinegar, CrabS-eyes, and Syrup of Sorrel, is of fin-  
gular Service, in resolving the grumous and stagnant Blood.

By a due Observation of these Cautions, no mortal Disease  
will readily attack Child-bed Women, nor are the Purples to  
be dreaded: But is, in consequence of a Neglect of these  
'Rules, the Corruption of the Serum and Lymph is so increased,  
as to dispose to the Purples, whether of the red or white Kind,  
or if these Disorders are already present, I use the following  
Method, which I have often found successful. After injoining  
an equal and temperate Regimen, with respect to Heat, I order  
Child-bed Women, seized with the Purples, to use Water-  
gruel, with or without an infusion of common Chamomile ; and  
this I have found of very great Efficacy. In the malignant and  
white Purples, I do not render the Body soluble by stimulating  
Medicines; nor is it expedient to produce that Effect by Cly-  
sters. I, also, forbid, as much aS possible, all Change of Ap-  
parel and Bed-cloaths; but rather advise, tha t such as are already  
used, be put on, after having heen well dried, and warmed  
before a Fine. I, also, dissuade an erect Posture, or Rising out  
os Bed; because, by these means, the Patients easily fall into  
DeliquiumS; and, the Motion os the Humours being directed  
to the internal Parts, the Efflorescences disappear, and the most  
terrible Symptoms are brought on, aS is shewn in *Fred. Hossse  
manni Dissert, de Situ erecto in Morbis periculosis valde noxio.*

After the Eruption, I exhibit, at different times, about a  
ι Scruple, Or half a Dram, of the temperate bezoardic Powders,  
to which I sometimes add, a small Quantity of Saffron, or  
- Castor, interpofing now-and-then a Dofe of the anodyne

**- mineral** Liquor, which is of fingular Efficacy in allaying Spasms,  
queuing the het intestine Motion, and correcting the Acri-  
mony of the Humours : But, . is, sor Various previous  
Causes, the Retrocession of the Purples is to he dreaded, or  
has already happened, I mix with the anodyne mineral Liquor,  
a fourth Part of .the bezoardic Liquor, prepared according  
**to the** Directions of *Bussius.,* and described in under the AT-  
tide BUSsIUs : Which Mixture excellentiy promotes a Di-  
inphoresis, and forces the peccant Matter to the Surface of  
the Body. For restoring the Strength, which, in the White  
purples, is greatly impaired, I recommend an analeptic  
Potion, prepared of the Waters of Baum, Citron-peel, the  
Flowers of Lilies of the Valley, Primroses, *Egyptian* Thorn,  
**and** Cinnamon. This Potion must be impregnated with Juice  
of Quinces, adding a sufficient Quantity of Mother os Pearl,  
and Pearl-sugar, dropping into it a few Drops of the *Spiritus  
' Nitri dulcis..* In this Mixtures, as a proper Vehide, the Pow-  
ders may he exhibited, or a Spoonful of it.may he frequently  
taken by itself.

As it often happens, that in the Milk, or Purple Fever, the  
Lochia are suppressed, and, in consequence of a Congestion of  
Blood to the Head, mortal Symptoms produced, it is a  
Question whether, if the Lochia are totally suppressed, or not  
sufficiently discharged, if a FeVer is present,, and is the Purples  
are apprehended. Venesection may be safely and usefully used.  
**In** *Fred. Hoffman. Disifert.de Vinafectionis prudenti Administrat.***,tis** shewn, that Venesection is sometimes highly beneficial in  
Exanthematous Fevers, even when the Efflorescences appear.;,  
and I can affirm, that by Venesection alone, proportioned,  
**to** the Circumstances os the Patient, and performed' either in  
the Foot or Arm, Child-bed Women at the very Gates of  
Death, and labouring under spasmodic Strictures, by which  
the Blood is impetuoufly forced to the Heart and Brain, have  
not only been preserved, but, also, received speedy Relief.  
Hence, is Child-bed Women die os a Suppression os the Lochia,  
**we** may justly ascribe the Cause os their Death to a Neglect os  
Venesection. Nor are there wanting celebrated Authors, who  
agree with me in this Opinion; such as *Willis de Febribus,  
Cop.* I6. *Welsehius, de Purpura Lips. Rulsinckius, Lib. de  
Ord. et Meth. Consult. Lib.* 4. *Sect.* 2. *Cap.* 6.

In both Species os Purples, whether benign or malignant,  
nothing is so prejudicial, or has such a direct Tendency to in-  
crease-the Cause os the Disorder, heighten its Symptoms, and  
Tender it malignant, as an Excess either os Heat or Cold ; for  
this, of all Disorders, can least bear Refrigeration, or ex-  
\_ ceffive Heat, but, with respect to both, requires great Mode-  
. ration: So that the Room in which the Patient lies, and the  
Air she breathes, are always to he kept in a due and equal  
Temperature; for, if the cold Air is freely admitted to. the  
Surface of the Body; or if only the Arms, after heing hot  
' and moist in Bed, are stretched out, the whole Body is forth-  
with seized with Horror and Shivering ; and, after great Anxi-  
**ety** and Languor, the Pustules disappear; and this happens more  
easily, and with the greater Danger, the warmer the Room is,  
or the more closely the Patient has heen covered with a Load  
of Bed-cloaths. In like manner, in all Exanthematous Disor-  
' Ylers, especially the Purples, nothing, especially in the Vigour  
of the Disease, is more prejudicial, than frequent changing the  
Degrees of Heat produced by the Fire in the Room, because  
the sudden Changes from het to cold, and from cold to hot,  
violently affect the nervous and sensible Substance of the Skin,  
and surprisingly Vary and disturb its Tone, Strength, and Mo-  
' tion ; so that the Pustules either cannot appear, or, if they ap-  
pear here-and-there, cannot long continue.

Great Injury is done to Persons labouring under the Purples,  
**by an** excessive Heat os the Room or Fire ; as, also, by Heat  
raised by the Exhibition of hot Liquors, or Medicines of an  
heating Quality; fince, by these means, all the Parts being  
agitated by a continual Heat, the Strength is not only impaired,  
and, the porousSubstance of the Skin being too open, too great  
**a** Quantity of the Moisture dissipated, but the morbid Mat-  
ter, by the hot intestine Motion, is, alfo, rendered more subtile,  
penetrating, and acrimonious; fo that the Itching, Heat, and  
Anxiety, are so sar from heing diminished, that they are in...  
creafed. Hence we Often observe, that the Symptoms are  
augmented, and rendered more dangerous, by drinking large  
Quantities of het Tea, or any other Infusions, or by eating hot  
Aliments, or ufing hot Liquors.

Much less can the Purples bear the internal Use of heating  
Medicines, Wines, spirituous Liquors, sudorific and expelling  
Substances, bezoardic Tinctures, and Essences, together with  
Alexipharmics, finoe, by means of these, the Disorder is always  
augmented. Thus I have seen chronical Purples of a mild  
Nature, and free from a Fever, and Violent Symptoms, by ex-  
ternal Heat, the Use of Antiscorbutics, and purifying De-  
coctions, and a strict sudorific Regimen, converted into Purples  
**of** the malignant Kind ; so that the Patient has afterwards

been afflicted with febrile Heat, a Loathing of Pood a Lagc  
guor of the Strength, and a Want of Sleep. Jt has also,  
been found from Experience, that the sooner and more impetus  
Oufly the Purples are expelled by Medicines, and an hot RCgi-  
men, the more easily they are repelled to the internal Paris,  
-by the flighteft Cause. - . - -i. *-o*

' Besides, in the Purples, excessive and liberal Parging is high-  
ly prejudicial; for so peculiar is the Nature of this Disease,  
that it admits neither too great Costiveness, mor too great So-  
-lability os Body, .much less artificial Evacuations by Stool.’  
-Hence, if the Patient is sor a long time costive, the. pent up  
Recrements are convey'd to the Surface of the Body ; and the  
bilious, mucous, and fermentable Scoriae, which ought, by  
means of the Liver, Pancreas, and glandular Coats Os the In-  
testines, to be evacuated by Stool, are convey'd to the Skin;  
or, being collected, and mutuallymixed, in the long and winding  
Canal os the Intestines, they are more corrupted by their Con-  
tinuance there; and, heing thence convey'd to the Mass of  
Blood, along with thevchylous and nutritive Juices, lay a copious  
Foundation for the Disease, and the Increase of the morbific  
Matter. Hence, unless the Evacuation by Stool, and the other  
Excretions, are recalled and reduced to Order,: the Disease is  
rarely perfectly cured, but either frequently returns, or is long  
protracted. r i..-.; st

We are, also, to take- care not to procure she Excretions,  
by acrid stimulating Medicines; for which Reason we are  
carefully to abstain from all, even the mildest Emetics, all  
Purgatives and Laxatives, the' destitute of Virulence, aS, also,  
from all saline Substances; nor is it always safe to render the  
Body soluble by a Clyster, or Suppository, especially before,  
and a little after, the Eruption of the Pustules; for, the inter-  
nal Parts being stimulated by this means, the Motion of the  
Fluids to. the Surface of the Body is forthwith disturbed,  
the Perspiration obstructed, and the PoreS of the Skin con-  
tracted, so that the Efflorescences disappear. -

.. Unseasonable Venesection, also, contributes a great deal  
to the dangerous Retrocession of the Purples ; for as in all Ex-  
anthematous Disorders, fo especially in the Purples, it is of.  
the greatest Importance, that the Blood should be in a due  
Quantity and Proportion, and that it should he convey'd to.  
the Surface of the Body ; for either an Excess, ossa Defect, is  
attended with Danger. Is the Quantity of Blood is too great, "  
from the spasmodic Strictures of the Parts, fatal Congestioris  
Of the Blood in the nobler Parts are to be dreaded. But, if  
the Quantity of the Blood is too small, it cannot he forced to  
the most minute Veffeis of the Skin, and the Organs destin’d  
for the Secretion of the Sweat ; and the peccant Matter is -less  
duly eliminated through this capillary Strainer, but with the  
greatest Danger remains immoveable in the internal Parts of  
the Body. Hence hardly any thing is more to be dreaded in  
this Disorder, than the Danger arifing from unseasonable Ve..  
Defection. I thyself have srequentiy seen the Practice' of some,  
who, in chronical Purples afflicting hypochondriac Patients,  
subject to spasmodic Strictures, advised Venesection, so unlucky,.  
that, the Exanthematous Efflorescences ceasing suddenly, an  
apoplectic Fit was brought on. In Cases of this Nature, I have, .  
also, known the most violent Contractions of the Joints, and  
almost fatal convulsive Motions of the Parts, brought on by  
ill-timed Venesection.

In the Miliary Fever, some advise Vesicatories, if the Dis- .  
Order proceeds from an acid corrupted Lymph, that by this  
means the peccant Matter may be extracted, and, at the same  
time, the oppressed nervous Fibres stimulated to a stronger Con-  
traction. Thus *Hamilton,* in his Treatise *de Febre Miliari,*highly extols the repeated Application of them to the Scapulae,  
in the following manner: " The Serosity of the Humours is .  
" excellently lessen’d by Vesicatories; for, by their means,  
" the morbific Matter being in some measure lessened. Nature -  
" can more easily throw off the rest in the manner to which  
" she is accustomed; so sar- are Vesicatories from hindering  
“ the Eruption of the Pustules." But, though this Method  
of affording Relief in the Pustules seems pretty consonant to  
Reason, yet, I confess, I never used it; and must, therefore,  
leave it to others to make Trial of it. *Frederic Hoffrnan.*See **MILIARIS FEBRIS.**

PURULENTIA. Purulence, or Suppuration.  
PURULENTUS. Purulent, full of *Pus,* or Matter.  
PUS. Matter. See **ABSCESSUS, INFLAMMATIO, and  
SUPPURATIO.**

PUSCA. The same as POScA. *Blancard.*

PUSILLATUM, Or PUSULATVM. **A** coarse, orgrossy  
Powder. -

PUSTA. A Digestion of Sanies. *Rulandns.*

PUSTULA. - A Pustule. These principally appear in the  
Spring, and are of Various Kinds; for sometimes a' certain  
Roughness arises all over the Body, resembling that which is.  
produced by the Application of a Nettie or the Obstruction of

**Sweat, and are by** the *Greeks* called έξανθήματά. These are  
.sometimes red, and sometimes retain the natural Colour of the  
Skin; sometimes large Numbers of them appear of the Bulk  
Of *Pari,* and sometimes larger. There are, also. Pustules of  
**a** livid, a pale, a black, or any other unnatural Colour, with  
an Humour contained in them. When these break, the sub-  
.jacent Flesh appears, as it were, ulcerated. These are by the  
*Greeks* called φλήκτοκιναι ελκῶδεις, and are produced by Cold,  
Fire, or Medicines.

. . But the φλυζἀκιον *{sthlyxacion}* is a Species of Pustule,Tome-  
what, harder,, whitish, and rising in a sharp Point. But Pus-  
-rules are sometimes converted into small Ulcers, either moist  
Or dry, sometimes accompanied only with an Itching, at other  
.times with Inflammation and Pain ; and a Pus, or Sanies, or  
froth, are discharged. This happens principally in Children, rare-  
ry in the Trunk of the Body, but frequently in its Extremities,  
ῖ The .worst Species os Pustule is, that call'd ἐπινμκτιῖ, .which  
is generally of a somewhat livid, blackish, or even of -a white  
.Colour. Round about this Kind of Pustule, there is a violent  
inflammation; and, when it is laid open, a mucous exulcera-  
.tionos the same Colour, contained in thePuftule, is sound with-  
in. The Pain accompanying it. is far more intense than could  
be expected.from-its . Bulk, which is no greater than that os a  
Bean. This Species of Pustule, also, arises on the Extremi-  
.ties of the Body, and generally in the Night-time; from which  
.last Circumstance, the *Greeks* gave it the Name of ἐπινυκτις.

In the Cure of all Pustules, the first Step uro be taken is, to  
use much Exercise and Walking; and, is these cannot he  
.practis'd. Gestation is their heft Succedaneum. The second Step  
is, to diminish the Quantity of Aliments, and abstain from all  
acrid and extenuating Substances. ‘ The same Measures are to  
the taken with the Nurse, when a sucking infant is affected  
with Pustules. Besides these Steps, .when the Patients are ro-  
-bust, and the Pustules but small, they ought to sweat in a  
Bagnio, haye Nitre sprinkled on. the Pustules, and he anointed  
iwith a Mixture os Wine and Oil, after which they are to go  
Into the Bath. If these Measures prove ineffectual, or if the  
Pustules are os a large Kind, Lentils are to be applied to them;  
and, when the Skin is removed, we are to have recourse to mild  
Medicines. Aster the Application of the Lentils, the ότηνυκτάστ  
jo commodioufly cured by Knot-grass, or green Coriander.  
.. Ulcers formed from Pustules are removed by Litharge mix'd  
' with the Seeds of Fenugreek, adding Oil of Roses, and the  
Juice os Endive, till the Preparation is of the same Consist-  
.cnee with Honey. The Pustules of Infants are very properly  
ianointed with the following Preparation:

- Take of the Stone by the *Greeks* called πυρίτης, eight  
Drams; mix with fifty bitter Almonds; and add three  
Cyathi of Oil, in order to make an Ointment: Before  
the Use of which, however, the Pustules ought to he  
anointed with CerusS. *Cels. Lib.* 5. *Cap.* 28.

.. PUTORIUS. The Fitchet. The Flesh of this Animal is  
said to be resolutive, externally applied.

. ' PUTREDO, or PUTREFACTIO. Putrefaction.

. The happy influence of Natural Philosophy and Chymistry  
upon Medicine is in no Instance more palpably evinced, than  
-in the Doctrine of Putrefaction; the great Importance of  
which in Medicine, and its Necessity to the Physician, we shall  
-prove from several Arguments, after having investigated its  
; Nature, Causes, and Effects, from physical and chymical Prin-  
ciples, that its Use, in the Application of things of a medici-  
.nal Nature, may he the more apparent. The Putrefaction,  
. therefore, of a Body, is nothing but an intimate Dissolu-

tion os the Parts of which a Body consists, from their UniorT  
,and Connection, accompanied with a Volatile and fetid Exhala-  
tion, and changing the whole CrasiS, Properties, and Qualities,  
of the mixed Body.

. The Diflolution of Bedies is justly distinguishable into su-  
perficial and intimate, or radical. In the former, the Body is  
.only divided into its most minute Parts, every one of which  
still retains its peculiar Nature, Virtues, and specific Qualities.  
Thus, in a Solution os Gold with Aqua Regia, though the Gold  
.is resolved into highly minute Atoms, as is obvious from this,  
that a few Drops os such a Solution are capable of giving an-  
other Taste ro a whole Pintos Spirit os Wine, yet by a Pre-  
cipitation made by teme Salt, either of the lhdVial, or Volatile  
Kind, these Particles, or Atoms, appear to have perfectly re-  
tained the Nature of Gold. But an intimate, or radical Solu-  
tion is that, in which rhe Parts of a Body are so removed  
from their Situation, and po resolved from their intimate Mix-  
ture, on which the specific Differences of Bedies depend, that,  
being absolutely» transformed into another Texture and Dispo-  
sition, they anume new Qualities and Virtues. Thus, in the  
Solution of the Aliments ut che Stomach and intestines, by the  
subtile and universal saliva) Menstruum of the Stomach, and  
’the influence of the animal Heat, the intimare Mixture and

Texture of the Aliments are so destroy'd, that their Taste,Smeii,  
Colour, Consistence, and other Qualities, heing destroyed, they  
produce Chyle and Faeces. Thus, also, in the Fermentation  
of Vegetables, the sweet Juices os Grapes, and Summer  
Fruits, by means of Fermentation, lose their sweet and tem-  
perate Nature, and are either changed into an acid, spirituous,  
or a Vinous intoxicating Liquor ; among these intimate Sola-  
tions, we ought, also, to reckon Putrefaction, Ihe Nature and  
Effects of which consist in extinguishing the Mixture, Form,  
'Qualities, and Virtues of Bodies.

The Cause of this intimate Dissolution, whether of the fer-  
:mentative, or putrid Kind, is an intestine Motion of the moist  
Parts, and a copious Influx os a hot and Violently agitated  
Matter; for as there can never he a Solution Of asolitrBody  
iwithout Moisture, so without Water, the original Fluid,  
there can neither be Fermentation nor Putresactinn; for Water  
is the universal Menstruum, which not only deeply insinuates  
itself into the Pores of Bedies, but,, also, because its Parts are  
in a continual intestine Motion, is able to disjoin and remove  
from their Situation , the Parts of Bodies, which are variously  
mixed and united: But it produces this Effect most happily,  
.when assisted with Heat; which is no more than the rapid Mo-  
-tion of an ethereal and celestial Matter, furnish'd with a great  
expansive Power, propelling from the Centre to the Circum-  
ference. The Moisture, then, when acting on Matter ca-  
.pable osFermentation and Putrefaction, resolves the saline, sul-  
phureous, and earthy Parts, receives them into itself, and car-  
ries them off with it in its Motion. -

But though both Fermentation, and Putrefaction, are pro-  
duced by an intestine Motion of the Moisture, and of the hot  
Principle, yet their Effects are Very differens, since, by Fer-  
mentation, a sulphureous inflammable Spirit, but, by Putre-  
faction, a volatile urinous Spirit, is produced ; for which .Rea-  
son Putrefaction is always accompanied with a fetid Smell.  
'TiS,' also, to be observed, that the Juices of Animals admit  
os no Fermentation, nor can any Vinous inflammable Spirit  
the prepared from them, fince these are the Properties of Ve-  
getables alone ; which, however, are capable of Putrefaction,  
as well as the Juices of Animals. The Reason why Animals,  
and their Parts, are only capable of Putresactinn, but can never,  
by Fermentation, yield an inflammable Spirit, is only to he  
sought for in the different Mixtures ofAnimais and Vegetables,  
since these last admit into their Mixture not only an Oil, but,  
also, an Acid, wnich in Distillation is obtain'd from them ,  
.whereas in Animals no such thing is found, fince they are  
.rather impregnated with an Oil, and a subtile volatile Earth,  
which, by the Action of the Fire, becomes saltish. In the Fer-  
mentation, therefore, of Vegetables, by the warm intestine  
Motion the tartareous Acid is first dissolved, by which, when  
it begins Io act on the sulphureous and oleous Farts, an Effer-  
. Vescence, in consequence of this mutual Action and Reaction,  
.is not only excited, but, also, a copious penetrating Vapour is  
raised, and carried off in the Air; and, lastly, by the mutual  
Combination of acid and oleous Parts in **the** Acid, a spiri-  
tuous or Vinous Liquor is produced. But in Putrefaction,  
where the Acid is defective, the oleous, sulphureous, and sa-  
line Volatile Principles are forthwith carried off; and, heing nei-  
**. ther** fixed nor corrected by the Acid, are freely dissipated in **the**Ain with a nauseous and fetid Smell; which, according to in-  
disputable chymical Experiments, is produced by an oleous, or  
sulphureous Principle, and a Volatile Salt. A palpable Instance  
of this we have in mineral Sulphur, which, in its native State,  
.is without Smell; but, when fused over the Fire with alixixial  
Salt, assumes an ungrateful Odour. If, therefore, we intend  
to obtain a Volatile oleous Salt from Animals, we must either  
subject them to Putrefaction, or burn them with a strongFire; by  
which means both their oleous and Volatile Parts are freed from  
the Contexture os other Parts with which they were entangled.

We have already observed, that Moisture and Heat were **the**principal Instruments os Dissolution, both in Fermentation and  
Putrefaction; so that, without the former two, neither of these  
can he performed. Hence it follows, that a Body, which  
has otherwise a great Tendency to Putrefaction, cannot he more  
effectually preserved from it, and kept sound, than by remov-  
ing Heat and Moisture. For this Reason, Bodies sufficiently  
dried are never observed to be subject to Putrefaction and Corrup-  
tion. Pork and Beef dried by Smoke, and the Influence of  
the Air, do not easily become putrid : But, if, by Maceration  
in Water, they receive a due Degree of Moisture, they soon  
become putrid in a warm Air. Such, also, is the peculiar Na-  
ture of Cold, that it preserves Bodies from Putrefaction, for  
no other Reason, than that by a certain rectilinear Motion it  
presses and conjoins the Parts, so that they are not easily (sis-  
joined, and put out of their Situation; whereas Heat, by its  
Vertical Motion round its own Axis, expands and enlarges the  
Pores, and propels the Parts from the Centre to the Circususe-  
fence.

But as there are various ways of removing Moisture, or Hu-  
midity, so there are as many Methods of preserving Bodies  
from Putrefaction. Thus 'tis certain from Experience, that  
highly rectified Spirit of Wine is Very proper for. preserving  
Bodies from Putrefaction, when kept in it, because it quickly  
imbibes and absorbs the Moisture Os Vegetables and Ani-  
mass from their internal Pores and Parts. Hence Bedies, hesore  
foft, are indurated: But the Experiment succeeds more happily,  
if fresh dephlegmated Spirit is frequently pour'd to.them. And  
though by means of distil'd Oiis, and liquid Balsams, the Embalm-  
ing and Preservation of Bodies from Putrefaction may be obtained;  
yet highly rectified Spirit os Wine is far preferable to them all. be-  
cause it is os a more penetrating Nature, and more easily enters  
**the** internal Parts os theBodies, than resinous balsamic Substances.

There is, also, another Method of preserving Bodies from  
Corruption, which is by Salts, the most considerable of which  
are common Salt and Alum, which excellently imbibe the  
Moisture, by the Absorption of which the fleshy Fibres are ren-  
dered harder. The more pure and dry these Salts are, the more  
happily they produce this Effect.. And as Alum, in conse-  
quence of its large Number of terrestrial Particles, is of an astrin-  
gent Quality, by which the Parts are more intimately united  
and connected with each other, so by means os a Lixivium  
prepared os Alum, and common Salt, all the Viscera of the hu-  
man Body may for several Years be preserved entire. .

ITis to be observed, that corruptible Fluids, if agitated with  
a continual Motion, do not easily become putrid ; but that  
stagnant and putrescent Fluids, such as are observed in Marshes,  
are easily susceptible of Corruption: For Heat and Moisture,  
continually acting upon quiescent Particles, more easily dissolve  
and destroy their Mixture, than if they perpetually changed  
their Place and Situation, in which case the Action andChange  
of Heat is more transitory ; whereas, in quiescent Panicles, it  
is more durable and permanent. We, also, observe,7 that Ve-  
getables abounding with Moisture, and collected in a large  
Heap, become more easily warm and putrid, than when they  
are scattered ; in which Cose, they remain free from Putre-,  
section: The Reason os which is this, that, when they are col-  
lected into an Heap, the Effluvia excited by the Motion os the  
Moisture, and the intestine Warmth, cannot be exhaled and  
dissipated in the Air ; but, bring pent up, and returning, as it  
were, on themselves, accelerate the intestine putredinouS Mo-  
tion, instead of diminishing it. But nothing more effectually  
prevents the Corruption of corruptible Bodies, and dissipates it  
when beginning, than the Access os a free Air, especially of  
the dry and cold Kind. 'Tis, also, to be carefully observed,,  
that a beginning Putrefaction is of a Very multiplying Nature,  
and diffuses itself Very quickly ; for it acts like Leaven, which  
quickly puts the homogeneous, and especially the most adja-  
cent, Parts into the like putredinous Motion with itself; as we  
plainly see in fermentable Substances, where a little Leaven  
added to a farinaceous Mass, or the Juice of Vegetables, imme-  
diately throws them into the like fermentative Motion.

Having thus, from the Principles of Natural Philosophy and  
Medicine, investigated the Nature, Generation, and Effects of  
Putrefaction, it will be far more easy to apply what we have  
i said to medicinal Purposes in the human Body, in which a  
singular and wonderful Phenomenon recurs to be explained,  
that is, why the Bedies os Animals, and the Juices contained  
in them, which in their own Nature are so prone to Putre-  
faction, when Moisture and Heat are present, do not, however,  
become putrid so long as the Animal is alive, but remain sound.  
and entire; whereas they quickly hecome putrid after the Death  
**of** the Animal. And in this principally consists the Presenta-  
tion of Lise, the Causes of which ought to he carefully investi-  
gated by every Physician. Those are greatly deceived, who seek  
for the Cause of the Preservation in a certain Vital Spirit, or  
Balsam, and the innate Heat, since, instead of specifying. **the**true Causes, unmeaning Words which explain nothing, are only  
used. They are, also, no less deceived, who think that this Pre-  
servation is the Effect of the Salt and Sulphur contained in the  
vital Juices; for 'tis certain from Experience, that neither  
saline, mor spirituous Substances, nor balsamic Medicines,  
copioufly exhibited, are os such Efficacy as to remove Pu-  
tresaction, fince they rather contribute greatly to pro-  
mote it; for we observe, that the Bodies of scorbutic Pa-  
tients, whose Juices abound with saline and sulphureous Parts,  
easily fell into a sphacelous Corruption; so that other Causes  
. must be assigned for this Vital Duration, or Preservation. Now  
we observe, that so long as the Mass of Blood and Humours,  
**of** themselves very corruptible, is continually, by a progressive  
and circular Motion, carried through the Vascular Structure of  
the Body, it remains free from Corruption; but so soon as  
these Humours, ceafing to move, or circulate, stop, or become  
stagnant, in the solid Parts, they soon become subject to Putre-  
faction, which immediately diffuses itself, and, spreading to the  
adjacent Parts, brings on a Mortification and Sphacelus Of

them.' Whenever, also, the Circulation of the Blond IiS sop.  
tally removed, .which happens in Death, Putrefaction-imme-  
diately ensues, unless it is prevented by Cold, or some other  
external Cause. - ‘ “ - -. *i*-.. Hence 'tis obvious, that the Circulation of the Blood is the  
*Cause* which defends the Bodies of Animals from Corruption ;  
and so long as the Circulation is entire, the Body is free from all  
the Injuries of Putrefaction. But we must inquire, whether  
this Flux and Reflux of the Blood produces this Effect only by  
its progressive Motion, or whether other Causes, also, concur  
with .it,-which seems most probable; for, by means-of this  
continual Circulation of the Blood, the hot intestine Motion of .  
fits constituent Parts is greatly increased, and the Juices not only  
consumed, but, also, gradually converted into a saline'sulphu-  
reous Excrement. Hence 'tis obvious, that the Circulation has  
rather a Tendency to destroy than preserve the due Mixture Os  
the Mass iof Blood, as is obvious from the intense Heat of Fe-  
vers, where, in consequence of the brilk Circulation of the  
Binod, a greater intestine Agitation of the Parts is produced,  
and a more Violent Heat excited? which not only consumes the  
Body, together with its Strength and Juices but, also; resolves  
these last into exdrementitious Parts, winch ought to be elimi-  
nated partly by Perspiration, and partly by Urine and Stool.  
Besides, with theAir, Aliments, and Drink, many Parts foreign  
to the Mixture of Blood, and highly subject to Corruption, are  
often mixed with the Blood ; and, if these are retained in the  
Habit, they must naturally disturb and destroy the Nature and  
benign Mixture of the Blood. Daring the Vital Action, and  
perpetual Motion, of the Fluids, we, also, observe, that a *cor-  
ruptible* Matter fit for inducing Putrefaction, is generated in-  
the Blood. ’ Hence Reason dictates, that these Parts, so preju-  
dicial to Lise, by spoiling the due Crafts -and Mixture os the  
Blond, should, .with all Care, be separated, secreted, and eli-  
minated from the Body.

Hence it is, that unerring Nature, in the curious Structure of  
Anirnais, has formed numberless secretory and excretory Or-  
gans ; thy means of which, not only the Excrements of a more  
fixed, but, also, of a more moveable. Volatile, saline, sulphu-'  
reous, aqueous, and aereal Nature, are continually and unin-  
terruptedly separated from the Blood and Vital Humours. This  
Purpose is excellently answer'd by that large Organ the Liver,-  
which is continually employ'd in separating from the Blood the  
sulphureous Scoriae, together with the hot, saline, and serous  
Parts. There arc, dal so, here-and-there in the Body, number-  
less conglomerate Glands, which consisting of infinitely small  
Tubes, continually secrete a subtile and highly fermentable  
Fluid of a salival Nature, which, having performed its Office,  
is eliminated from the -Body. The Sinn, also, being full of  
Tubes and Pores, is, as it were, an universal and common  
Emunctory, through which the serous,, sulphureous, saline,  
and excrementitiouS Parts of the Humours are eliminated.  
The Kidneys are the Organs through which a saline, sulphu-  
reous, and thick Serum is strained ; and through the large  
Intestines the feculent Sordes and Faeces are evacuated.

For, in order to preserve the due Mixture of thevital Fluids,  
'tis not only requisite there should be a perpetual Separation of  
the superfluous Parts, but 'tis, also, necessary there should be  
another Preservative of Life and Health, not mentioned by  
modern Writers; which is a fresh Accession of mild and tem-  
perate Juices, in the room of the corrupted Fluids, eliminated  
from the Body. Hence we fee the Reason, why Men, and  
brute Animals, in order to prevent internal Putrefaction, and  
preserve Lise, ought constantly to have due Supplies of Ali-  
ments, from which laudable, temperate, sweet Juices, fit for  
nourishing and increafing the Strength, such as the chylous  
and lacteal Juices are, may be again generated; for, without  
such a new Accession and Assiux of fresh Juices, Life and  
Strength cannot be long preserved ; so that Life is excellently  
preserved, and a mortal Putrefaction prevented, in the Bodies  
of Animals, by. means of Aliments, and due Excretion. It  
must, also, he observed, that in Adults, who stand in no need  
Of having the Parts of their Bodies farther increased, the Ex-  
cretions ought, in order to a due and equable State of Health,  
to be equal to the Aliments taken.

This sum and unshaken Foundation of Health, consisting in  
this, that every Substance approaching to Corruption, and ca-  
pable of inducing Death and Destruction, ought carefully and  
perpetually to be abstained from, furnishes us with Various Cor-  
rollarieS and Theorems, of singular Use in Practice: For, first,  
from whet has been said, we may deduce the Nature find im-  
mediate Cause of Death, find the Putrefaction which succeeds  
it, and is, in its own Nature, highly unfriendly to Life : The  
Cause,, then, of these Effects is a destroyed Circulation of **the**Bloed, and the Putrefaction and Corruption arisino thence,  
winch, on the contrary, is generally the Cause of the5Destruc-  
tion os the Circulation, and, consequently, os Death ; for,  
from a careful Dissection of those who have died both of acute

**and** chronical Disorders, the Causes of Death are always maul-  
sost and conspicuous; since one or more of the Vifceta, or  
more noble Parts, appear corrupted, putrefied, or sphacelated,  
by an Extravasation or Stagnation of **the** Humours; But in  
**these** who die suddenly, or of violent acuto Disorders, which  
are not to he known without Difficulty, polypore Concretions,  
.coofrsting of vatious Fibres and Membranes, are frequently  
found in **the** large Vessels; especially in the Ventricles of **the**Heart, and the Sinufes of the Dura Mater; which, by obstructs  
ing the free Circulation of the Blood, destroy the Patient.

Since, therefore, the whole Business of the Physician con-  
sists in procuring long Life, preserving the Body sound, and  
preventing untimely Death, and the Disorders which bring it  
on, he certainly cannot, in a more effectual manner, answer  
these grand Intentions, than by preventing and removing Cer-  
‘ ruption and Putrefaction, both in the internal and external  
Paus. But this End cannot be better obtained, than by pre-  
serving a free Circulation of the Blood through all the Parts  
of the Body, and removing every Cause which may in the least  
ohstruA and hinder it.

But.several Causes are capable of disturbing and hindering  
this Circulation; the most considerable of which is, a Redun-  
dance of Blond and Humours, which, by its strong Resistance  
and Expansion, impairs the Elasticity of the Fibres of theHeart,  
and its Auricles, so thatthe Circulation becomes very flow and  
languid: And this Circumstance, unless soon removed, pro-  
duces Stagnations of the Humours, infarctions of the Viscera,  
Obstructions, indurations. Extravasations of the Humours, and  
putredinous or apostematous Corruptions of the Parts. By.this  
flow Circulation of the Blood and Humours, the Excretions  
are lessened, and particularly those made by Perspiration, and  
that of the bilious Humours, large Quantities of which are  
daily secreted in the Vessels of the Liver. Hence large Quan-  
tities of impurities, of various Kinds, must necessarily he ac-  
cumulated in the Mass of Blond.

But a Plethora fo unfriendly to Health and Life is very in-  
cident to those, who, being of fpongious Habits, live luxurioufly,  
and indulge themselves in Ease and Quiet: But Women are  
still more disposed, than Men, to generate a larger Quantity of  
Blond than is necessary to Nutrition and Life. Lest, therefore,  
this Redundance of Blood and Humours should injure Health,  
or threaten Death, the Structure of our Bedies is so artfully  
contrived, that the Vessels and nervous Parts, have a peculiat  
Kind of Motion, by which they prevent Stagnations, and free  
themselves from the Load of redundant Blood, so unfriendly  
to Nature; in Childhood, generally by the Nose; in Women,  
by the Uterus; and in Men, by the hemorrhoidal Discharge  
returning at stated Periods: When, therefore, the usual and  
salutary Excretions, destined -for diminishing the redundant  
Blood, are, by any Cause, rendered defective, diminished, or.  
. violently suppressed, numherless Misfortunes are produced *y and,*unless Relief is soon afforded, the Body is rendered subjefi to  
Disorders of all Kinds, both of a chronical and acute Nature,  
as in shewn in *Mndicnt. rational. Fred. Haffman. Torn.* 2. I  
have frequently seen plethoric Women, who, having their  
Menses suppressed by a Fright, upon the Accefs of Cold, or  
the Use of a drastic Purgative, have soon after died of a spha..  
celous Corruption of the Parts ; and immediately after Death,  
their Bodies became, tumid, and were seized with an highly  
fetid Putrefaction, large Blisters rising here-and-therc upon  
them.

From what has been said, any one may conceive, that Putre-  
faction and Death may he generated only by a Redundance of  
laudable Blood: In order to prevent which, no Remedies are  
- more proper than Venesection, or a Restitution of the ufiral  
Excretions of Blond : But if any one is unaccustomed to Vene-  
section, and naturally abhors it, and at the fame time feeds  
and lives in such a manner as is sit *for* generating large Quan-  
tities of Blond, whilst Nature is stow, or absolutely defective,  
in carrying on the Excretions; such a Patient is to be treated  
- in another manner, and great Care taken, lest he fall into some  
violent, or, perhaps, mortal Disorder, arising from Putrefaction:  
For, according to his peculiar Circumstances, fuch Things as  
lessen the Redundance of the Bleed and Humours, are to be  
used v fuch as proper - Exercise, Abstinence, light Drink and  
Aliments, Bathing, Laxatives, Infusions, and a due Use of the  
Mineral Waters, both of the hot and cold Kind.

It is, also, certain, that a mortal Putrefaction may be pro-  
duced, by a Penury or Deleft of Blond: For though it is  
seemingly most prohehle, that different Causes must produce  
different and dissimilar Effects, yet it is certain, from various  
Instances, that, in the human Body, contrary Causes may con-  
spire in the Generation of the same Disease: But we shall  
now content ourselves with showing, in what manner both **a**Redundance and Penury of Blood may induce a mortal Cor-  
ruption on the Humours, and fobd Parrs. We have already cti-  
served, that the redundant Blood **cosily stagnates in the Vesicis,**

and soon becomes impure, in consequence of the Diminution,  
occasioned by a Plethora, of the Secretions and Excretions,  
which ought to free the Blood from impure Sordes, and excre-  
mentitious Matter, which have a great Tendency to Corrup-  
tion : The fame, in like manner, happens from a Defect of  
laudable Blood ; for, as, by a natural and due Quantity of  
Blood, all the Vessels are kept open, so, in consequence of a  
Penury or Scarcity of it, they collapse, and baue their Diaure-  
ters lessened, or, perhaps, are at fast totally blocked up; Hence  
the benign and nutritive Juices can neither be conveyed to **the**solid Parts, nor a sufficient Quantity of the .nervous Fluid he  
generated in the Brain; by which means the Strength is greatly  
impairedV Besides, as the Impulse of the Blond, by the due  
Diastole of .the Heart and Arteries, such as is observable in the  
Pulse, depends upon a sufficient Quantity of Blood, it must  
necessarily heppen, that, under a . Deleft of this Fluid, the  
Pulse must become very weak and languid, whilst the Blood itself  
is not duly propelled through the minute capillary Vessels of  
the Viscera, but stagnates here-and-there in the Viscera; fuch  
as the Lungs, Spleen, and Liver: And this State is succeeded  
by Corruptions, Cachexies, flow and hectic Fevers.

Now there is not a nearer Way to Corruption, and the Dis.  
orders arising from it, then when, after the Strength is con- .  
fumed, by violent Haemorrhages, severe previous Diseases, long-  
continued Passions of the Mind, Grief, or Hunger, Persons  
voraciously eat large Quantities of Aliments, which, as they  
cannot be sufficiently digested, and the ufeful separated from  
the useless Parts, on account *of* the weak and languid Force of  
Natur, fo they not only generate a large Quantity of peccant  
Humours in the *Pritna Via,* but the Vessels, also, in conse-  
quence.of the obstructed Excretions, are filled with impure and  
corruptible Juices, and a great Disposition to malignant and pu-  
trid, or to flow and hectic Fevers is broiegirt on; for it is cer-  
tain from Experience, that terrible Camp Diseases, as malignant  
and petechial Fevers, the *Hungarian* Fever, Diarrhoeas, and  
malignant Dysenteries, afflicti the Soldiers most, spread them-  
selves farthest, and are most contagious, jo the Autumn, and  
when they begin to leave the Camp, for no orber Reason than  
that, during the Summer, under the long Heat,. the Night-  
colds, the continual Fatigues and Watchings, or, perhaps, zcorrupted Aliments and Liquors, they have lost their Strength,  
and laudable Blond; instead of which they have their Veins  
and *Prima Via,* stuffed with large Quantities of corrupted  
Juices, which are highly subjecti to Putrefaction, and, in acute  
Fevers, generally induce a mortal Sphacelus on the internal  
Parts.

Having thus considered the Caufe of malignant Disorders,  
which is'a Defeol of laudable Blood and Juices, and a coofe-  
quent easy Transition to Putrefaction, every thinking and judi-  
cious Physician must certainly perceive, that nothing is more  
dangerous than to exhibit ton much Aliments, especially of bad  
Juices, to Persons weakened by Diseases, or any other Causes;  
since such Persons are, according to *Celsus,* highly subjeol to  
putrid Diseases: But it is better, in such a Case, gradually,  
and by little and little, to restore the confirmed Blond, to **ell-:**minate the Crudities attending such a State, cither by Petioi-  
ration or Stool, by means of gentle Evacuants; and then to  
corroborate the Digestinn, and concoctive Power of the Sto-  
mach, by temperate, corroborating, and stomachic Medicines,  
by which means the violent Disorders, to be dreaded from **a ’**Corruption and Putrefaction *of* the Humours, may he excel-  
lently prevented.

There is, also, another expeditions Method of bringing on a  
mortal Putrefaction, in sound vigorous Persons, in the very  
Flower of their Age ; which is by the Exhibition of Poisons,  
especially those of a caustic Quality, fuch as the three Species  
of factitious Arsenic, bighiy acrid Purgatives, or drastic Erne-  
.tics prepared of Antimony ; for, unlefs the violent Operation  
of all these is soon stopt by proper Remedies, they quickly  
prove mortal, by inducing terrible Sperms of the nervous Parts,  
and a Putrefaction of the nobler Organs of Life. Upon dis-  
secting Patients taken off by these means, sphacelous Spots **of**the Stomach and Intestines, accompanied with an intolerable  
Stench, present themselves to out View ; for Poisons of this  
Kind, by constricting **the** nervous Parts, and Vesseis of **the**Stomach, produce Inflammations, which degenerate into **a**Sphacelus, which is **the** more fatal to Lise, because it seizes **the**nervous and membranous Parts, fuch as the Stomach and In-  
testines, which have an intimate Consent with thofe Parts,  
which are furnished with an exquisite Sensation, and a brisk  
lively Motion, and which they, also, draw into the like irre-  
gular Commotions r It is, also, obfervable, that cold Liquors  
drank by a Person over-heated, and covered with a profile  
Sweat, are highly prejudicial, and, in their Operation, fre-  
quently imitate Poisons, by quickly inducing a Sphacelus and  
Death: And though the Estedt is not always so fatal, yet we  
have instances in which cold Liquors, drank by over-heated

Persons, have proved mortal; and, upon laying open their Bo-  
dies, their Viscera were found sphacelous. Thus, some Years  
ago, a young Man of eminent Distinction, in the Flower of  
his Age, being covered with a profuse Sweat, after violent Ex-  
ercise, drank a large Quantity of cold Ale, ar a Draught; in  
consequence of which, being seized with a great Languor, an  
Uneahness about the Praecordia, a Desire of vomiting, and  
frequent Deliquiums, he died of Convulsions on the fourth  
Day; and, upon opening his Body, a Part os his Stomach was  
not only sphacelous, but his Spleen, and the Left Lobe of his  
Lungs, were found resolved into an highly fetid and putrid Mass,  
black aS Ink : For as the Viscera consist almost entirely of a  
Congeries of highly minute Vessels, it is of course obvious,  
that they must readily be subject to Infarctions, and a Stagna-  
tion of Blood. When, therefore, a large Quantity os Liquor,  
actually cold, arrives at the Blood, which, jn consequence of  
its Motion and Heat, is pretty thin and fluid, it is not fur-  
prising, that the Blood should he immediately coagulated, and,  
being firmly impacted in the Vessels, become putrid. In this  
Cose there is not a more efficacious Remedy than speedy and  
seasonable Exercise and Motion, whether by riding on Horse-  
back, or in a Chariot, after drinking a large Quantity os a  
warm Infusion of the Flowers of Daisies, common Chemo-  
mile. Carduus Benedictus, Paulis Betony, and Scordium; by  
which the Coagulation of the Fluids is prevented, and the free  
Circulation of the Blood, through the Vessels, promoted;  
Hence we see how simple, and yet how efficacious, the Reme-  
dies for preventing the most terrible of Deaths sometimes are.

Among the terrible Disorders arising from Putrefaction, we  
may justly class the *Morbus Nigcr* os *Hippocrates;* under  
which. Humours os a black Colour are not only vomited, but,  
also, highly fetid Excrements discharged by Stool. Here it is  
to be observed, that a Vomiting os bloody, or black. Matter  
rarely proves mortal; but is a large Quantity os Blood is, from  
the ruptured Veins of the Ileum, conveyed to the Faeces os the  
Colon, and is not immediately discharged, but, stagnating, is  
put into a putredinous Motion with the Faces, accompanied  
with an highly fetid Smell, it soon kills the Patient : For, in  
thy Opinion, those who die of this Disorder are not so much  
destroyed by the Effusion os Blood, which is not sufficient to  
destroy Lise, as by the Putrefaction arising from the Mixture  
of the Blood with the Excrements; for this fetid Vapour is  
highly unfriendly to Nature, since, by its Subtilty, it pene-  
trates to, contaminates, and totally destroys, that Fluid which  
animates the nervous and membranous Parts, and governs Sen-  
sation and Motion ; because the Strength, the Origin of which  
is no other, than a pure and subtile State os the Humours, im-  
mediately begins to sail, and-at last is totally destroyed, as we  
observe in a Sphacelus, and ulcerated Cancer os the external  
Parts, where the Putrefaction, penetrating into the internal  
Parts, proves the only Cause of Death, by destroying the Agi-  
lity of the animal Spirits.

Among the putrid and malignant Disorders, the most terrible  
are the Plague, and petechial Fevers, which are sometimes more  
Violent, though less contagious, than the Plague itself; for these  
Disorders are propagated, and conveyed to the Body, by a  
kind os Miasma, which is nothing but a putredinous Leaven;  
for as a small Quantity of any Mass already, putrid, mixed with  
corruptible Substances, forthwith infects them, and surprisingly  
propagates itself, so highly subtile Vapours arising from Persons  
labouring under the Plague, or petechial Fevers, and received  
by the Air into other Bodies, partly by the Mouth and Nostrils,  
immediately reaches the Mass of Blood, and Being partly swal-  
lowed with the Saliva, passes to the Primse Via, quickly mul-  
tiplies itself, and, at last, contaminates the whole Mass os Hu-  
moots, producing the most terrible Symptoms. That the Nature  
and Essence, of these Diseases consist in Putrefaction, is obvious  
from the uncommon Loss of Strength, the greatWeakness and  
Inequality of the Pulse; the Conversion os the Carbuncles and  
Buboes into Abscesses, the highly fetid Exulcerations, the nau-  
seous Scent of the Excrements, the black and livid Spots di-  
spersed over the Body, which are only Species of Sphacelations,  
and the Smell of the Body after Death. And though these  
Miasmata insect sound and healthy Persons who contain a tem-  
perate Blood in their Veins, yet it is generally observed, that  
they exert a greater Force and Influence on Persons of caco-  
chymic Habits, whose *Primes Vics Rte* full of peccant Juices,  
because they there meet with Humours already disposed to Pu-  
trefaction and Corruption ; such as those os the saliva! Kind,  
which are easily thrown into a fermentative Motion: Hence  
the Reason is obvious, why the Plague rages most among poor  
People; and why those.who are oppressed with Hunger, and  
live in an irregular manner, are most subject to those putrid  
Disorders. If a Dyfentery, the Small-pox, the Meafles, or  
a Purple Fever, are accompanied with Signs of a malignant  
Nature, and prove very mortal, they derive their malignant  
Nature from nothing but peccant Humours, and Juices dis-

posed to Putrefaction, and corrupted by a depraved Habit of  
Body.

Having thus investigated the Nature of the Plague, and of  
malignant Disorders and Fevers, which consists either in Putre-  
faction itself, Oran easy Transition to it, it will be no hard  
Talk for the skilful Physician to find out proper Remedies,  
and a due Method of ufing them, both for the Prevention and  
Cure of these Disorders; tor nothing is more effectual for Pre-  
vention, than a good Diet, and a proper Regimen, taking care  
not to load the Stomach with too great a Quantity os Aliments,  
especially of a corruptible Kind. We must, also, take care,  
that the salutary Excretions, by which the Blood is excellently  
depurated, be duly and expeditioufly carried on ; for, by this  
means, the Miasma, not finding a Substance similar to itself,  
either does not operate at all, or renders the Progress and Ter-  
mination of the Disease far more happy than they would have  
otherwise been. Under the Cure, those things are carefully to be  
avoided, which increase the intestine Motion of the Blood and  
Humours, such as all alexipharmic, hot, bezoardic, and spi-  
rituous Substances, which are so far from hindering the Putre-  
faction, that they rather accelerate and diffusa it.. The Patient  
ought, also, to abstain from all alcaiine, volatile, fetid, and  
oleous Substances, which are only the Produce of Putrefaction :  
On the contrary. Acids, which, by fixing rhe volatile and oleous  
Parts, strongly resist Putrefaction, are the best Medicines in the  
Plague. To this Class, also, belong earthy bezoardic Sub-  
stances, and such aS keep. the Body in a gentle Diaphoresis ;  
since there is not a more expeditious Method os removing a-  
beginning Putrefaction, and evacuating the subtile fermentable  
Parts, than by the Emunctory of the Skin: And this Intention  
is best answered by such Analeptics as restore the Strength, and  
promote the Circulation os the Blood. Earthy and bezoardic  
Substances have this peculiar to themselves, that they, -in some  
measure, preserve the Mixture of the Blood, and hinder its  
Dissolution.

To malignant Disorders, also, helong hectic Fevers, which  
arise not from so active, but a flow-proceeding Putrefaction,  
which preys upon the Strength: For, upon opening the Bo-  
dies os those who have died of hectic Fevers, they have  
been found to proceed. from corrupt Abscesses, degenerating  
into a Sphacelus, in some os the Viscera, especially the Liver  
and Lungs. And this Corruption of the internal Parts is the  
Cause, why these Fevers are with Difficulty, if at all, susceptible  
os a Cure.

It is, also, to be observed, that most acute Fevers prove mor-  
tal by no other means than Putrefaction, as is obvious from  
dissecting those who die of them immediately after Death; on  
which Occasion an intolerable Stench, arising from nothing  
but the Putrefaction, is perceived; and, for the most part, the  
Stomach and Intestines, or some os the nobler Viscera, are  
found sphacelated: But as nothing more resists the Generation  
os Putrefaction, and the Sphacelation of the internal Parts,  
than hindering the Stagnation of the Blood, and preserving its  
equable Circulation, so the whole Businefs of the Physician is  
to prescribe such Medicines as preserve the Circulation os the  
Blood, restore Strength, and promote Perspiration; such as  
temperate bezoardic Mixtures, consisting os the Waters pre-  
pared from the Flowers of *Egyptian* Thorn, black Cherries,  
Cinnamon without Wine, Carduus Benedictus, and Roses,  
distilled Vinegar, Syrup of Citron-juice, the *Mixtura Simplex,*Crabs-eyes, diaphoretic Antimony, Hartshorn philosophically  
prepared, and native or common Cinnabar; the Use of which  
is to be long persisted in. Nor are we to suffer rhe Patient to  
the long costive, because the putrid Sordes, when translated from  
the whole Body to the Intestines, and there fermenting toge-  
ther, prove the Fomes of Putrefaction: For the Prevention of  
greater Mischief, the *Prima Via* are to be carefully cleansed.  
But, for this Purpose, we are never to ufe drastic stimulating  
. Medicines, since only gentle Laxatives, and mild Clysters, ace  
to be prescribed, not in every Period of the Disease, siut in its  
Remission.

We now come to consider, whether Comphire, which so  
powerfully resists Putrefaction, that nothing is sound more  
effectual against an external Sphacelus and Gangrene, and, for  
this Reason, is called the best os AlexipharmicS, may be safely  
used, to check a Putrefaction. Now, tho’ Camphire is an highly  
subtile, though coagulated, and very evaporable Oil, yet it  
differs from other distilled Oils in this, that these induce a much  
greater Heat on the Blood, than Csmphire, which soon tran-  
spires ; whereas the others, in consequence os their viscid Na-  
ture, and tenacious Texture, continue longer in the Pores and  
Parts: This may be confirmed by an Experiment ; for half aDram of Camphire, dissolved in one Dram of Brandy, and  
taken internally, by a sound Man, produces rather a Sense of  
Cold, than of Hear, in the internal Parrs ; noris the Pulse in-  
creased, or the Urine tinged of a red Colour; But if twenty  
Drops of the Oil of Cinnamon, or Cloves, are diluted in

Hrandy, and taken, there is a remarkable Increased not only  
of the Pulse, bus, also, of rhe Heat. For this Reason, in  
malignant Disorders, I greatly recommend the internal Use of  
Preparations of Camphire, both for the Cure of Inflammations .  
and malignant Fevers: And in this I do not rely upon Specu-  
lation only, but, also, upon Fact and Experience, by which  
we ought to conduct ourselves in the Use of all powerful and  
efficacious Medicines. In the Height and Exacerbation of the  
Disease, if the Skin, and all the Parts subservient to Excre-  
ti on, are spasmodically constricted, and the internal Parts ex-  
cessively hot, especially if the Patient is young, and accustomed  
to spirituous Liquors, it is expedient to abstain from Prepara-  
tions of Camphire, which are most com’modiousty used in the  
Beginning, after cleaning the *PrtinezVia* by a Vomit, if ne-  
ceffary, in Conjunction with cinnabarine bezoardic Powders, and  
a few Grains of purified Nitre, using at the same time a sudo-  
rific Regimen. I know some Persons, who, by certain Signs,  
appearing to be infected with a contagious malignant Fever,  
have, by the seasonable Use of Preparations os Carnphire, once  
or twice exhibited, had a profuse Sweat excited, and been per-  
fectly freed from their Disorder. In the time of the Remission,  
when the Skin is moist, the Pulse weak, and the Strength  
low. Camphire, with the Addition of bezoardic acidulated  
Substances, is an excellent Preservative against Malignity ;  
and in violent Deliriums, no Medicine is more efficacious than  
Nitre, mixed with a small .Quantity of Camphire, When  
the Strength is so far exhausted by the Violence of the Disease,  
that it begins to be insufficient, as it were, for promoting the  
Circulation of the Blood, it is excellently restored by a few  
Grains of Camphire, dissolved in Oil of sweet Almonds.  
And, lastly, in Fevers, arifing from Inflammations of the in-  
ternal Parts, half a Grain, or a Grain, of Camphire, mixed  
with Nitre, and frequently exhibited, -is of singular Service:  
Tins Powder I have, also, used with Success, in Violent Pori-  
pneu monies.

We now come to inquire, why scorbutic Patients, and those  
wasted with Age, are, generally, so subject to a fatal Spha-  
celus, from the flightest external Cause, or some Fault os the  
Blood : This, then, happens, in consequence of the Propen-  
sity of the Blood to a putredinous Corruption; for a Sourvy is’  
an excessive Impurity, or Cacochymy, of the Blood, arising  
from a Redundance of saline and sulphureous particles, which,-  
in consequence of the diminished Secretions, not only remain  
in the Habit, but, also, contaminate the benign and temperate  
Humours, whose due and natural Mixture they destroy. A  
Blood, therefore, impregnated with Impurities of this Kind,  
easily degenerates into a State os Putrefaction; for which Rea-  
son scorbutic Patients are often afflicted with ichorous fetid  
Exulcerations of the Mouth, Fauces, and other Parts, whilst the  
Gums become tumid and putrefied, with , an intolerable Stench  
of the Mouth, and the inferior Parts os .the Body are covered  
with Spots os a livid bluish Colour; which are the Signs of a  
flight Sphacelation. It is not, therefore, to bo wondered ar,  
that, from the flightest Cause, the Blood, hecoming stagnant  
in the Parts, should degenerate into a sphacelous mortal Putre-  
faction; as, also, that a Sphacelus, arising from an internal  
Cause, is incapable of being cured; for the Blood, already  
greatly disposed to Corruption, is soon so infected by the Pu-  
trefaction already began in one Part, that the Danger cannot  
he averted by the most efficacious Medicines. Sphacelations,  
both of the internal and external Parts, are, also, very familiar  
to old Persons, because they have many Circumstances in com-  
mon with scorbutic Patients; for, in consequence os the Thick-  
ness and Rigidity of the Fibres, contracted by Age, all the  
fecretory and excretory Ducts become narrower,\*" and have  
their Diameters lessened : Hence the Secretions of the laudable  
Humours, the Application of the nutritive Juice to the mintne  
Vessels of the Parts, and the Influx of the nervous Fluid into  
the Nerves, are diminished, the Strength of the whole Body,  
and all its Parts, impaired, ’ and the Constitution rendered dry,  
parched, and wasted, by a flow Consumption: But as in this  
Decline of Age, in consequence os the contracted Emuncto-  
ties, and diminished Excretions, saline and acid Sordes are ac-  
cumulated in the Primae Vise, hence the Blood of old Per-  
sons is full os scorbutic Salts : Hence it is, that Itching, *a dry*Scab, red Urine, calculous Concretions in the Kidneys and  
Bladder, and tophaceous Concretions in the Gout, Catarrhs,  
Coughs, Rheumatisms, Stranguries, and Exulcerations of the  
Parts, are so frequent and familiar to old Persons: Hence ap-  
pears the Reason why they have this in common, with scorbutic  
Patients, that both their internal and external Parts are highly  
subject to a Sphacelation. J have seen the flightest Injury of  
the external Parts, rhe Sting, for Instance, of a Wasp, a  
gentie Contusion, or the unikilsul Paring of a Corn in the  
I" oot, produce a Sphacelus in old Persons. I have, also, seen  
very old Men die of a Cardialgin, or Colic, brought on by  
some flight error in Regimen; for no other Reason, than that

in those Parts, which were afflicted with Pain, a sphacelous  
Stagnation was brought on.

Since, therefore, cacochymic, scorbutic, and old Persons,  
are so subject to violent, putrid, and dangerous Diseases,  
those who intend to keep themselves free from those Disor-  
ders, ought carefully to abstain from every thing which can  
render the Blood impure. But, in particular, old Persons/ .  
who are already half scorbutic, ought carefully to abstain from  
all such Things as are fit for generating the Scurvy; such aS all  
Sea Substances, which do not afford laudable Juices; Flesh,  
and other Aliments, indurated in the Smoke, salted Substances,  
all rancid, corrupted, and semiputrnl Substances; Aliments of  
strong Juices, such aa Pulses; a sedentary Lise free from Exer-  
else; a foggy, cold, moist, and heavy Atmosphere; heavy,  
sharp, or semiputrid Waters; living, and steeping, in moist  
Places ; long-protracted Care and Grief; a Neglect of usual  
Evacuations; the too great Use of acid and spirituous Sub-  
stances; all which, as they are never beneficial, but highly in-  
jurious, to weak Habits, so they ought carefully to be avoided  
by old Persons. *Fredcric Hoffmans .*

PYCNOCOMOS. A Name for the *Scabiosoy integri-  
folia-, glabra\ radice 'prcsmorsu.*

' PYON OSIS, πήκνωσις. Condensation.

PYCN OTICA. Incrassating Medicines.

PYCTE, πυκίή. A Mixture of Curds, and Honey.

PYE, πύη. The same as PHTHISIS. *Aretaus, de Cause  
et Signis Diuiurn. Lib.* I. *Cap.* 8.

PYELOS. See **CHOANA.**

PYGAE, πυζαᾶ The Buttocks. *Pusseus Ephesius, de Apol,  
lai. Part. Corp. Human. Lib.* I. *Cap.* I5.

PYGARGUS.. A Name for a Sort of wild Goat; .sor the  
Heron; and sor a Species of Eagle.

PYLORUS. The Right Orifice Of the Stomach is thut  
**Called. ,**

PYODES, πυώδες. Purulent.

PYON. Pus.'

PYOPCEUS, πυβποιός. Suppurative.

PYOSIS, πτβσις. Suppuration; OT an *Hypopyon* a Dis.  
order of the Eye.

PYR, πῦρ. Fire,  
PYRACANTHA. A Name for the *Mes.pilus; sipinosu;*

*Pyri Folio.*

PYRACEUM. Perry. See POMACEUM.

PYRAMIDALES MUSCULL The Pyramidal Muscles  
of the Abdomen.' See ABDOMEN. \* ' ..

PYRAMIDALIA CORPORA. Two Protuberances of  
the Medulla Oblongata, are thus called. See CEREBRUM.  
By some Authors the Spermatic Vessels are thus named.

.PYRAMIS. A Cone, in Chymistry, used for making  
Regulus of Antimony.

PYRAMISTA. An Insect, very subject to fly into the  
Fire, or a Candle. The Poets make frequent Allusions to this  
in their Love Songs ; but it is of no other Use, that I know  
of. .. ' .

PYRENOIDES, ττυρηνοειδὴς, from πυρὴν, a *Nucleus,* or  
Kernel. A Name for the Tooth-like Process *os* the second  
Vertebra of the Neck.

PYRETeRION. The Part of a chymical Furnace, which  
contains the Fire.

PYRETHRUM. Offic. *Pyrethrum OJsicenarum.* Ger.  
618. Emac. 758. *Pyrethrum vulgare Officinarum.* Park.  
Theat. 858. *Pyrethrum flore Bellidis.* C. B. P. I48. *.Bellis  
montana frutescens acris.* H. Monsp. 3I. *An Buphthalmum  
Canarienso Leucanthemum.* Pluk. Almag. '7G. Phytog. 272.6.  
PELLITORY OF SPAIN. ' 6/5/6 sc .

The Roots os the common Pellitorv are about a Finger  
thick, hard, and of a yellowish-brown Colour on the Outside,  
and whiter within; os a very hot burning Taste; from which  
arise Stalks about a Foot high, much branched, and cloathed  
with large winged Leaves, in Shape like those os Chamomile,  
but larger, and thicker *: Among* these grow several Flowers,  
much like the Flowers os Chamomile, but larger, set upon long  
Foot-stalks. It grows in *Spain,* and other warmer Countries,  
flowering in *fune* and *July.* The Root is used.

The Root of Pellitory of *Spain,* held hetween the Teeth,  
helps theTooth-ach, by drawing forth the cold watry Rheum:  
It, also, helps the Palsy of the Tongue, and the LofS of the  
Voice consequent therefrom: It is put into Masticatories for  
that Purpose; as, also, into drawing Cataplasms and Piasters,  
particularly the *Emplastrum Cephalicum. Metllguls Bar. Off.*

*Pyrethrum* has its Name from πῦρ *(Pyr),* Fire, because of  
the igneous Heat of its Root : It differs from the *Anthemis,* or.  
*Chamcemelum,* by the Largeness of its Flower, and the acrid  
and fervid Taste of its Root.

It is imported from the eastern Parts. *Mattheolus* says, that  
it grows on some Mountains of *Italy*; hut is there less acrimo-  
nious. ' ’. -

It stimulates to Venery, cures a Quartan, and gives Relief  
under an Hemicrania. *Schroder.*

*Morison,* or *Ecbart,* affirm this Plant to be the genuine Py-  
rethrum; for what is esteemed by some the *Pyrethrum verum,*is an umbelliferous Plant. Authors were imposed upon by a  
corrupt Reading of *Dioscorides,* where, in the Description of  
the Flower, some Copiesssor ἀνθἐμιο, erroneously substitute ἀνήθις.  
*Hist. Oxon.* 3. 34. ' ;

**PYRETHRUM VERUM.** Ossic. *Pyrethrum sista esire.* Ger.  
618. Emac. 758. *Pyrethrum untbelliferum.* C. B. P. I48.  
Raii Hist. I. 462. *Pyrethrum umbelliferum primum.* Park.  
Theat. 8oI. *Pyrethrum umbelliferum MatthioU. J.* B. **3. 20.**TRUE PELLITORY OF fi-AIN.

’ The Roots and Leaves are like those of the *Coitila foetida;*the Umbella is supported by a Multitude of Pedicles, proceed-  
ing, as it were, from one common Centre, aster the manner  
of the *Pecten Feneris, or Anethum*; the Flowers are white,  
and os a fervid and bitterish Taste; to these succeed round  
blackish Seeds, larger than Aniseeds : The Roots are an Inch,  
and sometimes two inches, thick, a Foot in Length, run deep  
under Ground, are of a brown Colour, inclining to yellow on  
the Outside, black within, and of an hot and acrimonious  
Taste.

*Guilandinus* cultivated this Plant in his Garden at *Padua,*and presented it to *Label,* by the Name of the *Pyrethrum ve-  
rum.* The Pyrethrum of *Casulpinus,* which bears a round  
Compressed Seed, of the Figure of a Lentil, belongs to another  
Genus.

The Root of this Pyrethrum is often, and with good Suc-  
cess, held in the Mouth for the Tooth-ach, which it removes,  
by attracting a Multitude of Humours into the Mouth, toge-  
ther with the Spittle: It excites, therefore, a Salivation, which,  
perhaps, it would excite in a more plentiful manner, and of  
longer Duration, if it were taken inwardly, in small and re-  
peated Doses. *D. Soame e Sylvii Lib.*

Besides this Species, *Ray* mentions the

**PYRETHRUM** *umbelliiferum alterum.* Park. *Foliis Anethi.*C.B. *Gescort. so-B.*

It has a long simple Root, moderately fibrated, creeping, of  
the Thickness of a Finger, of an hot and burning Taste; the  
Leaves are like those of *Anethum*; and the Stalk like that of  
Fennel, and the Flowers grow in Umbellas exactly circular.  
*Eaii Hist. Plant.*

-- This *Pyrethrum* is cultivated in the Gardens of the Botanists,  
and flowers in Summer.

It is used in lethargic Affections, the Palsy, and the like  
Disorders. The *Pyrethrum* sends forth a Stalk and Leaves like  
the *Daucus Syluestris,* or Fennel, and has the circular Umbella  
of the *Anethum.* The Root is long, an Inch in Thickness,  
and of a very hot Taste. Dafrfrom *Dioscorides.*

PYRET1CA, according to *Blancard,* are Febrifuges.

PYRETOLOGIA, in Pathology, is the Doctrine relative  
to Fevers.

PYRETOS, πυρετός. A Fever.

A Fever is a very frequent Disorder, inseparably attended with  
an Inflammation, the Cause not only Os many Diseases and  
Death, but, also, frequently of an happy and successful Cure.

As the Nature of this Disorder is of an highly latent and con-  
cealed Kind, so we ought the more carefully to guard against  
Mistakes and Errors in investigating it.

- But, in a Research of this kind, errors are easily fallen into,  
in consequence of the large Train of Symptoms, with which  
thia Disorder is generally attended, and without which, how-  
ever, there may still be a Fever.

: That such Errors may be avoided, it is necessary, from  
among numberless Symptoms, to select those Phenomena alone,  
which always accompany every Fever; from the Presence of

' which Physicians know, that a Fever is present; and from the  
Absence of which they conclude, that a Person is free from a  
Fever.

- Then, from these Symptoms and Phenomena, duly disco-  
vered, and maturely weighed, the particular Nature of the  
Fever is to be found out.

\* All Fevers, arising from an internal Cause, are accompanied  
with Horripilation, a quick Pulse, and Heat, at different  
Times, and in various Degrees of the Disorder.

The Fever in which the Horripilation, quick Pulse, and  
Heat, proceed with Velocity and Danger, is called an Acute  
Fever.

The Fever, on the contrary, in which these three Symptoms  
proceed slowly, either with or without Danger, is called a Slow  
Fever.

Both these Species os Fevers are either common and epide-  
inicah or only affect particular Persons.

These are called Acute Febrile Disorders, which are accom-  
panied with an Acute Fever ; whereas those are called Chro-  
nical Febrile Diseases, which are attended with a Slow Fever.

. Hence it is, that all these febrile Disorders are not m he  
explained, without a previous Knowledge of the Nature os that  
Fever with which they are accompanied.

Now the Nature. of the attendant Fever is to be estimated  
from the three common Symptoms before-specified; which are.  
Horripilation, a quick Pulse, .and Heat..

Though these three Symptoms are present, at some time, in  
every Fever, yet the Velocity, of the Pulsie is the only Symptom  
which continues from the Beginning to the End os the Disorder,  
and by which the Physician judges, that a Fever is present.

In consequence os this, whatever Knowledge s Physician has  
of a Fever, depends entirely on the Velocity os the Pulse.

The proximate Cause, therefore, os this Velocity os the  
Pulse is, in like manner, the proximate Couse os the Fever,  
thus known from its Symptoms.

.ThisCause may, therefore, be a too quick Contraction of the  
Heart, or a too speedy reciprocal Influx of the nervous Fluid,  
conveyed from the Cerebellum into the Muscles and Cavities  
os the Heart.

Almost all Fevers hitherto observed, arising from an internal  
Cause, begin first with a Sense of Cold, Concussion, and Hor-  
ripilation ; and this Sense is greater or less, shorter or longer,  
internal or external, according to the Diversity of Patients,  
Causes, and Fevers.

In the Beginning, therefore, os every Fever arising from an  
internal Cause, the Pulse is quick, small, and frequently inter-  
mittent; whilst there is often a Paleness, Coldness, Rigor,'  
Tremor, and Insensibility of the Extremities.

. Hence it. is obvious, that in this Period of the Disorder the  
sanguineous Humours become stagnant in the Extremities of  
the minute Vessels, whilst, at the same time, there .is a Cause,  
imitating the Heart to a stronger Contraction;

From these two Circumstances we discover the Cause of all  
the Symptoms which appear on such an Occasion, and ale before  
enumerated.

In all Fevers where these Symptoms have preceded, there  
arises an Heat, which is greater or less, shorter or longer,' in-  
ternal or external, according to the Diversity of Fevers.

As this Heat. succeeds the Fever already produced, it is Ob-  
vious, the former must be rather the Effect, than the Cause and  
’ Essence, *os* the latter.

Hence, a quick Contraction of the Heart, and an increased  
Resistance of the Capillary Vessels, are Circumstances which  
account for all acute Fevers. Both of these Circumstances may,  
in a live Animal, be produced by numberless and infinitely Va-  
rious Causes ; and aS they may happen either jointly or fepa- '  
. rately, so when one is produced, the other easily follows.

For this Reason, the proximate Cause of a Fever, which  
consists in the quick Contraction os the Heart, and the increased  
Resistance os the Capillary Vessels, may itself have an almost  
infinite Number of proximate Causes,which are either singular,  
and peculiar to some Persons; or universal, and common to  
many : And these depend on the State of the Air, the Quality  
Of the Aliments, and the Patient's Method of Life.

The Causes, therefore, of a Fever, are either particular, or  
epidemical.

The proximate particular Causes of a Fever may be reduced  
to five Classes; which are, first. Acrid Aliments, Drinks,  
Sauces, Medicines, or Poisons, when either possessed of such a  
Property as that they cannot bo digested, moved, and. eva- .  
cuated; or when taken in such a Quantity as to irritate, suffo-  
cate, and obstruct the Vessels, by their Putrefaction. Secondly,  
The Retention of such Things in the Habit as ought to be  
evacuated, in consequence of Cold, Unctions, gloomy Dispo-  
sitions of Mind, improper Aliments, Drinks, Medicines,  
Poisons, a cloudy and soggy Air, Ease, a Remission Of usual  
Exercises, Obstructions of rhe Vessels by their Contents, or  
Compressions of them by surrounding Substances. Thirdly;  
Too much Exercise of the Mind, or Body; and acquir'd Heats  
Fourthly, External Applications of an acrid, pungent,.cor-  
roding, lacerating, caustic, and inflammatory Nature. And,  
fifthly. Such Substances as induce a great Change in the Humours  
and their Motion, such as many external and internal Things j  
Hunger, excessive evacuations ; the Pus, Water, and Ichor,  
in a Dropsy and Empyema; an acrid Serum collected in any  
Part; an hot State of the Bile; an Inflammation; a Suppuration;  
a Gangrene; a Cancer; long-protracted Watchings; intense  
Study, of any kind ; and excessive-Venery.

-The Effects of a Fever are, a briik Expulsion and Propul..  
fion of the Fluids; an Agitation of their stagnant Parts . a  
Mixture of all their Particles; a Prevalence over the resisting  
Matter; a Concoction of the Humours ; a Secretion of the  
concocted Parts ; and a Crisis of that which, by its stimulating  
and coagulating Quality, produced the Fever; a Change of  
Health and Soundness into a morbid State; a Change of Health  
into a Disposition fit for bearing th0se Things to winch the  
Patient was little accustomed before; an Expression of the most

stuid Parts of the Humours; and an Inspissation of the rest;  
Thirst, Heat, Pain, Anxiety, Weakness, Lassitude, a Sense  
Of Weight, and Loathing of Food.

The sooner the Viscidity of the Juices is resolved, and the  
more expeditiousiy the Irritation is allayed, the stigbter, shorter,  
and more salutary, the Fever is; and, on the contrary, it is the  
more Vinlent, long, and injurious, the longer it is before the  
Viscidity of the Humours is resolv'd, and the Irritation allay’d.  
Fevers are, also, various, according to the several Degrees and  
Conjunctions of this Irritation and Viscidity.

Hence it is, that Fevers often exert the same Efficacy with  
Medicines, with respect to other Diseases.

Hence, also, the Beginning, increase. Height, Decrease,  
Crisis, Change, and Cure of Fevers are Various, in acute and  
particular Fevers.

A Fever terminates in Death, some other Disorder, or in  
Health.

It terminates in Death, when the Solids are destroyed by a  
Force acting too strongly on them; or when the Fluids are so  
depraved and peccant, as to obstruct the vital Vessels, or those  
through which new Fluids ought to be conveyed, in the room  
of those lost. Hence arise Inflammations,‘Suppurations, and  
febrile Gangrenes, in the Vital Viscera, the Heart, Lungs,  
and Cerebellum; or aphthous Ulcers in the Prima» Viae, the  
frequent Causes of Death in Fevers.

A Fever terminates in other Diseases, when either, thy a too  
violent Agitation, it injures the Vessels, and, dissipating the  
more fluid Parts of the Humours, inspissates the rest; or when,  
by a too weak Action, it is unable, by its Force, to resolve the  
coagulated Parts of the Fluids ; or when it deposites the cri-  
tical Matter in some obstructed, dilated, or ruptured Vessels.  
Hence arise red Spots, Pustules, Erysipelas, Meastes, Small  
Pox, Phlegmons, Bubos, Inflammations of the Parotid Glands,  
Abscesses, Gangrenes, Sphacelus, and Scirrhus.

A Fever terminates in Health, first. When by its Force it  
subdues, resolves, renders moveable, and carries off, by insen-  
sible Perspiration, the material Cause of the Fever; and, at the  
same time, checks its Impetus, by restoring an equable Circu-  
lation. This universal Resolution almost resembles the Reso-  
lution .in the Inflammation of a particular Part; Secondly, A  
Fever terminates in Health, when the Matter of the Disease,  
heing, by the Force of the Fever, subdued, resolved, and ren-  
dered moveable, yet retains a certain Quality, by which it resists  
the equable Circulation sos the Blood,’stimulates the Vessels,  
and, by exciting some sensible Evacuation, is expelled. Hence  
Sweat, a Discharge of the Saliva, Vomiting, a Diarrhoea, and  
copious Discharge of Urine, happen critically, after the Con-  
coction of the Matter, and the State of the Disease, generally  
within fourteen Days.

A Fever, also, terminates in Health, when the Matter of  
"the Disease being, by the Force of the Fever, subdued, resolved,  
rendered moveable, and again assimilated with rhe sound Hu-  
mours, circulates without any Crisis, or the Induction of any  
ether Disease.

The Genius, Difference, and Duration, of Acute Fevers,  
when observed from the Beginning, through the Increase to the  
Height of the Disease, enable us to prognosticate its Event,  
several Changes, and final Termination.

From all the Circumstances, therefore, already enumerated,  
the general Diagnostics and Prognostics of Fevers may be easily  
deduced.

The general Cure of Fevers is most effectually obtained,  
first. By preserving and supporting that Strength on which  
Life depends. Secondly, By correcting and expelling the acrid  
irritating Matter. Thirdly, By dissolving and expelling **the**\_ viscid Juices. And, fourthly, by mitigating the Symptoms.

The Strength on which Lise depends, is supported by Ali-  
ments and Drinks of easy Digestion, opposite to Putrefaction,  
allaying Thirst, fit for increafing the Appetite, and Contrary to  
the known Cause of the Disorder.

The Aliments are to be exhibited at the time the Fever is  
absent, or, at least, when its Force is least.

- The Aliments are to he exhibited in a small Quantity, tho'  
at frequently repeated Intervals, lest the Viscera should be op-  
pressed, or a Change induced on them.

The Quantity and Quality of the Aliments are to be esti-  
mated and determined, first. From the Probability of the Du-  
ration of the Fever, whether for one, four, seven, nine,  
eleven, fourteen, twenty-one, shinty, forty, or sixty Days;  
sor as much Aliments ought ro be exhibited as are sufficient for  
supporting the Strength, and rendering it fit for the Purposes of  
Concoction, and a Crista - The shorter the Disease, the less and  
**the** weaker the Aliments ought to be; whereas'the longer the  
Fever, the more and the stronger they ought to be. Secondly,  
From the Age of the Patient; for the younger and the older  
- Persons are, with the greater Difficulty they bear Hunger.  
Thirdly, The Height and Vchemence of the Disorder, when

known, require Aliments of various Virtues, and exhibited in  
different Quantities. In the Height, a small Quantity os sight  
Aliments are to be used; but, in the increase and Decline, the  
snore and the stronger five Aliments ought to be, the more  
the Disease is distant from its Height. Fourthly, From **the**Place in which the Patient lives : For those who live near the  
Equator, commodioufly bear light Food, which does not so well  
agree with those who live near the Poles. Fifthly, From the  
Season of the Year; because the Summerrequires light, and  
the Winter stronger Aliments. Sixthly, From the Custom and  
natural Constitution of the Patient; For the Person who,  
when in a State of Health, using delicate Aliments, has them  
easily dissipated, requires a pretty large Quantity of Aliments,  
because the Vessels and Viscera were accustomed to them before.  
And, seventhly. From the Sense of Lightness or Weight sec-  
ceeding the Use of the Aliments.

Any external irritating Substance, such as the acute Frag-  
ments of Glass, Metal, Wood, Stone, and Bones, stimu-  
lating, corroding, vesicating, caustic, septic, and poisonous  
Substances, or such as produce a Redness of the Parts, are,  
with all Expedition, to be removed ; and the Parts in which such  
Substances were lodged, and are injured by them, are to he  
fomented with Viscid, mucous, mild, oleous, anodyne, and  
gently aperient Fomentations. Thus,

Take six Quince-feeds; and of the distilled Waters of Rose  
and Elder-siowers,each three Ounces*: Make into an* Emul-  
fion, to which, when pure, add half an Ounce of rectified  
Spirit of Wine, and one Dram os the Tincture os Opium.

This Intention is, also, answered, by the Unguentum Au-  
reum, Basilicon, Diapompholygos, the Unguentum Nutritum,  
Ointment os Poplar, and Ointment of Roses.

The acrid irritating Substance lodged internally, such aS the  
Acrimony of an Inflammation, Suppuration, Gangrene, Spha-  
celus, Cancer, carious Bone, Ichor, Pus, and acrid or stag-’  
nant Lymph, is to be removed, or corrected, by the Methods  
prescribed under their respective Articles.

An acrid irritating Quality, induced on the Fluids, may and  
ought to be corrected by the Use os rhe six Nonnaturals, and  
Various Remedies adapted to the known State and Nature of  
the Disorder. This intention is excellently answer’d.

First, By Rest, both of the Body and .Mind; Abstinence .  
from too much Exercise ; by moistening, diluting, mild, and  
lenient Substances, such as Ptisans, and laxative Decoctions.

Secondly, By temperating the excessive Heat of the Air, by  
cooling Exhalations, especially those os Plants proper sor this  
Purpose; by drinking subacid, gently-nitrated Water, with a  
small Quantity of subacid Wing ; by subacid, gentiy demulcent,  
and a little salted. Aliments; and by Medicines of a similar  
Nature. Thus, '

Take of the Decoction Of Barley, twenty-five Ounces; of-  
pure Nitre, one Dram ; os Rhenish-wine, six Ounces;  
of the Robs of Currans, and Elder, each two Ounces:  
Mix all together, and lot the Patient take an Ounce or  
two every Quarter of an Hour.

Take os the distilled Waters os Succory, Fumitory, and  
Baum, each three Ounces; of the Spirin of common  
Salt, one Dram ; of the Syrup of Mulberries, two Ounces;  
and of pure Nitre, half a Dram : MiX all together, and  
let the Patient take a Spoonful every Half-hour,

- Take of the Crystals of Tartar, two Drams ; and of **pure**Nitre, half a Dram : Reduce to a Powder, of whicn let  
the Patient take half a Scruple every three Hours, in **some \_**proper Ptisan.

Thirdly, By correcting the excessive Moisture os the Air, by  
large Fires of aromatic and refinous Woods, and by the Echa...  
lations of aromatic Substances. Thus,

Take of the recent Herbs of Marjoram, curled Mins, Ori-  
ganum, \_ and Rosemary, each two Handfuls; of **the**Flowers of *Roman* Chamomile, red Rofes, Tansey, and  
Lavender, each one Handful; of *Syrian* Marum, half an ‘  
Handful; of the Roots os *Florentine* Orris, Garden An-  
gelica, and Masterwort, each three Ounces ; os the Sha-  
vings of Sassafras, two Ounces; and of bruised Celeri-  
seeds, three Ounces: Cut all down, and reduco m aPowder, to be sprinkled in the Room where the Patient is.

Fourthly, By correcting the putrid State of the Air, -by  
throwing Nitre, Gunpowder, Vinegar, and Salt,, upon live  
Coals.

Fifthly, If a Fever is excited by Affections of the Mind, the  
Passions os the Mind are to be regulated by Reason, and con-  
irary Affections; by Variety os Objects, A nodynes,and Opiates.

- Sixthly, When a Fever proceeds from acrid acid Aliments,  
this Acrimony is to be diluted, cheek’d, absorb’d, and changed  
into a compound Salt ; and thia Effect is produced by the  
aqueous and gelatinous Farts of Animals, by oleous and  
'cretaceous Substances, Shells of Fishes, Crabs-eyes, pin-  
guious Earths, alcaline, fixed. Volatile, simple, and compound  
Salrs.

SeVenthly, When the Fever arises from acrid saline Aliments,  
this Acrimony is to be diluted by aqueous Medicines, and eva-  
cuated at the same time; tempered by mild oleous Medicines,  
and corrected by lixiyious Preparations of Qinck-lime.

Eighthly, WherT the Fever proceeds from acrid, aromatic,  
and heating Aliments, the Acrimony is to be diluted by aqueous  
Fluids, corrected by Acids, resolved.and deterged by sapo-  
naceous Acids, and tempered by Infld glutinous Substances.  
As alcalescent acrid Substances belong to this Class, so we hence  
learn the Method os treating Fevers produced by them.

Ninthly, When a Fever is produced by the alcalescent Parte  
of Animals, it is to be cured by the Measures directed under  
the Article ALcALi.'

Tenthly, When a Fever proceeds froth too large a Quan-  
tity of Aliments, or the use os such as constrict the Stomach,  
it is to be cured by Dilution, Fasting, Vomiting, and render-  
ing the Body soluble.. Gentie Vomits may be prepared, in **the**following manners:

Take of light Barley-water, thirty-six Ounces; of  
Oxymel of Squills, three Ounces ; and of Vitriolated Tar-  
tar which is not acid, two Drams: Mix, and let the Pa-  
tient take two Ounces every Half-hour. Or,

Take of the Rob of Elder, three Ounces; Vinegar of  
Squills, one Ounce; and distil'd Baum-water, fix  
Ounces i Mix- all together, and let the Patient take half  
an Ounce every Half-hour. Or,

Take five Grains of Emetic Tartar, for one Dose. Or,

Take one Ounce and an half of Emetic Wine for a  
Dose. Or,.

Take of white Ipecacuana'root, one Scruple: Reduce to a  
Powder, to be taken for one Dose. Or,

Take of the Powder of Ipedacucha-root, four Scruples; and  
of White-wine, three Ounces: Boil in a long Pinal, for  
four Hours; and exhibit the Liquor, when strain'd, for one

. Dose. Or,

- Take five recent Leaves of Asarabacca, cut down; pour  
upon them boiling Water; let them infuse for half an  
Hour; and exhibit the express'd Juice for one Dose.

Eleventhly, A Fever brought on by acrid, fermented, or fer-  
InentingLiquors, acid, oleous, aromatic, or distil'd Fluids, or  
a simple Acrimony, is to be removed by the same Remedies  
with those mentioned above in N° 5.6. and 8.

Twelfthly, A Fever arising from excessive Watching is  
cured by the fame Methods with those recommended above in  
N° 1,2. and *5.*

Thirteenthly, If a Fever arises from an alcaline, acid, oleous,  
or saponaceous putrid Acrimony, contracted by a Retention of  
the excrementitions Humours, these must be rendered move-  
able, their Passages must be lubricated, and their proper Emis-  
saries opened ; mean time, the Vital Powers, which expel them,  
must be stimulated, and augmented: And this is to be done both

. by internal and external Remedies.

i The principal excrementitions Humours, winch, if retained,  
are capable of exciting a Fever, are the Faeces of the Belly, the  
Urine, the Lochia, the haemorrhoids! Blood, and the perspi-  
rable Matter. . . '

The Emissaries are opened by resolving the Matter fixed  
therein, and by relaxing the obstructed Emissaries: This is done  
by Baths, Clysters, Frictions, Abrasions of the Hains, and  
cleansing of the Skin. ’ - : -

What stagnates at the Extremities of the conical Vessels, on  
account of too great a Quantity of Blood, by which the Vessels  
are compressed, is reduced to a State of Fluidity, by diminish-  
ing the Quantity Of Blood by Venesection; and we learn, that  
this is the Case, by the Signs of a PLETHORA, specified under  
that Article. -

Whet adheres to the Extremities of the Capillary Vessels, on  
account of spasmodic Contractions of their Fibres, by which  
their Capacities are diminished, is resolved by relaxing the

Fibres, and removing the Acrimony which causes .their Con-  
traction; for the Methods of doing which, fee rhe Articles  
**FIBRA, and OBSTRUCTIO.**

What adheres on account of its own Viscidity and Lehtor,  
is resolved .by various Remedies, the principal of which consists  
in a due Moderation os the Fever itself, in fitch a manner, that  
by means thereof the Coagulation may be resolved. It is, there-  
fore, necessary to regulate the Fever in such a manner, first,  
that no Inflammations, Suppurations, Gangrenes, or Spha-  
celations, may he produced ; the Danger of which is evinced,  
by the Violence os the Symptoms, particularly Heat, compared  
with the Strength of rhe vascular System.

. Secondly, That the most fluid Parts of the Plood may not he  
‘dissipated by too violent a Motion thereof; the Signs of which  
Dissipation are, a Dryness of the Nostrils, Eyes, Throat, and  
Tongue; an Hoarseness, a Dryness of the Skin, a diminished  
Excretion os Urine, and a small, quick, and unequal Pulse.

Thirdly, That, before the Concoction of the febrile Matter,  
the Fever may not languish too much, so aS to be incapable of  
subduing, moving, secreting, and excreting rhe Cause os the  
Disease. This State is distinguished by an universal LanguorOf  
all the vital Actions, before the Signs of Concoction appear.

In case the febrile Motion is exorbitant, *(flee the Dissertation,  
cm Disorders arising from an Excofs of the Circulation, under the  
Article* **SANGUIS),** it must he moderated by Abstinence, or an  
extremely thin Diet, by aqueous Drinks, by a somewhat cool  
Air, by calming the Passions of the Mind, by Venesection, ’ .  
refrigerating Clysters; and by mild, aqueous, glutinous, refri-  
gerating, anodyne, and opiate Medicines.

Refrigerating Clysters may be prepared in the following  
manner:

Take os pure Nitre, two Drams; os Honey os Roses, one  
-Ounce; and of recent Whey, twelve Ouncest Mix  
for a Clyster. Clr,

Take of common Vinegar, one Ounce; of Native Nitre,  
three Drams; of solutive Syrup of Roses, with Sena, two  
Ounces; and of a Decoction of Barley, twelve Ounces:  
Mix for a Clyster. Or,

Take of Butter-milk, ten Ounces; and Syrup of pain  
Roses, two Ounces t Mix up, for a Clyster. Or,

Take of the common emollient Decoctinn, eleven Ounces;  
of pure Nitre, three Drams ; and of Honey os Mercury3one Ounte and an half: Mix for a Clyster.

If the Peyer is too languid, it must, be raised by a cardiac  
Regimen, consisting of the more generous Sorts os Food and  
Drink; by respiring a somewhat warm Air; by exciting the  
Passions os the Mind; by acrid. Volatile, aromatic, fermented  
Medicines; by Frictions, Heat, muscular Motion, Baths, and  
Fomentations. ,

**FORMS OF MEDICINES IN A FEBRILE LANGUOR.**

Take os Oxymel of Squills, three Ounces ; of *Matthiolusts*Spiritus Vitae, three Drams; of distilled Mint-water,  
four Ounces; and of distilled Cinnamon-water, one  
Ounce: Mix all together,’ and let the Patient drink art  
Ounce every Hour. . '

Take of the Diascordium of *Sylvius,* one Semple and an  
half; of the Theriaca Andromachi, one Dram and an  
half; of the Syrup of the Five aperient Roots, two  
Ounces; and of the distilled Water of Carduus Bene-  
dictus, fix Ounces: Mix all together, for the same Use.

Take of the Confection of Alkermes, one Dram ; of can-  
died Ginger, fix Drams; of the Roots of Contrayerva,  
and *Virginian* Snake-root, each one Dram ; and of tbe  
Syrup of the Five aperient Roots, a sufficient Quantity  
. for making a Conserve: Os which let the Patient takehalf a Dram every four Hours.

Take Os the Countess os *Fears* Powder, one Scruple and ary  
half: And exhibit it for a Dose every sour Hours.

Take Os White Ginger, *Winter's* Bark, of the Roots 0s  
Zedoary, Contrayerva, and *Virginian* Snake-root, each  
one Dram; and of the Troches of Vipers, two DramS .  
Reduce to a sine Powder, to be divided into Doses os orso  
Scruple and an hah ; One Of which is Io he taken every  
sour Hoursz

Take os the Salt of Carduus Benedictus, half a Dram ; of  
burnt Hartshorn- one Dram; of red Coral, two Scru-

ples; and of the distilled Oils of Cinnamon, and Citron-  
peel, each three Drops: Reduce to a Powder, to he di-  
vided into ten Doses, for the same Use.

Next to the due Regulation of the febrile Motion, the most  
important Remedy against the Viscidity of the Juices is, the  
Restitution of the elastic Force of the Veffeis, by diminishing  
the Quantity of Fluids, by copious Venesection, performed with  
Expedition, and from a large Wound ; and immediately after,  
or at the same time, increasing their Motion by stimulating  
Remedies.

Lastly, The Viscid Juices are render'd fluid, by diluting with  
aqueous Drinks, Baths, Fomentations, and Clysters.; usmg,  
at the same time. Frictions. And these have a much better  
Effect, if taken warm 5 if resolvent Salts, as Nitre, are mix’d  
in a due Proportion with the aqueous Fluids; -and if gentiy  
aromatic, hitter, and lactescent cooling Vegetables are boiled  
in them.

The bitter lactescent Cooling Vegetables hinted at by the Au-  
thor, are the

*Chondrilla.* Gum Succory.

*dchorea.* Succory.

*Hieracia.* Several Species Os Hawkweed.

*Intubus.* Endive.

*Lactuca.* Lettuce.

*Scorsooncra.* Vipers-grass.

*'Sonchus.* Sow-thistle.

*Toraxaca.* Several Species of Dandelion.

*Tragepogon.* Goats-beard.

But, that these may operate well, expeditiousiy, safely, and  
with Efficacy, Venesection is to precede their U se; for this  
facilitates their Ingress, their Mixture with, and Action upon,  
the Blood.

So soon as, by these Remedies, the morbid Viscidity is dis-  
solved, hy a Continuation of the same, and sometimes aug-  
menting their Actions, it is forced through the Veffeis, and  
expelled: Sometimes, however, it may he so far subdued and  
amended, as to he rendered similar to the healthyTuices, and  
require no Expulsion.

The usual Symptoms, accompanying an acute Fever, are.  
Cold, Tremors, Anxiety, Thirst, Nausea, Enictations, Vo.,  
tinting. Weakness, Heat, Exestuation, Dryness, Delirium,  
Coma, Watchings, Convulsions, Sweats, Diarrhoeas, and in-  
stammatory Pustules.

All these Symptoms arising from, and caused by the Fever,  
cease shontaneonsty, when that is removed : For this Reason,  
they require no particular Method of Cure, provided they can  
be supported without endangering Lise, till the Termination of  
the Fever.

But it must be remarked, that these Symptoms frequently  
arise from an Attempt Of the Vital Powers to form a Crisis, and  
expel the critical Matter ; and then they precede, accompany,  
and follow the Crisis; in which Cases, nothing must be dono  
to moderate them,'which can in any Degree interfere with the  
salutary Work carrying on.

But if any of these Symptoms are unseasonable, or too severe  
to be supported without the Hazard os Life ; if so troublesome,  
as to render the Patient insupportably uneasy ; or if there is  
Danger of their producing some more formidable Disorder; in  
such Coses they must be mitigated by Remedies adapted to them;  
always having due Regard to the Cause and State of the ori-  
ginal Distemper.

**FEBRILE SYMPTOMS ὁ** and first of

**FEBRILE COLD.**

Cold, in the Beginning Of Acute Fevers, arises from a de-  
creased Attrition of the Liquids with each other, and with their  
respective Vessels; a Diminution of the circulatory Motion ; a  
Stagnation of the Liquids at the Extremities of the Vessels ; a  
diminished Contraction os the Heartland only a partial Evacua-  
tion of its Ventricles; and a less copious Influx of the Spirits  
conveyed from the Cerebellum.

This Cold, if of long Duration, Causes polypofe Concretions  
in the larger Vessels near the Heart; and in the small Vessels  
an Evacuation of the Fluids they ought to contain, in conse-  
quence of them Contractinn ; and in hath these Cases many  
and severe Diforders are excited.

*Hence* the Reasons are evident, why intense Coldness, in the  
Beginning of Acute Fevers, is of very bad Presage; why the  
Fever is dangerous, in Proportion to the Cold perceived upon  
its first Attack; and why, in the Beginning of the Plague, an  
excessive Sensation of Cold is succeeded by as excessive a De-  
gree Of Heat.

If any Attempts aro made to remove the Coldness in the  
Beginning of Acute Fevers, by any Remedies which stimulate  
briskly, under wherever Denomination, a Foundation is fre-  
ryuently laid for an incurable Inflammation in the Sequel. For

this Reason, all kinds of acrid saline Medicines, aromatic and  
oleons Substances, and Vesicate ties, are to ho condemned, in  
these Cases, aS highly pernicious.

But a much more safe, 2nd effectual Method os Cure, ynav  
by Tnrfned, hy exhibiting warm aqueous Drinks impregnated  
with Nitre, a little Honey, and wineby Bathe, Vapours,  
Fomentations, and Lotions, made of the same Sorts of Li-  
quors ; and by moderate Frictions : For these, applied at firsts  
are capable of curing and preventing Very great Disorders.

Take of Barley-water, thirty Ounces; of pure Nitre, twoDrams; of simple Oxymel, three Ounces; and os di-  
stilled aromatic Clove-water, two Ounces: Mix all μ,-  
gether, and let the Patient, every Quarter of an Hour,  
drink two Ounces, pretty warm.

Take of the Four greater and lesser cold Seeds, each fwoDrams: Make into an emulsion with Water; with three  
Pints of which mix, of distilled Fennel-wator, four  
Ounces; of Sal Prunellas, two Scruples; of the Syrup of  
the Five aperient Roots, two Ounces; and of the Syrup  
of. Violets, half an Ounce :. To he exhibited sor the same  
Purposes with the other..

Take of distilled Borage-water, one Pint; of the distilled  
Water of Rose-flowers, one Ounce; of distilled Elder-  
flower-water, eight Ounces; of Distilled Cinnamon-  
water, one Ounce and an half; of *Matthiolusts* Spiritus  
Vitae, half an Ounce ; and of *Ferneliugrs.* Symp of Mug-  
wort, two Ounces: Mix all together and exhibit for the  
same Use. -

Coffee, Decoctions of Sassafras and Sanders, together with  
Others of a like Nature, are of singular Service in the cold Fir,  
especially if towards the End of their Preparation a small Onan-  
tity of some aromatic Substance is added. Thus,

Take os the White, Yellow, and Red Sanders, each one  
Ounce : Boil in Water sor a Quarter of an Hour r Then  
add, of the Roots of Fennel, sour Ounces; of the Sha-  
vings of Sassafras, two Ounces; and of Liquorice, half an  
Ounce : Let them boil sor a Moment, and strain off four  
Pints; for the fame Use with the others. *Boernaave,*

**PROGNOSTICS FROM COLDNESS IN ACUTE DISEASES.**

A *Coldnes.s* of the Body, which may rather be called a *Cool.,  
nefs,* or moderate *Heat,* after some good Evacuation, by which  
the Pulse is rendered better, and stronger, is a very good Sign,  
as it indicates a critical Solution *os* the Fever *z* That *Coldnes.s,*also, which is the Consequence of refrigerating or allaying the  
Heat of a Fever, and is attended with Signs of Concoction in  
the Urine, Spit, or Stools, (where the Discafe has affected the  
Nervous System, spirituous Parts, or Belly) and an Alteration of  
the Pulse for the better, is a very good Symptom, and signifies  
a safe and speedy Return os Health. 'A *Coldnes.s,* also, is some-  
times observed to be critical, or preceding a very good Crisis.

Though a *Coldnes.s* thus qualified, as before described, is to be  
esteemed salutary ; yet it rarely happens that we can draw any  
good Prognostic from a *Coldnes.s* os the Body. This *Coldnes.s,*to proceed, is observed ‘either in the whole Body, or in the  
external Parts; in continual Fevers it is generally mortal, but  
in very robust Constitutions it portends not Death, but the long  
Continuance os the Disease. Under great Weakness it is always  
mortal, that is, where the Disease has been great and violent ;  
when it is the Consequence of an Extinction of the Faculty,  
it shews Death to be very near: But that it proceeds from such  
a Cause, will be indicated by other preceding destructive Signs.

Some who labour under an Anasarca, but especially under an  
Ascites and Leucophlegmatia, have a *Coldnes.s* almost of the  
whole Body ; and the same is observed in Persons affected with  
inward Suppurations when dying; such have a *Coldnes.s or*Chilness in almost every Part, either from an extraordinary  
Resolution of the natural Heat, or a Redundance of cold Hu-  
mours.

A *Coldnes.s,* however, of this Nature, in the extreme Parts,  
affords not always sure Grounds *for Prognostication*; for in  
some Patients, not under any acute Distemper, such a *Coldnes.s*is not much to be feared. In Diseases, says *Galen,* not at-  
tended with a Fever, which happen in w inter, and to old  
Persons, for the extreme Parts of the Body, as the Ears,  
Nose, Feet, and Hands, to be cold, is not at all surprifing ,  
*fince,* as he attests, in his second Comment on the *Prognostics,*those Parts are naturally bare of Flesh, and,'also, at a great  
Distance from the Viscera.

But a *Coldnes.s of* this Sort, in Acute Diseases, is no final!  
Evil; for, by means hereof, through Weakness, the natural  
Heat is prevented from penetrating to the extreme Parts of

the Body; hesides, under acute Disorders, through she Vio-  
lence os the Inflammation infesting the Viscera, the Blood is  
distributed but in small Quantities over the Body. In these  
Kinds os Disorders;- therefore; for the Body to be cold, and  
chilled, and not only in the Extremities; but in every Part to-  
gether, is very pernicious, unless occasioned by the Approach  
of a Fit ; for it indicates the natural Hear to be either extin-  
guished, or to labour under a Suffocation from the Multitude  
of Humours so but such a *Coldnefs* is attended with many other  
mortal Signs. Many dying Persons appear cold, with Desuda-  
tions, or cold Sweats, and an extreme Languor; and they ap-  
pear not only to be excessively cold, but; also, hard ; whence  
we read, I *Prorrhet. rj'j.* nd That a Refrigeration with an  
" Hardness, is a destructive Sign. " But we shall proceed to  
examine more atcurately into the Prognostics, *which maybe  
drawn particularly from a Coldnese os. the extreme Parts.*

**OF PROGNOSTICS FROM A COLDNESS OF THE EXTREME  
PARTS OF THE BODY.**

The extreme Parts of the Body; which *Hippocrates* in his  
*Prognostics* calls the *Head, Hands,* and *Fees, Galen* on 7 *Aph.*I. more distinctly, the *Nose, Ears, Hands,* and *Feet,* are as-  
fected with a *Coldnefs* in acute Diseases, when the natural Heat  
is either contracted, resolved, oppressed; or suffocated; os, in  
the last place, extinguished. The natural Heat is contracted in-  
wardly to the Viscera, relinquishing the extreme Parts of the  
Body, and possessing the middle Parts, The Thorax, and the  
Belly, either on account of a violent Inflammation, or Erysi-  
pelas, affecting the Viscera, and, as *Galen* says, by its Heat  
attracting the Blond, in manner of a Cupping-glass, to the  
affected Part, or from a severe Pain in the Stomach, or its  
Mouth, or in the Colon, small Intestines, Uterus, Or Kidneys;  
or, lastly, on occasion of the Fit; when Nature is at Work  
in the internal Parts, and makes its utmost Efforts to expel the  
redundant Humours with which it is oppressed ; from which we  
prognosticate sometimes Death, sometimes Recovery, accord-  
ing to the present extraordinary Degree of Strength or Weak-  
ness of the Patient.

The natural Heat is resolved, either by the Violence of the  
febrile Estuation, or some vehement Pain, or immoderate Eva-  
cuation, or some poisonous Juice offending the Heart, and the  
Mouth of the Stomach, or by a sudden and immoderate Fit  
of Mirth. ' . 1 -

The natural Heat is oppressed or suffocated in the Viscera;  
whence the remote Parts, being left destitute of their wonted  
Supplies of Heat, are refrigerated; when the Mouth of the  
Stomach is either overloaded with an immoderate Quantity of  
Feed, or strongly Vellicated by mordacious Humours, as *Galen*expresses it. *Com. in Lib. de IL F. I. As* or when, the Viscera  
are infested with a Multitude of corrupt or crude Humours, by  
which the natural Heat is either suffocated, or remarkably op-  
pressed, in the same manner aS when by heaping great Quanti-  
ties of greenwood upon a Fire, the same is so far from being  
increased, that it is quite suffocated,.or, at least, much diminish-  
ed, by so doing. Thus is the Heat shut up, and confined, with-  
in the Viscera by the Redundance and Coacervation of the Hu-  
mours, so that it cannot penetrate or expand itself to the exte-  
rior Parts ; the Veins and Arteries, by winch it was diffused  
from the Viscera, being obstructed by those crude or corrupt  
Humours. A Fever proceeding from such a Cause is, by some,  
called *Lipyria,* [λειπυρία,λιπὑριον,λιπυρίη] by others, *As.aphodes,*that is, obscure and. latent [see AsAPHESJ ; by others is de-  
scribed aS mild and gentle externally, but violent and tumul-  
tuous within,: The Reason is, thecause the Fever owes its Ori-  
ginal to a Multitude of putrid Humours, or a Redundance of  
cold, crude, and gross Humours, by which the Heat is suffo-  
cated; Or to a Phlegmon affecting the Viscera, or to a malignant  
and poisonous Putrefaction ; in all which Cases there is a *Cold-  
nose,* or, at least, a Coolness, and Absence os Heat, in the ex-  
treme Parts.

The natural Heat is not only destroyed or diminished by  
Strangulation or Suffocation, but is even extinguished by an  
intense *Coldnefs,* or an occult poisonous Quality, by which the  
vital Parts are corrupted ; as may be observed in the Effects of  
cold Poisons, and such things as are mortal from a Property in-  
herent in their whole Substances, as *Galen* expresses it.

Again, the natural Heat, which has its Seat in the solid  
Parts, according to *Galen,* may be wasted, resolved and dissipated,  
by a greater or stammeous Heat consuming the humid Parts, by  
winch the natural Heat itself is preserved, and lives. Thus it  
happens in hectic Disorders, and under Violent Pains of the  
Viscera, by which the natural Heat of chose Parts is corrupted  
and resolved ; on which account, *Hippocrates* had Reason to  
pronounce, 7 *Aph.* 26. a Coldness of the extreme Parts, under  
a Violent Pain in the Parts of the Region about the Belly, a bad  
Sign..

In the last place, a *Coldnefs* may be generated, or Treat he  
destroyed, by an immoderate Evacuation, either spontaneous,  
or procured by Art; the Consequence os which, when extreme,  
is a mortal Syncope, in which the Patient dies under a *Coldnese*os the extreme Parts-: And the Symptom is occasioned by a Re-  
solution os the Heat from opening an Artery.

We have hitherto heen employ'd in examining into the Causes  
of this *Coldnefs,* or Extinction or Diminution os Heat, in the  
extreme Parts, and proceed now to the Prognosis, or Signs,  
afforded by it for our Observation ; from whence we may pre-  
dict a good or bad Event in an acute Disease.

In the first place, then, *RColdnefs* of the extreme Parts, when  
Nature makes Attempts towards a Crisis, with other good Signs,  
must be esteemed salutary. But at the periodical Return of a  
Fit, or under a long Disease, such a *Coldnese* affords no certain  
Prognostic; neither is it to be accounted a mortal Sign in old  
Persons, and in the Winter-season. . .

" A *Coldnefs* of the extreme Parte (with the before-menti-  
" oned Exceptions) in acute Diseases is, as *Galen* says. *Com.  
" in y Aph.* I. no flight Disorder, but a very pernicious Sym-  
" ptom, as it in the Consequence of a violent Inflammation of  
" the Viscera." But here we are to except, also, A *Coldnese*os the Extremities from unseasonable Eating, and what is oc-  
casioned by a Paroxysin, in which, fays *Galen on* the *Prognostics',*not only the extreme Parts, but the Skin about the Ribs and  
Belly, are rendered cold.

A *Coldnefs os* the extreme Parts sometimes begins at the  
fame time with the Disease ; and this Symptom was observed  
by us one Year in many wandering malignant Fevers, which  
derived their Original either from a most intense Degree *of* Pu-  
trefaction, by which, the Viscera are affected, as it were, with  
Poison, and the natural Heat on that Account Very much re-  
solved, or else retracted inwards, or almost suffocated by the  
Redundance of the highly putrid Humours ; or, which is the  
last Account to be given for it; the Fever was kindled up, and  
took its Rife; from crude and pituitous Humours, as we observe  
in a *Febris Arnphemcrina,* Or Quotidian.

A *Coldnefs* of the Extremities, in continual Fevers, is always  
bad, and imports Death, or Malignity, but most commonly  
Death. When this Symptom appears in the Beginning, toge-  
ther with the Fever, and not in an exraordinary Degree, it  
foreshews only a Malignity; and is accounted by Physicians a  
pathognomic Symptom of malignant Fevers, in which the  
Patient is often not Very thirsty, nor has his Tongue Very much  
dryed ; and this *Coldnefs* is sometimes equal, or os one Tempe-  
rature, during the whole Course of the Disease, and sometimes  
unequal; or more or less increased and diminished.

A *Coldnefs* of the extreme Parts, not in the Beginning of the  
Disease, but on a critical Day, with critical Signs, indicates a  
Crisis, or a Change of a continual Fever into an Intermittens,  
But an intense *Coldnefs* of the Extremities, and of long Dura-  
tion, with bad Signs, is always bad, and worst of all on a cri-  
tical Day.

An almost invincible *Coldnefs* Of the extreme Parts is a mor-  
tal Symptom: And this is confirmed by *Hippocrates* in his Ob-  
sefvations, I *Epid. Sect.* I. on a Very mortal epidemic Fever,  
in which the Patients, the fays, " were very subject to Resri-  
" geration of the extreme Parts, into which .it was Verydiffi-  
" cult to recal the Heat." And by whet he tells us, 3 *Epid.  
Sect.* 3. in his Account of the Symptoms of an epidemic, and  
very malignant burning Fever, among whichwas " aremark-  
" able Coldness of the Extremities of the Feet and Hands,  
" and especially about the time of the Paroxysms, into which  
" Parts the Heat returned but by stow Degrees, and not in a  
" kindly manner." To the same Purpose he says, of some  
who died of a Tabes, that, towards their End, " they were  
" much affected with Coldness, and were hardly capable of  
" receiving Heats " In *Prorrhet.* 65. we read, that (i Resri-  
" gerations after a Rigor, which are not succeeded bya Re-  
" turn of Heat, are bad. " Thus they proved, for Instance,  
in the Case *of Philiseus,* I *Epid. Sect.* 3. *AEgr.* I. "whose  
" extreme Parts [the Day before he died] were cold on every  
" Side, and never recovered any Heat afterwards. ” The same  
happened to *Silenus, ibid. AEggr.* and others mentioned in the  
*Epidemics,* not long before cheir Deaths

In Persons Very near Death, there is-observed a *Coldnefs* of the  
extreme Parts equal to that of a Marble-stone, and often attend!  
ed with an Hardness and Lividness. Now an Hardness, with  
an intense Degree *of Coldnefs,* is accounted a mortal Sign, as  
we read I *Prorrhet. JJ.* on which *Galen* says, " If the Cold-  
" ness be so intense as to cause a total and absolute Resrige-  
\*«« ration, with an Hardness, it is a Sign of Extinction,-" or  
that the natural Heat is extinguished.

A *Coldnese* of the extreme Parts, attended with -a Lividness,  
is no less mortal ; for this latter is of all Symptoms the most  
pernicious, and shews Death to be at the Door. For a livid

Colour in those Parts indicates an Extinction of the natural  
Heat, as we are taught by *Galen,* who, in his Comment on  
the third Epidemic, telis us, that a *Coldnefs* of the extreme  
Parts, attended with a Lrvidness, is an evident Sign of Death.  
And this is confirmed by *Hippocrates, Lib. Prognosi,* where it is  
said, that, " If, besides this dead Heaviness of the Body, [hefore  
" mentioned] there be, also, a Lividness of the Nads and  
" Fingers, nothing is to he expected but immediate Death."  
And, in whet follows, we read, " That for the Fingers and  
" Feet to be quite black, is less pernicious than for them to  
" he livid ;" and not without Reason, fince a LiVidness of  
these Parts always proceeds from an Extinction of the natural  
Heat, but a Blackness is not always from that Cause ; for it  
may be owing to a black Humour settled in those Parts. We  
may conclude, therefore, that if to a *Coldnese nd* the extreme  
Parts there accedes a Lividness of the same, it is a most mor-  
tal Symptom, and shews Death to be near at hand. This we  
have abundantly consumed by *Hippocrates* in his first and third  
*Epidemics,* by Instances in *Philistus, Silenus,* the Woman who  
lay ill of a Qpinsey at the House of *Apisilion,* 3 *Epid. Sect.* I.  
*AEgr. I.* the Daughter os *Euryanactes, ibid. AEgr.* 6. *Erasinus,*and the young Man who lay ill in the *Forum Mendacium,* in  
all whom this Symptom was observed as they lay dying.

A great *Coldnesesees* Chiiness, of the extreme Parts, attend.  
ant on an intense Thirst, with a Vehement Heat in the Thorax  
**or** Belly, is esteemed Very pernicious, because it indicates a  
violent Inflammation of the Viscera, and is, *a&Galen* says. *Com.  
in* 7 *Aph.* I. an usual Symptom os the same. This is asserted,  
also, by *Hippocrates, Prognost.* where he says, that " For the  
" Head, Feet, and Hands, to be cold, whilst the Belly and  
" Sides are in an Heat, is bad; " and *Galen,* in his Comment,  
says, " it is not only bad, but mortal." The Sense of this  
Passage is Very well and fully expressed by *Cornelius Celsius,* in  
the following Words: *Cui Fibre aque non quiescente exterior  
Pars friget, interior sic calet, ut rtiam sitim faciat, lothale*de A Coldness of the exterior Parts, where the Fever ceases  
" not in Proportion, and an Heat in the interior Parts so great  
" as to cause a Thirst, is mortal."

- A *Coldnefs* of the Extremities is accompanied with other per-  
nicious Signs, besides those mentinned ; such as a Violent and  
continual Pain of the Head or Viscera, Want of Sleep, a  
Coms, a furious or gentle Delirium, Dotage, Loss os Me-  
mory, Deafness, Blindness, Convulsions, Tremor, Loss of  
Voice, Hiccup, Restlessness, Anxiety, difficult Respiration,  
and cold Expiration from the Mouth and Nostrils, turbid Urine,  
which will Dot become clear, black Urine, with a black  
ENAEoREMA, ssee that Word] .white, aqueous, lucid Urine,  
and Suppression of Urine, Drops of Blood from the Nose, Vi-  
Iulent Vomitings, bad and copious Stools, which give no Re-  
lies, and other Symptoms of the like Kind. Any of those, ap-  
pearing with a *Coldnefs* of the extreme Parts, portends Death;  
and the more there are of them, the more certain and speedy  
is the fatal Event. This is illustrated by *Hippocrates* in the Case  
Os *Silenus, so* often quoted, of whom he observes, that " On  
" the sixth Day he had a thin small Sweat about his Head,  
" his extreme Parts were cold and livid, he was Very restless,  
" Voided nothing by Stool nor Urine, and had an high Fever."  
And of *Pythion,* 3 *Epid. Sect.* 3. *AEgr.* 3. who died in *Thafoe-*in ten Days, it is observed, that " On the second Day about  
. " Noon, his extreme Parts, and especially his Head and Hands,  
am were affected with a *Coldnefs* ; he was Speechless, and lost  
' " his Voice, fetched his Breath short, and at long intervals,  
ζβραχύπνοος *end* χροτανπουλυν. We have here, with *Galen,*

" and some few Copies, joined the tbree last Words with the  
" first, and not with ἀνεθερμάνθη which follows them. See  
**or BRACHYPNOEA];** his Heat returned with a Thirst, he had  
" a quiet Night, and sweated a little about the Head.'' From  
these Instances, with what has been said, it appears, that a  
*Coldnefs* which is perpetual, or in a Very high Degree, or at-  
tended with an Hardness, or LiVidness, is a Very pernicious  
Symptom, as indicating an Extinction of the natural Heat.

We may form Prognostics of a bad Event, also, from a  
*Coldnefs,* with respect to the preceding Symptoms, as, for In-  
stance, when it succeeds a Rigor, and is not removed, accord-  
ing to I *Prorrhet.* 65. where we read, that " Refrigerations  
. " succeeding a Rigor, and not followed by a Return of the  
" Heat, are bad."

For the extreme Parts to he much chilled after bad Evacua-  
tions, is pernicious, and especially if these Evacuations them-  
felves are *of* the Number of mortal Signs ; such as Blood sal-  
ling by Drops from the Nose, cold Sweats, Destinations in the  
Head, Urine aqueous, livid, icteric, turbid,'depositing no Se-  
diment, black, with a black Enaeorema, a Suppression os Urine,  
Stools sat, liquid. Very fetid, too frequent, or immoderate in  
Quantity, Spit black, livid, viscid, expectorated with much  
Difficulty, or quite intercepted. A *Coldnefs,* or Refrigeration

of the extreme Parts, succeeding any of these bad Symptoms  
just enumerated, is pernicious.

A *Coldnefs* of the Extremities is known to be destructive,  
not only by preceding, but by concomitant and subsequent bad  
Signs. A Refrigeration, or Coldness, of the extreme Parts is  
usually followed by many other Symptoms os mortal Significa-  
tion. And here, with respect to the *Coldnefs* itself, is°this be  
first moderate, but increases afterwards to a violent and intense  
Degree, it is pernicious, because, aS we have said out os *Ga-*len, it indicates an extreme Languor os the Faculty. It is no  
less fatal, in the second place, is this *Coldnes.s* of the Extremi-  
ties be succeeded by little or no Degree of R ehisration ; as we  
find it consumed in the Case of dying *Philifcus,* **I** *Epid. Sect.*3. *AEgr.* I. of whom *Hippocrates* observes, " That his ex-  
" treme Parts were cold on every Side, and never afterwards  
" recovered their Heat; " and of *Silenus,* " whe, it is said,  
*" on* the seventhDay was speechless, and could never from that  
time have the Heat recalled into his extreme Parts. "  
A Part, aster extreme Refrigeration, becomes livid, and  
sometimes hardens, in which Circumstance, *if it* long conti-  
nues, Death, as was said, is at the Door. The same Event  
may he predicted from a subsequent Coma, Dotage, Forgetful-  
Dels, Deafness, Blindness, Loss of Voice, Convulsions, Tre-  
mor, cold Sweats, especially in the refrigerated Parts them-  
selves, (which kind of Sweats seems indeed proper only to a  
Syncope and Death) evacuations not good, no way relieving  
the Patient, or suppressed. Difficulty os Respiration, and the  
like Symptoms, many of which were observed by *Hippocrates .*in dying *Silenus,* after a Refrigeration of the extreme Parts,  
and described by him as follows: " On the sixth Day he sweat-  
" ed a little about the Head, his extreme Parts were Very cold,  
" and grew livid, he was Very restless, had no Excretion by  
" Stool nor Utine, and was in an high Fever. On the seventh  
" Day he was speechless, his extreme Parts recovered no more  
" Heat, and he made no Water. On the eighth he had a'  
" cold Sweat over all his Body, and, with the Sweat, an Erup-  
tion of small, round, red Exanthemata, resembling *Pari,*" which settled without forming an Abscess ; he voided, with  
" little Provocation, much thin, and, as it were, indigested  
" Matter by Stool, and with some Difficulty; his Urine was  
" sharp, and excreted with Pain ; his extreme Parts recovered  
" some little Heat; his Sleep was but flight and comatous;  
" and his Urine was thin and pellucid. On the ninth Day  
"the Symptoms were much the same. The tenth he re. -  
" fused Drink, was affected with a Coma, and slept in a  
" flight manner, his Stools were the same, but he discharged  
or Plenty os thickish Urine, which deposited a white and branny  
“ kind os Sediment; his extreme Parts were again refrigerated.  
" On the eleventh Day he died." We conclude, then, upon  
the Whole, that a Coldness of the extreme Parts, preceded,  
attended, or succeeded, by any of these before-mentioned, er  
the like pernicious Symptoms, gives just Reason for predict-  
ing a fatal Event in acute Diseases.

**OF PROGNOSTICS FROM A CHANGE OF HEAT TO  
COLD, AND OF COLD TO HEAT, IN ACUTE DISEASES.**

It often happens in acute Disorders, that the whole Body  
changes from hot to cold, and from cold to hot, sometimes ..  
flowly, sometimes suddenly.- A sudden Change to Cold, unless  
occasioned by a Paroxysm, is always bad; fince, aS it has been  
observed, it indicates the natural Heat to be either resolved,  
or by the Multitude of crude Humours oppressed and suffocated  
to such a Degree, as to he incapacitated, the Vessels bring ob-  
structed, *for* expanding itself externally; or that it is entirelycol-  
lected in the inward Parts, on account of some malignant Hu-  
mour, or Violent Inflammation, infesting some of the princi-  
pal Viscera.

We conjecture the natural Heat to be resolved, if there has  
appeared some preceding Cause of a Resolution ; such aS a vio-  
lent and continual .Fever, continual Watchings, severe Pains,  
and immoderate Evacuations of Blood or Humours.

A Suffocation is indicated by a Plethora, in which the Veins  
and Arteries are obstructed by the Multitude of crude Hu-  
mours.

That the natural Heat is not expandedexternally,weknowby  
all those Signs which indicate the Redundance of the Humours;  
and that it is retracted inwardly by some acrid or malignant  
Humour infesting the Mouth os the Stomach, the Heart, or  
some other noble Part, we conclude from Pains about the Re-  
gion os the Part affected. Loathing, ANGOR, [see that Word]  
Nausea, Virulent or bilious Vomitings, Despondency of Mind,  
Anxiety, Watching, the Pulse highly irregular, weak, and  
low, and the like, as may be observed in those who have the  
Mouth of their Stomach Vellicated by Worms, or some acrid  
Juice.

' When some internal Inflammation is the Caufe that the Heat  
retires inwards, it is known by the Heat of the inward Parts;  
and, by proper Signs, which *Celsius,* aS above-quoted, has ex-  
pressed from *Hippocrates,* where he says, " That a Refrigeration  
" os the extreme Parts, where the internal Parts are parched  
" with Heat in such a manner aS to excite aThirst, is mortal;"  
for such a Refrigeration has for its Cause an internal Inflamma-  
lion, and that in a Very Violent Degree.

In whatever manner, as we said, the Body is refrigerated.  
It is never good ; but it is often highly pernicious, and most of  
all, is the *Coldnefs, or* Refrigeration, be long and intense, or.  
If an Hardness, or LiVidness, accede thereto ; for then Death,  
as was observed, is very near. A sudden and immediate Re-  
frigeration of the actually warm Parts is, also, constantly bad,  
except that Refrigeration of the extreme Parts, which is occa-  
sioned by Nature in her Attempts towards a critical Excretion  
of the Humours; for it often happens against a Crisis, from the  
Impetuous Course and Conflux of the malignant Humour. to  
some noble Part, that the extreme Parts are refrigerated, and  
never, or but Very seldom, and by flow Degrees, recover any  
moderate Degree os Heat, after a Propulsion of the Humour  
to some more ignoble Part of the Body.

. On the contrary, for refrigerated Bodies to recover Heat by  
'equal and flow Degrees is a Very good Sign; for it shews, that  
no inward, latent, acrid, or malignant Humour infests a  
noble Part, that there ts no Inflammation s those internal Re-  
gions, nor any thing to prevent or intercept the Heat from dif-  
fusing itself over all Parts of the Body.

For the Parts to be unequally heated, is never good, and is  
sometimes esteemed a very bad Sign; but for tile outermost  
Parts os the Body to be suddenly and frequently changed from  
hot to cold, and from cold to hot, in malignant Diseases,  
is pronounced by *Hippocrates* Very pernicious, and is indeed  
esteemed more dangerous than the like Mutations in otherSyin-  
ptoms. To the fame Purpose we read in i *Prorrhet.* 43.  
" That sudden Mutation of the remote Parts to either ex-  
" treme is had, as is, also, aThirst of the like Nature;"  
that is, subject to the like Permutations. Here *Galen,* in his  
‘ Comment on the Place, says, that in Diseases highly malignant  
there is a Mutation of these Qualities into their Contraries in  
. the Spade of one Hour, in such a manner, that the Patient  
shall at one time feel himfelf as cold as in Winter, and, soon  
after, as hot aS in the Summer-season ; and the Reason is, he  
says, because he has no Heat os his own, but is heated by that  
of the Fever, which, beginning at the Middle of the Body, and  
like a Flame spreading itself every-where, kindles an Heat in  
the extreme Parts, which being spent and transpired, those  
Parts grow cold again, because the natural Heat is extinguished.

Such swift Mutations of Heat and Cold, and, also, of Co-  
: lour, and every other Symptom, frequently indicate a Com-  
plication of Affections in the Body, which requiring a consider-  
able Length Of Time for Nature to subdue, shews, that the  
Disease will be long and tedious; as is exprelly affirmed by *Hip.,  
prorates,* 4 *Apia.* .40. where he says, that " Mutations in the  
" whole Body, aS when the same is refrigerated, and then again  
" heated, signify the Length of the Disease."

In Very acute and Violent Disorders such sudden Mutations  
are a Sign that Nature is stinted’in its due Time by the Violence  
of the Disease, and is in imminent Danger of being extin-  
guished before it can put itself in a Posture of Resistance. Up-  
on this Consideration it is, that we' are told by *Galen* on the  
*Prorrheiica,* that Mutations of this Kind in highly malignant  
Distempers, are mortal, and that they are occasioned by an'  
Extinction of the natural Heat.

Mutations of this Kind, or sudden Changes in other Sym..  
ptoms, as from a Thirst to an utter Extinction of the same, from  
a placid Stilness to Restlessness,, from Watching' to profound  
Sleep, from the perfect Use of Reason to Deliriousness, or the  
Reverse of all these, are generally, also, of fatal Signification.

A Change of Symptoms in such a manner .as, for Instance,  
there shall be a Pain of the Head, foon aster of the Belly, then  
of the Legs, and soon after a Cessation of Pain, followed in a  
short time by a Delirium, which quickly gives place to another  
Symptom, has for its general Caufe *RMetaptosis,* that is, a  
Transflux of the Humours; for Migrations of the Humour  
from one Part of the Body to another, or Turgescencies of the  
Humour appearing successively in different Parts, have the Name  
of *Mctapoosis,* which of itself bears no other Prognostic than  
does the turgescent Humour. Every Turgescence or Orgafm os  
the Humours is, however, to be dreaded, since it threatens an  
Injury to some principal part ; for which Reason *Hippocrates,***I** *Aph.* 22. *Galen,* and indeed all other Physicians, in Turges-  
cencies, or Orgasms of the Humours, have immediately pre-  
scribed Purging even in the Beginning when all things are in  
**a** crude State. ° °

Permutations of Heat, Cold, Colour, and other Symptoms  
and Quinines, appearing with Signs of Concoction, indicate **a**

critical Perturbation of the Humours. And in thin senTe, ρρὶψ  
haps, we are to understand, *Coac.* I25. where it is .said,’ that  
" Frequent Changes of the Colour with the Heat are of Ser-  
" vine. ”

In malignant Diseases .these Mutations are of Use, if made  
for the better, according to that os *Hippocrates,* **6** *Epid. Sect,  
se Aph.* 16. ἐν τόισι παλιμβήλοισι άι μ-ταβολαι ώφελέουσι, τουτοςσίν  
'μεταβἀλλειν πριν κακῆσθαι ἐς τὰ πρἐ—οντα, *cc* In deceitful (mat.  
\*c lignant) Diseases, Mutations are serviceable, is directed to  
"proper Places, before they have received *some* Injury.'"  
*seFoesius for creD.tVNiKolat* reads παλιμβολοισι, which he owns to  
be an obscureWord, and renders it in his Notes by *intonstantibus,*inconstant ; and in this Sense, which seems most probable, **the**Sentence may be otherwise transsated, thus, " In mutable,' and  
" inconstant Diseases, Changes aro beneficial, if made in proper

Places, and before any Malignity is contracted. "J *Prosper  
Alpinus de Prafag. Fit. et Mors.' .*

**FEBRILE TREMOR.**

A Tremor is a Vacillation of the Muscles betwixt the State  
of Tension, and that of Relaxation, the distending and relax-  
ing Causes suddenly, and involuntarily,, succeeding each other *h*which supposes an alternate Cessation, and Repetition of the  
Influx of the arterial, and nervous Fluid into the Muscles: Ini  
the Beginning of a Fever, therefore, it arises from a partial  
‘ Stagnation of both the above-mentioned Fluids; but, in the  
latter End of a Fever, a Deficience of them, after they have  
been too much dissipated.

A Tremor, if of long Duration, causes Impediments to the  
.Circulation of the Vital Humours, and all their fatal Conse-  
' quences.

Hence the Dlagnostid and Prognostic os a febrile Tremor  
may be understood; and hence 'tis evidens, why a Tremor  
joined with Coldnefs, and why a Very great Tremor, are of  
’ extremely bad Presage: Why a Tremor accompanies Very great

Affections of the Mind : Why a Tremor happens about **the .**time os Death: Why it is excited by exorbitant Evacuations  
of any kind : And why, when the Body has been habituated  
to a too copious Use of Liquors of any Sort whatever, a De-  
pletion of the Vessels, by Abstinence from these Liquors, Is  
accompanied with a Tremor.

A febrile Tremor is cured by restoring an equable Influx of **the**arterial Fluid into the Arteries, and its due Pressure upon them,  
and of the Spirits of the *Cerebellum* into the moving Fibres.  
This is done in the Beginning os the Fever, by such Remedies  
as dissolve Viscidities, and restore the Strength, which are spe-  
cisy'd above : But at the latter End of a Fever, by whatever  
expeditioufly recruits the dissipated Liquids, and corroborates  
the Fibres and Viscera. See FIBRA. *Bocrhaave.-*

**PROGNOSTICS FROM Α TREMOR.**

In treating of this Subject, we are first to shew whet a *Tore...  
mor* is; and, next, from what Causes it proceeds. . *Galen,  
'Com. i. in 3 Epid,* makes a *Tremor* a Diminution not of na-  
tural, but Voluntary Motion; in which the Will or Faculty  
endeavours to move the affected Part, but faiis of its Purpose,  
through the ImbecillityOr Oppression of the same Part, which  
makes a Motion contrary, at least in some respect, to whet waa  
intended. . .

This kind of Affection differs from a convulsive Motion,  
which several have mistaken for a *Tremor* in Acute Fevers, under  
a Persuasion that *Hippocrates* makes a *Tremor* to be a convulsive  
Motion in many of his Patients, particularly in the fair Daugh-  
ter of *Narius,* 5 *EpiA.T.* 5o. of whom it is said, καὶ σπασμός,  
καὶ τρομώδηστ ην. *There satere Convulsions, also, and sue was affected  
with a* Tremor.' On some such Consideration, perhaps, it was,  
that *Sabinus* and *Metrodorus,* two antient Physicians, said, that  
a *Tremor* was a small Convulsion; intending, by this Expression,  
it is supposed, an Affection complicated os a *Tremor* and Cora-  
vulsion; which kind of *Tremor* is, also, among Physicians,  
usually called a convulsive Motion, .and *Corrvulsto ex Materiot -  
nonproportionata. '*

Others think that *Hippocrates* sometimes by *Tremor* means **a***Rigor,* particularly 4 *Epid. T.* I 3. where he relates of the  
young Stranger Patient, that *on the sixth Day he had a Crisis ;  
on the seventh the sievcrisp Fit returned, ana went off with a*Tremor; that is, as they would have it, with a *Rigor.* In this  
Matter, however, they seem to be mistaken, fince we persuade  
ourselves that *Hippocrates* means a real *Tremor,* and not a *Rigor -*if for no other Reason but that the Crisis, on the sixth Day,  
was not a perfect one, but effected partly by an Excretion,  
partly by a Tranflation of the morbific pituitous Matter upon  
the Nerves and Muscles,. which was the Occasion of the  
*Tremor.*

But we have said enough on this Point, and proceed to **shew**the Generation of a *Tremor.* And here we are told by *Galen,  
Lib. de Trern. Rig. Palp, et Convulse* **that a** *Tremor* is occa-

sinned by Weakness, or an Imbecillity of the motive Faculty,  
which is sometimes infirm of itself, aS in old Persons ; and.  
sometimes accidentally from other Causes; particularly, as the  
same Author proceeds, from want os Aliment, from a Violent  
Flux of the Belly, or a profuse Hemorrhage; also, from long  
Fasting ; by which the Aliment is consumed, and, consequently,  
the Faculty weal.n’d ; or from a Resolution of the vital Force,  
as the Case is in Stomachics, Cardiacs, in Paintings, violent  
Colds, and a Plethora oppressing the Muscles and Nerves.  
And he seems to speak much to the same Purpose, *Com.* I. *in*3 *Epid,* when he makes the Caufe os a *Tremor* to he the Im-  
hecillity of the muscular Force, which is occasioned either on its  
own Account, or from an oppressive Redundance of Humours,  
or by Hunger, Lassitude, Watching, Cares, or immoderate  
Venery; all which resolve the natural Heat, or Strength. But  
Jet us hear the same Author more explicitly declaring the Cause  
and Generationes a *Tremor,* as follows, in the Place just hefore  
quoted. *A* Tremor, he says, *is occasioned rut only when the  
Muscles and Nerves are disorder'd, bus when they are in a sound  
State; when any Person undertakes to heave, er carry in his  
Hands, something above his Strength. Thus fame very strong  
young Men, in carrying some very heavy Burden, and especially  
vohen they have cried* to *ascend with it by Steps, have been observ'd  
to tremble in their Legs; and tvhat happens to them from an  
extraordinary Weight, the fame is occasion\*d in old and weak  
Pcrs.ons by a scgreigkt which ts lightcr; for that is heavy to them.*And a little after, comprchending under one all the Causes of a  
*Tremor,* he hers, *We had the greatest Reason, therefore, in our  
Treatise* de Tremor. Convuls. & Rig. *for ascribing always a*.Tremor to Imbecillity.

But since the Virtue, or Faculty, is sometimes weak of itself,  
sometimes from some Passion of the Mind, and sometimes not  
at all from itself, but from a Load which oppresses it; hence  
there ate three different Causes of a *Tremor',* which are, a Dis-  
.order in the Organs under the Command of the Faculty, the  
.Passions of the Mind, and an heavy Load.

First, then, a want of due Temperament, or a Distempe-  
rature, whether het. Cold, dry, or moist, may render the  
Muscles so weak, as to occasion a *Tremor* in their Parts : For  
Heat, if excessive, resolves or dissipates the natural Strength;

1 violent.Cold, on the other hand, extinguishes the natural Heat;  
.Humidity, when imbibed in an excessive Degree, oppresses the  
Muscles; and immoderate Dryness consumes the Humid, which  
‘ preserves and maintains the natural Heat: Hence some mortal

Phrensies are observed to end in *Tremors,* from an excessive  
Desiccation of the Origin of the Nerves, as well as of the  
Nerves themselves.

Secondly, The Passions os the Mind, as Fear, Sorrow, im-  
moderate Joy, and others, which dissolve the Strength : Or,

Lastly,. An heavy Burden, by which the Muscles, bring op-  
pressed, are disabled from moving according to the Directions  
.of the Will, may he the Causes of *uTremor.*

These things heing premised, we proceed to the *Prognosis t*'And here, first, we observe, that some *Tremors* affect the Pa-  
.tient in the Beginning, Others in the End of the Disease AS  
to the former, we learn from *Galen, Corn.* 2. in 3 *Epid,* they  
never appear but in a Violent Disorder: *Tremors,* we have said,  
are occasioned either from Hunger, Lassitude, Watching, im-  
moderate Venery, or an oppressive Quantity of Humours; in  
which. last Case they afford nothing certain alone on which  
To ground a Prediction in the Beginning, but are only Indica-  
.tions of the Violence of the Disorder; because all Redundances  
of Humours render a Disease dangerous. Of this Nature was  
the *Tremor* of *Pythian,* 3 *Epid. Aigr.* I. who was taken the  
first Day with a *Tremor* of the Hands, an high Fever, and De-  
lirium. Such, also, was the *Tremor of Charion* observed on  
. the third Day, 3 *Epid. Abgrr* 5- But though *Tremors,* in the  
Beginning of Diseases, indicate only a Redundance os Humoure  
oppressing the Nerves and Muscles, unless they proceed from  
Hunger, Lassitude, Watching, or immoderate Venery, orare  
excited by some Passion of the Mind, the Patient, however,  
will not he free from Danger, if he he Visited with a severe,  
malignant, or even long Distemper, fince not Only such, but  
every other. Disorder is to he dreaded in a Patient by any means  
debilitated. These *Tremors,* as we said, are no sure Grounds  
alone for predicting any thing os Certainty concerning the Fate  
of the Patient; but if they are accompanied with other severe  
Symptoms, the Case will he dubious, as it was, for Instance,  
in the Wise of *Eumyris,* 4 *Epid. T.r.* 4o. " who, it is said,  
\*\* look'd like one free from any Distemper, and had no Fever ;  
" but lost her Wits, and was afterwards seized with a *Tremor*\*\* of the whole Body, attended with a Colliquation, Loathing,  
" Thirst, and a Coldness. " The same is further illustrated  
in the Case of the old Man, 4 *Epid. T.r.* 4I, who, after a  
Relapse, sell first into a *Tremor* os the Lips and Voice, at which  
time the Skin of his Body was observed to he more tense, and  
\* his’ extreme Putts were cold ; he dy»d, as n0 left could he ex-

pected, th o', perhaps, his *Tremar* might proceed from Worms,  
as it was thought to do in some other Instances.

And thus much may he presaged from Tremors in the Be-  
ginning of Diseases ; but when they appear without any other  
Disorder accompanying or immediately succeeding them, they  
are usually Signs of an Apoplexy : This Presage is hinted to us  
by *Hippocrates,* 4 *Epid. T.* 36. where it is said, " That some  
" were seized at the Beginning with a Tremor of the Fingers,  
" and of the Lips in speaking, and, also, of other Parts; but  
" had their Tongue more ready, and Speech more fluent, than  
" Usual : They were more remarkable, also, for a Redness of  
" the Face. These, also, drank Wine to a Degree of line-  
" briation, or were swelled by Vomiting."

Having thus shewn whet may reasonably he predicted from  
Tremors, in the Beginning of Diseases, what we have to say  
of those which are observed afterwards is, that some of them  
indicate a critical Translation of the Humours, when Nature  
propels Part of the noxious Humours from the Viscera to the  
Muscles: And such Tremors are Very good, provided they are  
attended with Signs of Concoction. . Such was the Tremor of  
she young Stranger, 4 *Esc cl.* before-mentioned, whose Fever  
went off on the seventh Day with a Tremor, the noxious Hu-  
mours being critically tranflated from the principal Parts to the  
Muscles: It often happens, also, that at the Approach of a  
Crisis, by Vomiting, there is a Tremor os the lower Lip,  
which *Galen, Lib.* 3. *de Cris. Case. tilt.* reckons among the  
Signs os a critical Evacuation by Vomit.

These, then, are the Tremors observed in Diseases aster their  
Beginning, which we have not the least Reason to dread; but,  
on the contrary, those which attend burning Fevers, and In-  
flammations os the Brain, when the NerVeS are dried, or when  
the Origin os the Nerves, that is to say, the Brain, are all  
mortal. Tremors, from a Dryness os the Nerves in Phrensies,  
are mortal, and seem to he proper to deadly Phrensies. Justly,  
therefore, was it said by the Author os the i *Prorrbet. T.* 9.  
" That phrenetic Affections and in Tremors/' or Tremors  
follow mortal Phrensies. *Galen,* also, in his Comment on the  
Place, says, " That a Tremor succeeds mortal Phrensies; for  
" Infirmities of the Nerves are of very long Continuance in  
" Phrensies, on account os the Dryness of the Affection, the  
" Faculty being worn out with Watching, and much Motion,  
" and the Nerves immoderately dried, which are the Causes of  
" Tremors.'' In a Pbrensy, therefore, you see, all Tremors  
are mortal; and much more, if they appear attended with Con-  
vulsions, which are, also, the usual Attendants of vehement  
Phrensies. But, in the Beginning of a Phrensy, a Tremor is  
not mortal; sor aTremblingof theTongue and Speech are then  
only Prognostics of a Delirium, as we are taught by the Au-  
thor of I *Prorrbet.* I9. In obscure and mild PbrensieS Tre-  
mors are, also, usually observed, from a Resolution os the  
animal Faculty, and are. all pernicious: *Os these* Kinds of  
Phrensies we have the Author of I *Prorrbet.* pronouncing,  
T. 34. where he tells us, that " Tremulous, obscure, mild,  
" and tractable Deliriums, are very phrenetic; as was the  
" Case of *Didymarchus, in Coos.\*\** For these are occasioned  
by a Resolution of the Faculty. In the last Place, a Tremor,  
from a considerable Injury of the Brain, by which the motive  
Faculty, for the Reason given hefore, is debilitated, is mortal  
in the highest Degree ; of winch we have an Instance in the sair  
Daughter of *Narius,* I *Epid. T.* 5o. \_ *Prosper Alpinus de Prae-  
sag. Vit. et Mort. AEgrot.*

**FEBRILE ANXIETY.**

Anxiety is caused by some Impediment to the Egress of the  
Blood from the Heart; and, in consequence of this, from an  
Impossibility of its due Circulation through the Ramifications  
of the Pulmonary Vessels, and those of the Aorta: And these  
arise either from a spasmodic Contraction of the small Vessels,  
or an inflammatory Spissitude of the Blood, which renders it  
incapable of circulating through the proper Canals. Or the  
same Symptom is produced by an Impediment to the Passage of  
the Blond through the Vena Portae, from the same Causes t  
Since, therefore, all the Blood conveyed to the Abdominal Vi-  
scera by the Coeliac and Mesenteric Arteries, and thence to **the**Vena Portae by the Veins, cannot pass farther, it must there  
stagnate, distend the Vessels, and resist the fresh Influx of Blood  
into the Arteries last-mentioned, thereby producing the most  
fetal Consequences. On this account it is absolutely necessary,  
in all acute Distampers, to observe, with the utmost Diligence,  
the Causes of both these Species of Anxiety; and, by all poffi-  
ble means, to remove them.

If such an Anxiety continues long about the Hears, and vital  
Parts, it will produce polypose Concretions, Inflammations,  
and sudden Gangrenes, accompanied with intolerable Uneasi-  
ness, and soon succeeded by Death : But that, whose Cause is  
situated in the Hypochondria, will produce an excessive Sick-

**ness** at the Stomach, the other Viscera, mean time; having not  
so acute a Sensation: This is succeeded by sodden Putrefactions  
. of the Blood, contained in the large and weak Vessels about  
the Liver, whence Gangrenes, Putrefaction of the Liver,Rud  
**. a** fatal Dysentery, arising from such a Putrefaction.

From whet has been said, the Physician may understand the  
-Casrse and Nature os such an Anxiety, -and whet Presages may  
.hence he drawn; and, at the same time, he will distinguish he-  
..twixt that Species os Anxiety, excited by some nervous Dis-  
order only, without a, Fever, and that-which is caused-thy an  
.acute Inflammation, previoufly discovered by its proper Signs.  
. And by comparing tins with the Violence and Duration of the  
- Symptom, and the Part where the Disorder resides, he will be  
enabled to discover its Nature; and to learn why, in all Dis-  
eases, at the Approach of Death, the last Scene is closed with  
extreme Anxiety; why a convulsive Anxiety is not attended  
with much Danger, but an inflammatory Anxiety with a great  
deal; and why Uneasiness, Restlesness, Sighing, Anhelation,  
.and obstinate Want of Sleep, in suppuratory or inflammatory  
Distempers, are the Forerunners os Death.

Hence, likewise, st is eVident, that various Methods of  
Cure are required, in order to mitigate the Severity of this  
Disorder; in the Discovery and Application of which the  
Physician will he duly instructed by.a.previous Knowledge of  
the particular Nature os the Symptom..

. When, therefore, it is discover'd, that the Affection is ex-  
cited by Spasms, it is to he removed by rendering the acrid,  
irritating Matter, of whatever Nature, mild; .by.expelling it,  
*by* means of Vomits, Cathartics, Sudorifics, Diuretics, and  
AbstersiVes; by diluting with warm aqueous Fluids ; thy calm-  
ing the Affections os she Mind;\* by relaxing the Fibres, Veffeis,  
and Viscera; and .by moderating the Tumult of the nervous  
Fluid with Anodynes and Narcotics.- ...Ἄ ...

*. Boerhaave* recommends the following Medicines, as Vomits,  
proper in Fevers. ... .: ); ?

. Take of Oxymel of Squills, three Ounces; and of. distilled  
Succory-water, five Ounces I .Mix for a Draught.

: Take eight recent Asarabacca-leaves ; infuse for sour Hours,  
in the distilled Water of Carduus Benedictus; and exhibit  
five Ounces, os the expressed Tincture for a Draught.

**7** Take of white Vitriol, twenty-five Grains: Reduce to R  
Powder, to he exhibited in a small Quantity of Bees,

. Purgatives proper in Fevers are these following:

\*\* ' / . . .

Take of the Crystals of Tartar, five Drams : Reduce to a  
Powder, and exhibit in warm Whey.

Take .of the Crystals of Tartar, two Drams; of Sal Pru-  
nellas, twelve Grains; and of Sai Polycbrestum, sixteen  
Grains; Reduce to a Powder, to he taken for a Dose,

. : Take of Scarnmony, seven Grains; and of distilled Succory-  
water, half an Ounce: Make an Emussion ; to which  
add twelve Drams of the solutive Syrup os Roses, with  
Sena, to he taken for a Draught.

‘ Take of Tamarinds, three Ounces; os the Troches of  
. .Agaric, three Drams; of Sena-leaves, one Dram ; and

of Figwort, half an Ounce; Boil in Water, and to eight  
Ounces Of the expressed Liquor, add half a Dram of hal  
Prunelise, and an Ounce and an half of solutive Syrup of  
Roses, with Sena: Of this let The Patient take two  
ί Ounces, every Half-hour, till he begins to he purged, .i

Take of Prunes, four Ounces ; of Tamarinds, one Ounce;

- . of Sena-leaves, Two Drams; and Of Figwort, six Drams:  
Boil with Water for half an Hour ; express through a  
Cloth, and, with twelve Ounces of the Liquor, .mix two  
Ounces of the Syrup os Succory with Rhubarb: . Of  
. ’. this Preparation let the Patient take three‘Ounces every  
Half-heur, till he begins to he purged.

Take of the Electuarium Diaprunum of *Sylvius,* one Dram  
and an half; and of the Powder of Sena-leaves, Ona  
Scruple; Makeup for a .Bolus, ... so:..

. The fame Intention is, also, answerdd by the following Me-  
dicines, exhibited in. the Doses specified. The Electuarium  
Diaprunum, or Chelagogum,. of *Sylvius,* half an Ounce ; the  
Consectio Hamech, Tour Drams; the Hiera Picra of *Galen,*one Dram and an half; Lenitive Electuary, one Ounce ; and  
Electuary of the Juice of joofes, half an Ounce. \* -. ... sc ..

' Sudorifics proper in Fevers are always of Ἀ diluting and dhes.  
rienr Nature, and may he prepared in the folinwing manned;

Take of the Roots of Smallage, half an Ounce ; of the  
Roots Of Burdock, and China-root, each one Ouqce; os  
the Roots of Succory, Grass, Navew, Parfley, Rapes,  
...and Butchers-broom, jeach halffan Ounce; of Sarsaparilla,  
one Ounce; and of Vipers-grass, half an Ounce ; os the

. - Leaves of Sorrel, Succory," Endive,, and Dandelion, each - -  
: one Handful ;rof Elder-flowers, two Ounces,; and of.the

bruised Seeds of Smallage, and Parfley, each one Ounce:  
Boil in three. Pints of.Water, of which .the Patient:is  
every Quarter Of .an Hour to drink three Ounces warm,  
till a gentle Sweat is excited. . -. I’

After this Formula a great many more may he prepared. .

-. Diuretic Medicines, proper, in Fevers, are these fallowing a

One -Part Os recent Milk, mixed with three Parts of Water.  
Whey; Buttermilk; the Juice of the Birch-tree ; the re-  
cent Juices of mature Summer-fruit, diluted in Water;

-; Nitre; antimoniated Nitre;'Sal Polycbrestum; and the  
Preceding sudorific Decoctions, used with 2 diuretic Re-  
gimen»- \* . '.ῖ τ' 'ι ’ . t - -su - ss .

Abstersive Medicines, proper in Fevers, are the same with  
-those already mentioned.

. If the .Anxiety is exerted by an inflammatory Viscidity of the  
-Blood;thisVisciditymust bediffolvedanddiluted; theVeffels must  
:be relaxed; and theImpetuosity of the Vital Fluid must he checked.  
With these Views, jet .the Patient drink copious Draughts of  
aqueous Liquors, in which farinaceous Vegetables have. been  
-helled, impregnated with Honey and Nitre, somewhat acescent,  
and slightly aromatic. Let Fomentations, .Cataplasms, Epi-  
thems, and Plaisters, composed of diluting, relaxing, emol-  
lient, and anodyne ingredients, be applied to the Region affected. -  
Let .Clysters,! at the same time, made of the like ingredients,  
and small in Quantity, be frequently injected, and, if possible,  
he .retained a long time. And let the vapour Of warm Water,  
mixed with Emollients, be perpetually drawn into the Lungs,  
through the Mouth and Nostrils. '

And let it be remarked, that this Symptom, above all others,  
requires a safe and immediate Cure, on account of the Seve-  
rity thereof, and its Consequences. *Bocrhaaue.-*

**PR0GN0STICS, OR PRESAGES, FROM AN ANXIETY.**

There occur in the *Prognostics, Prorrhetica, Bxes* ail **the**Books Of *Hippocrates,* relating to Prediction, four synonymous  
.Words, ἀλήκη *fAlycefo* άλυσμὸς *(Alys.musss,* ἀπορίη *(Aporie),*rand ἄση *s.Ase),* or ἄςηη *(Asset) :* These all i signify the same thing  
which we .express by *Anxietas* (Anxiety), *Inquietatio* (Restles-  
ness), *Implaciditas* (Uneasiness), and *Jactatio {*Jactation, or  
Toiling). [To these-may he added δυσφορίαψ Some indeed  
-would have *Alyce* to have respect to an injured Respiration,  
when tt is too frequent and irregular; but it appears from  
*Galen,* to have relation to a Vitiated Decubiture, for. *Lib. de  
Humoribus,* he says, " He *(Hippocrates)* called it *Alyce* (an

Anxiety) though many call *itDysurestia* (a Sels-displiciencyI,  
An sor they say, those Patients are under an Anxiety τἄλυκοι),  
who cannot continue in one Posture of Decubiture, but are  
continually changing their Position, because the present is

" always uneasy to them/' And he repeats the feme in his  
Comment on *yAph.su.* By these Terms, then, we under-  
stand no more than a Vitiatets,Decubiture, when, through the  
Violence or Malignity of the Disease, the Sick is perpetually  
shifting ins Position, and Cannot in the least rest in One Place,  
but moves, tosses, and throws himself about, in Various man-  
ners; sometimes raising himself up, then sinking down, some-  
times on one Side, sometimes casting himself on his Belly, and  
sometimes on his Back, but never resting in one Place or Fi-  
gure Of. Decubiture.

An Anxiety proceeds either from the Stomach, labouring  
under some Disorder, or oppressed with Food, and under a  
-Nausea; or from a great Inflammation of one of the internal  
Viscera;, or an Imhecillity,incapable of sustaining the Disease;  
or from an occult Malignity infesting the Heart, as in a pesti-  
lential Fever; or from an Agitation of the Matter in the tur-  
gent Veins about the Praecordia ; or, lastly, from a critical and  
violent Perturhation, occasioned by an Intumescence of the  
Humours, tending to an .Excretion.

First, then, an Anxiety may he owing to some Indisposition  
.of the Stomach, Or an Oppression Of that Part by an immode-  
rate Quantity Of Food, as appears from *Hippocrates, de R. Vi  
I. A.* and *Galen's* Comment on that Book. Thus, when the  
patient, after long Abstinence, the Disease not being past its \*  
Height, seeds mo.freely; or when the Mouth of the Stomach,

- ’ . - as

is *Galen* says, *Com. in Aph. et in Lib. de Humor,* contains  
some Humour particularly offensive, which Humour is not much  
in Quantity, nor diffused in the open Cavity of the Stomach,  
but immersed in its Coats; or, lastly, which is perhaps the  
same, when, as that Author says. *Com. in Prorrhet.* the Mouth  
**os** the Stomach is vellicated by depraved Juices : An Anxiety,  
he there telis us, is known to proceed from the Stomach-by the

: -Attendance of a Nausea. ... . ..

In the next Place, as Anxiety is produced by the Violence of  
-the Disease, in het and burning Fevers, especially at their  
. Height, when the Sick becomes restless and impatient, through  
**the** Vehemence of the febrile Heat, and, whet is no small Sign  
νθί Malignity, has .his Anxiety occasioned by.a Corruption of  
the bilious Humours swelling and estuating in the larger Veins.  
This Anxiety is most apparent, when one of the Viscera is  
affected with as great Phlegmon, or Erysipelas; in which Cir-  
cumstance .the Patient is not very het in his outward and ex-  
treme Parts, but burns inwardly.

An Anxiety may, alfo, he owing to Weakness, as we are  
.told by *Galen, Corn, in* I *Prorrhet.* when the Faculty is.op-  
pressed by the Body; as when immoderate Evacuations have  
^preceded, or the Faculty, is extinguished by the Malignity of  
-the Distemper.-

. Lastly, The Patient becomes seized with an Anxiety, from  
**a** Commotion of the Humours vellicating the Parts, in order  
tto a critical Excretion : Hence we are told by *Hippocrates,  
lyAph.* 13. " That they who undergo a Crisis, have a severe  
Night hefore the Fit." For when Nature intends an Excre-  
tion os the Humours, **she** raises a Commotion and Perturba-  
tion in the whole Body, winch must, of Necessity, create **a**i Restlesness and Anxiety in **the** Patient. To **this we** may add,  
. that those who labour under a Suppuration, are often molested  
with this Symptom, either from a Decay of Strength, and De-  
-pression of Nature, or from the Use of Respiration much  
injured; or an Estuation in the Thorax; or from the Acrimony  
.of the Pus corroding and Vellicating the sensible Parts; or from  
.an acrid Distillation from the Head upon the Mouth of the  
Stomach

ς. We have given you the Causes of an Anxiety, and proceed  
to speak os the Prognostics, which may he formed from this

. Symptom: And, in general, we say, with the Author- of  
I *Prorrhet.* 39. 76. and in other Places, that an Anxiety is  
ralways bad, except when it is critical, or precedes an happy  
Crisis: There are, however, some Anxieties from which not.  
thing certain can he prognosticated; fitch are those occasioned  
by some Disorder os the Stomach, which, though bad, never  
'afford, by themselves, any sure Prognostic os the Death or  
Recovery os the Patient. And indeed such an Anxiety as is  
.excited by some Affection *os* the Stomach, is distinguished,  
according to *Galen, Com. in* i *Prorrhet.* from other Anxieties  
thy ναυτικ, a *Nausea,* and ἔμετος, *Fomiting',* because they who  
'are molested with this Sort *of Anxiety* have a continual Nausea,  
.and Inclination to Vomit; whence it is justly said, by the Au-  
thor of the *Coaca Pras.agia,* that an Anxiety, with a Loathing  
-and Nausea, indicates an Affection os the Stomach. . Now in  
Intermittent Fevers, and in many other Diseases, an Anxiety,  
.or inquietude, with a loathing and Nausea, is sar from heing  
malignant, since the Anxiety is often removed by Vomiting.  
-Of this, we have an Instance given tin by *Hippocrates, J Epid.*'T. I02. " The Wife os *Theotimus,* he fays, labouring Under  
a Semitertian, was seized with an Anxiety, Vomiting, and  
" Horror, all at once; and as the Fit came on with a Thirst,  
\*\*\* in the Progress of the Fit, the Heat increasing with the  
:" Fever to a Vehement Degree, she drank Hydromel; and,  
" aster Vomiting, was freed from the Horror and Anxiety to-  
gether."- An Anxiety and. Inquietude, therefore, attended  
‘with a Loathing and Nausea, are not much to he dreaded, and  
least of all, when, by the Benefit of Nature, or the Assistance  
of Art, a Vomiting excited, relieves the Patient from them ;  
as, on the other hand, an Anxiety which is increased by Vo-  
miting, is not usually Void of Malignity. -Thus, also, in the  
IHeight of burning Fevers, under the greatest Estuation, - an  
uAnxiety is not to he seared, because it is a proper Symptom of  
-that kind of Fevers. Anxieties os a good Sort are, also, fre-  
quently observed hefore an happy Crisis ; sor, at the Approach  
“of a Crisis, the Patient grows restless and turbulent, and for  
Very S°ed Reasons, since the whole Body is then thrown into  
:a Commotion and Perturbation, while Nature attempts an  
-Excretion os the morbific Humour: But such critical Anxieties  
and inquietudes are distingued from others by critical Signs,  
.'and chiefly by a supervening Rigor, succeeded by a copious  
'Sweet, or by plentiful Vomiting or Purging, or a copious and  
-critical Haemorrhage. With Respect to this Subject, we read,  
*'-Coac.* I9. that " Such as labour under an Horror, Anxiety, and  
‘" Lassitude, with a Pain in the Loins, fall into a Flux os the

Belly." And *ibid. Ils.* " They, who, aster Watchings,  
1 " are seized with an Anxiety, may expect an Haemorrhage  
2

from the Nofe.'' An Anxiety, alfo. Often happens, when  
Nature makes Efforts to propel the put.rid and malignant Hu-  
mours to the Skin, as in an Expusston of -Exanthemata, after  
- whose Appearance the Anxiety ceases. -

These, then, are the Anxieties from which we have no Rea- \*  
’ son to he apprehensive of any Danger in a Disease. But, as  
an Anxiety under a burning Fever, especially at the Height,  
\* and utmost Intenfeness and Estuation, at which time it is corn-  
\* mon to all, merits not our Concern, so, on the other hand, **a**- malignant Anxiety observed in Fevers, - where the outward  
. Parts are in no extraordinary Degree of Heat, whilst the in-  
- ternal Parts and Viscera are in a burning State, is justly to be  
dreaded. Such an Anxiety seems to he a proper Symptom of  
malignant Fevers, which are mild and gentle, as to outward  
Appearance, but full of inward Perturbation and Uneasiness,  
Occasioned, as we said, either by some Violent Inflammation of  
- one of the Viscera, or by an Erysipelas, or by an Estuation  
.and Effervescence of the highly putrid Humours in the Veins  
about the Praecordia, or from mere Weakness, or from an er-  
traordinary Redundance of crude Humours, with which Na-  
ture feems to he oppressed: In such a Circumstance the Patient  
in a Fever labours under a remarkable Anxiety, which we  
take *for* no flight Indication of Malignity.

. - But the " worst os. all Anxieties, according to *Coac.* 2. are  
" those which are attended with Refrigerations," particularly

-of the extreme Parts, the Feet, Hands, and Ears. To‘this  
. Purpose we find *Hippocrates* thus speaking, in his Book of  
*Prognostics .:* " If the Patient, he says, lies with his Feet bare,  
" and not Very het, and throws about his Hands, Neck, and  
.\*\* Legs, in an unequal and disorderly manner, it is a bad Sign;  
" sor it indicates an Anxiety."

An Anxiety, under Refrigerations of the extreme Parts,  
where Heat is not to he recalled, is mortal in the highest. De-  
gree, .and shews Death to be at hand : - Thes it proved in **the**Case of *Silenus, i Epid. Sect.* 3. *AEgr.* 2. and os the Woman  
who lay ill *in Forts Mendacium,* 3 *Epid. Sect. 2. AEgr.* 12..

No less pernicious is accounted an Anxiety which appears  
attended with bad Sweats,, on a critical Day. Bad Sweats,  
according to *Hippocrates,* are all such cold Sweats, asina con-  
tinual Fever appear on the upper Part Of the Body, aS’th**8**Head, Neck, and Clavicles. Of such an Anxiety we read,  
**1** *Prorrhet.* 27.-where it is said, ." That **a** Restlesness and  
" Uneasiness [δυσφορἲα4 with Refrigerations, and a Sweating  
.."4.f the upper Parts, where the Patient is not free from a .  
" Fever, prognosticate a Phrensyand Death, as in the Instance  
" of *Aristagoras.”* And it was observed, by *Hippocrates,,* of  
*Silenus* hesore-mentioned, " That on the sixth Day he sweated  
" a little about the Head, his extreme Parts were Cold and

livid, and he was under a great Anxiety.'' And of the  
Woman mentioned, also, hefore, he says, " On the seventh  
" Day she had a new Fit of a Rigor, succeeded by an high  
" Fever, and an intense Thirst, with an Anxiety : Towards

Evening she had a cold Sweat over all her Body, with a  
". Coldness of the extreme Parts, .and no Return of Heat.'\*  
Anxieties, therefore, under Refrigerations, attended with bad  
Eweats, are destructive ; which is the same thing aS if he had  
said, that Anxieties, with had Signs, are bad; and with per-  
nicious Signs, pernicious and deadly. Now, that cold Sweats of  
the Head, and Refrigerations of the extreme Parts, are perni-  
cious Signs, we are taught by *Hippocrates, Coac.* 572. 573s .  
*Prognosis, et Lib. de Crisibus. - - , - -*

Anxieties on critical Days afford surer Prognostics, and are  
esteemed Very bad, when succeeded by no salutary Evacuation,  
as by an Haemorrhage from the Nose, or by Stool, Vomit, or  
Urine, but especially by Sweat. For Confirmation hereof we  
read, I *Prorrhet.* 61. " Refrigerations of the whole Body,  
" attended with an Anxiety, but no Sweat, are bad Signs"  
And of Anxieties, attended '.with bad Evacuations by Stool, .  
we are told by *Hippocrates, Lib. de R. Vi I. A. \*\** That such  
fC Stools [spumous, and saturated with pure Bile] were Very  
." pernicious on many Accounts, as not extinguishing, but  
" increasing the burning Heat os the Hypochondria, and  
" exciting a Restlessness, Anxiety, and Jactation of **the**" Memhers." Which *Galen,* in his Comment, telis us, are  
Symptoms of an Inflammation, affecting the Hypochondria  
themselves. Of the same Symptom, in Conjunction with  
Vomitings, it is said, I *Prorrhet.* 62. " Pure and unmined

Vomitings, attended with Anxieties, are bad.”

An Anxiety under an utter Decay of Strength, from im-  
moderate Evacuations, is pernicious in the last Degree. Such  
a Sort of Restlesness and Uneasiness is observable in many  
dying Persons, We have an Instance, 7 *Epid. T.* I2. nt **the**Person of *Chartades,* who .(after Vast Haemorrhages by Stool)

was affected with an Anxiety about the Mouth os rhe Sto.  
" mach, [περί τήν καρδίαν] a flight Sweating in almost every  
" Part of his Body, and a stow I ever. At first he seemed to  
**" have the free** Use of his **Reason;** bus, **as the** Day went for..

" ward.

si ward, the Anxiety and Uneasiness increased upon him, and  
" he fetched his Breath somewhat shorter; He was more'  
\*\* hearty and obliging in bis Salutations, and Receptions os'  
" Persons, than Occasion required, and some Symptoms of a  
" Lipothyrny appeared, which were not at all relieved by  
"drinking Ptisan, or Barley-water [τὸ ἀπὸ κρίμνων ὕδωρ] j  
" Towards Evening he drew bis Breath very thick, with much  
" Agitation and Tossing, and Turning from Side to Side,  
" without the least Intermission, or Rest.”

In acute Diseases, if a Pain, affecting some ignoble Part,  
ceafes, and the Parient is afterwards taken with an Anxiety,  
it is of bad Prognostication. An instance of this we have in  
the bald Man of *Earijsa,* 3 *Epid. Sect.* 3. *Aigr.* 5. " Who,  
*\*" Hippocrates* says, on the third Day, was freed from the Pain  
" in his Thigh, but was under much Perturbation and Deli-  
“ rioufnesscedth great Jactstion and Uneasiness; and the fourth  
\*\* Day about Noon he died.”

For a Perron, after receiving a Wound or Blow, to be un-  
der an Anxiety, or very restless and uneasy, is, allo, a bad  
Sign; as was observed by *Hippocrates, % Epid. T.* 59. in one  
who received a Stroke on the Head with a Stoneand in ano-  
ther, who had his Liver-pierced with a Dart. *Ibid. T.* 6I.

Anxieties, also, are often observed attendant on mortal  
Phrcnsies, as we learn from the Author of **I** *Prorrhet.* **I 2.**where he fays,. “ That in the Beginning of a Phrensy for the

Panent to be mild and gentle, but often shifting from Place

" to Place, is a bad Sign.”

- We conclude, therefore, from the Whole, that all Anxieties  
are bad, except those which precede a salutary Crisis, and such  
as proceed only from an Affection of the Stomach, and are  
not preceded, accompanied, or succeeded by other pernicious  
Signs; or fuch as were observed in the Cales of *Silenus,* the  
Woman in the *Forum Mendacium,* the bald Man os *Larijsa,*and *Cliartades,* hefore-related. *Prosper Alpinus, de Praefar.  
Vis et Mart. Acgrct.*

**FEBRILE THIRST.'-**

- Thirst is exulted by a Dryness of the Solids, an Immeability  
of the Fluids, and a saline, alcaline, or billons and oleous  
Acrimony.

Thirst, therefore, always witnesses that some one of these  
Causes is present; and, on this Account, it prognosticates all the  
Evils which are capable of being produced by such Causes. 5

Care must, therefore, he taken, to remove immediately this  
Symptom of Thirst, particularly in Acute Distempers.

Thirst is removed, first. By drinking frequently, and in  
sinall Quantities at a time, aqueous, fubacid, nitrous, demul-  
cent, warm Liquors; of which kinds are the following. . is

Take of common simple Barley-water, forty Ouncesof  
. the Rob of Currants,four Ounces ; as many Drops of the

Spirit of Salt, as is sufficient to procure a grateful Acidity;  
and of distilled Cinnamon-water, one Ounce: Mix, for

- ordinary Drink. I X'

. Four Ounces of the Rohs, Jellies, or Syrups, of the fol-  
lotving -Fruits taken as above, may \* he used r The Robs,  
Jellies, or Syrups, for Instance, of Currants, Quinces, black  
Cherries, Barberries, Mulberries, Raspberries, Pomegranates,  
Lemons, Citrons, common and *China* Oranges. Thus,

- Take of the Jelly.of Quinces, one Ounce; of.the Dia-  
moron of *Flicclaus,* two Ouncesa of the Syrup of Citron-  
juice, one Ounce ; of the distilled Waters of Borage,  
and Baum, each four Ounces; of common Water,

; twenty-four Ounces; and of Rhenish-wine, th re-  
Ounces: Mix all together.

Drinks proper in a febrile Thirst are, also, thefe following;  
Milk arid Water, Whey, Butter-milk, Small Beer, Coffee,  
and one Part of Wine mixed with twelve Parts of pure Water,  
and a little Lemon-juice.

- Secondly, Thirst-is removed, by washing the Nostrils, mid  
gargarizing the Mouth and Fauces, with the fame kinds of  
Fluids as those above recommended. *. „ s*

Thirdly, By applying Fomenta tains, Epithems,- andCata-  
plasms, of the same Nature, to the Region- of the Hypo-  
chondria. . .miner-:

Fourthly, Sy the Use of similar Clysters, retained a consi-  
derable times . - . '

But if a very great Thirst is accompanied with extreme  
Weaknest, jt will ne fofe to exhibit vinous, or more spirituous  
Liquors, mixed with those above recommended. Thus,

... Take two of the best Citrons, take out the Seeds, pane off  
the yellow Bark, throw away the whole fungous Sub-  
stance, and, bruising the yellow Bark and the Pulp to-

gether, pat them in thirty-two Ounces of sinipte herhert.

-water; to which ads, of the Syrup of Mulberries, tio  
Ounce and an half; of Rhenish-wine, eight Ounces \*'  
and of toasted Bread, two Ounces: To he preserved in a  
clofe earthen Vessel. Or,

Take of the Syrup of Lemons, three Ounces, of the best  
Spirit of Wine, one Ounce and an half; of Rhenish-

- wine, four Ounces and of pure common Water, four-  
teen Ounces: Mix all together, for ordinary Drink.  
*Boerhaave. .... -*

**PaoGNosrIcs FRoM ThiRsT In AcUTE DrsEAsES.**

It is natural for Persons under acute and burning Fevers to  
he molested with Thirst, as conflicting with a hot and dry  
Distemper, since it is much worfe for the Patients, insuco.  
Cases, not to thirst at all, as jt is, also, for them to have .their  
Urine of no Colour, but thin and aqueous. It is best, there-  
fore, on all Accounts, since the Reason of the thing required  
it, that Persons under hot Distempers should he affected with  
Thirst: But immoderate and intense Thirst in no Cafe is good;  
as indicating a vehement and burning Heat in the internal Vis-  
cera ; but, on the contrary, is, for the most part, a bad and  
dangerous Symptom, and signifies-that the Disease is very strong  
and urgent upon the Patient, and difficult .to be subdued ., and  
that Nature is in Danger of sinking under the Weight which ’  
oppresses it. We may, therefore, safely pronoaince an immo-  
derate Thirst, as it is an Indication of the extraordinary Strength  
of the Disease, a dangerous and formidable Symptom in acute  
Disorders, but most pernicious, and fatal, when it precedes/  
accompanies, or follows other very bad Signs , in which Cafe  
it is a certain Presage of Death.

But from a Thirst alone, as well in acute as other Diseases;  
we can prognosticate nothing with Certainty, but regard it only  
as a Sign of the Strength and Violence of the Disease. With  
Refpedt to this Subjecti may be considered, whet *Hippocrates*writes, I *Epid. Sect.* 2. *Stat.* 3. where he says. *That the burn-  
ing Fevers [of that Constitution) afforded Signs in the Beginning  
in what Subjects they would prove mortal ; for the Patients were  
’ first seined on a sudden with a high Fever, attended with a  
senall Degree of a Rigor, they were incapable of steeping, were  
very restless, and afflicted with a Thirst and Nausea.* Such was  
the Cafe of *Philistus,* I *Epid. Sect. 3. Aigr.* I. of whom we  
read, *That on the third Day in the Morning, and till the Middle  
of the Day, he seemed to be scree from a Fever i bus towards  
Evening he was seized tisith a high Fever, attended with Sweat;  
and a Thirst, a Drynese of the Tongue, and a Blacknofs of the  
Urine.* In this Cafe, a Thirst, attended with block Urine, and  
other bad Symptoms, signified that the Disease would prevail  
over Nature, and prove mortal. The like Thirst was observ’d  
by *Hippocrates* in *Pythian,* 3 *Epid. Sect;* 3. *Aigul* 3. *who, he*says, *was seized veith a vehement Rigor, succeeded by a high.  
Fever, a Drynese of the Tongue, a Thirst, Redandance of Bile,,  
black Urine, which had an Enaorerna* [fee the Word], *bus nd  
Hypestafis.* This Thirst continued upon him till the fifth DayA  
accompanied with other pernicious Signs, particularly a Cold-  
ness of the extreme Parts; and a Loss of Voice. We conolude;  
therefore, that an inteofe Thirst, accornpahied with other bed  
Signs, is of the most fatal Consequence. Of this Nature;  
perhaps; was the Thirst which the Wife .of *Hermppoolernur*endured, 7 *Epid. Th* I 3. who, it is *siacs, was affected with a.  
Trembling of. the Hands, and a Shaking of the Plead, a deprived.  
Cast of the Eye, with a violent Thirst ; and as scon as see had  
drank, estill craved for more Drink, arid seiatcbed the Cup frlumi  
the Attendant, and took large Draughts, and would not suffer  
the Cup to be pulled from her ‘ her Tongue- vous.dry, and very  
red; and, when under a Tremor, foe would put both Hands to.  
her Mouth, and chew them.* Like to this:was the: Thirst *of  
Aristecrates,-* who died in fout Days.ofa pestilential Carbuncle,  
We conclude, upon the Whole, then; that an immoderate  
Thirst in acute Diseases is never good, often tones bad;, .and,  
when attended with other bad Signs, most pernicious and fatal. 1**WHAT, IS To SE EROGN0STICATED' FROM A REMoYAn**

**ORABSENCB OF THIRST IN DIsEAsRs. - - ’**

A moderate Thirst in Diseases is always gondj.and to thirst  
more or less, as the Reason of the thing, and the Nature of the'  
Disorder, with respect to Heat, require, can he no bad SignἸ  
But for the Patient to hemolestedwith an intense and continua!  
Thirst, is never a good Prognostic; as, on the contrary, not tej  
have the least Desire of drinking, when labouring under a hot  
and dry Distemper, is highly perniciosis, and fatal; and the  
more, when the Thirst, with which they were’hefore afflicted,’,  
ceases, without any Reason to be given for.it. The Author of  
I *Prorrhet.* 57. telis usi that “ a Thirst in acute Diseases,  
" which ceafes for no Reafon, is bad.” And *Galens* in his  
Cormnent on the Place, endeavouring to account for it,..hel

these Worth: " When, therefore, it happens, that the Tmrst  
" cannot be removed, either by Vomiting, Sweating, or Pur-  
“ gings or by a critical Abscess, so aS that the Disorder itself is  
" not mitigated, but that the Sense thereof is blunted or abated,  
" this is no good Sign; bur If the Thirst ceases whilst the  
" Tongue continues dry, and the Urine crude, this is a sorer  
" Evidence of the Malignity of the Disease; and still the more,  
" if no refrigerating or moistening Remedies have been out-  
" wardly applied; a proper Use of which Medicines, in acute  
" Diseases, is not so much to extinguish a Thirst, as to abate it.  
" But in acute Distempers, if the Thirst he perfectly removed,  
\*" it is pernicious in the highest Degree.” From this Passage  
of *Galen* it is obvious to every one, that it is highly pernicious,  
in acute Disorders, for a Thirst to cease for no manifest Couse,  
as, sor Instance, a heneficial and salutary Evacuation or Pur-  
gation, but in a crude State of the Distemper.

But this want of. Thirst, in such Cases, is most fatal and  
deadly, when attended with other destructive Symptoms. To  
this Purpose we find *Galen* discoursing, in his Comment on the  
first of the *Epidemics:* " AS an Accumulation to all those  
p- pernicious Symptoms under which the Patients laboured,  
An must he reckoned, that though they were afflicted with **a**" violent Heat, and Estuation, they had no Thirst ; but as  
" for those who were at first molested with a Violent Thirst,  
" and were afterwards freed from it, such an Event must be  
Ci necessarily owing to one of these two Causes; that is, either  
**" a** Solution of **the Disease,** or an Extinction of the Faculty,  
" in such **a** manner, that the Sick are no longer sensible of.  
- the Eviis under winch they suffer : Put the first was not the  
" Cose in those Disorders, since these Symptoms prov’d mortal

in the Event."

They who labour imder acute Diseases, **are** not thirsty; first,  
' On account of a cold and moist Humour distilling from the  
Head upon the Stomach; whence *Hippocrates* justly says,  
4 *Aph. ζ.* that they who are molested with a Cough, are not  
very thirsty, because the Phlegm, which distils from the Head  
upon the Stomach, takes oft the Thirst: And this want of  
Thirst is observed in some pleuritic and peripneumonic Patients;  
from which, however, nothing can be prognosticated with Cer.,  
tainty, since the Sick, in such Cases, are distinguished from  
others,who are not afflicted with Thirst by their Tongue, which  
is not dry and parch'd, but moist and soft, from the Phlegm  
which moistens it. . .

Secondly, A want of Thirst in Very het Distempers, where  
**the** Patient is in a Very high Estuation, proceeds either from a  
Delirium, which renders him insensible-os what he suffers ; or  
an Extinction Of the appetitive Faculty *of* the Stomach, or  
from both Causes.. Of Persons.in a Phrensy, the Author of  
i *Prorrhet.* I 6. - says. *LittleDrinkers, who are startled at  
the hast Naise, Arae 'subject Ao Tremblings.* And *Galen,* in his  
Comment, tells us, that *Phrenetic r Paiients are* οὐραχυπόται,  
*that is, have little Desire to drink,, though their Disorder be of  
' a hot and dry Nature, and their Tongue rough with excessive  
‘ Drynefs.* But we are taught by *Hippocrates,* that such Patients  
stre disorder'd in their Senses, 2 *Aph.* 6. where he fays. *They  
'who are affected with Pain in any Part of the Body, and yet  
have but little Sense thereof, have their Reason disturbed.* Hence  
**he** says of those Persons who labour'd under a Phrensy, and  
whose Cases he describes, 3 *Epid. Sect.* 3.. that they were all  
free from a Thirst. And he gives a particular Instance of this  
kind in the fame Book, Case the last, of the young Man of  
*\* Meliboea,* who labour'd under a Phrensy, unattended with a

Thirst. \_ . . \_

- In such Cases as these, then, not to thirst, is a bad Sign;  
and, if attended with others of the like Nature, mortal ; hut  
without these nothing certain can he prognosticated from it:  
For there are many Persons in a. Delirium who never call for  
Drink, and yet recover, though, it is true, they are such as  
have no Violent Delirium, nor other concomitant destructive  
Symptoms, particularly, winch is much to he regarded, a Dry-  
ness of the Tongue. - But where that Part is not Only-Very dry,  
hut, also, black and soul, nut to-thirst is mortal in the highest  
Degree, as it shews, that the Disease is Very.strong and urgent  
upon the Patient; and that Nature IS ready to fink under its  
Burden. . ’ \_ E

' In a Very hot Distemper, not attended with a Delirium, but  
- a great Dryness find Adustness of the Tongue, a want os Thirst  
is infallibly mortal, as it demonstrates the Faculty to he extin-  
. guished ; and with the more Certainty, if the Thirst, under  
which the Patient laboured -hefore, ceases unaccountably, and  
sor no Reason ; for this is a sure Indication of the Extinction of  
the faculty. And we have very, good Reason to assert it fatal,  
sinoe it is impossible for Nature to be oppressed, and totally sub-  
dued, by the Disease,- without the Appearance of several other  
mortal Signs. Thus it happened in the Case of *Erasinus,  
- i Epid. Sect.%. AEigr. S.* " who shad a continual Fever,, with  
. Sweating; an 'Elevation and painful Tension of the Hypo-

" chondrin; black Urine, which had a round Enaeorema, but  
" no Hypostash, a great Dryness of the Tongue, but no extra-  
" ordinary Thirst." Another Instance is in *Hirmocrcites,*3 *Epid. Sect.* I. *AEgr.* 8. " whose Tongue at first was parch'd  
" with Heat, and soon aster be was seized with Deafness, and  
" was incapable of steeping, but not Very thirsty." Anda  
little after we read, " On the twentieth Day he had an Aversion  
" to all Food, had the perfect Use of his Reason, but could  
" not speak; his Tongue was Very dry and parch'd, but he had  
" no Thirst; and he flept, but labour'd under something of a  
iC Coma.” The same was observ'd in the Virgin Daughter of  
*Euryanax,* 3 *Epid. Sect. 0.. AEgr.* 6. who through rhe whole  
Course of her Fever, of which she died, had no Thirst, but  
abherred Food. From these, and the like Instances, we con-  
clude, that in acute Diseases it is always a bad Sign for the  
Patient to he without a Thirst, when he has been freed from it  
in an unaccountable manner; but when a Thirst ceased for good  
Reasons, which may be given, such a Cessation is so sar from  
heing had, that, on the contrary, it is a Very good Sign; aS it  
proved, for Instance, in the Person who lay sick in the Garden  
of *Dealces, % Epid. Sect.* I. *AEgr. S.* who had several times,  
in the Course of the Disease, heen thirsty and delirious, but  
was, at last, for a Very good Reason, which was the Solution of  
the Disorder, freed from his Thirst. *On the twentieth Day,* says  
Hippocrates, *he fell into a Sleep, was restor'd to the perfect  
Use of his Reason, smeated, and was freed from his Fever and  
Thirst.* This Person underwent several Crises, which were  
preceded by a Thirst, a Dryness of the Tongue, and a Deli- '  
rium ; and these Symptoms were all alleviated, and the Thirst,  
in particular, diminished, after a Crisis, as the Reason and  
Nature of the thing required : But a want of Thirst, contrary  
to Reason, or just Expectation, and attended with other perni-  
cions Signs, is destructive and fatal, in the highest Degree.  
*Proffer Alpinus, de Prasug. Vit. et Mort. AEgrot.*

A **FEBRILE NAUSEA.**

A Nausea is an ineffectual Effort to Vomit, accompanied  
with an Idea of Horror ; it is, therefore, excited by flight Con-  
Vulsions os the muscular Fibres of the Fauces, Oesophagus,  
Stomach, Intestines, and abdominal Muscles: These are caused,  
first. By an acrid, putrid, and bilious Matter, received into  
the empty Smmach, thence ascending into the *Fauces,* which,  
together with the Stomach, It Vellicares, , and irritates. . Hence,  
the Parts above-mentioned are drawn into Consent, and excited  
to similar Motions: And that a Nausea is thus caused, we disc  
tinguish, by previous Fasting,by a putrid Breath, and Sordidness  
of the Mouth, and Fauces. Or, secondly. By a tenacious,  
viscid, fluctuating Matter, residing in, and Vellioating the same  
Parts. This Species os Nausea is distinguished by the previous  
Signs of such a Viscidity. . See LENTOR. Or, thirdly, by a  
flight Inflammation of the Stomach, Oesophagus, Intestines,  
and adjacent Viscera: This is distinguished thy the propel Signs  
of Tuch Inflammations.

Fourthly, By the Remembrance *of* something, which, for-  
merly taken into the Stomach, excited such a Nausea.

Fifthly, By an inordinate Motion of the nervous Fluid, ex-  
cited by any Cause whatever: This is distinguish’d by *Deliria,*Spasins, averti go; and Tremor.

If a Nausea persists long, it produces Emptiness, Abstinence  
from proper Drinks and Medicines, Vomiting, and many  
Misfortunes which may hence he excited; the principal of  
which are. Weakness, an alcaline putrid Acrimony, and uni-  
Versa! Dryness. . ’. t.

A Nausea, from the first Cause, is to be cured by the Use os  
acid, nitrous, aqueous Drinks,; Aliment, and Medicines,  
which are the same as those recommended against febrile Thirst;  
by the Exhibition of a lenient Purge of the same Kind ; by  
acido-austere Medicines, which corroborate the Fibres; or, if  
these do not succeed, by a Vomit.

The second Species in to he remov'd by diluting, attenuating,  
purging, and Emetics. The. Medicines here .proper are rhe  
same as those recommended in a febrile Anxiety. .

The third Species is only to he removed hy curing the In-  
flammations which excite it.

The fourth Species is cur'd by forgetting and avoiding the  
Ideas winch cause it.i '

The fifth Species is remov'd by austere Remedies, Rest, Nar-  
Coties, and cold Water. Thus, for Instance,

Take of the Rob of Quinces, four Ounces; of the Syrup *d*Lemons, two Ounces; of *Matthiolusts* distill'd Aqua  
Vitae, one Ounce; of distill'd Cinnamon-water, six  
Drams j Of the distill'd Water . of Citron-peels, six  
Ounces; and os the Tincture of Opium, sixty Drops:  
Mix all together, and exhibit one Ounce for a Dose, . till  
the Nausea is remov'd.

Take of strong distill’d Mint-water, a sufficient Quantity a  
And let the Patient drink an Ounce of it cold, every  
Quarter of an Hour.

Take of the Rob of. Quinces, a sufficient Quantity ; Of  
which let the Patient take one Dram every Half-hour.

Take of recent Lemon-juice, half an Ounce; and os  
Rhenish-wine, one Ounce: Mix both sufficiently to-  
gethin; add one Dram of the Salt of Wormwood; and  
. exhibit during the Effervescence.

Take thin Slices of Lemon, sprinkled with Sugar: To be  
kept lying On the Tongue.

Most Patients receive Relief from Epithems, Fomentations,  
Cerates, and stomachic Applicatinns; especially when there is  
no Inflammation. Thus,

Take of the aromatic Powder of Rofes, of Diagaianga, and  
the Diarrhodon Abbatis, each one Ounce: Mix all to-  
gether, sew up sh a Piece of Mullin, and apply to the  
Epigastrium. .

' Take of the stomachic Cerate of *Galen, a* sufficient Quan-  
tity for making a stomachic Plaister, to be spread upon  
Leather. This Plaister affords, Relies, so long as it  
adheres. :

Take of *Mat thidusts* Aqua Vitae, one Ounce; of the Spirit  
*' of* Angehca-rootS, of the carminative Spirit of *Sylvius,*and of the Spirit of Mins, each two Ounces» Let a small  
Slice of toasted wheaten Bread, well soak'd in these, be  
applied warm to the Epigastrium, applying *over* it a Swine’s  
Bladder moisten’d with Oil, and secur'd by a Bandage.  
This Dressing is to he renew'd every twelve Hours.

Hence we learn why, in acute Diseases attended with a  
*Nausea,* a Purge, or an Emetic, exhibited in the Beginning,  
are of such great Service ; and in what sort of acute Distem-  
pets: Why Patients, under acute Fevers, abhor pinguious All-.  
xnents. Flesh, Eggs, and Fish: And why, on the contrary,  
they covet Water, Acids, ripe Fruits, and cooling Liquors: .

Why Medicines can he of no Service, unless the Nausea is  
first cur'd: .

Why the Symptom of a *Nausea* is often incurable: -

And why Diseases, attended with a Nausea, are generally,  
when they ceafe, succeeded by a sudden, unusual, and sur-  
prising Appetite. r i.. . : . ‘ -

**FEBRILE ERUCTATIONS, AND FLATULENCES.**

Eructations are caused by an elastic Mattes, dilatable by  
Heat, Effervescence, Or Fermentation ; which one Moment is  
confin'd, and the next set free, by a Relaxation of the Part  
which confines it, and is forcibly exploded, with a Noise.

Thus Ain, opposite Salts, ripe Fruits, putrefying Humours,  
and fermenting Vegetables, afford Matter for Eructations and  
Flatulences; the. Force and Fetidness of which vary, according  
to their different Natures. *so - - s'*

Thefe, however, if suffer’d io pals off freely, are productive  
os no forcible Explosion : It is evident, therefore, that Spasms  
*itf the Sphincter* of the *Oesophagus,,* of the Oesophagus itself, os  
the superior and inferior Orifice of the Stomach, and of the  
intestines, concur, and are alternately- relax'd, in order to pro-  
duce eructations,' Flatulences, Explosions of Wind from the  
Anns, and Mtstmurings of the Intestines from Wind confin’d. -

If the two Causes above-mention'd, that is, a Production of  
Flatulences, and their Confinement by SpasinS, concur, act  
strongly, and continue long, then .the elastic Matter, dilated  
by Heat,. Motion, and its own proper Force, and confin'd in a  
Cavity, the surrounding Fibres of winch are spasmodiCally con-  
stricted, distends, stretches, and excites Pain in the Membranes  
winch confine it, and compresses the adjacent Parts: Hence  
Pains, and intolerable Anxieties, are excited, which cease upon  
the Emission of the Flatulences/ To this, if the Force of a  
Fever is added, it is evident, that insupportable Torments may  
beproduced. ... - ...

TheCureof these Disorders consists.

First, In removing the Matter which excites them, thy di-  
luring Remedies; by .warm, aqueous, and somewhat aromatic,  
dissipating Drinks; by Remedies which render the effervescing  
Salts. perfectly neutral; such as correct Putrefaction, and put a  
Stop to Fermentation. : ὓ - -

Secondly, In mitigating the Convulsions by proper Remedies;  
among winch are, those which destroy Acrimony, and compose  
the Spirits; the principal of which are. Opium, and mild  
Antihysterics. -mi. - ' - - \* .- . -

Thirdly, In the Application of warm, relaxing, anhevne,  
and somewhat aromatic Clysters, Fomentations, and Epichems :  
and of Cupping-glasses without Scarification, to the *Abdomen. '*

Hence we understand whet sorts of Meats, Drinks, Ah.  
ments, and Medicines, are flatulent; why Flatulences happen'  
particularly in the Stomach, and superior Intestines, when  
empty ; in the Intestines, when wounded; when the Abdomen  
is, by any means, compressed ; and wh^they accompany hy-  
pochondriac, hysteric, convulsive Disorders, and the Colin.

**' FEBRILE VOMITING.**

Vomiting is a Violent Expuinon, first, of the Contents of  
’the Stomach; then of those of the Intestines; and, lastly, of  
those of .the Viscera, which evacuate themselves into the In-  
-testines. The proximate Cause of Vomiting is, a convulsive  
Motion of the muscular Fibres of the *Fauces, Oesophagus,*Stomach, Intestines, Diaphragm, and abdominal Muscles;  
the remote Cause, whatever is capable of stimulating the Fibres  
above-mention in, or the easily-irritable Viscera, to spasmodic  
Contractions.

Vomiting is sometimes excited by a primary Disorder of the  
Stomach, upon the Access of a Fever; as, if it is affected with ..  
Convulsions, Inflammation, Suppuration, or Soirrhus; or if ’  
any Part of it is hecome cartilaginous ; in these Casos it is ex-  
cessively obstinate, and may be distinguished by the Signs of theDistemper which produces it ; and when that is remov’d, it  
ceases spontaneoufly.

. But, frequently. Vomiting is caused by similar Disorders in  
the Viscera, and circumjacent Parts, when they are irritated by  
the Stomach distended with Aliment,., especially upon the Access  
of a Fever, in such Cases, it is extremely obstinate, and -the  
Cause is sometimes not easily discovered.

Or a Vomiting may he excited by every Cause of a const-  
derable *Nausea,* mentioned above, from the Doctrine of which  
this Species of Vomiting may he distinguish'd; and hence, also, ,  
we may. learn how to treat, and cure it.

If the Symptom of Vomiting continues long, it produces an  
Atrophy, the Iliac Passion, Convulsions, and all the Effects of '  
a great and obstinate Nausea, mention’d above.

- The Cure of that Species of Vomiting which if excited by  
primary Disorders of the Stomach, and those of the adjacent  
Parts, is to be learnt from the History os those particular  
Diseases.

That Species which is produced by the same Causes as a  
*Nausea,* is to he cur'd by the Remedies recommended for a  
*Nausea*,diligently applied; especially Opiates, and corroborating,  
attracting, and dissipating Epitherns. ' ' .

Hence the Reason is evidens, why Vomiting is so difficult to  
he check'd in many acute Diseases; and hence we learn the  
Falsity and Danger of the Maxim, *that Vomiting is cuofd by  
.Emetics:* This Doctrine of Vomiting sarther teaches tis, why  
Sudorifics sometimes remove Vomiting, as in the Plague; why  
st often ceases, immediately aster a Crisis, as in the Small-Pox  
why it is frequently cured by Bleeding, as in acute inflammatory  
Distempers; why those who Vomit perpetually in the Beginning  
Of acute Distempers, without any Inflammation of the Sto-.'  
mach, or adjacent Parts, have a Crists byway of Diarrhoea,  
which may be prevented by an-Emetic exhibited in the Begin-  
thing of. the Distemper; and why a Discharge, by Vomit, of  
whatever is taken into the Stomach, as soon as receiv'd, is one  
- of the worst Symptoms that can happen in acute Distempers. T

An Hiccup may he excited by the same Causes as a Vosusting,  
and is to be cur'd by the same means.

*Predictions from* **VOMITINGS ;** *and first of those of a salutary  
si su \* Kind. :* **' Si -s**

Since it is certains, that the Humours may fussier a good or a  
bad expurgation by way of *Vomiting,* the events of Diseases  
may, therefore, in a great measure, he prognosticated from such  
Excretions; from those which are bad;' otherwise call'd spins-  
*ptornatical,* -we may. predict either Death or a long Diseased  
and from she good we may:Venture -to foretel the- Recovery of  
the Patient. ’ “y - ’ ' /

*Vomiting* in the Beginning os -acute Distempers, is excited by  
an Irritation os the Stomach, through the excessive Quantity,  
or depraved Quality os the Food, or Humour contained into;  
or from an Etefudationof- a Humour, either from the circumi,  
jacent Parts, the Liver, for Instance, when under an Inflam-  
mation, or from the wholeBody, andaCacochymy of the Blood  
and Juices; but *Vimitings,* in the Increase end Progress of the  
Disorder, are produced by the Redundance or Malignity of  
the Humours-stimulating the Stomach to Excretion. *Fouritings,*thusoccasion'd, are by Physicians.call’nseherscrdirirdss, and bad j  
because they are seldom or never succeeded by a Recovery,' or;  
at least-'not -till - after in long time, much Pains, and frequent  
Relapses. It Is usual, also, for the Patient, Yin the Height os  
the Disease, .or a Iittse before, when Sign? of - Concoction have

prectated, to be suddenly taken with *Fomiting* in a plentiful  
manner; and this *yomitisn* they call *critical,* because it is the  
Work os Nature prevailing over the Disease, and employ’d in  
Cleansing the Body ; on which account it is most salutary, and  
indicates a safe and speedy Crisis and Solution os the Disease.

**Os** the Signs which indicate *Pomiting,* we have the following  
Account from *Hippocrates* in the *Prognostics t If a Person,* he  
says, *not seized with a mortal Fcver, tells us that his Head  
aches, or that a Mist appears before his Eyes, or that he has a  
gnawing Pain at the Mouth of his Stomach, bilious* Vomitings  
*are at hand. If he be, also, under a Rigor, with a Coldnefs of  
' the Parts about the Hypochondria, the* Vomiting *may be expected'  
still sooner ; and if he eats or drinks at this Juncture, he will  
vomit immediately.* Andr *Epid. Sect. 2.* we are told, that they  
who were affected with burning, or other epidemic Fevers in-  
cident to that Constitution’of the Seasons there described, *and  
Caere oppressed with a Heaviness of the whole Hoad, attended  
with a Cardiogmos, and a Nausea, had those Symptoms succeeded  
'dura* Vomiting *of bilious and pituitous Matter. Galen,* in his  
Book of *Crises,* says, that the Signs of *Fondling* are, a gnaw-  
ing Pain at the Mouth of the Stomach, with a Pain of the  
Head, - a Scotomy, an Agitation of the lower lap, and a Flux  
Of much thin Spittle from the Mouth ; and these not attended  
with Signs of an Haemorrhage, Sweat, Flux of the Belly, or  
an extraordinary Flux of Urine, the Menses, or Haemorrhoids.  
But the Author of the *Coac.* I 42. gives us only three Signs of  
*Vomiting’,* which are, a Nausea, Cardiogmos, and Ptyalismus,  
or Flux of Spittie. In a Phrensy *Galen* affirms, that frequent  
Spitting alone foreshews *Vimiting.*

These, then, are the Signs which indicate *Vomiting*; and  
so, without insisting more largely or accurately on this Head,  
we proceed to what we principally intend here, which is,  
to give the proper Marks and Characters by which we may  
distinguish those *Vimitings* which are good, useful, and saln-  
tary.

For lean or thin Bedies, which are prompt and easy to vomit.  
Expurgations by *Vomitings,* in the Summer Season, are useful  
and proper; as we are taught by *Hippocrates, ^Aph.^.(s.*especially in Disorders of the Parts seated above the Diaphragm,  
*ibid.* I8. where we read, that *Pains above the Diaphragm in.,  
dicate Purgation by* Vomiting; *Paint belawAhat Part, Pur.,  
gation by Stool.*

AS to Substances discharged by *Vimititsg,vtt* read,in the *Prog.,  
nasties,* that *Vomiting* is most serviceable when the Matter eva-  
cuated is mostly a Mixture of Bile and Phlegm, and not Very  
' thick, nor much in Quantity. *Galen, Com. in* 4 *Lip. Aph.* safe  
It is good for bilious *Vimitings* to succeed a Rigor; because they  
indicate a Solution in a burning Fever, from an Expurgation of  
. the Cause ; whence not all *Vimitings* are good and serviceable,  
but only such as critically discharge a Multitude of bilious Hu-  
mours. And not only bilious, but pituitous *Vomitings,* if cri-  
tical, are beneficial ; since *Hippocrates,* 6 *Epid. Sect.* I. *Aph.*5. commends pituitous, as well as aeruginous *Vomitings,* in  
Pains of the Kidneys: And *Galen, Com. in* 5 *Asms.* allures  
us, that aeruginous *Vimitings* have proved salutary in *Convul-  
sions* ; and speaks of a young Man, who under Violent Vomit-  
ing was convulsed in all Parts of his Body; but aS soon as he  
had discharged an aeruginous Matter, his Fever and Convulsions  
immediately ceased. *Hippocrates,* in his Book *de PrifcaMedi..  
. aeina,* touches Very elegantiy upon the Benefit of this Expur-  
' gation of bilious Humours. " When a kind of Bitterness, he  
" says, which we Call yellow Bile, is effused, what Anxieties,  
" burning Heats, and Unruly Disorders, immediately arise I  
" But when we become free from this Humour, and the same  
" is difcharged, either spontaneoufly, or by the Help of Medi-  
" cines, provided it he done either way in Season, we find ma-  
. " nifest Relief from our Pains and Heat.'' And a little after.  
When Persons are molested with a sharp, acrid, andSenI-  
" ginous Bile, what furious Passions, what Gnawings of the  
Viscera and Thorax, with Desperation and Despondency of  
" Mind, seize upon them! Nor are any of those Symptoms  
" removed before the peccant Humour is purged off, subdued,  
" and mixed with others."

Hence we conclude, that all *Vomitings,* which duly evacuate  
**the** Humours, which are the Causes of Diseases, are good :  
They are, also, as we hesore observed, called. *critical*; the  
proper Marks or Qualifications of which are, that they appear  
when the Disease is in a State of Concoction, that is, when  
Signs of Concoction have preceded; that they happen on cri-  
tical Days; that they he conformable to the Nature of the  
Disease; and, above all, that they entirely remove the Sym-  
ptoms os the Disease; or, at least, alleviate and diminish them.  
And this agrees with whet *Hippocrates* has determined, I *Aph.*le. where we read, that " spontaneous Evacuations by Stool or  
" Vomis, if the Matters discharged are such as require an  
**A\*** Expurgation, are beneficial, and easily supported; if other-  
**- " wife,** the **Effect is** Contrary." Of **the Marks or** Signs of

.critical Excretions, we find the Author of the *Coac. Piraen.*thus speaking, *T. yy.* In a continual Fever, if the Patient  
" lies speechless, with his Eyes shut, and now-and-tben twink-  
" ling, if he he seined witli an Haemorrhage from the Nose, or  
" with Vomiting, succeeded by a Return of his Speech and.  
" Senses, he recovers.''

Those *Vimitings,* also, are salutary, which are attended with  
other good Evacuations: Of this Nature was the bilious *Vomit.,  
ing* of the sick Woman in the *Strand,* who was three Months  
fone with Child, I *Epid. Sect. 3. AE.gr.* I3. on the fourteenth  
)ay of her Illness, and attended with a Sweat, succeeded by a  
perfect Crisis, and Removal of the Fever.

*, ' Vomitings* without Signs of perfect Concoction, though they  
may he good, and alleviate the Disease, and diminish its Sym-  
ptoms, yet they promise no Recovery till aster a long time,  
and many Relapfes. Such was the *Vomiting* of the Wife of  
*Epicrates,* I *Epid. Sect.* 3. *AEgr.* 5. who " on the fifteenth  
" Day was seized with frequent Vomitings of bilious, yellow  
" Matter ; sweated, and was free from a Fever; but towards  
(e Night had a high Fever, and discharged a thick Urine, with  
" a white Hypostasis.'' Here the Crisis and Recovery were  
delayed till the eightieth Day.

*Forti lings* of a pernicious Tendency, such as the black, pure,  
and others, if the Disease under which they happen be pretty  
savourable, portend not Death, but a long Disease, and Re-  
lapses. Thus of the Patient last mentioned it jo said, that  
" about the twentieth Day, in the Morning, she had a small  
" Return of a Rigor, lay under a Coma, flept quietly, and  
" Vomited bilious and black Matter, in small Quantities."  
Another Example we have in *Cleonactides,* I *Epid: Sect. p.  
AEgr.* 6. who, also, recovered not till the eightieth Day; and  
was observed by *Hippocrates*. ."thn the twenty-fourth Day to  
" be affected with a Pain in the Extremities os the Hands, and  
" to Vomit up a yellow, bilious Matter, at pretty frequent  
iC Returns, and, a littie after. Virulent Mattes, by which all  
" the Symptoms were alleviated.'' These *Vomitings,* as they  
indicated some sort of Concoction of the Urine, which, it is  
said, " was during all the time thin, but not colourless,'\* since  
it was of a good Colour, (winch, according to *Galen,* in his  
Comment on the Cafe of the Virgin of *Abdera,* 3 *Epid. Sect.* 3.  
*AEgr.y.* is the greatest Sign of Recovery in those who labour  
under a Redundance *of* Humours) and.alleviated the Disease,  
and its Symptoms, were justly to be accounted salutary, and  
procured a salutary, though imperfect Crisis, from which might  
be prognosticated a future Recovery, though at a good Distance  
of time. .

„ We conclude, then, that all *Vomitings* in acute Distempers,  
which alleviate the Disease, and render it more supportable to  
the Patient, are salutary; but those which are not good in their  
own Nature, such as pure, aeruginous, black, fetid, Virulent,  
scanty, and particoloured Vomitings, if the Disease he of the  
milder fort, and not In an absolutely crude State, are Prog-  
nostics that the same will be long, if not mortal, and attended  
with much Pain and Trouble, and frequent Relapfes.

A spontaneous *Forni ting,* succeeding upon a long Diarrhoea, in  
said by *Hippocrates,* 6 *Aph.* I 5. to remove the Disorder ; and  
bilious *Vomitings,* in a Woman of a bilious Constitution, whose  
Menses .flow'd in less Quantity than was requisite, are by the  
same Author, I *Epid,* pronounced good. j

*Of destructive* **VOMITINGS** *portending Death.*

*Vomitings* of *a* bad Rind, portending a fatal Event, happen in  
the Beginning os the Disease, or soon after ; and are attended  
with none, or, at least. Very obscure Signs os Concoction; for,  
at such times. Nature, as has heen observed, makes no due  
Excretions, according to that 2 *Epid. Sect.* I. "Critical Syrn-  
" ptoms determining for the hetter appear not presently.'’  
The Nature of destructive *Vimitings,* then, appears,'in the first  
Place, from their happening in the Beginning of a Disease,, and  
heing attended with Signs of Crudities.

Secondly, Excessive Evacuations by *Isomiiing,* which exhaust  
the Strength, indicate -a deprayed Excretion j and copious Dis-ι  
charges this way, under a Violent Disorder, is they relieve not,  
in some measure, the Patient, portend his Death; and with the  
greater Certainty, if accompanied with other pernicious Signs ;  
but moil certainly and irtsyllibly, when they are in their own  
Nature destructive; as' when they are *porraceous, livid, aru..  
ginous, black, particoloured, virulent, fetid, pure css unmixed,*and *scanty,* or discharging small Quantities of Matter ; of  
which we are to treat singly: These Kinds of *Vimitings* were  
observed by *Hippocrates* in the phrenetic Patient, 3 *Epid. Sect.*3. *AEgr.* 4. the Woman who lay ill *in Foro Mendacium, iced.  
Sect.so. AEgr. 12.* and the Son of *Hegetocides, y Epid, sub T.*6r. a little hesore their Death.

*. Small* and *scanty* Excretions by *Virtiting* in acute Diseases,  
are one os those Signs, which, aS *Galen* says. *Com.* 2. *in gi  
Prorrhet. T. ^sc* are in the Whole to he regarded, as of bad  
Sryni-

\_ All bilious, that is to say, yellow, croceous, pormceonS,'  
and all Vomitings accompanied or preceded by bad Signs, are  
pernicious ; and if reducing the Sick to a worse State than be-  
sore, destructive : Those os the former kind are to. he esteemed  
among those Pseudo-critical Signs, which determine nothing,  
but indicate a. doubtful future Crisis; and, in the last Case,  
they appear to portend nothing but Death; and with the more  
Certainty; if they happen to be malignant. To this Purpose is  
that in I *Prorrhet.* 62. before-quoted, " Pure or unmixed -

Vomitings with Anxieties are bad.'' And, *ibid, J2.* "They  
" who Vomit up black .Matters, and are affected with a Nau-  
*CC fez,* accompany’d with a Delirium, and a flight Pain in the  
" Pubes, who have a fierce Look, and shut their Eyes, ought  
" not to be purged, because Purging would prove destructive .  
*Ct to* them." And a little after, T. 79. we' are told, that.  
" Scanty and bilious Vomitings are bad; and especially when ?  
" atrended.with Watchings: Blood falling by Drops from the  
‘4 Nose, in. this Case, is, also, bad.'' . Of this Nature were .  
the Vomitings observed by *Hippocrates,* in the fiek Woman *iri s  
Foro Mendacium,* 3 *Epid. Sect. sc. AEgr.* I2. ". Who, he

says, on the twelfth Day vomited much black fetid Matter, i  
" and was much affected with the Hiccough, and a trouble- \*  
ii some Thirst : On the thirteenth she brought up great Qpan-  
" tities of black virulent Matter, had a Fit Of a Rigor, and;  
i( about Noon was speechless.”

All Vomitings which give no manner of Relies to the Pa- \_  
tient, are bad; but those which render his State worse, are very  
pernicious, though they happen not to be malignant r Thus, ’  
they proved in the Cafe of the Woman before-quoted, of  
whom we read, that {i On the eighth Day, about Noon, she,  
" recovered Heat, was thirsty, under a Coma, with a Nausea,  
" and Vomited small Quantifies of a bilious yellowish Substance *i-i*or at Night was Very ill, took no Rest, and made great Plenty .  
."of Water, which flowed from her imperceptibly." This  
Woman, if her bilious Vomitings had been good, should have  
rested, and found herself better; and thus it ought to have been,  
also, after the Vomitings on the ninth Day; whereas, on the  
tenth, the Fever was exasperated: And on the eleventh Day,  
after some bilious and virulent Vomitings, she was taken with  
a Rigor, her oxtremeTarts were cold, and she fell afterwards  
into a cold Sweat; arid though she had Vomited plentifully that.  
Day, yet she had a Very troublesome Night. All these Vomit-  
ings were of deadly Signification, as appearing not only in a  
Violent Disorder, but attended with other bad Signs, and pro-  
ducing a Mutation in the State of the Patient for the worse j  
which last is the proper Character of all useless and remarkably  
bad Signs. ; . - .

. In Wounds of the Head, also, bilious Vomitings are had,  
according to *Hippocrates,* 6 *Aph.* 5O. " A Cut received by the  
" Brain is necessarily succeeded by a Fever, and Vomiting  
" of Bile" . ss . i  
-- Vomitings in the Iliac Passion are, also, very pernicious, as  
appears from 7 *Aphe* IO. where we read, that. “ Vomitings,..  
" the Hiccough, a Delirium, or Convulsions, succeeding the.  
" Ileos, are bad." *HAnae Galen,* in his Comment, says, " That  
" in the Ileos nothing descends to the lower Parts; and that this  
" is an inseparable Property of that Disorder. But Vomiting  
" is.not always a Symptom; but when the Disease is mortal,  
" and the Patient Violently racked, the Excrements ascend,  
" and a Hiccough succeeds.'' And *Lip.* 6s *de Loc. affect,* he  
says, that "He never knew one who vomited, tip his Excre-  
" ments eVer recover."

\ These, then, are the Vomitings which are justly to be dreaded  
in acute Diseases,, the immoderate, scanty, yellow, red, por-.  
raceous, aeruginous, livid, black, fetid, pure, particoloured,  
which happen in the Beginning of Diseases, where no Signs of  
Concoction have preceded. In fuch a Circumstance they are  
generally mortal; and is the Disorder be Violent; and if other  
bad Signs appear together with them; or precede, or. follow  
them, they are to he regarded as certain Prognostics of Death;  
especially when, aS we observed, they in no manner relieve the .  
Patient, but rather alter his Case for the worse. *Profpcr Al...  
pinus, de Preofag. Vit. et Mont. A.grot.*

**FEBRILE DEBILITY.**

. Great Debility arises from an Impediment to the Influx of  
the nervous Fluid into, and its Pressure upon, the Muscles.

This Impediment may be, an Emptiness of the Canals, when  
the Fluid they should convey is exhausted ; or an Immeability  
Of the Fluid ; or an Obstruction, or Compression of the Ca-  
nals, especially near their Origins in the Cerebrum, or Cere-  
bellum ; or a Weakness of the Heart, thus rendered incapable  
of furnishing the Brain with a Quantity of Blond, sufficient  
for the due Secretion of the nervous Fluid.

That the Impediment to the. Influx of the nervous Fluid  
- into, and its Pressure upon, the Muscles, and the consequens

Signification. For an Evacuation truly .critical ought not to be  
in- small Quantities, fince a scanty Discharge, of whet Kind  
soever, indicates either ^intolerable Redundance os the mor-  
bific Matter, too copious to be suffered by the affected Parts, or  
the Imbecillityos Nature, which proposes to itself an Excretion'  
of Superfluities, but is too weak to effect it. Hence it appears,  
that scanty *Fortitings* are of the Numher of critical Signs which  
determine nothing, and always indicate a difficult and dan-  
gerous, and generally a mortal Crisis, or Turn of the Disease,  
especially is they are, besides, bad in their own Nature; and  
are so far from relieving the Patient, that they reduce him to a  
.worse State than he was in before.

*. Pure, sinccre,* op *unmixed Vomitings,* in acute Diseases, are  
very bad; because the excreted Humour is not only crude, but  
indigestible, as excluding not only the Act, but the Power of  
Concoction. *Hippocrates, Lib. Prognosi,* bestows the Epithet  
of ἄκρητον [from *a* Negative, and κερα'ννυμι, to mix] on whet- -  
ever Humour is void of-Mixture, or every crude and fervid  
Excretion which is not diluted with its proper Serum, but owes  
its Generation to the Disorder of some Part, or to the Fervor  
of the febrile Heat, by which the aqueous and serous Part is  
consumed. This Kind of Excretion, therefore, ‘by *Vomiting*in acute Fevers, indicates a Violent internal Heat, and such as  
generally proves too strong Tor Nature. Is it beaattended with  
other had Signs, it isos fatal Prognostication: Hence the Author  
os I *Prorrhet.* fays, that " Pure and unmixed Vomitings, at-  
" tended with much Nauseating and Anxiety, are bad.'' And  
*Hippocrates, Prognostic,* tells us, that The purer or more  
de unmixed Vomitings are of the worst Sort.''

The same Author, in the Treatise just mentioned, passes hiss  
Judgment on bad Vomitings,: with respect to their Colours,  
where he says, " If the Matter discharged by Vomiting be por-  
" raceous, or livid, or black, any of these Colours is to be  
" esteemed bad ; but if the Excretions be of all these Colours, ,  
" it is a most fatal Prognostic ; but is the Matter be os a livid.  
" Colour, and, also, fetid, it shews Death to be Very near."  
All these Colours in Excretions by Vomiting are Very bad ;  
but porraceons, aeruginous, livid, black, and fetid Substances  
may sometimes be Vomited critically, though never but in a  
concocted State of the Disease, that is, at its Height or De-  
cline; and then they will be sure to effect an entire Solution of  
the Fever, or at least an Alleviation of it and its Symptoms.  
However it seldom happens, that Substances are critically ex-  
creted of these Colours ; and therefore, in a violent continual  
-Fever, where no Signs of Concoction have aS yet appeared,  
the)’ are to be esteemed most certain Signs of Death.

Vomitings of different Colours are, in their own Nature,  
very bad, because, aS *Galen* says, they indicate a .Variety of  
Disorders affecting the internal Parts: Whence the Author of  
I *Prorrhet. T.* 60. telis us, that " Vomitings of Various Co-  
" lours are bad ; and especially if they are discharged at short  
" intervals,'' that is,. aS. *Galen* says, follow sast one upon an-  
other. .

Virulent, also, or aenrginous Vomitings are, for-the same  
Reason, mortal in acute Diseases, and most of all in a  
Phrensy, because, they indicate the Brain to labour under -  
i deadly Inflammation from an adust Bile. To this Purpose  
is the Observation of *Hippocrates,* \_ I *Epid. Sect.* 2. where  
we read, that 'the epidemic Phrensies ended in Convulsions,  
and aeruginous Vomitings, under which some of the Patients  
died. suddenly. And of the phrenetic Patient, 3 *Epid,* that  
" On the first Day of the Decubiture, he vomited much thin  
" Virulent Matter, and had a Fever, attended with an Hor-  
5\* ror.'' For *aeruginous,* which we suppose we may, also, call  
*virulent Vomitings,* to happen aster had and destructive Signs,  
portend Death unavoidable; for mortal Signs, succeeding one  
upon another, shew the Case to be desperate. These kinds of  
Vomitings, attended with Pains of the Head, Watchings, or  
Deafness, which are Signs of an Inflammation of the Head,  
indicate an approaching Mania, *iProrrhet.* Io. From the Pre-  
raises we inter, that aeruginous or Virulent Vomitings indicate,  
in the first place, the near Approach of a destructive Disorder,  
as Delirium, Madness, and Mania, or Melancholy, attended  
with a Ferocity, and, at last. Death with Convulsions; fince,  
as we have elsewhere declared, it is the Nature of these Kinds  
os Deliria, on account of an extraordinary Dryness, occasioned  
by an intense Degree of Heat, to end, at last, in Tremblings  
and Convulsions.

*Fatid Vomitings* seem to indicate no less Danger, but are ra-  
ther most certain Prognostics of Death, as bring, in their own  
Nature, extremely bad and destructive, according to the *Pro-  
gnostics,* where it is said, " That Vomitings of a livid Colour,  
" if they have, also, a fetid Smell, portend very speedy Death;  
" and all subputrid and fetid Smells in Vomitings are bad.''  
The Woman who lay ill *ea Pero Mendacium.* 3 *Epid,* before  
her Death, Vomited black and fetid Matters.

Weakness, arise from the Emptiness of the Vessels, is known  
from the preceding or prefent Symptoms of large Evacuations,  
and from the long Duration of the Disease they accompany or  
succeed; from morbose or artificial Haemorrhages; Sweats; a  
Diahetes; Salivation; or Diarrhoea; from a Defect of Ali-  
ment, with Respect to its heing taken in, its Retention, Di-  
gestion, and Conveyance to the Blond ; from Paleness, a Smal-  
ness of the Pulse, collapsed Vessels, and flaccid Muscles.

That they arise from an Imrneability of the Fluid, may he  
distinguished from what has been said under the Article LEN-  
TOR.

: That they are caused by Obstructions, may he known from  
the Doctrine of Obstructions, given under, the Article Os-  
**sTRUcTIo. - '**

- We distinguish, that a Compression of the Cerebrum and  
Cerebellum is the Cause of Debility, when we perceive those  
Functions injured, which depend upon the Integrity of these  
Organs; as in case Of Deliria, profound Sleep, Tremor, Ver-  
tigs, and Ringings in the Ears.

That. Debility arises from a Weakness of the Heart, is known  
by the Signs Of a languid and deficient Circulation. See PLE-  
**TH0RA.**

’Liquid Aliments, nearly approaching the Nature of the  
Blood, which are previoufly digested by Art, gelatinous, and  
mild, and artfully impregnated with Vinous and aromatic Sub-  
stances, if exhibited frequently, and in small Quantities at a  
time, serve excellently to fill the exhausted Veffeis, gentie  
Frictions of the Extremities heing used at the same time; par-  
ticularly if these are prepared of proper Materiais, opposite to  
the Nature of the Disease.

Among these Aliments are the Broths made of Bees, Veal,  
Mutton, and Fowls of the gallinaceous Kind, either separate,  
or mixed together, with the Addition of Salt, and Lemon-  
juice; new Milk ; and the Decoctions-of Bread, mentioned  
under the Article F1ERA.

That Species of Debility arising from an Imrneability of the  
Fluid, is to be cured by the Methods recommended under the  
Articles LENTOR, and OBSTRUCTIO.

That caused by an Obstruction of the Canals, is to he re-  
lieved by the Methods .considered under the Article OB-  
**STRUCTIO.**

\* That Species which arises from a Compression of the Cere-  
brum, and Cerebellum, is generally cured by such Applications  
near the Part affected, as are capable of removing the impacted  
obstructing Matter, and of deriving the Force thereof to other  
remote Parts. The Nostrils, therefore. Head, Face, Mouth,  
and Neck, are to be moistened with mild Fomentations; and  
EpispasticS are to be applied to the Feet.

The debilitated Heart usually recovers Strength Very flowly:  
But the general Methods of removing Debility, recommended  
above, may do some Service.

From what has been said, we may learn, bow little the Ufe  
of Cardiacs in acute Diseases is understood r And that Debility,  
in Fevers, is frequently an insuperable Symptom.

**FEBRILE HEAT.**

’. External Heat may be determined by.a Thermometer ; in-  
ternal, by the Sensation of the Patient, and Redness os the  
Urine.

; A greater Quantity of Fire- is always present in that Part  
which is most hot. ‘

This increased Quantity of Fire arises from a more Violent  
Attrition of the fluid Parts of the Body on each other, and on  
the Vessels, and of the Veffeis reciprocally on these. \_

This Violent Attrition is caused by a strong Motion of the  
Fluids from the Heart, and a great Resistance of the Vessels  
to the Force of the Heart.

' This Motion is to be estimated, by the Density, of the Blond  
impeded from the Heart, and its Velocity through the Vessels.

The Density of the Blood is known by examining the Blond  
taken out of the Vessels ; by a preceding Dissipation of the  
most fluid Parts; -and by an Hardness of the Pulse.

The Velocity may he calculated fromche Number *of Pulsa-  
tions os* the Heart, Compared, with the Magnitude of these  
Pulsations. ....

The great Resistance is to be known by the Bulk of the in-  
ert Fluids to be moved; and from the Paucity, Narrowness,  
find Immobility of the Canals, which transmit them.

The Bulk of the Fluids is perceived by the Signs of a Ple-  
thora, or Cacochymia; or by a sudden Solution of those Li-  
?uids, - which hefore were in a State of Stagnation, as of the

’at; but principally hy an Inflation of the Veins, together with  
in quick and strong Motion of the Arteries.

The Paucity of Vestels is to he learned from the History of  
Obstructions, or of Wounds, See.DBsTRUCTIo, and VuL-  
NUS. ...

The Narrowness of the Veffeis is known by the Sighs, **the**Touche a dry i emperamens, and a great Increase os Ημὲν  
upon a very small Degree of Motion.

The Immobility of the Canals which resists their Dilatadonis learned from all the Signs of a Rigidity of the Fibres, Vef-  
seis, and Viscera. See FIBRA.

Upon so many Causes depends the Origin of Febrile Heat.  
which, however, may have a great Variety of QchQ. rcm0teCauses. .

But Heat may be increased, by an Increase of one of chgte  
Causes only; and, in this Cass, the Increase of ffeat in ut ριο\_  
portion to the Cause.

But if two os the Causes are, at the same time, increased,  
the Heat is as the Product of the Increases of the Causes mul-  
tiplied by each other.

- And this Method of calculating will held, with respect: to  
the Accumulation of more Causes.

- An increased Heat dissipates the most liquid Parts Of theBlood, that is, the Water, Spirit, Salts, and most subtile Oiis;  
dries and condenses the Rest of the Mass, and causes it to  
concrete into an immoveable, lrresoluble Substance; disengages,  
attenuates, renders acrid, exhales, and moves the Salte and  
Oils: Hence the smallest Veffeis are fretted and broken; rhe

. Fibres are rendered dry, rigid, and contracted; and hence  
many acute, dangerous, and satal Diseases are produced, which  
may be accounted sor from what has been said relative to Heat.

From this Doctrine we learn, what is required to mitigate  
Heat ; and how Various the Remedies are winch tend thereto.

Thus, if an increased Velocity of the Blood excites Heat, the  
Remedy is, whatever diminishes that Velocity: The principal  
os these are. Rest of the Muscles, and os the Mind ; Vene-  
section ; a flight Compression os the Veins in the Limbs, con-'  
tinned a Vefy short time, by Ligatures ; a gradual and cautious  
Application of cold Substances, both externally and internally ;  
and Preparations of the Poppy prudently exhibited.

: Is Heat arises from the Density of the Fluids, it is cured by

ι those Remedies mentioned above, which diminish theVelocity;

and by drinking Water, and Oxymel, and such Medicines aS  
- relax the Veffeis.

The Bulk of the Fluids, in a Plethora, is easily diminished;  
but in a Cacochymia, the Diminution is to be brought about  
. by evacuating flowly, and at Intervals r Bur when the Fat,  
’ which was before stagnant, is resolved, the- greatest Difficulty  
arifes; in this .Case, aqueous Fluids, impregnated withan  
Acid, Honey, the Yolks of eggs, or Sugar, together with  
perpetually continued Evacuants, are of the utmost Importance,  
because they render the Fat, or Oil, miscible with the Blood.

The Cure of Heat excited by Obstruction, may bo learned  
from the Article OBSTRUCTIO; and that Part of the Article  
VULNUS, which treats of the Accidents supervening upon  
Wounds, attended with Loss of Substance.

Is Heat depends upon the Narrowness of the Veffeis, they  
are to be dilated by relaxing Remedies. See FiBRA.

And Heat arising from a Rigidity of the Vesteis, is removed  
by the same relaxing Remedies. See FIBRA.

When Heat is excited by many of these Causes combined,  
it must be removed by the proper Remedies above described.  
Combined, also, together.

From all this Doctrine of Heat we learn, why a Fever, at-  
tended with excessive Heat, is acute, quick in its Progress,  
putrid, and, if there is the greatest Degree of Heat, pestilen-  
tial : Why the Heat of a Bed, os Air confined, os Regimen  
'and Medicines, must necessarily be, in fuch Cases, extremely  
prejudicial; and why Heat about the Heart and Hypochon-  
dria is of satal Presage.

From this Doctrine, also, the Origin, Nature, and Effects  
of Dryness may be understood ; and the Cure may hence he  
learned, which consists in the Exhibition of Drinks, Fomen-  
tations, Baths, Clysters, and Gargarisms, which are aqueous,  
somewhat acid, impregnated with Honey, and relaxing. *Boer.,  
haave.*

**PROGNOSTICS IN ACUTE DISEASES FROM HEAT.**

Since Heat, Coldness, Dryness, Humidity, Softness, Aine-  
rity, and Pains, have relation to the Sente of Feeling, and  
furnish ns with Signs and Symptoms for Prediction,, as good  
and firm as any taken from other Heads, we think ourselves  
obliged to treat of them distinctly, with regard to our Subject  
of *Prognostication.* And here, first, we shall begin with Heat,  
from whence, the Observation of other Signs not being ne-  
glected, may be drawn Presages of Life and Death.

' Heat, then, it must he observed, with relation Io Prognoy  
sties, is either mild, or tepid, or high and Vehement. A mild  
and gentle Heat is always good, especially if, according to  
*Hippocrates,* in his Book of *Prognostics,* it he attended with  
an «inal Softness of the whole Body, or be like the Heat of

the same Person when in Health. The Flesh of some Persons  
in Health is observed to he cool; of others temperately hot;  
ofothers again, hot.to a pretty high Degree: Whence, if the  
Heat os the Sick be much the same as usual in a State of Health,  
.It is a good Sign: And hence it is, that sometimes an high and  
vehement Heat, and sometimes a moderate Degree of the same,  
or Coolness, are laudable in the Patient, on account of their  
Approach to the Degree of Heat familiar Yo the Body whilst in  
Health: And the like Judgment is to be formed of the Urine,  
and other Excretions, which, if resembling those usually dis-  
charged in time of Health, are esteemed good. It is hest,  
therefore, when the Body, under a Disease, suffers little or no  
Alteration with respect to Heat.

Of febrile Heat, the best Kind is what is mild, temperate,  
'equal in all Parts of the Body; and united with a sort of Hu-  
midity, in which it chiefly resembles the natural Heat, which,  
as *Galen, in* 2. *de Natur. Hum.* telis us, is not' only tempe-  
rately hot, but, also, humid, in Opposition to acute and. ig-  
neous, which kind of Heat is most contrary to the *natural.*This temperate Degree of Heat, therefore, will always be best,  
unless it happens, that we are deceived by the Malignity of the  
Disease: For there are several malignant Distempers, attended  
with a mild and gentle Heat, extremely like the natural; the  
Heat, in reality, being confined to the inward Parts, and not  
freely diffused abroad; sor which Reason this good Heat must  
he accompanied with an equal Softness of the whole Body, as  
required by *Hippocrates,* in his *Prognostics t* " It is best, he  
" there says, for the whole Body to be equally hot and soft  
for an equal Softness distinguishes a good Heat from bad ones,  
since the Heat Os a Patient may seem to he temperate and  
-equal, and yet proceed from a Very malignant Disorder. In  
such a Circumstance the State of the Sick is known, and distin-  
guished by an unequal Softness of the Body; where, in parti-  
cular, the Hypochondria are commonly observed to he hard,  
and the Heat is by no means equally diffused over the whole  
Body; the extreme Parts, for Example, being less hot than the  
Belly, whose Region and Contents are under a more intense  
Degree of Heat. We'conclude, therefore, that a temperate  
Heat, equally diffused over the Body, and united with an equal  
Softness, will always he a good Sign, fince it is impossible for  
a Body, under such an equal Heat and Softness, to be satally  
Tick;.theUnion of these Properties being a sure Indication,  
. that the Viscera are free from a Phlegmon, Obstructions, and  
any considerable Degree of Putridness.

An equal Softness of the whole Body distinguishes, also, a  
good from an hectic Heat, which latter being, sometimes ob-  
served mild and gentie to the Touch, has given Occasion to mis-  
. take the Case of an hectical Patient: But an hectic Heat is not  
usually attended with a Softness, but rather with a Squalidness ;  
and an Hectic Fever is pot only known by this Mark, but, also,  
by an Inequality of the Heat itself: For the Fever, aS *Galen,*on the *Prognostics,* Observes, is exasperated after taking Food.

The best Heat, therefore, is what is temperate, equally dif-  
fused over the whole Body, and united with an equal Softness  
**. of** the Flesh. And not only an Heat thus qualified, but even  
an intense and Vehement Heat, diffused over all Parts of **the**Body in burning Fevers, is not to be condemned, fince it is a  
Property of malignant burning Fevers, as *Galen* on the *Pror-  
rhetica* observes, not to heat the outer Parts; as it is, on the  
.‘Contrary, Of those which are not malignant, to put the whole  
Body in an equal Degree of burning Heat, even to the outer-  
ι most Parts, by which they indicate, as *Galen* tells us, on the  
*Aphorisms,* the Viscera to be free from any Violent Inflamma-  
, lion.

It is, also, often best, and most desireable, sor presaging a  
Recovery in acute Disorders, for some Parts of the Body to  
grow hot, or kindle into an extraordinary Degree of Heat,  
especially the Parts towards the Skin, upon which Nature often  
discharges and deposites both the Vehemence of the Heat, and  
the peccant Humours. For the extreme Parts, in such Cases,  
to undergo an extraordinary Degree os Heat, is a Very hopeful  
Sign ; as the contrary is of bad Prognostication: Hence a Cold-  
ness of the extreme Parts in acute Diseases is a Very bad Sym-  
ptom, as, on the other hand, an Heat in - the same Parts is a  
good Sign, as indicating the internal Viscera to be free from  
any great Phlegmon, Inflammation, or considerable Putre-  
faction of Humours ; and that Nature is not oppressed with a  
Multitude of Crudities. It, also, ‘signifies, that the febrile  
Heat has lest the Viscera, and discharges itself upon the remote  
Parts ; or, that the noxious Humours are propelled and depo-  
sited upon the same ; for an extraordinary Heat extending it-  
.self to the Feet, is, in many Cases, a Sign of the Decline of  
she Disease : Whence .we are directed by *Hippocrates, de R. Vi  
. I. A.* in the Decline of a Fever, when the Heat descends to  
**the** Feet, to offer the Patient Food.

An Heat of rhe extreme parts, attended with a Redness  
**and** Inflammation, is, also, a good Prognostic. In Confirma-

tion hereof we are told by *Hippo orates,* in his *Prognostics,* that  
" The Patients [under a QtjinseyJ are very much relieved, if  
" the Neck and Breast contract a Redness, and the Erysipelas  
" returns not .upon the inward Parts." And a little after he  
fays, " It is safest when the Tumor and Redness are roc the  
" most part turned Outwards.''

- Having made these Observations concerning good and salu-  
tary Heats; we are to take some Notice os the contrary to  
these, or the bad and pernicious; of which Nature is, first, an  
Heat of the Body; attended with a Colliquation and Tabes;  
such is the Heat of Hectics, which, unless corrected hefore *it*has colliquated the solid Parts, infallibly brings the Patient to  
the Grave. This kind os Heat is equal and uniform, acute,  
and not Very obvious to the Touch and Senses; on which ac-  
count an hectic Fever, in the Beginning, escapes the Know-  
ledge of many Practitioners. *Galen,* as we have observed in  
. another Place, in his Comment on the *Prognostics,* has taught  
us to know this Heat by the following Signs : " By an Hectic  
" Fever the solid Parts of the Body become ignited; for  
iC which Reason the Fever-remains constant to itself, without  
" Alteration, under an Heat weakly affecting the Touch,  
" aster the manner of Lime-stone. As-often, therefore, as  
so the Patient eats or drinks, it is much the same as if you  
poured Water on Quick-lime; whence the Heat becomes

" much more sensible to the Touch.''

That uniform Heat, also, of the Wh0le Body under a c0n-  
tinual Fever, though amounting to no more then a tepid  
Warmth, or perhaps Coolness, is to he suspected, as indicating  
the whole Force of:the Burning to be contained within the  
Viscera. *Galen,* in his second Comment on *Hippocrates, de  
R.V. I. A.* and on-the Book of the *Prognostics,* telis us, that  
" For the Body, under acute Diseases, not to be hot tn pro-  
" portion to the Nature os the Fever, and to lie with the

Limbs naked, though cold or tepid, as if they were in a  
" burning Heat, is a Sign of Malignity." -Such a tepid Heat,  
though never good, is, however, no sure Prognostic alone, no  
more thana Vehement Heat, which, though always bad in it-  
self, will yet afford no certain Grounds sor predicting a fatal  
Event; fince, on the contrary, for the Body to grow hot' to  
an intense Degree, after a Rigor, is a Sign to us of the near  
Approach os a Crisis ; and therefore that Measure os Certainty  
which it may carry with it, must he taken from other Signs.

A vehement Heat,, either .of the whole Body, or only of  
the Thorax and Belly, is it continue long, is pernicious, since  
It exhausts the Strength, dries and colliquates, and, if suc-  
ceeded by Spasms, portends Death ; for Convulsions from such  
a Cause as produces a Dryness of the Nerves, are all mortal.  
Hence *Hippocrates,* 7 *Aph.* I3. pronounces Convulsions, or a  
*Tetanus,* after Violent burning Heats, a bad Sign.

A Violent Degree of Heat, also, in the Face, or inyhe Hy-  
pochondria, or in the Thorax, is Very bad ; since the two latter  
indicate a Phlegmon of some one of the Viscera; and the first  
an Inflammation of the Brain ; though jt must be confessed,  
that a firey Redness of the Face is not always a Sign that the  
Brain is thus affected, but, on the contrary, is sometimes the  
-Forerunner Of a critical Haemorrhage; but when it appears  
accompanied with some other pernicious Sign, it foreshews a  
bad Event. Hence we read, I *Prorrhet.* 49. 44 That a good  
" Colour in the Face, with a very stern and sour Aspect, is a  
" bad Sign." For, as *Galen* says, when the Face is os a fio-  
rid Colour, and-the Countenance remarkably sour and sad, it  
indicates the Brain to labour under some very hot Affection,  
by .which the Blond is rendered adust. . A .very high and firey  
Redness of the Face, attended with Sweating, is, by the same  
Author, pronounced a Sign of Malignity, and a just Ground  
for predicting a fatal EVent to the Disease, since it indicates a  
great Inflammation of theBrain, which is reckon’d among mortal  
Distempers, as the Sweat, also, which in no measure relieves  
the Patient, is one of the pernicious Signs. The same is con-  
firmed, and in a manner repeated, i *Prorrhet. len.* where it is  
said, that " Burning Rigors are, in some measure, pernicious,  
" and a firey Redness of the Face, with’Sweating, in such .  
" Cases is bad."

An Estuation, or intense Heat in the Belly, or Thorax, is  
always bad, for it often indicates some great and deadly Disor-  
der in those Parts; as when it proceeds from a great and ma-  
lignant Phlegmon of one of the Viscera. In this Case the  
extreme Parts are either tepid or cold ; agreeably to whet we  
read I *Prorrhet. J.* where it is said, that " Those burning  
" Heats which remain in the Hypochondria, aster a general  
" Refrigeration, are bad at all times, but especially when at-  
" tended with Sweats.” And more expressly to the Purpose,  
in *er Aph. Asts.* " In .Fevers not intermittent, is the outward  
" Parts are cold, whilst the inward burn with Heat and la-  
" hour under a Thirst, the Case is mortal/'

In Fevers, a Vehement burning Heat about the Stomach,  
with a CARDIOGMOs [see that Word], is bad, *e,Aph.* 64.

**Δ rnA-**

And burning Heats In the Sides, attended with Pain, and a  
Rigor, are condemned by the Author of I *Prorrhet.* 66. " For  
" a burning Heat in the Side, attended with a Pain, fays *Ga-  
" len* on the Place, is a Sign of a Phlegmon infesting that  
" Part; and if a Rigor supervenes, expect a Suppuration os  
" the Phlegmon.'' Now a Suppuration of a Phlegmon of the  
Viscera is seldom cured; bus, when the Strength is much ex-  
hausted beforehand, never at all.

For the Patient, after some preceding Evacuation, to he so  
far from being relieved from his Fever, that he perceives an  
Increase of Heat, it is bad, according to I *Prorrhet.* 66. where  
we are told, " That a Return of the febrile Heat, after Re-  
" srigeration from Sweats, is bad; and burning Heats in the  
" Sides, with Pain, and a supervening Rigor, are bad." " For,  
*" as Galen* says in his Comment, is any Person under a Dis.  
" ease, after Sweating, grows colder than Nature requires;  
" and afterwards becomes feverish again, his Case is not free  
" from Danger.” Again, the Author of i *Prorrhet. T.* 68.  
fays, iC That a Return os the febrile Heat, aster Watchings  
" and Sweating is bad." And the same is repeated *Coac.* 4I.

We may add, with relation to this Subject, that for resri-  
gerated Bodies to he almost totally incapacitated for recovering  
Health, is highly pernicious in acute Diseases, as it is occa-  
sioned by an Extinction, Resolution, or Suffocation of the na-  
tural Heat. And the Case seems to he no less mortal, is the  
Symptom be observed of the exterior and outermost Parts of  
the Body, or if these are hardly capable of recovering Heat.  
To this Purpose we read, I *Epid. Sect.* i. *Seat.* I. that in a  
.Very mortal epidemic Fever, the Patients were much affected  
with Refrigerations of the extreme Parts, and that it was scarce  
possible to recal the Heat into them.

For Bodies, also, in the last Place, to be soon heated, and  
soon cooled, is a bad Sign; for it shews, as *Galen* says, the  
Disease to he highly malignant, and if not mortal, yet of long  
Continuance: But in acute Diseases, which speedily exhaust  
the Strength, the same Symptom portends Death. *Prosper  
Alpinus, de Preefag. Vit. et Mort:*

**PROGNOSTICS IN ACUTE DISEASES FROM HUMIDITY  
AND DRYNESS.**

We sometimes form Presages in acute Distempers, from the  
Humidity or Dryness of the whole Body, or of some of its  
Parts. In those who die of an Empyema, or a Phthisis, may  
often be observed a littie before their Decease, a copious Hu-  
midity, sometimes diffusing itself over the whole Body, some-  
times no farther than the Legs and Belly. And *Hippocrates,  
Lib. Prognost.* pronounces a Dropsy in or from acute Diseases,  
mortal, as proceeding from an utter Decay of the natural Heat.  
" Dropsies, he there says, caused by an acute Disease, are  
An bad; sor they remove not the Fever, hut increase the Pain  
" and Sickness, and end in Death."

Desiccations, Dryness, and Hardness, either of the whele  
Body, or of any of its Parts, give, also, frequent Occasions  
for prognosticating an unhappy Event in acute Disorders. A  
Dryness and Extenuation of the whole Body, aster a long  
Bunting Fever, are just Grounds for presaging an hectic Habit  
of Body, terminating at last in Death, as every one versed in  
Medicine knows. An extraordinary Dryness, also, of the  
Forchead, Tongue, and Other: Parts, pretty often portend a  
fatal Event, as it did, for Instance, in the Case of the young  
Man of *Meliboea, p, Epid. Sect.* 3. *Acgr.* I6. who, before his  
Death, was observed by *Hippocrates,* to have the Skin of his  
Forehead extremely dry and tense. *Prosper Alpinus, de Prafag.  
Vit. et Mort.*

**FEBRILE DELIRIUM»**

A Delirium is a Production os Ideas not corresponding to ex-  
ternal Couses, but excited by the internal Disposition of the  
‘ Brain, whilst the Judgment is conformable to such Ideas, and  
the Affections of the Mind, and Motions of the Body, corre-  
spond therewith : And these, either alone, or combined, form  
'various Species of Deliria.

It always, therefore, witnesses a morbose Affection of the  
medullary Part of the Brain, winch may arise from any kind  
of Obstruction; from an Impediment to the Influx, Transstux,  
or Efflux of the Fluids, through the Brain ; from a Violent Ve-  
locity, or Stagnation, os the Liquids, and many other Causes,  
which must be investigated with the utmost Diligence, in order  
to acquire a just. Knowledge of the Method of Cure.

For various Remedies, and Methods of Cure, must be adapt-  
ed to the various Causes; among which the principal are. Baths  
sor the Feet; epispastics apply’d to the Feet and Legs, and  
Frictions of these Parts; diluting Clysters frequently admi-  
nistred ;« a thin. Diet; sedative, deobstruent, and diluting Po-  
tions ; emollient Applications to the Hoad; gentle Anodynes;  
Bleeding in the Feet; and exciting the bremorrhoidal or men-  
strual Flux.

For an Account of Prognostics from a *Delirium,* see the Ar-  
ticle DELiRiuM.

**Λ FEBRILE COMA.**

A *Coma* is a perpetual Inclination to steep in a Fever, either  
with, or without Sleep ; and always witnesses such a Stare of  
the Brain, as prevents the Exercise of the Senses; and animal  
Motions. It may arise from a Deficience of the Arterial Fluid  
convey'd to the Brain ; from an Impediment to its Circulation  
.through the Brain ; from an Impediment to the Secretion of  
the nervous Fluid from the Blood; or from whatever prevents  
the Flux and Reflux of the Spirits through the Nerves.

Hence Various, and those often different, and eVen contrary  
Causes, may produce this Symptom, in a Fever ; aS all violent  
Evacuations, or Repletions ; all glutinous, pinguious, or in-  
flammatory Inspissations of the Blood ; all Causes, of what  
Lind soever, which may excite a Compression of the Brain,  
which may, also, have the same Effect, if they act upon the  
Nerves.

Hence appears the Necessity a Physician is under of investi-  
gating the particular Caufe of a *Coma,* hefore he can deter-  
mine what Remedies are to he apply'd, and in what manner:  
For, frequently, quite contrary Methods are required ; audit.  
often happens, that a *Coma.* obstinate to all Remedies, ceases  
fpontaneoufly, when the Concoction of the Fever is completed. .

Those Remedies, however, recommended above in a *Delia  
rium,* are proper in this.Case; especially Fomentations apply'd  
to the Head and Neck.

**But if there are Signs of a great Inflammation, it must he  
treated as an original Disease. See PHRENITIS, and SoMNUs,  
AFEBRILE PERVIGILIUM, OR OBSTINATE WATCHING.**

**A** *Pervigilium^* or obstinate Want of Sleep, is the direct  
contrary .to a *Comay* whence its Nature may he understood: It  
is caused by the first Tendency to a flight Inflammation of the  
Brain; an Increase os which often excites a *Coma.*

It is cured by Rest of the Muscles ; Calmness os Mind ; the.  
Absence of all Objects of Sense; moderate Cold ; a moist Ain ,  
mild and emollient Aliments; a gentle, continual, grateful,  
agreeably ringing hushing Murmur; farinaceous, fuboleous,.  
moistening, and demulcent Medicines; the Smell of sopori-  
serous Vegetables; and the prudent Use of Anodynes, Parego\*  
rics, foporiferous Remedies, and Narcotics; always premising  
those Remedies, which are capable of checking and curing the  
Inflammation.

**OF PROGNOSTICs IN DISEASES FROM WATCHING.**

*Watching,* as well as Sleep, with respect to what they may  
portend, are to be considered first in their natural State; sor  
when no Change or Alteration can he perceived on this Head, -  
we have good Room and Opportunity for Prediction ; since, if  
the. Patient steeps and wakes, according to Custom in time of  
Health, it is a good Sign, and gives Occasion to presage an  
happy Event. For it seems impossible for a Person to die of  
any Distemper, while his Times of Sleep and Watching remain  
entire, and without any manner of Alteration. On this Sub-  
ject, *Hippocrates,* in his *Prognostics,* thus pronounces: " AS to  
" Sleep, it is best when conformable to natural Custom, or when  
" the Patient wakes by Day, and steeps by Night; but if  
" there be any Alteration in this respect, it is so much the  
" worse.And 2 *Aph.* h. he fays, that " when Sleep com-  
es poses a Delirium, it is a good Sign.

As to *Watching,* os which we will now treat in particular, -  
it is defin'd by *Galen,* An Extension of the Soul from its  
" Original to all Parts of the Body, which sometimes happens  
" to be great and copious, at other times little and inconsider-  
Ci able ; because the SouI is extended from its Original some-  
" times for a long time together, and in an abundant manner; .  
" at other, times, for a shorter while, and more sparingly. " .  
Hence then proceed much and little Watching; But what we  
treat.of at present is, a great and preternatural Extension and \*  
Effusion of the Soul from its Original to all Parts of the Body, .  
proceeding from a Dryness of the Brain, occasioned by hot and  
acrid Juices, or Exhalations; as we are taught by *Galen* in  
many Places, particularly *Lip.* 3. *de Lor. Affect,* and *Com.* 4.  
in *Lib. de R. V. L A.* And *Com.* in *Prognost.* and ΖἈ4. *de ,  
Praefag. ex Puls. Cap. An* and *Lib.* 3. *de Lac. Affect,* and in  
other Places, he telis us, that Watching is the proper Effectos  
Dryness, as Sleep is of Humidity , and that, aS it is a Property  
of Heat to produce Delirioufness, so it is of Dryness to he the  
Cause of Watching: Whence they who have their Brains affect-  
ed at the same time with an Excess os Heat and Dryness, are :  
at once both wakeful and delirious, as the same Author observes, .  
*Lib.* 4 *de Preefag. ex Puls. Cap.* 8. And in his *Comment* on .  
3 *Aph.* 3I. he says, that old Persons are wakeful from Dry-  
ness. ,

From the Causes of *Watchings,* we shall now Consider whet  
inay he learnt for prognosticating their Event ; and here, first,  
we shall speak of *Watchings,* from which we Inay draw savour-  
able Prognostics : For though all *Watchings* are in themselves  
bad, yet there are some winch have a Very good Signification ;  
and such are those which precede good Crises, and are accom-  
panied with Restlessness, Anxiety, Delirium, Convulsions,  
Pains, and other Symptoms, as *Galen, Lib.* 3. *de Coast.,  
bus,* observes. These *Watchings* are perceivable in the In-  
crease or Haight of the Disease, at which time it is usoal for  
the Patients to he almost perpetually waking, to be under great  
Disorder, and to have the Fever more and more exasperated, the  
nearer they approach to a Crisis, as we are told by *Galen in*4 *Aph.* 7o. And the same Author, *Lib.* 3. *de Crisibus,* pro-  
nounces *Watching* with Signs of Concoction, in acute Diseases,  
the Forerunner of a Crisis. Of such Patients we read, I *Prorr.*132—I35, I36. where it is said, " They who on a sudden  
" [ἐιιθή, for which some read *soQisu, sedate,* composed] appear  
« Very much disorder'd, are wakeful, and bleed at the Nose,  
" are in some measure relieved on the sixth Day. " And, *Text.*135. " They who are affected with an Heaviness os the Head, *r*“ and a Pain in its fore Part, with perpetual *Watching,* are  
" subject to an Eruption of Blood at the Nose. ” And, *Text.*136. " Perpetual *Watchings,* with sudden Jactations and In-  
\*\* quietude, signify an Haemorrhage, and especially if there has  
" been any previous Discharge of thetNature." " Again, *Tent.*I49. " An Horror, attended with critical Sweats, and return-  
" ing on the next Day, with unaccountable *Watchings,* por-  
" tend, in my Opinion, an Haemorrhage." Once more,  
*Coac.* i IO. " Sudden Inquietudes with *siscatchings,* and black  
" and hard Stools, are sometimes Forerunners of an Hiemor»  
" rhage. " These then are the *Watchings* from which we may  
Venture to predict the Recovery of he Patient, on the same  
Ground, as from Pains, Convulsions, Deliriums, and Anxie-  
ties preceding a Crisis. .

All *Watchings,* except those hefore taken notice of, however  
caused or circumstantiated, are. bad ; for *II/at thing* dries the  
whole Body; and aS *Galen, η M. Μ. Cap.* 6. observes, is  
extremely prejudicial to such as labour under a Dryness, and in-  
duces on them, if it continues long. Convulsions, and aCon-  
fumption. It is no Wonder, therefore, that, in burning Fevers,  
obstinate and perpetual *Watchings* bring on mortal Convulsions,  
since in other Cases they cause Violent Inflammations, and, in  
some Subjects, Fevers, especially as *Galen, Lib.* I. *de Sanitat.  
tuenda,* observes, in Infants, *Watchings* refrigerates the internal.  
Viscera, by resolving their Heat. Agreeably to this, it is assert-  
ed by *Hippocrates, is Epid. Sect.* 4. *Aph.* I 2. CC In *Watching,*" he says, the external Parts are evidentiy hotter, and the in-.  
" ternal colder." He there teaches us, also, that *Watching*digests and resolves Bedies: Whence it is necessary, as *Galen,.  
Lib.* 12. *de M. M. Cap.* 8. infers, "that by its long Continu-  
ance,' the Patient must be extremely weakened .and exhausted. \_  
We may add to this, that *Watching* foments and increases the  
Crudities of the Humours, as we are told by *Galen, Com.* i.  
*in Lib. de R. V. L A. . .. „.:ss*

.' For the Reasons aforesaid, all *Watchings* in acuteDiseases,  
are to he esteemed bad ; but the most pernicious are those which  
are perpetual, and which by inducing all the bad Symptoms be-  
fore-mentioned, cannot but afford too just Grounds for prog-  
nosticating a fatal Event. ’ It is, indeed, customary for per-  
petual *patchings* to bring on Convulsions, and a Delirium ;  
which they effect by two different Ways and Means, one by  
drying and inflaming the Brain, and the other by an Oppletion  
of that Part with an hot Humour j fince all *Watching,* as we  
observed before, indicates either a Vacuity and Exsiccation of the  
Brain, or a Repletion of it with hot Humours, or an Inflam-  
mation of that Part. Convulsions and a Delirium from *Watch- .  
trig-,* Procured by thin latter means, are not indeed absolutely \_  
fatal; for either by a Resolution and Evacuation of the hot Hu-  
mour, or a Propulsion of it. to some other Part, they are some-  
times removed. Withtelationto thisSabject, we read *Coac.* Io9.  
""That, in Children under an acute Fever, CostiVeness with  
"“Watching, much Crying and Striving, Alteration of Co-

lour, and\* great Redness, indicate Convulsions. " But tho'  
*Watchings* with those Symptoms are not always mortal, they  
are, however. Very much to be dreaded. Wherefore, *Hippo-  
crates,* 7 *Aph.* IB. justly pronounces *Watchings,* attended with  
Convulsions and a Delirium, a bad Sign.

Convulsions and a Delirium, attendant. Or consequent, on  
perpetual *Watchings,* and not caused by a Repletion of the  
Brain with hot Humours, are absolutely mortal, in the same  
manner as Convulsions, supervening upon burning Fevers, in-  
dicate inevitable Destruction. Thus it was in the Case of the  
phrenetic Patient, who could not steep, and dy'd on the fourth  
Day, as is observed by *Hippocrates,* 3 *Epid. Sect.* 3. *AEgr.* 4.

*Watchings,* with some other attendant Signs, aS teruginous  
Vomitings, and Pain of the Head, portend a furious Delirium

and Death ; agreeably to what we are told by the Author fr.  
I *Prorrhet.* I0. " A Pain of the Head, he says, attended with  
" aeruginous Vomitings, *Watchings* Deafness, are soon fuo-  
" ceeded by a Manin;" as it was in the. Instance os the pbre..  
meric Subject before-mentioned. ..

We may conclude, that constant, and perpetual Watchings  
in acute Diseases are deadly ; as they were in the Case of the  
phrenetic Person aforesaid ; and of the Wise of *Drorneades,*i *Epid. Sect.* 3. *AE.gr.* II. who continued without Sleep  
from the first to the fourth Day, and dy'd on the sixth.  
*Hippocrates,* i *Epid. Sect.* 2. *Stat.* 3. informs us, that  
many, under burning Fevers,’ dy'd after perpetual Watchings:  
Wenhe, *grsPrognoJsc.* he justly pronounces it " a Very bad Sign,  
" when the Patient can neither steep byDay nor by Night;." sor  
either Pain, and greatAnxiety, OraDelirium, are signifiedby it.

*lPatchings,* attended with some mortal Sign, are absolutely  
fatal. Here we ought attentively to consider the Evacuations  
attending this constant Want of Sleep ; and, if these are all bad,  
as indicating a symptomatical, useless, or depraved excretion  
of Nature, they portend certain Death.

*Watchings,* accompanied with Cold, copious and Constant  
Sweating of the Head, are bad. With relation to this, we read  
*Coac.* 4I. that "They who are affected with cold Sweats,  
" Watchings, and Vicissitudes of Head and Cold, are in a had  
" State." ’ . .

Of no better Signification are *Watchings,* attended with other  
Excretions, which give no Relief to the Patient, but are' Signs  
of Crudity ; such are aStillation, or Falling by Drops, of Blood  
from the Nose, and Virulent Vomitings.

Sometimes *Watchings* are succeeded by Evacuations, which,  
affording no Relief, are esteemed Very bad, prove injurious to  
to the Sick, and increase the Disease : Such a Consequence in  
all Evacuations and Symptoms, under which, the Patient might  
reasonably expect'to be eased, is pernicious, as we are taught  
by *Galen, Com. in Prorrhet.* and other Places, hecause in acute  
Diseases, Excretions, or other Circumstances, which use to re-  
lieve the Patient, if they answer no such Purpose, are said to  
be bad ; but if they are so sar from proving beneficial, that they  
render the Case of the Sick really worse than it -was before,  
they may safely he pronounced sand. »

As pernicious Convulsions, furious Phrensies, and Tremblings,  
are frequently the Consequences of continual *Watchings,* so it  
sometimes happens, that a mortal *Coma* succeeds them : For,  
aS a long Sleep, aster much *Watching,* which refreshes the Sick;  
is a Very good Sign, so a long Sleep, which is so sar from re-  
freshing, that the Patient rather finds himself fatigued and in-  
jured by it, must be of deadly Signification ; agreeably to that  
of *Hippocrates,* 2 *Aph.* 2. iC Sleep which composes a Delirium,  
" is good;" and the preceding Aphorism, "A Disease, inwhicli  
" Sleep creates Pain and Anxiety, proves mortal:" But where  
Sleep helps and relieves the Patient, the Disease is not mortal.

A *Coma* succeeding a perpetual *Watching* is generally fatal, .  
. as proceeding from a Refrigeration and Resolution of the natu-  
ral .Heat, which must be highly destructive, as *Galen, Com. in 4.  
Aph.fa.* observes; sor Coldnesses, he there says, which are con-  
sequent upon hot and dryAffections, are incurable. A *Coma* some-  
times succeeds a *Watching,* orWant os Sleep, fromaResolution of  
the Bile, and a dry Evaporation, which was the Cause of that  
*Watching,* the pituitous Humour still remaining, which moistens  
and dilutes the Brain; and such a Coma, with Signs of Con-  
coction, and the Strength not much injured, cannot be thought ί  
pernicious. *Pros.pcr Alpinus de Prcefag. Vit. et Mort. AEgroe,*

**FEBRILE CONVULSIoNS.**

See **VULNtiS. ' ' - ' / . .**

A. Convulsion in a Fever, is always excited by some Injury  
done to the Brain, either byVellications convey'd to it by the  
Nerves from the inferior Parts, or from an inordinate Appulse,  
Transflux, or Egress, of the Liquid secreted in the Brain; which  
may arise from every Cause capable of exciting a *Delirium,  
Coma, er* obstinate *Watching:* And on this Account, there is  
a great Variety in the ./Etiology and Cure.

If it continues long, it easily affects the entire nervous  
System: Whence fatal Disorders are excited.

If Convulsions succeed the Signs of an Inflammation of the  
Brain, they are generally satai Symptoms.

If a Discharge of thick Urine is succeeded by one of the  
aqueous and pellucid kind, and Convulsions immediately fol-  
low, it is the worst os Symptoms.

If Convulsions arise in Fevers, aster profuse Evacuations,  
they generally prove fatal; aS do those, also, which are accom-  
panied by a perpetual *.Delirium.*

In order to a Cure, the particular Cause is, first, to be in- .  
. vestigated, and the affected Part must be discovered, whence  
the Convulsions primarily arose; then Medicines are in-  
mediately to be apply so, which are capable of correcting Acri-  
mony, of resolving the impacted Matter, and relaxing the

Parts whicinare contracted. We are, therefore, to attempt  
the Cure of Convulsions by diluting, relaxing, malting Revul-  
sion, and lenisying, never trusting to the specious Character  
of Antispasmodics.

But is the Head is sound to he primarily affected, recourse  
**must he** had to **the** Methods of Cure recommended above, in  
**ease os a** *Delirium,* **and** *Coma. Bocrh. Aph.*

**PROGNOSTICS FROM CONVULsIONS.**

*Convulsions,* when alone, or attendant on other Disorders,  
though always bad, yet sometimes prove Indications for prog-  
- nosticating a good Event; but ostener portend Death than Reco-  
**very;** of which fatal Tendency are those excited in Fevers  
**from** a Dryness of **the** Nerves. *Convulsions* suddenly seizing  
**the** Patient in the Beginning of the Disease, afford no certain  
. Prognostic. They are much attendant, also, on Fevers, and  
indicate nothing *of* themselves but a Multitude of Humours,  
without any Tokens os a Recovery, unless they are critical.  
But we shall treat more accurately of the Prognostics of *Con-  
vulsions,* after we have first shewn what they are, with these  
Causes and Differences. . ' \* . '

**A** *Convulsion,* in *Greek axetaflos, Spas.mui,* according to *Ga-  
len, de Syrnpt. Cause Lib.* 2. *Cap.* 2. is an involuntary Tension  
. of the Nerves and Muscles, by which they are reduced to the  
fame Posture and Disposition, as would happen to them from *Λ*natural and spontaneous Motion. And in the *Definitiones Me-*dicae, ascrihed to the same Author, it is said, that a *Convulsion*is an Affection incident to the Nerves and Muscles, by which  
sometimes the whole Body, sometimes a Part of it, is distended.  
Hence, this Kind of Disorder is by.many properly enough Called  
a *Tension,* and a *Distension,* tho’ some make a Distinction between  
a *Convulsion,* or *Spasin,* and a *Distension,* from that Passage of  
*Hippocrates, er Aph. Si.* "A Fever coming upon a *Convulsion,* or  
*" Distension,* [τείάνκ], removes the Disorder . " But *Galen, in*Comment, has removed this Difficulty, and Very well stated  
the Case, where he tells us, that os the three different Kinds  
of *Convulsions,* what the *Greeks* call *Tetanus,* may more pro-  
perly he called a *Distension,* and not a *Convulsion,* if it were  
Only, hecause in fitch a Disorder the Parts appear not convulsed,  
but are equally distended both Ways ; on which account prin-  
cipally it has the Name os *Distension.*

There is, also, a twofold Distinction of *Convulsions,* one  
' permanent, and without conspicuous Motion, os which there  
are three subordinate Kinds, one called by the *Latins, Distentior*by the *Greeks, Tetanos,* and by *Celsius,* particularly *Rigor,* **in**which Affection, the Neck, together with the rest of the Body,  
' remains immoveable, and inclined to neither Side, hut erected  
in a right Angle to both. And this seems most properly to he  
what *Hippocrates* calls *Tetanus, z Distension,* which differs from  
a *Convulsion,* in that, as we just said from *Galen,* **the** Parts  
appear not to be convulsed.

A second Kind is called EMPRosTHOTONos, [see TETA-  
NUS] which is, when the Head, Neck, and rest of the Body  
are contracted towards the Breast, on which account it is called '  
*Tentio ad anteriora, “* a Tension towards the anterior Parts." ’  
The third has the Nameof OPISTHoTONos, [seeTETA-  
KUS] from the *Greeks;* and by the *Latins* is expressed by  
*Tensio ad posteriora, “* A Tension towards the posterior Parts. "  
*Galen,* in his Book of *Medicinal Definitions,* has comprehended  
these three Kinds os permanent *Convulsions,* in the following  
Words : " Travellers, says he, who die of Cold on the Roads, '  
" are seized with such Kinds os Rigors as the *Greeks* call  
*" Ernprosthotonos, Opisthotonos ,ζηά Tetanos,* hecause under .  
" such Accidents the B.oy is inflected sometimes to the ante-  
" rior, sometimes to the posterior Parts, sometimes neither  
" Way, but is distended in a strait and immoveable Posture.

The other Kind of *Convulsions* is distinguished by frequent  
and interrupted Motion ; and,, therefore, called by Physicians,  
*convulsive Motions,* or *Convulsions, ex Ma tcria non proportionate,*as when they are excited by a Stimulation and Vellication of  
the nervous Parts, or a Violent Straining, and Stretching os **the**‘ same, as in the Disease which the *Greeks* Call *Epilepsia,* or are  
caused by Consent from a biting Sensation at the Mouth inf the \*  
Stomach, or from some Injury received first by the Brain.  
This last Species of *Convulsions* is not *per so,* and in Strictness  
of Speech, called a *Convulsion,* but rather a *convulsive Motion i*And this is either universal, aS when the Brain is primarily affect-  
ed j or particular, from a Vellication os some particular Muscle  
or Nerve, in the same manner aS a permanent or motionless  
*Convulsion,* is called *universal,* when, from an Affection of  
the Brain, it seizes the whole Body; and *particular,* when it  
affccts only one Part; as, for Instance, in the Disorder which  
some call *Ssiasinus Cynicus,* in which the Mouth is distorted, or  
rather the Farts of the Mouth are convulsed. .

AS to the Parts which may labour under a *Convulsion,* or  
*Distension,* and the Place affected in *( anvulsions, Galen, de  
Lor. Affect. Lib.* 3. *Cap.* 6. tells us, that all Parts of rhe Body

which are fitted for Motion, may he convulsed ; for the.Parts  
of the Body which are moved, are put in Motion by Help of

**' the** Nerves and Muscles, which heing convulsed, there is a  
Depravation of that Motion, as it happens in a Grinding of  
the Teeth; which the *Greeks* call *Trysinos,* and is a *Convulsion***os the** Muscles, as **we** are taught by *Galen, de Lac. affect.  
Lib.* 2. *Cap.* 2. And in the same Treatise, *Lib.* 3. *Cap.* 6.  
the teaches us from the convulsed Part to know, whether the  
spinal Marrow, or the Brain, or the Nerves, or which os them,  
are affected, in the following Words: ." When the whole  
" Body is convulsed, all imagine such a Part to he affected,  
" as, like the Trunk with respect to the Branches os a Tree;  
" is the common Trunk of all the Nerves, and not of a few  
only in one Part, in nature of a Branch; as is the Case,  
" when a Leg, or one of the Hands, happens to he convulsed,  
" where a Convulsion of the whele Member shews the Origi-  
" nal of the Nerves distributed on it to he affected, from **the**" Example of a Branch of a Tree. But when the whole Body  
" is affected, we must suppose the common Origin of all the  
" Nerves below the Face, which answers in proportion to **.the**" Trunk of a Tree, to be affected, that is, the first Parts.of  
" the spinal Marrow; for winch Reason, the most experienced  
" Physicians adapt their Remedies to those Parts, and take  
"no Notice of the Heart. But if, with the rest, of the  
" Body, the Face he, also, convulsed, we take care nor  
" only os **the** Beginning of **the** spinal Marrow, but of **the**" Brain itself. And, indeed, we often see the Lips, the Eyes,  
" the Skin of the Forehead, the whele Jaws, and the Root  
" os the Tongue, affected with *Convulsuris* ; and; because  
" we learn from Anatomy, that all these Parts are moved by  
" Mufcles, which receive their Nerves from the Brain, **we**" judge that to be affected whenever those Parts are Convulsed;  
" but when we see the other Parts of the Body labouring under  
*" Convulsions,* while those remain in a due Disposition, **we**

conclude the Origin or Beginning of the spinal Marrow to he  
" affected."

Having thus learnt to know **the** Part originally affected **by.**the Part convulsed, we proceed to inquire into the Causes os .  
*Convulsions*; and, first, of those which are perpetual and per-  
manent without Motion. *Convulsions,* says *Hippocrates,* 6 *Aph.*39. " are occasioned either by Repletion, or Inanitions" The  
same is confirmed by *Galen, Lip.* 2. et 3. *de Loe. Affect, et  
in* 4. *et 6. Lib. Aph. et Lib. de Them. Palpit. et Convulse*and' in innumerable other Places ; but especially. *Lib.* 2. de  
*Symptom. Cause* where he says, that ic a *Convulsion* draws the  
" Nerves and Muscles into the same Posture and Disposition,  
" as that into which they were brought by the animal Force,,  
" when in their natural State. ' Whether, therefore. Voluntary.

Motions are personned by a Tension of the.Muscles at their  
Cc Origin, or an Impletion of them by a flatuous Influx, the  
" Effects are the same in a *Convulsion,* whether from a . statu-  
lent Spirit, which may he generated in the Veins, Or a Mal-  
" titude of other Disorders, among which is a Phlegmon,  
" which may create a Tension." And these are .all compre-  
hended, according .to *Hippocrates,* under the two general Heads  
Of *Repletion* and *inanition,* of which the first takes place in a  
Phlegmon, and the other in burning and dry Fevers. And that -  
immoderate *impletion* and *Inanition* may either of them cause  
a Tension in nervous Bedies, we may learn from what happens  
to the tense Strings of musical Instruments, which break when-.  
ever those Instruments be laid in a moist and humid, or a.  
dry and dusty Room; and they are therefore relaxed, before laid  
aside. This Generation of *Convulsions* is illustrated *by Ga-  
len, Lib.* 3. *Case.* 6. in the following WordsIs you  
" observe nervous Bodies, particularly .the Strings of an .  
\*6 Harp, by an immoderate Distemperature of the Air, dher  
" stended to such a Degree as to break, you will easily  
" imagine, that the same thing may happen to the Nerves ;  
" of Animals. " Put how are Strings, from .an Affection  
of the Air, as when it is immoderately dry or moist,, stretch-  
ed in such a manner aS to break ? The Humour, to ansiver, ..  
moistens them so as to raise them into a preternatural Tu-..  
mor,, which must of Necessity cause -extraordinary Tense-,  
ness ; on the other hand, aS the Sun by drying Skins contracts  
them, so Dryness draws and stretches Cords and Strings; and  
thus we observe Thongs of Leather, whentlry'd by the Fire, :reduced to a State of Tenseness and Contraction.

To these two Causes of *Convulsions, Galen, in Aphe* 25. adds,  
a third, which is, the Weakness of the nervous Parts, on  
which account Children, he says, are much subject to *Convul-  
se ons,* as well as from the crude Aliment with which they  
abound.

The nervous. Parts often labour under a Repletion from a \_  
crude Humour, by which they are convulsed, as we are told  
by *Galen, de Syrnpt. Cause Lib.* 2. *Cap.* 2. Thus it is wither  
Children, who, abounding with crude Aliment, and having their  
nervous Parts not Very strong, are easily affected with Disten-

frons, *as Hippocrates* telis us, 3 *Aph.* 25.' Hence, 2 *Epid. Sect.*5. he advises, when Children \* are affected with *Coivvulsuns  
to* excite a Fever, by which means that Disorder, together with  
the Fever ; is sometimes removed in aside Manner.

To this Head of *Repletion ,may be* reduced Convulsions froth  
an Humidness of the Air, as when we are told by *Galen,* in  
*Epid. Sect.* 2. that in a moist and cold Constitution of the Air,  
many Persons, and especially Children, as *Hippocrates* writes,  
**' were** afflicted with Convulsions; and, also, those proceeding  
from an immoderate drinking of Wine.

. Sometimes, also, the nervous Parts are stretched and eon-  
yulsed from their heing imbued with Blood, or bilious Excre-  
ments, sometimes from a Flatus, and frequently from a Phleg-  
mon, either immediately, or by Consent of the neighbouring  
Parts. After this manner are occasioned Tensions of the Hy-  
pochondria, which proceed from a Violent inflammation of the  
Diaphragm, Pleura, or LiVer; and to the same Head appertain  
*Convulsions* from Wounds attended with an Inflammation.

. The Parts are dry'd, or, to speak in .the Phrase of *Hippo-  
crates,* emptied, or evacuated, as well by a burning Heat, as  
an immoderate Cold, *Qs* the latter we read, 5 *Asm.* 17. that  
it " produces Convulsions and Distensions,;'' and, *ibid. Aph.*2.O.. it is said, that " Cold is biting to Ulcers, hardens the  
" Skin,, renders Pain insupportable, blackens, and excites fe-  
U brile Rigors, Convulsions, and Distensions." Here *Galen,*in his Comment, says, that " Immoderate Cold excites those  
" Convulsions and Distensions, with a-Refrigeration of the  
" Nerves; for as it is not convenient, that this Substance should  
" he dissolved by an immoderate Heat, it is no less prejudicial  
" to.them to.be refrigerated and contracted." For excessive Cold,  
affecting the Nerves, Muscles, Tendons, and Ligaments, first  
causes an Inequality of the Skin, by repelling the Heat and Moi-  
sture inwards ; then dries by expressing the finer Parts, com-  
presses, condenses, hardens, and, by closing the interior Sinuses  
- and Bores, prevents Diffiation and Perspiration, as well as Recep-  
tion of Aliment, so that the Parts remain rigid, hard, and dis-  
tended- To this Purpose we read, *Coac.* 23. that " a Rigor,  
". producing an Opisthotonos, is mortal ; " and *Galen,* in his  
Book of medicinal Definitions, hefore quoted, says, that " Tra-  
" VellerS oppressed with Cold, die Of *zDEmprosthotonqs, Qpistho-  
.detenus,* or *Tetanos.*

Immoderate Heat produces the same Effect, and much more  
efficacioufly ; for by dissipating all the humid Substance of the  
Muscles, and other nervous Bodies, it renders those Parts ex-  
tremely dry'd and parched ; whence they are distended and con-  
vulsed. Burning Fevers, therefore, which,: like a Fire, dry  
the. Nerves, produce a Distension and *Convulsion* of the same ;  
and, as *Galen,* on .4 *Aph.* 66.\_ reaches, induce *Convulsions* of  
a pernicious Kind. Aster the same manner mortal Phrensies,  
by diflblving the Substance of the Nerves with their immode-  
rate Heat, usually end in *Conwelsians.* On the same account,  
all considerable feverish Estuations have the like Effect by Dry-  
ing, as we are assured by *Galen,* inn .7 *Aph.* 13. and the same  
Consequence follows from Constant Watchings, and all great  
and immoderate.Evacuations and Purgations, as we learn from  
the same Author, on 5 *Asm* 3.4 *et j: Aph. 9.* And he calis  
all those *Drynesses,* is ! may use the Word, the Causes *us Con-  
vulsions, de Loe. Affect. Lib. 2. .Cap.* 5. comprehending them  
all in the following Words: " For smce a: *Convulsion* is occa-  
" finned either by; Labour, Watching, .Hunger,, Solicitude,  
" or.a dry and.bunting Fever,, .as. we see in Phrensies, you may  
justly impute the Cause to a Dryness and Inanition.";.

c Thus have, we assigned the Various Causes of perpetual and  
permanent *Convulsions ,.2aA* have reduced them under the gene-  
ral Heads of Repletion, andADryness,E Vac nation, or Inanition;:  
of the nervous Parts. But *Convulsions* attended with manifest  
Motion, such aS those of the .epileptic Kind, and those they  
call *'convulsive Motions,* have other Causes'. For sometimes they  
proceed from a gross and Viscid Humour obstructing the Ven-  
tricles of the Brain ; which is the Cause Of that universal Con-  
vulsion which the *Greeks* call *Epilepsia,* and others *Morbus Co-  
mitia its,* according *to Galen, de Loe. Affect. Lib.* 3. *Cap. η..*where he telis us, that the Epilepsy is a Convulsion of all  
" the Parts of the Body, not perpetual, aS is observed in the  
*'♦\* Emprosthotonos* and *Tetanos,* but incident at certain Inter-  
" Vais; and this *Convulsion* is occasioned when the Brain is pri-  
" marily and in itself affected ; whence, by Consent of Parts,  
" we often observe Bedies to labour under *Convulsions* both  
" general and partial. " The same Author, *de Loe. Affect.  
Lib. ζ. Cap.E.* has demonstrated, that a Disorder of the Mouth  
of the Stomach has not only occasioned *Convulsioris,* by com-  
municating the Injury to the Brain, the Origin os the Nerves,

hut other very **severe** Symptoms ; and, he tells us of a yfnin|  
Grammarian, who, whenever he was too intent on Teaching  
or Thinking, or lasted too long, or fell into a Passion, wua  
seized with a Fit ossan Epilepsy, from a bilious and acrid Jujoe  
vellicati ng the Mouth of the Stomach. And, in his Comment  
on *sApio. 1.* he speaks of a young Man who was frequently  
affected with an universal *Convulsion,* from an aeruginous Hu-  
mour gnawing the Mouth of the Stomach ; and recovered not  
from his Fit, before he had discharged the aeruginous Matter by  
Vomit. Again» in his Book of *Vinesection* against *Erasistratus,***he** telis us, that *Diodorus* **the** Grammarian was affected with .  
*Convulsions* after long Fasting.

. A *Convulsion,* also, is occasioned by much Straining and  
Retching, when the Stomach labours to ’expel some malignant  
and noxipuS Matter, in the same manner as a true Epilepsy is  
induced, while the expulsive Faculty in the Brain makes Efforts,  
to expel the gross and Viscid Juices which obstruct its Ventri-  
cles, and intercept the Passage of the animal Spirits thro' them.  
*Hippocrates,* therefore, had good Reason to say, that Convul-  
sions were produced from White Hellebore, by its pernicious  
Juices gnawing and Vellicating the Mouth of the Stomach.  
An Instance of this fell within our own Observation, while we  
practised Medicine at *Padua,* in a young Man, who, by **the**Carelessness of an Apothecary, took'White instead of Black  
Hellebore. But many Instances may be given of such as have  
been affected with convulsive Disorders from some bilious, dr  
aeruginous Humour, or some poisonous Juice infesting **the** Sto-  
mach, and Vellicating its Mouth.

It appears, therefore, that an Injury done to the Mouth of  
the Stomach in, by Consent of Parts, communicated to **the**Brain ; whence Convulsions are excited. And not only the  
Mouth of the Stomach, but the Uterus, and this last, most  
of all, communicate, by Consent, their Disorders to the Brain;  
whence hysteric Women are often observed m be molested with  
*Convulsions. Galen, de lac. Affect. Lib.* 6.. *Cap. a.* gives an  
Instance of this in a Widow, who was affected *with Convulsions,*from the Uterus heing injured by a Retention of the Semen **j**and was freed from them by gross, fetid, seminal Excretions.  
Hence the Author of I *Prorrhet. T.* I2o. fays, "that Women  
" affected with Hysterics, without a Fever, are subject to

Convulsions ; aS was the Case, for Instance, os *Dorias."*

And not only from the Uterus, but from other Parts, by **a**poisonous and highly pernicious Vapour ascending to the Brain, -  
may convulsive Disorders he excited ; in Proof of which, *Ga-  
len, de Loe. Affect. Lib.* 3. *Cap. η.* gives Instances of two Boys  
affected with an anomalous Epilepsy. ' .

Such, then, we may suppose, are the Causes not only of per-  
manent, but moveable *Convulsions* ; but *Galen, Lib.* I2. *Meth, a  
Med. Cap. ult.* has comprehended in few Words the Cause  
of all *Convulsions,* and convulsiVe Motions, where he fays, they  
are occasioned either by a Dryness, Repletion, a considerable  
Inflammation, a biting Humour, or Violent Cold.

But we have treated, we hope with sufficient Accuracy, of  
the *Causes* of *Corrvulsions*; and proceed now to consider **the**Signs from which we may predict their future Appearance.  
And here we read, *Coac.* 85. I57. that Deliriums increasing  
sensibly in Ferocity hecorne at last outrageous, and portend  
*Convulsions* ; and a little aster, T. I62. " They who are *as-  
c( fected* with a Pain of the Head, and labour under a Catochus,  
" with a Constipation of the Belly, have a fierce Look, and a  
" florid Colour in the Face, are seized at last with an *Opisthor'  
" tonos. "* That *Compulsions* should succeed mortal inflamma-  
tions os the Brain, is agreeable to Reason, fince they are Signa  
os a mortal Phrensy, under winch it is proper and usual sor the  
Patient, as *Galen* says in T *Prorrhet.* to be convulsed, and tO  
die in *Convulsions.* The Author, also, os i *Prorrhet. T.* 28.\*  
tells us, " That frequent Mutations in Phrensies indicate *Con-  
" vulsions.* " And, *Coac.*I7I. we read, " That an acute Pain  
" in the Head, attended with a Torpor and Heaviness, are  
" usually succeeded by Convulsions.'' And, *ibid. T.* I77. "That  
" a Pain of the Head, with a small Sweat, and a Constipa- -  
" tion of the Belly, end in Convulsions."

These, then, are the prognostic Signs of *Corrvulsions,* of which  
Signs only Violent Pains of the Head, and a furious or out-  
rageous Delirium are to;he reckoned as certain, the other  
Marks not affording any sure Grounds for Prediction. As for  
Children, we are .told by *Hippocrates,* in the *Prognostics*towards the End, that " They become affected with *Convusa  
" suns,* if they labour under an high Fever, and are costive,  
" wakeful, frightful, much given to Crying, and change their  
" Colour to pale, livid, er red ; and these Symptoms are inci-.  
" dent to Children from their Birth to their seventh Year. "

\* The Author of the Notes and Emendations to *Prosper Alpinus,* reads *Puerperas* with *Faesius,* as rendered from λεγοις, and not *Pueros,***with** *Alpinus,* because, as hc says, no such Directions concerning Children are to he sound in all the *Epidemics.*

Children mote advanced in Years, and full-grown Persons are  
not so subject to *Cotruulsuns* in Fevers, unless at some Very  
Violent and dangerous Crisis, as is usual under a Phrensy.

But we have said enough on this Head, and shall now take  
into Consideration **the** *Prognostics* from Convulsions which offer  
themselves to our Examination, in order to the Prediction of  
Death, or Recovery in acute Diseases. And here, first, **we**shall speak a little of those *Conevuisions* which are not attended  
with a Fever. *Convulsions* of this Kind, which proceed from a  
Repletion of the nervous Parts with a crude Humour, are less  
dangerous than such as. are excited by a Dryness and Aresaction  
os the Nerves; and ‘ *Convulsions* which owe their Original to **a**Repletion, are distinguished from the others by their Suddenness.

Of the three distinct Kinds of *Convulsions,* what they call the  
*Tetanus* as the most acute Disorder, and often kills in three or  
four Days; the Muscles os the Jaws and the Gullet heing con-  
Vulsed in such a manner, that Deglutition is entirely destroyed,  
and the Patient rendered incapable os being nourished with  
Fond, or relieved with Medicines : But when the Disease is pro-  
tracted to a greater Length, there are good Hopes os Recovery.  
What *wt* have said is the same with that os *Hippocrates,* 5 *Aph.\_*6. *Whoever happen to be'seized with a* Tetanus, *die in four  
Days ; but is. they survive that Term., recovcr.* The Patient,  
in such a Case, always meets with the hest Relief from a super-  
vening Fever; sor the febrile Heat consumes the Humours'  
which obstruct the nervous Parts. On this Subject we find  
*Galen* discoursing, *in* 2 *Aph.* 26. where he says. *Is. any Person  
in Health happens to be suddenly seized with* Convulsions, *they  
must of Necessity be occasioned by a Plenitude. Now the Nerves  
suffer'a Repletion from cold and viscid Humours, by which, also,  
they are nourijhed, so that they become convulsed c And this Dis-  
order is remedied by a supervening Fever, vjhich heats the cold,  
and attenuates and dis.cujs.es the visesus Humours.* This .is no  
more than a Comment on that os *Hippocrates,* 4 *Aph.* 57.  
hefore-quoted. Very justly, therefore, it is said, 2 *Aph.* 26.  
that *it is better for a Fever to come upon Convulsions, than Con-  
vulsions upon a Fever.* And with good Reason does the same  
Author\*, 2 *Epid. Sect.* 5. advise exciting a Fever in Children  
' for *Convulsiont*;. by which means, the crude and gross Humours  
are heated, attenuated, and discussed. Hence the more Violent  
she supervening Fever, and the more intense its attendant Ri-  
gor, the more effectually will it remove the *Convulsions.* Thus  
qualified is a Quartan, which is accompanied not only with an-  
intense Degree of Coldness, but a most efficacious Heat.; *s* by  
virtue of which it gives Relief under a great Disease, *is we*may believe *Hippocrates* and Experience, sot which we have  
good Reason; sor this Kind of Fever is attended .with, a  
more effectual Heat than other Fevers; because it has its. Foun-  
dation in .a more gross and dense terrene Matter; as may be  
inferred from what we read 5 *Aph.* 70. .where we are told by  
*Hippocrates, that they who are seized with a quartan cere not  
very subject to* Convulsions; *and such as are sirsi taken with*Convulsions, *are relieved by the coming.on os. a Fever..* Such is  
the good Effect os a Quartan, not only by its Heat, which  
effectually discusses the Repletion of the nervous Parts; but by  
the Intenseness os its Coin, with which it shakes the Body so  
long till the Humour is by that Motion digested, or. expelled  
from the nervous. Parts. A Fever, therefore, comingfupon  
*Convulsions,* is good ; hecause it removes the Repletion by a Dis.  
cussion. And this is further illustrated, and confirmed by *Hip-  
iocrates,* in what he says of those vvho are convulsed from

Irunhenness, 5 *Asm* 5. where we read, that if *a Person who  
iy dr unit be taken suddenly speechless, he dies in Convulsions, un-  
lesisA Fever seizes him. ’ .*

. And these are the *Convulsioris* from which we may hepe a good  
Event, especially in Children; who, the more subject they are  
to *Convulsions,* both on account os the crude Aliment with  
which they abound, .and the Weakness os their nervous Parts,  
*as Galen,* on 3 *Aph.* 5. has it, the less are they in danger from  
such Disorders, and the mote easily are they relieved from them  
by a supervening Fever. Hence *.Convulsions* in Children la-  
bouring under Fevers, are not so much to he dreaded; but in  
adult Persons they are usually pernicious, aS they are generally  
owing to a Dryness and Rarefaction os the nervous Parts by **the**febrile Heat, than which nothing is more pernicious, in the  
Opinion of *Galen* ; who, in his *Meth. Med. Lib.* I2. *Cap.* 8.  
has these Words, with respect to a *Convulsion* from Dryness:  
*sese must know,* he fays, *that an Affection of this Kina, ts. ever  
it be cured, requirescHumectation. Bus it is extremely difficult to  
be cured, or rather incurable, if it be contracted by a Feuer, and  
succeeds a phrenso of the most mortal Kind. For my part, I never  
knew, nor heard of any ane cured, who was convulsed in this  
manner.* In Children, indeed, affected with feverish Disorders,  
*Corxtulsiorae* are not so bad, or so much to be dreaded, as we

shall hy-and-by demonstrate more plainly, from I *Epid. Sect .st..*but in all other Ages, *Convulsions* proceeding from Dryness are'  
pernicious. For this Reason, *Convulsions* attending Fevers are  
to he dreaded. Whence *Hippocrates* might Very justly say, that  
it is hetter for Fevers to succeed *ConDusisuns,* than sor those to  
come upon Fevers; for if they are the Consequence of Pur-  
gation, or any other considerable Evacuation, they are of the  
worst Sort, hecause all Evacuations dry the Body, in Con-  
firmation of tins Doctrine, we are told, by the Author of  
I *Prorrhet. T.* I 45. *that a violent and copious Haemorrhage from  
the Nose sometimes induces Convulsions*; and, by *Hippocrates,  
5 Aph.* 3. *that Convulsions or Hickups succeeding a copious Dis-  
charge of Blood by the Anus, are bad :* And *ibid.* 56. *that Con-  
vulsiont and a Lipothymy after a Flux of the. Menses, are bad.*Again, 7 *Aph.* 9. we redd, *that a Delirium or Convulsiorissuc-  
ceeding an Haemorrhage, are bad.* The same Position is more  
generally and exprefly asserted by *Galen,* in his Comment on  
Lib. 6. *Aph.* where he says, that *Convulsuns* from an EVacua-  
tion are most acute and pernicious. , To the same Purpose we  
read, 7.ἀρ6.ι3. *that* Convulsions, or *a Tetanus, after violent  
burning Heats, are bad*; and, *ibid. Aph.* 18. *Convulsions and a  
Delirium after patchings, are bad.* The Reason is, because  
Violent Heats, or burning Fevers, and immoderate Watchings,  
resolve and evacuate the humid Parts. In the same manner,  
that is, by drying the Body, do immoderate Purgations produce  
pernicious *Convulsions,* according to 5 *Aph. An* where it is  
asserted, *that* Convulsions *or Hickups, succeeding an Hyperca-  
tharsts, (or profuse Purgation) are bad.* Moreover, we read,  
7 *Aph.* 25. *that Convulsions from a purging Draught are mortals*And 5 *Aph.* I. *that* Convulsions *from (white) Hellebore* ***are****deadly.*

- Having spoken hitherto of the Prognostics from what they  
call *permanent,* or *perpetual Convulsions ;* we proceed to treat,  
in a sew Words, Os such *Convulsions* as are occasioned by a  
Straining, or Stimulation, while Nature attempts an Exclusion  
os the gross and Viscid Humours which obstruct the Ventricles  
os the. Brain, asina Fit os the Epilepsy. *Galen, in Lib.*

*5 Aph..* says, that an Epilepsy is not a Very acute nor dangerous  
Disease; and justly, hecause it helongS to the Lists os chronic  
Diseases; and the Patients are often perfectly freed from it,  
especially Children; according to that Aphorism of *Hippocrates,*2 *Aph.* 45. *Viry . young Personssubject to an Epilepsy, are cured  
chiefly by Change in Age, Place, and Way of Living.* And  
5 *Aph.* 7. we are told who are capable, and who are incapable  
of a Cure; where it is said, " An Epilepsy hesore the Age of  
" Puberty, admits of a Metastasis (a Solution, see META-  
**" STASIS);** but is it molesta the Patient after twenty-five, it  
" generally accompanies him to his Grave." And *Galen, in*his Treatise *de Puero Epileptico,* tells us, that he had cured  
several Children ; and in his Book *de Purg. Med. Fac.* that in  
several others, who were not cured, he had prevented a Return  
of the Disorder, by the proper Precautions of Purging and  
Phlebotomy in the Spring. :. .

As for. other Kinds of *Convulsions,* which are excited from  
Consent of Parts, by some acrid Humour, or Poison, or from  
some poisonous and malignant Vapour, they are all curable.  
Of this Nature were the *Convulsions* under which the Gramma-;  
rian besore-mention’d labour'd, from bitter Bile; and the young  
Man, also, spoken of,, who was molested withran aeruginous  
Matter, gnawing and Vellicating the Mouth of the Stomache  
and was freed from she same by Vomiting. Examples may;  
also, be given, of *Convulsions* from malignant Vapours, remov'd;  
and perfectly cur'd; but we have, perhaps, said enough, as to  
the Prognostics from *Convulsions* excited.without a Fever; and  
shall, therefore, proceed to speak of. such as happen under acute  
Fevers. :

*Of the Signification of* **CONvULSIONS** *in acute Feuers.*

All *Convulsions* which happen in the Beginning of Diseases,  
indicate a Multitude of Humours, by the nervous Parts labour-  
ing under a Repletion, which occasions a Tension, or *Convul-  
sion.* This Kind of *Convulsion* affords no sure Grounds sot  
Prognostication, but indicates, however, that the Disease is very  
severe, and not Void of Danger; since all Disorders, proceeding  
from a Multitude of crude Humours, are Violent, and dangerous.  
Instances of this are many, in the Books of the *Epidemics,* of  
those who were restored to Health; particularly, the Woman  
who was three Months gone with Child, and lay ill in the  
*Strand; Pytbion,* who liv'd near the Temple of *Tellus*; the  
Man who lay ill in the Garden *osDealees; Chorion* at *Dema.,  
retus*; and the morose Woman, who was seized with *Convul-  
sions,* aS it were, on a sudden, on the first Day. In all these  
Cases,, except his who lodged in the Garden of *Dealces,* where  
a Crisis was indicated. *Convulsions* were Signs of a Multitude

\* The Passage here meant nma thus: ἥν λέχοις σπασμός ὲπιγένηται. πῦρ πεἴει. Where our Author, for λέχοις, reads παιδένις; and  
transiates πὑρπουιει literally. *Ignem exerceamus seu inuramus* ; but we have followed *Fiestas.* See the preceding Note.

” ' of

of Humours, and had nothing in them of Certainty, with  
resoect to Prediction. In *Chorion* and *Pythion,* indeed, they  
were not so much to he dreaded, because on the ninth Dav at-  
tended with a Discharge of Urine, in which appeared some  
Signs of Concoction ; but in the Cafe excepted they were cri-  
tical.. For, as *Galen* says, in his Comment, " the Delirium on  
" the ninth Day, and squinting os the Right Eye, were usual  
" Incidents in a Crisis.’'

*Convulsions,* also, in Fevers which proceed from the Brain,  
affected by Consent of Parts from a Disorder in the Mouth of  
the Stomach, are not to be feared, fince.they may he remov’d  
by a Vomit. An Instance to this Purpose we find recorded by  
*Hippocrates,* 5 *Epid. T.* 4O. in " the Son of *Hermophilus,* who  
" was ill eleven Days. His Disorder was a Fever, and he  
" took no Sustenance: On the first Day he was delirious, hut  
" recovered his Senses at Night. The next Day he lay speech-  
" lefs, under a Stertor, with his Eyes distorted, and was sever-  
" ish; but by Intromission of a Feather he vomited black  
" Bile ; and, by means of a Clyster, had a plentiful Discharge  
" os stercoraceous Matters hy Stool." ? .

*Convulsions,* in such Cases, proceeding from the Uterus, are,  
also, easy to be cured ; according to that in I *Prorrhet.* 119.  
*" Convulsions* in hysteric Women are easily removed; aS in  
" the Case of *Dorcas.\*\** [See a more just Tranflation *of this*Passage before.]

*Convulsions,* also, in Children affected with feverish Disor-  
ders, as they are no Indications of any great Alteration from a  
healthy State, because Children abound much with crude Ali-  
ment, and have, besides, weak Nerves, are not much to be  
dreaded. " Children, says *Galen, Corn, in i Epid,* because of  
" the Weakness of their Nerves, are very subject to *Convusc  
" sums.”* And the more easily they are liable to be convulsed  
on flight Occasions, the less is the Danger. It is no wonder,  
therefore, if Disorders *of* this Kind are not so formidable in  
Children, even under Fevers, as in adult Persons. To this  
Purpose is the Observation os *Hippocrates,* I *Epid. Sect.* 2.  
" that many were at first seized with *CorrvulsiOns,* and a Fever,  
" especially Children ; the Fever was, also, succeeded by *Con..  
“ ‘vulsans.* These Symptoms were generally, of long Conti-  
nuance, and had no ill Consequence, except in those where  
" all other Signs were pernicious." And the same is confirm'd  
by the Author of the *Coac. T.* 356. where he says, that " *Con-  
" vulsioris* succeeding a Fever are mortal, but least of all so to  
" Children." But if to *Convulsions* there succeeds a Fever,  
or, if there be a Fever already, an Exacerbation of the same, it  
is a good Sign, with respect to the *Convulsions,* provided they  
proceed from a Repletion of the nervous Parts.. Hence we are  
told, *Coac.* 358. " that an acute Fever, coming upon *Corrvul-  
" setons,* removes the Disorder; whether it is a new Fever, or an  
" Exacerbation of the old." The same Symptom is much al-  
leviated by a Discharge of much Vitreous Urine, or whet re-  
fumbles Semen. . .-

*Convulsions* in the Beginning of Fevers, if the Fever increases,  
usually cause an Alleviation of the Rigor. Thus it waS in the’  
Caseos *Philisiides,* the Wise Os *Heraclides,* 7 *Epid. T.* I 30.  
Ci who, it is said, was seized with a hioh Fever, and. a Red-  
" ness of the Face, without manifest Cause; .soon aster, on  
" the same Day, she was affected with a Rigor, and recovered  
" no Heat; then was convulsed in her Fingers and Toes;  
" and, shortly after, her Heat was revived. On the second  
" Day she had a new Fit of a Rigor, but recovered a littie  
“ more Heat than before; her Redness was less, and the su-  
" pervening *Convulftons* were more moderate."

We may add, that some Sorts of *Convulftons* in Fevers much..  
alleviate, and even remove the Disease ; and these ought to be  
called *critical,* bring occasioned by a Tranflation of the mor-  
bific Matter from the Veins to the Nerves and Muscles ; and if  
they effect a Solution the first Days,they are critical and salutary,  
according to *Coac.* I 57. where we read, ." that a Convulsion  
excited in a Fever removes it the hast, second, or third  
" Day ; but is it transgresses the Time in which it first began,  
" and ceasesnot, it is a badSign.’' *Convulsions* of this Nature  
are occasioned, as we said, by a Metastasis of the morbific  
Matter from the Veins to the nervous Parts; which Metastasis,  
or Tranflation, may possibly diminish, or even quite remove  
the Fever, the Humours heing excreted from the Veins, and no  
longer lest to putrefy jn them. ..... . ...

And thus far have we spoken of those Kinds of *Convulsions,*which, though not properly good, for all *Convulftons* in them-  
selves are had, yet sometimes happen to he salutary Prognostics:  
We come now to treat of those which are universally bad and  
pernicious, and of destructive or fatal Signification.

It is an Observation of *Hippocrates, Lib. Prognost.* that in  
acute Diseases a *Convulsion,* os. the Testes and Pudenda is suc-  
ceeded by a violent Pain, or Death; and *Convulsions* in acute  
Fevers are always of bad Signification to adult Persons, but  
worst of all in burning Fevers, aS we are assur’d by *Galen, in*

*4 Aph. 66.* because these dry the Nerves like a Eim, and excite  
pernicious *Convulsions.* We have observ’d, that *Corrvulsicms* from  
a Dryness os the nervous Parts are not only difficult, bur impos-  
sible to be cur'd ; for which Reason, they must he always per-  
nicious in acute Fevers, as being occasion'd by a Drymess of the  
Nerves, from a Consumption of the humid by the igneous  
Heat os the Fever. Thus *Galen, inAAph. 2S.* tells us, " that  
" in burning Fevers, is the whole Body be dry'd, and Ἀ *Con-  
“ uulsion* of the Nerves happens to proceed from that Dryness,  
" it din a very great Disorder, and almost incurable, because a  
" longtime is requir'd sor removing the Dryness of the Nerves;  
" whereas the Violence of the Disease will not allow Time to  
" Nature, thut speedily exhausta the Strength, and destroys the  
" Patient.''.. *Hippocrates,* therefore, had good Reason to say, .  
that "Convulsions and violent Pains about, the Viscera, in  
" acute Fevers,, are bad ; " but if attended with a Decay of  
the Strength, they shew Death to be Very near. *Hippocrates,*4 *Aph.* 49. is Very express and elegant to this Purpose, when he  
says, " In a not intermittent Fever, if the Lip, or Eyebrow,  
" or Eye, or Nose, be distorted, or the Patient cannot see, or  
" hear, the Body being at the same time very weak; which  
" eVer of these Symptoms appears. Death is at hand." ' Thus  
it happened, for Instance, to the Wife of *Dromeades,* I *Epid.  
Sect.* 3. *AEgr.* Il-, who died suddenly in *Convulsions* which be-  
gan at the Head. . ’

*Convulftons* in a Delirium are Very dubious, but in Phrenfies  
are the most pernicious of all Symptoms, and indicate the speedy  
Approach of Death. *-Galen,* aS before observ'd, *M. M. Lib.*I 2. *Cap. ult.* fays, he never knew or heard of any Person who  
recover’d in such Circumstances. *Hippocrates,* in his Description  
of the Epidemic Constitution, I *Epid. Sect.* 2. says, that  
*those who were affected with Phrensies, were convulsed, and mo-  
lested with virulent Vomitings', and seme of them died suddenly.*And this he had an Opportunity os observing more exactly, in  
the Case os. the phrenetic Patient, 3 *Epid. Sect.* 3. *AEgr.* 4.  
*vvho on the second Day, in the Morning, lost his scoice, had a  
high Fever, suteated, without Intermission os. the Fever, was af-  
fected with Palpitations in all Parts of his Body, and at Night  
with* Convulsions. *On the third Day all the Symptoms were ex-  
asperated ; and on the fourth he dsid.*

We have hesore demonstrated, from *Hippocrates* and *Galen,*that it is a Property of mortal Phrensies to.end in *Convulsions:*For it is the Nature of a true Pbrensy to excite *Convulsions* a  
littie before Death, the Nerves being dry'd by an Inflammation  
of the Brain: We have an Instance to this Purpose in the  
Maid-servant of *Conon, J Epid.* Ὕ98. who dy’dat the End of  
forty Days, and was speechless and convuls'd for some Days  
before her Decease. -

Tremors ending in *Convulsions,* or *Convulsions* from Tremors,  
are affirm'd by *Galen,* on the *Prorrhetics,* to be mortal. -

*Convulsions* occasion'd by Pains, or obstinate Watching, in  
acute Fevers, are pernicious, *siAph.* I8. and so are those which  
proceed from profuse Purgation, or immoderate Evacuations of  
any Kind, 5 *Aph.* 3, 4. 56. before quoted. The Reason is,  
because all immoderate Evacuations dry the whole Body, and  
occasion a *Convulsion* from a Dryness of the Nerves, which is  
of the worst Sort, as we have observ'd. Hence *Galen, Com. in*7 *Aph.* says, that " a *Convulsion* from an Evacuation is most  
" acute and pernicious." . ....

A *Convulsion* proceeding from an Inflammation of the *Ileum*is pernicious, 7 *Aph.* Io.

*Convulsions* from Wounds are, sor the most part, mortal.  
Death is not the necessary Consequence of all *Convulsions* occa-  
sion'd by Wounds, aS *Galen* observes. *Com. in* 5 *Aph.* though  
*Hippocrates,* 5 *Aph.* 2. pronounces them mortal. They are,  
however, for the most part, deadly; and J we have many In-  
stances os it in the *Epidemics,* particularly in *Scamander,* who  
was convulsed aster a Section; another from a Wound with a  
Dart; the fair Daughter of *Nireus* from a Blow; a certain  
Pilot from a Fracture os the Finger ; another from a Luxation  
Of the Finger; who all died oss *Convulsions.* Of *Scamander,  
5 Epid.* I5. it is said, that " his Hip was sphacelated, and the  
" Bone had sor a long time been distocated. The Operation  
" of the great Section was performed upon him, and he was  
" cut home to the Bone,and the Wound afterwards cauterized.  
" The twelfth Day after the Section he began to be taken with  
*" Convulftons,* which held him pretty strongly ; he was con-  
" Vulfed from the Leg, on the infirm Side, up to the Ribs ; and  
" the *Convulsion* was communicated to the other Side; the  
" Leg was contracted and extended , the other Limbs were'  
" moved, and his Jaws set. The Patient died in *Convulsions:*" on the eighth Day after he was first seized with them." In  
the second instance, *ibid. T. A].* it is said, " that a certain  
" Person received a Wound with a sharp-pointed Dart, a little  
" below the Neck behind, which appeared scarce worthy No-  
" tioe; sor it was not deep. But, not long aster the Dart  
" was taken out, the Patient felt himself distended, and drawn

*~€e backwards,* like one seized with an *Opisthotonos*; his Jaws  
*“ were* under a Constriction, and if he received any’ Liquid  
fr into his Mouth, and tried to swallow it, the same was dis-  
" charged again at his Nostnis, and he immediately grew worse  
tc and worse in all other respects, and died on the second Day.'\*  
The tragical Story of the beautiful Virgin-daughter os *Nireus*is thus related: " This young Woman heing about twenty  
" Years of Age, in playing and sporting with one os her  
" female Friends and Companions, received a Blow from her  
" with the Flat of the Hand, on the fore Part os the Head :  
" She was immediately taken with a Dimness of Sight, and her  
" Breath sailed her; and when she came home she was imme-  
" diately seized with a high Fever, attended with a Pain of  
the Head, and a Redness about the Face. On the seventh  
es Day she had a Discharge of above a Cyathus os fetid, red-  
" ish Pus by her Right Ear, and she seemed to he better, and

easier; hut the Fever increased again upon her, with a Cara-  
fe phora; she lost her Voice ; the Right Side of her Face was  
ec contracted ; she fetch'd her Breath with Difficulty; labour’d  
" under Convulsions and Tremblings, with an impediment of  
**" the** Tongue, and a Stupor of **the** Eye 4. and died on the

ninth Day." Again, *ibid. T. yer.* we have a pretty remark-  
able Case of a " Pilot belonging to a great Ship, who crushed  
" the fore Finger of his Right Hand, and the Bone below it,  
" with an Anchor: The Consequence was, an Inflammation,  
" Sphacelus, and a Fever; he had a gentie Purge administer'd,  
" and his Heats and Pains were mild and favourable. Some  
" Part Of his Finger was separated, and after seven Days a  
" laudable Ichor was discharged from the Wound. Some time  
" after he complained ,of an Impediment in his Tongue,  
" whence an Opisthotonos was predicted, and a Tendency to  
" that Disorder further appeared first from a Constriction of  
" the Jaws, and afterwards by an Affixion of the same to the

Neck. On the third Day he was wholly convulsed, and  
" under a perfect Opisthotonos, attended with a Sweat; and  
" on the sixth Day from the Prediction he died.'' Much of  
the same Nature was the Case of *Telephones, ‘* the Son of *Har-  
palus* by his freed Woman, related *ibid. T.* 75. " This young  
" Man had his Thumb luxated towards the lower Parts, **the**" Consequence, of which was, an Inflammation, and Pain.  
" When the Luxation was reduced, he went into the Field,  
" and at his Return had a Pain in his Loins; he bathed, and  
" towards Night had a Constriction of the Jaws, and was  
" seized with an Opisthotonos. A spumous Saliva made its  
" way through his Teeth, with much Difficulty ; and on **the**" third Day he died.'' In the same manner one *Tychon, ibid.*T. 94. who received a Wound in his Breast by a Dart from an  
Engine, at the Siege of *Datos,* died suddenly. On the third Day,  
*in Convulsions.* From **these** Cases it appears, that *Convulsions*from Wounds are generally mortal.

*Convulsions* Of the permanent Rind from drastic, or  
very strong Cathartics, or poisonous Medicines, are fatal.  
Thus *Convulsuns* from Hellebore taken inwardly, are by  
*Hippocrates* pronounced mortal, 5 *Aph.* I. and, in general,  
*Convulsuns* from any Violent Cathartic are by the same Au-  
thor judged fatal, 7 *Aph.* 25. And he gives an Instance of  
the same, 5 *Epidi T.* 53. " in a young Woman about twenty,  
" who took a Medicine to procure Abortion; aster which she  
" was taken with a Pain, and Vomited much bilious, pale, and  
" porraceous Matter; and when she drank was convulsed, and  
" bit her Tongue. On the fourth Day I *(Hippocrates)* at-  
" tended her, and observed her Tongue to be much swelled,  
" [μεγάληὸ and black, and the White of her Eye to he red :  
" The same Day, towards Night, she died." in the same  
Book, T. 85. he gives us a Relation os a young Man who died  
*in Convulsuns,* from swallowing a Serpent [See the Story under  
-the Article ARGEs]. And 7 *Epid. T.* 2o. we have an Ac-  
Count of a Woman labouring under a Quinsey, who was Con-  
vulsed on the fourth Day, and died on the fifth or sixth.

These, then, are the mortal *Convulsions* observed in acute  
Diseases; and the most pernicious of them all, as we have ob-  
served, are those which happen in acute and burning Fevers,  
especially when Consequent upon a Pbrensy; and that *Convul-  
sions* from Wounds are Very much to be dreaded, we have  
proved, from Cases related out of *Hippocrates.* It remains to  
give some Marks or Signs by which we may know whether  
those Kinds of *Convulsions,* which in the Beginning of acute  
Diseases are necessarily owing to a Repletion of the nervous  
Parts, or at any other time os the same acute Diseases, are by  
the same Cause in any manner whatsoever excited, are salutary  
on pernicious. For our Satisfaction in this Point, we are taught  
to form a Judgment of such *Convulsuns* from the Signs which  
precede, accompany, or follow them: And here we ought to  
have a principal Regard to the Signs of Concoction, and Cru-  
dity : For when *Convulsions* appear under an absolutely crude  
State of the Disease, they always threaten a bad EVent. And,  
indeed, those Kinds of *Convulsions,* when pernicious, never use

to appear alone, but attended with other pernicious Signs.  
Thus it was in the Cases of the Wise of *Philinus,* the Wise or  
*Dromeades, Philastes,* the phrenetic Person, and the Woman of  
*Cyxicus,* related in the first and third Books os the *Epidemics ;*to all which Persons these *Convulsions* proved fetal. In the Wife  
of *Philinus,* I *Epid. Sect.* 3. *AEgr. An* these *Convulsions* appear'd  
on the eighth Day in great abundance, attended with Pain, and  
a high Delirium. The *Convulsions* continued upon her the ninth  
Day; on the eleventh Day, after being convulsed, she voided  
great Plenty of white, thick, tuthid Urine, which deposited no  
Sediment ; and these concomitant and subsequent Signs were,  
no doubt, to he esteemed mortal Much of the same Nature  
was the Case os the Wise *Qs Dromeades,* I *Epid. Sect.* 3. *AEgr.*II. for " on the sixth Day, in the Morning, she was seized  
" with a new Rigor, but soon recovered Heat ; sweat in all  
An Parts of het Body; was cold in her extreme Parts, and de-  
" lirious; her Respiration was great (full), and at long Inter-  
" vais [ἀραιόν- See ARAE AS]; and soon after she died suddenly  
*" in Convulsions,* which began at the Head.'' The Signs pre-  
ceding, it must he .observed, are related, among others, to he  
an Evacuation of thin, oleous Urine, and a small Distillation of  
Blood from the Nose; which, with the others before-mention'd,  
portended nothing but Death. The same Judgment was to he -  
form'd from a Tension of the Hypochondria in *Philistes,* 3  
*Epid. Sect. 2. AEgr.An* who died on the fifth Day; for his  
*Convulsions* were preceded by an Inflammation of the Dia- ,  
phragm, with other very bad Signs. In the phrenetic Patient,  
3 *Epid. Sect. 3. Abgr-* 4. hestdes what We have hefore proved  
out of *Galen,* that all *Convulsions* are destructive, his *ConvuL .  
stores* were, moreover, attended with other mortal Signs; such  
as, on the first Day, Virulent Vomitings, a Fever with a Hor-  
ror ; a copious, constant, and universal Sweat ; and a high De-  
lirium: On the second Day a Loss of Voice; a high Fever;  
Sweating, without any Remission of the Fever; and Palpitations  
in all Parts of the Body t These, among others, were the per-  
nicious Signs which preceded those fatal *Convulsions* seiz'd  
him the same Night, and were sure Prognostics of his Death,  
which happened on the fourth Day. Thus, also, the Woman  
os *Cyzicus,* who was taken with *Convulsuns* on the fourteenth  
Day, had them accompanied with a Coldness of the extreme  
Parts, and a Delirium, which never went off, in an absolutely  
crude State of the Disease.

Thus much we think proper to be said of *Convulsions,* with .  
respect to their Prognostics; and under them some may, per-  
haps, think, that we should have comprehended the *Singultus,*or *Hiccough,* which is a Species of *Convulsions:* But since the  
*Hiccough* **is a** Very particular *Convulsion,* affecting only the  
Stomach, we have chosen to treat of it apart, under its proper  
Article; and the rather, because *Hippocrates* has written of the  
same as distinct from *Convulsions. Prosper Alpinus de Prafag.  
Vit. et Mort. .*

**FEBRILE SWEATS.**

A Sweat in the Beginning os an acute Fever, whose Cause is  
somewhat obstinate, arises from a lax Debility of the extreme  
Vessels, a Vchement Circulation of the Blood, and a ready  
Separation of the aqueous Particles from the other Principles of  
**the** Blood.

If it perseveres, it deprives the Blood of its diluting Fluid,  
inspissates the Remainder, and causes fatal Obstructions, it being  
afterwards aimost impossible to dilute, or resolve the Blood:  
Hence aimost every kind of acute Disease may he produced.

These Sweats are, therefore, always, to he- restrained in  
the Beginning, unless it is certain that the Matter, which ex-  
cites the Disease, is sufficiently thin to be carried off, together  
with the first Sweats.

Sweat is check'd by rising out of Bed, and siting up; by  
avoiding too many integuments; by admitting the cool Air;  
by abstaining from warm and heating Medicines; by using  
copious Draughts of mild, soft, and cool Liquors; that the  
Loss of what is dissipated may be quickly repair'd ; and by  
checking the Violence of the Circulation. '

**PROGNoSTICS IN ACUTE DISTEMPERS FROM SWEAT.**

As the Crisis of acute Diseases often turns upon *Sweats,* the  
Prognostics which may he formed from them, with respect to  
the Fate os the Patient, deserve to he carefully considered.  
For this End, therefore, we shall first explain theNature of  
*Sweat,* with its Differences ; and, also, its Causes; that we  
may understand how it iS generated.

We say, then, a Person *fweats,* when he excretes through  
the'Pores of the Skin a Humour which is actually moist; to  
distinguish it from Perspirations, or Exhalations, which pass  
through the same Pores, and are called, by Physicians, Insen-  
sible Evacuations; because they are imperceptible to the Senses.  
Whence it follows, that *Sweat* is a particular Sort of sensible  
Evacuation made through the Pores or Passages os the Skin

As to the Differences of *Sweats,* they are of several Kinds;  
Some are taken from their *Substance*; in which respect they  
are sometimes thick and Viscid, sometimes thin, and without  
any Viscidity : They differ, also, in *Figure ; for* some, as we  
are assured by *Hippocrates, Lip. Prognosi,* appear like Millet ;  
others are in the Form of Drops. There is a Distinction ob-  
serv'd in their *Colour*; for some are yellow, others green ; and,  
besides, they must os Necessity assume the Colour of the Hu-  
mour from which they are excreted through the Skin. There is  
some Difference, also, to be made in their Taste, though they  
are all, as *Galen* says. *Lib.* I0. *Simpl. Cap. de Sudore,* more or  
less salt and bitterish, as are the Humours whence they are eva-  
cuated. They differ in Smell, fince some are fetid, others not;  
in Quantity, some are copioufly effused, others are sparingly  
excreted, or vanish immediately after their Appearance. Again,  
as to their active gasifies, they are either hot, or cold, or of  
a middle Temperament; and they have their Differences, also,  
with respect tOthe Times in which they appear; for some are  
observed in the Beginning of a Disease, some at its Height, and  
others at its Decline: And with regard to the Times of their  
Duration, some are continual, others are observed at Intervals ;  
some *Sweats,* again, appear with Signs of Concoction; others  
with Signs of Crudity: Some are critical, and determine the  
Fate of the Patient; others symptomatical, aS appearing only  
aster the manner of Symptoms: And some are periodical; as  
those which are observed in Tertian and Quartan Fevers. And  
these are all the Differences of *Sweats* which we shall observe at  
present.

In treating of the Generation of *Sweats,* we are to consider  
the Matter of which they consist, and the efficient Cause of  
them. The Matter of *Sweat* and *Urine* is the same, as *Galen*says. *Lib.* IO. *Simpl. Cap. de Sudor,* and in sound Persons is the  
Liquid they receive by the Mouth, only more elaborate, as  
- having passed through all the Ducts, from the internal Parts to  
the Skin. Hence it appears to he the thinner Part os the Ali-  
ment, which they call the serous Humour, or Ichor, but what  
has acquired somewhat of a bilious Substance; and by its Thin-  
ness is capable of being eliminated from the Body through the  
Pores of the Skin seas a thick Humour, by a like Reason, seems  
indisposed for the Generation of *Sweat.* Such, then, is the  
Matter of *Sweat,* in healthy Persons; and hence it follows,  
that they who eat and drink plentifully, sweat copioufly; aS do,  
also, plethoric Bodies, which have wide Pores, and such aS have  
a moist Liver and Spleen. Hence it is said, by *Hippocrates,* 4 .  
*Aph.* 4I. *that copious nocturnal* Sweats, *without manifest Cause,  
indicate the Body to be too plentifully fed; if this be not the Case,  
you may be assured that the Body requires Evacuation.* The  
Matter of *Sweat,* then, in healthy Persons, is either the thin-  
ner Part of the humid Aliment, as was said before ; or a re-  
- dundant Humour in the Body. In Valetudinarians, or sick  
Persons, it sometimes consists of Serosities generated from too  
humid an Aliment, as may be observed in those who have  
transgressed the Laws os Temperance; but most frequently  
from a Redundance of too thin Humours, as Blood, yellow  
Bile, and, also, from a cold pituitous Humour. Hence it is  
said by *Galen, Lib. 2. de Crisibus, Cap.* 3. that *Sweats* are pro-  
per to all Fevers, especially to burning Fevers; and that Semi-  
tertians, Quotidians, and Quartans, form their Crises by them;  
that they are a considerable Relief under excessive Heats, in-  
flammations, Parotides, Lethargies, and all other Cephalic  
Affections; and that all Humours, whether cold or hot, with a  
proper Degree of Thinness, may excite a *Sweat,* or discharge  
themselves in *Sweat,* but, most of all, putrid Humours find a  
Vent this way, as heing the thinnest, and most fluid. Some-  
times it happens, though only in malignant and dangerous Dis-  
orders, that the alimental Humidities of the solid Parts, which  
Physicians call the natural Humid, by which the natural Heat is  
maintained, being colliquated and discussed, pass through the  
Pores of the Skin in the Form of *Sweat.*

The efficient Cause of *Sweat* is Heat, either natural or pre-  
ternatural, existing in the Body; for it is Heat which attenu-  
ates the Humour, and conveys it to the Skin: For Bodies,  
when they are heated, fall into a *Sweat.* Hence it is that in  
continual Fevers, under that extraordinary Degree of Heat  
which succeeds a Rigor, there is usually an Eruption of *Sweat ':*For while the Body is under a Rigor, the Heat retires to the  
inward Parts; but afterwards, if it be strong enough, breaks  
forth, and, diffusing itself through the Body, extenuates the  
Humours; and, heing resolved almost into Vapours, conveys  
them, with itself, to the Skin, and there causes a *Sweat. Hip-  
pocrates,* in his Book Of *Prognostics,* says. *Some* Sweats *are  
occasioned by a Faintnefs or Feeblenefs of the Body; others by the  
Violence of an Inflammation.* From the first Cause is produced  
not simply a *Sweat,* but a small Desudation, or rather a kind  
of dewy Moisture, which the *Greeks* call ἐφίδρωσις *(siphidrosis ; .*see that Word) and the *Latins Desudatio, over* all the Body,  
**as we** are taught by *Galen* on the *Prorrhetica*; or only On **the**

Head and Thorax, and indicates the Imbecilliry os the retentive  
Faculty, or the Redundance of Humours in the sweatiho. Parts.  
Desudations (in the Sense before implied) are occasioned°hy chCViolence of an Inflammation oppressing or resolving Nature ;  
or because the thinner Part of the Humidities which are rarefied  
by the burning Heat, settles on the Skin : Wherefore *Svaeat is*generated by Heat, changing into Vapour the thin Humour  
which is the Sertnn or Ichor of the Blood, proceeding from the  
Humidities of the Meat and Drink, or rarefying rhe Blood,  
Bile, or Phlegm, and raising them into Vapours, in Fevers,  
which the *Greeks* call *Elodes,* and we *Sweating Favors, Sweat*is a proper Symptom; for in this Case the suppressed Humour is, -  
by the Violence os the Heat kindled in the inward Parts, re-  
solved into a continual Exhalation and *Sweat.* But Desuda-.  
tions, which are, according to *Galen,* small *Sweats,* or Moist-  
nefleS, of no Signification or Benefit, affecting the whole Body,  
or rather the .superior Parts, are to be ascribed to another  
Cause, as we observ'd, proceeding, as *Hippocrates* says, from a  
Faintness or Resolution of the Body, or the Violence of an  
Inflammation ; or, according to *Galen,* from a Resolution of  
the retentive faculty, occasioning a Desudation not only of the  
redundant excrementitious Humour, but os the alimentary  
Portion appropriated to the solid Parts. These Things premised,  
concerning the Nature and Causes of *Sweat,* we proceed to the  
Prognostics which may besormed from them.

*Of good and salutary* **SWEATS,** *prognosticating Raecvvery.*

It often fortunately happens, that Persons under acute Dis-  
eases are freed from them by a profuse and critical Eruption of  
*Sweat* ; and with good Reason, since, aS *Galen, in Lib. Art.  
Med.* observes, the whole Body is evacuated hy *smearing.  
Sweats* of this beneficial Sort are distinguished from the con-  
~trary, by the following Properties or Characters. .'

Fust, Thesis salutary *Sweatt* appear when theDisease is con-  
cocted, and are attended with Signs of Concoction ; as we are  
taught by *Galen, Lib.* I. *de Crisibus, Cap. y.* where he writes,  
that *Sweats* effecting a happy Crisis, happen not in the Begin-  
ning, but in the Increase, or at the Height of a Disease, when  
Nature has either made a perfect Concoction, or has done Part  
os her Work, and proceeds in the rest with Vigour and Sue-,  
cess. This, then, is one considerable' Character of a good  
*Sweat,* without which *Sweats* are so far from being serviceable,  
that they portend a long Disease, much Pain and Anxiety,  
Relapses, and- either no Crisis at all, or a fatal one; according  
to the Observations of *Hippocrates,* i *Epid. Sect.* 2. *Sweats,*then, appearing aster Concoction, are Signs of a speedy Crisis,  
and safe Recovery ; but in a crude and unconcocted State, they  
signify either that the Disease will be converted into an Abscess  
. of a bad Kind; or that the Crisis will be frustrated; or that the

Disease will be.very painful and lingering, or mortal; or else it  
foreshews a Relapse. A necessary Mark, then. Of a salutary  
*Sweat* is, that it appear after Signs of Concoction.

Secondly, A good *Sweat* must make its Eruption on some  
critical Day. On this Subject we find *Hippocrates, er Aph.* 36.  
thus pronouncing: *Good Sweats in Persuns labouring under a  
Fevcr,* he says, *are those which appear on the third, fifth, se-  
venth, ninth, eleventh, fourteenth, seventeenth, twenty-first,  
truentyfeventh, and thirty-fourth Days ', for these Sweats are cri-  
tical : But those which break out at other times, signify that the  
Disease will be painful and tedious, and the Patient subject* to  
*Relapses. Galen,* in his Comment on this Place, says, that the  
fourth Day was either omitted by *Hippocrates* because there are  
several Diseases, of Avery acute Nature, which have their Fits  
or Paroxysms on odd Days, and their Crises at the same time  
with their Fits; or that the fourth Day was omitted by the  
Negligence of some Transcriber : But, for ourPart, we have  
oftenadmired the divine *Hippocrates* on this Head, since we have  
rarely observed *Sweats* Of a Very good Kind appearing on the  
fourth Day.

A third Character of a good *Sweat* is, its succeeding some  
critical Rigor: For when Nature has succeeded in her Efforts  
to expel the thin andsharp Humours out of the Veins into the  
superficial Parts, it occasions a Vehement Rigor from a Disper-  
sion os the same Humours Over the sensible Parts, arid Vellica-  
ting: them, as we are taught by *Galen, Lib. de Rigor. Convulse  
et Palpit.* together with a Refrigeration of the extreme Parts ;  
the Consequence of which Vinlent Rigor and Coldness, when  
Nature is strong and Vigorous, is, the exciting an acute and  
high Fever, by the breaking forth of the Heat, which, also,  
attenuates and rarefies those Humours, and resolves them into a  
copious *Sweat.* AS an Instance to this Purpose, *Hippocrates,*I *Epid. Sect.* 2. *AEgrr.* 6. observes a very gond Kind os fin,\*\*  
succeeding a Rigor in the Case of *Cleonactides. Hi was seixed,*he says, *with a P.ig°r, had a high Fever, and fell into a copious  
Sweat* the Consequence of which was, g perfect and salutary  
Crisis. This is further confirmed in the ease os rhe fiat  
.Woman in the *Strand, ibide AEgr.* I 3. of whom he says. *On*

*tie eleventh Day see had a new Fit of a Rigor, succeeded by a  
high Fever , on the fourteenth sue fell into a Suseat, which  
proved critical, and removed the Fevcr.* Another Instance we  
have in *Charion,* 3 *Epid. Sect.* 2. *Asgr.* 5. who *on the seven-  
teenth Day had a new Fit of a Pdgor , had a high Fevcr ; fell  
into a Sweat; underwent a ^Crisis; and nuas freed from his  
Fevcr.* It is on this Account that we are told by *Hippocrates,  
A Aph.* 58. *that in Rigor coming upon a burning Fever causes a  
Solution of the Disorder* ; because, *lens "Galen,* such Rigors are  
succeeded by *Sweats,* or some other good Evacuations. A  
*Sweat,* then, following a *Rigor,* is a Very'good Sign ; and there-  
fore *Galen, Lib. i,, de Crisibus, Cap. frlens,* that those who are  
seized with a Rigor sweat Very well; and *Com.* I. *in Prorrhet.  
that Sweats succeeding a Rigor are good, is. they appear with  
Signs os. Concoction.* And, as a further Confirmation, it is ob-  
served by *Hippocrates,* I *Epid. Sect AL. Stat.* 3. that *the greatest  
Part of thoje Who lay sick (at that Season), wore seized with a  
Rigor about the Time of the Crisis, and especially those who had  
'not been affected with an Haemorrhagesirtsm she Naso., thofe lattes.  
had, besides, a Return of the Rigor with a Sweat.*

A fourth Qualification of a good *Sweat* is, that it be co-  
pious, hot, and break forth from all Parts of the Body\*: These  
are Marks which shew the Firmness and Strength of the Fa-  
tuity, in equally diffusing the Heat oyer all Parts of the Body,  
and resolving the superfluous Humours with equal Efficacy on  
every Side into a *Sweat,* which it were impossible for it to effect  
if it were either Very weak, or were contending with a mali-  
gnant Disease; in which Cases the evacuations of that Kind  
would he unequal, in some Parts much in Quantity, in others  
‘ little, or, perhaps, nothing. The best Kinds of *Sweats,* then,  
you see, are hot, copious, and universal; whereas those which  
appear only on the Head or Thorax, or on all Parts of the  
Body, but little in Quantity, or cold, are esteemed Very bad  
and pernicious; aS we shall shew hereafter. The Truth of this  
Observation is consumed by *Hippocrates,* in many Instances in  
the *Epidemics*; particularly, 3 *Epid. Sect.* 3. *ea.gr.* 6. in the  
Case of *Pericles, Qs* whom he writes, " that on the fourth Day;  
" about Noon, a hot and copious Sweat broke forth over all his  
" Body, he had a Crisis, and .was freed from his Fever without  
" any Relapse." And *ibid. AEgir.* IO. in *Nicodemus,* " who  
" on the four-and-twentieth Day sell into a profuse and hot  
" Sweat, which was universal, and proved critical, in the Re-  
‘" inoval of the Fever.'' And of the morose Woman, *ibid.  
TEgr.* II» we read, " that on the third Day, towards Night,  
" there was a plentiful Effusion of hot Sweat throughout all  
" Parts of the Body; she was freed from the Fever, and fell  
" afleep,” Once more it is related of the Virgin of *Larissa,  
ibid. AEgr.* 12. " that after a Horror she fell into a hot and  
plentiful Sweat over all her Body, underwent a Crisis, and  
" was freed from her Fever.''

Fifthly, It is an additional Mark of a Very good *Sweat,* that  
it he not only universal, copious, and hot, but discharges itself in  
.Drops and Vapours. *Lib. Prognosis.*

. Lastly, A singular Mark and Character of the best and most  
salutary *Sweat,* given by *Hippocrates,* in the Book just quoted,  
is, that it effects an entire Solution os the Fever, or wholly frees  
the Patient from it. For this Reason, he always, in his *Epi-  
demics,* gives it as a distinguishing Characteristic of a critical and  
most beneficial *Sweat,* that the Patient is, by means thereof,  
ἀπυρος, " free from a Feveror ἄπυρος ἐκριθη, " that he had  
" a Crisis with the Removal of his Fever;'' or ΐδρωσεν ἄπυρος,  
" his Fever went off with *zfiweatP* Those *Sweats,* also,  
According to *Hippocrates, Prognost.* justly deserve the Name of  
salutary, which, by their free and plentiful effusion in all Parts  
Of the Body, though they do not entirely remove the Fever,  
are, yet, the Cause that the Patient can more easily support him-  
self under it; fince they alleviate the Disease, and diminish the  
Symptoms. But these *Sweats* differ from those of the best Kind,  
in not effecting a perfect Crisis, though they are Prognostics of  
Recovery at a longer Distance of time. *Sweats* of this Kind  
were often observed by *Hippocrates,* particularly of him who lay  
ill in the Garden of *Dealces,* 3 *Epid. Sect.* **i.** *AEigr.* 3. in whole  
Case it is related, " that On the seventeenth Day his.extreme  
" Parts were Cold ; they covered him with Clothes; he had a  
" high Fever ; sweated over all his Body ; sound some Relief,  
" and had the freor Use of his Reason; but the Fever did riot  
" leave him, and he had a Thirst. On the twentieth Day he  
" slept; had the perfect Use of his Reason; had an Eruption  
U of Sweat; was without a Fever, or Thirst;'' which, how-  
**ever,** return'd upon him . and it was the fortieth Day, when,  
aster frequent Evacuations of white pituitous Matters by Stool,  
the fell into a profuse and universal *Sweat,* and had a perfect  
.Crisis.

Thus we have given you the Marks or Characters of the best  
Kinds of *Sweat,* and fuch aS are critical, which yon will find  
comprehended by *Hippocrates,* in his Book of *Prognostics,* in the  
following Words: " In all acute Diseases the best *Sweats ttte*

Ci such as happen on a critical Day, and entirely remove the  
" Fever. They are good, also, which arise over all the Body,  
" and render the Disease more tolerable to the Patient; bet  
" those which produce no such Effect, are of no Service’'  
And good *Sweats* are not only known bv these Marks in them-  
selves, but by the Attendance os other good Signs, as a good  
Haemorrhage, or some other salutary Evacuation ; and, also, as  
we said, by the Patient's finding himself in some measure re-  
lieved by them. *Sweats* of this happy Influence were observed  
*by Hiflpocrates* in many Instances, particularly *Cleonactides,  
Maton,* the sick Woman who lived in the Strand, and *Melidic,*recorded in the first of the *Epidemics* ; and in the Patient who  
lay ill in the Garden of *Dealces ; Charion, Pericles,* the Virgin  
os *Abdera, Anaxion, Nicodemus,* the morose Woman, and the  
Virgin of *Larissa* ; whose Cases you find related in 3 *Epid.*with many others: In whose Histories the intelligent Reader  
may find the forementioned Signs, and Matter to exercise his  
Judgment in forming such salutary Prognostics as will not sail  
to justify themselves by the Event.

*Of bad and pcrnicious* **SwEATs,** *Which' portend a fatal  
Event.*

*Hippocrates,* in his Book Of *Prognostics,* speaking of bad  
*Sweats,* makes Degrees of them ; and telis us, that sucn *Sweats*are in a great measure bad, as neither remove the Fever, nor  
render it more tolerable to the Patient ; that is, afford him not  
the least Relies, though proceeding from all Parts os the Body..  
A worse Sort than those are such aS neither proceed from the  
whole Body, nor alleviate the Disease: Still more pernicious  
are *Sweats* which exasperate the Disease; but the worst, and  
most pernicious Os all are cold *Sweats,* and such aS arise only  
about the Head, Face, and Neck; sor such *Sweats,* he fays,  
in a high Fever, portend Death; in one os a milder Nature  
the long Continhance of the Disease. But we shall consider all  
the bad Kinds of *Sweat* distinctly, under some general Heads,  
- for the sake of Accuracy, and that we may he the better enabled  
to form just Prognostics from them.

First, then, we shall take into Consideration such bad Kinds  
of *Sweat* as appear in a crude State of the Disease, and un-.  
attended with the least Signs of Concoction. Secondly, We  
shall treat of bad *Sweats* with regard to their Quantity; or aS  
they are more or less copious. Thirdly, We shall consider them  
with respect to Heat and Coldness. Fourthly, with regard to  
the Parts of the Body whence they proceed. Fifthly, aS they  
injure, or at least no way relieve the Sick. And, lastly, aS they  
appear attended with other bad Signs.

In examining the first general Head, that we may have a  
clearer Notion of what it contains, we shall distinguish *Sweat*into periodical, critical, and symptomatical. We call that a  
periodical 5itinat,which attends the Periods or Returns of inter-  
mittent Fevers ; aS Tertians, or Quartans. Such was the *Sweat*observed by *Hippocrates,* 7 *Epid. T.* 4. in the Case of *Ppthda  
dorus.* A critical *Sweat,* of which we have spoken before, is  
fuch aS appears, in continual Fevers, on some critical Day ; and  
either entirely removes the Fever, or diminishes it, and relieves  
the Patient: And the Effect of this *Sweat* we call a Crisis,.  
either perfect or imperfect. The Characters of a critical *Sweat,*we have told you, are, its Appearance with manifest Signs os  
Concoction, on a critical Day, when Nature is strong and Vi-  
gorous ; that it is hot, copious, and universal, yet not dimi-  
nishing the Strength; and removes, or much diminishes the  
Fever, with its Symptoms. To a critical *Sweat* is opposed a  
symptomatical one, which happens in manner os a Symptom,  
and is never of any Benefit, but generally attended with de-  
structive Signs ; and portends Death, or, at least, a longConti-  
nuance to the Disease, with many Relapses, and much Pain  
and Trouble. On all such *Sweats* we bestow the Appellation of  
symptomatical, as we do, also, on all other Excretions which  
happen when the Disease is crude, or when no Signs os Con-  
cession appear. Wherefore all had *Sweats* appear in a crude  
State of the Disease, when there is no manifest Sign os Con-  
coction.' For which Reason *Hippocrates,* 2 *Epid,* near the  
Beginning,' makes the *Sweats* which appeared at the Beginning  
of an epidemic Fever, there descrihed, to be Prognostics of a  
difficult and dangerous Crisis : And these Kinds of *Sweats* are  
the worse, if they appear only on the Head, Neck, Throat, or  
Thorax; and is they are cold, scanty, or cease immediately ; or  
if they are copious, continued, or immoderate, they are worst of  
all. Secondly, we are to speak os bad *Sweats,* with respect to  
Quantity, as they are copinus, or scanty, or none at all. *Sweat*is said to be much, and copious, when it breaks forth in a thick  
and profuse manner; when it is assiduous and continual; and  
when it is both assiduous and copious. .Copious *Sweats,* accord-  
ing to *Galen, Lib.* 3. *de Sympt. Cause* are occasioned either by  
the Rareness of the Body, or the Thinness os the Matter eva-  
cuated. *Sweat* which flows for either of these Reasons, comes  
not forth in a pressing and profuse manner, but assiduouflv and

constar.tiy. Much Sweating, therefore, in Fevers-, If occa-  
tinned neither by the Thinness of the Matter, nor the Rare-  
ness os the Pores, (which sort of Sweat, according to *Galen,  
in erAph.* 4I. is never copious) always indicates a Redundance  
of Humours, aS we are told by the same Author, in 4 *Aph.*42. And hence, *Hippocrates,* in the first-mentioned *Aphorism.*says, that " Much Sweating from Sleep, without any manifest  
‘o Cause, indicates too plentiful Feeding; but if it happens,  
" though the Patient takes no Food, it shews that the .Body  
" wants Evacuation." Much Sweat, says *Galen,* signifies  
Plenty os Excrements : These Sweats, therefore, appearing in  
Fevers, and affecting nothing towards a Crisis, are constantly  
pernicious, sor this very Reason, chat they indicate a Redun-  
dance of Humours, which requires a long Time for Nature to  
digest and subdue ; whence in acute Diseases, which extinguish  
Nature in a short time, they often portend Death. Hence  
*Hippocrates,* 4 *Aph.* 42. says, that " A constant Flux of much  
" Sweat, is cold, indicates a severe Disease; is het, a milder  
Because, as *Galen* says in his Commentary, \_ both of them are  
Signs os a Multitude of Humours, the cold Flux os cold Hu-  
mours, which are the worst; and the hot of hot Humours,  
which are less dangerous than the other. These Sweats neither  
remove nor alleviate the Fever, and break forth when the Dis-  
ease is crude; and therefore are, at best. Prognostics of a long  
Disease, subject to Relapses, and attended with much Pain and  
*Ί* rouble, she Author os I *Prorrhet.* 58. calls those Sweats  
unserviceable in acute Fevers ; and *Hippocrates,* I *Epid. Sect,  
i.* speaking of an epidemic continual Fever, says, that the Pa-  
tients sweated much; but were so sar from being relieved, that  
they were rather injured by it.

Sweats not copious, but yet constant of perpetual, are,  
also, bad, and, for the most part, mortal ; since they are oc-  
casioned, as *Galen* says, *Lih.* 3. *de Sympt. Cause Cap. 2.* and  
*Com. in Aph .At.* either by the Rareness of the Pores, or  
Imbecillity from a Resolution of the Habit of the Body, as  
the Case is in a Svncope : These Sweats then, are all pernicious,  
as indicating a Languor of Nature ;. but the worst are those  
symptomatical Sweats which are copious aS well aS constant,  
since they indicate an extreme Weakness, as well as an extra-  
’ordinary Redundance of Humours, in which Circumstance  
Death is unavoidable, as is confinmed from the Instances of  
*.Erasinus,* I *Epid. Sect.* 3. *AEgr.* 8. and the phrenitic Patient,  
.3. *Epid. Sect.* 3. *AEgr. An* of the first of whom it is said, that  
*He had a Feuer with perpetual Sweating :* And of the other,  
that *Ho vomited much thin, virulent, and aruginous Matter;  
had a Fevcr, attended with an Horror, And a copious and con-  
tinual Sweat aver all his Body.* Some read this Place not ac-  
cording to *Galen,* as above, but from other Copies, thus. Ha  
*had a copious and continual Sweat, which affected his Hoad and  
Neck during the whole Day.* And it is usual with Persons un-  
der a Lipothymy to sweat in their Head and Neck. But this  
is no Reason that we should not, with *Galen,* read δ’ *alum die*-σώματος, *over all the Body*; since every Physician knows, that  
persons under a Phrensy, before their Death, fall into a Sweat,  
from an universal Resolution of the Parts: Hence we con-  
elude, that copious Sweats, in acute Diseases, not heing criti-  
cal, are not only of no Benefit, but, for. the most part, fatal,  
and, when attended with a Languor, or total Decay of Strength,  
are most certain Signs of approaching Death ; and that con-  
stant Sweats, whether copious or not copious, are alike perni-  
cious in acute Diseases. ' '.

' Sweat, little in Quantity, is usually of the same pernicious  
Signification as when much. *Galen, Lib.* 3. *de Symptom. Cause  
Cap.* 2. writes, that small Sweats are occasioned by the fmali  
Quantity, or gross and glutinous Quality, of the superfluous  
Humours, or the Straitness of the Pores, which are rendered  
narrower, either by Contraction or Obstruction. The cuta-  
neons Passages are obstructed by thick and glutinous Juices,  
and closed up, or contracted from an Atrophy, Refrigeration,  
or Softness: These little Sweats, if they break forth on a cri-  
tical Day, are an undoubted Indication, that Nature makes  
fruitless efforts to expel the Humours; and that its Attempts  
are frustrated by their Thickness or Viscidity, or the Narrow-  
ness of the Passages. But where there is no Constriction Of  
the Passages (as may be known, because the Skin is neither con-  
tracted by an Atrophy, nor much refrigerated, nor remarkably  
soft) and there are Signs of a Redundance os Humours, little  
Sweats indicate Plenty of gross and Viscid Humours; and if  
the Strength, at the same time, he Very much exhausted, are  
mortal; and so much the more, if they appear without Signs  
of Concoction; in which Case, all Excretions are symptoma-  
tical, and indicate a Redundance of Humours. ' Sweats of this  
Kind shew, that Nature had begun Io expel the Humours  
through the Skin,, and could eliminate no more than the thin-  
nest Portion of them, which must prove insufficient for a Solu-  
tion os rhe Difeafe. Under this Head may he reduced Sweats  
which cease immediately after their Eruption, and are con-

demned by *Galen,. Com. 1. bit Prorrhet.* Sweat, therefore,  
little in Quantity, is always bad.

But the worst and most fetal of all Sweats, is that thirj foanty  
fort of Sweat which the *Greeks* call *Ephidrosts,* and the *Tyurina  
Desudatio,* or *Mador, “* A Destination, or Moismess.'\* This  
Kind of Sweat appears sometimes on all Parts of the Body,  
but generally about the Head, Neck, Throat, Breast, and  
sometimes about the Extremities. Of this Subject we find  
*Galen* discoursing, in his Comment on the *Prorrheticel,* where  
he says, " We meet with the Word *Ephidrosts* several times  
" in this Book; but we are. not certain whether the **Author**" means by it, these Sweats which appear about the Head and  
" Thorax, or those which break forth from all Parts of **the**" Body, but in a weak and faint manner, and of no Benefit  
" to the Patient." Both of these indeed are bad ; but the  
worst of them is what appears only on the uppar Parts : For  
since all *Desudatum* demonstrates either a Plenitude in the ,  
sweating Parts, or an Imbecillity of the retentive Faculty, if  
either os these affects the Parts about the Head and Thorax, it  
is a worse Sign, than is it were in any other Region. Os the  
Judgment that is to be made of Sweats indicating a Redun-  
dance of Humours, we have said enough already; but we may  
conclude the other Sort to be, also, pernicious, since they pro-  
ceed from an extreme Decay Of Nature, which is too weak Io”  
retain the alimentary Humid os the solid Parts, dispersed by  
Oppression or Resolution. These *Desudaiions* are. distinguished  
from those occasioned by a Multitude of Humours, in chat they  
generally break forth about the Forehead, Neck, Breast, or  
extreme Parts, with a flight Moistness, not increasing, seldom  
hot, but generally coldish, with a Very low Pulse, and other  
Signs indicating Nature to be in a Very languid State. Of thia  
Nature are the Sweats, which owe their Rife to immoderate  
Evacuations, concerning which we read, I *Prorrhet.* 126. *A  
flight Sweat with a Refrigcration, after an Haemorrhage from  
the Nose, is bad. '*

But is it not a bad Sign in some acute Disorders not to sweat  
at all? Yes, certainly, in all those which, as *Galen, Lib.* 3s  
*de Crisibus,* has taught us, are critically terminated by Sweats :  
Such are all continual, and especially burning Fevers, which  
form their Crises by Sweat, or some other laudable Evacuation ;  
whence the Fever is either entirely removed, or much dimi-  
nished, with its Symptoms, and the Case of the Patient altered  
much for the hetter. Without such an Evacuation we are not.  
to trust to any Remission of the Disease, as *Galen,* in 3 *Epid.*advises, agreeably to that of *Hippocrates,* 2 *Aph. o.y. sefae are  
not to place our Dependence on Things which give Relies, after  
an unaccountable manner sc* The Necessity of such Caution in  
exemplified in the Instances of *Hermocrates, To Fpid. Sect. l.  
AEgr.* 2. and the Virgin Daughter of *Euryanactes, ibid. Sect. 2.  
Algr.* 6. Of the first it is said. *On the fourteenth Day he 'was free  
from a Fevcr, did not smeat, siept, and was in his perfect Seasiest  
His Urine was the fame. About the seventeenth Day, the Disc  
ease returned, the Patient was very hot, and on the following ‘  
Days he had an high Fevcr, his Urine was. thin, and he was  
delirious. On the twentieth Day he hade another Crisis, and was  
freefram a Fevcr, but fweated not.* Such deceitful Remissions  
of Diseases without Sweat, or any other laudable Evacuations  
are distinguished from such aS may be trusted by the subsequent  
Signs, which, in the latter, are Very good, in the former bad si  
as appears in *Horrnocrates,* froth what followed after the Crisis?  
*On the twentieth Day he had another Crists, was free from A  
Fevcr, suveated not: Hi had all the Tome hitherto an Aversion .  
to Food, had the Use os. his Reason, but not of his Speech , his  
Tongue was'diced up, but without Thirst \*, and his Sleep ideas carl  
rnatous. On the twenty-seventh he died.* And thus you sensi  
that *not to fweat at all,* in burning Fevers, is sometimes **a**Prognostic os a fetal Event. s'

' We proceed to take into Consideration chose Sweats which  
are *cold,* fince they are often Observed to he mortal in acute  
Distempers; but, first, we are to have a thorough Insight into  
the Generation and Causes of them, which will very much  
illustrate the Reasonableness of grounding Predictions upon them.'

First, then. Cold Sweats, as they consist of a cold and crude  
Matter, demonstrate, in continual Fevers, a Redundance os  
Crude Humours, as *Galen* shews. *Com. in t,Aph.* 42. eipecially  
when there is a copious Eruption of them. These Sweats,  
according to *Galen’s* Opinion, *Com. in* 4 *Aph. ysp. are generated  
when the Humours putres.y in the Vessels ; ana. Nature, which  
moderates and rules the solid Parts, and is, according th* Hippo.,  
crates, *the natural Hint, is either nuholly or nearly exiinguisuedo  
the Mattcrs evacuated are indeed cold to the Sense, though the  
Hoat, proceeding from the Putrefaction, may, for all that, he  
vcry violent', for which Reason it is a very destructive Sign, as  
it spews, that the excessive quantity of Humours ea the animal  
Body is endued nuith Jo great a Coldnes.s, as nOt fst be heated by  
either the natural or febrile Hint.* Cold Sweats, them, indicate  
a Redundance of very cold Humours, by which Nature is either

totally, or xtery nearly, extinguished. But when there happens  
to be kindled in the Vessels a most violent Heat, from the Pu-  
♦refaction os the Humou.-s, and rhe natural Heat retires to **the**inward Parts, there is a Refrigeration'os the Extremities, with  
n.very cold Humour, without considering their acting one upon  
another; but when there comes to be a mutual Acting and  
Resistance os the Humours, it is necessary, either that the cold  
Sweat should he heated, or the Heat soon extinguished by it.  
Agreeable to this is the Observation of *Galen,,* in *Lib. An Aph.  
in Diseases not acute, but of a milder Nature, if the natural  
Heal, after maintaining itself a long Tome, prevails not at last,  
it is ertinguisued, which happens much sooner in a Violent Disc*

*. order from a speedy Resolution of the Strength.* Justly, there-  
fore, is it said by *Hippocrates,* 4 *Aph. Tso.* that *Cola Sweats,  
iyt an acute Fever, prognosticate Death ; in a milder one, the  
long Continuance esc the Disease: Since, as Galen,* in his Com-  
ment, says, *if the Fevcr be os. a gentler Kind, the Patient may  
recover, the Redundance of the Humours being concocted, and  
subduea by Length of Time. But an acute Fevcr is both a Cause,  
And a very pcrnicious Sign : A. a Cause, it naturally effects a  
Resolution of Bodies; and as a Sign, it shews the Multitude of  
Humours, which are toa intensely cold to be altered by thefebrile  
Heat.*

But perhaps you will aik. How it is possible for these Hu-  
mours, which are cold, and, consequently, unfit for Motion,  
and much more under an extreme Weakness, and almost Ex-  
tinction of Nature, to he conveyed to the Skin ?

I answer, That the Humour being in some measure heated  
by the febrile Heat, though naturally unfit for Motion, is con-  
veyed to the Skin, where the adventitious Heat it had received  
being resolved, it begins Io cool again, and so turns out cold.

*Cold Sweats,* then, in acute Diseases, are always os fetal  
Signification, whether much or little in Quantity, howsoever  
they come forth; or whether they proceed from the whole -  
Body; or from the Head, Neck, and Breast; or from'the Ex-  
tremities. Instances of this were observed by *Hippocrates,* in  
the first and third Books os the *Epidemics, in Philiscus,* **the**Wise of *Dromeades,* the Woman who lay ill *in Foro Menda-  
cium,* and *Philistion,* who all died with cold Sweats upon them.  
And the most destructive os this kind is a petty thin cold Sweat,  
which domes out about the Head, or extreme Parts, as **the**Hands and Feet, because they indicate a near Extinction of **the**. Faculty. Justly, therefore, was it.said by *Hippocrates, Lib.  
Prognost.* that *Cold Sweats are worst,‘and, in acute Diseases,,  
indicate Death', in milder ones, a long Continuance of the Disc  
order.* Cold Sweats, then, are bad in all Cases; agreeably to  
the Observations of *Hippocrates si* 3 *Epid. Sect. 2. Stati Pest.*wheresiarnong other Symptoms peculiar to the reigning Fevers  
Of thss Season, were *Cola unseasonable Sweats, which came  
forth in a plentiful manner, and held the Patient, continually.*ThedestructiVe Tendency of these Sweats is confirmed' by'  
other concomitant Signa; which, taken all together, and. **espe-**cially i such as are subsequent, are necessarily pernicious, *l Of*this kind were those observed by *Hippocrates,* in *Philiscus,* and  
the others just mentioned. Of *Philiscus,* I *Epid. Sect.* 3.  
*AEssr.ii*It is said, " At'the Close of the.fifth Day he grew  
" speechless, sell into a cold Sweat, 'and his extreme Parts were  
" livid : On the sixth Day about Noon he died."’. It , is far-  
ther .remarked of this Patient, that " He was continually finder

a cold Sweat?\* The Wife*AA Dromeades, ibid. AEgr.* II.  
" On the sixth Day in the Morning had a new Fit of a Rigor,  
" succeeded by a speedy Return of the Heat',’ and a Swear all  
" over her Body ; her extreme Parts were cold; she was de-  
"Jirious; her Respiration was great and rare [ἀραιόν. See  
A’ ARAEON], and soon after she died in Convulsions, 'which  
" hegan at the Head.''\* And of the Woman who lay ill *in  
Fora Mendacium, 2 Epid. Sect. T. Ac.gr. 12.* **we** read,, that  
. 0n the seventh Day she was seined with a Return of'a Rd-  
" got, succeeded hy an high Fever, with an intense Thirst,  
" and Jactations [Βληστρίσμός.' SeeBLEsTRIsMUSJ: Towards  
" Evening she fell in than universal cold Sweat,, and her ex-  
or trerne Parts were cold.''' Front'these Instances,'and what  
has been said, it abundantly appears, that cold Sweats' in'acute  
Diseases are destructive, and constantly portend Death ; which  
may be predicted with the greater Certainty,.if thosse Sweats  
make their Eruption on some critical Day, and are. succeeded  
hy some pernicious and mortal Sign- si si' su

- Let; this suffice concerning destructive cold Sweats ; and  
**lessus** now proceed to consider Sweats, wish respect to  
**the** Partiality, and the Parts of the Body whence .they break  
forth." For Sweats,’ as we have said, are Very good and salu-  
tary, .when they make their Eruption froin.ail Parts.of **the**Eodys because they demonstrate Nature To be robust, find unr  
**der.** no inward Impediment, from a malignant Disord er; , hr-any  
morbific Cause, which might frustrate her Efforts in shaking  
-Excretions of the Humours from all Parts. But, on the.con-  
trary,. .when any one of the internal Viscera is seized with **a**

violent Inflammation, or oppressed with a Multitude os Hu-  
mours, there arises a partial and unequal Sweat. Such Sweats,  
therefore, as make their Eruption not from the whole Body,  
but from the Head or Thorax, are, according to *Hippocrates,  
Prognosi,* of the worst Kind ; and, whether they he het or  
cold. In acute Diseases portend Death; in milder Disorders, a  
long Continuance, Relapses, and much Pain and Sickness.  
*Hippocrates,* I *Epid. Sect.* I. *Stat.* I. speaking of epidemic,  
and Very mortal kind of Fevers, fays, that the Patients « were  
“ Under a perpetual Sweat, but not in all Parts of the Body.’'  
And a little after, enumerating the Symptoms by which burn-  
ing Fevers were known to be mortal, even at the Beginning,  
says, that " The Patients sweated a little about the Forehead  
" and Clavicles ; but not one of them in all Parts os the Bo-  
" dy." Hence the Author of I *Prorrhet.* 3o. had Reason to  
say, that " Sweats, and especially about **the** Hhed, with a kind  
" of Uneasiness [ὑπεροδὑσφοροι ], in acute Diseases, are a bad  
" Sign.'' All Sweats, therefore, which proceed not from **the**whole Body, are bad, as being Prognostics os Death, or A  
long Sickness. Justly, therefore, has *Hippocrates* said. *Lib.  
Prognosi,* that " The worst Kind of Sweats are those which  
" are cold; and especially when they happen only about the  
" Head, Neck, and Face: For such Sweats, in acute Fevers,  
" portend Death ; in less violent Distempers, their long Con-  
“ tinuance.” And Very right is **the** Judgment which *Galen*on the *Prorrhetica,* pastes on them, when he says, « Every  
*" Descalation,* that is. Sweat breaking forth about the Fore- .  
" head, the fore or hinder Part of the Neck, or Clavicles,  
" indicates an Imhecillity os the retentive Faculty, or a Re-  
" dundance of Humours.'' And, in another Passage of **the**fame Comment, he tells us, that " Such Sweats are not good,  
" both because they arise on the superior .Parts, and, also, sor  
**"a** double Reason, which is, that they proceed from a Lan-  
" guor os the Faculty, or an Oppression os the same in ita  
" Original.'' Sweats arising in the Head and upper Parts, are  
very bad, particularly in a Suppuration and Phthisis, os which  
**the** Author of the *Coac.* 4o2. says, " They who are affected  
" with a Suppuration, especially from a Pleurisy or Peripneu-  
" mony, have their Disorder attended with Heats, which are  
6i but flight in the Day, but more intense nt Night; they, also,  
" spit forth something not worth Notice, sweat about the  
" Neck and Clavicles, have hollow Eyes, and red Cheeks."  
With good Reason, therefore, are such Sweats esteemed mortal  
in an acute Fever, as indicating an Extinction of the Faculty,  
before it can accomplish the Concoction of the Humours; and  
when they are occasioned through an imhecillity of the reten-  
tive Faculty, being unable to retain the Humour, or even the  
alimentary Juice proper to the Solids, portend, in a Fever, not  
only unavoidable but speedy Death, and with the greater De-  
gree of Certainty, if they are, also, cold; of which Nature  
were those observed in *Pylhion,* and the Woman *in Foro Men.,  
daesum,* 3 *Epid,* before-mentioned ; and in *Meton, Aristocrates,  
and Pherecydes,* 7 *Epid. T.* 47 . 57. qi. and in many others,  
who all died. But is **the** Disease **be** more favourable, and **the**Strength extraordinary, such Sweats indicate not Death, but  
**the** long Continuance of the Distemper ; as it was in the Cafe  
of the Patient who lay ill in the Garden'of *Dealces, ‘lEpid.  
Sect . 2 . AEgri* 3. of whom *Hippocrates* says, that ‘sQn the .  
" fourth Day there flowed from his Lest Nostril a small .  
" Quantity os pure Blood ; he haff a Sweat about the Head  
" and Clavicles, a Tumor of the Spleen,, and a Pain in **the**" Thigh on the same Side/\* '

Sweats are, alfo, known to he bad, from their heing unat-  
tended withiny other Evacuation; and inore from the Injury  
the Patients experience from them. For when a Sweat is found  
' to he' so sar from heing beneficial that it proves os ill Conse-  
quence to the Sick, it is to he esteemed one of those pseudo-  
critical Signs which"'determine nothing, and, consequently,  
according to *Galen, Com. in Prorrhet.* are mortal. *Hippocrates,*in his Book of *Prognostics,* pronounces such Sweats as neither  
remove the Fever, nor render the Disease more tolerable to  
the Patient, to be useless and bad, and Prognostics either of  
Death, or a long Sickness. And the Author of the *Prorrhet.*38. fays, that " Much Sweating, in acute or high Fevers, is  
" of no Service to the Patient," as nor removing the Fever.  
And,' ιἤιευ 7.. Burning Heats in the Hypochondrium, re-  
" maining after, a Refrigeration of the Fever, are a bad Sign ;  
" and especially when attended with SweatsBecause, as  
*Galen* fays,’ in his Comment, they extend not over the whole -  
Body.,, but are small and inconsiderable, and incapable ofextin-  
guishing the flammeoiss Heat in the Hypochondrium. Again,  
I *Prorrhet.* 68. it is said, that " They who. lie waking in -a  
" Sweat,'and have a Return of the Peyer [ἀναθερμασίνμὲνιοι],.  
" are in a bad State." .And, *ibid.* 6/. A fiery red Face,  
" and Sweatings, in a horning Rigor, are bad ;’\* because, is the .  
Sweat were good, the Heat *of* the Face would be resolved by  
is, which the Sweat not doing, indicates, a Malignity’. To

**the** same Purpose, but more express, IS 4*'Aph.* 56. " Is a Per-  
" son under a Fever sail into a Sweat, and finds no Remission  
" os his Fever from the same, it is a bad Sign s for the Disease  
" is prolonged, and a Redundance of Humidities is indicated.''  
Such Sweats, in an acute Fever, portend Death; in a more  
gentie one, a long Continuance. λ

Among bad Sweats are, also, to be reckoned, all those which  
precede, accompany, or follow, other pernicious Signs. From  
sirch Sweats as these we may prognosticate a fatal End ; smce,  
if succeeded by bad Signs, they prove themselves of the Num-  
ber of those critical undetermining Signs, by which the Patient  
is so far from being relieved, that.he finds himself worse ;, and,  
consequently, are to be esteemed mortal. Of pernicious Signs  
succeeding bad Sweats we find *Hippocrates* speaking, I *Epid.  
Sect.* I. where he says of some Patients under an epidemic Fe-  
ver, that " They had continual Sweats, but not diffused oyer  
" the whole Body, and their extreme Parts were refrigerated,  
" so as to become almost incapable of recovering Heat." And  
the Author os the I *Prorrhetica* I 26. says, that " An Haemor-  
" rhage from the Nose, with thin cold Sweats, and a general  
" Refrigeration, indicate Malignity, and are bad for the Pa-  
" tient." And, *Hid.* IO2. " They who in the Beginning (of  
" acute Diseases) are affected with cold Sweats, make con-  
" cocted Urine, and are in a burning Heat, then unaccount-  
" ably [ἀκρέτωςί refrigerated, till a sudden Return of the hot  
" Fit, and moreover labour under n Torpor, Coma, and Con-  
iC Vulsions, are in a Very dangerous Stare." Once more, *Coac.*40. " Refrigerations, with thin .cold Sweats, succeeding a  
" Rigor [sor ῥινῶν I read, with *ProfpcrAlpinus,* ῥιγέων], are  
" bad." Of this Nature were the Sweats observed by *Hippo-  
crates,* in the Wife of *Dromeades, lEepide* theVirgin Daughter  
of *Euryanactes,* and the young Woman who lay ill *in Foro  
Mendacium,* 3 *Epid,* and in the Wife os *Theodorus, Aristocra-  
tes,* and the Wise of *Euxentis, J Epid. T.* 27. 52. 58. who all  
died. Of the Wife of *Dromeades* we have taken Notice above ;  
and of the Daughter of *Euryanactes* it is said, that ". On the  
" seventh Day aster a Crisis she was seized with a Rigor, was  
" feverish, and ' sweated: The eighth Day after the Crisis she  
" had something of a Rigor; and afterwards her. extreme Parts  
" became cold, and'always so, continued. About the tenth  
" Day, after a Sweat which she bad, she was delirious ; but  
" soon recovered her Senses/' Caf the young Woman who  
lay ill *in Foro Mendacium,* we read, that " On the’ second  
" Day all the Symptoms were exasperated ; she had frequent  
" and unseasonable Stools, had no Sleep, was disturbed in her  
" Reason, and sweated a little. I On the third Day she was  
or very uneasy, thirsty, nauseating, Very restless-and impatient,  
" delirious, and her extreme Parts were cold and'livid.” 'The  
Wife of *Theodorus* "had first a small Eruption of Sweat about  
" the Forehead, which, after a considerable Time, diffused it-  
self over the whole Body and Feet, after which- the Fever  
" seemed to remit. The Body of the Arteries seemed cold to  
" the Touch; but those at the Temples had more than an or-  
" dinary Degree of Pulsation;: HerTlreath grew short; she  
" was delirious at every Turn, and she hecame worse, on -all  
" Accounts.'' The Wife *ai 'Fuxcnus,* " Had aiRethissiori of.  
" her Fever, with a copious Sweat ; was much refrigerated ;

laboured under an Asthma‘osevarious Kinds,” sand so died.  
By these, and other Instances which might he given,' it appears,  
that all Sweats which are succeeded by pernicious Signs, have a.  
destructive Tendency. ., su‘si ” *'sss.si':*

" Sweats are, also, pernicious, ' when attended withSad Signs  
and Symptoms ; arid this is confirmed thy Couss.iciCwhereit is  
said, that "They who are molested with frequent thin or cold  
"τ Sweats and RigorEthy Tiirns,'are in a very dangerous Way'."  
And, *ibid.* I3- " They who labour,under frequenTReturns of  
"'Horrors anffSweats, are in a- Very- dubious State?\* YAgain,,  
ἀρρά. 53. iC Sweats with a kind oTIjneafiness,.imaouTe.Dif-  
"‘eases, are haff?' And, *ibide* 327. :0omparedswith I *Pror-  
rhet.* I27. “ An.Haemorrhage..at.the Nose, on the oontrary  
so Side is bad; as,'shr Instance,‘if It, proceed from she Right  
" "Nostril, in aTuinor *os* the Spleen; but it tS worse if’at-  
" tended with *jsc* Sweat.'\*.' '/And, *ibid.* 35. .'chrnpared with  
*VProrrhet. J An fa* i Peyers, attendedwith a Coins, Lassitude,

Dimness of Sight;” Want os'Sseep, and Sweats, are malig-  
" “nant." Such were thehad Symptoms attending the Sweats  
under which *Arastcerates* laboured^ *J 'Epid. T.* 52.’. ssss,- i ’ I.  
'\* The same Judgment in to be made os Sweats succeeding Very  
had Signs or'Syinptoms.' Thus, *1 Prorrbet.* 1261 " A finals  
"\_Sweat, with a general Refrigeration succeeding an Hteinorr  
"/rhage at the Nosh, is Inal sonant, and pernicious/^ And  
we may say the same of it,' whenTudceeding any bad Eyacuad  
tion in general, whether it be an.immoderate Haemorrhage, or  
Distillation os Blood by Drops from.the Nose, inthurning Fe-  
vers, or a bad Fluxos the Belly, Or Vomiting. Sweat there-i  
fore, consequent upon bad Signs, is very pernicious, and espe-  
daily if it neither removes nor alleviates those bad Symptoms.

Thus It was in the Case of the Wife of Usuapnades, 7 *Epid.*T. 49. os whom we read, that " Her Speech was not restored,  
" nor was she any way relieved ; that her Eyes were cast down,  
~cl her Respiration was sublime ζπνεῦμα μετἐωραν. See PNEtr-  
" MA], and performed through the Nose; she had an ill Co-  
" Jour, and, when she 'was near Death, had a Sweat about her  
" Feet and Legs.” *Prosper Alpinus, de Prafag. Vit. et Mon.  
AEgrotdrum. . ‘ -*

**. ... . . A FEBRILE DIARRHOEA**

; The Matter of a Diarrhoea is the Mucus, Lymph, *Gluten,*Pus, .Sanies, or Blood, from the Nose, Mouth, Fauces, Oeso-  
phagus, Stomach, Lives, Gall-bladder, Pancreas, Intestines,  
and Mesentery r It arises from too great an expulsive Force of  
these Substances into the Intestines, and a Weakness os the  
contracting Force of the Intestines; or from some Obstruction  
of the absorbing Vesteis of the Intestines, which prevents the  
Admission'of what ought to pass through them.

'. Hence it appears, that Fluxes of the Belly in Fevers are of  
Various Kinds, with respect to the Matter, Cause, Effect, and  
Event; they are, therefore, sometimes utterly incurable; and  
sometimes colliquative, in which Case they seldom admit *of* a  
Remedy.

- If a *Diarrhoea* perseveres long, it disposes the abdominal  
Viscera more and\* Inore to the same Disorder ; weakensinem,  
excoriates, and inflames them ; empties and exhausts the other  
Veffeis and Viscera: Hence arise an Atrophy, Emaciation,  
Weakness, a Dysentery, an Inspissation of the Fluids through-  
cut the whole Habit of the Body-.a Laxity of the Solids; a  
Loss of the Fluids ; a *Leucophlegmatia,* Dropsy\*; and Tabes.1- The Cure is performed by destroying the Acrimony which  
irritates the Intestines, and by expelling, it by means os Eme-  
tics, Purges, and Clysters; by corroborating the relaxed Parts;  
by mitigating the Violence of the Diarrhoea with Narcoties 5  
by determining the morbose Matter to some other Excretion,  
as those by Sweat and Urine; by diminishing the Cause, and  
correcting it at the original Fountain. " Y '

For an Account of Prognostics from Stools, fee the Article  
**DEJECTIO.'- - sese ry; .. . ’**

***δ᾽ '..τε .. . : FEBRILE ERUPTIONS. ..ί .: .so.***

\_ The Matter of inflammatory Pustule? is, generally, something ’  
which cannot pass the cutaneous Vessels, but sticks therein  
and they are excited by the Force of'the circulatory, secretory,  
and excretory Vital’ Powers: Hence Eruptions are Various,  
according tothe Variety of Causes which produce them; and  
on tins account Fevers acquire different Appellations, from" the  
different Eruptions- with which they are attended, as *Erysipe-  
latous, Scarlet, orcd-'Petechial,- siurpie' Petechial, .Morbillo/eA .  
and Pariolos.e. ‘ ------ ...*

It is customary toil treat of the last three separately 5 as for  
the three, first, .the Diagnostics, . and. Prognostics are easily  
fotind. *' .' ’sosis.".' - "A* ’ E. sc sc εἴ. . ...fe' t

The ' Cure is not'.difficult ; fof lt only requires," that'sthe  
eruptive Matter be kept .in *3.* moveable State, by theSithstn-  
tion of'a' sufficient Quantity of light Fluids, and preserving .a  
due. Moderation of the Vital Powers ; sor by this, means 'they  
shop come to a Period, with a Desquamation of the CutinleCs  
TThe other febrile Symptoms, which ale' similar'to these,' and  
of the like kinds require the same Treatment as the Diseases  
on which they depend.- 'sese so rἈ.ῖ - . ? \* sssi  
Y Heiidewe Iearii,- what JudgineriTis to hessonned of. *iferNdur*fiery of acute Fevers ; Tor those shYwhich the febrile'Motion,,  
when'once began, js continued equably to the End, ‘ ores called  
*ConiinhelDevcrs* ; those in which the febrile Force reniits, and  
«‘ again1 exasperated alternately, in such a manner,- however,  
that the Fever never-ceases, are called *Continual Reniitsunt Far  
versf* those, lastly,. which remit’ so entirely, that the Patient  
is'absolutely free from a Fever\* in- the Intervals, heswhet'the  
Pasobysms, are *CaSad Intermittent^* **.1. . .** '.-"’’γ'οὐρπ.Ἀζ

**A CONTINUAL FEVER.**

S The most simple, of continual Fevers, is *^n Efhemerd,* or  
DiarYTeVer,‘whictsgogni"through the' different- Stages,' as.'the  
Beginning, Increase, State, and'Detlension, tin the'SpaoeJos  
twenty-fonr Hours;- ' It arises ‘ from a more. Vchemen't M'otiod  
only,1 excited by shineiEfror with' respect to the Non-oatursts-;  
dhd'lher searcelyiany.material Caiise.\* It is.distinguished bysthe  
Slightness of the Cause ;7'the Purity os the'Body'; the Mildness  
osithe YSymptornsTjthe expeditiout.Crlfis T and a'Restoration  
of the:Pulse to its nat'draLState,' immediately upon the Ce^i  
tiofimf \the; Fever.. Τ The Cure" is easily spersqrined.i by,Absti-I  
nence,‘iRest, iniithpstutihgss-’-ju 7Y\*',' .sese

τ Is this Speoigniof .Fever continues, jhahyDaysjTfj is, called;  
*A. ceatinual. ~ibut Apbscpitjpide Fever,fr*Thei Canises, ' signv. a.sus  
Cure are .thessathewith\* those. *os'tatiiEpheniera* ; \* burstt\* redimelse  
partiddlarly' copious Bleeding; andIdfrrgerating Medidinodf “ "'s

**Λ CoNT IN:JAL PUTRID FEVER.**

That Species of Fever, which is called *R putrid Synschus,*Riises from Causes somewhat greater than a simple Inflamma-  
tints, an Obstruction of theViscera; anOppilation of the Skin,  
and almost all the Capillaries ; and a considerable Degree of  
Acrimony.

It is known by a Degree os Heat which is pungent to **the**Touch; a febrile, but unequal and irregular Pulse; Urine  
which is thick, red, and turbid, without a regular Sediment 5  
and by an hot and sanguineous Temperament, Age, and Habit  
Of the Patient.

This Fever is distinguished by the Name *Homotonos,* when it  
preserves the same Tenor through all its Stages, neither in-  
creasing, nor diminishing: When it perpetually increases, it is  
called *Epacrnastica,* or *Anabatica:* But when it continues per-  
petually to decline, it acquires the Titie of *Paracrnasiica.*

Of these the first Species is esteemed salutary; the second  
the worst; and the third better.

This Fever is esteemed the more dangerous and fatal, in  
proportion as the Pulse is more weak, frequent, unequal with  
respect to Strength, inordinate with respect to Time, and in-  
termittent ; as the Respiration is more difficult, frequent, and  
Iaborious; the more the *Pinnae of* the Nostriis are agitated; **the**more Pain it excites about the Vital Parts ; and the more inor-  
dinate it is; the more vchementiy a Sensation os Lassitude and  
Weakness, is perceived ; the more frequently the Patient  
changes his Posture of lying, tosses about, and lies on his Back,  
with his Limbs extended ; the more the rational Faculties, and  
Affections, are injured ; the more the Appetite is impaired,  
**the** Digestion difficult, **the Urine** red, thick, and turbid, er  
pale, watery, discharged in small Quantities, and difficultiy  
retained; the more tremulous Motions are perceived in the  
Patient; the more he starts from the Touch; the more he trifiles  
and fumbles with his Hands; and the more he picks the Napa  
.of the Bed-cloathS; the more ghastly his Eyes appear, and the  
more moist they are with involuntary Tears ; for these are all  
**Very** bad Symptoms.

But when Sleep is laborious and difficult, and affords no **Re-**lief ; when purple or livid Eruptions appear on the Body;  
when the Hypochondria are tense and inflated, the Patient  
generally dies.

The Cure delivered above, is to be Varied according to **the**Variety of Indications, the Vinlence of the Symptoms, the  
Conditinn of the Patient, and the Stage os the Fever; and,  
.therefore, does not require to he particularly treated of.

‘The Antients called these Fevers ζῖένοχοι, and the Schools,  
*Continentes,* because in them there is no Remission of Heat:  
But Continual Remittent Fevers, the AntientS called *QscvVyNls,  
Ala Latin Continua.* ' -ς

**A CAUSUS, or ARDENT FEVER.**

Among **these** Fevers, we may justly reckon **the** *Caulsus,* or  
burning Fever, on account of its Frequency, Danger, and  
' Difficulty of Cnre.

The primary Symptoms of this Disorder, are an Heat almost  
burning to the Touch, unequal in different Parts of the Body,  
most intense in the Vital Parts, (but more mild towards the Ex-  
tremities which are some times cold) and rendering the Breath  
intensely het, a *DryctAess* in the whole Skin, Nostriis, Mouths,.  
and Tongue; a dense, difficult, and quick Respiration; a dry,  
yellow, black, parched,. and rough Tongue ; an insatiable  
ThirstOften suddenly removed; a Loathing of the Aliments, a  
Nausea and Vomiting ; the greatest Anxiety, Inquietude, and  
Weariness ; a gentle Cough, and a shrill Voice; a Delirium,  
Phrenitis, obstinate Watching, Coma, and Convulsions, and  
Exacerbations on the odd Days.

si The Causes of a burning Fever may. be excessive Labour ;  
long Journeys; the Heat of the Sun; Thirst' song endured; the  
**Use** of heating, fermented, aromatic, and acrid Substances;

**.excessive** Venery; and immoderate Weariness, especially in **the**Summer. . \* - Λ

This is the Progrefs of this Disease: Op the third and fourth  
Day it often proves mortaland, if It is Violent, rarely exceeds  
**the** .seventh, without putting an End to the Patient's Life. It  
**is** frequently terminated by an Haemorrhage, (which, if. it is  
sparing on the third or fourth Day, is a mortal Sign) which  
fnay he predicted by the Pain of the Neck, the Heaviness of  
**the** Temples, a Distension of **the** Praecordia without a Sense  
of Pain, a-fpontaneous Discharge of Tears without any other  
mortal Sign, a Redness or the Fade, an Itching of the Nostriis;  
end this Haemorrhage as .most salutary on the critical. Day.  
This Species of Fever is, also, terminated on the critical Day,  
**by** Vomit, Stool, Sweat, Urine, and the Expectoration of a  
. chick Ma star t Is the Exacerbation of the Fit happens hesore  
**khe** sixth Day, it is a very had Symptom; black and thin  
discharged in a small Quantity, is, in this Disorder, **a** mor-

**tal** Sign ; as, also» a Spitting of Blond, and a Discharge of  
bloody Urine; an injured Deglutition is a bad Sign; and a  
Refrigeration of the Extremities, among the worst of St mptoms;  
a Redness and Sweating of the Face is, also, a bad Sinn;  
and an Inflammation of **the** Parotid GLnds, which does soot  
come to Suppuration, proves mortal ; an excessive Flux is,  
in this Disorder, also, mortal r This Species ofDisorder, when  
accompanied with a Tremor, terminates in a Delirium, and  
then in Death; it, also, terminates in a Peripneumonv, often  
accompanied with a Delirium : That Species os burning Fever,  
which arises after Violent Gripes of the Belly, is os the worst  
Kind ; it is critically terminated by a Rigor.

From thefe Signs the Disorder is easily known to he present,  
nor can its proximate Cause be mistaken ; for it arista from rhe  
Blood's being deprived of its milder and more liquid Parts by  
an inflammation through the Whole of the Body, whilst the  
Strength of the Patient is Vigorous. Hence, κύζο, sure Pro-  
gnostics may he made with respect to the Termination of this  
Species of Fever.

The Cure of a burning Fever requires a pure cold Air fro-  
quently renewed ; CloathS, which by no means suffocate or  
burden the Patient ; a frequent erect Posture of the Body;  
large Quantities of mild, demulcent, subacid, aqueous, and  
warm Liquors used as Drink ; light farinacious Foods prepared  
of Barley, Oats, and subacid Fruits; Venesection, if the Dis-  
ease is in the Beginning, if the Marks of a Plethora appear,  
if there are Signs of a considerable Inflammation, if the Heat  
is intolerable, the Rarefaction of the Fluids excessive, a Re-  
vulsion necessary, and the Symptoms so Violent, that they can-  
not he easily removed by any other Remedy ; the Injection *of*mfld, diluting, laxative, antiphlogistic, and refrigerating Clysters  
to he repeated as the Heat, Costiveness, and Revulsion re-  
quire ; Humectation of the whole Body, by drawing into **the**Nostriis a mild Ain, impregnated with the Steam of warm  
Water, by washing the Mouth and Throat, by bathing the  
Hands and Feet with tepid Water, and by fomenting, with  
warm Sponges, **the** Places where most Vessels are exposed to **the**Touch; aqueous, mild, nitrous, gratefully acid, and gently  
laxative Substances; together with fuch aS supply the Matter of  
the Urine, and without any Acrimony, by their Quantity,  
afford a Vehicle for the Sweat; fuch Rs remove Contractions of  
the Fibres, resolve and dilute the Thickness of the Humours,,  
and, at the same time, correct their Acrimony.

To these if we add what has been said in the general  
Rules relating to the Cure of acute Disorders, and their  
Symptoms, and the Doctrine of each particular acute Disease,,  
arifing from the Affection of each of the Viscera, to he found  
under their respective Articles, he shall clearly understand what  
Remedies are proper for the Cure of any burning Fever.

- Besides, from what has heen said, all ocher particular acute  
Fevers may .be understood, fince they may either he referred to  
particular Symptoms, or are the Effects of some other Disor-  
der. See **CAUSUS.**

**INTERMITTENT FEVERS.-**

**We** have already given the Definition os an intermittent  
‘ Fever, the Diagnostics of which are obvious, and its Distin-  
ction into Various Classes easy, fince these depend only on the  
Difference of Time.

But 'tis to be observed, that intermittent Fevers, in general,  
are either Vernal, and rage from *February* till *August*; or au-  
tumnal, and rage from *August* till *February* ; winch Distin- '  
ction is necessary on account of the Various Conditions, Sym-  
ptoms, Terminations, Durations, and Cures of different In-  
termittentsl Besides, one IntermittentFeVer sometimes removes  
another,. ' -

Intermittent Fevers, in the Beginning of the Autumn, often  
resemble those os the continual Kind, on account of their longer  
and redoubled Paroxysms, whereas their Nature and Cure are  
widely different, . ’

Fevers of this Rind begin with an Oscitation, Pandiculation,.  
Weariness, Weakness, Cold, Honor, Rigor, Tremor, and  
Paleness os the Extremities, a difficult Respiration, an Anxiety,  
a Nausea, a Vomiting, and a quick, weak,, and flow Pulse.  
The more Violent and numerous these Symptoms are, the worse  
the Fever is 5 and afterwards the Heat, and other Symptoms, are  
the worse. This is the first Stage of intermittent Fevers, which  
correspond to the Increase os continual Fevers, and is of all  
the other Stages the most dangerous; for, in this Condition,  
the Urine is generally crude and thin.

This Stage of intermittent Fevers is succeeded by another,  
which begins with Heat, Redness, a strong, large, and free  
Respiration, a small Anxiety, a large and strong Pulfe, an ex-  
cessive Thirst, and a Pain of the Limbs and Head, and gene-  
rally a Redness of the Urine: This Stage corresponds to the  
State or Height of continual Fevers. ' ' . '

Than, last of aS, there generally appears a profuse Sweat, -  
a Remission of all the Symptoms, a thick Urine, with a Sedi-  
ment resembling Brick-dust, Sleep, a total Absence of the Fe-  
ver, Lassitude, and Weakness.

Intermittent Fevers frequently terminate in those *os* the-acute  
and dangerous Kind, which is generally owing to an excessive  
Heat, and too brisk a Motion of the Fluids.

Intermittent Fevers, running through their three disserent  
Stages, greatiy injure the minute Fibres of the Vessels and Vise  
cera, by producing Stagnations, Obstructions, Coagulations,  
Impulsions, Resolutions, and Attenuations os the Fluids 7  
Hence the Veffeis are weakened, and the Fluids become mor-  
hid, especially in that Species of the Disease, in which their  
Parts are less assimilated, and not duly mixed, by which Cir-  
cumstances in Conjunction, an acrimonious State of the Juices  
is produced. Hence all these things concurring produce'an  
easy Propensity to sweat, which greatly weakens the Patient,  
fince, sometimes, the Viscid Part os the Blood transpines. In  
this Situation of the Patient, the Urine is surprifingly thick,  
turbid, pinguious, like that of Horses, or like Saliva. Hence  
the weak, resolved, and hardly coherent Blond, heing deprived  
Of its best Parts, is at once acrid and thick ; so that, in con-  
sequence of the Laxity of the Vessels, and the Acrimony of  
the Humours, those long-eontinued Fevers sometimes termi-  
nate in chronical Disorders, such as a Scurvy, a Dropsy, a  
Leucophlegmatia, scirrhous Tumors of the Abdomen, and the  
several Misfortunes produced by these.

But. if intermittent Fevers are not of the malignant Kind,  
they dispose the Patient to Longevity, and cleanse the Body from  
inveterate Disorders.

Hence, aster an accurate Examination of the whole History  
Of Intermittente, their proximate Cause seems to be a Visci-  
dity of the arterial Blood upon the Accession of any Cause  
which produces a brish and strong Contraction of the Heart,  
and a Resolution of the stagnant Fluids.

Since, therefore, this Order is always observed in Intermit.:  
tents, the Physician who can surmount the fust Time, and rhe  
first Cause, may by that means remove the whole ensuing Pa-  
roxysm.

Besides, as an infinite Number of Causes, and these not  
very considerable, may produce the first Stage of a perfectly in-  
termittent Fever, and its Cause; and as many such Causes  
may be produced, increased, and fomented, in all the Fluids,  
formed and secreted in the human Body, it is more difficult to  
distinguish the Cause already formed from infinite possible Cir-  
cumstances, than to invent one possible Cause, sufficient from  
the Laws of the animal (Economy to account for the stated  
Periods of Intermittents. This is sufficientiy obvious to every  
accurate Inquirer.

. The Cure, therefore, requires that we should use aperient,  
saline, alcaline, aromatic, mineral, diluting, mild, and oleous  
Substances, Heat, Motion, Fomentation, and Friction, during  
the Intermission, or in the first Stage. The Medicines of this  
Kind are all *Tacheniusso* Salts Of Herbs, the most, considerable  
of which, are obtained from Wormwood, Carduus Benedictus,;  
and Stalks of Peans; Nitre; antimoniated Nitre ; diaphoretic  
Antimony unwashed ; Sal Ammoniac; Sal Prunelhe; and Sal  
Polychrestus; Tartarus regeneratus; Tartarus Tartarifatus; Salt  
Of Tartar reduced to a saponaceous Mass with Oil cf Turpen-  
tine ; and all the Parts of all the aromatic Herbs, especially of  
those which are resolvent.

In order to purge the *Purina Via* from the redundant Sordes,  
a Purge, .or a Vomit, are often very beneficial, exhibiting either  
so long before the Paroxysm, that its Operation may he over,  
before the Fit comes on. That this Method is to be taken,  
may be known from the Patient’s way of living, preceding  
Diseases and Symptoms, a Nausea, a Vomiting, eructations,.  
Tumors, the Breath, the Sordes os the Tongue, Throat, and  
Palate, want of Appetite, Bitterness of the Mouth, and a Ver-  
tigo accompanied with Dimness of Sight ; and, aster the Ope-  
ration, the tumultuous Commotion os the Fluids is to he allay-  
ed by an Opiate before the Paroxysm. Thus,

Take of emetic Tartar, five Grains, reduced to a Powder ;  
to be taken at one Dose: Or,

Take of emetic Tartar, five Grains ; and of the Crumbs of  
Bread, a sufficient Quantity; to make five Pilis, to be  
taken for one Dose: Or,

Take of emetic Wine, two Ounces; and of Oxymel of  
Squills, fin Drama: Min up for a Draught t Or, -

Take of emetio Tartar, five Grains. Roh οτ Currans, half  
an Ounce; and Oil of Cinnamon one Drop ; Make into  
a Bolus. - ' . . r

Forms of Purges, are these following:

- Pulvis Cornachini, two Scruples *for u,* Dose:

Take of the Piluhe Cochiae majores, two Scruples . ofsolud.  
five Syrup of Roses, half an Ounce; and of distilled  
Elder-stowers, two Ounces : Mix for a Draught I Or,

Take of washed Aloes, twelve Grains; of Myrrh,-ten  
Grains; of Opopanak, five Grains ; and of Sal Gemmae,  
five Grains : Mix, and make up into nine Pilis.

These are beneficial, when, by their Stimulus, they operate  
both Ways.

But they prove injurious when they weaken, evacuate the most  
liquid Parts of the JuiceS, and disturb the necessary Digestions;  
and thus either protract the Disease, or bring on Death. The  
cold and hot Fits are often removed by Sudorifics, whilst a few  
Hours before the known time of the Paroxysm, after filling the  
Patientis Body with an aperient, diluting, and gently narcotic  
Liquor, an Hour before the Paroxysm, a Sweat is excited, and  
continued till two Hours after the Paroxysm usually began.

Take of Sal Polychrestum, two Drams; of the Syrup of the  
Five aperient Roots, two Ounces ; os pure Opium, two  
Grains; of the distilled fermented Waters of Carduus  
Benedictus, Wormwood, Rus, Marjoram, and Mint,  
each one Ounce ; and of the Extract of Wormwood,  
two Ounces : Mix all together, and let the Patient take  
one Spoonful every Quarter of an Hour, drinking after  
each, four Ounces of the following Decoction:

Take of the Root of Masterwort, six Drams; os the Roots'  
of SasasraS, and red-Saunders, each two Ounces ; of the  
Leaves os Golden-rod, two Handfuls; of the Leaves of  
the Lesser Centaury, half an Ounce ; and os the bruised  
Seeds of Candy Carrot, six Drams : Infuse for two Hours  
in a close-stopt Vessel, without boiling, though very hot;  
then let them boil a littie, and exhibit two Pints of the  
Decoction for a Dose. - -

Venesection, considered in itself, is always pernicious,  
though it may prove accidentally beneficial, as, also, a light-  
and exactly regulated Diet.. . - . -

When intermittent Fevers are in the second Stage, aqueous  
Substances actually warm, mixed with subacid aperient, nitrous.  
Ingredients, or Preparations of Succory, and other mild Sub-  
stances of .a similar Nature, are indicated, whilst the Patient is  
to be kept in a State of Rest, and moderate Warmth. The  
Medicines before recommended in a febrile Anxiety and Thirst  
are to be used in this Stage os Intermittents. . ...

When the Paroxysm is terminated by a Crisis, then it is ex-  
pedient to supply the Matter os Sweat and Urine, by Vinous  
Ptisans, Broths prepared with Flesh, and temperate Decoc-.  
tions: Thus those two Excretions are to he excited, not by.  
the Force of Heat, Medicines, or Bed-cloaths ; butgentiy pro-  
moted by an increased Quantity of their Materials long persisted-  
in. .'

- Violent Symptoms are to he removed by the Rules laid down  
for the Cure of febrile Symptoms in general. : .

. When the Fever is removed, the Patient is to have his;  
Strength restated by analeptic Aliments, and corroborating Me-  
dicines ; then after his Strength is increased, he is to he purged,  
several times.

But is an autumnal intermittent Fever is very Violent ; is the.  
Patient is weakened by the Disease ; is the Disorder is os a con-,  
fiderable Standing ; is .there are no Signs of an internal Inflame  
mation, nor of. Pus collected any-where, nor of, a considerable  
Obstruction of any of the Viscera, the Disorder is to be re-,  
moved by the *Peruvian* Bark, ejthlbited in the Form os a  
Powder, an Infusion, an extract, a Decoction,- or a Syrup,  
with proper Specifics, during the Intermission, in a due Order,:  
a proper Dose, and in Conjunction with a proper. Regimen.  
For this Purpose, ’ - .

Take of the *Peruvian* Bark, one Ounce ; reduce to a Powe  
der, to be divided into twelve Doses ; one of which is to  
he taken by the Patient every Hour in Wine: Or,

Take of *Peruvian* Bark, three Ounces ; and common Wa-  
ter, twelve Ounces: Infuse for two Hours; then boil for  
an Hour ; and add four Ounces of *French* Wine; then,  
let the Whole hell a little longer in a tall Vessel ; and  
os this Decoction, when pure, let the Patient take one.  
Ounce and an half every two Hours : Or,

Take of the *Peruvian* Bark, three Ounces ; boil for two  
Hours in a close Vestel in common Water to sixteen  
Ounces os strained Liquor, of which let the Patient take  
an Ounce and half every two Hours'. Or,

**inspissate she preceding Decoction to the Consistence os  
Honey, and divide into four Doses, one of which is to he  
taken every two Hours : Or,**

Take the preceding Extract, dilute in one Ounce of the  
Syrup of the Five aperient Roots: Make a Syrup to he  
used in the same manner with the Extract : Ora

**Take** the preceding Extract; mix with ita sufficient Quantity  
of **the** Powder of Liquorice, and reduce to a Mass of Pilis,  
of which the Patient is to take four Grains, during the

**. time Of Intermission.**

Epithems are, also, frequently beneficial, as, also. Unctions  
**of** the Spine of the Back, and the drinking astringent Liquors.  
Thus,

Take of the Otis of Scorpioni, Castor, Juniper-berries,  
Camphire obtained from the Root of the Cinnamon-tree.  
Bays, and Turpentine, and of the terebinthinated Balsam  
of Sulphur, each half an Ounce : Mix sor a Liniment. '

Take of the Whole of the broad-leaved Plantain, **ten**Ounces; and of recent Tormentil-root; two Ounces:  
Boil in two Pints os Water; and let the Patient drink  
three Ounces Of the Decoction every two Hours.

Take of Roch-alum, one Dram; of Nutmeg two Drams;  
and of the Powder of *Armenian* Bole, twelve Grains:  
Reduce to a Powder, to he taken an Hour before the Pa-  
**roxysm.**

Epitherns for the Wrists may he prepared in the following  
manner:

Take of Currants, and Hops, each two Ounces ; and reduce  
to a Poultice, to he applied to the Wrista: Or,

Take of the Tops of green Rue, two Ounces ; and of  
Mustard-feeds, two Drams: Bruise, and apply to the  
. Wrista.

That the Cure of particular Intennittents may he understood,  
’tis to be observed, first, that the shorter the InterVais of true  
-Intennittents are, the sooner they are cured ; and the longer  
the intervals are, the more Time is required to their Cure.  
Secondly, that, for this Reason, they approach much to the  
Nature of acute Fevers, and are sometimes converted into them.  
Thirdly, that for this Reason, their Cause is inore moveable,  
tho' more copious. Fourthly, that Vernal intennittents, upon  
the Approach of warm Weather, are spontaneously terminated.  
Fifthly, that autumnal Intermittents, on the Approach of cold  
Weather, are increased. Hence 'tis obvious what Fevers are  
curable, and by what1 Medicines. *Bocrhaave Aph. et Mat.  
Med.* See **ARANEA.**

*Sydenham,* speaking of the intermittent Fevers, which raged  
from the Year I675, to 1680, observes, that though Quartans  
were more frequent formerly,, yet now Tertians and Quotidi-  
ans were most common, unless the latter may be intitled double  
Tertians ; and, also, that though these Tertians sometimes be-  
gan with Chilness and Shivering, which were succeeded first  
by Heat, and soon after by Sweat, and ended at length in **a**perfect Intermission, returning again after a.fixed time; yet  
they did not keep tins Order after the thud or fourth Fit, espe-  
cially if the Patient was confined to his Bed, and used hot Car-  
diacs, which increase the Disease. But afterwards this Fever  
became so unusually Violent, that only a Remission happened in  
Place of an Intermission; and approaching every Day nearer to  
the Species of continued Fevers, it seized the Head, and proved  
fatal to abundance of Persons.

. As to the Cure, I have learnt, says he, from the Experience *of*many Years, that 'tis dangerous to attempt to remove Tertians  
and Quotidians by Sudorifics; sor when they are recent, and have  
assumed no certain Shape, they nearly approach to continued  
Fevers. And though it is well known, that as soon as the  
Sweat flows, the Restlesness, and other Symptoms, presently  
go off, and a perfect Intermission succeeds, and consequently  
that it should be somewhat promoted, or, at least, not hinder-  
ed, when the Fit is going off; yet 'tis manifest, that, if Sweat  
be forced heyond the due Degree, the Intermittent hecomes a  
continued Fever, and Life is endangered. I conceive the Rea-  
son os this to be, chat in profuse a Sweat, (since it exceeds the  
Degree of the febrile Matter, already so exalted by the Heat oi  
the Fit, that it may now be expelled by Despumation) after il  
has expelled that Part thereof, winch might produce a single  
Fit, proceeds to’ inflame the Blood: Upon considering, there-  
fore, the Inefficacy of this Method, and the Inconveniencie  
attending other Evacuations, as Bleeding and Purging, hot!  
which, by weakening the Texture of the Blood, prolong the  
Disease, the *Peruvian* Bark afforded me the sorest Hopes; o  
which I can truly affirm, notwithstanding the Prejudice of tin  
Vulnar. and a few of the Learned, that I never found. **Ο1**

could reasonably suspect, any ill Consequence follow Its Use j  
unless, that such as have taken it for a considerable time, are  
sometimes seized with a scorbutic Rheumatism. But this Dis.  
order rarely proceeds from this Cause, and when it does, readi-  
ly yields to the Remedies adapted to it.

And, in reality, if I were as certain of the Continuance of  
its Effects, as I am of the Innocence of the Bark, I should not  
scruple to prefer it to all the Medicines hitherto known; since  
it is not only excellent in this Disease, but, also, in those of  
the Uterus and Stomach: So little Reason there is to com-  
plain of its Unwholsomeness.

But, I Conceive, that the Bark has heen ill spoken of, prin-  
cipally, for the following Reasons: (I.) Because the numerous  
Train of Violent Symptoms, which accompany, previoufly to  
the Use of the Bark, inveterate Intermittents, are ascribed to  
it, though it has heen taken only once. (2.) As it cures the  
Disease by a secret Virtue, and not by any sensible Evacuation;  
several Persons maintain, that the morbific Matter, which ought  
Io have been expelled, is retained in the Body by its Astringen-  
cy, ready to occasion fresh Disturbance, the Disease not being  
entirely carried off. But such Persons do not sufficiently con.,  
sides, that the Sweats; happening at the Decline of the Fit,  
have expelled all the morbific Matter that was collected during  
the preceding Interval, so that only the Seeds of the Disease  
remain, which require time to be ripened ; and the Bark, by  
closely pursuing the retiring Fit, and cutting off the Supplies of  
the Disease, cannot be a means of retaining any morbific Mat-  
ter in the Blood, which is now existent there only in Embryo;  
consequently the Bark is not to be esteemed productive of those  
Obstructions, which are Commonly judged to proceed from its  
Use. . ‘

But how does it appear, that the Bark cures Intermittents *bs*its A stringency? In order to prove this, other Astringents,  
Γstaffed of the same Virtue, must first necessarily be produced:  
have tried the strongest ineffectually. Besides, the Bark  
effects a Cure, even where it purges, which is sometimes the  
Case. Upon the Whole, therefore, they act the wisest Part,  
who limit their inquiries to their Abilities. But, if a Person,  
imposing upon himself, should imagine, that he is possessed of.  
other Faculties than such as are useful, either to Natural Reli-  
gion, by which we learn that.GoD, the Creator and Gover-  
nor os all things, is to he worshipped with prosound Venera-  
tion, as he justly merits; or to moral Philosophy, that he may  
practise Virtue, and render himself every way useful to Society f  
or, lastly, to the Medicinal, Mathematical, and Mechanical  
Arts, which supply Mankind with many Helps and Conveni-  
encieS; I would have him in the first place, deduce an Hypo-  
thesis from Natural Philosophy, that may enable him to ex-  
plain the Cause of but a smgle specific Difference of Things in  
Nature. For Instance, let him account for the universal Green-  
ness of Grass, and why it is never found of any other Colour,  
and the like. And if he can do this, I will readily embrace his  
Sentiments; but, if not, I shall not scruple to affirm, that all the  
Diligence and Caution of a Physician should be employ'd in  
investigating the History of Diseases, and applying those Re-  
medies which stand recommended by Experience for the Cure  
thereof; observing, notwithstanding, that Method which is  
founded on right Reason, and not the Result of idle Specula-  
tions. I will, therefore, briefly deliver what Experience hath  
taught me, relating to the Method of exhibiting the Bark.

The *Peruvian* Bark,, commonly called the *'Jesuits Powdcr,*to the best of my Remembrance, began to be. esteemed at *Lan-  
den,* for the Cure of Intermittents, and especially Quartans,  
.about twenty-five Years since; and, indeed, very deservedly,  
as these Diseases before this time were seldom cured by any  
other Method, or Medicine; whence they were reputed, the  
*Opprobria Medicorum,* and not without Cause. ' But, not long  
aster, it lost its Character, and was entirely disused, *for two con-,*fiderable Reasons: (I.) Because, heing exhibited, only a few  
Hours hefore the coming of the Fit, according to the received  
Custom of that Time, it sometimes destroyed the Patient; which  
I remember happened to Mr. *Underwood,* a Citizen and Al-  
derman of *London,* and to one *Pottcr,* an Apothecary in  
*Blacle Fryars.* This fetal Effect os the Powder, though very  
rare, did, however, deservedly prevail with the more prudent  
Physicians to refrain from its Use. (2.) Because, tho\* the Pa-  
tient was, for the most part, freed from the Fit, that would  
otherwise have come, by this Medicine, yet a Relapse com-  
monly happened within a Fortnight, particularly when the Dis-  
ease was recent, and had not been weakened by a long Con-  
tinuance. These Reasons weigh’d io much with the Genera-  
lity, that they lost all Hopes they had hitherto conceived of this  
Medicine; nor did they esteem it so material to prevent the  
Access os a Fit for a few Days, as, upon this account, to en-  
danger their Lives by taking the Bark.

But, having some Years since throughly considered the extra-  
ordinary Virtues.of the Bark, I was firmly persuaded, that In-

termirtents could not he hetter cured than by this efficacious  
Medicine, provided it were given with proper Caution. For  
this Reason I spent much time in considering how I might pre-  
vent the. Danger ensuing from its Use, and the Relapse that  
succeeded in a few Days, which were the two Inconveniencies  
to he remedied, and by means thereof, to restore the Patient to  
perfect Health.

I. I conceived, that the Danger proceeded less from the  
Bark itself, than from the unseasonable Use thereof; for when  
a large Quantity Of febrile Matter is collected in the Body upon  
the intermediate Days, the Bark, if taken immediately before  
the Fit, obstructs the Expulsion of the morbific Matter in the  
natural way (that is by the Violence os the Fit); which, heing  
preternaturally detained, usually endangers Life. But I judged  
**I** could remedy this Evil, and, also, prevent the fresh Genera-  
tion of febrile Matter, by giving the Powder directly upon the  
Departure of the Fit, so that a Stop might be put to the suc-  
ceeding one; and by repeating it upon the intermediate Days,  
at proper Distances, till the Approach of a new Fit; and that  
by this means the Blood might he impregnated gradually, and  
consequently safely, with the Virtue of the Bark.

2. As the Relapse, which generally happened in a Fortnight,  
seemed to me to proceed from not sufficiently impregnating the  
Blood with the Virtue of the Febrifuge, which, however effi-  
cacious, was not powerful enough to cure the Disease at once,  
I judged, that the best Method of preventing a Relapse, would  
he to repeat the Powder, at proper InterVais, before the Virtue  
os the preceding Dose was quite spent, even though the Inter-  
mittent appeared to be conquered for the present.

These Considerations led me to the following Method, which  
**I** now use. -When J am called to a Person afflicted with a  
Quartan, suppose on a *Monday,* is the Fit is expected the same  
Day, I refrain from doing any thing, and only give the Patient  
Hopes, that he shall be freed from the next Fit. And, inorder  
to effect this, I exhibit the Bark upon the two intermediate, or  
well Days, that is, *Treefday* and *Wednefday,* in the sollowing  
manner:

Take of*Peruvian Baik, very* finely powdered, one Ounce;  
Syrup of Cloves, or of dried-Roses, enough to make it into  
an Electuary, to be divided into twelve Doses ; whereof  
let the Patient take one every fourth Hour, beginning im-  
mediately aster the Fit is gone off, and drinking, after each  
Dose, a Draught os any Kind of Wine.

Or, if Pills be snore agreeable.

Take os the *Peruvian* Bark, very finely pulverized, one  
Ounce 5 Syrup of Cloves; enough to make it into Pills,  
of a middling Sizej of which let the Patient take six  
every fourth Hour. .jo

But an Ounce of the Powder may be mixed with a Quart  
of Claret, with less Trouble, and equal Success, and eight or nine  
Spoonfuls of it may be given at the Intervals above-mentioned.  
I order nothing on *Thunsiday,* when the Fit is expected, because,  
- for the most part, it does not come, the Remainder of the fe-  
brile Matter being despumated and expelled the Blood by the  
usual Sweats, which terminated the preceding Fit, and a Col-  
lection of fresh Matter being prevented by the Repetition of  
the Powder upon the intermediate Days.

But, in order to prevent a Relapse, which was one of the In-  
. conVeniencies above recited, Lalways gave the same Quantity  
os the Powder, an Ounce divided into twelve Doses, upon the  
eighth Day precisely, aster taking the last Dose. But though  
a fingle Repetition of the Bark in this manner frequentiy re-  
moves the Disease, yet the Danger is not over, unless the Pa-  
tient will comply with the Directions of his Physician, and take  
it thus a third or fourth time 5 especially when the Bleed has  
. been impoverished by some preceding Evacuation, or the Body

unadvisedly exposed to the cold Air.

Now, though there is no inherent purgative Virtue in this  
Medicine, yet a Violent Purging is frequentiy occasioned there-  
by, on account of some peculiar Idiosyncrasy in the Constitu-  
tion. In this Case, it is indispensably necessary to exhibit Lau-  
danum therewith, to prevent its having this Effect, which is  
. manifestly aS opposite to its own Nature, as it is to this Dis-  
ease, and that it may he retained long enough to answer its End.  
Therefore I direct ton Drops of Laudanum to he given in a little  
Wine, after every other Dose of the Powder, provided the  
Purging does not go off.

I follow the same Method in other Intermittente, whether  
' Tertians or Quartans; for, immediately upon the Fit's going  
off, I administer a Dose of the Powder, and repeat it in point  
of Frequency, at aS close Intervals, during the time of the In-  
termission, as the Nature of the Disease will admit ; but with  
this Difference, that a Tertian may be so far conquered jVith

six Drams of the Bark, as at least to give a Respite . **wheims**a Quartan can Very rarely he removed with less than aij Ounce  
of it, divided into proper Dofes.

But tho' Tertians and Quotidians, aster a Fit or two, may  
seem entirely to intermit, yet, as I have before observed, they  
afterwards frequentiy degenerate into a Species of continued  
Fevers, and only come to a Remission even upon those Days  
that promised an Intermission; especially when the Patient  
has been kept too warm in Bed, or been tormented with  
Medicines to carry off the Intermittent by Sweat. In this  
Case, I have no other way left, but to take Advantage of **the**Remission, though it he ever so small j and accordingly, I give  
the Powder immediately after the Fit is gone off, as near as **I**can conjecture, and repeat it every four Hours, as above-men-  
tioned, without waiting for a regular intermission, because  
otherwise the alexiterial Virtue of the Bark cannot be commu- .  
nicated to the Blood in so short an Interval.

And though the present reigning Intermittente, after **the**second or third Fit, incline to continued Fevers, yet they must  
be referred to the intermittent Kind; and, therefore, I scruple  
not to order the Bark, even in the most continued of this Spe-  
cies ; the Repetition of which, in the above-mentioned manner,  
will certainly remove the Disease, provided the constant Warmth  
of the Bed, and the improper Use os Cardiacs, have not render-  
ed it a continued Fever; in which Case, I have frequentiy ob-  
served, that the Bark proves ineffectual. Nor have I ever  
found, that the Wine, wherein the Bark is administred, did  
the Patient Harm, which might reasonably be suspected ; but,  
on the contrary, the Heat, Thirst, and other febrile Symptoms,  
generally went off soon after taking a sufficient Quantity of this  
Medicine. But it must be here observed, that the nearer the  
Intermittent approaches to a continued Fever, either spontane-  
oufly, or from using too hot a Regimen, *so* much the more  
necessary it is to exhibit a larger Quantity of the Bark ; for **I**have sometimes found, that Intermittente would not yield to  
less than an Ounce and an half, or two Ounces, of the Bark.

AS some Persons can neither take the Bark in Powder, an  
Electuary, or in Pills, I give them an Infusion of it, which is  
made with two Ounces of Bark grofly powdered, infused cold  
for some time in a Quart *of Rlornifh* Wine. This Infusion,  
being several times passed through a sine Strainer, becomes so  
clear, as not to be nauseated by the nicest Palate. Four Ounces  
of this Infusion, after it has stood some Days, should seem equi-  
valent in Virtue to a Dram of the Powder in Substance; and,  
as it is neither disagreeable, nor lies heavy upon the Stomach,  
it may be exhibited with twice the Frequency of the other  
Formulas, till the Disease Vanishes.

When this Disease hath assumed no regular Appearance, it  
is sometimes attended with an almost continual Vomiting, **so**that the Bark cannot be retained in any Form; in which Case  
the Vomiting must be stops, before it Can be administred.  
For this Purpose I order, a Scruple of Salt os Wormwood to **be**dissolved in a Spoonful of fresh Lemon-juice, and taken six or  
eight times in the Space of two Hours ; and afterwards I give  
sixteen Drops of Liquid Laudanum in a Spoonful of strong **Cin-**namon-water; and soon after, if the Vomiting stops, I pro-  
ceed to ufe the Bark. -

For Children, who, on account Os their tender Age, - can-  
scarcely bear to take this Remedy in any other Form, at least in za suitable Quantity to. effect a Cure, I generally prescribed the  
following Julap: \* ' .

Take of black Cherry-water, and *RFeniso* Wine, each two  
Ounces; *Peruvian* Bark finely powdered, three Drams;  
Syrup of Cloves, an Ounce : Mix them together for **a**Julapt Let a Spoonful or two (according to his Age) he  
given to the Child every fourth Hour, till the Fits return  
no inore, dropping into every other Dose, in enise of **a**Looseness, ode or two Drops of Liquid Laudanum.

It must be/further observed, that the Intervals between the  
Fits in Tertians and Quotidians are so short, that they do not  
allow sufficient time to impregnate the Blood perfectly with **the**febrifuge Virtue of the Bark; so that 'tis not to be supposed;  
that the Patient should so certainly miss the next Fit aster **the**first time of taking is, as it commonly happens in a Quartan ; \*  
for the Medicine, in these Cases, will frequently not effect the  
Cure in less than two Days.

\*. st must, also, be remark'd, that if the Patient, notwithstanding  
the Observance of the Cautions above delivered, should relapse;  
which happens less frequentiy in a Quartan than in Tertians and  
Quotidians, it will hecome a prudent Physician nor to adhere  
too closely to the Method of giving the Bark at the above-men-  
tioned Intervals; but to attempt the Cure, aS his Judgment shall  
direct, by some other Procedure: And here the bitter Decoction  
is generally esteemed of most powerful Efficacy, ι

**With respect to Diet and Regimen, the Patient** must he al-  
lowed the Use of all Kinds os solid and liquid Aliment that  
agree with his Stomach, Fruit and cold Liquors always excepted;  
hecause they impoverish the Mass of Blood, and are Very sub-  
ject to occasion a Relapse. Let'the Diet, therefore, be Flesh  
of easy Digestion ; and a moderate Use of Wine may he per-  
mitred for common Drink , by the sole Use whereof I have  
sometimes recovered such aS have been so debilitated by the fre-  
quent Return of the Intermittent, that the Bark proved inef-  
fectual to their Cure. The Patient, also, must not unadvisedly  
expose himself to the cold Air, till the Blood has recovered its  
former healthy State.

- It must here her emark'd, that tho’, in treating of Intermit-  
**tente** heretofore, we recommended due purging aster the Disease  
was gone off, yet this practical Caution is only to be under-  
stood os such Intermittente as either went off spontaneoufly, or  
were cured without the Assistance of the Bark: For when the  
Cure is effected by this Medicine, Cathartics are unnecessary  
and injurious; so powerfully does the Bark, alone, resist the Fits,  
and the Indisposition they occasion. Hence, therefore, all Kinds  
of Evacuations must be refrained from ; for the gentlest Purge,  
even a Clyster of Milk and Sugas, will certainly endanger a Re-  
lapse, and, perhaps, reproduce the Disease. '

And here it is proper tomention, that4Very remarkable  
Symptom sometimes succeeded these Intermittents in the first  
-Iears of this Constitution: For the Fits did not begin with  
Chilness and Shivering, which were succeeded by a Fever; but  
the Patient was seized with the Symptoms of a true Apoplexy;  
though, in Reality, how nearly soever it resembled this Disease,  
it was nothing more than the Effect of the Fever's seizing the  
Head; as plainly appeared from other Signs, as well as the Co-  
lour of the Urine, which in Intermittents is usually of a deep  
red, though not so red as in the Jaundice, and, also, lets sell a  
lateritious Sediment. But though \* in this Cose all Kinds of  
Evacuation seem to be indicated, in order to make a Revulsion  
*os* the Humours from the Head, as is generally practised in the  
genuine Apoplexy, yet they are to be wholly refrained from, be-  
cause they are Very prejudicial in the intermittents, whence this  
Symptom originally proceeds, and, consequently, endanger Lise,  
as I have observed. On the contrary, therefore, we must wait  
till the Fit goes off spontaneoufly, when the Bark, in case it  
Could not be given sooner, must immediately be exhibited, and  
repeated with sufficient Frequency in the InterVais, till the Pa-  
tient he perfectly recovered.

And these are the Observations I had to communicate, in a  
summary way, concerning the Use of the Bark; for my Design  
was not to consult the Pomp of Medicine: And, in reality,  
they who add any thing more to the Bark than a Vehicle, which  
is necessary to carry it into the Stomach, in my Opinion either  
do it ignorantiy, or fraudulently ; which every good Man must  
detest, who, as a Part of the Whole, would not be induced  
.to commit such a Fraud, for his private Advantage. AS  
lo what remains,. if my Contemporaries had pleased to have  
considered what I published in my History of acute Diseases,  
'.(which, it is highly probable, I was acquainted with before that  
time) relating to the Method of exhibiting the Bark in the Inter-  
-vais of the Fits, and the succeeding Repetition of it when the  
Disease was gone off, perhaps the Lives of many Persons had  
been faved ; how much soever some Men contemned my {len-  
der Endeavours for the public Good, and flighted the Cautions  
there delivered in the following Words; which contain, in a  
concise manner, what I have here judged proper to enlarge  
upon. ...s . . .

' I." Great Caution must be had not to give this Bark too  
" early, that is, hefore the Disease he in some measure Tpon-  
." taneoufly abated ; unless the extreme Weakness of the Pa-  
" tient requires it to he given sooner: For the giving it too  
" soon may render it ineffectual, and even fatal, if a sudden  
" Stop should be thus put to the Vigorous Fermentation raised  
" in the Blood, inorder to its Despumation. 2. We must not  
" direct Purging, much less Bleeding, in order to carry off a  
Part of the febrile Matter, and render the Bark more effe-  
" ctual; for they both weaken the Tone of the Parts, whence  
" the Disease returns so much the more expeditiously and cer-  
" tainly, after the Virtue of the Bark is spent. It were better,  
" in my Opinion, to impregnate the Blood with this Medicine  
" by Degrees, and at distant Intervals from the Fit, rather than  
" endeavour to stop jt at once, just upon its coming ; for by  
" this means the Bark has more time to produce its full Effect  
" in ; and, besides, the Mischief is avoided that might happen  
so by putting a sudden and unseasonable Stop to the Fit just  
" approaching. 3. The Bark must he repeated at short Inter-  
" Vais, that the Virtue of the former Dose may not he entirely  
" gone off, be:ore another be given ; and by repeating it ire-  
" quentiy the Difeafe will, at length, he perfectly cur'd. For  
" these Reasons, I prefer the following Method of giving the  
ec Bark to all others.

" Take of the *Permian* Bark, one Ounce ; ConserVe of  
" Roses, two Ounces r Make an Electuary thereof. Take  
" the Quantity of a large Nutmeg, every Morning and  
" Night, on the intermediate or well Days, till the whole  
" he taken; and let it he repeated thrice, interposing a  
" Fortnight hetween each time."

But though the Bark is the best Medicine hitherto discover'd,  
for the Cure of these Diseases; yet I have known Vernal Ter-  
tians, in Persons in the Prime of Life, and of a sanguine Con-  
stitution, yield to the Use os the following Remedies I For In-  
stance, Bleed in the Arm upon the intermediate Day; and some  
Hours afterwards, upon the same Day, give an Emetic of the  
Infusion of *Crocus Metallorum,* regulating the time in such  
manner, that its Operation may be over before, the Fit comes  
on; and as soon as it is gone off, let the following Electuary he  
given. .

Take of the Extract of Wormwood, Gentian, and the lesser  
Centaury, each two Drams '. Mix them together, and  
divide the Whole into nine Doses. . Os which, let one he  
taken every fourth Hour ; drinking, after each Dose, of  
the bitter Decoction without Purgatives, and of White-  
wine, each three Ounces.

There is another Method of curing these Tertians in Persons  
os low Circumstances, who are unable to be at the Expence of  
a long Course os Medicines, in order to their Cure. AS,

Take of *Virginian* Snakeweed, in sine Powder, a Scruple ;  
White-wine, three Ounces: Mix them together. Let the  
Patient take it two Hours before the Fit comes’ on; and,  
being well covered with Cloaths, let him sweat three or  
four Hours afterwards; and let it be repeated twice in the  
same manner.

- In the following Year I67o. these Intermittents re-appeared  
at the Beginning of *July,* and, increasing every Day, p.ovcd  
very Violent and destructive in *August t* But, having already  
treated of these at large, I shall only observe, that they gave  
way to a new Epidemic, which proceeded from the manifest  
Qualities of the Air in *November. Sydenham. '*

**OF THE SALUBRITY OF FEVERS.**

Such is often the wife and admirable Oeconomy of Nature,  
that what at first Sight appeared noxious and prejudicial, tends,  
to promote and advance the Happiness and Health of Mankind.  
In no Instance is this Doctrine more remarkably Verified, than  
in Fevers, since the febrile Commotions os the Blood, which  
accompany many Disorders, both of the chronical and acute  
Kind, are of such a Nature, as to banish and extinguish mor-  
bific Causes; and, consequently, they must he rather beneficial  
than detrimental to the human Body. ' \

Before we proceed to the Confirmation of this Assertion, we  
shall observe, that this Doctrine is supported by the Authorities  
of the Antients. Thus the divine *Hippocrates,* in his Writings,'.  
often affirms, that a supervening Fever cures some Disorders, to  
he afterwards mentioned: And *Celsius, in Lib.An. Cap.* 8. telis  
*us, that a Fevcr iosclf, which ta some may seem strange, often  
proves falutary .♦ For* a Fever allays Pains os the Praecordia, is  
not attended withan Inflammation, mitigates Pain, and, sire-  
ceeding Convulsions of the Nerves, and a Rigor, totally re-  
moves them. It, also, relieves the Disease os the small intestines  
arising from a Difficulty of Urine, if by the Heat it promotes a  
Discharge of it: Besides, a Fever was by the sagacious An-  
tients defined the Struggle, Motion, dr Contest of Nature;,  
against the morbific Cause and Force of the Disorder; by which  
they intended to insinuate, that it was rather of a salutary, than  
of a noxious Nature: For that which fights against the Enemy  
of Life, which is the morbific Cause,, cannot, in its own  
Nature, be pernicious. Hence *Linden, in Selectis Medicis,*dannot sufficiently wonder, that, notwithstanding the many In-  
stances of this, in the Writings of *Hippocrates,* some should yet  
ascribe this Doctrine to *Campanella,* and damn it aS a Novelty-  
invented by a Man who was no Physician: For that Author, id  
*T.r. de Sensu Rarum, Lib. J. Cap.* 2. affirms, that no Fever is  
a Disease, but a Remedy against other Diseases. This Opinion  
is, also, espoused by *fob. de Meg, in Comment. Philos. Cap. Se  
Loc.* 5. and the celebrated *Sydenham* is at a great deal os Pains  
to prove, that a Fever is the Effort or Instrument of Nature,  
by which the pure are separated from the impure Parts, and  
the morbific Cause exterminated and expelled.

Hence the Reason is obvious,,why *Hippocrates,* in *Epidema  
Lib.* 2. informs us, that it is the Office of a prudent Physician,-  
sometimes, to excite Fevers: Besides, nothing more confirms  
this Doctrine, than the universal Agreement of the Antients in’  
tins, that Nature was the best Physician; cured best; termi-

hated Disorders most happily ; and, as *Galen* expresses it, made  
a violent Insurrection against the morbific *Cause*; strongly at-  
tempted Crises and Excretions; and at last, by Concoction and  
Evacuation, freed from mortal Disorders: For the Struggle or  
Effort of Nature against the morbific Cause, is nothing but  
a Fever. Hence we justly conclude, that a Fever is the In-  
strument by which Nature preserves the human Body, opposes  
morbific Causes, and, by expelling them, restores Health.

All Physicians, both antient and modern, have accounted a  
Fever a Disease in a certain Sense; and *Hippocrates, in Lib. de  
Flatibus,. Sect.* 3. calls a Fever a common Disease, which ac-  
companies other Disorders, and especially an inflammation:  
For a Fever is a preternatural Commotion of the Blood and  
Humours, which not only injures and weakens the Functions  
of the Body and Mind, but, also, proves mortal: For few are  
taken off without a Fever. But this does not hinder it from  
being, in other respects, the Remedy not only of its own  
Cause, but, also, of other Disorders: So that we cannot suffi-  
ciently admire the stupendous Skill of the adorable Architect,  
who has so artfully contrived the human Structure, that by its  
' - Force and Strength it cannot only defend itself from impending  
Injuries, but, the Commotions or Effects of the morbific Cause  
are of such a Nature, that, if all other Circumstances are  
equal, they are, also, sufficient for removing themselves, and the  
Disorder. But that this Doctrine may be the better Compre-  
headed, we shall inquire into the Nature and Essence of a  
Fever, examine how it is created by Nature, and determine  
what Fevers produce such salutary Effects, at what Time, in  
. whet Diseases, and under what Circumstances, such laudable

Consequences may be expected.

How common a Fever is, how often it accompanies most  
Other-Disorders, , and how much the Knowledge os it has hi-  
therto been involved in Perplexities and'Obscurities, is suffi-  
eientiy known; for almost all the celebrated Writers embrace  
different Opinions'and Hypotheses, with respect to Fevers:  
But, without enumerating them, we shall only observe here,  
I that as Health and Lise depend on the due Motion os the ani-  
mal Spirits, and Circulation of the Blood, so the Origin and  
. Causes of all internal Disorders ought to be deduced and ex-  
? plained from some preternatural Circumstance in these Fluids.

. Hence we define a Fever, a too briiIc. Motion of the Muscles,  
especially of the Heart, accompanied with an unequal Circu-  
. .\* lation of the Blood, a Change of the Excretions, os the na-

rural Heat, Pulse, and remitting or intermitting at certain  
'.Times.

A Fever is, therefore, a strong and increased Motion of the  
inuscular System. Motion, by the Consent of the greatest  
Physicians, is performed in the human Body by means of an  
highly subtil and fluid Substance, by some called the animal Spi-  
rits, and by others the Vital Principle, winch exists originally  
in the Semen, is contained in the Blood, and afterwards sup-  
‘ ported by the external Air, and spirituous Aliments. This Sub-  
stance was by theAntients called *Nature,* the *Anima purpurea,*/and the *Calidum innatum*; and is the Cause not only of in-  
testine, but, also, of circular Motion; moves all the Limbs,  
and is the genuine Instrument of Sensation and Reasoning.  
This Substance is capable of having its Motion augmented and  
. accelerated in the Nerves, and muscular Fibres; as evidently  
; appears in Spasms of. the Skin, and internal Parts, and  
during an increased and more frequent Action of the Heart,  
accompanied with preternatural Heat. We, therefore, affirm,  
with *Holmont, in Lib. de Febribus, Cases.* that the febrile  
.; Heat is not proper to the peccant Matter, or the Effect of it ;

but that it is’ the Effect os the animal Spirits acting too vio-  
lently, which, as in a sound State, they are the Source of na-  
tural Heat, so they are, also, the immediate, primary, and essi-  
cient Cause of a febrile Heat. But I differ from *Hilmant in*this, that he says the material Cause of a Fever is only occa-  
sional, and free from a material physical Influence and Concur-  
rence, to the Production os a Fever; but that it affords an  
Occasion or Opportunity to the intelligent *Archaus,* or Nature,  
which, in the same manner aS when an Object of Anger is ex-  
‘ ternally presented, by her proper Force and Energy, rouses'  
herself, attacks the Enemy, and endeavours to expel him.-  
But I cannot deny, that the morbific Cause has a certain Power  
\*. ' -of Action and Motion, which, by'acting inordinately on the.

animal Spirits, or Vital Principle, by a certain mechanical Ne-  
cessity, excites that impetuous Motion observable in the Heart,  
Arteries, and Muscles: For the febrile or morbid Motion is  
produced by the Action and Reaction of the active morbific  
Matter, and the moving vital Principle in the human Body; in  
which Sense it may be admitted, that Nature, or *Areheeus, is'*the Author of Fevers.

But we must determine by whet means the febrile Matter  
- acts on the animal Spirits in the Nerves and Membranes; what  
sort of Effect or Reaction succeeds this Operation, and how the  
. Symptoms, Common to Fevers, are produced. Now we assert.

that all Motion of the muscular Fibres is active, systaltic, oT  
Contractory: Hence such a Motion must be rendered preterna-  
tural, either by Intension, or Relaxation, of the Fibres. The  
Intension is generally called a Spasm, which is a preternaturally  
strong and long-continued Contraction of the muscular Fibres.  
Such Spasms constitute the first and fundamental Cause Of all  
preternatural Disorders, and morbid Commotions, and produce  
many and Various Effects; fince there is hardly any Disease '  
without Spasms : These happen more especially in Fevers, and  
the Generation of excessive Heat, where Spasms are the Cause  
of the unequal Circulation of the Blood, the irregular and in-  
creased Pulse, and the other Symptoms: For aS when the Tone  
of the Muscles, and Pulsation of the Heart, are moderate, and  
in due Proportion, the Fluids circulate regularly, the excre- .  
mentitious Parts are secreted and eliminated,and such Substances,  
as are subservient to Lise and Health, are retain'd, so, on the  
Contrary, aS soon as the Tone of the Muscles is Vitiated, Or as  
soon as a Spasm happens, and the Motion of the Heart becomes  
inordinate, the whole Order of the vital Motions, and the  
Oeconomy of the Secretions and Excretions, are disturbed and.  
perverted.

The evident Signs and effects of spasmodic Contractions of  
the muscular Fibres , and Membranes, which in the Beginning  
of intermittents appear evidently, but in a more languid manner:  
in the Remission of continual Fevers, are Various, according to ν  
the Diversity of Patients and Fevers. The following Symptoms,  
especially in the Beginnings of these Disorders, appear: The  
Skin, which is highly sensible, and the Organ os Touch, is  
much constricted, the lax Pores Contracted, and the Skin raised,  
into Tuhercles, like that of. a Goose: The Vessels, which were  
before tumid, and .full of Blood, subside and disappear; the  
natural Redness is converted into a livid Colour; the turgid  
State of the whole Body subsides; there is a Violent Horripi-  
lation, Rigor, and Refrigeration, especially of the Extremities ;

- the Skin, which was before moist, becomes dry and parched ;  
and the Sweat is suppressed. But this Compression and Con-  
striction of the Fibres and Veffels is not only found on the Sur-  
face of the Body, but, also, in the internal Parts;. as is obvious,  
about this time especially, in flow and continual Fevers, from  
the copious Discharge of aqueous limpid Urine, an obstinate  
CostiVeness, a Retention of the Flatulencies, the Impossibility  
of injecting Clysters, the Anxiety of the Praecordia, the Nausea,  
and Disposition to Vomit, and the intense Pain about the spinal  
Marrow, and Region of the Loins; all which Symptoms sussi-  
cientiy evince, that not only the Stomach and Intestines, bus,  
also, the Kidneys, and. hepatic Veffels, are spasmodically con-  
stricted. Nor is the Substance of the Heart, Arteries, **-and**Muscles, free from such Spasms, which, being rooted in the  
Spirits, by Consent affect the whole Body j as is evidens, from  
the small, frequent, hard, and weak PalTe, arising from an in-  
sufficient and less free Influx of the Spirits. All these Symptoms-  
differ not only in Degree, hut, also, with respect to the Time  
of their Accession; since in Intermittents they appear in **the**Beginning, whereas, in those of the continual Kind, they ap-  
pear in the Height and Decline of the Disorder, without ob-  
serving Time, Tenor, or Proportion. And, certainly, **there**is no Fever with which the skilful Physician will, not observe  
such Symptoms complicated. These Things were diligently  
observed by *Helmont,* who, *in Lib. de Fehr. Cap.* 9. gives us  
the. following remarkable Observations: The Part in which  
the febrile Matter is lodged, is first corrugated, which is easily  
perceptible in the Praecordia; in the affected Parted! the Veins  
are disorder'd and constricted, by a Contraction of their oblique  
Fibres: Hence arises a rare, herd, and small Pulse, at once the  
Sign and the Cause of the cold Fit. This corrugating Stricture  
of the Veins will be easily perceived by every feverish Person,  
if he carefully adverts to his own Condition; and even a found  
Person, by careful Attention, may be sensible of the natural  
State of the Veins: For when the Scrotum is lax, and hanging  
down, it is fpontaneoufly corrugated, when the Excrements  
arrive at the Sphincter of the Anus. It is, therefore, natural  
for the Veins, and Parts primarily affected, to corrugate them-  
selves; and aS almost all Veins have Corresponding Arteries,  
these must, also, in Consequence Us their Communication, he.  
seized with Convulsions. Spasms constitute the principal Cause  
both of the febrile Rigor and Heat; for, by means of the  
Spasms, the Circulation of the Blood through the Parts of the  
Body is rendered unequal, so that some Parts are turgid with  
Blood, whilst others are entirely deprived of it. In s0me Parts  
it, also, moves more quickly, and in others more flowly . Hence  
some Parts are affected with a Horror and 'Coldness, whilst  
others are seized with a preternatural Heat: And this unequal  
Circulation of the Blond, arising from Spasins, constitutes **the**Very Essence of a Fever. None, either Of the Antients or  
Modems, has more judiciousty treated of this, than *Hiapocraies,*in ins Treatise *de Flatibus.* For, says he, when the lower  
Belly is obstructed. Flatulencies run through all the Parts of