which, when the Emit is ripe, are discharged Sat Seeds, of the  
Bigness Or French Beans, having a Kerne], within a thin Shed,  
covered with a red Skin. These red Seeds, when discharged  
from their Cells, fall not to the Ground, but are fiipporred by  
feall white Threads, Or about two Inches in Length, which  
make a very beautiful Appearance. The Emit is at first green;  
when ripe, red; and, when declining, turns brown. The Tree  
grows naturally in moist Places, and osten in shallow Water; and,  
what is very extraordinary;bey.being removed on high dryGround,  
become more regular and handsome, and are more prolific of  
Flowers and Fruit. They usually lose their Leaves in Winter,  
' units it be moderate r It is called by fotne, *rhe facet nay.*

There is, also, another Sort of this Tree, which bach been lately,  
brought into *England,* which is called, by Father *Plunder, Mag-  
nolia amplissimo stake albo, fructu caeruleo.* This is esteemed one  
of :he most beautiful Trees in *-America,* where they usually  
grow in moist fwampy Woods; and Often rise to the Height  
of sixty Feet, or more: .The Leaves are much larger than those  
of out common Laureis, and are of a light-green Colour; rhe  
Flowers, I ara rold,- are very large, ot a whitish Colour, and  
very fragrant: The Fruit is shaped like that of the former Sort,  
but is much larger, and emits the Seeds in like Manner; so  
that it is in Beauty from *May* to *Navember,* and the Leave., al-  
ways remaining green, afford an elegant Prospecti in Winter:  
They are of quick Growth, and generally rise with strain Stems,  
which is a great Addition to their"Beauty; and, since they -are  
hardy enough to endure the Cold Of our Climate in the open  
Ground, I doubt not, but, in a few Years, we shall have the  
Pleasure of feeing its beautiful Flowers, there being several Trees  
planted in the Gardens Of some curious Perrons near *London,*where they have borne the Cold of the three last Winters,  
without Shelter; and make considerable Progress every Year.  
*Miller's Dictionary, Pol.* I.

TULPBOOM. A Name for the *Eepidocarpodendron, folas  
angustis, brevioribus, scaliguls ; calycis squamis elegantisseme ex  
roses, aureo, albo, atro rubro variegatis ; storurn plumis albis.*

TULOS. Τὐλος A CalIus.

TUMBABA, or TUMPABAR. Live Sulphur. *Balandas.*TUMBALUM, Or TUBEL. The Scales *{Squamae}* of Me-  
eds. -'

'TUMBIL. Earth. *Palandas.*

TUMOR.

By a Tumor, Physicians mean any Part of the Body that is  
preternaturally enlarged, or swelled; and its Situation and State  
may be known, both by feeing and feeling. But, although it  
has been ofual to refer Excrescences, fiich as Warts and Corns,  
with other simil.r Pustules in the Nostrils and *Pudenda,* to the  
Class of Tumors; yet as these Excrescences do nor grow be-  
neath the Skin, shut without, or upon the Skin, they may be pro-  
perly distinguished from Tumors.

Tumors are Of different Kinds, sod assume different Names,  
according to the Causes, whence they proceed, and the particu-  
lar Pisces, in which they are situated. Some are called hut, others  
*cold* and *watery,* some *windy,* others *scirrhous,* and some *be-  
nign,* others *malignant.* Some Tumors are contained in a mem-  
brancus Bag, like a proper Cost, and, therefore, are called *encysted*Tumors. If a Tumor appears in the Arteries, they are called  
*atneuristns*; if in the Veins, *Varices,* if in the Veins of the  
*Anus,* or *Intestinum Rectum,* the Disorder is termed *Haemor-  
rhoids* ; if in the Scrotum, Insides Of the Thighs, or. Navel, they  
assume the Appellation Of Hernias, or Ruptures.. But if any  
Pur, or Matter, be formed in a Turnor, it is called an Abfcds.  
When a Tumor rises on the Bones, it is named Exostosis.

All these various Sorts of Tumors are generally subdivided into  
several other Species. Thus, the hot and burning Tumors, which  
are the same with Inflammations, when they are violent, and  
rise externally, are termed Phlegmons; if smaller, and gentler,  
they are called Furuncles. When the .nfiammation is'not reared  
deep in the Flesh, but Only spreads superficially upon the Skin, it  
is commonly named an Erysipelas. A Tumor, or Inti animation,  
on the Extremities of the Fingers, is termed a Taronychia, or  
whitlow; but in the lnsidc of the Thighs, in the Groin, Or  
under the Arm-pits, a Bubo; but near the Ears, a Paroris: But  
if, from exrreme Cold, violent lnfi.mtrarions he raised in the  
Hands or Feer, they are named Perniones, or Chilblains.  
Other Inflammations assume different Appellations, according  
to the different Parts of the Body which they affect. Thus, in  
the medicinal Writers, we frequently read of Inflammations in  
the Breasts, Eyes, Tonsils, Testicles, Aims and Legs.

**THE METHOD OF TREATING ENCYSTED TtJ.MoRS.**

- IfTumors, or Tubercles, arise in the Body, contained in certain  
Coats, they receive the Appellation of encysted Tumors, which  
«re generally unaccompanied with Pain, of the fame. Colour  
wain the reft of the Skin; and sometimes harder, and sometimes  
sorter. This Species of Tumor is produced by certain Ob-  
structions in the Glands, or in the Fat, and appear in almost all  
Parts of the Body, paniculirly in the Head, Face, and Neck,  
(see TlonXXXlll *Fig.* I;.) frequently occasioning a prodigious  
Deformity. The Coat, which is often very thick, is formed either

by the obstruSed Gland, ct hy some Cell of the **Membrani**Adipose: They are, at first, finali; and, generally, moveable;  
bur, in time, they gradually increase; and, sometimes, arrive  
to an enormous and surprizing Size. Their Substance is some-  
rimes thinner, and softer; and, at other times, harder and thicker.  
Their Figure is very various ; some have the Shape of Filberts,  
Acorns, Balls, Wainuts, or Eggs; sometimes they assume the  
Form of a Pear, like a fleshy Excrescence suspended, as it were,  
by a Stalk; forne have a broad Base, and some resemble a Fist,  
some a Head; with many other Shapes: Some grow so very  
large, as to weigh many Pounds; others adhere firmly to the  
adjacent Parts; and, at last, hecome entirely immoveable ; and,  
others resemble a Callus, or a Cartilage, in Hardness; some,  
however, contioue always moveable; and forne always soft.  
Encysted Tumors are, also, distinguished by the different Nature  
and Consistence of the Matter, which they contain. When **the**Matter of a Tumor resembles a Poltice, it is termed *Atheroma,*when like Honey, *Meliccris ,* when it is like Fat, Suer, Or Lard,  
*Steatoma*; when is resembles an indurated Gland, *Scirrhas;* and,  
when it seems to he a fleshy Substance, it is called *Sarcoma.* IB  
some Patients, as *Celsos* observes, they are found like Concretions  
of Hain These Tumors are, also,, variously denominated ac-  
cording to their various Situations. When one arises in the Scalp,  
is is by some named *Talpa, Testudo,* or *Luria* ; in the Neck,  
*Struma,* or *Scrofula*; hut, if they appear in the Hands, or Feer,  
especially near the Tendons of the Muscles, they are called *Ganglia.*

Encysted Tumors may he easily known from others, by seeing  
and feeling them, bur,they are not so easily distinguished from one  
another, unlest we are able, by the Touch, to disoover some  
Difference in the Consistence of the Matter, whether It **be**herd, thick,and tenacious ; Or, foft, thin, and liquid; for, as **the**Colour of the cxienral Skin suffers little or ho Alteration by  
these Tumors, we can learn little or nothing from it: Nor is it  
a Matter of great Importance, to know the Nature of the in.  
eluded Matter before the Cure, the Hardness Only excepted; for,  
whatever Matter they contain, the Method of Cure is nearly the  
same. It is, however, necessary to he observed, that theScirrhus  
and the Sarcoma, are the hardest of this Species of Tumors;  
next to these, is the Steatoma.; the rest are foster, and, sometimes,  
differ a little in their Treatment, according to their different **De.**grees of Consistence. Those Tumors of the Neck, which are  
called *Scrofulous,* or *Strumous,* **are,** generally, said to **be** indiI-  
rated Glands; but I have frequently observed Steatomas, **and**Yther encysted Tumors, to proceed from the Fat **Of** the Neck:  
flor it teems scarcely possible, that thefe small Glands, situated in  
the Sides of the Neele, should, sometimes, increase to so mon-  
strous a Size, as to hang down Over the Belly; which is frequently  
the Cafe with the *Tyrolese,* who are troubled with this strumous  
Affection, which may easily happen, wnen the Disorder is lodged  
in the Fat. But, besides thefe, there are sometimes smaller and  
harder Tumors in the Neck, which procced from the Induration  
of these .Glands, which then belong to the scirrhous Species.

If the Pain of encysted Tumors be not violent, if their Bulk  
and Hardness he not formidable, they are attended with little  
Danger. Whence it is not surprising, that forne, especially among  
the poorer Sort, bear them as longas they live, rather than fub-  
mit to the Severity of chirurgica! Operations. But if, as it some-  
times happens, their Size should greatly increase, so as to weigh  
ten, twenty, or more Pounds; if they should begin to excite  
Pain, as is commonly the Cafe in scirrhous Tumors; they not  
Only produce a monstrous Deformity, but intolerable Uneasiness ;  
and, unless seasonably extirpated, they induce a Consumption and  
Weakness, or a Cancer; and the greatest Danger of Death- But,  
in the Cure ofthest:Tumors,theUseQftheKnifeisasinostdways  
necessary', for they are not easily digested, or brought to a Sup\*  
miration. If they are recent, soft, moveable, and small, they  
may he readily and safely extirpated wiih the Knife; but not with-  
our Danger, if they are large, hard, and resist the Touch ; espe-  
cially if they be fnuated near the larger Veins and Arteries, **or**about the Nerves, Tendons Or Joints; or if the Panent be worn  
out with Infirmities, or Old Age; The Surgeon, therefore, must  
regulate his Method of Cure according to **the** Nature of **the**Disorder, and Circumstances Of the Patient.

**Of** thefe Tumors, various Methods of **Cure have heen insti.**toted. Many Surgeons diredt them to he immediately **exist,**pared by the Knife; but, according to the Precept Of *Hippocrates,*1 would not leave mild Means unattempted . For, when theTu-  
mor is recent, and the Patient is of **a** fax, delicate Habit, it **seems**expedient to attempt/Resolution or Suppuration, before **the**Application of the Knife. Bur, when the Tumor is inveterate  
and hard, external Remedies ought not to he applied ; which  
would be so fat from promoting Digestion, especially in a ScirIhus,  
or Steatoma, that they would- increase the Tumor, and make st  
degenerate into a Cancer ; whereas, without topical Applications,  
the Pirienr might have been iupported under them many Years.  
In such Cafes therefore immediate Recourse must be bad to  
**-the** Kniie. du , if the Timidity of the Patient will nor permit  
him to yield to the Knife, io that he will allow of nothing bur ex-  
ternal Remines, digestive Plaisters may he properly applied ;  
fuch as the Plaister qf *Ammrniacum, of Galbanum,* **of** Frog\*

with Mercury, Of *Diachybm* with Mercury, the *Emplastrum  
Oxycroceum, Mynsichrs* diaphoretic Plaister, the *Emplastrum Diasu-  
ponis five miracuiosum,* and the like. *Scultetus* asserts, that he  
has cured various Tumors, os the melicerous Kind, with the  
*Ceratum Dinsinapios.* But, before a Plaister Of this Kind is ap-  
plied, the Tumor Ought to he anointed with the Peruvian Balsam,  
-the Oil Os Soap; Or Petroleum. By these means, when the Tu-  
Iners are not inveterate, nor of the larger Size, they may be again  
.discussed , and, for the mere readily answering Of this Inren-  
Iion, it may be expedient frequently to rub the Part withawarm  
mercurial Ointment, especially if the Tumor he Of the scirrhous  
dsondw ' I ’ 'si..

; "When nothing can be effected byPlaisters, Or digestive Medi-  
.cines. Suppuration must be attempted; especially if the Tumor  
be .still soft, as in an *Atheroma,* Or *Meliceris.* The . Plaister of  
Diachylon with the Gums, and digestive and emollient Cata-  
piasims, frequently applied to the Tumor, excellently answer this  
Intention, especially, if the Middle Of the.Part affected be **seve-**nd times well moistened every Day with the strongest Spirit  
**of** Sal AmnioniaC , and, as soon as the included Mat:er is per-  
'ceiyed to have ripened, the Tumor should he opened by a large  
Incision, and the Pus discharged. After this Operation, the Tu-  
»mor, with its Bag, must be removed by the Application of  
strong Digestives, or Of mild corrosive Medicines; for, if any  
Of the Coat should remain, aster the Abscess is healed, a Relapse  
will gradually ensue, and, therefore, it is extremely necessary to  
apply, daily, a Diachylon-plaister, rill the Deterfion Os the  
Wound be completed: Thus; whatever preternatural Substance  
remains in the Wound, will be more expeditioufly softened, and  
the .Wound more Conveniently healed,

T If, by thole means, neither Discussion, nor Suppuration, Can  
he Obtained, but .the Tumor-rather gradually increases, lest it  
should become too much enlarged and he concreted with the neigh-  
-houring' Parts, Or degenerate into a Cancer, so aS to yield to no  
Medicine, or Operation, they ought to be immediately extirpated.  
Bin these encysted Tumors Ought to he extirpated by different  
M etbods, a ccording to their different Natures. Those which have  
a slender Rcor, andhang, aS it were, by a Stalk, cannot be rno:c  
.expeditioufly removed than by a Ligature, like Warts, Or other  
Excrescences ; by winch-means, in a sew Days, st will drop Ost,  
as it were, fpentaneohily j or it may be extirpated with the Knife;  
and the Wound may bedressed, and healed, like Other Wounds;  
But is, byuheLncisiosq o large Artery should be wounded, the  
Haemorrhage may he stopt with some styptic Medicine, or the  
actual Cautery, Or the Artery may be taken up with a Needle and  
Thread. Lastly, these Tumors may be removed with Corrosive  
Medicines daily applied round the Root, and retained by PlaisterS,  
till *it* falls off. Or, the greatest Part Os the Root being consumed,  
it may be conveniently cur through.- . -V

- When the Root Os the Tumor is broad, recourse must **be  
had** to incision, -Or EfcharOticS, although the latter he generally  
preferred. The incision' may he thus performed: The Skin  
inust he divided longitudinally, through the Middle Of the Tu-  
mor, but, if this Wound he not sufficiently large, another **ln\***Cision must he made rraniyersely, in the Form or a Cross; then,  
with the Knife, and Fingers, the Tumor,-with its Coat, must he  
carefully separated from the Skin and Flesh, keeping the Coat en-  
tire,-that the Tumor may be extracted whole. Thao this may  
be done more commodiouily, -an AssistanrinOnld draw, asunder  
**the** Lips Of the Wound, with Hooks, and the Blood, as it flows,  
should he wiped up with a Sponge, that it may not hinder **the**Operation. As-soon-aS the Coat Of the Tumor appears, which  
is,-usually, whitish, and stretched, the Surgeon must keep it  
raised with his LeftHand, if it he small , hut, if it he too large  
to he held in the-Fingers, another Assistant Ought to keep the Tu-  
mor raised with a Hook, *SaeTab.* XXlX. *Fig.* 2.) Or with the  
Forceps represented in *Tab.* XLIV. *Pig.* I. Or with a CreokedNeedle  
and Thread : Thus, the Tumor, being cautionfly separated from  
the contiguous Parts, it may be extracted entire. The Task is  
easily performed, if the Tumor be moveable, but, is fired, **the**Operation requires both Pains and Skill. Particular Care must  
**he** taken, not to wound any Os' the principal Parts that may he  
situated near the Tumor ὁ and, if the Tumor is to he taken from  
the -Leg, or Arm, inhere a large Artery Or Vein must be7 di-  
.video, ’the TOurrjequetought, first, to be applied to the Limb.  
These Directions being duly Observed, Tumors of this Kind,  
weighing several Pounds, may he extirpated, not only from the  
fleshy Pans, but, also, when they adhere to the Bones and Jaws.-

The Tumor being rightly extracted; if the Wound he small,  
and the Haemorrhage flightjthe Lips must be brought into Contact  
with the Fingers, Lint and Compresses must be applied, and the  
.Whole secured with a Bandage: Thus will the Wound be healed  
in a few Days. But,- if the Haemorrhage he large, it must he  
stopped, as in other Wounds, principally by the Application Of  
Lint,- Comprefles, and Bandages, by Astringents, by a Ligature,  
or the actual Cautery. But, when, in the Operation, either by  
Negligence, or Accident, the Coat, including the Tumor, par-  
ticularly, of the softer Kind, is wounded, as may sometimes hap-  
pen in preventing the Eye from bring injured, when the Tumor  
is in the Eye.lid, or by cautioufly avoiding a large Vein Or Ar-  
.’.τί

tery in any Other Part Of the Body, particular Care must he  
taken, that the Coat he entirely extracted. Otherwise the To-  
mor -will easily return, ln a Scirrhus, Sarcoma, Or Steatoma,  
when the glandular, fleshy. Or pinguicus Substance is hard,  
though the Coat be wounded, the Maner wiil not .flow out:  
Wherefore the whole Tumor, with its Bag, must he carem.hr  
extracted, as we have already directed , so that none of the  
Coat may be lest behind, ln other Tumors, where the Mat-  
ter is soft and fluid, is **the** Coat be wounded or lacerated, the  
Contents are immediately discharged , then all that Can be ex-  
tracted os the remaining Bag, must not Only be removed with  
**the** .Knife .and Scissars, but, is any Fragments should happen to  
remain, they must he extirpated with Corrosive Medicines,  
such aS red Precipitate, with burnt Alum, Or the *Unguentum  
Aigyptiacumatirrets* with a Digestive; And then the Wound may  
he healed like Other Wounds, without the Danger of a Relapse

When, in the extirpation Os encysted Tumors, Escharoiics  
are preferred to the Knife, the *Lapts Infernalis,* Butter os An-  
timony, Or the like, may be applied : But, in mv Opinion,  
when the Tumors are large, hard. Os a Cancerous Diipohtion,  
inveterate, and painful, the Method by Escharotics is osteo darr-  
gerous, because a Scirrhus is easily changed into a Cancer:  
And in other Cafes they cannot he totally consumed without  
Intense Pain, large Effusions of Blood, with great Decay os  
Strength, Or the Loss Os Lise. It is, therefore, safer to extirpate  
large hard Tumors by Incision, though sometimes they may  
he happily removed by Escharotics. But is the Tumors he os  
foster Kinds, such aS the *Atheroma* Or *Meliceris,* l frequently  
use this Method, Opening the Integuments and Bag with **a**Caustic, Or with a Knife, in the Middle Os the Tumor, and dis.  
charging the Contained Matter ’, then by promoting Suppura-  
tion, and the Use. os ..Corrosives, I extirpate the Bag and de-  
terge and inCarn, aS in Other Wounds. This Method I think  
milder than removing the entire Coat by Incision. *Heifl.Cher.*

**For PHLEGMoN, see 1NFLAMMATIO.**

For Abscesses, see ABSCESsvs.

For Tumors and Inflammations Of the Breasts, **see MA&1MAE.**

For inflammations of the Testicles, see **TESTICULL**For Erysipelatous Tumours, see **ERYSIPELAS.**

For Furuncles, see FURUNCULUS.

For Bubos, see BUBO.

For Carbuncles, see **CARBUNCULUS.**

For Clilblains, Tee PERNIO.

For the Gangrene and Sphacelus, see **GANqjo/ENA,**For Burnings, see AMBUSTIO.

For scirrhous Tumors, see SCIRRHUS. . i

For cancerous Tumors, see **CARCINOMA. tio**

For Cedematons Tumors, see OEDEMA. . ;

For. fungous and. dropsical Tumors 0s the Joints, len  
**FUNGUS. ‘**

For fleshyTumors, see NAEVUS.

For Tumors of the parotid Glands, **see PARoTiS.**

TUNA. A Name for the *Opuntia. Indsun* Fig.

TUNETANUS FLOS. A Name for the AFRlcANUJ FLns,  
TUNICA. A Name for the *Caryaphyllus, altilis , natiors..*TUPA-ΙΡΙ. A Species of large Onion, winch grows in  
*Brasil,* called by the *Portuguese Cebola Albaeraea. ' '*

TUPHUS, Or TUFUS. SeeTypHosE-- ' . .

TUPI-EWA. A Name for the SCOPARIA. .

TURAS. The secret effect Of the Water *as Thornes ist* that  
of the Earth and *Sarnies* that Of the Air. *Paracelsus.*. TURBEDON. The *Arabic* Name for **TURBITH.**

TURBINATA OSSA. The turbinated Bones Of the Nosh  
TURBINATUM. The Pineal Gland.

' TURBITH and TURPETHUM. Ossie,.'*Tterbith Alexandra  
num Officinarum.* Ger. 335. Emac. 415. *Turbitsi Officinarum,*Park. Theat. i6IO. *Turpethurn repens soliis Althaeae, vel Indicum.*C. B. P. I49. *Convolvulus Indicus, alatus, maccimus, foliis lbis.ee  
nonnihil similibus, angulosis.* Ran. Hist. 2. i8his.Toum.Inss 84.  
*Convolvulus Zeylanicus alatus maximis foliis. Ibisco nonnihilsinapi  
libus angulosis. Ttrasiavtalu. . Turbith Arabum legitimum et Offi-  
cinarum.* H. Mus. .Zeyl. 26.. TU.RBjkTH.. .

This is a Root about a Finger thick, brown on the Outside,  
and whitish and somewhat resinous within-, of in hot Taste.  
*. Herman,* in his *Catalog. Hortens.. .Luges Sa/αν.* gives a Figure  
and Description Of it.. He says, the Root is long and spread-  
ing, when broken, yielding a milky Juice, which soon hardens  
into a refinons Substance. It shoots forth many long, trailing,  
and climbing Branches, that twist One about the other like the  
great Bindweed , the Leaves are soft and downy, and in Shape  
like those of Marshmallows The Flowers come forth among **the**Leaves, several together. On long Foot-stalks, Os a white Colour,  
in Shape like those of the great *Convolvulus,* Of which it is **a**Species. It grows plentifully in *Ceylon* and *Malabar* in the *East..  
Indies* from whence the Roots are brought to ns, being the  
Only Parts used.

Turbith is a pretty strong Cathartic, purging tough serous  
Humours from the remote Parts, and thereby helps the Dropsy,  
Gout and Rheumatism, and is put into several of the stronger  
purging Compositions..

**The**

- The *Pulnds Oiaturpethi compositus* takes its Name from this  
Root. *Millers Dot. Ojfe*

*Turbith Gallorum.* A Name for the *Seseli , qua Ferulae facie.;  
Thapsia.*

T URBOTIJS. The Turbot. See RHOMBUS.

TURCHOsS. Offic. Worm. Mus. Io6. Charlt. Foss. 39.  
Boet. 265. De Laet de Lap. 87. *Turcheiia.* AldrOV. Musi  
Metalhpera. THETURQUOI3.

This is a precious Stone of the opaque Kind, and Variegated  
with Streaks of green, white, and blue. There are two Species  
of it, the Oriental, and the Occidental; The former is more  
blue than green, and is found in *Persia* and the *Eafi-Indies.*There are two Sorts Os it, one, which always retains its Colour,  
and is Called theTurchoisof the.old Rock, and another, which  
loses a little Of its Colour, becomes greenish, and is called the  
Turchois Of the new Rock.'

The Occidental Turchoife is Of a Colour partly green, and  
partly white: It is found in *Spain, Germany, Bohemia,* and  
*Silesia.*

Sometimes TurchoiseS are found aS large aS an Ordinary Nut,  
but very rarely , since their Bulk is generally no greater than that  
Of a Very small Nut.

This Stone is thought proper to fortisy the Sight, and  
the Spirits Of the Brain but this pretended Virtue is not tO  
he Confided in. if it is reduced to a fine Powder, and exhibited  
internally, it operates like Other alkaline Substances; absorbs  
Acids, and stops Fluxes, Hemorrhages, and Vomiting. The Dose  
is from six Grains to one Scruple. *Lernery des Drogues. -*

The Virtues Os this Stone are Very great in Falls, a memo-  
rable Instance os which is related by *Boetius* concerning him-  
seis. *Scylla* would have it to he a Sort os Fsu’s Tooth.  
Dr. *Woodward* is os Opinion, that the Stones which the Jewel-  
lerscali Turquoise, are only Fragments os Bones ting’d with a  
. bleuish Colour in the Veins Os Copper Mines, where they are  
found; These Stones are polished by the Lapidaries, and set in  
Rings." *Wooden.* Attempt. F. 2. Brollons Travels. *Dale.*

TURCHOSA. A Name for the TURCHOIS.

TURDUS. Offic. *Turdus vulgaris.* Men Pin. I76. *Turdus  
vifcivorus minor.* Bellon, des Oyse. 326. *Turdas simpliciter  
dictus.* AldrOV. Ornith.2. dots. *Turdus minor altor.* Geso, de Avib.  
690. *Turdus musicus.* Schw. A. 3dI. *Turdus simpliciter dictus,  
sive Viscivorus minor.* Raii Ornith. I88. THE MAVIS, Or  
THRUSH.

These Birds, when stuffed with Myrtle-berries, and roasted,  
are said to he exhibited with Success to those who labour under  
Fluxes. *Plin. Bellon.* In the Time of the Plague they are, by  
*'Alexand. Dened..* said to be highly beneficial when macerated in  
Vinegar. The Powder of these Birds is, by *Gainarius,* recom-  
mended against the Effects Os the *Napellus* Or Monkshood. *Dale:  
: Turdas* is also a Name for a Fish, which Authors thus distin-  
guish. . s

TURDUs. Offic. Charlt. Pisc. *I* 3. - Bellon, de Aquat.  
258. Met. Pin. I 86. *Turdus vulgatissimus.* Raii Ichth. 3I9.  
Ejusd. Synop. Pisc. 136. *Turdus primus.* Rondel de Pisc. I74.  
.AldrOV. de rise. 2I. Jons, de Pisc. 26. *Turdus primus.* Gein.

de Aquat. IOI6. THE WRASS, Or OLD-WIFE.

This Animal is found in the main Ocean, and in the *Medi-  
terranean. Alexander Trallian* highly recommends it in the  
Epilepsy and Pleurisy. *Dale.*

. TURNERA. 4. . ‘ Y .

The Characters are,

It hath a funnel-shaped Flower, Consisting Of five Leaves,  
which are fastened tO the Calyx, which is monopetalous, and di-  
vided into five Parts at the Top: Under the Flower-cup there  
are two Leaves, which join at the Bottom,, and surround the  
Cup : From the Centre Os the Flower-Cap arises the Pointal,  
which is divided into three Parts to the Bottom, and surrounded  
by five Stamina. This Pointal afterwards becomes an almost  
spherical Fruit, which is divided into three Pans, - and filled  
with roundish Seeds, which are fastened to the Placenta by  
Ilender. Threads. . - J

*Millar* mentions two Sons Of *Turner a*, which are,

1. Turners frutescens ulmisolia. *Plum. Nov. Gen.* I5.

*. 2.* Turnera frutescens, folio longiore & mucronato.

. These Plants are both Of them Natives of the warm Parts Os  
*America.* The first Species was found by F. *Plumier* in *Martinlen,*' who’ gave it the Name os *Turnera,* from Dr. *Turner,* a famous

*Englssh* Physician, who lived in Queen *Elizabeths* Reign, and  
wrote an Herbal, in which he has principally figured and de-  
scribed the useful Plants. - *- . I; ; \**

The other Species was discovered by Sir *Nans Sloane,* Baronet,  
who has figured it in his Natural History Of *Jamaica,* under the  
following Name ; *Ciflus urticae folia, flore luteo, vasculis trigonis.*But both these Sorts were Observed by Dr. *Vgrilliarn Housioun, in*several Parts of *America. Millers Dictionary, Vol.* 26

TURNESlUM. τουρνέσιον. The Name Of a Weight men-  
. tioned by N. *Myrepsus. Sect,* 8. C. I rd. But if is not known  
whet Weight he means.

TURPETHUM. Turbith.

. TURPETHUM MINERALE. Turpeth, or Turbith Mineral.  
;See MERCURIUS.

TURRETS. The Name os a Stone, which is said to prescrve  
the Bones from being fractured in a FalL

TURRITI3. si ...

The Characters are ,

The Pod is pretty stat ὁ the Seed is not rnarginated, but in  
Other respects like rhe *Leucarum* and *Hes.pcris ,* the Pods end  
in a pyradintical Form.

*Eocrhaave* mentions sour Sorts Os *Turritis ,* which are, :

I. Tufritis; soliis inferioribus Cichoraceis, caneris perdo: sum.  
*T.* 00-4- *Brassica scylvesiris, foliis circa radicem cichoraceis.* C. β. R  
*ssz.Sinapi album.* Lugd. I688.

2. Turritis ; quae Barbarea muralis. *J. B.*.2. 869. *Erysima  
similis hirsuta alba.* C. B. Prodr. 42..

3. Turritis ; Vulgaris; ramosa. *Τ.* 244. *Burs.a E assoria a sive  
Piloscllasiljquos.a.* J.B. 87O.

4. Turritis , solio Leucoii *Tourn. Infl.* 224 *Boerh. Ind A.* 215.  
*Camelina.* Offic. Ger. 2I 3. .Emac. 273. *Camelina sive My agrum  
alterum amarum.* Park. Theat. 868. *Myagrum siliqua longa.*C. B. P. I09. *Myagro. affinis planta siliquis longrs.* jo Β. 2. S94.  
Raii Synop. 3. 298. *Erysimum Galeno et Theophrasto.* ..Rail  
Hist. I. 8I1. TREACLE WORMSEED. ....

This is sometimes found in putrid Places, and flowers **in***June* and *July.* The Herb itself is used, which kills and dis-  
lodges Worms, Corroborates the Stomach, expeis Poison, is be-  
neficial to paralytic and epileptic Patients, and cures Ulcers Of  
the Mouth. *Dale.*

Besides the foregoing Species os *Turritis, Dale* mentions.**the**following Sort, which is, .... ..

TURRITiS. *Ossic. Ger.* 2I2. *Emac..* 272. *Raii Hist.* I. 799.  
*Synop.* 3-.293. *Tourn: Inst.* 223. *Turritis vulgatior,* J. B. 2.  
836. Paris. Theat. 852. *Lohelio Brassica siylveflris hispida,. non  
ramose.* C. Β. P. I I2. *Leucoiurn flore albo, sil testeis usto versu  
dis.posctii, et reflexis.* EJosth 243. TOWER MUSTARD.

This is sound in sandy Hillocks, and flowers in *June.* The  
only Part Of it used, is the Herb itself; the Juice os which is,  
by feme, recommended for curing Ulcers of the Mouth, and  
killing Worms. *Dale.*

TURSIO. The Porpoise. ...

TURTA5, *re sc as. A fort* Of Tart, made Of Dates, Meal,  
and Water, and baked under the Embers. *Erotian. . .. .*

TURTUR. Offic. Schroff 5. 324. Met. Pin. I75. Bellon,  
des Oyse. 310. AldrOV. Ornith. 2. 5O5. Gesm de AVib. 277»  
Sehw. A. 362. Charlt. Exer. 85. i Jons. deAVib. 64 Raii Or-  
TL D^)VEUlfd. -Syn°PEJ' Will. Ornith- I 34. THE TURe  
' This Bird, and its Fat, are used. In Virtues it .agrees with **the '**Pigeon, especially in stopping Dysenteries, . and immoderate  
Discharges of the Menses. The Fat, collected when the Animal  
is roasting, is, according *to Sehroder,* properly used as'an Oint-  
ment in Disorders os the Kidneys, Abdomen, Breast, and  
Groins. *Dale. .*

' TURUNCoE. Tents.

Tents are sometimes used in dressing Wounds, and are made  
Os scraped Lint artfully rolled up, with a broad Head lthe **a**Nail. Their Length and Thickness ate different, according to  
the different Sizes Of the Wound for winch they are designed.  
See *Tab.* XXlIl. *Lit.* K, L, M, and N. This sort Of Tents are  
principally used in deep Wounds and Ulcers;; for by their Assist-  
ance, I. Remedies may not only he conveyed to the inner-  
most Recesses and Cavities Of the Wound ; but, 2. they pre-  
vent the external Parts Of the Wound from Coalescing, before  
the Bottom appears to be healed. 3. By their Means, also.  
Wounds may be conveniently cleansed from Blood, and Other  
Sordes But they must not only be fitted to the Wound, but,  
also, made extremely soft, that they may not increase the Pain  
Os the Wound. That they may not Obstruct the Healing of. **the**Wound, if it appears to he sufficiently deterged, and that **the**Cavities are gradually uniting, the Tents should be lestehed in  
Size, and, as soon as possible, entirely laid asides And it is not .  
improbable, that the Neglect os this Caution induced some  
Surgeons,, both antient and modern, os mo mean Reputation,  
to forbid entirely the Use os Tents ‘. Among these *ntCMaga..  
tap* and . her/*leste.\_ ' .*

Some Tents are, also, made of Linen Rags, Dot scraped, but  
entire, twisted together in a conical Form, with a Thread fa-  
stened at jts Basis, but the small End should he a little scraped,  
to Tender It softer,, that it may not increase the Pain. The  
Thread is fastened to the Basu, that the Tent .may be easily ex.  
tracted, is it should accidentally drop into the Cavity Of the Ab-  
domen Or Thorax.." See *Tab.* XXI ll *Fig.* O. This Kind Of  
Tentis principally used in’Wounds winch penetrate into the  
Cavity.Ofthe Abdomen and Thorax, lest they should heal,..be-  
fore the Blood, and Other purulent Matters, .be evacuated.

A third Kind of Tent is made for dilating the Orifice of  
a Wound, lest it should be too narrow, that the Blood, Sanies,  
Or any exUaneous Substance lodged within the Wound, may. he  
more easily extracted. Or that Remedies may be more conveni-  
ently admitted. These Tents are generally made Os a Piece  
Of. Sponge prepared in a peculiar Manner , Or Of the dried  
Roots Os Gentian, Turnep, Calamus aromaticus, or Comfrey,  
which

which are of inch a Nature aS to imbibe rhe Matter that stows  
to them ; and, being hy these means swelled, they dilate the  
Orince of the Wound. NOt unlike Tents are those Tubes or  
Pipes Os Lead or Silver, which are sometimes used for dis-  
charging Blood Or *Pus* our of narrow Wounds or Ulcers;  
and sometimes for evacuating dropsical Waters, and Urine.  
Thein Size and Figure vary according aS the Nature Of the  
Wound may require. See *Tab.* XXllI. *Lat.* P, Qss. S, T, V, X.  
Tents are rejected by *Magatus* and *Bellosie* in *Fistulas.* See  
FISTULA..

*Garengeors* Objections tO Tents in Wounds Of the AbdO-  
men are considered under the Article ABDOMEN.

For the Use Os Tents in the Cure Of Inguinal Ruptures, **see**BUBONOCELE.

The Reasons against the Use os Tents in Lithotomy are  
taken Notice Os under the Article LITHOTOMIA.

.TURUNDULA. A sinallTent..

. TUS. The same aS THUS.

TUSAI. A Name for several Species Or *Corona Imperialis.*. TUSSEDO. A Cough. - -

TUSSICULARIA. Medicines which excite a Cough. *Gal.  
Aurelianus.*

TUSSILAGO.

- The Characters are ὁ .

The Root is very creeping; the Flower Consists of Very  
numerous Barbulae, stands on a single Stalk, and is included in  
**a** Calyx, which has **a** multifid Base.

*. Bocrhaave* mentions two Sorts Of *Tussilagp* which are,

i. Tussilago , vulgaris. 6. B.P. I97. *Tourn. infi.* 4g7. *Isperh.  
Ind. A.* Id. *Tussilago, Farsura.* Ossie. *Tussilago.* J. st 3. 563.  
Get. *666.* Emac. 8II. Park. I22O. Raii Hist. I. aco. Sv-  
nop. 78. COLTS-FOOT.

The Roots of Colts-foot are thick at the Head, from which  
run several Strings. The Flowers spring up about the latter  
End os *February, sat* the Beginning Of *March,* On Stalks about  
two Or three Inches long, beset with sharp-pointed scaly Leaves ;  
they are yellow, radiated, and in Shape like Dandelion, which  
turn into Down like them : The Leaves spring up, after these  
are gone, somewhat roundish, but angular, and indented about  
the Edges, hollowed-in next the Stash, in Shape like Butter-  
bur, but much less, whitish underneath, having the upper Part  
green, but Covered with a Cottony Skin, that is easily wiped  
Off It grows in moist watery Places, and flowers early in  
the Spring. The Leaves and Flowers are used.

They are pectoral, and accounted good for Diseases Of the  
Lungs and Breast, aS Coughs Consumptions, and Shortness  
Of Breath \* and are frequently put into pectoral Apozems:  
The dry Herb, Cut small, is smoked among Tobacco for  
Coughs, and Other Affections Of the Lungs. *MillersBot. Osse.*'.. Colts-foot-leaVeS are bitter, glutinous, and a little styptic ;  
they have the Taste Of an Artichoke, and give hut a very saint  
Tincture Of Red to the blue Paper. \_ There seems to he in this  
Plant, a Salt resembling that os Coral, involved in Sulphur, and  
**a** great deal Of Viscous Phlegm.. The Leaves and Flowers are  
very sweetening, moderately aperitive, and dedicated (if l may  
so say) to the Diseases of the Breast, winch are Occasioned by  
acrid and saltish Serosities. The Leaves are prescribed IO asth-  
matic Persons, to smoke aster the manner Of Tobacco: MI.  
*Doyle* advises to mix with those Of.Colts-sOOt, Flower of Sul-  
phur, and some powdered Amber: He affirms, that this Medi-  
cine has Cured several Os the Phthisich. In the Time Of .Drosio-  
*rides,* they made those that were afflicted with these Distem-  
Pers, receive the Smoak Of the Leaves Of this Plant at their  
.Mouths. The Flowers and Leaves are used in the pectoral  
Decoctions, and LOhOchs to make one spit; there is a Syrup  
and a Conserve made or these Flowers. The following Ptisan  
is Very good for a dry Cough.

. Pour four Quarts Of boiling Water upon four Handfuls of  
the Leaves os Colts.foot, and three Pugils Of the Flowers,  
two Pugils Of the Tops Of Hystop, One Ounce Of Raisins,

. and three Spoonfiiis of *Narbonne* Honey ὁ boil it a little;  
take the Pot from the Fire, cover it, and strain the Ptisan  
-when it is Cold. *Martyn's Tournoforf. . -*

*Hillerius* informs us, that he restored many Children labour-  
dug under an Atrophy, only by the Leaves of Colts\*soot, which  
he ordered to he cut down like Other Pot-herbs, made up with  
**a** farinaceous Puls, fried in Butter like Sage, and used- for a  
long Time, aS we are informed by D. *Sarne ex Observat.  
Hieron. Beus.neri. Raii Hiss, plant.*

- 2. Tussilago; Alpina; rotundifolia y glabra. C. *B. P.* I9y.  
*M. H.* 3. 130. *Do er sc jnd. asp. Plant. Cal.* I. ,

This Plant, in all Probability, is called *Tussilago,* from the  
-Word *Tussis;* because it is good for a Cough. It receives  
.the Name *Bechion* from the Greek Word βὴξ, which Corresponds  
to the Latin *Tussis.* It is called *Ungulae Caballina,* Or *Calceum  
Equinum,* because its Leaf, in Shape, resembles an Horse's Foot.  
It receives the Name of *Farsura,* or *Tarfoerella,* because sta  
**Leaves** resemble those of the white Poplar, or appear to havo

Meal sprinkled on them. It is, also. Called *Firtus ante Patrem,*hecanse in rhe Months of *February* and *Marche* when its Leaves  
have not appeared, it suddenly sends forth its Flowers, which  
hardly Continue above two Days.

The Flowers, Roots, Stalks, Leaves and Fruit, are used in  
Medicine. They are of a penetrating, heating, and lenitive  
Quality for which Reason they incide thick and pituitous Hu-  
mours contained in the Lungs and are good in Coughs, Con-  
sumptions, and Pleurisies. The recent Leaves bruised in a Mor-  
tar, and boiled with double the Quantity Of Sugar, are excel-  
lent in a Phthisis, an ExulCeration os the Kidneys, a long-con-  
tinned ulcerous Gonorrhoea, and Disorders of the Stomach  
arising from Phlegm. ColtS-soot is accounted *alentpharmfn,*because it excites Sweat. The recent Leaves, applied externally, -  
are beneficial for the Cure of Ulcers and Inflammations, Its  
Juice drank for some Days, is said to cure quartan Agues. *Host.  
Plant, adscript. Boerhaav.*

TUSSIS. A Cough.

A Cough and an Asthma are *so* nearly related, and so frequently  
Complicated, that the one can hardly be without the other: A  
Cough, then, is a Violent Expulsion Of a foreign Matter from the  
Bronchia os the Lungs, by means os their increased contracted.  
Or convulsive Force, accompanied with a Violent Expiration.

AS I intend to give the History and Pathology os this Disorder,  
**I** shall begin with a Description os those Parts, which most imme-  
diately concur to the Production of a Cough, that thus we rosy  
discover the true Essence Of this convulsive Motion, and **be**able to understand its several Differences. The primary Seas,  
then. Of a Cough is, that large Canal, by means of which we  
breathe, and which is divided into two Parts, the Aspera Arteris,  
and the Bronchia : The latter Os these are distributed through the  
Substance os the Lungs, whilst the former reaches from the  
Lungs to the Fauces. The Origin Of the Aspera Artesia,  
which is called the Larynx, is a Canal, beginning at the Fauces,  
and form'd Of five Cartilages, connected by three Mem-  
branes, the exterior of which is nervous , that in the Middle  
fleshy, and the internal glandular: The superior Aperture  
Of this Canal is call’d the Glottis, which is covered with a  
Cartilaginous Covering, called the Epiglottis : The Larynx  
is succeeded by a Cartilaginous and membranous Tube, call'd  
the Aspera Arteris, which, being wider at the Beginning,  
and gradually becoming narrower, in its Progress to the Lungs,  
**is,** near them, divided into two Ramifications, call'd the Bronchia.  
These Ramifications are divided into numberless other, which  
are distributed through the Substance of the Lungs, and which  
Consist of Cartilaginous Segments, and contractile Membranes;  
then they terminate in small Vesicles, like Clusters, which adhere  
to these small bronchial Ramifications, and constitute the most  
Considerable Part of the Lungs.

All these pneumonic Canals, from Beginning to End, are fur-  
rounded with a Membrane, Consisting Of longitudinal and an-  
nular Fibres, and furnish'd with many excretory Ducts and Glands^  
the Number, Situation and Figure os which is exquisitely deli-  
neated by *Morgagni adverse. Tab.* Xl. *Fig.* I. These Glands  
pour into these Canass subservient to Breathing, a thin, roscid,  
mild, and lymphatic Humour, which, also, in all Probability,  
drops from those Glands, which externally adhere to the Epi-  
glottis, the arytenoide Cartilages, and the Extremities Os the  
Bronchis. These Glands are represented by *Heise er HsA.Fl.C.  
Cent. J et %. Ob.* 63. Provident Nature has bestowed On these  
Ducts, Vessels os Various Sorts, especially of the arterial Kind,  
distributed from the bronchial Artery : This bronchial Artery  
takes itS Beginning from the Trunk Of the Arteria Magna de.  
scendens, above the Arch Of the superior inter-costal Arteries;  
and is divided into three Ramifications, One os which runs ex-  
ternally upon the Aspera Arteria, whilst the other two distribute  
many Ramifications through the whole Substance Of the Mem-  
branes of the Trachea, and of the pulmonary Bronchia. These  
Ducts, also, receive Venous Vessels from rhe bronchial Vein; the  
Ramifications of which, being propagated' in the same manner  
with the Arteries, at last, by a large Ramification, terminate in  
the Trunk of the Vena cava descendens, and the Azyugos: Both  
these Species of Vessels were discovered and are accurately described  
by Mt. *Euysoh,* in *Episi.* 4 And lastly, the Ducts, subservient to  
Respiration, receive NerVeS from the Par vagum, and the inter-  
costal Nerve. . ' . ' \* -

The primary Use and Function Of these Canals is, to afford **a  
a** Commodious Ingress Of the Air to the Lungs, and a free Re-  
turn Of it thence, in Order to facilitate the Circulation Of the  
Bsood, so necessary to Lise and Health: For this Purpose, thefe  
DuctS are furnish'd, first, with a large Number Of Glands, not  
for secreting an excrementitious Liquor, for this Part is by no  
means naturally destin'd for the Excretion of the Sords, hut  
the Design Of those Glands is, to discharge a thin Lymph, which,  
by a mild and continual Lubrication, cherishes the Membranes  
Of the Trachea and Bronchia, lest they should become dry by  
the continual Action of the Air in Inspiration; and, when this  
Lymph has perform’d its Office, it is resolv'd into Exhalations, and  
carried Ossi with the expired Air, aster rhe manner Of cutaneous  
Perspiration. For **the same** Purpose, **thefe** Ducts, subservient **to**

**Respiration**

Respiration,. are furnish’d, secondly, not Only with nervous  
Coats, exquisitely sensible, but, also, with muscular Coats, posa  
fessed of longitudinal and annular Fibres, by means Os which  
they are capable, not only Of constrictors, hut, also, of a dila-  
tarory Motion, which provident Nature has bestow'd On all the  
nervous and membranous Ducts Os the Body, aS we find io the  
Ureters, the biliary Ducts, the Stomach, and intestines ; Nor is  
this Motion without its peculiar Advantages ; for it greatly con-  
tributes, not Only to promote the Ingress and Egress of the Air,  
btr, also, to the Secretion Of rhe Lymph from the above-men-  
tioned Glands, and to the Circulation of the Blood, through the  
bronchial Vessels. Bur, thirdly, too’ these membranous Ducts  
are not of themselves sufficient for the Business of Respiration,  
yet they are so necessarily connected with the other Parts, sub-  
servient to the same Purpose, such aS the Lungs, the Pleura,  
and the DIaphragm, together with the intercostal and abdominal  
Muscles, that 'th almost impossible, that when one Part acts, all  
the others should not, also, begin to act.

When these Parts are in their due and proper Condition,  
Respiration is carried on in a natural Manner: But when any  
one os them recedes from its natural State, Respiration is forth-  
with injured and perverted. Without Considering other Disor-  
ders os Respiration, we only now treat Of a Cough, which  
always arises from a preternatural State of some of rhe above  
mentioned pneumonic Canals, l don't-hesitate to affirm, that  
what in the Stomach produces a Vomiting, in the Bronchia gives  
rise to the Cough ; that is, an Inversion Os their tonic Morion -  
for I am of Opinion, that under a Cough, the bronchial Ducts,  
being constricted from their inferior to their superior Parts,Toroe  
their contain'd Air quickly and impetuously upwards, aS is they  
were to expel something foreign » But since, when these are  
disorder'd, 'tis necessary the other Parts of the Breast destin'd to  
Respiration, and intimately connected with these, should, in con-  
sequence Ol the strict Consent between them, become Par-  
takers Of their inordinate Motions, it is sufficiently Obvious,  
why the more Violent a Cough, which is a preternatural Expira-  
tion, is, the more violently the Breast, the Abdomen, and the  
whole Body should be concussed. -In consequence os this Con-  
sent, it also frequently happens, that when the. Stomach, the Dia-  
phragm, the Oesophagus, the praecordial Nerves, and .those di-  
stributed from them. Or the pituitary Membrane of the Nostriis,  
are, by any Cause, Vellicated, the Ducts, subservient to Respira-  
tion, being by that means affected, a Cough is excited.

is, -therefore, a spasmodic, and convulsive Disorder of these  
Ducts, is the remote Cause Of a Cough, their VelliCation must  
necessarily be the immediate Cause os such a convulsive Disor-  
der, and consequently of the Cough. Every Cough, therefore,  
has its Seat in the Breast, the’ its productive Caules are not al-  
ways lodg'd there. And this Diversity Of remote Causes, which  
concur to the Production of a Cough, produces a great many  
different Species thereof.

Nor do we intend to consider that Species Of Cough, which,  
aS a terrible Symptom, accompanies Various Disorders : Of this  
Kind is a Phthisical Cough, which arises from a Colliquation Of  
the Vesicles, ard bronchial Vessels, produced fry an Ulcer of the  
Lungs, and, consequently, has, for its Foundation, a Solution  
os Continuity. In this Species Of Cough, an ulcerous and so-  
reign Matter is not Conveyed through the pulmonary Glands,  
but thro’ the Corroded, lacerated, and gaping Cavities *os* the  
Bronchia, and, by Vellicating the herVous Membranes, pro.  
duces the Cough. To the Class of symptomatic Coughs, also,  
belong those which happen in Asthmas, PeripneumonieS, Pleu-  
fifies, a Scirrhus, and lmpostumation Of the Lungs, or an In-  
fiarnmation Of the Diaphragm and Liver. Of the symptomatic  
Kind, are, also, those Coughs, which arise from a Wound inflicted  
in a Nerve or Tendon about the Neck, as, also, those which  
succeed Convulsions, Epilepsies, and hysteric Disorders: For  
these Species of Coughs are, for the most part, produced by  
a VelliCation os the Bronchia, Only induced by Consent, since  
the Cause of the Disorder is lodg'd in a Place more or less di-  
stant from the Praecordia.

Nor shall we, at great Length, consider . that Species Of  
Cough, which arises from a Falling of any foreign solid or fluid  
Body into the Aspera Arteria, thro’ the Aperture of the Glottis:  
TheseAccidentS are Very terrible , and often fatal, by inducing  
a sudden Suffocation, memorable Instances Of which are found  
in *Marcelli Donati Host. Med. Mirab. Lib.* 3. *.cap. Ji* To this  
Species of Coughs, belong those produced by Tumors, Stones,  
and other preternatural Things, adhering to the Aspera Arteria  
and Bronchia. Hence Authors, of undoubted Veracity, assure  
us, that Stones, and Other small Bodies, like Hail, have been  
thrown up in Coughing. See *Alexander Tralliart,* in *Lib.* 5.  
*Paulus ASgineta, Lib.* 3. *Cap.* 28 and 3t. and *Pet. Borelli, in  
Obs. Cent.* I. *Obs. 6y.*

Nor are we to consider those Coughs, which are produced by  
the Fumes of Lead, Metals, and, especially Of acid Minerals  
long inspired with the Air; to Which the Diggers and Refiners  
of Metals, Porters, who use much Litharge, Masons, and those  
who deal much in Quick-lime, are principally subject, since  
these Coughs are easily accounted sor . h-causs, when the me-

tallic, and almost corrosive Panicles, enter the Ducts sub&r-  
vient to Respiration, and possessed of an exquisite Sensibility,  
they insinuate themselves intimately into them, and constrict  
them violently, which proves the Cause of a dry Cough, com-  
plicated with an Asthma.

Nor does that flight and short Cough, which, in Persons other-  
wife sound, is produced by a Suppression of Transpiration, come  
under Our Consideration. Coughs Os this Kind are produced, when  
Persons, especially Of pituitous Habits, suddenly expose their Heads  
Or Breasts, when warm, and under a gentle Perspiration, to Cold, in  
Consequence Os which the acrid Serum, repelled from rhe Skin, salis  
upon the Asperia Arteria and Bronchis. Coughs Os this Kind area  
also, produced, in old Persons, when they steep in cold Places, espe-  
cially in the Night-time; Or freely expose themselves to a cold and  
Winter Air: This Species Of Cough is, also, a Concomitant Of  
a Coryza ὁ and is soon cured, either by keeping warm. Or, per-  
haps, more expeditiousty, by the Exhibition of proper DiaphO-  
reties. To this Species of Disorders, also, belongs the Falling of  
the Mucus from the Nostrils to the Fauces and Larynx: But this ’  
Mucus is, however, easily expectorated in the Morning.

But we shall treat, at greater Length, of that Cough which is  
a primary Disorder, Violently affects the whole Body, and racks  
the Patient, not Only by its Vehemence, but, also, by its long Con-  
tinuance : This we call a a rheumatic Cough ; for it has for- its  
Cause an inverted Motion Of the Humours, from the Circum-  
ference Of the Body to the Lungs, and a Congestion of them  
therein. Nor is it ever free from Horripilations, and febrile  
Commotions, principally Observable towards the Evening,  
This Species os Cough is either dry Or moist, according to  
the Habit Of the Patient. The moist Species is incident to san-  
guineouS and phlegmatic Persons to Persons whose nervous, si-  
brons, and.museular Parts, are sett; to those who abound with  
serous and pituitous Juices, such as Women rather than Men ,  
and infants. Children, and Old Persons, rather than young and -  
adult Persons : But the dry Cough is more incident to hypochon-  
driac, scorbutic, and cachectic Persons ; to such RS are Of a  
rigid Habit of Body,. to those who have a weak nervous Syd  
stem, disposed to spasmodic Motions, and to such aS abound  
with an acrid Serum.

The highest Degree Of a rheumatic Cough is Called a Con-  
Vulsive or Chin-Cough. This rages with inch unbounded Fury,  
and agitates the Patient with such Concussions, that he fre-  
quently seems to he in Danger Os a Suffocation. Sometimes,  
especially in **the** Beginning, it is dry ; and none, or at most **a**Very .small Quantity Os thin Serum, more or less acrid, is ex-  
pectorated : At other times it is moist; and then, after violent  
Efforts, a fublivid, and Often an highly tenacious Mucus is err  
pectorated. Under this Species os Cough the Patientis Extre-  
mities become cold, he is costive, discharges thin Urine, and  
his Vital juices, being too copiously and impetuously conveyed  
to his superior Parts, fill his Head and Breast : Hence, under  
the Paroxysm, his Face is red, his Veins tumid, and his Pulse  
strong and quick , his Eyes are prominent, and discharge Tears,  
his Eye-lids swell, and sometimes, when he shee2.es, the Blood  
bursta from his Nostrils. Sometimes, also, the small Vefleis of  
the Lungs are ruptured, and a Spitting of Blood succeeds. This  
Species Of Cough is frequently accompanied with an Hiccup,  
and troublesome Vomitings; some Patients involuntarily discharge  
their Faeces and Urine , and others, especially Children, in  
Coughing, contract Hernias or, according to *Hippocrates in  
Apse* 46. *Sect. 6.* become gibbons. *InM.N.C. Cent.* I. *Oof* **I.**we have a memorable Instance Of one Of the Bodies of the  
Vertebrae Of the Back, broken through the Middle, by the Ve-  
hemence Of a Cough of this Kind. It is, also, to he observed,,  
that an Apoplexy may he produced by the excessive Vehe-  
mence of a Cough. And *Boyle* observes, that by such a Cough  
a sudden Loss of Memory, as, also, a Palsy of **the** Hantsq and  
Other Limbs, were produced.

The material Cause Of a conVulsive, or Chin-cough, resides  
in the thin, acrid, and almost caustic Humour deposited On the  
highly sensible Coats Of the Ducts destin'd for Respiration. This  
Humour is either lodged only in the Larynx, and Aspera Arteria,  
in which Case it produces a continual and ungrateful Titillation  
Of the Fauces , Or it is more deeply seated in the pulmonary  
Bronchia; and then it excites the most atrocious Efforts of  
Coughing. This Humour is generated by the acrid and impure  
SOrdes, either not sufficientiy expelled to the Surface of the Body,  
or repelled by any Cause, especially Cold, and Consequently con,  
gested in the Lungs. Hence we leans, that a Suppression of  
the Itch, Tineas, and AchoFS Of the Head, the Gutta Rosaces,  
aS, also, a too hasty Consolidation of Ulcers, Or the Repelling of  
the Gout, are succeeded by a Chin-cough: And there is no  
other Reason, why the MeasteS are preceded, accompanied, and  
suceeded with long continued Coughs of this Kind, than that  
the acrid morbillacious Matter is retired to the Ducts subser-  
vient to Respiration, and Violently Vellicates‘them. See *A.N.*C. *Dec.* 3. *Obs.* II.

A rheumatic and convulsive Cough, arising from a common  
Cause, some Fault of the Air, for Instance, frequently, rages epie  
domically io various Countries, |t seizes principally in the Au.»

-tumn and Winter, especially if the Winter, after a South Wind,  
and a moderate Warmth, suddenly becomes intensely cold, and  
.inpp.ng North Winds begin to blow. But this Cause Only ex-  
cites a thematic Cough in impure Habits, whilst in others it  
Only, for the most part, produces one of the catarrhous Kind:  
.Hence we generally observe, that the Cause of these epidemic .  
Coughs is an Air replete with pernicious fetid Clouds, or im-  
pregnated with Other acrid and Often poisonous Particles, the  
. Causes, alfo. Of exanthematous Fevers , which Particles, when  
drawn in with the Air, not only produce a Violent Cough, but  
.also Aphthae, which render it more intolerable, than it would  
have otherwise been. Besides, in the Spring these several Coughs  
. sometimes rage epidemically, and are accompanied .with .an  
Hoarseness, and at this Season they derive their .Origin from  
the saline and acrid Exhalations contained in'the Air, thy the  
Heat Os the Sun raised from the Earth aster Winter, and insinu-  
ating themselves through the Glands Of the Ducts subservient tO  
Respiration- See *Hippocr. Epidem. Lab, 6. Sect.* S. *Sennertus de  
Tebribus, Lib.* 4. *Cap.* ry- *Sydenharni Opera. gi.*

Let this suffice,; with respect Io the highest Degree .of a  
; rheumatic Cough, the Causes Of which are generally external.  
But there are Other Coughs, which are more properly called  
rheumatic, which proceed from an internal Cause, and .which  
-are not Only long protracted, hut, also. Very uneasy to the Pati-  
ent,. since they are complicated with rheumatic Pains of the  
Breast and Head, Hemicranias, TOOth-achs, Punctures Of. the  
.Sides resembling a Pleurisy, and Defluxions of .an : acrid. Mat-  
yer-from the Head to the Fauces.. Coughs Of this:Kind **are**(Principally incident; to Cachectic and scorbutic Constitutions, in  
.Consequence of; a Suppression of (edematous Swellings of the  
Feet, or any Other Tumors : And this preposterous Practice  
brings On so Violent a Cough, and Difficulty Of Breathing, that  
the miserable Patient seems tO be in Danger. Of being suffo-  
cated. Coughs Os this Rind are. very Common in Old Persons,  
.who abound with impure Juices, and in such Patients it is pro-  
ducedthy external Cold, admitted principally to that RegionOf the  
Pack, where the first Vertebra Os the Loins, and greaterfMeseteric  
Plexus, os Nerves, are found , not iS .it Owing to any other Cause  
than a Conveyance os the acrid Serum from the external Parts  
jos the Body to the Lungs. This Species, os Cough, in pituitouS  
and old Patients, who live delicately, use a sedentary Lise, and  
have, neglected, usual. Venesection, is. frequently Os the moist  
Rind, and, produces a critical Effect , fince by its means the  
whole Mass Os Blood and Humours, though not without, con-  
siderable Uneasiness, is excellently purged from theRedundanoe  
Of Impure Serum , so .that when the..Cough is .removed, ’the  
natural Strength returns, and the Sleep, .Appetite, .and . perfect  
Health, are restored. L.. ί..ψ

To the Class os rheumatic Coughs, also, belong those of the  
stomachic and hypocondriaCKinds ; .TheCause Of.the former  
Of which is .lodged in the Stomachand that: of .the lattes,  
deeper in the Hypochondria and Intestines:. And both .these  
Species Of Copgbs are produced, partly by a Consent of the  
Nerves, and partly by a rheumatic DestUxion. of Serum on the  
Lungs. The. stomachic Couth discOVerS itself, by peculiar  
Signs, which are a Nausea, a Cardialgis, a Loss of Appetite, a  
defective Digestion, a Sense Os Weight in the Stomach: And'  
the first StimuluS to Coughing is perceived about the Pit of the  
Stomach. .The hypochondriac Cough, On the Contrary, is ac-  
companied "with Flatulences, Spasms Of the Intestines, and the  
Other hypochondriac Symptoms. The stomachic Cough is pro-  
duced by a bilious, acrid, and acid Sordes, winch is lodged in  
the Stomach, especially.in its superior Orifice, and in the Oeso-  
phagus, and which VelncateS the nervous Coats of these Parts,  
which are Closely connected with the Ducts fuhserVientsto  
Respiration. Hence this Species of Cough is accompanied  
with frequent Vomiting, It is most troublesome, when the Sto-  
rnach is empty, and is familiar to.those labouring undet.a Ter-,  
tian, especially Of the Continual Kind, as we are informed by  
*Hippocrates in Epidem. Lib. 2.* . The hypochondriac Cough is  
produced by thick, impure, and serous Humours, by the Force  
Of Spasms, and abdominal Flatulences, Conveyed to the Breast  
and Lungs, and it is the more Violent, if an excessive.Cold,  
Or the Influence Of exhorbitant Passions, have preceded, aS the  
Occasional Causes. But it is to he Observed in general, that  
every periodic Cough derives its Origin from Sordes lodged in  
the Stomach, or rather in the Duodanum.

We must, also, consider **an** habitual Cough, which may **be**justly called one of the catarrhous and. rheumatic Kind. This  
Species principally depends On a Relaxation Os the Glands lint.  
ated in the Fauces, Palate, and Larynx» and is protracted for  
many Years with a continual Expectoration. It is accompa-  
nied with a defective Digestion, and a successive Consumption  
Of the whole Body. It is incident to serous Patients, to those  
who lead a sedentary Life, and to such aS are addicted to Lu-  
cubrations, and drinking, os Wines.

As for the Prognostics of Coughs, a dry Cough generally  
passes into one os the moist Kind, which, when of longstand-  
ing, becomes habitual, spoiis the Digestion, and induce; 3 ca-  
chectic. State, .and a flow Fever. A moist Cough, passing into

one Of theory Kind, and leaving a Sense of Weight in the  
Breast, subjects the Patient ro the Danger of a putrid or su  
hectic Fever, according to *Lommius, in Ohjerv. Medicin. Lib.* 2.  
Convulsive and Chin-coughs are dangerous in InsanrS, .because  
they easily induce a Suffocation, especially in difficult Dentition,  
and the Meafles, In Children they procure Distortions of the Back,  
and Hernias , in pregnant Women, Abortion ; and in Aduln,  
a Spitting os Blood, and a Phthisis. That Coughs Of this Kind  
are, also, sometimes productive Of a sudden Suffocation, we are  
inform’d by *Igrilsm. in.Pharm. ration, p. 2. Sect. i.Gap. 6.* and  
*Nildanus, Gent.* 2. *Oof.* 68. Coughs succeeding a SCirrhuS of  
the Lungs, Or any other os the Viscera, are generally incura-  
. ble by any Remedies whatever And those Coughs which are  
. produced by a Repulsion os exanthematous - Eruptions, cease  
when these Eruptions are again recalled. *Luminous,* in rhe Part  
above quoted, informs us, ςί That all .Coughs, which deprive  
the Patient Os Sleep, Are bad, and that such as are long-

" continued, frequent. .Violent, anti accompanied with a De-  
ss fluxion, that is, habitual, rheumatic Coughs, are productive

"of bad Effects.” Coughs happening to dropsical Patients,  
.are bad Signs, according to *Hippocrates* in *Sect. 6. Aphor.* 35.  
.On the contrary, a moderate Heat in the Night, an equable  
.Sweat Or Moisture over all the Body,. a copious Discharge of  
Urine, a due Solubnny of Body, tranquil Sleep, and an easy  
Expectoration, are lore Signs, that, the Cough is in a fair Wsy  
Of being removed. ...

*The* CURE. i

In the Cure of a rheumatic Cough, sour Intentions are to be  
purshed ; For, in the first Place, we are to correct thesped-  
cant Matter, dispose ir for elimination, and, is necessary, pro.  
.mote Expectoration. Secondly, we are to derive the Astim of  
the. Serum from the Praecordia, and inVite it to other more  
proper Ernunctories. Thirdly, we are .to check the exorbitant  
Commotions Os the Body.. And, fourthly, we are to restore  
.Strength to the weakened Parts

- Is, therefore, the Bronchia, are Obstructed by a tenacious  
.Coagulated Mucus, this Muons is to he incided, resolved, and  
softened. This intention is excellently answered by the rcsol-  
-vent Roots, the best.os which are,.the Root os Florentine  
Orris ,tthe Root or Faecula Os Arum ; and, what is very pow-  
erful in fusing tough and tenacious Humours, and procuring  
expectoration, five os six Grains Os Squill-root,, exhibited with  
a little. Nitre, aS alsoOxymel of Squills, Essence Of Gum Am-  
moniac, anisated Spirit Of Sal Ammoniac, Milk and Flowers  
Of Sulphur, and Sperma Ceti. '

so Ao highly thin, acrid and saline Humour is disposed for Elimn,  
nation, by incrassarim Medicines, and such aS correct the Acrimony  
of the Lymph. These Intentions are excellently answer'd by  
Decoctions prepared Of Barley,- Shavings of Hartshorn, Roost  
of VipetS.grass, and Liquorice , by. Cremor of Barley and  
Water Gruel, prepared with sweetAlmonds, and Currants; by  
a Decoction OfTurneps, prepared with Sugar; by Jellies of  
the Horns of Deer, and other Animate; by Broths prepared of  
Fleshes and Milk, by LOhochs Of the Lungs Of Foxesby the  
Syrups of Poppies, Celts-foot, and Mountain Diacodium; by  
Sperma Ceti exhibited with Milk , and, above all, by Oil of  
sweet Almonds recently expressed without Fire, and exhibited  
either, alone, or with Syrup Of Maiden.hair, or julap os  
Roses. Thus, . ss

. A

Take Of the Oil of lweet Almonds, and of the Syrup of  
Maiden-hair, each one Ounce , of Sperma Ceti, three  
Drams , and Of Saffron,, fifteen Grains: Mix all together,  
and exhibit. - - ,

The same Intention is,also, excellently answered by Infusions Os  
Paul’s Betony and Hyssop, the Flowers of Mallows, Elder, red  
Poppies, Sage and Daisies ; the Roots os Liquorice; the Seeds of  
Fennel and the Bark of Sassafras. When a catarrhous Cough is he-  
come habitual, and accompanied with Coss Of Appetite, and a Con-  
sumption, the Cure is to he attempted by Asses Milk, or Whey,  
Or the *Seltcran* Waters, mixed with an equal Quantity Os Milk.  
: When there is too great a Congestion, Afflux, and Defluxion  
of Serum in the Breast, aS happens in a Very moist, pituitouS  
and long-protracted Cough, it is expedient to derive this Serum'  
from the Praecordia and pulmonary Vessels, partly by the Anus,  
the proper Emunctory of mucus Sordes, and partly by the Skin,  
the proper Outlet os the thinner and more subtie Humours. AS  
in all Coughs, so more especially in those of the convulsive  
and rheumatic Kind, a due Solubility of Body is Of great Ad-  
Vantage, for procuring which, correcting the Acrimony, and  
mildly, though copiousty, and, without any Trouble or Loss of  
Strength, evacuating the serous Sordes, ed have found none of  
all the Laxitives more effectual than Manns, two Ounces Of  
which may be exhibited in some proper Infusion Or Decoction, and  
the Dose repeated aS the Situation Os the Patient requires. I  
generally dissolve two Ounces of it in eight Ounces of the  
Water Of Paul’s Betony, or the Flowers Of the *Egyptian* Thom,  
with a gentie Heat, adding afterwards One Dram of the *Terra  
foliata*

*'foliata Tartari,* and a few Drops of the Oils of Cedar, Anise,  
- or Mice. . *Gabelehaverus,* also, in *Cent- 4. Oof.* 7. recommends  
several Ounces of Manna to be exhibited for the soccestsol Cure

. of Coughs. The fame Laxative may, asso, he exhibited in an  
infusion of Paul’s Betony, or in Milk. This Intentionis, also,-  
answered by folurive- Syrup of Roses, recently extracted Cassia,  
**the** laxative Decossions, and Raisins impregnated with Rhubarb.

- And if the Stomscb cannot bear these Laxatives, the redun-  
-. daur Serum and Mucus arc, by Clysters, to be evacuated  
through their proper Emunctory, which is principally in the'

..large intestines. *e ' ' : : .*

By .restoring the equal Circulation of the Blood through the  
whole Body, and especially by inviting the Serum to thesubcu-  
- raneous Giands, its Afflux to the Praecordia is prevented. This  
intention isaofwered by warm pectoral Infusions ofthe Flow-  
.:ers of Mallows and Violets, the Leaves of Hyssop and Sage, the  
Seeds of Fennel and Anife, and Cinnamon. These Infusions  
-are to he drank in the Morning in Bed, observing a proper Re-  
regimen, and keeping the Body always in an equal Heat. The  
. same intention is, also, answered-by the diaphoretic and bexoar-  
- dic. Powders prepared of Crabs-eyes, the Pulvis-Marchionis,  
prepared Amber, diaphoretic Antimony, or, in its stead, *Poterinda*. Antihectic, uncalcin’d Hartshorn, and Cinnabar, with theAddi-  
.tion ofa few Grains of the express’d Oil of Nutmegs, or ofthe  
iOil of Saffron. To these Powders we may, also, add Flowers of  
; Sulphur, if the Cough is produced by a Recropulsion of Achors,  
.or an-Itch. : - - -:

. . The. third Intention is to.check rhe exorbitant Commotions  
.of the Body; which is to be attempted in the very Beginning,  
.for:fear-of greater Danger. Among the Remedies, answering  
this End, the best is Saffron, which is highly friendly to the  
.Breast, and its .ExrraA with rhe bezoardrc Powders: Some,  
also,, order Otio-moss to he added both to the Powders, and to  
-the Decoctions. :The fame Intention is, also, answered by the  
*-Pilula de Styrace* mix’d with the *Pilulae Aloephanginae,* and ex-  
-hibked in the Evening, ordering at the fame Time Expedorants;  
ifuch.as Ort of sweet Almonds, and Sperma Ceti. This End is,  
osiso, anfwered by the anodyne mineral Liquor, or the Liquid  
.Laudanum of *Sydenham,* united with Spirit of Hartshorn, so  
.much extol’d by *Bsyle.. .* If rhe Disorder does not yield to these,  
,we are to have recourse to more powerful Anodynes, such as  
the Piluix de Statace, the Pilulae Starckeyanae, the Pilulae Wilde,  
gainst,, and Preparations, of the Theriaca.

. Nor for allaying **the** Vehemency Of a Cough are we to con-  
edema Topics , since, in a Cough of the phthisical Kind,  
great Relief is afforded by applying the Emplastrum Diasolphu-  
- nisi Rulandi to the Breast. In a convulsive, or Chin-cough,  
excellent.Effects are produced fay anointing the Praecordia with  
-the Unguentum potabile rubrum, mixed with Spirittof Wine.  
The anointing the Sides of the Thorax with the pedoral Oint-  
ment in the .Pharmacopoeia Augustana, is of great Efficacy in  
allaying Coughs, mitigating Pains of the **Breast,** and promoting  
Expechoration. In ail rheumatic Coughs I have, from long  
Experience, found the following Plainer very beneficial.

. Take Of the best Myrrh, Bdellium, and Amber, each half an  
Ounce ; of Sperma Ceti, human Far, Wax, and red Lead,

. each two Ounces; of *Venice* Soap, three Drams; of Saf-  
fron, one Dram ; and Of Camphire, half a Dram: Mix for  
a Plaister to be applled in. the Breast, Neck, and Spine of  
,: - Back. . .

In the Decline Of the Disease, the fourth Intention is to be  
pursued, and the. weakened Parts corroborated, because Coughs  
easily recut. For this Purpose I recommend the Essence of  
Amtver, and the Spirit Ot Hartshorn mixed with Tincedre  
of Tartar, or the anodyne Liquor; with the Addition of a few  
Drops of the Oil of Sassafras-wood ; as, also, the Essence Of  
Casearilla. I. have osten observed happy Effects produced by  
a few Drops of the Balsam of.Life, exhibited with Extract Or  
Timimie ot Saffron. In the End of the Disorder, in order to  
corroborate the Stomach, I generally prescribe the following  
Electuary :

Take of the Conserve of red Roses, two Ounces; of the  
the Conserve of Rosemary, one Ounce; of prepared Am-  
ber and Nutmegs, each three Drams ; and Of the Syrup of  
Citron or Orange-piel, a sufficient Quantity- :

*Crate,* in *Lib.* 37. *Coascl.* extois Amber with a Decostion of  
Raisins, and very justly, since that Medicine is possessed of a  
corroborarive, and, at rbe same rime. Of a laxative Virtue. But  
the genuine Essence of Amber is far preferable to Amber itself.  
The Stomach is, aito, excellently corroborated by old and ge.  
serous *Faleruian* Wine, which the Antients, and especially  
*Pliny,* greatly «tolled. *Hippocrates,* in *Lib. de Victu Acu,  
tarum,* greatly recommends 'the **Use** of fweet Wine tor old  
Persons. Water of PauiS sicrony, and of Hyssop distilled with  
V ins, and edulcorated, adding a. lithe Saffron, is very proper

for **the same** Purpose. In order to strengthen th. egiand- of ike  
Fauces and Bronchia, from which **the** Humour continually falls  
down to the Larynx, and Aspera Arteria, I have always,-with  
great Success, sprinkled upon’ the Head a Powder prepared of  
Amber, Benjamin, Masticin Flowers of Roman Chamomile  
and Cloveegilly-flowers. The Mouth is, also, to he frequently  
gargansed either with *Preach* Brandy, or with a Decoction of  
Sage, Hyssop, and Red-rofe-flowets, tn Wine.

In preventing and curing Coughs of all Kinds, a proper Re-  
gimen is of the last Importance. The Air, then, ought to be  
- neither too cold, nor too hot ; but in such a there as to pre-  
serve the Body in a perpenral breathing Swear. The NightAit

- is particularly burrful, and bad Effects are produced by cold,  
clondy, and rainy Weather; as, also,, by excessive Heat; "but,  
most of all, by Northerly winds.. Those who are frequently  
subject to Cougbs and Catarrhs, ought to abstain from such

. Aliments as are high.salted, indurated in theSmoak, too strongly  
- season’d wish Aromatics, as, also, such as are acid and austere; be-  
: Caule these render the Blood, and its Serum, acrimonious and ini-  
- pure. They are, asso, to have a due R egard to what they drinlo ;  
- for no Malt Liqour is proper, and much lest acid' Wins'. .Tor

Dtiok, such Persons ought rather to use Bariey-warer, or Ptifair,  
or a Decoction prepared of rhe *China* Roar, Raisins, and the  
Roots 6f Vipers-grast: or Hydromel,- which" *Cabelcboverus* or-  
ders in the following Manner.:

Take of despumated Honey, four Ounces ; of Spring Water,  
- - - three Quarts ; of Liquorice, five Drams; six Figs, of the

Seeds of Fennel, and Roots of Burnet, each two Drams' ί  
Of the Flowers-of Mallows, one Handful; of the Flow-  
ers Of Sage, and Violets, each One Pugil; and of Cinna-  
mon, two Scruples : Mix, and boil to the Consumption  
of half a Quart-- J

- Scorbutic Patients,- astiitsted with a -Cough, may, for Drink,  
ofc pure Sptiog-water, not too cold, either alone, or corrected  
with sweet Almonds, or sine wbeaten Bread. The common  
**People,** with great Success, in violent epidemical Coughs, pour  
-bossing Waler upon the Bran of Wheat, and drink the Infusion  
when cold. - . ' - ' . ' ' ἐν..'

- The Prevention - of Coughs, in a great measure, depends  
**'upon a** proper Use of the Non-naturais. Those Persons who,  
-when ^covering from a Cough, drink Wine, expose themselves  
(to the Cold, Or indulge themselves in exorbitant Passions, are  
forthwith seized with a more violent Cough, than that which  
they before laboured under. Old Persons ought to guard against  
Cold of Ihe Feet, and especially of. the Back ; and because  
**in the** Winter rheumatic Disorders are easily contradied, **the**Head, the Neck, and rhe Regions of the Praecordia and Loins,  
*as,* also, the Feet, in old Persons, who are subjea to a Cough,  
are to he carefully fortified against the Cold with warm Linen  
and Cotton, in order to preserve a moderate and equal Per-  
spiration ; for when any one of these nervous Parts is affected  
and penetrated by the Cold, especially by Northerly Winds, all  
the rest, in consequence Of their mutual Consent, are preier-  
naturally affedced. It is, also, necessary to keep the Body iuffici-  
ently soluble, and the Perspiration free; for which Purpofe mo-  
derate, but frequent Exercife is healthy during sice Weather.  
Thofe who are plethoric, ought ar stared Times, and especially  
about the Equinoxes, to use venefection, or Scarification. When  
the Cough is epidemical, wc ought to guard against its Tyranny  
by a proper Regimen of light Aliments, and preserving **the**Excretions free and uninterupted. ' ,

-In all Coughs we are to deal cautioufly with Expectijrants,  
sweet Substances, and incrassating Decoitions; lest, as is cu-  
stomary among the common People, by exhibiting these alone,  
and in too large Quantities, we should still farther relax the Lungs,  
and excise a greater Afflux of Humours to them. And in sto-.  
machic and hypochondriac Coughs, we ought totally to abstain  
from such Medicines, because they spoil the Digestion, and by  
that means pave the Way for a Cachexy and Dropfy.

A Chin-cough, arising from a Rctropulsion of exanthematous  
Eruptions, indicates the recalling of the peccant Manet to the  
Surface of rhe Body. For this Purpose nothing is more effe.  
final than AEthiops Mineral, or Flowers of Sulphur internally  
exhibited with diaphoretic Antimony, or the bezoardic Powder,  
especially at Night: Nor. besides Frictions, and staining of the  
Feet, is there a more effectual Remedy for drawing the Serum  
from the Breast, than Veficatories ; provided the Delicacy of  
the Age would but permit their Use. In the Chin-coughs Of  
Children it is of considerable Service to anoint the Soles of the  
Feet with Hogs-lard.

In Coughs arising from a Repression Of oedamatous Tumours  
of the Feet, besides Clysters, molding and diaphoretic Medi-  
cines, and fitch as derive the Monon of the Humours from  
the Breast, gentle Diuretics are of singular Service; such as the  
Tincture ot Tartar, the tartarifed Tincture of Amber, and the  
visceral Elixir mixed with the pestoral Elixir, hist acrid saline  
Substanccs, and drastic Diuretics, are not to be used, because

they carry Off the sweet Serum , whereas the Others carry off  
the acrid Serum through the urinary Passages.

I have frequently seen a long-continued Cough, arising from a  
scorbutic State of the Biood and Humours, cured by an inter-  
nal exhibition of Wbey and Powders prepared Os Crabs-eyes,  
the Pulvis Marchionis, prepared Amber, diaphoretic Antimony,  
Extract of Saffron, and the aqueous Ex:ract Os Cascarilla, inter-  
posing a Laxative Os Rhubarb, and Ordering for common Drink  
cold Water, corrected with sweet AlmondsOr the *Selceran*Waters, mixed with *Moselle* Wine, Or a Decoction with Wa-  
ter of such temperate Species as have a Tendency to depurate  
and sweeten the Blood. I have, also, towards the Evening, ex-  
hibited the Piluhe Aloephanginse, mixed with thePilu’ae de Sty-  
race, and ordered the Application Os the above-described Plaister  
to the Breast.

If the Cough is excited by the acid and bilious Sordes in the  
Stomach, nothing is more efficacious than Absorbents ; such- aS  
Crabs-eyes, and prepored Amber mixed with the Arcanumrcupli-  
mm, with the Addition Os a few Drops Os the Oil Osa Mace:  
To these wears, al sol to join mild Laxatives prepared Of Manna  
and Rhubarb. The stomachic Cough os .Children is removed  
by a gentie Emetic, if nothing Contraindicates that Practice.

In a Cough arising, from an Obstruction of the Viscera  
of the Abdomen-, which is called an hypochondriac Cough,  
those Medicines ore most proper, which recal the suppress'd  
Excretions of Blond. Happy Effects are, also, produced by An-  
tispasmodics,-and bathing the Feet: But nothing is Jo effectual  
as tepid mineral Waters, mixed with Goats, or rather Asses,  
Milk, and drank with a proper Regimen.

A long-continued Cough, tending to a Consumption; is most  
effectually cured by Asses Milk, provided .the Body is duly pre-  
pared for drinking it: And this Method Os Cute succeeds best,  
is longJoumies, Changes Of Air, and Corroboratives, are Joined  
with it: Nor, if the Cough is Very moist, has any thing a more  
happy Influence, than a proper Abstinence from Aliments, espe-  
cially from Flesh.

It is always expedient to mix Anodynes, such aS the Piluhe  
de Cynoglosso, and the Piluix de Styrace, with equal Quanti-  
ties of Laxatives, such aS the Pilulae Aloephanginse, or the Pi-  
lulse Cratonis de Succino, and to exhibit them in Conjunction at  
Bed-time, for when Anodynes are exhibited alone, I have, observ-  
ed, that the Cough is suppress'd, and an Asthma produced bya too  
great Congestion Of Humours, and a Weight about the Breast.

AS an intense Cold, so also an excessive Heat, is prejudicial to  
Perfons afflicted with a Cough. Hence Infusions, is excessive-  
ly hot, exalperate the Cough, for which Reason all the Liquors  
the Patient drinks ought to be only tepid.

Venesections are beneficial to plethoric Persons, whose Veins  
are tumid and prominent, like Cords, or who have their Ex-  
cretions suppressed ; They are, also, an excellent Preservative even  
in old Persons past the seventieth Year of their Age , nor can  
we he without Venesection, when the convulsive Cough is so  
intolerably Violent, that in Children, and young Persons, a Rup-  
ture of some Os the Vessels is to be dreaded from it. *Sydenham*affirms, that be cured ’ a Cough Of the Convulsive epidemic  
Kind, Only by Venesection, repeated Purging, and Vesicatories.

*Celsius,* in *Lib.* 4. *Cap.* 4. when treating os the Cure or a Cough,  
gives the following Directions : " The Patient jo to drink  
" a Decoction Of Hyssop every other Day, and read with  
\* a loud Voice, which is first hindered by the Cough, but  
“ the Reading afterwards OVercomes the Cough; then the  
Q Patient must walk, use Exercise, and long-continued Frictions of  
" his Breast then be is to eat fat Figs In a moist Cough, strong  
« Frictions, especially Of the Head, with hot Substances, are  
Q beneficial: A poach'd Egg may, also, be exhibited, with the  
\* Addition Of a little Sulphur; and for Drink he is to use tepid  
" Water.” And I must Own, I am Of Opinion, that it is best  
to follow the Advice os *Galen* in curing a Cough, who tells  
us, that we are to prescribe Things light, simple, and most fa-  
miliar to Nature, rather than Compound active Medicines, pre-  
pared in the Shop. Thus I remember, -among the Common  
People, to have seen an obstinate Chronical Cough, not Only allevi-  
ated, hu:, also, totally removed, by a Decoction *of* dried TurnepS ,  
or of the Stalks Os red Colewort, Or os the Bran Of Wheat,  
mixed with Sugar. Is the Matter Of the Fluxion is this, copious,  
and acrid, which is known from the Redness of the Eyes, the  
Titillation and Sense Of Biting in the Throat, and the saltish  
Tafie in the Mouth, the Juice of *Spanish* Liquorice, despu-  
mated Honey, an inspissated Mass consisting Of Jelly of Harts-  
horn, and Decoction os Liquorice, and Oil Of sweet Almonds,  
mixed with Syrup os Poppies, and gradually swallowed, afford  
immediite Relief. No less common and excellent a Remedy,  
is the Yolk os a new-laid Egg, mixed with Sugar-Candy and  
Saffron, drinking after it a s);sn or two of BoheaTea ; as, also,  
fresh Butter, with Sugar and Milk, with an infusion Of Paulis  
Beiony, and the FlowerS..of red Poppies.

feVhen the epiglottis, the firstand primary Instrument Of the  
Voice, is so relaxed, and deprived of itS Tone, that the Voice  
becomes hoarse, it is expedient frequently to gargarize the Mouth

with a Gargaristn prepared of nervous ingredients, shch aS rhe  
Flowers Of Rosemary, Lavender, and common Chamomile, the  
Tops Of Thyme and Origanum, Sage ano Myrrh, boiled in  
Wine: Externally l ufe, with great Success, to apply to the Larynx  
a Bag consisting Of the above-mentioned ingredients, with an  
Addition Os Amber and Styrax Calamita. *Hippocrates, in Iab.  
de Victu Acutorum,* would not have hearse Perlons purged but  
rather chose to cure the Coldness and Moisture of their Ccro-  
stitutions, by drying their Heads, and the Other Parts affected, by  
the Use of Topics. *Horseman. ;*

In 1675, the Season having continued unusually warm, like  
Summer, till towards the end Of *October,.* and being suddenly  
succeeded by cold and moist Weather, 4 Cough became more  
frequent, than l remember to have known it at any other Trme -  
for it scarce lustered any One tO escape, of whatever Age or Con-  
stitution he were, and leized whole Families at once; nor was it  
e remarkable only for the Numbers it attacked, .(for every Winter  
abundance of Persons are afflicted with a Cough) but, also, on ac-  
count os the Danger Ina: attended it. - For as the Conltitution  
both now, and during the proceeding Autumn, eminently tended  
to produce the epidemic Fever, and asthere.was now no other  
Epidemic existing, which by its Opposition might, in **some**measure, lessen its Violence, the Cough made Way for, and  
readily changed into^ the Fever, ln Ihe mean while, as the  
Cough assisted the Constitution in producing the Fever, so the  
Fever on this Account attacked the Longs and Pleura, just as it  
had affected the Head eyen the Week preceding this Cough;  
which sudden Alteration Os the Symptoms occasioned some, for  
want of sussiicent Aneniion, to esteem this Fever an essential  
Pleurisy Or Peripneumony, though it remained **the** same as st had  
been during this Constitution. .

For it began now, aS it always did, with **a** Pain in the Head,  
Back, and some Of the Limbs; which were the Symptoms, of  
every Fever of this Constitution, except only that the febrile  
Matter, when it was. copioufly deposited in the Lungs and Pleu-  
ra, through the Violence os the Cough, Occasion'^ such Sym-  
ptoms aS belong to those Pans. BumeVerrheless, aS far as I  
Could Observe, the Fever was precisely the same with that which  
prevailed to the Day when lhele Coughs first.appeared , and this,  
also, the Remedies, to which it readily yielded plainly, shewed. And  
thes the pungent Pain Of the Side, the Difficulty Of breathing,  
. the Colour Or the Blood that was taken away, and the rest Of rhe  
BymptomS that are usual in a Pleurisy, seemed to intimate, that  
it was an essential Pleurisy , yet this Disease required no Other  
Method of Cure, than that which agreed with the Fever of this  
Constitution, and did no ways admit of that which wasproper  
in the true.Pleurisy.. Add Io this, that when the Pleurisy is the  
originalDisease, it usually arises betwixt Spring and Summer;  
whereas .the Distemper we now treat of, began at. a Very dif-  
ferent Time, and is only to be reckoned a Symptom Of the Fe-  
ver which was peculiar Io the present Year, and the Effect of an  
accidental Cough. *.-l ... Ἀ . '.*

Now, in order to proceed in a proper manner to the parti-  
cular Method os Cure, which Experience shews to he requisite  
both in this Cough, and in those which happen in Other Years,  
provided they proceed from the same Caules, it iS to he Observed,  
that the Effluvia, which used to be expelled the Mass Of Blond by  
insensible Perspiration, are struck in, and thrown upon the Lungs,  
from the Stoppage Of the Pores by Cold , and, by irritating **the**Lungs, immediately raise a Cough. And the hot and excrementi-  
nous Exhalations being by this means detained in the Habit,  
**a** Fever is easily raised in the Mass Of Blond, when either the  
Vapours are so copious, that the Dungs are unable to expel  
them, or the Inflammation is increased by the adventitious Heat  
arising from the Use Of OVer-heating Remedies, or too het a  
Regimen, so aS suddenly to cause a Fever in a Person who was  
already too much disposed to this Disease. But Of whatever Kind  
the Stationary Fever he which prevails the same Year, and at  
that particular Time, this new Fever soon assumes its Nature, and  
becomes Of the same Rind, and is every-where subservient there-  
to ; tho' it may still retain some Symptoms belonging tO the  
Cough, whence it arose. In every Cough, therefore, proceed.  
ing from this Cause, his sufficiently apparent, that Regard must  
not Only be had tO the Cough, but, also, to the Fever that so  
readily accompanies it.

Relying on this Foundation, I endeavoured to relieve such aS  
required my Assistance by the following Method: If the Cough  
had not yet occasioned a Fever, and Other Symptoms, which,  
as we said, usually accompany it, I judged it sufficient to forbid  
the Use of Flesh-meats, and all Kinds of spirituous Liquors 5 and  
advised moderate Exercise, and the Benefit Of the Open Air, with  
**a** Draught of a cooling Pectoral Ptisan, to he taken hetweeu  
whiles. These few Things sufficed to relieve the Cough, and pre-  
vent the Fever, and Other Symptoms, usually attending it. For  
by the Abstinence from Flesh, and spirituous Liqours, along with  
the Use Of cooling Medicines, the Blood was so cooled, aS not  
easily to admit Of a febrile impression , and hy means of Exercite  
those hot Effluvia Of the Blood, which strike in, and occasion a  
Cough, as often as **the Pores are stopt** hy sodden Cold, are oom.

**InodiOufly**

modicnilly exhaled in the natural and true Way, with Advantage  
to the Patient. *Sydenham.*

TUTENAG. Speitre or Zink.

TOTlA. Tutu’. See CADMIA.

TYLLI GRANA; The Seeds of **the** lefler *Ricinus, Ca-  
stellus,* from *Gregor. Hymman.*

TYLOMA, Τὑλωμα. A *Callus.*

TYMPANLAS. Τυμπανίας. The fame as TYMPANITIS.

TYMPANITES. A Tympany.

In no Part of the human Body are so great Disorders pro-  
duced by . FiatuIenceS, which are nothing but Vapours and  
Exhalations, possessed of an expansive and elastic Quality, rhea  
-ia the Cavities of the Stomach and intestines ; where being, as  
it wee, pent up.in a Prison, they violently distend these Canals  
'Which ere possessed of Senfation and Motion, destroy their  
Tone, proauce great Pain and Anxiety, and by these means  
greatly injure all the several Functions of the Body. ’

*if* the S.ornacb is preternaturally distended by Flatulences,  
very violent Symptoms are produced, fuch as intolerable Unea-  
siness about the Praecordia, accompanied with a Difficulty of  
sheathing, an Oppression of the Breast, inquietude, a Coldness  
of the Extremities, and an uncommon Loss Of Strength, in  
this State the Patient’s Countenance becomes contracted and  
.livid, and sometimes the Fauces are so contrailed, as to render  
. Degltiotion difficult; and Palpitations of the Heart, Fleshings,  
Dimness of Sight, Vertigos, and other Symptoms of the like  
Nature, are brought on. Flatulences of this Kind, are known  
by a Tumour about the Pit of the Stomach, towards the Right  
Side, which is often discovered by the Touch; as, allo, by a ire.  
\*ouenr and violent Eructstion, by which the Symptoms are con-  
siderabiy muigated.

The Causes of the terrible Symptoms produced by a violent  
.Inflation of the Stomach, are these : Tis certain from Anato.  
- my, that the Stomach is an highly nervous Part, and that the  
Ramifications os the eighth and intercostal Pairs of Nerves, are  
copiousiy distributed thro’ its nervous Coat; and as these Rami-  
fications run off to all the nervous Parts of rhe Body, and fuch  
as are subservient to Sensation and Morion, ’tis not to be won-  
dered at, is, in consequence of this close Communication, vio-  
lent Disorders should, alst), he produced in all the other sensible  
Parts .of the Body. And these Symptoms are accompanied  
with an Expansion of the Stomach, by which the expansive and  
constridtory Motion Of the Diaphragm, on which Respiration  
depends, is hindered. And since by these means the Cavity of  
the Thorax is lessened, the Lungs cannot duly expand them-  
selves. Hence the free Pastage of the Blond from one Ven-  
tricle Of .he Heart to the other is obstructio.

The Inrestines, which are furnished with the fame Kind of Coats  
and Ramifications Of Nervesand Blood-vessels, with the Sto-  
mach, are, also, subjedt to similar flatulent Distensions; and, If  
the Whole of the large and small Intestines are violently distended  
by Flatulences, there is not only a Tumor of the whole Abdo  
men, but, also, a considerable Pain, especially about the Navel,  
where the stnall intestines are situated, accompanied with an ob-'  
stinate Costiveness, inquietude,. Anxie.y, Refrigeration of the  
Extremities, and Lost of Strength ; in which Cafe the Disorder  
is called a flatulent Colic. When this Flatulence is not transito-  
ry, hut protracted for some Months or Years, an hard Tumor  
of the Abdomen is produced, which, when struck, sounds like .  
a Drum, and is for thatReaion called Tympanites; a Disorder  
' hardly curable by any Medicines, especially when accompanied  
with an *Ascites,* and an Extenuation of the superior Parts.

The proximate Cause of these Flatulences is twofold; the  
one, which is material, consists in the eafy and copious Gene-  
ration of these Flatulences, and is owing to Almients, especially  
of a tenacious mucid Kind, and sucn as are fir for inducing  
Flatulences, such as Porherbs, the several Species of Radish,  
Pease, Beans,'dryin Sea Fishes, Summer Fruits, all fermentable  
and sweet Aliments, Preparations of Honey, Ale prepared of  
Wheat, farinaceous and wheaten Aliments; Paps, especially pre-  
pared of Millet, and rhe Fat of Mutton, especially if cold Li-  
quors are drank arter them. But it is to be observed, that  
thefe Aliments, whether moist or dry, are injurious in proportion  
to the Quantity taken.

The other, which is the formal Cause Of these Flatulences,  
consists in a considerable Weakness of the peristaltic Motion of  
the intestines, which depends upon an obstructed Influx of rhe  
nervous Fluid, and arterial Blood, into the Intestines ; for as this  
peristaltic Motion, when in its natural State, not only resists the  
Vapours generated in rhe intestines, in consequence- of their  
Moisture, but, also, without any Trouble, propels and eliminares  
them, so, on the contrary, this Motion, when the Tone and  
Strength os the Viscera are weakened, and their Membranes ren-  
dered flaccid, becomes incapable of any longer performing its  
proper Office. Besides, the Aliments, before they are con-  
vey’d to the intestines, remain for a considerable Time in the  
Stomach, and are resolv’d into Vapours. Hence, in the adja.  
cent *Duodenum and Jejunum, , csss* account of the Acrimony,

them is a particular Spastn produced, which constricts.the kight  
Orifice of the Stomach or Pylorus, and by Consent **the I.wi, st,**that the Vapours cannoi he discharg’d, but violently exercise their  
elastic Force on the nervous Coats of the Steinach ; and when  
this Distention is removed by a greater influx of the n-svous  
Fluid, and the Tone of the S.omich is for a time restored, the  
Flatulences are with great Impe:uosi;y discharged upwards.

As it is so, we may easily conceive, that wherever depraves  
rhe peristaltic Motion, also contributes to the Generation of  
Fjatulences. Hence the Reason is obvious, why Men or lax,  
spongeous, and phlegmatic Habits ofBody, Women, oid Persons  
and lnianrs,-are Highly subject to Futulences. And because, un-  
der an inordinate constridtory and cilatatory Motion of the in-  
testines, the Vapours continually generated in theIn:estines,.«n-  
not be freely transpir’d, but procuce a great deal of Mischief,  
we may easily understand why, by exposing the Abdomen and  
Limbs to rhe Cold, by walking upon cold Floors, immersing  
the Hands in cold Water, or drinking coid Liquors when the  
Body is over-heated in the Summer-time, theulent Colics, and  
Gripes of the lower Abdomen, are fo frequently produced J  
for all these Things have a remarkable Tendency to weaken the  
Tone of the Intestines.

But other more powerful Causes, by destroying the Tone of  
the intestines, concur to the Production of.Flatulences; for ’tis  
certain from Experience, that dangerous Inflations of the Abdo-  
men are principally incident to those whose Strength is im-  
paired, and their Blood and nervous Fluid impoverished by **a**previous Disease ; fuch as a Dysentery, an acute, a variolous,  
or a chronical intermittent Fever; excessive Hemorrhages,  
Wounds, the hemorrhoidal Discharge, Abortion, difficult La-  
bours, or an immoderate Evacuation of the Menses or Lochia,  
especially if the Patients, without paying a due Regs rd, to their'  
Strength, eat. too copiously. Hence we may learn, what Judg-  
men' is to be form’d, when, as it ofien happens in acute and  
dangerous Disorders, abou: the critical Times, uneisyDistentions  
of the Pracordia, accompanied with Rumblings, and aTluitu\*.  
ation of Flatulences in rhe lower Abdomen, are perceiv’d; for  
they are generally a Sign of. Death, nor only because they indi- .  
cate an exirerne Lost of Strength, but especially because they  
.in a great measure obstruct Respiration. These inflations of  
the Abdomen, proceeding from a total Destruction of Strength  
are by the Liquors and Medicines taken by the Patient, whilst  
alive, generally so increased, .that the Abdomen is, by proper  
Means, to be compress'd, for fear it should break..

Tis, also, certain from Experience, that violent and-leng-cond-  
**rm’d** Spasms of the *Prima Via* sre succeeded by a want of  
Tone and a Flaccidiry of the Intestines, a Weakness of these  
peristaltic Motion, and violent Inflations. Hence a spasmodic  
Colic is frequently succeeded by one of the hemient Kind;  
which, when not rightly treated, and when anodyne Potions are  
exhibited in order ro mitigate the Pain, frequently and easily **de.**generate into a- Pally. For the Illustration of this, *IVepfefz*Experiments inrr. *de Cicuta aquatica,* in order to demonstrate  
the Effects of Poison, are of singular Service ;. for by exhibit-  
ing Arsenic to Dogs, he first observed violent .Vomitings, and  
spasmodic Contractions of the Stomach. Then the Stomach,  
becoming fliccid, was afterwards incredibly distended by Flatu-  
lences. This is, also, evinced by dissecting those whoare taken off  
by any acrid Poison, which operates by producing violent Spasms ; .  
for, upon making an Incision in their Abdomen, their whole sh-  
tcstincs, by means of the Flatulences, burst forth in fuch **a**manner, that (here is hardly'a Possibility os replacing them.  
From a due Consideration of what has been raid, we may clearly  
- understand, why acrid Purgatives, and Emetics, Dysenteries,  
and spasmodic and hsemorrhoidal Colics generally leave a remark.  
. able Weakness of the *Prima fria,* which greatly tends, to pro.

duce infiations os the Abdomen.

st frequently happens, that both Spasms and Flatulences af-  
flidt the intestines ; and whilst rhe Sperms contradi their Coats,  
.the Flatulences contained in their Cavities, attempt a violent  
contrary Expansion. I his principally happens, when the Satu.  
lent Matter is possessed of a certain biiious Acrimony, as is ob.:  
servable in rucking Children, who are violently tack’d by Gripes  
and Rumblings, which discover themselves externally by their  
vehement Explosions, whilst the Fzces of the Patient are green  
by the Admixture of an acid corroding Substance, which, like  
. Aqua Fortis, consumes sic- Linen Cloths. The fame is, alio, ob-  
served, when tenacious mucous Faeces mined with Bile, and resem-  
bling the Yolk of an Egg, are discharged: The thick ano mucous  
Humours, which are in infants raffed in a moist and mucilagi-  
nous Cough, and which, by being swallowed, obstruit the bro.  
macb and intestines, are, also, frequently the Cause of copious  
Flamiences, accompanied with Gripes.

Having already considered those Flatulences which equally dll.  
tend rhe whole intestines, we now come to treat *of those parti-*cuhr lnfi.tions and Spasms, which, in rhe Course of oUr practice,  
we have observed only to amici certain Parts of the lnteftioes.  
It is, the efurs. to be observed, that Dubrders of this Κ’,.,δ οει.

principally incident to hypochondriac Pationrs, and hysteric Wo-  
men; when, for instance, the Stomach is inflated without soy  
Expansion Of th- inestines. This principally happens, wbed  
the Spain poffefses the *Duodenam,* or Beginning of the ytior  
*num.* Toe *Ileum,* also, without **any** Inflation of rhe Stomach,  
and large intel tines, is, in Children afflicted with Worms and  
*Hernias.* frequently found greatly expanded, and pnarul towards  
the Navel. And in hypochondriac Patients, and those labouring  
under the Hemorrhoids, when the *Intestinum PeSssm,* and in-  
ferior Pan Of the *Colons* in consequence Of the Stagnation Of  
the Blond, and its Obstructed Discharge thiol the hemorrhoidal  
**Veins, are** violently constricted, and rendered narrow by the  
' Spasins, |the superior Part of rhe Colon, and especially sis Fle-  
sure in the Left Side, and shout the lumbar Region, is greatly  
expanded. Hence arises **a** pressory Pain, which is commonly,  
tho’ falfly, ascribed to rome Disorder of the Spleen. It some-  
times, alio, happens, that the Flexure of the *Colon* in the Right  
Hypochondrium, about the Liver, and Region of the Stomach, is  
greatly elevated, and produces troublesome Symp.oms ; the  
Cause of which is, in my Opininn, lodg’d-in the Peginning os  
*the Colon,* which is situated in the Confines os the or *Jleam,*the Valves of the *Colon,* and the *Intestinum caecum,* since rhis  
Part of the *Colon* is deprived of its due Tone, and systaltic  
Motion , io consequence os which the Excrements are forced  
upwards, a Circumstance which greatly contributes to the Genera-  
tion Of Flatulences; and not only a spastnodic Stricture, and subse-  
quent transitory Inflation seize a certain Portion of the Intestines,  
.and are the Causes of the most violent Symptoms, (but, also,  
*λ* certain Narrowness, Hardness, or Callfiry, arising from **va-**rious Causes, affetl particular Parts Of the intestines, and, by  
perverting their whole peristaltic Motion, give Rise to the most  
violent Symptoms. But Causes of this Kind can he only dis-  
covered by dissecting the Patients aster their Death. See *cValtheri  
Dissert, de Angustia Intestinorum.*

*We* now come to consider that Species of Flatulence, in  
which there is not a transitory, but a permanent and conti-  
nual Inflation of the Abdomen, and which is called a Tympani,  
res; which *Celsas,* in *Bib. ?- clap.* I2. defines, “ A Tumor and  
\*\* vehement Distention of the Abdomen, accompanied with  
\*" frequent Rumblings, produced by the Motion of the Flam-  
"" lences.” This Disorder discovers itself by the following Signs r  
For the most part, aster a Pain and Tension about the Loft lumbar  
Region, and an obstinate Costiveness, the Abdomen is violent-  
ly distended.. Flatulences and Eructations are now.and then vjo.  
lently *discharged* upwards : The Polfe is inequal, the Appetite  
languid, and the Thirst increased; and, about the *Praecordia and*Navel, a tensive, corroding, and punitory Pain, accompanied  
wish a certain Hear, is perceived. The Patient can lie on  
neither Of bis Sides, nor does the Tumor ever subside, when he  
lies on bis Back. .

The Cause of this continual unease and dangerous inflation of  
**the** Stomach and intestines, is by *Willis, Bagiivi,* and others of  
the Moderns, justly asserted to be a spasmodic Stricture Of the  
intestinal *Coat,* by the long Continuance of which, the Pores  
and Passages Of the Intestines, through which the Vapours tran-  
spire; are straitened and obstructed; so that the retained Vapours,  
dur their elastic Force, in consequence Of an Admixture Of the  
. Air, afterwards produce a violent Distentionofthe inrestines. And  
that the genuine Caure Of this Disorder consists in such a Srri-  
.dure, feems to he pretty plainly indicated by *Hippocrates, issApher.  
jt.* .Sni?.4. where we are told,That those who have Gripes  
"" in the Abdomen, and violent Pains about the Navel and  
μ Loins, which can neither he removed by Medicines, nor any  
"" other Means, fall into a Tympanites, Or dry Dropsy”

This Disorder is-both by the Ansientsand Moderns,accounted a  
.Species of Dropsy, bccause,especially as a Symptom, it is often com-  
plicated with an Ascites; whereas,neverthelefi, it is absolutely a di-  
-stand Disease, and accompanled with no Extravasation Of Water in  
the Abdomen. Thus *Dolans,* in *EncychpaedeL.b. %. Cap.* 9. informs  
**us.** That in ia Girl of nine Years of Age, who died of a Tyrnpa-  
-nites, he found not One Drop either of Serum Or Water in **the**Abdomen. And in *M.* N. C. *Decor-* **I.** *Annos. Obsc* 85. we have  
an Account of a Boy who died Of a Tympanites; and, upon  
differing his Body, his Stomach was found preternaturally dis-  
tended with Flatulences, and contained **a** final! Quantity of  
*a* viscid Humour: But bis whole Intestines were pellucid, and  
in many Places, when prick’d, collaps’d; without the least Ap-  
pearance of a single Drop of Water. *Valestus* also, in *Comment,  
-in Lib.* 4. *Hippocr at. deVi&us Pat. in acut.* and *Colludas in Ad.  
ver scar. Lib. 2.* ι.ψ.40. observes. That, upon the Aperture of **a**similar Carcase, a very inconsiderable Quantity of Water was  
discharged ; bur **a** grofe Flatulence being evacuated, **the whole**Abdomen suddenly subsided. *Platerus,* also, in oasc 54. informs  
us, that in a Boy who iked of a Tympanites, the Inrestines were  
so distended, as in some Pisces to he as large as a Person’s  
Thigh, and that, being broken by Compression, they discharged  
.the Faces with a considerable Impetuosity, But in other Parts  
they were so contorted and wreathed no. that neither the Fiaiu.

lences, nor the Excrements, could find any Passage downwards.  
A large Number Of oblong Worms were, also, found in his in-  
testines.

A Tympanites without a Dropfy, is most incident to Wo-  
men, especially aster Labour; when the Lochia are either too  
soaoiily dilcharged, or by Cold, or the Influence of Passion, to-  
tally suppressed- The same happens when aster Labour, the  
Abdomen nor being duly compressed and swathed, any Error in  
Regimen is committed; Or, when in the Beginning of their  
Lying-in, the *Prima Via* are not sufficiently purged from their  
Sordes: For, in there Cafe, Women have generally for a long  
time, an hard and infiared Abdomen, accompanied with const-  
dersble Uneasiness, Difficulty of Breathing, Anxiety, and obsti-  
nate Costiveness. I have often observed the fame Symptoms  
produced by a difficult Labour, if the Secundines have not  
been totally removed; or if, in extracting them, the Uterus  
has beeen wounded. Imprudent Treatmenr aster Abortion, also,  
fays a frequent Foundation for a Tympanites; the Cause of  
which is, in iny Opinion, a perverse and disturbed Motion of  
the Blond, through the Vesseis Of the Uterus and Intestines : For  
if, in consequence of any Disorder of the Uterus, the natural  
Motion of the Blond, or its critical Excretion, ate not duly car-  
ried on, by reason of the subsequent Stagnation, the free Crr-  
cuiation of the Blood will be, by Consent of the Parts, hindered  
thro’ the abdominal Viseera, especially through the Intestines,  
where a Portion of the Blood or Serum remaining distorts and  
constricts their tender and sensible Fibres, and renders them harder  
and more tense; fo that the Perfpirarion *of* the Intestines can-  
trot afterwards he freely and duly carried on. When this hap-  
pens, rhe Flatulences are generally rather the Effect than the -  
Cause of the Tympanitis.

These inflations of the Abdomen are frequently observed in  
Infants and Children, cfpecially if they areafflided with Worms;  
as, also, aster the Measles and Small Pox: And unless Misfortunes  
of this Kind are seasonably encountered with proper Remedies,  
the superior Parts become extenuated, and an hectic Hear su-  
pervening, the Patients the By the Voracity, asso,-of Infants  
and Children, when the Stomach and its Tone are weak. Tu-  
mours of rhis Kind are often produced, and various Causes  
may concur to their Production ; far as rhe Meadur, Small  
Pox, Or **a** continual Fever, in consequence of the Lost of  
Strength, and the Exhaustion Of the spirituous Fluid, are fuc-  
needed by a considerable Weakness of the peristaltic Motion, and  
since, by reason of the Dyfcrasy of the Blood and Humours coo.  
-traded by the Disease, the Coats of the intestines and Perito-  
naeum, are spasmodically constri&ed by an acrid Serum, which  
binders the Discharge of **the** Flatulences, it easily happens that **a**Tympanites is produced. Sometimes, alfo, there is an infarction  
-or the meseraic Glands, and iadeal Vessels, which not traniinit-  
ting the chylous Juice, accumulates Sordes in the *Primae Via;*and these Sordes are resolved into Flatulences, and partly car-  
ried Off by Stool.

. But nor only hysteric Women and Infants, and Children la-  
bousing under Worms, or spent by previous Disorders, are fub-  
jest to a Tympanites; but, also, those whoareinchned to that  
Species of Dropiy called an Afcites : The principal Caofe of  
which seems to be, that in inch Patients, where the abdominal  
Vifcera, especially the Liver, do not duly perform their proper  
Offices, the Bile becomes peccant both in Quantity and Qua-  
lity, and is therefore deprived of its Qualities necessary for Dis  
gestion ; for the Bile is a genuine and natural preservative Me-  
dicine: For by its alcaiine, sulphureous, and saponaceous Princi-  
ple, it not only promotes the intimate Solution and Digestion  
of the Aliments ; but, also, by he moderately sulphureous and  
balsamic Bitterness, it gently stimulates and corroborates the  
Coats Of the intestines; by which means it preserves the peri-  
stalric Motion entire ; for when this Motion is perverted or  
disturbed, the whole Oeconomy of the vied Motions, together  
with the salutary Excretions, is, also, disturbed and perverted, **as**we generally Observe in hypochondriac Patients.

For the Illustration and Confirmation Of this Do&rine, let us con-  
sider a very singular Case, relaced in the Philosophical Transactions  
of the Royil Society of *London* in the Year 17 30. N° 414. A Sol.  
dier received a Wound; of which, aster theAppearance of various  
Symptoms, he died on the seventh Day : Upon laying open his  
Body, no internal Part was found hurt, except his Gall-bladder;  
which being gently perforated, in the Bottom, was callaps’d and  
flaccid, in consequence of a total Effusion of the Bile: Though  
no Signs of the slightest inflammation appeared in any Of his  
Viseera, yet his Intestines were highly inflated, distended, and  
tioged of a yellow Colour by the dilcharged Bile, which was ess.is’d  
-all over the Abdomen. The external Wound was dry, and tree from  
Tumor; nor, during rhe Patient’s Life, was it accompanied  
with any Sign of Inflammation ; fo that it is surprising that **a**Wound apparently Io flight, unaccompany’d with a Fever,Or any  
other violent Symptoms, should so soon prove mortal.

Among the memorable Symptoms afflicting this Patient, **we**Ought fust of **all** to consider the Inflation of .his Abdomen,

which Immediately succeeded the Wound, and remained with-'  
out any Considerable Increase Or Decrease, and even appeared  
after Death , so that the Patient appeared to have been affected  
with an Ascites, or a Tympanites. Yet during this Distention  
of his Intestines, which was **the** Cause of **the** Inflation of his  
Abdomen, **he** could discharge no Eructations **nor** Flatulences  
either upwards or downwards; and though he cat and drank  
sufficientiy, yet he had not one Stool through the whole Course  
Of the Disorder, nor could his Body he rendered soluble by the  
strongest Purgatives and Clysters: His Urine was in small Quan-  
tity, yellow, as it were tinged with Saffron, and without any  
Sediment. But nothing of a febrile Heat was observable in all  
his Body; for his Pulse was not quick, but rather equal and  
strong, till a little before his Death, when it became inequal:  
Nor was his Tongue black, hard, and rough, aS it generally is in  
Fevers, especially Of the inflammatory Kind ; but it was dry,  
for want Of a due Quantity of Saliva. And though, during his  
Disorder, he slept but about halt an Hour at Very distant In-  
tervals, and could not he disposed to steep by the Use Of **O-**pium, yet the smallest Signs Of a Delirium did not appear; and  
thus he died without any more Violent Symptoms, except an  
Hiccup and a gentle Effert to vomit, which, seized him the Day  
before he died.

From this Description Of the Case, and its concomitant Sym-  
ptoms, we shall draw something for the Establishment of Our  
Doctrine. Hence, then, we learn, how much a laudable Secre-  
, tion Of the Bile contributes to the PreserVation Of Health, and  
bow much its Defect Or Peccancy tend tO induce the most vio-  
lent Disorders, especially a Tympanites; for in this Patient's  
Cafe, no Other Cause than the Effusion Or total Defect of the  
Bile, produced the inflation of the Intestines ; by which, being  
distended beyond their proper Sphere Of Elasticity, they totally  
lost their peristaltic Motion ὁ and when this Motion was destroy'd,  
not only the natural Motion Of the Chyle through the lacteal  
Vessels was hindered, but, also, the Secretions in theother Viscera  
weaken’d, and at last destroy'd. Hence Death must of Neces-  
sity foon ensue. ι

AS for the Prognostics Of a Tympanites, it is justly reckoned  
**a** dangerous Disorder, since the Patients are Oftener observed  
to die than recover. Hence *Fuerarius in Additum, ad Burnetts  
. Thesuur. med. Tom. 2.. Lib.* 8. ingenuously Confesses, that he never  
knew a Patient afflicted with a Tympanites recover ; because  
this Disorder indicates an Obstinate Constriction of the Pores, an  
hardly dissoluble Incarceration Of the Flatulences, and a violent  
Distention Of the Parts, accompanied with a Privation of their  
Tone. When a Tympanites is accompanied with, or supervenes  
a Dropsy, it hardly admits Of a Cure, because the victent Dis-  
tention of the abdominal Muscles and Intestines, by compres-  
sing the Veins, renders the Circulation Of the Blond very lan-  
guid and weak, produces a costive Stars, and suppresses Per-  
aspiration. A simple Tympanites, when inveterate, and not  
-quickly cured, in Women and Infants, passes into an obstinate  
'chronical Disorder, which proves mortal.

On the contrary, that Distention Of the Abdomen, which is  
Called a flatulent Colic, is not naturally very dangerous, and is  
easily cured, when, by Proper interml and external Remedies,  
the lost Tone of the Intestines is restored. But if Spasms con..  
-Cur to produce the Flatulences, as it generally happens in Wo-  
men whose Menses are not duly discharged. Or in thofe who  
labour under a Stone io the Ureters, Or biliary Ducts ; Or, is  
spasmodic Symptoms supervene Estons to the hemorrhoidal Diss  
-Charge, then the Cure is somewhat more difficult, because the  
Force and Operation Os the Medicines Ought partly to allay tho  
spasms, and partly to restore the Tone Of the Intestines; winch  
intentions, however, seem inconsistent with each other.

In Curing Flatulences Of the Stomach and Intestines, the Phy-  
Fician'-s principal Intention is, to promote a Discharge os the  
Vapours by the Anus, and to attenuate, and gently carry Off hy  
Stool the tough -and viscid Matter which contributes -to the *Qf.*aeration Of the Flatulences For this Purpose, we are, first os  
all, to use derivative, discutient, and evacuating Clysters ; soch  
as those prepared Of Hyssop, Clary, Flowers of Common and  
Roman Chamomile, Tops *Of* Yarrow, Juniper-berries, and rhe  
larger carminative Seeds, with Veal-broth, adding a sufficient  
-Quantity of Sal-gemmae, Sal-ammoniac, or *Epsom* Sain and rhe  
Oil of Chamomile. Bur it is to he observed, that one or two  
-Clysters are not sufficient for removing the Disorder , but they  
are to be frequently repeated.

With these we are to interpose Laxatives, possessed of a car-  
minative, and at the same time Of a somewhat anodyne Quality ,  
such as the balsamic Pills, prepared in my Method, Or that of  
*Becher* and *Stahl* Or if rhe Patient is strong, and the In.  
"station a real Tympanites, 1 generally exhibit two Parts Of the  
*Extractum Panehymagqgum Crollii,* with one Part Of the *Pilala  
Wildogansii,* or Of the *Pilulae Starckii,* Or *Pilulae de Styrace, in*forne not very spirituous Carminative Water.

After these, we are to use Medicines possessed ' Of a mode-  
Lately balsamic Principle, and a volatile, Oleous, and aromatic

Salt, Commonly Called Carminatives: Sat the Operation of these  
Medicines is not to he so explained, as if, hy thein ssihthe vola-  
tile Sals, they attenuated the Matter of the Flatulences, and ten- '  
dered it thinner , but rather, because, by invigorating the Tone  
and Systole Of the intestinal Coats, they hinder the Stagnation of  
the Flatulences, move them from their Sear, and render them  
more Capable Of heing easily eliminated. Or prevent the Gene-  
ration *Of new* flatulences: For aS the destroy'd peristaltic Mo-  
tion Of the Stomach and Intestines is the principal Cause of  
Flatulences, so all Medicines, which have a remarkable Virtue  
in strengthening these Parts, are most proper for the Removal of  
this Disorder. The best and most approved Of this Kind, are  
Powders prepared of the Roots of Wake-Robin, Zedoary, and  
white Burnet ; the digestive Salt of *Sylvius,* or vitriolated Tar-  
tar ; Cumin-seeds, the Tops of the lester Centaury, and dried  
Orange-Peel, each one Dram , and six Drops of the genuine  
Oil Of Chamomile, Or of the Oil of Cedar, or Of the Oil Of .  
Orange-peel , to .which, if there is a Suspicion Of an Acid  
lodged in the *Primae Via, vlC* may commodiousty add Crabs-  
*eyes.*

TO this Class Of Medicines we may refer the following in a  
liquid Form.

Take Of the Essence of Orange-peel, and of the carminative  
Essence osZedoary Of *Jgredeltus,* each halfan Ounce; Of the  
Spiritus Nitri dulcis, or Of .my anodyne Liquor, and Of the  
Spiritus de Tribus, each two Drams: Mix, and exhibit  
forty Drops for a Dose;

TakeOf the carminative Water of *Dorncrellius,* of the Waters  
of common Chamomile and Zedoary Prepared with Wine,  
each One Ounce , Of the Spiritus Nitri dulcis, of the Pure  
Oil Of Caraway, eight Drops, mixed with two Drams Of  
Sugar.

Nor are we to neglect external Remedies, such as Liniments  
Opl/d by way Of Ointment to the whole epigastric Region.  
The principal Ingredients Of these Liniments Ought tO be,  
boil'd Oiis Of Chamomile and Rue, Oil Of Nutmeg, and -  
Peruvian Balsam; with which we may mix, the Oiis of Ju-  
niper, Caraway, Anise, Or Cumin .. But, instead of all others,  
we may use the Liquid Balsam of Lise, which, when mixed  
with three Parts of *Hungary* Water, and applied by way of Oint-  
ment to the Abdomen, Or laid on with a warm Linen Cloth, is  
found of great Efficacy.

*Is* a flatulent Distention Of the Abdomen proceeds partly from  
a long-continued spasmodic Stricture Of the intestinal Coats, and  
partly from their preternatural Tension and Hardness, and if  
these are fupponed by the Stagnation and bilious Acrimony Of the  
Humours, we are to deal very Cautioufly with hot, aromatic, vo-  
latile, and sulphureous Carminatives, such as the disus'd ethereal ‘  
Oiis Of Juniper and Caraway ; since these, by increasing the  
Elasticity Of the Flatulences, and the Turgescence Of the Hu-  
mours, render the Inflation more Obstinate, and the Symptoms  
more dangerous*, for* they excitea preternatural Heat, accompa-  
nied with an insatiable Thirst, an Anxiety, and great Difficulty  
Of Breathing. Hence *Pienus, in Lib. de Flatibus, Cap.* IxInen-  
tions a Girl miserably afflicted with a Tympanites, whO, by the  
Use Of an hot Electuary prescribed by the Physician for the Dill,  
cussion Of the Flatulences, sell into a new, and at the same time  
so large an Inflation, that the whole Breast was surprisingly diss,  
tended, and the miserable -Patient soon after died. To this Purpose,  
*also, Helmet ..tD Lib. de Flatibus,* telis us," That if Flatulences are  
“ Vapours and Exhalations, Pain and Flatulences must be more  
*" -excited,* and a Distention of rhe Parts produced, by the Ex-  
" hibifion of hot Substances, because, by this means, the Vapours  
\* must he increased, and the Pains and Distentions multiplied."

All Purgatives, even Preparations of Sena and Aloes **not**excepted, are carefully to he avoided, because they dry the in-  
testifies, and render their Fibres tense, constricted, and hard;  
But they are still more injurious and dangerous, is, by repeated  
Doses os them, any one attempts the Evacuation os the Flatu-  
lences. We rather recommend Preparations Of Manna, with  
Cream of Tartar dissolv’d in Whey, Or the *Sedlitx* Waters ; not  
Omitting, at the same time, emollient, and gently discutient  
Clysters

When Spasms copiously generate Flatulences, which frequenti?  
happens in a plethoric haemorrhoids! State, to young Persons  
and Adults, Preparations of Nitre, join'd with detersive and re.,  
frigerating Salts, are most safe. Good Effects are, alsis, produced  
by the mineral Liqour ; Citron-juice, with Salt Of Wormwood -  
Oil Of sweet Almonds ; Emulsions of the Four Cold Seeds; the  
*Pilulae Sylvd,* and the *PllulaeStarckii*.- Venesection is, alfo, some-  
times Beneficial. Hence *Carolus de la Pont,* Professor in the  
Academy of *Avignon, in Dissert, de Hydrope Tympanites* gives  
us an Instance Os a Person by him cured Os a Tympanites, hy  
Tincture of Roses impregnated with a sew Drops os rho Spirit  
of Vitriol, and a Julapi prepared Of the Waters of Purslane

Succory, and Water-Lilies, together with the Syrups Of Water. ।  
Lilies and Poppies, Sal Prune;ae, ana Spirit or Sulphur; inter-  
Sasing now-and-then a reruperite Emuiinin, Or a Decoction of  
arley, with Syrup Of Lemons, and Sal Prunella ; and an Opiate  
composed Of mineral Crystal, Crabs-eyes, Vi.riOI of Mars, and  
Conlerve of Role:. '

When there violent and obstinate abdominal Distentions hap-  
pen aster difficult Labours, Lying-in, Abotron, or an irreguiar  
Discharge Of the Menses, the Pills made in Imitation Of those of  
*Beccker,* of bitter Extracts and temperate resinous Gums,  
with a fmall Portion of Aioes. exhibited in a proper Order, and  
in due Doses, are of singular Efficacy. The fame .happy Effects  
are, also, produced by temperare balfamic Ellxirsv prepsred or the  
same ingredients; for thole, by their mild, sulphureous, and  
bassamic Virtue, restore the lost Tons and Strength of the Sto-  
mach and Intestines, and produce happy Effects, especially  
when the Bile is deiectivc. or too strong, provided they are  
nor exhibited in too large Doses: But if the Patient is too long  
habituated to them, they, in Process ofTme, by drying [be in-  
testinal Coats, pr duce preterna.ural Scraitness in particular Parts,  
and often bnng on fatal Symptoms.

Clysters are of grea: Efficacy, not Only to prevent Flatulence,,  
but, also, remove them, both in their Beginning and State. But  
**If the** Spasms exert their Tyranny in the small Intestines, Clysters  
**are** not lussicienr; but we are to pi escribe Preparations of Manna ;

. Cassia, *Epsem* Salt; *Sedlitz* Salt; and Goats Whey, prepared  
wish Cream of Tartar, or vkriolated Tartar. The proper Use  
Of hot and cold medicinal Waters is, also, of great Use in hy-  
pochondriac Patients assiicied with Flatulences.

Among the external Remedies for violent InSations Of the  
Abdomen, the AntientS most esteemed dry Fomentations; and,  
especially Sand dried by the Fire, or the HeJtof Che Sun. Hence  
they recommend this Remedy in various Parts of their Works.  
See *Celsas, Lib.* 3. *Cap.* at. And *Pliny, in Histor, natural. Lib.***ar.** *Cap. 6.* informs us, “ That Sea-sand, especially when small.  
\*" and rendered hot by the Sun, is of singular Service in drying  
“ the Bodies of dropsical Patients.” *Calius Aurelianus,* in *Lib.* 3.  
*Tard. Passe. Cap.* 8. is, also. Of Opinion, That warm Fomenta-  
tions of Sand ought to be ufed in dropsical Cases. But, as other  
Things successfully used by the Aotients, are by us neglected, so,  
alfo, this Practice is discarded, though ir leems to have a pr-tiy  
effectual Tendency to answer its intention : For the4.,rm Saud,  
not Only by the Compression occasioned by its Bulks checks and  
confines the instarion, hut, also, by its thy Heat attenuates rhe  
peccant and stagnant Humours, fo as to restore a free Circula-  
tion of the Juices: By this means, also, the Pores Of **the** Skin  
are opened, and Perspiration assisted, lt is a common Practice  
at prefent to apply dry and hot Oats, included in a B,g, to the  
Regions of the Stomach and Navel; because Oats are possessed  
of a dulolving and discutient Vrrtue. Besides there Meature,, I  
have, also, known the Soap-pleister well impregnated with Cam-  
pbire, and Iosten’d with Oil of Henbane, afford considerable  
Relief when applied to’the Abdomen. The Galbannm-plaister  
is, also, little- inferior to it in Efficacy. *Prederic Hoffman.*

TYMPANUM. The Drum ot the Ear. lt, alto, imports  
**S** Part of a chirurgica! Machine, in *Oribastus, de Machinamentis,*r^YPHA.

TbeChsrafiers are;

- It has the Appearance of the Arundo ; the Flower is male, con-  
sifting only or naked and very dusty Stamina, which are cloiely  
compacted into a slender Spike. The Ovaries, which are col-  
ledted into a very clofe Spike, are cIofely lodged under rhe for-  
mer Spike, and are of a rhin Contexture, and furnished with **a**Multitude of Fihtnents : Both Spikes are extended in one conci-  
-nued Length in the Figure of a Club.

*. Boerhaave* mentions three Sorts of *Typha*; which are,

*1.* Typha ; palustris; major. *C.B. P.* 20. *Theat.* 337. y B.  
o. 539. *Tourn. last.* 540- *Boerh. Ind. a* a. I67. *Typha.* Offic.  
Ger. 42- Emac. 4.5. Raii Hist. 2. I;I2. Synop.5..436. *Typha  
palustris maxima.* Park. Theat, I2O4. CATS-TA1L, or REED-  
MACE. ' \*

This Plant is found in Marshes, and on the Brinks of Rivulets.  
The only Part of *it* used is its Flower, which, when mixed  
with weli-waihed Hogs-lard, cures Burns. *Dale.*

**a.** Typha, palustris; clava gracili. *C. Β. Ρ.* ao *Theat.* **340.**

3. Typha; palustris : minor. *C.B.P.* ac. *Theat.* 34I.

*Boerh. Ind. alt. Plant.*

TYPHA AROMATICA. See **AcoRUs vERUs.**

TYPHLINiDIA. τυφλινίδια. *A* Sort of pickled Fish men-  
tioned by *Oribastus, Collect Medicinal. L.* **a.** *C.* 58.

TYPHODES, τυφώδης πυρἱτος. The fame as TYPHOS.

TYPHOMANIA, .τυφωμανιη. from τὑφος, and μανία, in *Ga-  
len’s Exegesis,* is expcunuec by μικτον εκ φρενίτιδος οῦ λιιδἀργκ *aesL-*6»μα, “ a Dsorder complioareo of a Pnrcniy ano a Letnargy.”  
But in feme Copies of *Galen* rr is written τυφλομανίη. as well as  
in 4 *Epid,* wh.re they read ά?.ιι5οῦ τυφγ.ομανίη, co which Place  
*Gale»* seems to have an Eye m hi- *Exegesis,* though rr be there  
read in the Nominative Case. Wc, however, read τυφωμανιη,  
in both Places, **and** understand it of **an** Affection compounded

of a Phrensyand a Lethargy, in which the Patten'S are de’inoin,  
and labour under a sleepy Coma, from a Mixture of B.Ic arm  
Phiegrn, according to *Galen, Com. ϊ. in Prorrket.* where he ss/ps  
ἱγώμένοὗν οταν ἄχρι τέλος ητε παροφροσὐί» κ τὸ κώμα διαμει-  
**ν«** μικτἰν, &c. ι- When a Delirium -ndComs conrinoe to **the '**“ End, **I** call ir a Diforder xi.rnplici:ed of a Pc.renfy and.  
“ a Lethargy, which by forne is called τυφωμανίη, as in *Hippe-  
“ crates, de Marlas\** From hence arses a Suspicion, that the  
Books *de Morbis.*as now txtanu ate not entire ; and tain *Galea,*in his *Exegesis,* had a Regain ro some Passage, therein which is  
now wan mg ; tor we fine no mention of *Typhomaxia* in these  
Books, nor in the Book *de Morbis internis.* This Affliction,  
thus complicated of a Pnreniy and a Lethargy, ma? he called  
**a** lethargic Madness or Delirium, or a mad and delirious Le-  
thargy, according to rhe Author of :..e *Definitiones medicae ,*though for τυφωαανία we there read corrup.ly τυρωεία *{Typhonide,*which corrupt Reining is foiion’d by rhe Trmibtor. *Galen,  
Lib. de Comate, Cap* 4. and *Cam.* I. *i» Prorrhet.* tells us, that  
this Disorder is called *Typhamania ;* but in his *Isas. Pulsc* and  
*Lib.* 4. *de Causc Pulp* he reds us, that i is a Diseirc which wants  
**a** Name, and therefore he defines it by some proper Ch.rasters;  
Which is a Custom be hirni’cti, however. *Lib. de Comate, Cap.* 4.  
ascribes to ignorant Physician-. This Vane y of Opinions about  
the Name, and the Disorder iigsify’d by it, mighis perhaps, give  
Occasion to *Hippocrates,* **4** *Epid,* ro call ir, as it were, to prevent  
Mistakes, ἀλιιόιίς τυφωιιαιια, cc\*a *true* Typhom-ania.”

TYPHONiA. The fame as TYPHOMANIA.

. TYPHOS, τὑφος. Or this Diforder, according to *Hippocrates,*there are five Species t The first is a legi:ima:e continual Fe-  
ver, which impairs the Strength, is accompanied with Pains of  
the Belly, and a preternatural Heat or the Eyes, hinders the Pa-  
tient from looking steadily on any Objcst whatever; and renders  
him unable, in consequence of the violent Pain, to answer any  
Question that is asked him; though be begins to speak, and fix  
his Eyes attentively on Objects, when he is at the Point of  
Death.

The second Species of Typhus begins with a Tertian or Quar-  
tan Fever, which are succeeded by a Pain of the Head. In  
this Disorder the Patienr discharges a large Quantity of.Siliva  
and Worms from his Mouth : His Eyes are painfu!, his Coun-  
tenance pale, and his Feer, and sometimes his whole Body, seiz’d  
with foft Swellings :. His Breast and Bsck are now-and then  
painful, his Belly rumbles, his Eyes are fierce, he fpirs a great  
deal, and bis Saliva adheres to his Throat, which renders his ’

1 Voice tremulous and faint.

The third Species of *Typhus* is known by intense Pains in the  
joint», and Tometimes over all the Body: The Biood, conta-  
minned by the Bile, becomes hot, and stagnates io the Limbs;  
whilst that Ponion of the Bile which is retained in the joints,  
becoming indurated, like Gravel-stone, the Patient grows  
lame. . '

The fourth Species of *Typhus* is known by a violent Tension,  
Elevation, and Heat of che Abdomen, succeeded by a Diasrhcea,  
which sotoetiir.es terminates in a Dropsy, and is sometimes ac-  
companlea with a Fever.

The fifth Species of *Typhus* is known by a Paleness, and kind  
Of Transparence of rhe whole body, as if ir was a Bladder full  
Of Water, though without any Inflation. On the contrary, the  
Body is extenuated, cry, and weak, especially about the Clavicles  
and Countenance: The Eyes are very hollow, -and the Body  
sometimes biack. The Parient rarely winks with his Eyes, and  
feels the Bed-ciothes with his Hands, as if he wanted to catch  
. Knap, of Wool, or Straws. He is more uneaiy after eating, than  
i when he was in a Srare Of Health. He loves the Smell of an .  
. extinguished Lamp, and is often troubled with Pollutions, both  
when asleep and awake.

TYPOS, τὑποστ. The Form, or Type of a Disease; imporr-  
ing the particular Manner ot its Remission, and Exacerbation.

TYRANN1S, τυρμννίς. The Name of an Antidote in *Galeis.***L.** *2. de Antidat. C.* Io. ..

TYRBE, τυρβὴ, is a Perturbation, or Confusion. Thus,  
*Lib de Pract. aedaaea gulf* ἀν τυρβίν παράχοι τιίσιν έπιδέσεσιν,  
" should canina Discraer in the whole Disposition of the But.  
"ι dage.” Here τυρβὴ is by *Erssian* expounded ταραχὴ, a Per-  
turbation, or Confusion. The same is rhe Sense of the Word in  
*Lucian, Polybius,* and *Aristophanes in Vespis.*

TYRIA. The same as OPHIASIS rn the *Arabic* Authors.

See Alopecia. i '

TYR AS1S, τυρίασιστ The ELEPHANTlAsls, or Leprosy.  
TYR1U M EMPLASTRUM. The Name of a Plainer de-  
scrib’d by *Aetius, Tetrabib. 4. Serrn.* 3. *C.* I2.

TYROS, τυρὸς. Cheefe.

TyROSiS. A Disorder of the Stomach proceeding from  
Milk coaguisred therein.

TYRRHENiCUM EMPLASTRUM. **The** Name of a Phi.  
**ster** mentioned by *xtetius. Tetrabib. 4. Seem.* 3. *C.-* I^.

TYRUS. A barbarous Word, importing a Serpent, or  
Viper.



ACCA. The Cow.. See Bost

V ACCARLA. A Name for the *Lychnis ; segetum* 5  
*rubra; scoliis Pcrfoliatee.*

**VACCINIA. See VITIs IDAEA.**

. VACCINIA NIGRA. A Name for the *Vidic Idaea* 5 *foliis  
'oblongis ; crenatis ; fructu nigricante. '*

VAGINA. The Passage from the external *Pudenda* to the  
Mouth of the *Uterus.* See UTERUS. The Name is, also, ap-  
plied to other Parts of the Body, as to the *Capsula Glijsimii,*which is called *Vagina Porta. '*

**HISORDERs INCIDENT TO THE VAGINA.**

*The Method of dividing preternatural Cohesions in the Genitals  
of Women.*

Some Girls are hern with the Orifices Of the *Pudenda* so con-  
glutina ted, that they are unable to discharge their Urine, whence  
they continue, for the first Days after their Birth, perpetually  
crying, without any Evacuation of Urine." In this Cafe, the  
Child must' inevitably perish, if not speedily relieved by Inci-  
fion. Some have the *Urethra sospru, for* the free Discharge of  
the Urine ; and others, but a small Perforation, by which the  
Urine is made with the greatest Difficulty, and only by Drops;  
and, in both these Cases, the *Fagina* may he preternaturally  
closed, by the *Hymen,* or some other Membrane; by which  
means, as they begin to ripen, and arrive at the Age of Pu-  
. berty, when the menstrual Flux begins to flow, it has no Pas-  
sage left for its Discharge, nor can they admit os Coition: And  
thus, from the menstrual Blond being collected in the *Fagina,*are produced Violent Pains, Tumors of the *Abdomen,* Paint-  
ings, *Deliria,* and Other most malignant Symptoms. This  
Disorder has been observed by many Physicians, who have de-  
nominated Giris, in this Condition, *Atreta,* which denotes  
*imperforate.* It appears, that *Aristotle* was acquainted with  
this Disorder, when he says, " That in some Giris the Mouth  
" of the Womb continued closed, or conglutinated, from their  
" Birth to the first Appearance os the menstrual Discharge;  
" which endeavouring to force its Way, Violent Pain is ex-  
cited, and the Part either bursts spontaneousty, or must he  
" separated by the Surgeon. Sometimes the Death of the Pa-  
An tient has ensued, when the Passage has been opened Violently,  
or could not be. divided at ail.". :Other Girls have the  
\* Mouth Of the *Fagina* closed with a Membrane, which, how-  
ever, is furnished with one or more Perforations proper; for dis-  
charging the menstrual Flux, hut will not admit of connubial  
Embraces; and therefore the Disorder is seldom discovered, be-  
fore they are married. Various Cases of these Kinds are de-  
scribed by *Raeonhuysen, Lib.* 2. *de Clausura Utcri, Obs..* I.  
*esenevenius de abdit. Morb. Causes. Cap.* 28. *Cabrolius Obs.  
Anatom.* 23. *Fabricius ab Aquapendente, in Oper. Chir. de  
Hymene imperforato. Hildanus, Cent.* 3. *Obs.* 60. *Schenck,'  
..Lib. An de Part. Genital. 'Solingen, in Obs.* 5. *Mechren, Obs.*

*Chirurg.* 55. *Mauriceau,* μὲν his *Obs. fur la Maladies des  
Femmes grosses ; Ruyseh,* in his *Obs. Chir.* 32. and by *Sa-  
viard,* in his *Obs. Chirurg.* 4. . -

This Disorder differs, in different Patients: In some there  
appears the Mark of a Perforation, or Passage, whereby the  
Urine may be easily discharged, and.which, at the same time,  
leads to the *Fagina* and *Uterus :* In others, no such Perforation  
**can** be. observed, hecause os the Thickness, and Density of the  
obstructing Membrane, or the firm Coalition os the *Fagina,*which renders the Cure either impracticable. Or extremely  
difficult. Sometimes, in new-born infants, a copious Col-  
lection of Urine, perhaps, in the *Fagina,* or in Adults, who  
have the urinary Passage open, the menstrual Blood, so distend  
the *Labia Pudendi, as* to shew the natural Passage os the  
*Fagina,* and, also, of the *Urethra,* according to the Obser-  
vations of many of the above-mentioned Authors. Sometimes  
these Cohesions are not Only formed in the Foetus before the  
’Birth, as, *Aristotle* and *Celsius* have observed; but they, also,  
happen in Adults, after an Exulceration os the Orifice of the  
*Fagina,* especially after a difficult Birth, when the Parts are so  
violently lacerated, inflamed, and exulcerated, that its Sides  
either entirely coalesce, or only a small Perforation remain,  
for the Discharge of the menstrual Blood, but not sufficient to  
admit of Copulation. In new-born Infants, therefore, it pre-  
vents the Discharge of Urine; but, in Adults, it obstructs **the,**I. Menstrual Flux. 2. Coition. 3s Conception. And, 4.  
The Birth. Its Cure, therefore, is extremely.necestary.

These Disorders are discovered, in new-bom Children, when  
they retain their Urine for the first Days after their Birth,  
and by seeing and feeling the Part; but in Adults, when the  
*Vagina* is obstructed by a Membrane, it appears from a Defect  
of the menstrual Discharge, intense Pains about the Pubes,  
Loins, and Belly, a Paleness of the Face, and Swelling of the  
Abdomen ; and, most certainly, by seeling and inspecting the  
Parts: But in those who have a small Perforation in the *Hymen,*sufficient to permit the menstrual Discharge, when Copulation  
is found to be obstructed, difficult, and imperfect. With re-  
gard to the Prognostic, if the obstructing Membrane he thin, **it**is generally broken in the first ActOf Coition ; or, if this Rd-  
medy should not he sufficient, lt may he easily removed, by the  
Knife. But is the Cohesion of the Parts is strong, and Hes  
deep, or if the Obstruction he made by a thick fleshy Substance,  
the Cure is difficult;' not only because the Bladder, or neigh-  
bouring Intestine, are in danger of being wounded, as .Roon-  
*huysen* acknowledges once to have happened to himself; but  
the Cure often does not succeed, hecause os the great Difficulty  
Of preserving a sufficient Wideness of the Passage.

in order to the Cure, it is, in the first Place, necessary, to  
consider, carefully, the Nature and State of the Disorder: If  
there appears any Mark of the *Urethra,* and the *Papina, so ,*that they are only obstructed by a Membrane, this Membrane  
must be opened in both these Passages, is both are closed, by  
**a** rectilinear Incision, from the superior to the inferior Part ;  
Or, as *Celsus* advises, by a. Crucial Incision, according to the  
.natural Aperture of the Part; but is a small Opening be lest in ε  
.the upper or lower Part of the Orifices Of these Passages, the  
Membrane may he divided with a Pair of Scissars, or with **a \**Director, and falciform Knife, taking care not to injure the '  
urinary Passage, much less the Bladder: Then, is it. appear ne-  
cessary, the whole Membrane may be extirpated.; afterwards,  
**4** proper Tent, anointed with Basilicon, or some digestive Oint-  
ment, must he introduced into the Wound for a few Days;  
and, to prevent its fallingout, secured by a Bandage; then a  
Tens, spread with a drying Ointment, aS that of Ceruss, or  
Diapornpholyx, must be applied, as before, and continued till no  
.Danger appears of a. new Cohesion os the Parts: But if **the**.Membrane he thick, or if the Obstruction be formed by a fleshy  
Substance, so that no Appearance remains of the natural Passage  
Of the *Pagina,* a careful Inquiry must he made, whether the  
Cavity may not be perceived by the Finger j if it can thus he  
discovered, with great Caution .make a rectilinear Incision,  
sufficiently large, in the proper Place, as before directed ; then  
laying hold of it by the Extremity, with a Forceps, or Hook,  
let it be extirpated, that the Passage may be sufficiently opened r  
Proceed, in the rest os the Cure, as before directed, excepting ’  
that, towards the Conclusion, when the Wound begins to heal,  
a leaden Pipe, of a sufficient Size, spread with a cicatrizing.  
Medicine, must be introduced ; and thus Medseine must he con-  
tinued, till a Cicatrix be induced.

. ' Sometimes new-married Women, and eVen. those who have  
lived Years in the matrimonial State, have the Orifice of **the***Vagina* so contracted, either thy an Exulceration, or some other  
Cause, that they cannot admit of conjugal Embraces,\* although cthe menstrual Blond may be freely discharged. In this Case, it  
may he adViseable, as I have happily tried the Experiment, to  
enlarge the Aperture, by making Incisions, of a sufficient Depth,  
in its Sides, and lower Parts, and by Abscission of the super-  
fluous Parts of the Lips; and then a large Tent, with dry Lins,  
twisted, must he introduced: Afterwards, in the subsequent  
Dressings,, which must be. repeated twice every Day, excepting  
**the** Day of Operation, lest the retained Matter, and *Sordes,*should occasion a troublesome fetid Smell, apply to the Sides of  
the Wound a vuinerary Balsam, and then a proper Pessary,  
made of prepared Sponge, or the swelling Roots, for the more  
convenient dilating os the Part, and let this Treatment he  
Continued, till it begins to heal: And, lastly, a leaden Pipe,  
spread with some desiccative Medicine, mustthe introduced every  
Day, till the Part is healed, and no more Danger of Cohesion  
remains: When the Constriction of the Orifice of the *Fagina*has nut been , from the Birth, but produced by some external  
**Caused,. I** have successfully- experienced the Method of **Cure**here laid down. *Sauiard* relates a like Case, in his *Obs.  
Chirurg.* 32. \*

*„ Cabrolius* relates a remarkable Case os a Patient about eighteen  
or twenty Years os'Age, whose urinary Pastage was entirely  
obstructed by a thick Membrane ; and her Urine, being, pro-

hahly. Conveyed by the *Urachus,* was constantly discharged by  
the Navel, which hung down about the Length of sour Inches,  
like the Comb or Beak os a Turkey-cock; and exciting almost  
an intolerable fetid Smell, as of putrid Urine. To remedy  
this most troblesome Disorder, *Cabrolius* first made an incision  
Into the Membrane which obstructed the Urethra; and, in or-  
tier to preserve a free Passage for the Urine, he introduced a  
leaden Pipe as far as the Bladder. Next Day he made a Liga-  
ture with a strong waxed Thread, as is commonly done in  
cutting Ruptures, upon the protruded Part at the Navel, hy  
which the Urine had been hitherto evacuated, and extirpated  
it below the Ligature: He then applied to it the actual Cau-  
tery, and, after the Eschar was removed, he deterged the Ul-  
cer, and induced Ἀ Cicatrix with desiccative Medicines, as in  
other Ulcers: Thus he completed the Cure in twelve Days.  
The fame Method may be followed in like Cafes, Only omit-  
ting the actual Cautery, which is not here very necessary, and  
greatiy intimidates the Patient, and all who are present.

**THE METHOD OF OPENING THE VAGINA, WHEN THE  
OBSTRUCTION IS DEEPLY SEATED.**

Besides these Disorders already explained. Women are some-  
times subject to have the Vagina preternaturally obstructed, by  
a Membrane deeply seated ; or by an entire Cohesion of its  
Sides; and thus the Discharge of the menstrual Flux being  
prevented, most acute Pains of the Belly and Hips, Swellings  
of the Abdomen, with *Nausea,* Extenuation, Watchings, and  
the other Symptoms above-recited, and sometimes eVen Mad-  
. Itels, are induced. Sometimes the Disorder is hern with the  
Patient; but frequently it arises from an external Couse, espe-  
cially a difficult Birth, when, aster a Violent Laceration and  
inflammation, the Vagina hecomes exulcerated. Instances of  
this Rind are given by *Roonhuyfen. Benevenius* relates a Cafe  
of this Nature that proceeded ’ from a Venereal Cause : And  
*Becker,* one from the Small-pox. Frequently the obstructing  
Membrane is situated near the Orifice of the Vagina; some-  
Times about the Middle; at other times near the Uterus. Some-  
times the whole Vagina, or great Part Of it, is concreted, or,  
at least, silled up with a thick fleshy Substance; and if this  
Concretion reaches deep; difficult and dangerous is the Cure;  
hecause the Bladder, and *Intestinum Rectum,* as we before ob-  
served, are Very subject to he injured. Sometimes the Mem-  
brane does not entirely obstruct the Vagina: And sometimes  
the Cohesion of its Sides is not total, but a Perforation is left  
for the Discharge of the Menses. Women, however, in this  
Condition, are capable of but an imperfect Coition 5 and hence  
new-married People, especially if they are prone to Supersti-  
tion, frequently imagine themselves bewitched; or the Husband  
inay think his Wise incapable of Conception; and therefore,  
meditate a Divorce, though sometimes such Women have be-  
come pregnant. *Becker* relates a particular Story of a wanton  
'Girl, who had been hem with an obstructed Vagina: She be-  
ing convinced by repeated Trials, that she was incapable of  
being deflowered, enticed many vigorous young Fellows to he  
with her; and when she had disappointed their Hopes of Επ-  
Joyment, and deprived them of their Money, she ridiculed  
them as insignificant Bedfellows for a Woman. But at length  
. Ihe committed herself to the Care of a Surgeon, to have thin  
Impediment removed ; and he soon so completely remedied his  
Patiens, that she, both aS a Fee; and a Testimony of the happy  
Cure, in a proper Time presented him with Twins, he him-  
self being the Father.

With regard to the Cure of this Disorder, it may he easily  
effected in young Giris, when the preternatural Membrane is  
thin, and not Very remote from the Orifice of theVagina, and  
Is, aS was above observed, the Incision he cantioufly performed.  
Bur, in Women this Operation Cannot be so conveniently  
Performed, unless the Membrane be distended by the-men-  
struous Blood, as it has been performed by the above-men-  
tinned, and others. *Amyand,* in the *Philosophical Transactions,*N° 422. gives the Cafe ofa Woman whose Vagina, after De-  
livery, was so obstructed with concreted Caruncles, that the  
Efflux of the menstruous Bleed’ was not Only prevented,, but,  
by. Its collecting ini theVagina, the Urethra was compressed,  
and a Suppression of Urine ensued. All these Authors relate, that  
immediately after the Incssion, not only a surprising and copiouS  
Discharge is made of inspissated Blood, and a fetid Liquor, but  
the Patient is relieved from all the Miseries she before suffered,  
and even from imminent Death: And, lastly, the Wound has  
been brought to a-Cicatrix, almost without the Use of any  
other- Remedies-than proper Tenrs, Pessaries of Wak,': and  
leaden Pipes. But, if the Membrane he thicker, and deeply  
seated in the Vagina, whether it be furnished with a Perforation  
er not, the Operation must be performed in the same mannere  
ssut greater Caution is required, aS the *Intestinum Pactum,* and  
Bladder, are more-exposed to Injuries ; the reft .of the Cure  
inay he eon:inped,Ἀτ before directed : But greater Care is, also.

necessary, in preserving a sufficient Wideness in the Passages  
Nor will it he improper to use here a *Speculum Uteri,* for the  
more accurate Inspection of the Parts, and rhe more wary Per-  
sormance of the Incision.

If Women in their Pregnancy, or in Labour, he afflicted  
in this manner, a timely Remedy must he applied; lest the  
Difficulty of the Birth should induce the most Violent Difor-  
dets. Is a pregnant Woman he thus affected, the Membrane  
should he extirpated long before the time of Travail; for then  
the Foetus, lying hehind the Membrane, may be easily wounded  
with the Knife. But if the Cure, by Ignorance or Negligence,  
he delayed to the time of Labour, the Operation must, even  
then, be performed, but with the utmost Caution, to prevent  
any Injury happening to the Child. A‘ small Wound must,  
therefore, he first made in the preternatural Membrane, with  
a Knife armed with a Button, see *Tab.* XXVI. *Fig. An* 5. or  
a Director may he used ; or a proper Forceps; or the Common  
chirurgical Knife, winch must he applied with extreme Care.  
*Mauriceau* advises, that the Midwife should forcibly divide this  
Membrane with her Fingers; but, as the Consequences attend-  
ing Laceration may he extremely dangerous, I think Incision  
preferable. ’

It remains to be observed, that if the Vagina he not ob-  
structed by a Membrane, but by a thick fleshy Substance, deeply  
seated ; or if the Sides of the Vagina are concreted, the Ope-  
ration must he both difficult and dangerous; from which,  
therefore, we ought rather to refrain, as *Benivenius* formerly  
did. But when the Operation is performed, in Cafes less dan-  
gerous, unless the Part he long kept distended with Sponge-  
tents, proper Pipes, or Pessaries, it will, soon aster the Cure,  
easily contract again, so as not to admit conjugal embraces.  
And upon this account I have not only been obliged to repeat  
the Operation, but *Rjoonhuysim* has done the same, who advises  
Surgeons particularly to attend to these Circumstances. But  
when there is an Adhesion of the Sides of the Vagina, deeply  
situated, as I once observed in a Butcher’s Wife, in whom the  
Disorder proceeded from a difficult Labour, the Incision is ex-  
tremely dangerous; from which I therefore abstained, in this  
Case, contrary to the earnest Intreaties of both her and her  
Husband, who were desirous of having Children. But if the  
Vagina be Obstructed by a thick fleshy Substance, though the  
Incision should be made, yet the Flesh becomes so luxuriant.  
Or indurated and callous, that not-only part of the Lips must  
be extirpated, where it Can. he done with Safety, for which  
Purpose the Affair must he duly considered, by Inspection,  
Feeling, and a *Spoculum Uteri*; but the fungous Flesh must  
he consumed by corrosive and desiccative Medicines, and re-  
pressed by proper Tents, and leaden Pipes, till the Passage be  
Sufficiently enlarged, and the Sides perfectly healed ; otherwise  
the Vagina will easily reunite, and render all this troublesome  
Procedure ineffectual. In Cases of this Kind, *Roonhuyfen* and  
*Becker* may he consulted, who illustrate this Affair with Various  
Observations and examples. *Roonhuyfen,* also, delivers a Me-  
thod of opening the internal Orifice of the Womb, when ob-  
structed : But as almost all Access is denied to this Part, this  
Operation appears scarcely practicable, and extremely danger-  
ous'j nor does it seem possible to preserve the Opening. *Hei-  
st ^Chirurg. . . jo*

**THE METHOD OF REMOVING TUBERCLES, CARUNCLES,  
AND OTHER ExCRESCBNCES OF THR VAGINA.**

Sometimes Exerc scene esof differentKindS, Sires, and Figures,  
grow not only on the external. Parts of theVagina, but, also,  
internally, both in the interior and posterior or superior Parts.  
SomeoscheseExcrescences resemble a Mushroom; others, a  
Fig; others, a Pear; and some; the ClapperOs a Bell: And  
sometimes they increase ro such a surprising Degree, that those  
of the last-mentioned Figure will reach to the Knees; which  
are not only great Obstructions to Copulation, and the Birth,  
but occasion intense Pain, and even threaten a Gangrene or  
Cancer, if not timely removed t When they are Very large,  
they are, by some, called *Sarcomas of the lssemb. Celsius Bui  
Tolpius czW* them simply *Fungi* ; but *Solingen* terms them *Fiet,*adding, though improperly; the Epithet *cancerous,* thecause they  
admiros inn easy Cure.- The nearer they are situated to the  
Orifice of' the Vagina, the more easily are they- removed ; but.  
the Talk- is Very difficult when they lie-deep; sh that *Tulpius*calis it a very uncommon Operation. Sortie have taken Excre-  
scences'os this kind for a .Falling-down of the Womb, buy  
without Foundation, -l-- - - - ς i\*

' The same Method of Cure must he followed here, that is  
generally Observed in removing Tuberales and *Sarcomas,* or  
fleshy Excrescences, by the Ligature ; by the Knife, or both;  
or by corrosive Medicines. But particular Care must he taken,  
not to mistake a *Prolapsus Uteri* for an Excrescence of this  
kind. .. .....

But, because these Disorders of the Vagina are hot only  
nearly related to a Polypus of the Nostriis; but are sometimes  
*so* deeply situated, near to the Uterus, and sometimes proceed  
from the Uterus itself, that they can nor he extirpated by the  
Methods above proposed, *Fabricius abAquapendente,* andDrdim,  
thought it necessary to use the Forceps recommended in ex-  
tracting Polypuses of the Nose, (see *Tab.* XL. *Fig.* q. Io. II J  
with which Instrument the Excrescence may he twisted off  
But, before thus Method he attempted, particular Circumspec-  
tion must be used, to see whether the Patient is not exposed to  
greater Injuries by the Operation. *Vieltcrs,* a *German Sur-  
geon,* informs us, that he has removed many of these Excre-  
scences, of various kinds, with a red-het Knife ; but I am so  
far from recommending his Example to others, that I rather  
think it ought to be abhorred, as cruel and dangerous. *Solin-  
gen* relates, that he happily extirpated a cancerous Excrescence  
in the Vagina of a Woman, who recovered in a short time.  
*Obf.* 29. But he gives no Account how he performed the  
\_ Operation ; nor any Reason why he Called the Disorder *can-  
cerous. Heist. Chir.*

**THE METHOD OF TREATING A PROLAPSUS LITER!,  
OR FALLING-DOwN OF THE WOMB.**

That a *Prolapsus Uteri* is an Impossibility in Nature, was  
not only alleged, but obstinately maintained, by some Physi-  
cians of the last Century: Among these were *Mechren, Roon...  
huys.en. Van Horne, Barbette, Pander Beche, Korkringius, Ver-  
due,* and others. But that the *Utcrus* is sometimes protruded  
from the *Abdomen,* through the external Orifice of the Vagina,  
is manifest from the Observations of the most experienced Phy-  
sicians, both antient and modem: Os this Number are. *Arti-  
us, AEgineta, Resset, Fabricius abAquapendente, Bcrengarius,  
Pare, Hildanus, Solingen, Mauriceau,* and many others. The  
celebrated *Ruyseh,* in his *Obs.* I. 7. 9. and Io. has clearly ex-  
plained this Affair, and illustrated it with elegaint and distinct  
Figures; two of which we have represented in *Tab.* LV. *Fig.,*sa. and 3. Next to him is *Sauiard,* a Surgeon Of *Paris,* who  
gives ten Cases observed by himself; then *Ju. Mau. Hoffman,*a Physician of *Altorsa, Sehacherus,* a celebrated Physician of  
*Leipsic, Sleuogtius, Fat crus, and Buggravius,* who all Certi-  
fied the Truth of this Disorder, and described it from Cases of  
which they were Eye-witnesses. And I myself have seen In-  
stances of this kind. When the Womb only bears down upon  
the Vagina, it is called a *Descensus Uteri*; but when it is pro-  
truded without the Vagina, it is denominated a *Prolapsus,* or  
*Procidentia Uteri.* Of the *Prolapsus Uteri* there are two  
Kinds; one happens without an Inversion Os the Womb, when  
the internal Orifice of the Uterus appears at the Extremity of  
the prolapsed Part, asm *Fig. I. Lit.* C; the other with an In-  
' version os the Womb, when the internal Orifice *of* the Utenis  
does not appear (sec *Fig.* 3.), as has been testified by the above-  
quoted Authors.

An inverted and non-inverted Uterus may he distinguished,  
as we just now observed, by the Orifice of the Womb, which  
appears when the Uterus is not inverted, as *inT.ab. LV. Fig.2.  
C* ; and by this Sign, also, it may be known from a Bearing-  
down, Or from fungous Excrescences of the Vagina. But it is  
not unworthy of Observation, that *Widemannus* not only de-  
scribed, but beautifully and clearly delineated, a fingular *Pro-  
lapsus* of the whole-internal wrinkled Coat of the Vagina, with  
an Orifice so nearly resembling that of the Uterus,, that none  
could have doubted it, hesore the Body was opened ; when the  
Uterus was found in its proper Place, and only the wrinkled  
Coat of the Vagina prolapsed. And that Physicians: may more  
prudently distinguish these Disorders, and not rashly mistake a  
*Prolapsus Faginee* for a *Procidentia Uteri,* I thought it not im-  
proper to represent the Figure given us by *LVidernannus, in  
‘ Ephern. Nat. Cur. Cent.Nsll. Obf.* 98. though not so large  
aS the Life. See *Tab.* LV. *Fig.* 4. The Appearance, there-  
fore, of an Orifice in finch a *Prolapsus* (see *Lit.* F) is not an  
infallible Sign os a *Prolapsus Uteri, as* has heen generally repre-  
sented ; but the prolapsed Part must he carefully considered, till  
it can he certainly known, whether it he the *Vagina* or *Uterus.  
Widemannus,* indeed, produces no pathognomic Sign, by which  
the Vagina, in this Case, may he assuredly distinguished from  
the Uterus ; but he says, that when he introduced his Probe  
into the Perforation F, which *so nearly resembled* the Orifice  
of the Uterus, that-it penetrated much deeper than the Cavity  
of the Womb, almost the Length of half a Foot: But whe-  
ther this Sign always appears, remains to he proved by future  
Experiments. This Observation of *IVidernannus* ought to he  
frequently read, and carefully considered.

. A Prolapsus of the Uterus, and one of the Vagina, are dif-  
ficult. to be certainly known, as well as to he distinguished  
from one another. We have a remarkable Instance of this  
- kind in the Physicians and Surgeons of *T.holouse,* and many  
of those at *Paris,*.who imagined a Girl about thirty, who.

from her Childhood, had 'been troubled with a *Prolapsus Litcri,*to he an Hermaphrodite; and publickly declared, that in this  
Hermaphrodite the Male Sex was predominant. Upon this  
Declaration, the Parliament of *T.holoufe* ordained the reputed  
Hermapbrodite to lay aside female Apparel, and assume a mai-  
online Dress, under a severe Penalty, if she refused. But when  
*Saviard* had narrowly examined her at *Paris,* he found her to  
he really a Girl, and, by restoring the Uterus to its natural  
Situation, metamorphosed her into her proper Sex; and, by the  
King's Command, she was ordered to dress accordingly. The  
inconsiderate Judgment of the *Tholousians* more plainly ap-  
pears from this diverting Relation, of *Sauiard, in Obs.* 15;  
who assures us, that she had no Resemblance either of a *Penin*or Testicles, Appendages which, in my Opinion, are absolutely  
necessary to the Formation of a Man ; besides her Breasts were  
large, and her Fane was entirely female, without a Beard.

This Disorder proceeds from a Relaxation and Weakness of  
the Ligaments of the *Utcrus* and *Vagina*; whence it is ob- .  
served frequentiy to follow a difficult Birth, or other Violent  
Efforts; though Virgins and Giris are sometimes affected with  
it. Another Species of Prolapsus is, when the prolapsed Ute-  
rus is inverted like a Bag, with its interior Side turned out-  
wards, and then the Orifice of the Womb does not appear,  
but is concealed in the Vagina.. See *Fig.* 3. B. Of this Kind  
of ..Prolapsus we have, among others, a remarkable Instance,  
described by *Genfelius.* In this Case, the prolapsed Uterus re-  
sembles a Mole, or a bloody and unseemly fleshy Excrescence;  
and, therefore, it is not surprising, that some unskilful Surgeons  
and Midwives have mistaken the Disorder, and by rude Treat-  
ment, endeavouring to extract the Womb by Force, bring the  
Patient's Life into extreme Danger. This miserable Disorder ..  
feldom happens, except when the Uterus is extracted with the  
Secundines; or immediately after a difficult Delivery, when  
the internal Orifice of the Womb is so dilated, that the Body  
of the Uterus is easily transmitted through it; or, lastly, when  
the Patient is so strained by the Labour-pains, or by the Con-  
tinuance of the Throes aster Delivery, that, by a Vehement  
Effort the Uterus flips through its internal Orifice, and is forced  
without the *Labia Pudenda.* But from whatever Cause **the**Disorder proceeds, unless it be quickly restored to its natural  
Situation, as the above-mentioned Authors have observed, a  
fudden Death is generally the Consequence; and, therefore,  
any Delay must be extremely dangerous.

S In this Species of a prolapsed Uterus, the Surgeon or Mid-  
**wise** must, in the first Place, take care that the Patient evacu-  
ate her Urine, lest the Repletion of the Bladder should obstruct  
-the Reduction of the UterusThen the Patient being laid on  
her Back, with her Hips elevated, and Thighs distended, the  
Secundines, if they still adhere, must be cautioufly removed  
by the Fingers, and the Uterus, with all possible Expedition,  
gently restored, by the Hand, to its former Situation. This  
Operation may be most conveniently performed, by tenderly  
returning into the Vagina the lower Part of the prolapsed Ute-  
rus, at *Fig.* 3. C, with the three first Fingers, and, then, with  
the whole Hand, into its natural Place in the Cavity Of the  
Abdomen; then, contracting the Hand into the Form of a  
Fist, it must he retained there, till the Uterus is reduced to its  
usual Figure, and, then, gentiy contracted; These Particulars  
are more easily executed immediately after the Delivery, while  
the Orifice or the Womb, and the Vagina, are preternaturally  
dilated. The Uterus bring thus replaced, and reduced to its  
former Figure, the Patient should be laid on her Back, in Bed,  
and earnestsy exhorted to keep her Legs close, and to dispose  
herself for Rest; for by procuring Rest, and keeping this Pos-  
ture, . the Cure may often he completed, without any other  
Assistance. Noy will it he improper to close up the Orifice of  
the Vagina with Compresses, and a proper Bandage, lest, by  
Stress of Pains consequent to the Birth, by Coughing, or by  
Sneezing, the Uterus should he again prolapsed: Thus will the  
Orifice of the Uterus be gradually contracted, so as to afford  
no Passage for the Uterus, and, consequently, the Disorder be  
removed. If the Uterus he not quickly returned, according to  
*Hildanus, Stalpart, Ruyseh, Saviard,* and other Authors above-  
quoted, sudden Death must he the Consequence: For the  
Orifice of the Womb is, by Degrees, so constricted by the  
soperior Part of the Uterus, that an Inflammation is induced,  
and the Reduction of theWomb becomes impracticable; and **a**Sphacelus is occasioned by the stagnated and corrupt Blond, and  
the Patient suffers a miserable Death. But if the Case be not  
desperate, when the Surgeon.is called. Care must he taken to -  
free the Uterus from its Inflammation, and to restore' it to its  
proper Place with all possible Expedition : For this Purpose it is;  
in the first place, necessary to bleed her copioufly; and then **she**should discharge her Urine, that no Obstruction may he occa-  
stoned by the Distention of the Bladder: Then let the Patient  
he laid in the same Posture as is above directed ; and then let  
the Uterus he carefully-fomented with warm Milk and Water,’

fnd anointed with Butter, lor warm Oil; or let digestive and  
emollient Fomentations, or Cataplasms, he so long applied,  
till the Part becomes soft and fiippery, and capable of being re-  
placed by the Method already directed. For unless this Re-  
duction can he seasonably accomplished, the Preservation os the  
Patient becomes impracticable ; nor will the .Extirpation of **the**Uterus, by Ligature or Abscission, as some have imagined,  
ought avail. *Puysch* relates a Case, in which a Surgeon re-  
moved by Ligature a prolapsed Uterus, but without Success ;  
for the Patient soon died. r

But here I think it may be worthy of Consideration, whe-  
ther Scarification may not be advantageoufly attempted in such  
desperate Coses, when the Uterus is swelled and inflamed, as  
in other Violent inflammations of a cancerous Disposition, which  
io me seems not improbable.

That Species of Prolapsus in which **the Uterus** is not in-  
verted, but its internal Orifice appears, which is not always  
. the Consequence of a difficult Birth, but is often produced by  
a Weakness of the Ligaments, is not attended with such un-  
happy Consequences. By the Appearance of rhe-internal Ori- .  
fice of the Womb, this *Prolapsus Uteri nay,* also, he distin-  
guished from fungous Excrescences, or Tubercles of the Vagina,  
as was already observed. In this Case the Danger of an in-  
st am mation. Or sphacelus; is notsomuch to he apprehended, as  
n the former Kind. This Species of *Prolapsus Uteri* is not  
only incident to Women after a difficult Labour, but, also, to  
others, to the chastest Virgins, and eVen young Girls, accord-  
ing to the Observations os *Mauriceau, Savlard,* and others.  
But if this. Disorder he for some time neglected, not only great  
**Uneasiness is** occasioned, but **a** .Difficulty of Urine, Violent  
Pains of the Hips, Exulcerations of the prolapsed Uterus, and  
an Inflammation followed with a Sphacelus, Scirrhus, or Can-  
**cer.** And the longer the Use of proper Remedies is de-  
layed, the more difficult is the Reduction of the Uterus, he-  
cause it becomes swelled and enlarged, and cannot he retained  
**in** its natural Situation, without proper Instruments. For **a**Relapse can scarcely he prevented, either in Walking, or in  
fome Commotion of the Body; or in Sneezing and Coughing,  
.especially is not sustained by a proper Bandage or Instrument.  
Put is the prolapsed Uterus he affected with a Cancer, or Gan-  
grene, the Reduction ought not to he attempted : For *Ruyfch*informs us, in *Qbs.* 9. that, after it is replaced, more intense  
Pains, and other malignant Symptoms, are induced.

If, -therefore, there be no Appearance of a Gangrene, or  
.Sphacelus, two intentions are necessary to he answered in the  
Cure: i. That, the Uterus he restored to its proper Place.  
2. That a Relapse be prevented.: With regard to the first In-  
.tention, if the prolapsed Uterus has not been of long Dura-  
.tion, or greatiy increased in Bulk, it may be easily replaced by  
- the Method already directed: Let the Head he laid low; **the**. Buttocks elevated; the Legs spread wide; and .the Womb  
\* .gently replaced with the Fingers, or a strong Wax-candle. It  
.has been often observed,' that Women troubled with this Dif-  
- Order can replace the Uterus themselves, without any Diffi-  
-culty. But if the Disorder he inveterate, and che Uterus  
enlarged, so that it cannot he without Difficulty reduced,  
digerent Fomentations must he applied, and the Bladder and  
.Intestines emptied; that it may he the more easily restored  
to its natural Situation.- But as the Uterus can scarcely he  
sustained by the Coats of the Vagina, and its own relaxed, de-  
bilitated lagaments, great Care, as well as proper Bandages  
and instruments are required to prevent a Relapse. For this  
Purposerit will he expedient to rest some Days in Bed, and to  
convey the Steams of strengthening SufiiimigationS through the  
Vagina, with a proper Funnel and Pipe (see *Tab.* LV. *Fig.*I 4.): Aromatic and astringent Fomentations, prepared with  
Spirit of Wine should, also, he injected with a Syringe. Then  
putting a Compress on the external Orifice *os* the Vagina,  
carefully apply , the T Bandage When the Uterus is greatiy  
swelled, it Ought to he fomented with Digestives, till its Bulk  
he diminished, and then it may he replaced. If the Uterus  
.be exulcerated, as frequently happens, the Reduction of it ought  
. ..not to be delayed upon that Account: For *Savlard* observes,  
that these Ulcers are much easier healed when the Part is re-  
stored to its proper Situation, than when it is preternaturally  
prolapsed. This Author, also, relates an Instance of. a *Pro-  
lapsus Uteri* in a Virgin, who had, at. the same time, a Stone  
in her Bladder : .in this Case he first replaced the Uterus, and  
then extracted the Stone, and relieved her from both Disorders,  
only ufinga. Pessary. See his *Obscssp.*

If the Disorder is already hecome so inveterate and obstinate,  
that the Uterus cannot he retained by the Methods already  
proposed, there remains but one Resource, to which Recourse  
is commonly had; and that is, to repress the Vagina, by in-  
troducing a Pessary- The best Sort of Pestaries are made of  
Box, Ash, Or other hard Woods, or of Cork, and covered  
with Wax, having a Perforation in the Middle .(See *Tab.* LV.

*Pig..* 6. 7. 8. 9J. Without the Wax they would fwell, rot,  
and produce many Inconveniences, so aS not to be, without  
Difficulty; extracted, and, perhaps, by Pieces. Those who can  
afford the Expence, may have them made of Ivory, or of Sil-  
ver or Gold excavated : Thus a Pessary os a .proper Size and  
Shape, inust he carefully pressed by the Fingers, deep into **the**Vagina, even to the Orifice of the Uterus, that it may not  
easily fall out ; having a String fastened to it, (see *Tab.* LV.  
*Fig.* 6. and Io.) by which it may he extracted and cleaned.  
The String should, also, he tied to any Belt about the Waist,  
Jest, by happening to fall out, when the Patient walks, it  
should indecently drop upon **the** Ground. A Pessary is judged  
to he of a proper Size, when it is not easily admitted at first, -  
that it may more firmly remain, and better repress the Uterus ;  
but, in some Cases, Pessaries twice as large as these are re-  
quired. The Perforations in Pessaries are designed for a Passage  
for the menstrual Blood, and other Sordes, discharged from the  
Womb; and, therefore, those Pessaries which are os an oval .  
or pyramidal Form, are not fo convenient;. such as those of a  
prodigious Size, recommended by *Pare, Hildanus, Scultetus,  
Roorihuys.cn,* and others: Besides, these perforated Pestaries will  
admit the *Semen* for Procreation, and, also, the strengthening  
Suffumigations and Injections, so necessary in these Coses.  
When these Pessaries are rightly made, they are so far from  
bring troublesome, that when once Women have been accus-  
tomed to them, they retain them without the least Uneasiness.  
It is proper to observe, that some Women, who have been  
affected with this Disorder, have been freed from it upon their  
becoming pregnant, by reason of the Dilatation of the Womb..  
See *Pechlinus, Obs.* 20. and *Saward, Qbs.* I 2. But *Mauri-  
ceau, Schelhammcr, Hunerwolf, Savlard,* and’others, prove  
that this is not always the Case; but the Orifice os the Womb,  
with the Head of the Foetus, may be felt without the Vagina.  
*.. Savlard* prefers a kind of elastic Steel Pessary before all  
Others; but as he gives no Description of it. Nobody can know  
whet he means. But *Goelicke,* in a Dissertation published at  
*Halle,* in 17 I0. describes a new Method of curing a *Prolapsus  
Uteri,* in which he recommends an elastic Pessary,\*made os  
Iron-wire, and wreathed into a conical Form: He, also, gives  
a small Representation ofjt ; but does not explain its proper  
Length or Thickness. Put in *Tab.* LV. *Fig.* II, these Faults  
are corrected, where it is represented os a convenient Size:  
He directs the Inside to be covered with Lint, and the Outside  
with thin soft Leather; and orders a String to be fastened on  
**each** .Side .of **the** Basis of the Cone, that it may he easily  
extracted. When it is to be introduced, it ought to he a little  
compressed '; so that, after it is placed, it expands itself, by its  
jelastin.Force, and is thus firmly retained, without any Danger  
of falling out: He owns indeed, that he never experienced **the**Effects of. this Pessary, bur, as it has all the Qualities necessary -  
for the Formation of a good Pessary, he does not doubt of its  
Excellency. But as I am afraid, that, in so moist a Place,  
such a Pessary should soon be corroded by Rust, to which Iron  
is particularly subject, I have, therefore, always used the  
wooden Pessaries, represented in *Fig.* 6. 7. and 8. which I **have**found to answer the End. *Heister Cher.*

**THE METHOD OR TREATING Α BEARING-DowN OF  
THE VAGINA.**

A Bearing-down ofche Vagina has not only heen confound-  
ed with a Bearing-down of the Uterus, by ignorant Midwives,  
but, also, by Physicians and Surgeons of Learning and Expe-  
rience; find these different Disorders have, likewise, been con-  
founded with the same Denomination: But they may hedistin-  
guished from one another; partly by considering the anatomical  
Structure of the Parts; and partly, by attending to the dia-  
gnostic Signs above observed. The Vagina is said to he pro-  
lapsed, when the Whole, (aS in *Tab.* LV. *Fig.* 4.) or only  
Part of it, being relaxed, by whatever Causes, hangs without  
the Pudenda. Sometimes the whole Vagina is prolapsed, and  
appears like crude bloody Flesh, resembling a thick fleshy Ring,  
more or less swelled, according to the different Causes of the.  
Disorder, and other Circumstances. If the prolapsed Vagina  
swelis Violently, and is attended with Inflammation, as I have  
sometimes observed, after a difficult Labour, there is imme-  
diate Danger of a Sphacelus : If the prolapsed Part be affected  
with little or no Swelling; or if the .Tumor he unaccom-  
panied with Inflammation, the Disorder inay long he hern,  
without Trouble, and without Danger. Sometimes a Part  
of the Vagina is preternaturally prolapsed out of the Puden-  
da, and may he produced by lifting too great Weights; or by  
an Effort in a difficult Birth; or by a Congestion os peccant  
Matter, resembling a large Fungus, or a *Prolapsus Vtcri.*Many plain Instances of this Disorder have been observed  
And *Meekren* has related, and illustrated with Figures, a Very  
remarkable Cose in *Cap.* 54. of his Observations. This kind  
of Diforder may not only he takeg for a *Prolapsus Uteri ;* but

rather for a Tumor, aS a *Fungus, Ficus, Sarcoma,* or fleshy  
Excrescence; and, therefore, it may be thought necessary to  
remove it bv a Ligature, or by Abscission. But to distin-  
guish this Disorder from a *Prolapsus Utcri,* or a Tubercle  
of the Vagina, it is necessary to observe, that an inverted  
*Prolapsus Utcri* never happens, unless immediately after De-  
livery ; but Tubercles os the Vagina, or any Part of is,  
may be produced at any Time , besides that of Delivery,  
and increase gradually, and, as it were, imperceptibly.  
Though I observed in the Year 1720, in a Lady of Quality,  
.suffering under a difficult Labour, that whilst the Foetus was  
yet in the Womb, Part of the Vagina was suddenly prolapsed,  
and within twenty-four Hours a Fungus or Tubercle appeared,  
equal to the Size of two Fists, which soon became sphacelous ;  
and, though the Child was safely brought forth, the unhappy  
Mother died within eight Days. Hence, then, it is not fur-  
rising, that some Physicians, not having sufficiently considered  
the Signs by which a *Prolapsus Uteri* may be distinguished from  
a *Pro lapsus Faginee,* have, therefore, afl'erted, that a prolapsed  
Uterus may sometimes not only be extirpated without endan-  
gering Lisebut that those very Women, though deprived of  
the Womb, may afterwards conceive and bring forth Children.  
That, after the Extirpation of a Tubercle Of the Vagina, as  
in *Fig.* 5. or where the whole internal corrugated Coat of the  
Vagina salis down,, like a *Prolapsus Uteri,* those Women may  
afterwards conceive, and bring Children, was never denied:  
But it is absolutely impossible, that, aster the Uterus is extir-  
pared, a Woman should conceive; and, therefore, these Re-  
Iations may justly he accounted fabulous.

How Tubercles resembling a *Prolapsus Vagina* may be re-  
moved, we have already explained: But when the Vagina ap-  
pears prolapsed, like a large bloody Ring, hard and inflamed,  
unless it be seasonably restored to its proper Place, there is great  
Danger of the prolapsed Part being affected with a Gangrene,  
or Sphacelus: But the Danger is less, if the prolapsed Part be  
flaccid, and not inflamed. Is no Inflammation appears, the  
Vagina should be restored to its natural Situation with the  
Fingers, or a thick Wax-candle, and then fomented with  
strengthening and digerent Medicines: Then the Patient should  
be ordered to rest in Bed for some Days, keeping her Legs  
close, or crossed. Meanwhile the Part should be fomented  
with Decoctions of strengthening, digerent, aromatic, and  
astringent Herbs, with Red-wine; or with Lime-water,mixed  
with Spirit of Wine: Suffumigations, also. Of Mastich, Oli-  
banum, Myrrh, Amber, and the like, should, also, be con-  
veyed into the Vagina with a proper Pipe (see *Tab. LV. Fig.*I4.) and Funnel;-then let the Part be carefully bound with  
the T Bandage. Thus may the prolapsed Vagina be restored  
to its natural Vigour, especially if the Disorder be recent, and,  
\* if proper internal Medicines be exhibited: For this Purpose, the  
medicated Waters, hot Baths, and chalybeate Waters, are ex-  
cellent. But if the Disorder be so inveterate as not to yield to  
the Remedies here proposed; it must, therefore, he palliated,  
and the Patient he ordered to wear the T Bandage constantly ;  
by which’ means the Danger of a ScirrhuS, Or Gangrene, may  
he averted.

But if the prolapsed Part he seized with an Inflammation,  
- the Inflammation must be removed, not only by the Applica-  
cation of discutient Fomentations and Cataplasms externally,  
but, also, by the Exhibition of proper internal Medicines, not  
Omitting Venesection, before the prolapsed Vagina can be re-  
stored to its natural Position, otherwise a Gangrene might be  
. induced, which would soon be followed by the Death of the  
Patient. But if the Inflammation he mild, the prolapsed Part  
*- Tcrxy* he reduced without Danger, as the natural Heat of the  
Body will greatly contribute to discuss the Tumor. But if a  
Sphacelus, or Fungus, already appears upon the prolapsed Va-  
gina, which may be known from its Blackness and fetid Smell,  
- the morbid Part must he scarified ; digestive Fomentations and  
Cataplasms applied ; and whatever else is necessary in the Cure  
os a Sphacelus. *Heister. Chirurg.*

VAGINALIS TUNICA. A Coat of the Testes; an-  
. Other of the. (Esophagus, and another Of the Spinal Marrow,  
’ are called by tins Name. - .-

VAGITUS. The Bewailings or Meanings of Children,  
when out of Order. τι.

VALENTIA SCABIOSAE. *Powers of Scabious.*

Take of the Juice of green Scabious, pressed out, and  
strained through a Cloth, and of Hogs-lard, cleared of its  
Membranes, each as much as you please: Let the Lard he  
beat in a Stone Mortar, and the Juice poured in by little  
at a time, for the ConVeniency Of Mixture, and giving its  
Tincture : Then put them together into a proper Vessel,  
to be exposed to the Snn, and so chat che Juice-may cover  
the Lard.. After nine Days, pur them again into the Mor-  
tar as before, and throw away that thin and discoloured

' Humidity, which separates upon beating, without rubbing  
them together; and again, pur it utrtio lts Vessel for five  
Days: Afterwards beat it again, and by a little at a fims,  
mix with it fresh Juice of Scabious; and aster a fredh Inso-  
lation of fifteen Days, in its proper Vessel, in rhe Sun, let  
it be cleared before of its watry Humidity. Lor it then  
stand again in the same manner, for fifteen Days longer,  
with fresh Juice; and, after a little Beating, let it be  
kept for Use, in a glass os earthen Vestel.

This, we are told by the first Compilers of the College Dis.  
pensatory, was the Contrivance of *fohn Arden,* an experienced  
Surgeon at *Newark, \DNattinghamfhire,* who lived in the Reign  
Of *Edouard* the Third. After Insertion of this, which they,  
had from an antient Manuscript, they particularly direct to  
repeat the Processes with fresh Juice, till the Lard looks os a  
deep Green ; and that is made the Measure of the Repetitions  
necessary.

. VALERIANA.

The Characters are; .

The Leaves are conjugated*.. The* Stalk is florigerous, and  
divided as in umbelliferous Plants; Under the Umbellae, both  
large and small, are two long small Leaves: The End of the  
Pedicle shoots forth two small similar Leaves, which supply the  
Place of a Calyx: From the Centre of the Area of the Pedi-  
cle, within these Leaves, proceeds an oblong Ovary, on whose  
fimbriated Apex grows a monopetalous. Funnel-shaped, naked  
Flower, furnished with three Stamina, proceeding from the  
internal Sides of the Flower: The Tube of the Flower, from  
its lower Part, where it adheres to the Ovary, frequently shoots  
forth a blind Spur at the Side *r* The Seed is Oblong, depressed,  
running out narrow, almost stat and downy : .From the Centre  
of the Apex of the Ovary shoots forth a long Tube.

*Boerhaave* mentions thirteen Species of Valeriana; which  
are, '

I. Valeriana ; major; hortensis. *Boerh. Ina. alt. yAn Phu  
rnajus, five Palcriana mayor.* Ossic. Park. II9. *Valeriana hor-  
tensis.* Ger. 9I7. Emac. I075. *Valeriana hortensis, Phu Olu-  
satri folio Dioseooftdic.* C. B. Ρ. I64. Tourn. Insta I 32. *Va-  
leriana mayor odorata radice.* J. B. 3. 209. Raii Hist. I. 388.  
GARDEN VALERIAN. . ? ss

' The Root of the Garden Valerian is about a Finger think,  
of a brown Colour, growing not deep in the Earth, but spread-  
ing itself across, with many large white Strings on each Side,  
which makes the Root appear, like a large Scolopendra, or  
Catterpiller with many long Feet, of a Very strong Smell, espe-  
cially when dry : It shoots out several hollow chand’d Stalks,  
two or three Feet high, having the lower Leaves long and-  
round-pointed; some whole, and Others cut in, resembling  
those of Scabious, but that they are smooth: The Leaves,  
which grow on the Stalks, are, also, much more cut in: The  
Stalks are divided towards the Top into several Branches, hav-  
ing, at each Divarication, a long narrow Leaf; and at. the  
Ends grow the Flowers, in a kind of Umbels, each Flower  
being a small, long, narrow Tub, divided at the Top into five  
Segments, within many Apices of a white Colour; they stand  
on the Rudiments of the heed, which, when they are fallen,  
. grow larger, being longish,, striated with a downy Top. It is  
. usually planted in Gardens, though it grows wild in the *Aspsue*Countries.. The Roots are principally used.

They are alexipharmic, sudorinc, and cephalic; and are ac-  
counted useful in malignant Fevers, and pestilential Distempers:  
They help the Head and Nerves, provoke Urine, and bring  
down the Menses. l. ;si. '

They are one of the Ingredients Of the *Thcriaca* and Mithri-  
date. *Mullens, Bat. Off. . .*

’ The Root and Herb are. alexipharmic, sudorific, and din-  
. retie: Their principal Use is in Weakness os the Sight, Pesti-  
. Ience, Asthma, inveterate Cough, being boiled with Liquorice,  
. Raisins, and Anise, in the Pleurisy, Obstructions os the Liver  
. and. Spleen, Jaundice, Stoppage of the Ureters, Hernia, and  
the Tike. Outwardly they strengthen the Sight, absterge  
Specks, and Films, being boiled in Wine Or Water, and in-  
stilled by Drops : They ease the Head-ach, provoke the Menses  
and Sweating, being used in Baths: In Suffumigations they dry  
up Rheums, and correct the Malignity os Buboes and Carbun-  
cles, extract Bullets or Arrows, and cleanse inveterate Ulcers.  
Thus far. *Schroder c* And indeed he has said enough, if not too  
much, in its Praise. It is certainly, however, a potent Diu-  
retic../.. vl'-fsu lrigni... - -

The.Powder of the Rooe, which grows spontaneousty, before  
it produces a Stalk, taken once or twice, to the Quantity of  
. half a Spoonful, in Wine,. Water, Milk, or any other proper  
juice, cures the Epilepsy; for st purges upwards and downwards.  
*Sylvius* thinks, that more in to be ascribed to this Plant, , than  
to Peiony, on account os its abounding with a Volatile Salt.  
It is usual with us in *England,* to apply the bruised Leaves to

'lWounds,-when but flight; whence it is called by some *Cui.,  
singer. Rase Hist. Plant.*

2. Valeriana; sylvestris; major. *Ger.* 9I7. *Emac. toys.  
Parle. 122. C.B.P.* I6.i. *Raii Hist.su.* 388. *Syrtap.* 3. 200.  
*Tourn. Inst. Bocrh. Ind. A. Valeriana fylvestris.* Ossie.  
*Faleniana sismestris magna aquatica. J. B,* 3. 209. *Phu Di~  
oscoridic verior.* Col. Ecph. I. 2Io. GREAT WILD VA-  
LERIAN.

VVe have two Species of this great wild Valerian ; the first  
has a Root divided into several white thick Strings, growing  
inore downward, and less spreading than the other ; of no great  
Scent, when just taken out of the Ground, but smelling very  
strong when dry. The Stalks arise to be shout a Yard high,  
hollow and chanelled, having several long winged Leaves, whose  
Pinnae are long, sharp-pointed, and serrated about the Edges,  
high-veined, and somewhat hairy; the Leaves, which grow  
'higher on the Stalks, are narrower, and less serrated. The  
Flowers are, in Shape, like those of the Garden Valerian, of  
a pale-purple Colour, and having the like Seed. This grows in  
Woods, and dryer Places than the other, which is larger, taller,  
the Root more spread out;, the Leaves are larger, ^smoother,  
of a deeper shininG Green, with broader Pinnae; the Stalks  
grow taller ὁ the Flowers are much alike. This grows in  
watery Places, and near Ditches, both flowering in *May.* The  
' Root of this has as strong a Smell as the other; they are both  
used promifcuoufly, though the former seems to come nearest  
*- Columneds* Figure and Description in his *Phytopinax.*

They are come much into Ufe of late, in Diseases of the  
Head, and all nervous Affections. *Miller\*s Bet. Off.*

'. The Leaves of this Plant have no Smell, but an herby, saltish,  
bitter Taste, find give a pretty deep Tincture of Red to the  
blue Paper; the Roots stain it a little ; they are bitter and  
styptic, of an aromatic penetrating Smell, and something dis-  
agreeable. This Plant has a Volatile aromatic oily Salt, loaded  
with a Part of the Acid of the Sal Ammoniac ; whereas the  
artificial Volatile oily Sait of this Acid, is detained by the Salt of  
Tartar.

Thus the wild Valerianis anti-epileptic, sudorific, hysteric.  
And emmenagogic: It gives great Relief to those troubled with  
' the Asthma, or Vapours:. *Camerarius* Commends it very much  
for the Jaundice; and *Fabius Columna* for the Epilepsy ; who  
r acknowledges himself to have been cured of the Epilepsy by this  
Root; and that he had seen several other Persons cured by it:  
- He advises to pull it up before it pushes forth its Stalks, to re-  
duce it to Powder, and swallow half a Spoonful of it in Wine,  
Water, Milk, or any other Liquor:. It may be given to Chst-  
. dren, and all Persons that have convulsive Fits. I have seen it  
have great Efficacy in the hysteric Passion, and most Violent  
' Paroxysms of the Asthma. Pour a Pint of hosting Water upon  
an Ounce of the Roots of this Plant ; remove the Pot from the  
Fire; cover the Infusion well; and give it to drink by Glass-  
fuls. The Extract of these Roots is good for the same Dis-  
eases : They give a Scruple of it with a Grain of Laudanum,  
Or else mix the Laudanum with half a Scruple of the Powder  
„ iof these Roots. *Martyn's Toumofort.*

*It is* effectual in Convulsions, Ruptures, and Bruises by Falls,  
as, also, for Inflammations, and Exulcerations of the Mouth  
’ and Gums, and the Aphthae, *Hi On.* and cures aTertian Fe-  
ver. *Schw. Dale. .*

A Dram Of the Powder os the drv’d Roots, taken in Wine,.  
\* purges upwards and downwards. Dr. *Mead,* in his Book de  
*' Imperio Solis et Luna,* highly commends the Root of this Plant  
- against the Epilepsy.-

3. Valeriana; major; fylvestris; montana. *C.B. P.* 164.

am Valeriana; foliis Calcitrapae. *C. B. P.* 164.

**5.** Valeriana ; soliis Calcitrapae, magis dissectis.

' ί 6. Valeriana ; palustris minor. *Co B. P.* **I** 64. *Tourn. Inst.*132. *Bocrh. Ind. A.* 74. *Phu minds et Paleniana minor.*

) Offic. *Valeriana minor.* Ger. 916. Emac. xo7 5 . Rail Hist.  
. I. 388. *Falcriana fylvestris minor.* Park. 122. Rail Synop.  
‘ 3. 2O0. *Paleriana minor pratensis vel aquatica.* **J.** B. 3.211.  
1 SMALL VALERIAN,

. The Roots Of this Valerian are long, Sender, and creeping,  
\* fending out a few small white Fibres. The Leaves which  
7 spring from them, before the Stalks run up to Flower, are  
almost round, hut somewhat pointed. The Leaves which grow  
’ cm the Stalks, are like those of the Garden-kind, but less. We  
have two Species of this Valerian, one whereof rises higher than  
the other, having usually three Pain os Leaves set opposite ; the  
... Umbeis of Flowers grow closer, and the Flowers are a great  
si deal smaller, than the other, which arises not so high, and has  
; Usually but two Pain of Leaves on the Stalks. The Flowers  
**"are** much larger, and like the Garden Valerian, but Of a pale-  
' purple Colour, as are, also, the former. They grow both  
promifcuoufly in marshy Grounds, and moist Meadows, as in  
*Baitcrsoa Field,* near the *Thames, in* great- Plenty, flowering  
*iXCMafe 0*

**Ί' know no particular Virtue this Species of Valeria n is en-**

dowed with, Authors having said but little about it; neither is  
it ever used in the Shops that I know of. *Mellegis Bet. Off.*

The Parts in Use are the Root and Leaves, which aS they  
resemble those of the *Great Wild. Pdicrian* in outward Appear-  
ance, so are they supposed to agree with them in Virtues, tho’  
in an inferior, or milder Degree. *Dale.*

*J.* Valeriana ; fylvestris ; vel palustris ; altera ; flore minore  
densius stipata. *Raii Synop.* 98.

8. Valeriana ; tuberosa. *J. B.* 3. 2. 2O7.

9. Valeriana; rubra. *C. B. P.* 165.

Io. Valeriana; marina; latifolia; major; alba. *Me U. 50.*

*II.* Valeriana; rubra; angustifolia. *C. B. P.* 65.

12. Valeriana ; maxima; Pyrenaica; Cacalhe folio. *Fagan.*

I 3. Valeriana; Lusitanica ; latifolia ; annua ; laciniata.  
T. I32. *Bocrh. Ind. alt. Plant.*

The first is the *true. Phu* of *Dioscorides,* and the Antientj;  
and takes that Name either from the *Greek* Word φάω, *(phyo)***to** grow, or spring from, or from *Phy,* a *Pontic* Word, de-  
noting the penetrating Smell of its Root. But it is erroneoufiy  
affirmed to be the *Herba Saracenica,* for healing of Wounds;  
for the Taste shews the contrary ; for it is aromatic, pene-  
trating, and somewhat ungrateful Taste, as it is said of the  
*Nardus os* the Antients; whence it appears to be os an aperi-  
five Quality,. and is reckoned among *Anistolochecs,* Emmena-  
gogues, and Antiscorbutics; it, also, exhilarates the Heart,  
and the Brain ; and is effectual in all Disorders proceeding  
from cold. Viscid, and aqueous Humours. A great Author,  
has talked much os its Virtues against Sorceries and Witch-  
craft, induced, I suppose, from its extraordinary Efficacy  
in spasmodic, hysteric, epileptic, and melancholic Cases.  
These Disorders are called *Lunatic,* and ate attended with *sur-  
prising* Symptoms; for which Reason the Antients called  
them *Morbos Sacros,* Diseases of the Gods. But the Antients  
made but littie Distinction between their Gods and Daemons,  
which might lay a Foundation for this Opinion of the before-  
mentioned Author. *Hippocrates* says Very well of these *Morbi  
Sacri,* that there are some Diseases very surprising, and there- .  
fore called *Sacred,* or *Diaine,* not hecause they came from the  
Gods, for then all would be *sacred,* but from their surprising  
Effects; whence this Plant has been esteemed an Antidemoniac,  
though Rue, also, cures the same Diseases. There are Authors  
who advise the Root as an Amulet against a Quotidian Fever,  
and hang it about the Neck for that Purpose. *Fabius Colum-  
na,* a Man of the first Rank, and concerned in public  
Affairs, fell into an epileptic Disorder. Finding no Relief  
from Physicians, and heing fatigued with the long Con-  
tinuance Of the Disease, he betook himself wholly to **the**Reading of the Antients, in order to examine, whether he'  
could find Out by Name a Plant which would cure the Epi-  
lepsy ; and at length he happened upon this Plant, the second,  
by sue Root of winch he was cured. From that time he he-  
came an extraordinary Botanist, and allures us, that he knew  
many epileptic Patients cured by this Plant. He advises to pull  
up the Root before it begins to sprout, and exhibit the same in  
Powder to the Patient, for fix Days together, in the Morning  
fasting, in Water, Wine, or Milk: .This Medicine provokes  
-tSweat, and frequently gives the Patient aS tool or two, winch is  
**a** Very good Sign.. The Roots are very odoriferous, acrimoni-  
ous, and penetrating; and have a balsamic, and somewhat oily  
Taste: Whence the *Faleniana* has the same Virtues which **we**observe in umbelliferous Plants. It is a proper Ingredient in  
pectoral, stomachic, and uterine Diseases, and is Very effectual  
. in a Stoppage of the Menses, an Ounce or two of the bruised  
Root being made into an Infusion aster the manner of Tea,  
and sweetened with Honey. It is an excellent Remedy against  
- Worms, and epileptic Fits, in Infants. *Camerarius* highly  
Commends jit against the Jaundice, and a Violent Asthma, the  
Infusion of the Root in Water, or the Powder thereof with a  
Grain of Laudanum,. heing exhibited. This Plant is effectual,  
also, against all Sorts of Contusions, the Leaves heing" bruised,  
in Wine, and applied Io the Place affected; the same discuss  
scirrhous Tumors without. Suppuration, and speedily cicatrize  
Wounds; for which Reason the Peasants in the Country ap-.  
ply.the Leaves of .this. Plant to all sordid Ulcers. . The Root is  
received into all Antidotes ; bnt the first Species is most cele-  
brated,. and I Can recommend it from an hundred Experiments  
which I have made of its Virtues. The eighth, ninth, tenth,  
and following Species, are cultivated in Gardens, being beauti-  
ful Plants, and continuing a long time in Flower. \_ *Hist. Plant. -  
adscript. Boerhaau.. . ......* . . i . .

VALERIANA is, also, a Name for several Sorts of VALE-  
.-RIANELLA ; .whinh.see. /...

VALERIANA GRAECA. A Name for several Sorts of PO-  
SLEMONIUM; whichsee. ....

- - VAL ERIANAE RU BRAE olMILIS. Λ. Name for- the *Limo.-  
nium .maritimum c radius.-*

**VALERIANA URTIcAE** FoLIo. A Name for *'fr&. Etopde.  
toriurn Unices foliis ; Canadenso ; store albo.*

'. VALERIANELLA.

The Characters are;

The Root is annual and fibrous ; the Leaves are conjugated ;  
the Stalk and Branches are divided in two, and appear at Top  
like an Umbella. The Calyx is monophyllous, small, quinque-  
fid, and closed. The Flower is monopetalous, os Various  
Shapes in different Plants, and furnished with two, three, or  
four Stamina, growing out of the internal Sides of the Flower,  
which grows on the Apex of the Ovary. The Ovary grows  
on the Centre of the Calyx, shoots forth a Tube, and hecomes  
a Fruit of Various Forms, inclining a single Seed.

*Bocrhaave* mentions fix Sorts of *Palcrianella* ; which are,

i. Valerianella; arvensis; praecox 5 humilior; semine de-  
presto. *Raii Synop.* 3. 20I. *Toum. Inst.* I32. *Bocrh. Ind. A.  
J sc. Lactuca agnina.* Ossic. Ger. 242. Emac. 3I0. Park. 8I2.  
*Valeriana campestris inodora major.* C. B. R I65\* Raii Hist. I.  
392. *Locusta Herba prior.* J. B.. 3. 323. *Locusta Henba,  
Pes Locusta.* Chain 437. LAMBS-LETTTCE, or CORN-  
SALLAD. '

**VALERIANELLA** is cooling, and somewhat moistening, br-  
ing in Temperament and Virtues not unlike Lettuce, and supplies  
its Room in Winter, and the Beginning, of Spring, bring  
pleasantly eaten with Vinegar, Salt, and Oil, like other Sa-  
lads, among which it is reckoned one of the best. Lambs are  
mightily delighted and improved, and fattened, by eating thin  
Plant ; whence, they fay, it takes the Name of *Lambs-lettuce.  
Raii Hist. Plant.*

It grows in Gardens, and among Corn, and flowers in **the**Spring. *Dado.*

. 2. Valerianella; arvensis; praecox; humilis; foliis ferratis.  
*T.* I32. *Pseudo-ualeriana, erecta, serotina, semine umbilicato,  
hirsuto, pyramidali.* M. H. 3. I0.4. *Locusta, altera, foliis  
ferratis, f.* B. 324. . .se

3. Valerianella; semine stellato. C. B. P. I65. *Pseudo.,  
ualcriana, annua, femine coronato, mayor, Lusitanica.* M. H.  
3. IO4\* . I.

.. An Valerianella; Cretica; fructu Vesicario. *T. Cor.* 6.

5. Valerianella ; cornucopotdes 5 rubra ; Vel indica. *M. U.*53. *Pfeudo-valeniana, cornucopdides ; annua, purpurea, semi-  
no solido.* M. H. 3. IO.4. *Palen i ana, pcregriiia, purpurea.*C» B. P. 164.

6. Valerianella; Africana; foliis angustis; flore macula  
rubente notato. *Η. A. 2.* 2I7. *Bocrh. Indo dic. Plant.*

The Plant is called *Valerianella,* that is, *fmall Paleriana, scoio.*its. Resemblance to the *Falcriana.* It grows in warm Places. The  
first and second Species are called *Lambs-lettuce,* because, they  
contain a Very mild juice in-all their Parts, with winch Lambs  
.are. highly delighted and improved. The Name *Locusta* is given  
to this Plant from the Resemblance of its Branches Io the Legs  
of a Grasshopper, when going to leap.

i. The first and second Species are very soft, succulent, mild,  
pleasant, and nourishing Herbs ; whence they are good,, mild,  
light, and nutritive Food for weak Stomachs. *Valerianella is*proper .in Cases which require Lenients, Relaxants, or Lubri-  
cants; .whence it IS of Use in the Pleurisy and Nepbritis, and,  
also, to procure Sleep. The crude Juice, or the Leaves, boiled  
In mild Flesh-broth, are Very mild and wholsome Remedies in  
a Phthisis, where the softest and most lenient things are required.  
.This Plant is, moreover, an extraordinary Demulcent; whence  
it is os Service in the Strangury, Pissing, and Spitting of Blood,  
Asperities of the Lungs, Cough, and Pains in theKidneys, and  
Jis a celebrated Remedy for mitigating the Gout. It has the  
feme Effect, whether boiled in Whey, Or the expressed Juice  
.thereof taken in good Quantity. It gives extraordinary Relief  
in hypochondriac Disorders. The Seed is highly aperient, and  
of excellent Use in. the Scurvy, and all Diseases where the  
Root of the *Bulbocastanum* is of Service; it is, also, commend-  
led in a Gonorrhoea and Dysentery.,. *Hist. Plant.. adscript.  
Boerhaav. \_ ... .......*

**. VALERIANELLA ZEYLANIcA. A Name for the Hy-***Arocotyle ; “Leylanica ; Asuri folio. ..... . - .*

VALERIANELLOIDES. ς ..... :

..The Characters are;, sit -.:.. .I- *s. s'so*

.. The Root is fibrous and perennial, and is produced from  
Towing the Seed, which is ash-coloured, oblong,, sharp,-and  
.small , like the Seed of the Lefler Cumin. The Sulk is ramous,  
Cineritious, covered with a flight Down, and frutescent. The  
:Leaves are conjugated,, roundish, scabrous, serrated,„upon a  
-long, sulcated Pedicle. From the Wings Of the Leaves .pro-  
.ceed other conjugated Leaves, similar, and four in Number.  
The Tops of the Stalk and Branches rnninto a Very long and  
flender Spike, to which grow on every.Side, as itwere,.engraVed,  
long, monophyllous Calyces, deeply .quinquefid, flender, tubu-  
Ions, and Very closely adhering to the Sides of the Spike. These  
Calyces contain a monopetalous. Funnel-shaped,.quinquefid.

expanded Flower, of a pale-bluish Colour. From the Inside  
of the Tuhe of thus Flower proceed two Stamina. Tho Ovary  
is in the Centre of the Calyx, and consists of one long, cylin-  
drical Seed, which has a long Time withan hemispherical Apex..  
This Plant grows in *America. Boerh. Ind. alp. Plant.*

VALERIANTHEMUM. A Name for the *Rapunculus* **5***Vdleriandides ; caeruleus ; umbeldaius,*

VALGUS. Bow-leg’d.

**THE METHOD OF REMEDYING BANDY-LECS IN CAIL-  
. DREN.**

Some Children have their Legs bent in an unseemly manners  
either from their Birth, or if they are used by the Nurse tO  
Standing or Walking too early : In some the *Tibia* are crook-  
ed, in others the Knees are distorted, in some the Feet, at the  
Articulation of the *Tibia* with the *Tarsus,* are turned inwards,  
and they are denominated *Fari*; and in some outwards, who  
are named *stalgi.* This Disorder requires .a different Method,  
according to its different Degrees and Situation. 1. The most  
certain and mildest Method of preventing it, is to take care,  
that tender Children, and. those who are otherwise exposed to  
this Disorder, especially by the Rickets; be restrained froth  
Standing and Walking, but be allowed to lie down, sit; or be  
Carried,’either in the Arms, or some Vehicle, till the Bones,  
as they increase in Age, are strengthened and confirmed. But  
if the Disorder increase, or is born with the Child, it will be  
expedient, aster the Application of Emollients, according to  
*Hildanus,* to use certain instruments, or a kind of Boots, such  
*as Pard* has delineated, (see *Tab.* LVII. *Fig.* I4, I5.) made  
Os strong Leather, Wood, .Or thin Plates of Iron, and adapted  
**to** the Size of the Leg. These Boots, heing applied to the  
Crooked Legs, especially .to those of the *Pari* and *Falgi,* dis\*  
pose them as they naturally grow, to receive by Degrees a pro-  
per Shape. The Boots must be worn Day and Night. But  
as several Inconveniencies may proceed from the Use of these  
Boots, especially If. they do not fit exactly. Surgeons have  
thought it expedient to contrive other Instruments for this Pur-  
pose, *lumsca. Tab.* XXXVI. *Fig.* I6. where A A represent the  
two Sides, made of strong Leather, or thick Pasteboard, or os  
thin Plates of Iron or Brass, so joined by the Piece B B, that  
One mayanswer to the interior, and the other to the exterior Side  
of the Legs, as in *Fig.* 17. where they are represented ap-  
plied ; and they may be so sastened by the Cord, or Thong,  
C C, as to be kept on for a considerable time Night and Day,  
and gradually reduce the .crooked Legs to their, natural Figure  
and Position. If the Disorder be not seated in the *Tibiee,* but.  
rather in the Ancles, whether the Feet be turned outwards  
or inwards, these instruments of *Hildanus, Fig.* I6. I7. may  
he advantageoufly used; but if, by reason of the Rigidity  
of the Limb, it cannot easily he turned to its proper Position,,  
let emollient Fomentations, Liniments, and Baths, be. used for.  
some Days before the Application of the Instrument. But, if  
the Disorder be but flight; in my Opinion, the Use of these  
Instruments should be neglected ; which are not. only very  
troublesome, but may, also, be hurtful by binding the Leg too  
hard, and hindering its Growth. And I have Often observed,  
Vwhen the Legs have been moderately bent, and sometimes  
when they have been greatly incurvated, if the Children he  
young, and not suffered rouse their Feet, but to be carried or  
wheeled about, that their Legs have been spontaneously restored  
to their proper Figure. *Hildanus* may be consulted on thin  
Head, who has given the Figures of other Instruments suited  
to different Coses. *Solingen,* and *Le Clcrc,* may,, also, be corf-  
sulted. *Hiister. Chir. ’* . - . . ι.

VALIGA. A Name given by some to an Infiision of Jalap,  
-by some called *Rhabarbarum nigrum,* in Spirit of Wine, or,  
. which is better, in Spirit Of Citron; then carefully strained,  
and some time afterwards coloured with a little. Saffron; so that  
-it seems to beche same with *the Phalaia of Rolflokites. Castes.*

VALLI, *Noel-valli,-.et Pauni~valli.* H. *Ni.. Eiliquofa la.,  
dica Flore papilionaceo. Siliquis plants brevibus duo aut trid  
semina isthmus continentibus.* This is an *Indian* Shrub, winch  
unites itself by Its small Branches with the neighbouring Trees;  
the Leaves;are like those of the Fraxinus, and have somewhat  
Of an acrimonious Taste ; the Flowers are papilionaceous, and  
void of Smell; the Pods are .an Inch ss Length, and aS much  
-in Compass, .Very stabrand Contain two or three Seeds separated  
. by Isthmuses, or narrow intervals. The Beans, , when parched  
. by theSuifsHeat, are os a cineritious.Colour, and an ungratea  
-ful Taste. It flowers, in *August,* and the Fruit is throughly  
*- grpzffi December u-u^fanuary.* Ἀ

.... The Beans, eaten .crude, .provoke toStool with Gripings.  
.The Leaves, made into a Cataplasm, cureinn Erysipelas. The  
- Bark suppliesIhe Place Of Hemp, in making of Ropes. *Raii  
.Hist..Plant....* ς. .. . . .

VALLUM. The Eye-brow, and a Species OL Bandage,  
are. Called by this Names *A - . : : . -»*

' VALRAT. A Leaf. *Rulandus.*

V ALVULA. A Valve. There are many -Sorts of Valves  
in Various Parts of the Body. Thus in the Intestines there are  
the *Pafoulae Connivcntes,* and the Valve of the *Colon,* see ,  
COELIA. In the-Heart are found Valves at its Orifices. See  
COR ; and Anatomists have discovered Valves in the Veins,  
and Lymphatic Vessels.

VANELLUS. The Lapwing. -See FLUVIALIs.  
. V ANILIA, BANILIA. Offic. *Vaynillus, Fayniglia.* Mont.  
Exot. 9. *Viinillias Piperis Arborifamaiceasts innaseens.* Pluk.  
Almag. 3OI. *Folnailis siliquofa Mexicans: foliis Plantaginis.*Raii Hist. 2. I330. *Lathyrus Mexicanus siliquis longissimis,  
moschaiis, nigris.* Ammon. Char. Plant. 436. *Aracus aro-  
maticus, Tlilxochitl, sou Flos niger.* Hern. 38. *Lobus oblongus  
aromaticus.* Cat. Jam. 70. *Lobus aromaticus subfufcus Tere-  
binthi corniculissimilis.* C. B. P. 404. *Lobus oblongus aroma-  
ticus, odore fore Bebzuini.* J. B. i. 428. THE VANEL-  
LOEsq or BANILAS.

These are dark-brown flat Pods, or Sheaths, five or fix  
Inches long, and scarce an Inch broad, wrinkled on the Out-  
fide, full of a vast Number of small black Grains, almost as  
fine as-Sand, Of a pleasant Smell, like Balsam *os Peru.* The  
. Plant which bears these Vanelloes, climbs the Trees like Bind-  
weed-; the Leaves are smooth and broad, in Shape like Plantain-  
leaves, set in an alternate Order; the Flowers are of A dark  
Colour, which are succeeded by the Vanelloes. They grow  
in *New-Spain,* and other Parts of the *West-Indies,* from whence  
they are brought to us.

They are only used with us, as an ingredient in Chocolate, to  
which they give a pleasant Flavour. They are commended by  
*Hernandez,* in his *Descriptio Rerum Medicarum Noves Hispa-  
nia, Lib.* 2. *Cap.* I5. to be grateful to the Stomach and Brain,  
to expel Wind, to provoke Urine, and the Menses, to pro-  
inote the Birth, and bring away the After-birth, to resist Poison,  
V an d'cure the Bites of Venomous Creatures. *MillgulsBot. Off.*

VAPORES. Vapours. SeeHYsTERlCA.

VAPORARIUM. A Vapour Bath. . -

VAPORATIO. A Fomentation by the Vapours or Steam  
**of** warm-LiquorS.

VAPPA is Wine deprived of all its spirituous Parts, and what  
.is usually called *dead.* This corrupt State os Wine is fre-  
‘quentiy, and Very properly, by modern Physicians, compared  
with 4. particular Corruption of the Blood, when it is in a low,  
'spiritless, and, as we say, a *vapid* State, as the Case is in healthy  
Persons, when their Spirits are exhausted by immoderate La-  
bour, or in sick Persons labouring under a Quartan, and in  
.cachectic and scorbutic Indispositions. *Castellus. ’*

VARENI, VARI. Names for a scorbutic Affection, other-  
wise called *Arthritis uaga,* the wandering Gout, consisting in  
.a wandering, or shifting Pain, affecting the nervous Parts about  
the Joints, and proceeding from, an acid and malignant Acri-  
mony of the nervous Fluid, or serous Lymph, together with  
on extraordinary Mobility and Vaporosity.of the fame, on ac-  
Count Of the Thinness of its Contexture.

*Parent,* with some, signifies a quite different Affection from  
*Pari,* being the same with the AMBULO ; which fee.

VARICIFORMES PARASTATAE, in Anatomy, are  
continuous to the *Epididymides,* and are Vessels so called, he-  
'cause they appear. full of Flexures and Contortions, like the  
Varices, for the better Elaboration, as it is supposed. Of the  
-Semen. \*

VARICOSUS, κιρσοεςδἤς, is an Epithet apply’d to several  
Plexuses Of the Veffeis about the Pudenda, panicularly of the  
Male. *Castellus. . ' .*

VARICULA, a Diminutive os *Varix,* is a Name given by  
*M. A. Severinus* to an Intumescence of the Veins in the *Tu-  
nica Adnata* of the Eye, proceeding from a Distention of them  
by black Blood. *Castellus.*

VARIE G ATIO, Variegation, in Botany, is a Diversify-  
ing with several Colours, as is Observed in the Leaves and Flow-  
ers of Plants.

VARIOLA. The Small-pox. . .

Perhaps from the Time of *Hippocrates* to this very Period,  
there never happened any thing so remarkable in Physic, as the  
Appearance Os this new and surprising Distemper , the On-  
ginal of which may he traced up from *she Arabian* Authors much  
farther backward, than is commonly imagined; even up to the  
famous Epoch of *Mahomet* himself, in the Beginning of the  
Seventh Century. The Measles, which no doubt was Of the  
Tame Age, (called not improperly, by *Avicenna, Variola Chole-  
tried}* they look upon As a Disease so near akin to the Small-  
pox, that they generally treat os them both together, as if the  
greater included the less. This was a Distemper, without  
Dispute, unknown to the *Greeks,* whatever some of the Mo-  
derns have said to the contrary; and fust ohsorved and described

*Vsuaphe^pT Capheph, in Arabic,* signifies au Eruption of Pustules.

by the *Mahometans.* And since it is one fo extraordinary in its  
Symptoms, so constant and regular in its Stages, and so univer\*.  
sally incident to all Mankind, it were to be wished, that Mr.  
*Le Clcrc* had thought fit to have given us a short Extract, at  
least, of what these original Writers have said os it; especially,  
when, in its Very Infancy, we may find the Image os this Dif-  
ease very well painted in their Works, and the Practice clearly  
enough delivered. That Tract of *RJsazes* alone, intituled, *A  
Discourse of the Pestilence,* would very fully explain to us the  
Idea they had of thts Distemper, and shew us, that they were  
not. at all acquainted with the Difference of the distinct and the  
confluent Sort. By the earliest Account we have of tho Small-  
pox, we find, that it first appeared in *Egypt,* in the time of  
*Omar,* Successor to *Mahomety* though no doubt, since the  
*Greeks* knew nothing of it, the *Arabians* brought it from their  
own Country, and might derive it originally from some of the  
more distant Regions of the East: For the oldest of their  
Writers do not speak of it aS a Distemper, which had taken its  
Rise very lately. And as this People in less than thirty Years  
did propagate its Religion, and Empire, so did it no less this  
modern Evil, not only through *Egypt,* but *Syria, Palestine,*and *Persia,* and a little while after, along the *Asiatic* Coast,  
through *Lycia* and *Cilicia :* And, in the very Beginning of the  
next Century, farther into the maritime Parts of *Africa,* and  
cross the *Mediccrranean,* even into *Spain* itself.

Here, indeed, is a new Field in Physic. I will only give  
you a short Flan of this Disease, aS it lies in their own Authors,  
and especially in one os the oldest and best of them, *Rhazes ;*the first, indeed, as he says himself, who wrote any distinct or  
exact Treatise upon this Subject. To begin then in his Me-  
thod ; as the Evil was unheard of before, so he assigned a Cause  
as entirely new in Physic, a sort of an innate Contagion. This  
is a Ferment in the Blood, like that in Must, which purifies  
itself sooner or later, by throwing off the peccant Matter at  
the Glands of the Skin; an Hypothesis since applied, though  
upon Very flight Grounds, to Fevers in general, by many Mo-  
derns. This Ferment he supposes to be derived from the Mo-  
ther in the Womb, which is the Reason why the Disease is To  
universal, and so equally incident to all. It is most epidirnical  
in Spring, and Autumn, especially aster a wet Summer, or a  
warm Winter: Children, and Adults, are most subject to it;  
old Age but seldom, unless in a very pestilential Season. Cor-  
pulent flabby Bodies which abound in Humours, and which **have**been used to much Wine or Milk, receive the Infection soonest;  
they who are of this dry Habit of Body, and of a bilious Con-  
stitution, are more subject to have a inore Violent Sort. The  
*Greek* Tranflator, who made his Version from the *Syriac,* **(the**original Language probably inx which *Rhazes* wrote) calls this .  
Sort by a Term never heard of, Εὑλογία, which, he tells us,  
answers to the *Syriac, Chas.pe \*.* This Word, indeed, in that  
Tongue, as well as in the *Hebrew,* and *Arabic,* signifies Έξάν-  
θημα, an inflammatory Pustule ; and, therefore, *N. Machelli,*who has given us a Very elegant Tranflation of the *Greek,* ex-  
presses it properly enough by *Incendium*; but the *Greek,* he  
fays, calls it Εήφλογία. If we go’a little farther, and suppose  
it should be read Έκφλογία, the Sense of the Author would **be**entirely preserved, and Very little Variation made in the Read-  
ing-

The forerunning Symptoms of this Distemper are, an acute  
Fever, Violent Pain in the Head and Back, (the last particularly  
a sure Sign) Dryness of the Skin, Heaviness, Difficulty of  
Breathing, frightful Sleeps, Redness of the Eyes, Pricking all  
over the Body, Yawning, Stretching, Pulsation, and Weight  
in the Head, .Sickness, and inclination to Vomit ; Great Pain  
in the Back, Violent Sickness, Restlessness, and Burning all  
over the Body, and an high flaming Colour, especially about  
the Throat, Signs of an ill Sort. He calis the Pustules, either  
*Sublimia,* which must be distinct, pointed, or rising high; or  
*Lata,* flat and broad, as in the confluent Kind. Many of  
these Symptoms are common to the Meafles ; and, if the Heat  
is more intense, and the Straitness and Oppression extremely  
- great, especially if there be a Cough, and Itching of the Ears  
and Nose, 'tis rather a Sign of this last Distemper, which is  
sometimes more dangerous than the Small-pox.

He is Very particular in relating the Differences and Pro-  
gnostics of the Small-pox. If the Eruption is easy, and the  
Maturation comes on well, and the Fever Vanishes, no Dan-  
ger; otherwise, if the Fever continues after the Eruption. It  
is a kindly Sort, when the Breathing is good, the Pulse regular,  
the Sense perfect, and the Person can take Nourishment, and  
Sleep. When the Pustules, containing a white Matter, are  
. large, distinct, and few, and ripen without any great Fever ;  
and even though there he many, and in some Places confluent,  
yet, if they are for the most part large, and advance kindly,  
and if, with this, the Strength keeps up, and there he rut

*Castelli Lexicon, side Face* rlSH.

Oppression or Burning, this is to be reckoned one of the worst  
Sort. But when they are thick and coherent, so that a great  
many of them make one by running together, when the Circle  
os these Clusters is Very large, and the Appearance of them  
like Fat or Suet, when they run like an Herpes, or like what  
they call a *Formica,* corroding, ulcerating, and contracting'  
the Skin ; when they rise like Warts, and have no Matter in  
them, it is a Very malignant Sort; especially, if after the  
Eruption, they don’t come on well, and the Patient be not .  
relieved. If the Fever increases aster the Eruption, an ill Sign:  
So a new Crop of Pustules, as it sometimes happens, shews a  
great Plenitude of Humours. The Sort is more kindly, when  
it is not attended with Violent Redness ; but if with great Pale-  
ness, dangerous. If the Eruption is made on the first Day of  
the Distemper, it shews the Humours to be too brisk and im-  
petuous , if upon the third Day, it denotes they are more  
tempered and languid; if in the critical Days, by which I  
suppose he means the fourth and seventh, the Distemper is still .  
milder ; is there be great Pain in any Part, and that Parr grows  
greenish or black, and the Strength fails, it is fatal; if the  
Pustules are extremely little, hard, of a violet, green, high-  
red, or a black Colour, and don't come to Maturation, it por- '  
tends III: If they continue so .throughout the whole Course  
of the Disease ; if the Fever be not removed, and is attended  
with a Syncope, Sickness, or Trembling of the Heart, nothing  
to be expected but present Death. Thus far of the Symptoms,  
and the Judgment to be formed of the Event.

The Cure follows : And the better .to judge of this, we must  
. always carry it in our Memory, that *Rhazes* lived and wrote  
in the warm Climate os *Persia.* He bleeds, or cups immedi-  
ately, eVen in Children; and, if the Symptoms be Violent,  
even to Faintness ; otherwise, a less Quantity is sufficient. If  
a Vein in the Arm be not easily found, the *Poplitcea* may be  
open'd : The Room to be kept cool; all the Regimen to be,  
also, cool; Ptisan the Nourishment, and the Medicines prin- 1  
cipally Troches of Spodium, (a good Absorbent) and the Juice 1  
of Pomegranate, and all other acid and astringent Plants. And (the Rule, in using this refrigerating Method, must be with re-  
gard to the intense Burning of the Disease, and managed with  
that Moderation, as not to extinguish the natural Heat. At  
first he gives Ice-water, till the Patient Vomits and sweats ;  
then VaporateS with warm Water; and this he reckons the  
most effectual way to drive out the Pustules : So for Prevention  
and Preparation, he advises Bleeding, Swimming, using Ice-  
water, and all the coldest acid Diet, as the Juice of unripe  
Grapes, Salad ing, *etc.* He gives a Receipt made of Acids and  
Spodium, much in Vogue among the *Indians,* who, it seems,  
affirmed, that whoever used it would not have ten Pustules in  
the Whole. The Body, if bound, to be kept open, by some  
Infusions taken twice a Day ; this will make the Pustules  
fewer; and to be done, if the Distemper be Violent. After  
the Eruption, strong Purging to be avoided, especially towards  
the Crisis, for fear os a Dysentery ; and too great a Flux is to  
he restrained. If Bleeding has been omitted in the Beginning,  
then gentie Sweating, and promoting the Eruption. If the  
Patient be hot, hnd the Pustules do not advance, the Decoc-  
tion with Figs, Raisins, Lentiis, *etc.* to be constantly used.  
If the Disease be flight, and the Oppression littie, and the r  
Small-pox be out. Coolers not to be given to any great Degree,  
for fear of retarding the Eruption ; but the Decoction to the  
continued, with some Saffron, *etc.* When they are all come  
Out, Vaporations with Water. For Dilution,. Water ofBar-  
ley, Pomegranates, Melons, *etc.* and other temperate Liquors;  
and any thing, winch more resolves the Humours, is less neces-  
sary, especially in the Meafles. If the Oppression be Very great,  
and near to a Syncope, dipping in cold Water, and Friction,  
to drive Out the Meafles; and to take care there be not too  
great a Solution os the Fluids, or too profuse a Sweat. After  
\_the fifth Day, (reckoning from the first Seizure) if the Pustules  
don't advance, use those Medicines which promote the Erup-  
tion. But this is to be done with Circumspection, and with  
regard to the Symptoms; especially the Fever, which will be  
best judged os by the Breathing, and the Pulse. But, is the  
Pustules are hard and rough, like the Warts, and the Patient  
languid, it Is to no Purpose to attempt any Maturation; for  
that cannot be done; such a State of the Disease being plainly  
pernicious. Opiates, above all things, are proper in Want os  
Sleep, or in case of a Looseness. The Body is open generally  
towards the end of this Disease, especially in the worst Kind.

No Purging hesore the Crisis ; but, if need be, and the Body  
he dry, purge at the Beginning, and before the Declension;  
the first to abate the Heat and Beating of the Head ; the lat-  
ter to ease Nature of her Burden, and to carry off the morbi-  
fic Matter. This to be judged of either besore-or aster Bleed-  
ing, by the Body's being weakly, yet bloated, and full of Hu-  
mours ; a lurking Feverishness, and undulating Pulse. In this  
Case, Purging answers best ; but if the Mouth he bitter, if

Vomiting, and great Inflammation, if the Throat is so staffed,  
as to endanger Strangling, it is proper to bleed. The Directions  
are Very full, which relate to Gargles, Collyriums, *etc.* and  
the preventing any Ulcers, or Pitting, from the Small-pox.

This is the Description *EJsar.es* gives of the Small-pox; a  
very true one, though it does not minutely descend into Parti-  
culars ; and, for above 50O Years, it was thought so complete,  
that succeeding Writers scarce added any thing to it: Till at  
last, indeed, they came to distinguish the several Stages os this  
Distemper, and observe the Very Days in each of them with  
great Exactness. However, even since thatTimeto our own,  
though the modern Authors have enter’d into a more precise  
Detail of the Appearances, and the Symptoms, which attend  
the Disease; yet, as far as regards the practical Part, we see  
here the Foundation of every thing they have advanced. To  
instance in a few Particulars:

The *Arabians* have rightly distinguished between the two  
Sorts of Small-pox, and between each of them, and the Meafles j  
and have described not only the regular Sorts, but have taken  
Notice os the anomalous too. They have, also, observed, where  
one Crop has succeeded another.

At the Beginning, and sometimes even aster the Eruption,  
they prescribe Evacuations, both by Bleeding and Purging.  
And, indeed, they thought, that the good or ill Event of the.  
Distemper, depended so much upon the Treatment they used  
at the first Seizure, or in the first Days of it at least, that  
they are extraordinarily careful and exact in the Regimen, which  
they order to be extremely cool, as was most proper and suit-  
able in so sultry a Climate as theirs was. Their Practice surely  
was sounded upon good Grounds ; though others have followed  
it in an. extravagant manner, and eVen exceeded what they did  
in Nations, where neither the Nature of the Disease, nor the  
Constitution os the Air, required it. Even our Countryman  
*Sydenham* carried this Notion to an Extremity in the first Edi-  
tion os his Works; though afterwards he was so wise aS to re-  
tract a great deal of what he had said ; and came into the mo-  
derate Method, aS, without Dispute, more agreeable to Reason,  
and to the Temper of our own Ifland.

We may observe, that their whole Management, both aS to  
Diet and Medicine, in this Stage, ran upon Dilution; which  
they thought the most effectual Means to produce a kindly  
Eruption, and to keep the Pustules out. And as to this last  
Point, however cooling their Regimen in general was, they  
made no Scruple to use warm and generous Cordials, when  
Nature seemed to want Assistance, or when they apprehended  
any Danger of their striking in. To the same End, when there  
was any great Disorder and Ferment in the Humours, which  
Ought to be allay'd, or any terrible Symptom, which hindered  
the Maturation of the Pock, they had recourse to that sove-  
reign and divine Remedy, Opium; a Remedy often used by  
them in this Case ; though *Sydenham* seems to have been the  
first, who ever gave the least Hint of such a Practice among -  
ourselves.

. Here, too, you will find, that in the Declension of the Dis- .  
ease, when Nature has discharged all she can, and is ready to  
fink under the Load of the morbific Matter, they took the  
proper ways to relieve her by Art; and for that Purpose direct

*i* us, how to apply both Bleeding and Purging, in such a Case of  
Extremity. *Freindic Hist, of Physic.*

**HISTORY OF THE DISEASE.**

When the Small-pox proves epidemic, and is mild and regn-  
lar, it usually begins about the vernal Equinox; but, when it is  
not only epidemic, but irregular and dangerous, it appears about  
*fanuary.* The SmallTpox is of two Kinds, the *distinct,* and  
. the *confluent* ; which though they differ not essentially, are easi-

ly distinguished by some considerable Symptoms peculiar to each ‘  
Kind.

The distinct Kind begins, (I.) with a Chilness and Shiver-  
ing, immediately followed by (2.) extreme Heat, (3.J Vio-  
lent Pain in the Head and Back, (4.) Vomiting, (5.) and in  
Adults, a great Tendency to Sweat ; (6.) Pain in the Parts  
immediately below the *Scrobiculum Cordic,* if they be pressed  
with the Hand; (7.) Sleepiness and Stupor, especially in Chil-  
dren, and sometimes Convulsions, which happening aster Den-  
tion, I always suspect the Small-pox to be approaching; and the  
Eruptions, appearing in a few Hours after, generally confirm  
the Prognostic; and I have frequently observed, that the Small-  
pox immediately succeeding such Fits throws out largo Erup-  
tions, is of a mild and favourable Kind, and seldom proves con-,  
fluent. It may he proper to observe here, that in fuch whose  
Blood is of a looser Texture, and easily admits of a Change, it  
sometimes happens, that the Course of Separation iS performed  
by degrees, without any considerable Sickness previous to the  
Expuhion of the Matter, and Eruption of the Pustules.

The *distinct* Small-pox come out mostly on the fourth Day  
inclusive, from the Beginning of tho Illness. and sometimes a

little -ater, but Very rarely sooner; at which time ths Sym-  
ptoms 2re usually much abated, or even entirely vanish, so that  
the Patient seems tolerably wen ; only Adults can scarcely be  
prevented from sweatinn. however thinly they are covered ; and  
this Disposition continues till the Eruptions begin to ripen, and  
then disappear spontaneoufly. The eruption proceeds nearly  
in the sallowing manner.. First, a kind os pale-red Pustules, as  
large as the Head ns a small pin, appear dispersed, first on the  
Head, Neck, and Breasts, and afterwards on the whole Body.  
During this Stage of the Disease, the Throat is affected with  
a Soreness, that increases proportionably as the Pustules rise,  
which, growing every Day larger, and sharper at the Top, dif-  
fuse a Redness and inflammation over the Skin and Flesh of the  
Parts adjacent.

This happens about the eighth Day from the Beginning of  
the Disease, which time I always particularly observe; for then  
the Spaces between the-Pustules, that appeared before os a pale  
White, begin to grow red, and swell in proportion to the .’  
Number os Pustules ; and are affected with a Pain, and, as it  
were, a Laceration os the Parts, which continually increafing,  
promotes the Inflammation and Swelling; so that, in the Pro-  
gress of the Disease, the Eye-lids are so distended, aS some-  
times to render the Patient blind ; 'and they shine, and nearly'  
resemble an inflated Bladder.. Sometimes the Blindness is in-  
duced sooner, a great Number os Pustules fixing on the Eyes  
from the Beginning os the Eruption; next, theFace, the Hands,  
and Fingers swell in proportion to the Quantity os the Pustules.  
The Pustules on the Face, that tifl this Day were smooth and  
red, now grow rough and whitish, which is the first Sign of  
a beginning Suppuration; and they, also, gradually discharge  
a yellow Matter, in Colour resembling an Honey-comb. The  
Inflammation os the Hands and Face, being'arrived at its  
Height, produces in the Spaces between the Eruptions, a florid  
Colour, like that of Damaik-roses; and the more mild and  
genuine the Disorder is, the more the Eruptions, and their in-  
termediate Spaces approach this Colour. As the Pustules in  
the Face appear rougher and yellower every Day aS they ripen,  
those *of the* Hands, and other Parts, appear smoother and  
whiter.

On the eleventh Day, the Swelling and Inflammation main-  
festly abate, and the Eruptions both of the Face, and the rest  
of the Body, being come to their Maturity, and just Bigness,  
equal to that of a large Pea, dry and scale off; and, in this  
kind of Small-pox, they commonly disappear on the fourteenth  
and fifteenth Day. But the Eruptions os the Hands generally  
prove more obstinate than those of the other Parts; and, being ‘  
yet fresh and white, remain a Day or two aster the rest. Thofe  
Of the Face and Body scale off, but these os the Hands burst,  
. and so vanish. The Pustules of the Skin are succeeded by a  
Scurf, or branny Scales, and these sometimes by Pits, or Pock-  
marks ; for when the Pustules first fall off, no Unevenness is  
perceived in the Skin ; but these Scales often coming on, and  
falling off alternately, at length those Pits are produced, which  
frequently appear long aster the Recovery of the Patient ; tho'  
the distinct Small-pox Very rarely leaves any Marks behind it.  
The Patient is either quite costive, or has few Stools, during  
the whole Course *of* the Distemper.

That Species of the Small-pox, which we call the *confluent,*is attended with the same Symptoms in common as the *distinct,*only they prove more violent; and by that. Sign the *confluent*Kind may be distinguished from the *distinct,* eVen before the  
Eruption.. Nevertheless, the Patient is not so ready to ssveat  
in the confluent Kind as in the other ; and a Looseness some-  
times precedes, and continues a Day or two after the Erup-  
. tion ; a Symptom which I have not hitherto met with in the  
distinct Small-pox. - .

The confluent Small-pox generally comes out on the third  
Day, sometimes earlier, but scarcely ever later; whereas the  
distinct appears on the fourth Day, or later; but Very rarely  
before; and the sooner the Pustules come out before the fourth  
Day, the more they run together. However, though this be  
true in general, and the confluent Kind scarcely ever appears'  
fo late as- the fourth Day, yet, sometimes, the Eruption is de-  
sert'd, by some violent Symptom, to the fourth or fifth Day.  
Thus, I. Sometimes, by a sharp Pain in the Loins, resembling  
a Fit of the Stone. 2. Sometimes in the Side, like a Pleurisy.  
3. Sometimes in the Limbs, as in a Rheumatism. Or, lastly,  
4. In the Stomach, attended with great Sickness and Vomiting.  
In these Cases, which, however, are not common, I have oh-  
served the Small Pox to come out later than ordinary, as being  
retarded by the considerable Violence of the Symptoms, which,  
being more severe than usual, when .they arise in the Very Be-  
ginning, manifestly indicate the subsequent Small Pox to be of  
the *confluent* Kind, and not void of Danger. . .

Though the first Symptoms os the *distinct* Kind Vanish  
immediately aster the Eruption, yes, in. the *confluent.* Kind,  
they afflict the Patient several Days after the Pustules appear.

- Sometimes this sort comes out like an *Erysipelas,* and some-  
times like, the Meafles, from which they are difficult to . he di-  
stinguished, without carefully attending to the different Times  
of ths Eruption in these Diseases, and other Circumstances, in  
which they differ extremely. As the .Distemper increases, the  
Pustules, especially os the Face, do not rise plump, as in the  
*distinct* Kind,- but run together; and appear, at first, like a red  
Bladder, covering the whole Face, and making it swell sooner  
then in the *distinct* sort, till, at last, they appear like a thin  
white Pellicle, closely adhering to the Face, and rising littie  
higher than the Surface of the Skin.

Aster the eighth Day, this Pellicle grows every Day gradually  
rougher, aS appears by the Touch, and inclines to a brown, and  
not to a yellow Colour, aS in the *distinct* Kind: The Rough-  
ness and Colour of the Skin daily increase, till,- at length, the  
Pellicle falls off in large Scales; but, when the Disease has  
been Very severe, it usually sticks to some Part of the Face,  
till after the twentieth Day. The more violent the Distemper  
proves, the nearer the Eruptions, as they ripen, incline to a.  
dark-brown Colour;, and the longer they are in sailing off, if  
left to themselves; but the less they run together, the yellower  
they are, and the sooner they scale off. When this Pellicle, or  
Scab, which covers the Face, first falls off, it leaves no Rough-  
ness behind; but it is immediately succeeded with branny  
Scales, of a very corrosive Nature, which not only make larger  
Pits than the *distinct* Kind generally do, but, also, much dis-  
figure the Face with unseemly Scars : And, in the *confluent*Kind, if the Disease has been very Violent, the Skin os the  
Shoulders and Back sometimes scales off, leaving these Parts  
bare.

It must be observ’d, that this Disease is not to be esteem'd  
dangerous from the Number os Eruptions scatter'd over the  
Body, but only from that in theFace; for if they.be Very  
thick in the Face, though there are but sew, and those of the  
*distinct* Kind, every-where else, the Patient is equally endan-  
gered, as if all the Limbs were extremely full. But, on the  
contrary, though every Part besides be full, *if* there be but few  
in the Face, the Danger is less: in this manner, therefore,  
must we judge os the Kind. - ’ . .

In the *confluent* Small Pox I have always observ’d, the Entp- "  
tions in the Hands and Feet were larger than those of the other  
Parts, and were gradually less and less, the nearer they ap-  
proached the Body. - .

The *confluent* Small Pox is attended with two other consi-  
derable Symptoms: I. A Salivation, or Spitting, in Adults.  
And, 2. A Looseness, in Children. The former is *so* constant  
an Attendant on this Disease, in Adults, that I never met with  
but one Patient who was free from it ; but the Looseness does  
not so certainly affect Children. The Evacuation made by  
these Symptoms is as necessary as either the Eruptions, or the  
Swelling of the Face and Hands.

The Salivation sometimes begins as soon as the eruptions ap-  
pear, and sometimes not till a Day or two after: The Matter  
is for some time thin, easily and plentifully expectorated ; and  
this Salivation resembles that raised by Mercury, only the *Saliva*is not so fetid : But, towards the eleventh Day, the *Slaliva* now  
becomes more Viscous, is raised with great Difficulty; the Pa- .  
tient is thirsty, coughs often whilst he drinks; and the Liquor  
flies out at the Nostrils; from this Day the Salivation generally  
stops, though sometimes but rarely, aster it has ceased for a  
Day or two, it returns: At the fame time, the Swelling of the  
Face begins to abate, but then the Hands commonly swell, or,  
at least, ought to do so.

The Looseness, in Children, appears not so soon aS the Sail-  
vation in Adults; but, whenever it begins, unless it be stopt by  
Art, it attends the'Distemper throughout.

In both Kinds of the Small Pox the Fever rages most srofn the  
Beginning, to the time os the Eruption, after which, it abates,  
and continues much more .moderate’, till the Suppuration begins,  
which being finished, it ceases entirely.

I have always observed, when the Disease proved very vio-  
lent, that the Patient had a Kind of Paroxysm towards Evening,  
at which time the more dangerous Symptoms arose, and raged  
most severely.

**IRREGULAR SYMPTOMS, ARISING FROM UNSKILFUL**ι z **TREATMENT.**

The irregular Symptoms which happen on the eighth Day, in  
the *distinct* Kind, and on the eleventh, in the *confluent,* always  
calculating from the first Beginning of the Distemper, most  
eminently concern the Lise or Death os the Patient, it being  
apparent, that most os those who perish by either Species, die  
on one of the above-mentioned Days.

In the *distinct* Kind, as the Patient, if an Adult/usually  
sweats freely, he conceives Hope of Recovery, thinking the  
Malignity os the Disease will thus he expelled through the Pores  
of the Skin; and therefore diligently promotes the Sweat, by a  
hot

hot Regimen. . But those Particles heing, at length, expelled hy  
Sweat, which should have served to raise the Pustules, and swell  
the Face, on the eighth Day; the Face, instead os being  
swelled, appears flaccid ; and the intermediate Spaces, instead  
of being inflamed, appear white, or pale, whilst ths Pustules'  
look red, and continue elevated,- even after the Death of the  
Patient. The Sweat, which had stowed freely to this Day, now  
ceases suddenly and spontaneously, and can’t be raised again by  
the warmest Cordials. In the mean time, the Patient is seized  
with a Delirium, great Restlessness and Sickness, a Frequency  
os making Urine in small Quantities, and expires in a few  
Hours. But it must here be observed, that, is the Eruptions  
be sew, the Disease happens in the Winter, and in a Person in  
Years, or is Bleeding has been previoufly used, this hot Re-  
gimen does not then so certainly hinder the Swelling os the  
Face, .and, consequently, .hasten Death, as where the Erup-

\* tionS are many, the Patients in the Prime of Lise, and no Blood  
has been taken away. '

Bus, in the *confluent* Kind, the Danger is greatest, and the  
greatest Number die on the eleventh Day: For aS the Salivation,  
which had hitherto preserved the Patient, commonly ceases  
spontaneoufly about this time, unless the Swelling of the Face  
continues longer, and that of the Hands, now manifestly begin-  
ning, supplies its Place,Death must certainly ensue. For it must .  
be considered, that, in this Kind os Small Pox, where rhe  
Eruptions are so small, not only the Salivation, but, also, the  
Swelling os the Face and Hands, is absolutely required, in  
' order to a proper Discharge of the morbific Matter; and if  
. either he wanting, or disappear too soon, the Patient must pe-  
rish immediately. But it happens too frequently, in this hot  
Distemper, that the Texture of the Blood is so much.weakeffd,  
and broke, and so highly inflamed, by an over-hot Regimen,, as  
to be no longer able to perform the Expulsion of the inflam-  
matory Particles in a flow and gradual manner (not to mention  
now the Mischiefs proceeding from forcing Sweat improperly) ;.  
whence either the Face and Hands do not swell at all, or-the  
Swelling vanishes with ths Salivation. For though the Swelling  
of the Face ought to abate a little on this Day, yet it should  
not go olf entirely, till a Day or two aster; the Swelling os.the  
Hands, in the mean while, continuing, and increasing, which is  
one of the most certain Signs of Recovery, as the contrary is of  
imminent Danger.

The *Saliva,* on this Day, becomes so viscid, and tough, as to  
endanger Suffocation; and, when the Patient drinks, the Liquor  
falis down the Windpipe; whence it is thrown up through the  
Nostrils with a violent Cough; He is seized with a Hoarseness,  
a great Stupor, and Drowfiness; and, being wholly oppressed  
by the Violence of the Disease, generally finks under the Diffi-  
culties on this Day. - '

«There are, also, other Symptoms, which happen in any  
Stage of the Distemper, and which are equally common in the  
*distinct* and *confluent* Kinds of the Small Pox. Thus a *Deli-  
rium* sometimes seizes the Patient, occasioned by the excessive  
Ebullition of the Blood; and the Heat is so intolerable, that he  
endeavours furiousty to get loose from those who confine him in  
Bed. Sometimes the same Cause produces a Kind of *Coma, secs*that the Patient almost continually dozes, unless he be constantiy  
roused.

Sometimes, also, in this Disease, as in the Plague, the Tex-  
ture of the Blood, being dissolv'd by the Violence of the In-  
flammation, purple Spots appear in the Spaces between the  
Eruptions, which are generally Forerunners of Death: This  
Circumstance happens Oftener,when the Constitution of the Ain  
chiefly favours this epidemic Disease. Sometimes black Spots,  
scarce so large as small Pins Heads, and depressed in the Middle,  
appear on theTops of the Eruptions, in different Places, which,  
as they proceed from too much Heat, at length, by the Use of  
a cooler Regimen, acquire a brown, and afterwards a yellow  
Colour, which naturally belongs to the genuine and regular  
Small Pox; and the nearer the Eruptions, when come to Sup-  
puration, resemble this Colour, all the Symptoms become pro-  
- portionahly milder, and *vice versa.*

The Blood os young, and of vigorous Persons, is sometimes  
so much inflamed, in this Disease, especially if too liberal an  
Use of Wine, or any spirituous Liquor, has preceded, aS to  
break through the Arteries into the Bladder, and so occasion  
bloody Urine; which is one os the most dangerous Symptoms  
of this Distemper.

Sometimes, but not so frequently, a Flux of Blood from the  
Lungs.proceeds from the same Cause: But either of these Hae-  
morrhages usually happen in the Beginning, before the Eruptions  
appear, which would prove particularly *confluent. .*

Sometimes, also, especially in young Persons, there happens  
a total Suppression of Urine, either at the Height or Declension  
Of the *distinct Katid.*

Other Symptoms arise, when the Patient has been injured,  
I. By too intense Cold. 2. Improper Bleeding in a very large

Quantity. Or, 3. Over-purging. Whence the Eruptions  
sometimes suddenly fink, and a Looseness comes on, which, in  
Adults, proves highly dangerous, the Variolous Matter being  
thereby struck in, so that Nature is utterly unable to expel it :  
By these means, also, the Swelling of the Face and Hands is  
check'd.

But the Symptoms, which proceed from taking Cold, seldom  
appear, is compared with those that arise from the hotRegimen:.  
For aS this Disease may deservedly be reckon'd among those of  
the most inflammatory Kind, a Mistake, On this hand, happens  
much more frequently than on the other. ' -

The Essence ps this Disease seems to be an Inflammation of  
.the Blood and Juices, (yet of a different Kind from other In-  
flammations) in removing which. Nature, during the first two or  
three Days, endeavours to correct and digest the inflamed Par-  
tides, which, being afterwards thrown out on the Surface of  
the Body, she further ripens, and, at length,totally expels them,  
in the Form of small Abscesses. Hence, in order to lay a Foun-  
dation for the Method of Cure, it must be remarked, that this  
Disease has two Stages; the first is that of the Separation, the  
second that of the Expulsion.

I. The Separation is mostly accompanied with a febrile Ebul- \_.  
lition,.and is ordinarily finished in three or four Days, during  
which time, Nature is employed in collecting the inflamed Par-  
tides that disturb the Blood, and, expelling them to the fleshy XParts ; which being over, the former Calm returns. 2. The .  
Expulsion next succeeds, which is performed during the Re-  
mainder os the Disease, by means of those small Abscesses in  
the Flesh, which, like other Abscesses, undergo the States of  
Crudity, Suppuration, and exsiccation ; and is these States are  
finished in a suitable manner, the Danger is past ; but, if other-\*  
wife, all is disordered. The Expulsion requires a much longer  
' time than the Separation, this being performed in a thin fluid  
Body, but that in a dense Substance, at a greater Distance from  
the Fountain of Lise. . \*

Hence the Indications are, I. That such an equable Ebul-  
lition os the Blood be maintain'd, that it may neither finish the  
Separation too hastily, by fifing too high; nor retard, or render  
it incomplete, by finking too low. 2. That the Abscesses or  
Eruptions be carefully kept up, so that, running through their  
proper States, they may, at length, entirely discharge the Mat-’  
ter they contain, and vanish.

With regard to the first Indication, great Caution is requir'd,  
especially during the Separation, that the ebullition may not  
rise too high, either from heaping too many Oloaths on the Pa-  
tient, over-heating the Air, by keeping too large a Fire in the  
Room, or using heating Medicines and Cardiacs, especially if  
the Patient be in the Prime os Life, or is his Blood be too much  
enriched by spirituous Liquors, or is it be the Spring Season, or,  
at least, only the Beginning os Summer ; otherwise, the Sepa-  
ration, which should be carried on siowly, and gradually, for  
the better promoting an universal Despumation, will hence be  
hurried on too sash and thus either there will not be a sufficient-  
Number ot Particles collected, or, perhaps, some Particles may  
be brought to Secretion, winch Nature would not, otherwise,  
have secreted, were she not forced beyond her just Limits, and  
madeto injure herself: For when such Particles are separated, as"  
are unfit for Separation, the Motion of others, that have a Ten-  
dency to it, is hindered, by their mixing with these; and ‘th us  
they are rendered less fit for expulsion. -

It seems agreeable to Reason, that tbe more time Nature em-\_  
ploys in perfecting the Separation, provided the Ebullition does  
not entirely subside, so much the more certainly and.universally  
it is completed; upon which the Success of the subsequent ..  
Cure must needs principally depend, as a different Event must  
manifestly ensue from the contrary Method. For as over-early  
Fruit does not come to Perfection, so no Good arises from the  
hot Regimen, but it frequently produces an immediate Deli-  
rium, or profuse Sweats arise, whereby such Particles are sepa-  
rated as are unfit for Secretion, and not agreeable to the Na-  
ture of *Pus*; or else the Eruptions, being driven out too much  
by Cardiacs, and a hot Regimen, become of a terrible and fatal  
*confluent* Kind.

From the other Method I have never observed any Mischief;  
-for Nature, lest to herself, finishes her Work in a proper time  
and manner, so as to need no Assistance, at least in the Young  
and Robust.

But the Danger of raising the Ebullition, by a hot Regimen,  
is not greater than the Danger of depressing it bv Bleeding,  
Emetics, Cathartics, Clysters, and the like Evacuations : For,  
by them, not only the Ebullition is too much diminished, by  
means of which the Parts, intended for Despumation, should  
have been carefully separated ; but the Matter, also, is wasted,  
which should continually serve as Fuel to the Secretion once  
begun: Whence it frequently happens, that the Eruptions,  
which came out kindly in the Beginning, and, perhaps, so much  
thethetter from the previous Use os the above-mentioned Eva-

cu at io ns, sink soon aster, as if they were suddenly struck in,  
Occasioned, principally, by a want of a fresh Supply of Matter  
to succeed the formes, and. sinilh rhe Separation. We shall,  
afterwards, shew, that Bleeding and Vomiting are necessary, in  
the *confluent* Kind.

To proceed to the second Indication : AS it has been shewn,  
that it is highly dangerous to keep the Patient over-warm, du-  
ring the time of Separation, whilst the Fever is present, and  
the Eruptions scarcely appear; so an Error of this Kind is  
equally dangerous, at any time of the Disease, and especially  
towards the Beginning of the Expulsion, whilst the Eruptions  
are yet in a State os Crudity. For though the tumultuary  
Motion of the Blood be considerably abated, upon the Sepa-  
ration and Translation of the Matter to the fleshy Parts; yet,  
heing still weak, and having scarcely acquired a new State and  
Texture, it is easily affected by the immoderate Heat arifing  
from all Parts ; and, upon the least Occasion given, becomes in-  
flamed with a Tendency to a new Ebullition, which does not  
.promote Separation, that Bufiness being already finished, but  
produces dangerous Symptoms, disturbs the Eruption begun,  
and proves detrimental, by putting the Contents of the Pustules  
into violent Motion. By these means, either the Particles, al-  
ready secreted, and deposited in the Habit, being hurried away  
by the Violent and rapid Motion os the Blood, are absorbed by  
it ; or the fleshy Parts, being heated beyond the Degree requisite  
for Suppuration, do not finish it s0 completely: Or, lastly,  
perhaps, upon the coming of this new Disorder, the Texture  
of the Blood, and the Tone of the fleshy Parts, suffer so great'  
an Alteration, that they cannot overcome the Matter expelled,  
and digest it in the nsiial Way of Abscesses.

.. But we must not be To intent upon preventing an immo-  
derate Ebullition of the Blood, as to check the Eruption of the  
Pustules, by exposing the Patient to the Injuries os the Cold r  
The fittest Degree of Heat, to promote their Expulsion, is the  
natural one, as this is suitable to the Temper of the fleshy  
Parts; and to exceed, or fall short of it, is dangerous, on either  
hand. . .

. From what has been deliver'd. It seems manifest, that this  
Disease is a very dangerous one, and the Method *os* Cure diffi-  
cult to be ascertained. .

Is the Eruptions recede, or the Swelling of the Face and  
Hands fall, either from unseasonable Bleeding, or taking Cold,  
recourse must be had to Cardiacs; but we must be careful of  
giving them too freely, lest a new Ebullition should be suddenly  
raised ; the Blood being, yet, weak, and easily affected by a hot  
Stimulus.

As soon aS the Signs of the. Disease appear, I confine the  
Patient within Doors, forbid the Use os Wine and Flesh-  
meats, and allow Small Beer, moderate!)’ warm, with a Toast,  
for common Drink; and sometimes suffer it to be drank at  
Pleasure: I, also, direct Water-gruel, Barley-broth, roasted  
Apples, and other Kinds of Aliment, that are neither remark-  
ably heating, nor cooling, nor hard to digest ; nor do I much  
disapprove os Milk, with roast Apples bruised in it, provided it  
be given warm, and sparingly. I immediately caution against a  
hotter Regimen, and the Use of all Cardiacs.

. Bloody Urine, purple Spots, and other mortal Symptoms  
above specified, happen only from a too early Confinement in  
Bed, especially in young Persons: I do nth, therefore, direct  
the Patient to be put to Bed till the fourth Day ; at which time,  
is the Eruption does not come kindly forward, it is proper to  
give some gentle Cardiac, at least for once, to drive out the  
Pustules. Among the Medinines that produce this Effect,  
those called Paregorics, or Opiates, such as Liquid Laudanum,  
Diascordium, and the like, given in a small Quantity, mixed  
with some proper Cordial Water, are the most efficacious: For  
as they abate the Ebullition of the Blood, Nature expels the  
morbific Matter with greater Ease and Convenience. But I  
would not advise the giving a Cardiac before this Juncture, even  
though there be a Looseness, that should require fuch a Re-  
medy for the Looseness goes off spontaneousiy, as does a  
Vomiting, when Nature expels the Variolous Matter by the  
Skin. .. -'

But if I am called to a strong young Man, who, besides, has  
been addicted to a free Use of Wine, or any other spirituous  
Liquor, I think, for him to keep from Bed, and refrain from  
Cordials, not sufficient to check the Ebullition of the Blood,  
unless Bleeding in the Arm he, also, used : For the Motion of  
the Bleed, heing rendered so violent by its Inflammation, it  
frequently bursts through the Vesieis into the Bladder, or oc-  
casions purple Spots, and other malignant Symptoms, which  
destroy the Patient.

As soon as the Pustules appear, I examine carefully, whether  
they are of the *distinct* or *confluent* Kind, as they differ ex-  
tremely from each other: If, therefore, upon considering the  
Symptoms above-enumerated, they appear os the *distinct* Kind,  
**I** take care, that the Patient **be** refreshed with Smail **Bees,** Wa-

ter-gnrel. Barley-water, Or the like, in the manner above di-  
**rected ;** and, is **it** be Summer, the Weather exceeding hot,  
and the Pustules few, I see no Reason why the Patient should  
be confined in Bed, but, rather, that he may rise, and sit up a  
few Hours every Day, provided the Injuries, arifing from the  
Extremes os Heat or Cold, be prevented, both with respect to  
the Place where he lies, and the manner os Clothing: For  
when the Patient sits up between-whiles, the Distemper finishes  
its Course with greater ease, and, also, more expeditionfly,  
than if he had been constantly kept in Bed ; which not only  
prolongs the Illness, but, likewise, promotes the febrile Heat,  
and occasions a painful Inflammation, upon the Rising os **the**Pustules: But if the Coldness os the Season, or a numerous  
Eruption, makes it necessary for the Patient to keep his Bed  
constantly, I take care to prevent htS lying warmer, or with  
more Cloaths on him, than he used to do whilst in Health ; and  
that only a moderate Fine be made in the Room, Morning **and**Night, unless it he the Winter Season. Neither do I require,  
that he should lie always in the same Place in Bed, lest a Sweat  
should be raised, which can't, be promoted without Very great  
Danger.

In the Declension of the Illness, when the free Exhalation  
of the *Effluvia,* proceeding from the Mattes, now chang’d into  
*pus,* is prevented by the Hardness and Dryness os the Pustules,  
it will be proper to give five or sixSpoonsuis of *Canary,* or some  
other mild Cardiac; lest these putrid *Effluvia* return again into  
the Blood. At this time, also, and not before. Cardiacs, and  
a warmer, and more cordial Diet, may be allow'd ; as Sugar-  
sops. Oatmeal-caudle, and the like. Nor will any thing fur-  
ther be needful,- in the kindly *distinct* Species, provided the  
Patient will conform to this temperate Method and Diet; un-  
less, perhaps. Restlessness, Watchings, or other Symptoms,  
threatening a Delirium, should occasionally.require an Opiate.

This is the true and genuine Method of treating this Kind  
**.of** Small Pox ; but if, through the Prejudices or Obstinacy of  
the Friends, or Diffidence of the Patient, this Regimen be op-  
posed, I esteem it safest to bleed ; which though it is, in its own  
Nature, prejudicial in this Kind of Smail Pox, as it disturbs  
the Separation, and lessens the Supplies intended to keep up **the**Eruptions and Swelling, yet it makes some little Amends **for '**the Injuries of the subsequent hot Regimen ; and therefore ren-  
ders this Method, 'which I would not use without Compulsion,  
less dangerous. \* . . .. ..

Greater is the Danger in the *confluent* Small Pox, which pro-  
ceeds from a greater Inflammation of the Blood, and therefore  
more Caution is required, not to heat the Patient. But though  
this Kind naturally demands greater Cooling than the other,  
yet, in order to promote the Swelling of the Face and Hands,  
(without which Death must ensue) and the Elevation and In-  
crease os the Eruptions; and, also, hecause the Patient, on ac-  
count of the painful Ulcerations, cannot sit up, it is proper he  
should keep his Body, and even his Hands, in Bed, provided he  
be lightly covered, and allowed to turn himself therein, as he  
pleases-: And, in the Declension of the Distemper, upon the  
Approach of the suppurative Fever, he must not only be allow'd  
this Liberty, but admonished to make use os it; and must be  
turned often. Night and Day, to moderate the excessive Heat,  
and prevent Sweat, by which the Humour is discharged,  
wherewith the Small Pox should be diluted, to render them  
mild.

As the Salivation, which constantly attends this Kind of Small  
Pox, is one of Nature's principal Evacuations, and is here sub-  
stituted instead of that which should have been made by Pus-  
tules, (for the Evacuation by Pustules does not proceed so well  
in this low and flat Sort, aS in the other) we must diligentiy en-  
deavour to keep it at its Height, and prevent its untimely Stop-  
page, either from the Use of heating Medicines, or by for-  
bidding the free Use of Small Beer, or some such Liquor.  
Now aS the Spitting, in its natural Order, is to begin as soon aS .  
the Eruptions appear, and abate on the eleventh Day, but not  
entirely Vanish till a Day or two after, so, if it ceases before  
that Day, the Danger is great: For as the Swelling of the  
Face, by which some Part of the morbific Matter is evacuated,  
always Vanishes on that Day, if the Salivation stops at the same  
time, the Patient is infected by the Variolous Matter, now be-  
come corrupt, as by a Poison ; and there being no way left for  
It to pafs off, the Danger is imminent, unless, as it sometimes .  
happens, the Swelling of the Hands be so considerable, as to  
snatch the Patient from impending Death. This Salivation  
may be promoted by drinking Small Beer freely, or some other  
Liquor, that neither heats, nor excites Sweat.

Besides these, in order to check the Violent Ebullition, and  
promote the Spitting, Opiates aremore proper than any other  
Remedies ; and though, by their incrassating Quality, they may  
seem, in some measure, to hinder the Expectoration, yet I have  
long shaken off that Prejudice, and given them in this Disease  
with great Success, provided the Patient was above Fourteen.

For as the Blood os Infants and Children, who generally steep'  
tolerably well throughout thin *Disease,* ferments more gently, it  
stands less in need of such a Check-; -besides,, by the Else os  
this Rind, of Remedy, the Looseness, which Nature appoints  
tone an Evacuation for Children in thin Species of the Disease,  
is stops, to. the Detriment of the Patient, χ ; .c::-

In 'Adults,.the frequent Use of Qpiares is attended wish the  
following .Advantages. I-,By procuring moderate Rest, theyi  
abate the violent Ebullition of theBlocd, and prevent a Deli-fe  
riled 2. They promote the Swelling of the Face and. Hands..  
3.’ They, support and prolong: the Swelling to its naiuralPe-'  
riod- 4. They promote the Salivation, which, though it mayl  
be stopt in some Subjects for a few Hours, thy means os so  
powerful an incrallating Medicine;.yet she Strength being in-  
creased by these new Helps, Nature resumes fresh Vigour, and  
happily finishes the Work. “5. I have observed, that the .Spit-'  
ting, which usually abates about the eleventh Day, and some-  
times earner, to the great Detriment os the Patient, by giving

\* Opiates ’a sew times, has been raised-anew, and not ceased  
before the fourteenth Day, and sometimes later. I usually:  
give about fourteen Drops os liquid Laudanum, or an Ounce os  
Symp of white Poppies, in a little.Cowflin-flower water, *or*some such. didjPd Water, to Adults,, every Night aster the  
Ppoptiop is over, th the End of the Disease'. And as in the  
worst Kurd of Small. Pox a hot Pit, attended with Reltlessneis,.  
Anxiety, and other Symptoms, generally come on in the Even-  
ing , thin may, in forne measure, be prevented, by administering  
the Opiate'at Six or Seveni at Night. . δ ... ......... - ὓ.. καὶ-ψχὓ  
' AT a Looseness as certainly accompanies the *confluent* Small  
Piherim Children, as a .Salivation in Adults, I takercare by nrf  
means' to cheek this Looseness; and. direct the Children to be:  
kept sometimes in the Cradle, and sometimes taken up, aflow-^  
ing'them the Tame Diet, if they .he .weaned, as I directed.for  
Adults. ss. l i / *- f-'.se. ..- .' .* . #.γτ. ssy

jln the Declension of the Disease, when the IFace . is stiff,-  
occasioned by the Eruptions bedoming.crusty,. hard, and dry, I;  
anoint in frequently with Oil os sweet Almonds, as well, to ease.  
the Pairs, as’to promote a'freer Exhalation os the hot *Effluvia.*fuse no Endeavours topreyent the.Pitting of the Face, as Oils,:  
Liniments, and the like ; these only causing the Scurf to scale off  
shore flowly, which .is gradually succeeded by unseemly Scars ;-  
But the Patient need nothe very anxious about these, when,i  
by reason of a previous temperate Regimen, the Eruptions,  
having been little irritated, have contracted no caustic Quality...

,!N6w though this’Method, provided it be carefully and pru-:dehtly suited to particular Circumstances; will render the Dis-,  
esse Very gentle and safe; yet, in some Cases, I findit neces-  
se rytosise a difiserentTreatmentl '\* ss.. [.si.' '. sc  
~ First, therefore,'if'in the *distinct* Kind, by means cs an  
over-hot Regimen, and continual Sweats, .the Face does not  
swell on. the eighth Day, .hut is flaccid, and the Spaces het ween  
the Eruptions look'pale, whilst the Pustules appear in great  
abundance; besides using*suny* utmost endeavours by a more  
temperate Regimen,'to check he Violent Motion of the  
Blood, I immediately direct an Opiate to be given, which, by

- gently procuring Sleep, (unless the Brain be over-heated) arid,'  
consequently, moderating the Tumult raised in the Blood, sea-  
sonably determines it, together with, the Heat, to .the Face, as  
the Nature os the Disease demands, τ . ς \ '

\* But if the Mischief, hence arising, has proceeded so far, that  
the Sweat,- which had hitherto flowed plentifully, ceases, spon-  
taneously, the Patient is seized with a Delirium, complains of  
great Sickness, and makes Urine often in-a small Quantity; in  
this Case, the Danger os Death being imminent, I conceive he  
can only be reliev'd, either by giving Opiates freely, or taking  
away a large Quantity of Blood, and exposing his Body to the  
open Ain Nor will what I have now propos’d seem impru-  
dent, and unreasonable, if we attend .to those who have escap'd  
imminent Death,by the plentiful Bleeding at the Nofe,suddenly  
arising: Besides, it must he considered, that, in this dangerous  
Extremity, Death does not ensue, because the Eruptions strike  
in ; for they appear red and plump, eyen when the Patient is  
expiring; but because ths Face does not swell. Now whatever  
tends To abate the Heat of the Blood, and I conceive, that  
none will deny‘that Bleeding, and moderate Cooling, have this  
Virtue, must necessarily help to promote the Swelling of the  
Face, aS much aS the Use of Opiates, and apparently for the  
same Reasons.

But I would not be understood to advise Bleeding immedi-  
ately, in every *Delirium* happening in the Small Pox, fince no  
Symptom oftener occurs in this Disease : But, I. In that only  
which happens because the Face does not swell, that is, in the  
*distinct* kind, the Eruptions being, at the same time, pretty  
numerous; or, 2. Where the Motion of the Blood is become  
so violent and immoderate, by means of a very hot Regimen,  
and the Use of Cardiacs, as to render it unsafe to wait till it  
can he reduced to a due Temper, by Opiates, and other pro-

**/ \_**

per Medicines. In such Cases, also, it has frequently feemeth  
sufficient toane, for the .Patient to .rife and sit up awhile ini  
his raying Fit ; by which Expedient I have saved several from.  
Death. And, besides those I *have* seen, there are numberless.  
Instances of Persons, who, by these means, , have been shatchetL  
from imminent Danger. For some delirious Persons, deceiving!  
their Nurses, and getting out of Bed, have remained exposeth  
to the cold Ain, even in the Night-time ; and others have.se-:  
cretly, or by Intreaty, procured cold Water to drink; and thus,,  
by an happy Mistake, saved, their Liives,. when despaired of.

I shall here set, down .the History of a Case, which-I had  
srom the Person concerned : He told me, that when he was a  
young Man, .he went to*Prsstol,* and was there seized with the  
Small Pox, about Midsummer, followed soon aster with a **De-**lirium : His Nurse, going into the City, lest him in the mean:  
while to the Care of some other Persons, intending to be back\*  
soon; but, making a pretty long Stay, the Patient in the mean -  
while died, as the Attendants thought; who, considering **the**Heat os the Season, and his Corpulence, that the Body might  
hot smell, took it out of Bed, and laid it naked on a Table,:  
throwing a Sheet over it. . The Nurse at length returning, and  
looking on his Face, she imagined she saw some small Signs of.  
Life, and, therefore, put him to Bed again directly, and brought,  
him to himself; and he recovered in a sew Days. **. :t**

:. Is the Saliva in the. confluent Small Pox be render’d so hard and -  
viscid by the preceding Heat-, as to endanger Suffocation, which  
commonly, happens on the eleventh Day,, a Gargarifm must  
absolutely be used, and great Charge given, to syringe **the:**Throat with it Night and *DRy. .* Small Beer, or Barley-water,  
mixed with Hooey os-Roses, may he employed .for this Pur-  
pose, or the sallowing. .. .

./Takeof the Bark of Elm, six Drams; Liquoriee-root, half  
an -Ounce ; twenty stoned Raisins; red Roses; two Pu-  
gilsS Roil them together, in a sufficient Quantity of  
Water; to leave a Pint and half ;-in which, when strained  
off, dissolve, of simple Oxymel, and Honey of Roses,  
each Iwo Ounces: Mix. the Whole ’for.-a Gargarisms .

.But, if-the Patient has been treated in a proper manner, the  
Salivation, even though st has begun to abate, will so effectu-  
ally answer its End, as to render this Remedy superfluous. And;,  
in reality, when the Patient is every moment in danger of Sus-'  
location, oppressed with a *Stupor,* and breathes with the utmost  
Difficulty, it is not safe to trust to this Remedy.. In this Case  
Lhave sometimes seasonably and successfully given aWornit, of.  
the Infusion of *Crocus Metallorum,* in a larger Dose than or-,  
dinary, to an Ounce and an half ; because the Stupor is so con-  
siderable, that a smaller Quantity will not operate, but by  
disturbing those Humours which it cannot eject, greatiy endan-  
gers the Lise of the Patient. Neither can **we** wholly trust **to-**this Remedy, and, which is truly to be regretted, we are hi-,  
therto unprovided with a more certain \_and effectual one, to.  
Conquer this dreadful Symptom, which alone destroys; most*Qs*those who die on the eleventh Day, in this kind of Small Pox. .

As the other Symptoms happening in this Distemper are pre»  
vented, so, likewise, most os them are relieved, by a tempe-  
rate Regimen. For Instance, as the Delirium above-men-  
tioned, proceeding from the too great Heat ofthe Brain, is  
removed by cooling the Blond, so, by **the same** means, a Co-  
ma is easily remedied; which seems to he a quite different  
Symptom. By cooling the Blood in this manner, I have seen  
purple Spots removed ; but have not yet been able, by this or  
any other Method, to stop bloody Urine, or a violent Flux of  
Blood from the Lungs; but so far aS I have hitherto observed,  
. both these Haemorrhages prognosticate certain Death.

in a Suppression os Urine, which sometimes happens in **the. -**Young and Vigorous, from the great Confusion and Disorder  
os the Spirits, subservient to this Excretion, by reason of **the**immoderate Heat and Agitation of the Blond and Juices, **T**have had recourse to all the Kinds cs Diuretics ; but nothing  
has succeeded so well with me aS taking the Patient out of Bed,  
who, aster walking twice or thrice cross the Room, supported  
by the Attendants, has immediately Voided Urine pretty plenti-  
fully, to his great Relies. - -’

But the Symptoms proceeding from the Striking-in of the  
variolous Matter from intense Cold, or unseasonable evacua-  
tions, must be remedied by Cardiacs, and a suitable Regimen;  
which, however, must not be continued longer than these-  
Symptoms last: The principal os these are a Depression, or Sink-  
ing of the Pustules, and a Looseness, both in the rfr/rLmir Kind -  
For, in. the *confluent* Kind, neither the Depression nor Sinking  
os the Pustules, threaten Danger, this being the Nature os rhe  
Disease; nor a Looseness in Children, because it promotes rheir  
Recovery. In either Case, it is highly proper to give a cordial  
Draught, made cs some proper distilled Waters, mixed with\*  
Diascordium, liquid Laudanum, and the like, not only to rc-

**move the above-mentioned Symptoms, but at-anv time of the**Disease, if the Patient complains of a .Pain at the Heart and  
Sickness. I judge, that the'Notion of the frequent Striking-in  
of the Eruptions, proceeds from hence, that such as have ob-  
served the Depression of them, ‘in the *confluent* Kind; esteemed  
**it to he a** Striking in of the variolous Matter from taking Cold;-  
whereas here lit is only the Nature of the Disease; and they  
suspect the same in the distinct/Kind, because they look for  
the Eruption, and increase os the Pustales, before the due  
time; not having sufficiently attended to the time wherein.  
Nature usually .finishes the Suppuration os this Kind of Small  
Pox. . . .--- :.. . \* .. ’ νύ - - -.egi..

f When the Patient, begins to recover, and the Eruptions scale  
off, and he has eat Flesh'a sew Days, for Example, the one-  
and-twentieth Day, I judge It requisite to bleed in the Arm, if  
the-Disease has been Violent: Tor- the Inflammation communi-  
cated to the Blood-by the Small Pox, whether in Adults or  
Children, equally indicates Bleeding; as the Foulness collected  
inr.the Habit2.doeS Purging; as appears sufficiently herb from  
the Colour os the Blood, taken away aster a severe Small Pox;  
which exactlyTesembles that of- Pleuritics; and, likewise; from  
the great Inflammations that fall on the Eyes, aster it is gone  
off; and other pernicious Effects, arising from the Blond over-  
heated, and Vitiated thereby... Hence, also, it follows, that  
such as enjoyed a good State hesore the Attack, are afterwards  
afflicted with a Defluxion os' sharp hot Humours upon **the**Lungs,' or some Other Part, for the Remainder of Lise. But if  
the Pustules were few. Bleeding is unnecessary: Aster Bleed-  
ing I purge three or four times., y — . -

. Aster the Patient-has heen long recovered from the confluent  
Small Pox, and rises every Day, there sometimes happens *Λ.*troublesome Swelling os the Legs; which either goes off .spon-  
taneoufly, after Bleeding'and Purging γ or is easily cured by **the**Use os Fomentations, made of emollient and discutient Herbs,  
boiled in Milk ; aS the Leaves of Mallows, Mullein, Elder,  
Laurel, and Chamomile and Melilot-flowers. *Sydenham.*

. -These Species of Small Poxp'adds’Dr. *Sydenham,* prevailed  
in I667. I668. and Part of 1669. which he chose to call *legi-  
timate,* or *regular,* to distinguish them from the other Kinds  
that succeeded them,-in-the Years 'I67O. I67I. and I672.  
which he denominated *Anomalous,* or *irregular y-* and gives ua  
the following Account of them...." .

- The irregular Species of Small Pox was introduced by **the**Meafles, (see MoRBILLI), and arose in the Beginning of *Ja-  
nuary,* I.67O. much about the same time that the Meafles did;  
and though-it-was not so epidemic, it, notwithstanding, ac-  
companied that Disease whilst it prevailed, and continued after  
it went off, as long- as this Constitution lasted.' Nevertheless  
it yielded to the Dysentery, which raged in Autumn, this Sea-  
son being peculiarly, disposed Io savour it. ' But in the Winter  
this Kind of Small Pox returned again, the Dysentery being  
overcome by the Cold. In this Order did these Distempers  
succeed each other, through all the Years os this Constitution,  
except that in Autumn I 67 2. the last Year it prevailed, the  
Constitution heing then in its Decline, and slowly promoting  
the Dysentery, which, at that time, was, also, declining,  
the Small Pox, contrary to Custom, raged, also, at the same  
time, and prevailed so equally with the Dysentery, that it was  
not easy to ascertain, which of the two Diseases were most  
predominant, chough, to me, the Dysentery seemed to pre-  
vail. This Small Pox, like other Epidemics, was Very Vio-  
lent in the Beginning, and increased daily till it came to  
the Height.; after which it gradually decreased, both with  
respect to the Violence of the Symptoms; and the Numbers  
it attacked.

I was Very much surprised, upon the Rise of this Small Pox,  
when I found that it differed, in several considerable Symptoms,  
from the Kind produced by the preceding Constitution, already  
described. Of -these different Symptoms I shall now treat,  
omitting those which were common to both Species.

\* The distinct Kind of this Small Pox differed from the com-  
mon distinct one, of the preceding Constitution, only in the  
following Symptoms : - I. The Eruptions generally came out  
on the third Day, which indeed is usual in the confluent Sort;  
whereas, in the distinct Kind of the former Constitution, they  
appeared not hesore the fourth Day. 2. They did not grow so  
big, in the Course of the Disease, as those of that kind. But,  
3. Were more inflamed; and, in their Declension, after their  
Suppuration, frequently looked black. 4. Sometimes, but  
Very rarely, a Spitting happened, as in the confluent Kind,  
though the Eruptions were very few. Whence it appears, that  
the Small Pox of this Constitution greatly resembled the con-  
fluent Kind; and was attended with a more Violent Inflamma-  
tion, than is usual in the distinct Kind.

The confluent Species of thin Constitution, differed from  
those I had observed in other YearS, in teveral Particulars:  
**I.** The Euruptions sometimes appeared on the second Day ; **at**

others ;on the third, in Form of an equal redish Swelling,  
covering the whole Face, and thicker than an Erysipelas ; nor  
could any Spaces easily he perceived between the Eruptions.

2. The rest os the Body seemed to he overspread with an almost  
infinite Number of red inflamed Pustules, joined together in  
one. 3. In the intermediate Spaces, especially in the Thighs,  
little Bladders arose, like those occasioned by Burns, full of a  
limpid Serum, which flowed out plentifully, upon the Bursting  
of the Skin, the Flesh underneath appearing black, and aS if it\*  
were gangrened. This dreadful Symptom happened Very rare-  
ly,-and onsy in the first Month that this Species prevailed,  
hut'proved always mortal. 4. About the eleventh Day, a  
white shining Pellicle extended itself over the redish Humour,  
in several Parts os the Fade; and, by degrees, over the Whole.

5. Soon after, this Pellicle discharged a shining crusty Matter,  
not of a yellow or brown Colour, aS' in the other Small Pox  
but of a deep-red, like congealed Blood; which, as the Pustules  
ripened, grew every Day blacker, till at length the whole Face  
appeared as black aS Soot. 6. And whereas, in the other Kind  
ofconfluent Small Pox; the Patient was in most Danger on **the**eleventh Day, which put an End to the Lives of the greatest  
Part of those that died ; in this Sort; unless an extreme hot  
Regimen destroyed him in a shorter time, he generally lived tO  
the fourteenth, and sometimes to the seventeenth Day, aster  
which the Danger was over. 7. But those who had the Blad-  
ders with the Mortification, died in a sew Days aster the Eru-ί  
ption. 8. The Fever, andall other Symptoms, which either pre-’  
ceded or accompanied this Species os the Small Pox, were inore  
Violent, than in the foregoing Kind; and it had manifest Signs,  
of greater Inflammation.- 9. The Patient was more subject to  
a Spitting. IO. The Pustules were considerably more inflamed;  
and much smaller; so that it was difficult, upon their fust  
'Appearance, to distinguish them from'an *Erysipelas,* or **the**Meafles. Ii. The Scales remained a long time aster the Eru-  
ptions vanished, and left more unseemly Scars behind them. It  
is worthy of Notice, that during the whole three Years which  
this Constitution lasted, in which the Dysentery raged so epi-  
demically, the Small Pox, when exasperated by an immoderate  
het Regimen, sometimes terminated in a Dysentery.

*But this* Small Pox was not attended with such fatal Sym-  
ptoms during the whole time of its Continuance; for, aster  
having prevailed two Years, it began to grow milder in I672.  
and the Eruptions having lost their Blackness, grew by degrees  
yellow,, like an Honey-comb,'which is peculiar to the regular  
Small Pox, during the Suppuration of the Pustules; so that in  
the last Year of this Constitution, it proved Very mild and  
gentle; considering its Kind. Nevertheless it is manifestly to  
be referred to a quite different Species, on account, I. Os the  
remarkable Smalness of the Eruptions. 2. The Tendency to a  
Salivation: And, 3. Other concomitant Symptoms.

As this Species was attended with greater Inflammation **than**the other, the sole intention in the Cure must be, to give a  
greater Check to the Violent Ebullition of the Blood. And this is  
chiefly effected by a temperate Regimen, aster exhibiting Opi-  
ates, as above directed ; and allowing the free Use os some Li- .  
quor that is not heating, but will rather immediately abate **the**Violent Heat, wherewith this Disease is attended, especially  
during the time of the Suppuration Of the Pustules. The white  
Decoction, made of Bread, and a small Quantity os burnt  
Hartshorn, boiled in a large Proportion of Water, and sweet-,  
ened with Sugar, is beneficial here: But Milk, helled with  
thrice its Quantity os Water, is generally a more grateful Li-  
quor, and better answers the End of Cooling: Nor is **the**Abundance of Liquor only proper Io diminish the extreme  
Heat, which chiefly prevails during the secondary Fever, but  
it, also, promotes the Salivation, and keeps it up longer than  
it could be continued, if the Patient were over-heated. And  
further I have often observed, that cooling Liquors, drank plen-  
tifully, have succeeded so well, that, by the Use thereof, the  
Small Pox, which appeared at the Beginning with the worst  
Signs of the confluent Kind, has, in the Course of the Disease,  
been rendered distinct; and rhe eruptions, which, as they  
ripened, would otherwise have first discharged a red, and soon  
after a black Matter, have looked Very yellow ; and instead of  
being inflamed, and Very small, proved of a mild and good  
Kind.

Nor does the menstrual Discharge, which frequently hap-  
pens in this Disease, forbid, but rather encourage the free **Use**os these Liquors; especially if it comes at an unusual **Time.**For Women are endangered here from no other Cause but from  
the Blood's heing too much attenuated, so that it escapes where  
it can find a Passage; especially when unikilsul Nurses add **Ost**to the Flame, by using an hot Regimen. Now wherever  
greatly dilutes and cools the Blood, as it checks.this Flux, does  
necessarily, though not immediately, tend to preserve **the**Eruptions, and the Swelling os the Face and Hands, in their  
due State ; whereas heating Remedies, although they may seem  
**better**

better suited to this Purpose, yet; as they promote this Dis-  
charge, they fall short of answering the End, even though  
Astringents be mixed with the Cardiacs.

I lately attended a Lady, who had this dangerous black Small  
Pox; and though I forbid everything, at the Beginning, which  
might agitate inc Blond, yet,- ar she was of a Very sanguine  
Complexion, in the Flower of her Age, and Of a liycsy Dispo-  
sition, and the Weather, .at **the** same **time,** very1 warm, **she**was suddenly seized, on the third Day after the Eruption,, with  
so copious π menstrual Discharge, at an unusual time/ .that the  
Women about.her suspected she had miscarried. '- Though this  
Symptom was Very urgent for several Days, yet ISid not,  
therefore, judge that the Use of the. Milk and VVateY was to  
he discontinued;brit rather esteemed it necessary to be drank  
plentifully now, and, also, through the whole Course of. the  
Disease; particularly on the coming on of the fjuppuratory  
Fever. This Liquor she often declared, was particularly grate-  
ful to her, promoted the Spitting, and both cooled and refreshed  
her. But, when the Face hegan to harden, lest; the Patient  
.should be injured thy the putrid Vapours proceeding 'from the  
purulent Matter of the Eruptions, which bad a Very fetid Smell  
in this worst Kind of Small Pox, a sew Spoonfuls of mulled  
Sack were directed to be taken once a Day, .or as osteh as she  
perceived any Sickness at her Stomach. By’the Use of **these**few Things, along with a quieting Draught every Night, **she**recovered, without having been attacked withS'Deliriums,\*or  
any other dangerous Symptom,' except the Haemorrhage/ The  
Face and Hands swelled sufficiently; the Eruptions were as  
large aS this Kind *of* Small Pox would permit T the Salivation  
was easy and copious to the End ; and though the Eruptions in  
the Face, seemed blackish whilst they'ripened, Tyet. they were  
yellow in most other Parts. ‘E‘: ’E " S

c But how. much'soever this Rind' of Smallpeenliar to  
this Constitution, exceeded.those of other.Constitutions in  
point of Heat and Inflammation,').yet,-when ’the 'Eruptions  
were distinct, or few. Experience shewed'1 it.to the needless to  
drink so copiously ofthe above-mentioned.Tisquofr;'‘But it  
sufficed if the Patient drank Small Beer, as the Tlnrst required,  
and supped “Water-gruel and'Panada, and . sometimes eat 'a  
roasted Apple; and if he exceeded Fourteejs, . took a Dose of  
*Diacodium,* when he was sick, or delirious sor/waht os Rest ':  
And I did nothing more,' when the Pustules were few, except  
keeping the Patient in Bed. - y ; ’ S' ’ :

The same, excellent Physician, In his Epistle to Dr. *Cale,*dated *'Juitr.* 20. I 681-2. gives us farther Observations’on rhe  
SmallPox; which, he informs us, are the Result of; longer  
Experience, ' . ' - ' . Ἀ -

Previous to these Remarks, says he, I must observe, that a  
Species of intermitting Fevers, which arose in I67y. still pre-  
vailed in I68I. These Fevers, throughout Those Years in  
which they reigned, like all Epidemics, principally raged in;  
those Seasons, that conspired most with their Nature; but,  
upon the Approach of another Seoson, yielded to such Epide-  
mics, as that Season principally favoured. Thus, , upon the  
coming in of Winter, they always yielded to the Cough, and  
peripneumonic Fevers, and,, also, to the Small Pox s bur, upon  
the Return ofthe Spring, they re-appeared.- Bo, in the Year  
I68O. when these Intermittents had prevailed universally dur-  
ing the Autumn, the Small Pox succeeded them in the Winter,  
and spread much. But in I68I. the Intermittents returned,  
though they, did not spread so epidemically, their Violence be-  
ing abated; so that the Small Pox, in some Places, appeared  
along with them. But, at the Beginning os Summer, the  
Small Pox increased every Day,’ and, at length, became epi-  
demical. - - 4.

- It now appeared to me manifestly improper tn confine the  
Patient constantly in Bed, hefore the total Eruption of the  
Pustules; for the Spring and Summer having been the driest  
Season that any Person could reinember, the Blood was, by  
these means, deprived of the greater Part of the Humidity,  
which the Air otherwise usually communicated to it : Whence,  
the then reigning Small Pox was accompanied with a more  
considerable Inflammation than ordinary ; and the other Sym-  
ptoms thence arising were more Violent. This I conceive was the  
Cause that purple Spots frequentiy preceded the total Eruption  
of **the** Pustules ; and that the Violent Inflammation which ex-  
.pelled them, by dissolving the Texture of the Blood, suddenly  
destroyed the Patient, before the due Expulsion of the morbific  
Matter. The Disease proved the more destructive, because  
the Eruptions more readily run together ; the Intemperature of  
the Air now doing the same Mischief spontaneoufly, which  
ignorant Practitioners ordinarily occasion, by using asshot Re-  
gimen and Cardiacs, at the Beginning of **the** Distemper: For  
the Danger of the Small Pox is least, when the Eruptions are  
few ; and greatest, when they are numerous ; but the bloody  
Urine, ana purple'Spots, destroy the Patient, besorethe total  
'Eruption of the Pustules.

It is easy to account for the Patient's heing more or less on-  
dangered, in proportion to the Paucity or Number of rhe Erin.  
prions' ; for as.every Pustule is, at first, a Phlegmon, chough of  
a Very small Sine, and soon impostumates, so a secondary Fever,  
which depends on the Matter hereafter to be produced, must  
needs he more or Tess Violent, at the Height of the Disease,  
according to the Quantity of Matter to he suppurated, which  
is ostIally Completed in the mildest'Species of the confluent  
Small Pox, on the eleventh Day I in. the middle Sort,.on the  
fourteenth ; and the worst, on the seventeenth -Day? sta ’Y

Now a Phlegmon in the Arms,' orany-other Part, will oeca-  
lion a Fever whilst it suppurates; the Blood being inflamed by  
Jthe purulent Particles, which are received into the. Mass from  
The Veins, according th the Laws of Circulation Land thus  
giving Rise to the Fever: Hence rhe'Physician'has Inore Rea.-  
sori' to foretel Death, on one of the ahove-mentioned Days,  
when the Face, at the Beginning os the'Disesse, appears totally  
covered with small Eruptions, resembling the Filings os Steel,  
on account of the extreme Violence ’of ' the succeeding Fever,  
which necessarily rages in proportion try the Quantity' of -Mat-  
.ter thrown \* out of these innumerable/ Impostuines .into the  
Blood.. And it 'in easy to foresee thsiDestrechonfosYhe Patierit  
Tome' Days.hefore it happens, thonalTTe chinkthimself in **a**her Way. ' ψ ' -ς, 'sist. . ‘. .. οὐρ.,ῆ.- ἀ

*suss.* therefore, the Danger of the Patinny prooeeds only from  
The Abundance os the Eruptions, Tuse) alLrnyTEndeayodrs to  
'repress-them,"which issue Way toIeIieve; the.Patient;'every  
Thing being doubtful and dangerous,‘when this Species of the  
Disease .is confirmed ; *so* that, *is* the Patient should escape; **it**may rather be ascribed to some Bleeding at.’ the Nose, sir other  
.accidental Alteration, happening in the Course inf the Disease,  
than to the Cure os the Physician,’Nowshch an extraordinary  
Triipthoh os the Ptistules proceedf from the too sudden Assimi-  
lation of the variolous Matter; which seenur principally to arise,  
jejtherJrom the over-hot and spirituous Constitution.oTthe'PaA  
Itient, or from his having'raised theTerrnentation too high, by  
'.a too daily Confinement in Bed; the Use Jos het Cardiacs, Or  
Any spirituous Liquor.‘δ᾽ - . ) : 7‘ ί i.T .7: si ‘i ’ I7,sq 7’ ὑ v

The immoderate Assimilation'ofthe Variolous Matter, how-  
’ever, cannot he more effectually promoted; than by she Pa-  
tient’s confining himself in Bed unseasonably, that is, 1 hefore  
the sixth Day froth the Beginning of the Illness-; orthesourth  
Tnolusive from the Eruption, when all the Pustules sare comte  
spur, and no more.are expected. And'though the moderate  
; Warmth of the Bed, eyen after thlSTime, does nt Torne Mea-  
suhercontribute to the Rise of the Delirium, Watching, and  
herherr Symptoms, yet these are of such a Nature, that they  
'readily yield to proper Remedies; whilst .the imminent Danger  
of Death, that happens on the eleventh Day, .from the great  
Abundance of the Pustules, cannot he preyented or jremoved  
thy Medicine. ,ss '

The Patient, therefore, is here to he diligently admonished,  
by no means to keep his Bed in the Day-time, till towards **the**Evening of the sixth Day; whereby the Eruptions will he sewer,  
‘and he will 'he greatly refreshed.. But, aster this time, if **the**Pustules be Very numerous, he .will scarce be able to leave his  
..Bed at all, on account of the Pain thence arifing, and a greater  
Disposition to Fainting, upon fitting up;.so that havingsre-  
‘quently remarked this, I imagined, that Nature,ἼΠ the com-  
.mon Course os the Disease, first pointed out the Time, when  
ia total Confinement in Bed becomes necessary.

For the Essence of this Disease seems' to consist, in *a* pecu-  
liar Inflammation os the Blood; inthe Course of which,. Na-  
'tore is. employed for some Days, in 'the Beginning, in prepar-  
ing and moulding the inflamed Particles, for their readier Ex-  
pulsion to the external Parts; at which, time the Bleed being  
^disturbed, a Fever must needs he occasioned. For the agitated  
Particles, hurrying in a tumultuary manner through theVeffels,  
necessarily cause a Sickness at the Stomach, sharp Pains in the  
Head, and all the other Symptoms preceding: the Expulsion,  
according as they are carried to this or that particular Part.  
But when the Eruption is oVersithe fleshy Part .heroines **the**Seat of the Disease; and, as Nature has no other Method of  
expelling the peccant Matter from the Blood, but by raising *a.*.Fever, so, likewise, it does not free the fleshy Parts.from any  
extraneous Body, but by Impostumation: Thus, if, by Acci-  
dent, a Thom, or the like sharp-pointed Body, be lodged in  
the Flesh, unless it be immediately extracted, the Parts around  
soon impostumate. Hence, when their Particles are lodged in  
the Flesh, they at‘first occasion Very small Phlegmons,, where-  
in they lie concealed; which increasing every Hour, and be-  
coming more inflamed, at length come to Suppuration, when  
a Part of **the** Matter must needs he .absorbed by the Blood;  
which returns by the Veins; and th too large a. Quantity thereof  
he received into the Mass, it is not only productive os a Fever,  
which the debilitated Patient is unable to bear, but, also,  
taints the whole Mass. Besides, by the extreme Heat *of* the

Fever, during the last Days of the Illness, the Salivation, which  
ought always to accompany the confluent Small Pox, is stept  
too soon ; whence immediate Death ensues. But, is only a  
small Quantity os the purulent Matter be received into the  
Blood, me Violence of the secondary Fever is easily checked  
by the increasing Strength os Nature, and, the Pustules drying  
away gracually, rhe Patient soon recovers. . ' -

Hence it is manifest,' that if these het and spirituous Parti-  
soles he quickened by het Medicines, and especially by a con-  
Tstant Confinement in Bed, the assimilating Virtue, which they  
already possess in too great a Degree, will necessarily he height-  
fined and increased. Besides, the Blood, and other Juices, her.  
ing hereby heated, yield more readily to'the:stronger Impression  
os the Particles; whence more Eruptions appear than should.  
'Whereas the moderate cooling Regimen, and the free Use of  
the Air, not only abate the Force of the hot tumultuary Par-  
.Holes; het, also, thicken and strengthen the Juices; .whence  
they are better enabled toXresist the morbific Spirits, and sup-  
port their Violence : -And hence no greater Quantity os vario-  
1 pus Matter is prepared, than is natural in this Disease/ ... δ᾽  
rA too early confinement in Bed produces, besides the Assi-  
imlation of too large a Quantity of the morbific Matter, and  
the'immoderate Exaltation of the Ferment os the Disease,  
‘bloody Urine,"and purple Spots, especially in Summer, and in  
Persons in. the Vigour of Life. T conceive, that both these  
Symptoms proceed froth the Heat and Commotion raised in the  
Blood, by hot and spirituous Particles, by which it is exagitated,  
and considerably attenuated, so that it bursts the Vessels, causing  
bloody Urine, when It forces its-way through the Kidneys ; and  
[purple Spots, when it is strained through the Extremities os the  
Arteries, terminating in the Muscles and Skin,' which resemble  
To many Mortifications in. those Parts wherein the extrayasated  
BloodTS coagulated.. And though both these Symptoms might  
shave been'easily prevented by a cooling Regimen and Dies,  
Jet, when they actually appear, all Remedies prove ineffectual;  
\* It "is not only unsafe .to keep the Patient always in Bed the  
first Days os the Illness, but sometimes necessary to expose him  
to. the open Air; especially is it he the Summer-sea son, and  
he nor past the Prime os Life, or is he has been accustomed to  
~ spi rituous' Liquors’; ’.and, ‘ particularly,' if the' Disease proceeds  
’from hard drinking.' *. s - .......*

*': I* have hitherto found, that Bleeding, though it he used early,  
' does not so effectually check the over-hasty Assimilation of the  
variolous Matter, as cooling the Blood by the Air received by  
lnspiration, especially if the Patient be put to Bed immediately  
after ’the Operation, and injured by hut Cardiacs ; the Blood  
being by these means, more disposed to receive the Impressions  
of the adventitious Heat, than .it was before Bleeding. . And  
one of the worst Coses I ever met with In the confluent Small  
Pox, happened in a young Woman soon after her Recovery  
from a Rheumatism, thy the usual Method of copious and re-  
peated Bleeding, who died on . the eleventh Day. From this  
Instance I first learned,, that Bleeding did not contribute so  
much to keep the Small Pox within its due Limits, as I had  
imagined ; though I have frequently observed, that repeated  
Purging, while the Blood remains uninfected, generally renders  
the subsequent Small Pox of a mild and distinct Kind. ' \*

To. this. Method it is objected, that sitting tip in the first  
‘ Days of the Disease hinders the Eruption of the Pustules, and  
' of course prolongs the Sickness, and other Symptoms, which  
Indeed I own, and Experience confirms it. But then it must  
be inquired, whether it is most dangerous to give a little Check  
to the Variolous Matter, and thus prolong the Sickness by keep-  
ing back the Eruption ; or ro urge the Ferment of the Disease,  
and assimilate so large a Quantity of Variolous Matter, aS to  
‘ endanger the Life of the Patient by the secondary Fever. I  
conceive it will appear, upon duly considering the Matter, that  
Very few have died merely because the Small Pox did not come  
out sooner or later; unless, perhaps, a few of those, whose  
Bleed, being inflamed by excessive Heat and Motion, circulated  
/with such Velocity, aS not to allow sufficient Time for the  
morbific Matter to be expelled stowly ; which is an Argument  
in savour of my Opinion.

' For we may he assured; though nothing be done, that the  
variolous Matter will\* at length be conquered by Nature, and  
driven to the Skin; especially as the Costiveness of the Patient  
to this time, promises a certain, though a late Eruption os the  
Pustules afterwards. But os the many dangerous Symptoms  
which enfue, when the Eruption is unseasonably promoted, I  
shall only mention the principal: I. The Number of erup-  
tions is too much augmented ; and thus the secondary Fever is  
proportionably increased, -g. Bloody Urine, and purple SpotS  
are produced. 3. The immoderate exaltation of the Ferment  
frequently increases the Force of tho variolous Matter so much,  
that the Patient sinks ar the Beginning of the Disease ; when  
the morbific Matter cannot disentangle itself, and come ou:, hy

reason Of the. confused and irregular Motion raised in the  
Blood.

If it he demanded, why a proper Separation os the variolous  
Matter may not he as well promoted at the Beginning of the  
Disease, by refreshing the Patient with the moderate Warmth  
Os the Bed,, as without it ; I ask, .by way os Reply, whether  
Experience does not testify, theta Person in Winter, whilst he  
lies in Bed moderately covered, without a Firein the Room, is  
much warmer than when he si-S Dp in it well cloathed ? And if  
the Difference here .be remarkable, I next inquire, which of  
these Methods is hest adapted to check the immoderate Motion  
of the Variolous Ferment? . Ἴ.”. . \* .

But what has principally imposed upon the Unattentive in this  
Case is, their having observed a Tendency tn the Patient to  
spontaneous Sweats; which continually flowing whilst he re-  
mained in Bed, greatiy abated the severish Heats, otherwise  
than in thofe who did not sweat. Let us therefore consider, why  
we so solicitoufly endeavour iff check the Fever, since it is the  
Instrument which Nature ordinarily and principally uses in pre-  
paring and expelling all kinds of noxious Matter, which lurk in  
the Blood, st is evident, that whilst we carefully promote  
Sweat, in order'to lessen the Fever, we thus drive out a crude  
and indigested^ Humour, like unripe Fruit, sand afterwards  
cause -a-. Fever; the Serum os the Blood, with which the Blond  
Itself, sand those newly generated hot Variolous Particles are  
'diluted, is expelled, whilst the Particles, being freed from **the**Serum wasted by the Sweat, have their Violence and Activity  
increased, '' ’ ’ . . - , ν r

But it is tohe observed,, that. I injoin the Patient to refrain  
from Bed, on Supposition only, that the approaching Small Pox  
isos the confluent Kind. For in the distinct Species, isit can  
he certainly foreseen, the Patient need neither be confined to  
Bed,-nor.injoined to fit. up, aS the Paucity os the Eruptions.  
.prevents all’Danger either way.. si , ,

Hence, then. It appears to me from frequentExperience, that  
he who refrains *from* Bed in the Day-timie, at the Beginning of  
’the Diseases abstains entirely from Flesh, and drinks only small  
Liquors, is abundantly safer than he who confines himself im-  
'mediately in Bed, and takes hot Cardiacsss And the Patient  
sends a singular Refreshment from the Admission of fresh Air,  
every time he is taken out of his warm Bed ; which all. those,  
whom I was suffered to treat in this manner, thanksuhy ac-  
knowledged.' ’Whence it should’seem, that more regard is due  
to the Apparito and Longings os the Patient, is they be not  
Very irregular, or immediately destructive, than is due to **the**more precarious and fallacious Rules of the Healing Art.

But,’ how advantageous soever it may he, in general, to keep  
the Patient from Bed at the Beginning os the Disease, yet  
sometimes he must be wholly, confined to it before the Erup-  
tion. Thus, when a Child,'aster Dentition, is suddenly seized  
with Convulsions, we are to consider, that this probably arises  
from the Endeavour os Nature to drive out the Eruptions of  
the Small Pox,' Meafles, or Scarlet Fever, though they yet lie  
concealed in the Skin. In this dangerous Case, a Blister must  
be immediately applied to the Neck, and the Child put to Bed,  
and a Cordial exhibited with a small Quantity ofin Opiate ;  
by which the Cause os the Disease may he more forcibly ex-  
pelled, and the Disturbance, also, quieted, which gave Rife to  
the Fit. . Thus, for aChild. of threeYears osAge,'I prescribe  
five Drops of Liquid Laudanum in a Spoonful of Plague-water,  
or the like. I suspect, that Thousands os Children, besides  
some Adults, have been destroyed for want of considering, that  
these Convulsions are only the Forerunners of thesabove-men-  
tioned Diseases; whereas inconsiderate Practitioners, taking these  
'Fits, which are really symptomatical, for essential Diseases, and  
attempting the Cure by a frequent Repetition of ,Clysters, and  
other Evacuations, hinder the Eruption of the Small Pox, and  
prolong the Fits,'which they *so* solicitoufly endeavour to con-  
quer, and which would otherwise assuredly vanish spontane-  
oufly, upon the Appearance of the Pustules.' Besides, the Small.  
Pox, that is preceded by Convulsions .in Children, is generally  
distinct; so that the Patient may be put to Bed with much less  
Danger in the Beginning os the Disease.

But! have observed, that the Small Pox, which immediate-  
ly succeeds comatous Disorders, proves Very confluent; in  
which Case I rather, order a Blister, and the Opiate described  
.above, then let the Patient keep his Bed hesore the Eruption.  
But sometimes, though Very rarely, I have known the Fits of  
Intermittents preceded by such Convulsions; and have often seen  
them begun, and terminated, by comatous Disorders, both in  
Children andiAdults; But both these Symptoms require no par-  
ticular Treatment, it being only necessary to oppose the Fever,  
which is the primary and essential Disease. For, is I were m  
attend principally to these comatous Disorders-accompanying  
the Fever,;and accordingly endeavour to conquer them by  
Bleeding, Purging, and‘repeated Clysters, I should heighten

the Fever, and consequently increase the Coma, so as to con-  
Vert it into a fatal Lethargy ; whereas, .if I use all my Efforts  
to cure the Fever, the other Symptoms proceeding from it will  
easily Vanish.

Though the Patient may sometimes refrain from Bed in the  
Day-time, yet in extreme Sickness, an high Fever, enormous  
Vomiting, a Vertigo, rheumatic Pains of rhe Limbs, and the  
like Disorders, he cannot he indulged this Refreshment, these  
Symptoms indicating the contrary; which, if they be Violent,  
especially in the young and sanguine, prognosticate, that a large  
Quantity of Variolous Matter is generated in the Body, and  
threaten great Danger from the tumultuary Eruption of the  
Pustules, which will prove Very confluent. In this Case, there-  
fore, as ail Endeavours must be used to check the immoderate  
Ferment, winch will rage more by the continual Warmth of  
the Bed, and yet the Patient cannot be kept up by reason of  
extreme Sickness, it is indispensably necessary to bleed first in  
the Arm, and a sew Hours after to give a Vomit of the Infusion  
os *Crocus Metallorum,* which not only expels the Matter occa-  
stoning thin unusual Sickness, but refreshes the Patient so con-  
siderably, that heing much relieved, he is able to refrain from  
Bed -, and, in order to weaken the Force of the Ferment fur-  
ther, it will, also, be proper to give him a large Dose of Spirit  
ofEitriol in every Draught of Small Beer, rill the Eruption  
he over. Notwithstanding these Evacuations, and the Uss, of  
the cooling Drink, the Patient must refrain from Bed in the  
Day-time, if he can bear to fit up ; because these general Re-  
medies do not check the Assimilation of the Variolous Matter  
so effectually, as once cooling the Blood by drawing in the fresh  
Air, and breathing it out by the Lungs, which alone immedi-  
ately abates the symptomatic Sickness, as I have often experi-  
enced. But this unusual Method is necessary in those only  
who'are in the Prime os Life, whose Blood has been over-heated  
by Venery or Wine, and in others, (always excepting young  
. Children) who, together with the Small Pox, struggle with  
the above- mentioned Violent Symptoms. For, where the Blood  
is less inflamed, and the Symptoms milder, aS there is much  
less Danger of assimilating the Variolous Matter too hastily,  
neither the Evacuations, nor the Spirit of Vitriol, need be  
used. .

The Eruption being completed, which happens on the sixth  
Day from the Beginning of the Iliness, or the fourth, inclu-  
sive, from the first Appearance of the Pustules, the Patient is  
not to be longer detained from Bed, as the Case will scarcely  
admit of its being longer delay'd, if the Small Pox be of the  
confluent Kind. And let it be remembered, that this is **the '**Only Species os which I am now treating; for, is the Erup-  
tions be few and distinct, there is naturally little Danger.

From this time, the Eruptions increase in Magnitude, and  
inflame the whole Body, especially the Head ; so that the Pa-  
tient, if not a Child, grows restless, and cannot steep readily,  
which is next to be carefully attended to in this Disease; for  
the calmer the Motion of the Blood is, the better the Pustules  
fill, and come to their due Size; and, on the contrary, the  
more violent it is, the more the Eruptions sink, their farther  
Progress being checked ; so that the Expulsion of the peccant  
Matter is not only obstructed, but the Order and natural Pro-  
gress of every particular Phlegmon is, also, disturbed ; whence  
the Eruptions either do not come to Suppuration in due time.  
Or, instead of *Pus,* an *Ichor* is at length generated; and, in-  
stead os the yellow Matter, resembling the Colour os an Honey-  
comb, some black, or other preternatural Humous, unlike the  
genuine Eruptions of the Small Pox, is discharged. I con-  
ceive, .therefore, that Opiates are aS much indicated in the  
Small Pox, as any particular Remedy in any other Disease, as .  
they quiet the tumultuary Motion of the Blood and Spirits,  
which always accompanies the confluent .Small Pox. He,  
therefore, is not enough acquainted with the Nature of this  
r Disease, who esteems these Symptoms to proceed only from the  
Watchings; for though it may sometimes happen, in Watch-  
ings, that the Patient’s Spirits may be composed and calm,  
which srequentiy proceeds from taking Laudanum, so, also,  
the Spirits, being sometimes in Violent Motion, check the lau-  
dable eruption of the Pustules, though the Patient steeps much,  
which is worthy os Observation.

. Though I have given Laudanum several Years , successfully in  
this Case, yet I give the Preference to Syrup *of* Poppies, the-  
.cause I esteem Laudanum more heating ; but both may be used  
for the same Purpose. AS to the Dose of this Syrup, it is to  
he proportioned to the Age of the Patient, and the Urgency of  
the Symptoms; for what might be too much for one whose  
Spirits are composed, would he too littie for another, whose  
Spirits-are greatly agitated. For Instance, suppose in general,  
that six Drams is a sufficient Dose, yet in the Small Pox, when -  
the Medicine is required, near an Ounce must he given, in  
order to obtain the desired Effect ; and as much must be pre- -  
scribed for a Dofe, throughout the Course of the Disease. **We**

speak of Adults now; for in Children, the Dose must he les-  
sened in proportion to their Age. Children, however/have  
not the same Occasion for Opiates In this Disease, as Adalis;  
because they are more disposed to steep during the Course there-  
of; yet, when they are much endangered by the Disease, **I**should be afraid to refrain from Opiates. But if is difficult to  
settie the Dose of Opiates; for whether they be required in a tu-  
multuary Motion of the Spirits, a Violent Vomiting and Purg-  
ing, or severe Pain, these being the three Disorders in which  
Opiates are principally indicated, they are to be exhibited in  
such a manner, that if the first Dose avails not, it is to be re-  
peated at proper Intervals, till it answers the intention of the  
Physician, having less regard to the Quantity taken, than to  
the Effect it should produce; winch being answered, it is to be  
administered less srequentiy and copioufly. Nor must we for-'  
get to interpose such a Space hetween every Dose, that we  
may be able to learn, whether the last has taken Effect, hefore  
prescribing another; which heing obtained, the Dose is to be  
diminished in the Course of the Disease, aS there shall be Oc-  
casion. '

This Method I shall illustrate by a Case : On *April* I 3.  
I68I. a Neighbour of mine came to mo in Tears, begging,  
that I would visit her Son about ten Years of Age, who having  
been ill four Days, she apprehended the Small Pox. The  
Mother had, by the Advice os some Woman, given- him the  
Countess os *Kent's* Powder, and other hot Medicines; and had  
besides, in a manner, buried him under the Cloaths, in order  
to raise a Sweat, to which the Women have recourse in this  
Disease, as an assured Remedy. She had, also, given him a  
large Quantity of Posset-drink, in which Marigold-flowers and  
Hartshorn had been boiled ; which increased the Fever, and  
caused such a Disturbance of the Spirits, that the Child was.  
Very delirious, and could not be kept in Bed by the Attendants.  
The Pustules did not yet appear, at least Very Visibly, but lay  
Very thick in the Skin, the Eruption heing manifestly hindered  
by this Violent Method, which was intended to promote it. I ’  
ordered him to be immediately taken out os Bed, and mot to he  
laid in it again, excepting a-nights, till after the sixth Day:  
I, also, prescribed half an Ounce of *Diacodium* to be taken  
directly, which proving ineffectual, I ordered the same Dose  
to be repeated an Hour after, but unsuccessfully ; for the Blood  
was so violently agitated, that it could not he quieted before he  
had taken two Ounces and an half; but such a Space was inter-  
posed between every Dose, that I might be certain whet Effect  
the last had. Afterwards, I prescribed only half an Ounce, to  
he given every Night at Bed-time, to the End of the Disease ;  
which proved sufficient to preserve the Calm, that had already  
been obtained, by a more frequent Use of it ; -and thus the Pa-  
tient recovered. - - . . a

If the Heat and Motion of the Blood and Spirits be ex--  
tremely violent in the Beginning, an Opiate, though given inl-  
the largest Dose, and srequentiy repeated, will scarcely avail,  
unless the Patient quits his Bed ; for the Warmth of the Bed  
increases the Heat os the Disease, so as to render it necessary  
to exhibit the Opiate in a larger Dose, than, perhaps. Nature  
is able to bear.

I would have this Remedy first exhibited in .the Evening,  
when the Patient is wholly confined to his Bed, that is, the  
sixth from the Beginning *of the* Illness; and repeated after-  
wards, every Evening, till the seventeenth Day, or at least till  
the Danger be over. For on the sixth Day the fleshy Parts are  
inflamed ; whence the Head begins to be disturbed by the Hu-  
mours, which are, also, inflamed from this Cause.

But great Care must be had to give the Opiate earlier imthis,  
than in other Diseases; because a' kind os Fit of Heat, and  
Restlessness, always comes on towards Evening; at some times  
it happens; unless the .Opiate be given early at the Decline of  
the Disease, that the Patient, Becoming suddenly.some what  
heavier, immediately grows hot, and afterwards complains of  
Sickness, which soon terminates in Death, to the Astonishment,  
and contrary to ithe Expectation of his Friends, who, a little  
before, conceived great Hopes of his Recovery ; and his Death  
might, perhaps, have been, prevented by giving an Opiate di--  
rectly. On these Days, therefore,-hut especially on the ele-  
venth Day, I order the Opiate ro he given earlier, as at five  
or six o’Clock in the-Afternoon; and. a second Dose to he kept  
in Readiness, lest Sickness should come On suddenly.

Since, therefore, it is. so dangerous, either to omit giving an  
Opsste soon enough. Or on the other hand, to give it so early, that  
its quieting Virtue be spent before the Time comes for repeat-  
ing it; it is safest, in this Uncertainty,, to order an Opiate to  
he taken at a set Hour, every Morning and Night, at the De-  
clension of rhe' Disease, when there is most Danger. Nor is  
an Ounce of Diacodium always a sufficient Dose at these times ;  
for this Quantity avails no more in a violent. Inflammation of  
the Blood, and a Very tumultuary Motion of the animal Spi-  
rits, than half an Ounce in a milder Disease. For I have learnt-

from repeated Experience, that an Ounce and half is required  
in the young and sanguine, to mitigate the Violence os the  
Symptoms wherewith they -are seined ; and in such Subjects,  
this Dose may he repeated with Safety and greatAdvantage, at  
such times. Morning and Nioht, till the Patient recovers.

Sometimes, also, I have sound it necessary at the Decline of  
a had Species of the confluent Small Pox, to exhibit an Opiate  
thrice in. twenty-sour Hours, that is, every eighth Hour, on  
account of the Violent Motion, or Disturbance of the Spirits,  
occasioning some Sickness. But it is to he observed,. that if  
the exhibiting Diacodium so frequently be nauseous to the Pa-  
tient, which often happens on the above-mentioned Days,  
. Liquid Laudanum must he prescribed instead of it; sixteen  
Drops of which are equivalent to an Ounce of *Diacodium.*

.. I am well aware, that it will be objected by those Of a  
different Opinion, that the peccant Matter will he fixed, and  
the Salivation diminished, by repeating the Opiate so often, and  
in so large a Dose. But though the Ptyalism will indeed he in  
some measure abated, it will not, however, cease so entirely,  
as not to rife again in some Degree, after the Opiate has been  
taken a considerable time, .and its Virtue is nearly spent. Be-  
sides, the Patient, being strengthened by the Opiate, will he  
better able to expectorate the Phlegm ; and the Saliva, though  
less copious, will be better concocted ; and the Want os Sputa-  
tion is abundantly supplied hy the Swelling of the Hands and  
Face, which happens more certainly, and rises higher, from the  
repeated Use of the Opiate, on those Days wherein these Parts  
usually swell, that is, the Face from the eighth to the eleventh  
Day, when it commonly begins to fall; hut the Hands from  
the eleventh Day, till the Pustules upon these Parts be entirely  
\* , ripe; and the Want of either of these Swellings, when they  
ought to appear, threatens more Danger than the Stoppage of  
the Salivation. - -

But I would not be understood to advise the daily Use of  
Diacodium, though in a suitable Dose, in young Children af-  
flicted with the confluent Small Pox, unless the Case appear  
very dangerous; because Children are not so hot as.Perfons in  
the Prime of Lise; and their tender Age is less able to bear  
the continued Use os Opiates. Besides Children, thus affected,  
steep most Part of the T ime spontaneoufly, and are consequent-  
ly less sensible of the Tediousness of the Disease. Yet when  
the Eruptions are of a bed Kind, or when they become deli-  
xious, Opiates are always indicated ; these being certain Signs  
of the irregular Motion of the blood, and animal Spirits.

The Method of preventing the over-hasty Assimilation ofthe  
variolous Matter, at the beginning of the Disease, and the  
Manner of checking the inordinate Motion of the Spirits, arising  
from the Inflammation of the external Parts, are the two Points  
wherein the Cure of this Disease consists; as the ill Accidents  
which succeed for want of preventing these two Dangers, suf-  
ficientiy occasion those fatal Symptoms, which destroy the Pa-  
tient.

If there be Occasion for a Blister, it should be made Very  
large, and sufficiently sharp, and applied to the Neck; but nei-  
ther too early, that it may not cease running hesore the eleventh  
Day, which is attended with most Danger; nor deferred to that  
Day, so as to prove prejudicial at this time, from being laid on  
too late, by increasing the Heat of the Blood, which is then  
scarce able to struggle with the secondary Fever. The fittest  
Time, therefore, to apply a Blister, is the evening preceding  
the great.*Crisis* of the Disease, presently aster the Opiate which  
is to he.taken at this time. For, is it be applied now, the Pain  
it causes will go off before the critical Day ; and there will  
then be a Discharge of the peccant Matter, which is necessary  
to conquer the Violent Symptoms happening on this Day. For  
now the Swelling of the Face first begins to fink, .and the Sali-  
vation, which had hitherto been copious, to abate ; the Hu-  
mour which occasioned it being thickened, and, with Difficulty,  
raised. Besides, the Blister supplies, in some measure, the  
Sinking of the Swelling of the Face, and the Abatement of  
the Salivation ; and, likewise, contributes somewhat to check  
the secondary Fever, which is then Very high, the Blood being  
in a manner oppressed, and totally infected, with the Abun-  
dance of *Pus* absorbed from such a Multitude of little Impost-  
humes; so that, in most of the Patients I have treated in this  
Disease, I have observed, that the Pulse in the Wrist could  
scarce be felt at this time, though it was easily felt the pre-  
ceding, and following Day.

But, among all the Remedies that occasion a Derivation, or  
Revulsion, from the Head, none, in my Opinion, seems to  
operate so efficaciously aS Garlick applied to the Soles of the  
Feet. The Revulsion it occasions is evident, by the Blisters it  
frequently raises, and the intolerable Pain it sometimes, though  
rarely, causes, by inviting the Humours to those Parts, even  
without railing Blisters.; so thas, to eate is, j have found it  
necessary to order a Cataplasm, made os the Crumbs of white  
Bread, boiled in Milk, to he applied to the Part. In Adults, .

**I**

therefore, afflicted with the confluent Small Pox, I usually ap-  
ply Garlick siiced, and included in Linen, to the Soles os the  
Feet, from the eighth Day, when the Face first hegins to swell;  
and renew the Application every Day till the Danger be past.

I must further observe, that the Patient must be kept from  
Flesh throughout the Course of the Disease, and only allowed  
Small Beer for his common Drink. In the mean time, it will  
be convenient for him to live on Water-gruel, roasted Apples,  
and the like. Bus, upon the Approach os the Suppuration,  
when the purulent Particles return into the Blood, and taint the  
Mass, it will be proper to give a few Spoonfuls of Wine every  
Morning and Night. As to the Coverings of the Bed, they  
are to be entirely the same he made use os in Health ; and he  
is to be permitted to turn himself in Bed as he pleases, for the  
Reasons already given.

I will subjoin a Case, as a Specimen of this whole Procedure:  
I was called this Winter, to attend a Gentieman of a very  
sanguine Constitution, and in the Prime of Life. The Day  
hesore I came, he was seized with an high Fever, Vomited a  
considerable Quantity os bilious Matter, and had a violent Pain  
in his Back. In order to mitigate these Symptoms, he went to  
Bed, and, by heaping on Cioaths, and taking hot Liquors,  
spent a Day to no Purpose in endeavouring to force Sweat; the  
great Tendency to Vomiting, and the Purging, though mode-  
rate, rendering the Sudorifics ineffectual, and, in the mean  
time, increasing the Fever. I suspected the Small Pox would  
shortly appear, and, also, prove Very confluent, herb on ac-  
count of his Youth, and the great Inflammation raised in his  
Blood by the fruitless Attempt to procure Sweat, which, if the  
Disease had happened in the Summer, would certainly have oc-  
casioned bloody Urine, and purple Spots ; but chiefly because  
I have always observed, that, in young Persons attacked with  
excessive Vomiting, Sickness, and extraordinary Pain, the sue-  
ceeding Small Pox proved highly confluent. For this Reason,  
judging it requisite to use all Endeavours to prevent the too  
hasty Assimilation of the Variolous Matter, I kept him up till  
his usual time of going to Bed; and the next Day in the Morn-  
ing, which was the third, the Small Pox not appearing, I  
directed eight Ounces os Blood to be taken away from the  
Right Arm. The Blood was good and florid, having as yet  
only received the spirituous Miafina, and not that Putrefaction  
occasioned by a longer Continuance os the Disease. The same  
Day at five in the Afternoon, I exhibited an Ounce of the in-  
fusion of *Crocus Metallorum,* which operated well, carrying off  
las Sickness, so that he seemed much better, and willingly re-  
frained from Bed, winch he did not care to quit before, by  
reason Os his great Sickness and Giddiness. On the fourth  
Day in the Morning, I sound the Eruptions coming out so co-  
pioufly, notwithstanding the Endeavours I had used to prevent -  
it, that they threatened the utmost Danger; I was therefore  
Very cautious to keep him up in the Day-time; and advised the  
drinking of Small Beer acidulated with Spirit of Vitriol. This  
. Advice he followed to .the sixth Day, when, though he was  
not sick, but much refreshed by the Air, yet his Belly was so-  
luble hetween whiles ; towards Night he was obliged to *go* to  
Bed, which is common in this Case; and therefore he. con-  
tinued therein, by my Consent, during the whole Course of  
the Disease, the Eruption being now over. Though the Pus-  
rules were sewer than I have observed in some that died of this  
Disease, yet they were more numerous than they generally are-  
in most that recover. I first exhibited this Evening, an Ounce  
of *Diacodium,* in Cowsiip-fiowecwater, and directed it to be  
repeated every Night: I likewise advised, that he should have  
no more Cloaths laid on him, than he was accustomed to in  
Health; and prescribed for his Diet, Water-gruel, Barley-  
broth, and sometimes a roasted Apple; and, for his Drink,  
Small Beerl On the eighth Day I ordered fliced Garlick, fold-  
ed in Linen, to be applied to the Soles os the Feet, and renew-  
ed every Day, till the Danger was past. Aster this, the Pus.  
tales ripened kindly to the tenth Day, when. Visiting him in  
the Morning, though I found him in a fair way, yet I perceived-some Signs of the secondary Fever, along with some kind of  
Restlesness. Apprehending, therefore, the approaching Dan-  
ger, I immediately exhibited the Opiate above-mentioned, winch  
quieted all the Symptoms; and the same evening I prescribed  
an Ounce and half of Diacodium. The next Morning, which  
was.the eleventh Day, (the Virtue of the Opiate, he had taken  
the Night before, heingspent) he began to grow restless again,  
whereupon I gave him the same Quantity immediately, and re-  
peated it in the Evening, and ordered it to be continued Morn-  
ing and Night, till he was perfectly recovered. The Patient  
complied, and no dangerous Symptom afterwards appeared,  
except a Suppression of Urine sometimes, which frequently at-  
tacks young Persons in thisDisease; but he, however, made Water  
kneeling in Bed. With regard to the Salivation, though it was  
checked, in some measure, by the frequent Repetition of Opi-  
ates in so large» Dose, yet at distant Intervals, - from the Use  
- ef

of them, he expectorated concocted Phlegm, and his Face and  
Hands swelled sufficiently at the proper time. On the eight-  
eenth Day he rofe from Bed, and then I first allowed him to  
sup some Chicken-broth; and afterwards he returned by De-  
grees to his usual manner of Living. On the twenty-first Day,  
eight Ounces of Blond were taken away from his Arm, which  
resembled pleuritic Blond, and differed littie from *Pus.* Lastly,  
he was purged four times at proper Intervals.

It is here to be noted, that aS often as the Day, from the  
Beginning, of the Illness, is here mentioned, for instance, the  
sixth, the eleventh, and the like, I would not 'he understood  
to infinuate, that the confluent Small Pox always comes out on  
the third Day ; because I am well aware, that sometimes, even  
in the worst Species, the Pustules do not appear till after the  
third Day. But in general the Eruption happens on the third  
Day, inclusive, from the Beginning of the Disease. Thus a  
Person who is seized with the confluent Small Pox on *Monday,*will find the Pustules appear on the *Wednesday* following; and  
the second *Thurfday* after the first *Monday,* will be the eleventh  
Day, which is full of Danger, unless the Physician prevents it.  
And I repeat it once more, that these Observations relate only  
to the confluent Small Pox.

The same illustrious Author, in another Dissertation, gives  
us some further Remarks on the putrid, or secondary Fever,  
happening in the Small Pox, to the following Effect:

I have already shewn wherein the great Difference consists  
between the distinct and confluent Small Pox; that the distinct  
Kind is so Void of Danger, aS to stand in need os Very little  
Assistance from Medicine, unless the Patient happens to pro-  
mote Sweat in the Beginning, by lying always in Bed. But  
the youthful Part of Mankind chiefly perish by the confluent  
Small Pox, when the Patient, who before seemed to be in no  
great Danger, is often seized on the eleventh Day, or one of  
the other dangerous Days already mentioned, with an high  
Fever, Very difficult Respiration, and great Restlesness, which  
suddenly put an End to his Lise, to the Astonishment of his l  
Friends, who, till this fatal Period, had Hopes os his Reco-  
very. In this Case it ought to be considered, that this adven-  
titious Fever, which happens in the confluent Small Pox, is a  
Distemper entirely different from the Small Pox, and that Fe-  
ver, which either precedes the Eruption, or arises sometimes  
from the Inflammation of the Pustules at the Beginning : For;  
properly speaking, it is only a putrid Fever, proceeding from  
the Transmission of the putrid Particles of the Pustules, now  
in a State of Suppuration, into the Blood; which, being preju-  
dicial to Nature, at the same time insect the Patient, and oc-  
casion a’ very malignant Fever.

Those, then, are the only proper Remedies, which will most  
effectually check this secondary, or putrid Fever; and nothing  
answers this Intention better, than plentiful Bleeding, which  
clears the Blood os the morbific Particles which nourish the Dis-  
ease. Nor is this Practice, in my Opinion, in the least con-  
tra-indicated by the Distemper, considering the present State *of*the Eruptions, since, if the Patient should die at this Period,  
and he interred, yet the Eruptions, being crusted, could not re-  
Cede, nor grow less. And, in Effect, we have nothing to do  
now with the Small Pox, but with the putrid Fever, which is  
a Very different Disease.

When, therefore, the Patient is threatened with immediate  
Death, from the uncommon Violence of the Symptoms, with-  
out speedy Assistance, whether it be on the eleventh Day, or  
afterwards, I order ten or twelve Ounces of Blond' to be im-  
mediately taken away from that Arm; which hath the fewest  
Eruptions, as heing the fittest for the Operation, for though  
Opiates, and refraining from Bed in the Day-time, may be suf-  
ficient in the Beginning of the Disease without Bleeding, to  
conquer the Fit which comes mostly towards Evening; yet on  
these Days of the secondary Fever, plentiful Bleeding alone can:he safely depended on ; this being the sole Means of quieting  
the present Tumult. An Opiate is, therefore, to be exhibited  
in a large Dose, in the Evening, as before; and it is to be re-  
peated from this time. Morning and Night, and sometimes  
oftener, as there is Occasion : For it must he carefully noted,  
that the Symptoms in some Persons are so extremely Violent,-  
that an Opiate given in a Very large Quantity cannot overcome,  
nor even check them in less than twelve Hours ; in which Case  
it is indispensably necessary to repeat the Opiate in the same  
Dose every fix or eight Hours. -

. But, as it frequently happens in the Declension of the Dis-  
temper, partly from its Nature, and partly from the greats  
Virtue of the Opiate, that the Patient becomes so Very costive,.

-as to he in Danger of Suffocation, and that the Fever rises so  
high, aS to leave little Hopes os .Recovery, we must suit the.  
Remedy to -the present Exigency ; and less Danger will ensue  
from taking a gentle Purge, than from the Fever much increased  
by the Retention' of the Faeces. I have successfully ordered  
here, an Ounce and half of lenitive Electuary to he dissolved-

in sour Ounces os some small distilled Water, as of Succory, of  
Milk-water, and taken immediately; and, though this Draught  
may not operate speedily, on account of the usual Costiveness  
in this Disease, and, alsio, of the long-continued U so of Opi-  
ates, yet being administered in the Morning, it ordinarily gives  
a few Motions before Night ; but, if it should not, the Opi-  
ate must he exhibited in the Evening, and indeed earlier, not-  
withstanding the Purge, if.great Restlessness, or Sickness,  
threaten Danger, lest the Patient, for want of this Assistance,  
should perish, whilst the Operation of the Medicine is waited  
for. Nor will so mild a Purge occasion the least Mischief,  
though it should not work at all; so that, if it does not answer .  
the Intention the first Day, repeat it the next, which will sei-  
dom sail to work. But, if it should seem to have procured a  
sufficient Discharge for the present, and the Patient grows bet-  
ter, the second Draught may be deferred to another time.

In this manner. Bleeding and Purging may be repeated by  
Intervals, as the Fever and Restlesness seem to require, till  
the Patient be out of Danger. But, let it be carefully remem-  
bered, that a Purge IS not to be exhibited till the Declension  
os the Disease, that is, on the thirteenth, or subsequent Day j  
and not then, unless some Blood has been taken away upon the  
first Appearance of the secondary Fever.

Though purple Spots may be removed by duly cooling the  
Blood, yet both bloody Urine, and a violent Flux of Blood  
from the Lungs, ordinarily soreshew certain Death: Never th e-  
less, this dreadful Difficulty may, likewise, be overcome,'and  
Lise preserved: For as both these Symptoms proceed from the  
vehement Inflammation, and of course, the exceeding Thin-  
mess, or dissolved State of the Blood, such Medicines as cool,  
and, also, thicken the Blood, by their binding and incraffating  
Quality, admirably cheek these Bleedings. For this Reason,  
sister Bleeding once plentifully, give an Opiate.

Take of distilled Water of red Poppies, two Ounces ; Li-  
quid Laudanum, fourteen Drops; distilled Vinegar, three  
Drams; Diacodium, half an Ounce: Mix them together  
for a Draught.

Then, let the following, or the like Remedies, be used till  
the Bleeding stops. .2

Take os the Troches of *Lemuian* Earth, and *Armenian* Bole,  
each a Dram; Seal'd Earth, Blood-stone, Dragons-blood,  
and prepared red Coral, each half a Dram; Mastich, and  
Gum Arabic, each a Scruple : Make them into a fine  
Powder ; of which, let half a Dram be taken every three  
Hours, in a Spoonful of Syrup of Comfrey, drinking after  
it four or five Spoonsuis of the following Jiilap: -

Take of the best distilled Waters of Plantain, and Oak-buds,  
, each three Ounces ; Cinnamon-water without Spirit, two .

Ounces; Syrup of dryed Roses, an Ounce ; Spirit of  
Vitriol, enough to give it a moderate Tartness : Mix **the**

. Whole for a J ulap. .

In the mean time the Opiate above prescribed must he given -  
in the Evening: Emulsions, also, made .of the sour greater  
cold Seeds, and white Poppy-seeds, are Very beneficial. But,  
after the Bleeding is stopped, the Distemper is to be treated in  
all other respects, according to the Method above delivered. -

When I order Liquid Laudanum, I mean my own Lauda\*  
num, which is prepared in the following simple manner;

. Take of *Spanisu* Wine, one Pint; Opium, two Ounces;  
Sastron, one Ounce Cinnamon and Cloves, reduced tor  
Powder, each one Dram t infuse them together in a Bath-  
heat for two or three Days, till the Tincture becomes of

\*; a due Consistence ; and, aster straining it off, set it by for  
Use. . ' - .

**. I** would have the Syrup of Poppies, or Diacodium, thus  
made : '

Take of the Heads os the white Poppy, well drsid, fourteen  
Ounces ; let them infuse for twenty-four Hours in a Gal-  
lon of Spring-water; then boil them well, and press out  
the Remainder strongly; to which add, twenty-four'  
Ounces of Sugar, and boil them together into a Syrup. '.

- I esteem these two Preparations the best of their Rind, espe-  
cially the*Diacsodium,* an Ounce of which will do more Ser-  
vice, than two of that which is made with green Poppy-  
heads, (without pressing the Liquor out so strongly) and'  
a large Quantity sometimes of the black Heads of the wild-  
Poppy, which have little Virtue. Accordingly, whenever I  
am not satisfied about the Strength of any of These Opiates, I  
usually order, in their stead, a' Grain and- half,, or two Grains,-

of solid *London Laudanums,* disiolved in some proper distilled  
Water; by which means I avoid making any Mistake, and  
injuring my Patient.

*Helurtius,* like other Authors, divides the Small Pox into  
. distinct and confluent. Os the distinct Species he mentions two  
Sorts, the *simple,* and the *malignant,* winch last, he again di-  
vides into two Species.

The confluent Small Pox he distinguishes, into the *simple,*and. the *malignant*; of which last he makes four Species.

THE SIMPLE **DISTINCT.**

The simple Distinct are distinguished from the other by a  
Cessation of all the Symptoms aster the eruption. The sqm\* ,  
ptorns are, a brisa Fever, Drowsiness, Deliriousness, convulsive  
.Motions, Head-ach, Pains about the Region of the Kidneys,  
**a** Propensity to Vomit, and Vomitings. In this Case the Pa-  
tient must be blooded in the first place. *Helvetius* recommends  
Bleeding in the Foot, if the Physician is called in late. The  
Patient must, also, drink a large Quantity os a light Ptisan ;  
and must have an emollient Clyster, made purgative, if occa-  
sion requires. He must be supported with Broths made of Veal  
and Fowls.

When' the Violence of the FeVer is a little over, he must  
take a Vomit; and be gently purged in case the Vomit do not  
work downwards. Nor need one to sear to purge the first or  
second Day, in case the Symptoms require it.

The Patient’s Regimen, aster the Eruption, must be os Broths  
somewhat stronger, to which Bees may be added with Rice.  
He must, also, take twice or thrice a Day an absorbent Potion,  
composed *of* simple Water, and some testaceous Powders, as  
Powder of Coral, Crabs-eyes, prepared Pearls, Species Con-  
fectionis Hyacinthinae, the Countess os *Kent’s* Powder, and dia-  
phoretic Antimony. In Children subject to Worms or Con-  
vulsionS, or in case their Stools are greenish or flimy, the  
*Pulvis ad Gutteiam,* Oyster-shells, and calcined Egg-shells,  
are preferable to those above-named.

If the Pock does not rise, and the Circle at the Base becomes  
pale, the Patient should take a larger Dose of diaphoretic An-  
timony, or the Countess of *Kent's* Powder ; or with an Addi-  
tion of Saffron, or Theriaca. In case the Belly is not relaxed,  
he must take a Clyster, especially if an Adult, aS he may a  
fentle Narcotic, in case of Want of Sleep, proceeding from  
ain and Uneasiness caused by the Pock. These Narcotics  
should be mixed with some Absorbent, in order to hinder them  
from growing souron’the Stomach. Whilst the Pustules su ppurate,  
he must not drink such large Quantities of Broths as before; but  
plentifully of some light. Ptisan, with some proper Apozem.  
When the Suppuration is over, he may come to a stronger  
Regimen, but continue his Ptisan, and take a Clyster every  
Day. As soon aS ever the Pock falis off, the Patient must be  
purged, which must be often repeated to hinder ill Conse-  
1 quences.

**THE DISTINCT MALIGNANT.**

In the *Distinct malignant,* the Patient has a burning and con-  
tinued Fever ; a great Oppression ; a dry and burning Skin; a  
\* considerable Pulsation in the Carotid Arteries; a Stiffness of  
the Tendons; the Eyes animated and sparkling ; and the Ves-  
sels of the *Tunica Conjunctiva* red and distended; a considerable  
Pain in the Small of the Back and Head, ostenest without De-  
Iirioufnefs, And without Heaviness or Inclination to sleep.  
These are the Symptoms before the Eruption. These Sym-  
ptoms generally cease after the Eruption; but the Fever soon  
after returns, and brings on frightful Dreams, Deliriousness, In-  
quietudes, Bleeding at the Nose, more particularly at the Increase  
of the Fever, often profuse Sweats, notwithstanding winch, the  
Skin remains burning, and dry.

Frequently upon the Skin, between the Interstices of the  
Pocks, red Spots appear, which make a fort of universal In-  
flammation. ...

The Fever, and other Symptoms, increase at the Suppura-  
tion, as, great Agitations, Violent .Deliriousness, and convul-  
sive Motions; notwithstanding which, the Pock remains ele-  
vated, and of a good Kind.- As the principal Danger in the  
. .Small Pox is the inflammatory Fever, so the greatest Care ought  
to be taken to diminish this, especially at the Suppuration,  
\* when there is the most Danger, the Symptoms then increafing  
-considerably. For answering this intention, the Physician must  
order the Patient to be blooded in the Arm, if he is sent for  
before the Eruption, or when the Eruption is but just begun.  
But in case he is called in mo late, he must not neglect Vene-  
section immediately in the Foot. For this Species of Evacua-  
. tion, besides the Advantage common to it, and Venesection in  
the Arm, which is diminishing rhe Quantity of the Blood,’is  
excellently calculated for making a Revulsion, and by that  
means keeping the Brain, and Parts adjacent, free from In-  
^arnmation. But Bleeding in the Foot is never- so effectual.

unless the Blood-vessels of the Body are first sufficiently empti-  
ed. Mean vthile. Care must be taken to dilute the Humours,  
by a plentiful drinking some proper Ptisan, and diluting Apo-  
zem, every third Hour, and to ease the Intestines by some pro-  
per Clyster. But the principal Care must be to observe the  
Diminution os the Fever, and then exhibit a Purge, and, also,  
a Vomit. *Helvetius* prefers soluble Salt of Antimony ; but the  
Emetic must not he given till the Vessels are emptied enough ;  
afterwards, if the Evacuation is not large enough, a Purge  
must be given; after which, some absorbent Draughts every  
third Hour. If more Evacuation is required, a Purge, Vomit,  
or both, may be repeated, to hinder Returns of the Fever, col-  
liquative Sweats, Haemorrhages, Suppression of Urine, *etc.  
Helvetius* orders a febrifuge Ptisan of the *Peruvian* Bark,  
with the Leaves of Borrage and Bugloss ; but never when the  
Skin is burning, and the Tongue dry, nor continued past the  
south Day. Sometimes the Patient must he blooded twice or  
thrice in one Day, and be purged the next; and even sometimes  
take a Vomit, or a Purge, some sew Hours aster the last Bleed-  
ing, according as the Symptoms are Violent, the Quickness of  
their Increase, the Ardour os the FeVer, and the quick Returns  
os it; so that there is but little Interval between. Is all this  
should have been neglected at first, before the Eruption, they  
must be put in Practice the three first Days of the Eruption.  
And though the Effects are more uncertain' in this latter Case,  
yet. all the III that happens from it is, that the Circles are  
paler, and the Eruption more flow. A gentle stow Eruptiori  
is better than a precipitated one. When the Symptoms do not  
demand the Ptisan os the Bark, the principal Care must be to  
dilute the Blood, and evacuate its Salts by the urinary Passages,  
to keep up a free Transpiration, and to keep the Intestines .  
relaxed. *Helvetius* recommends diaphoretic Antimony for this  
Purpose, and says, he uses it in the *distinct simple* Small Pox, -  
when, being called in too late to purge, he observes any Sym-  
ptom, which ought to determine him to purge. In case dilu-  
ting Apozems do not keep the intestines relaxed enough. Clys-  
ters mush be used ; or two, three, or four Grains of soluble Salt  
os Antimony, disiolved in four Doses of the Apozem, which  
he recommends, and says, it may be used from the Eruption to  
the Suppuration, theFever os which it diminishes. If a Loose-  
ness happens aster the Eruption, and immediately before the  
Suppuration, or whilst it last, if the Stools are crude, serous,  
and greenish, they must be corrected by Absorbents Incase  
the Looseness, appears crude and serous before, or at the Begin-  
Ding of the Eruption, Absorbents must be deferred till aster  
some proper Cathartic. But, if the Looseness is bilious, and of  
a good Kind ; if it do not stop the Eruption, or the Fever do  
riot increase, it is Very salutary, though it happens at the time  
os Suppuration : And should it cease too suddenly, it must he  
provoked again. But is the Evacuations are too large, they  
may be moderated. *Helvetius* thinks Clysters Very proper thro’  
the whole Course of the Disease, is the Patient has his Belly  
swelled, if he finds a Working of his Intestines, and Uneasi-  
ness. The Patient ought, also, to drink a large Quantity of  
Liquors. In case of Watchings and Inquietudes, agentleNor- ''  
cotic maybe used, provided that there are no considerable Com-  
plaints of the Head,uro Deliriums, Convulsions, Giddiness, nor  
Heaviness; provided, also, that the Watchings, *etc.* are not caused -  
by the Violence of the Fever: In which Case only, byrup os white  
Water-lily should be tried. But in case they are so violent as  
to oblige to have recourse to a Narcotic, *Sydenham?s* Liquid  
Laudanum, or some other Composition charged with Aromatics,,  
which correct the Opium: For *Helvetius* has often remarked,  
that Opium, Or the *Syrupus e Meconto,* by themselves, have  
often caused troublesome Drowsiness, and increased the Deli-  
rium. '

At the Suppuration the'diaphoretic Antimony must be lest off,  
and the Apozem taken alone, or with some testaceous Powder,  
and diluting Liquors must he drank in great Plenty ; the  
Broths the same as prescrib’d before. When these Deliria,.  
Convulsions, *etc. zprivi* violent, they are mortal. In cafe an-  
Epispastic can be applied twelve or fourteen Hours before these  
Symptoms are grown considerable, it is the best thing that can  
be applied, both to stop and prevent the ill Consequences. Tn  
cafe the FeVer retums, aster the Suppuration is ended. Emetics  
and Cathartics succeed best; if the Pus is too thin, and hinders  
the Suppuration, the Pocks must all be cur, and, .mean While,  
Cathartics and LenientS must be used. \_

: The second Sort of the *distinct Malignant* is, when there is a  
strong Fever with Purples, and a Multitude of little Vesicles,  
fill’d with a limpid Serum, more particularly on the Breast, and  
Very few Pocks: This must be treated aster the manner of,,  
*malignant* Fevers.

**THE CONFLUENT SIMPLE.**

in the *confluent Simple* the Fever ceases, for the most part,  
after the Eruption, but returns Violently at the time os Suppu-

ration, and sometimes with an Inflammation. Though it is  
difficult to tell if the Lymphatics have been obstructed from  
the Beginning, or not; the following are, however. Signs of  
.It, especially if they all, or most part of them, appear at once,  
though some separately may appear without any Obstruction.

If the Patient was not blooded at first, and has taken strong  
Cordials.

Is he is too drowsy after the Eruption.

If he seek a continual Humming, and Noise, in his Ears.

If, daring his Drowsiness, he has flight and frequent **Wan-**derings, " ' ’ ' /";

It he is uneasy, and tosses about.

. If his Belly remains Puffed, and swelled, although it has been  
**evacuated** by Clysters.

' If the Tongue is very dry.

. If his Urine' is made in a small Quantity, and that high-  
colour’d.

If the Pock is stat, and sunk in the Centre.

Though there is no Reason to suspect any Obstruction from  
**the** Beginning, yet there in great Danger at the Suppuration;  
and the only Reason one can have to hope for Recovery’, is, the  
Management of the Patient from the Beginning. Convulsions  
and Raving are Very bad Accidents; and, if they come on a  
sudden, at the latter End os the Suppuration, and after proper  
Evacuations by Bleeding and Cathartics, they almost always  
prognosticate a near and inevitable Death: But if proper Eva-  
cuante have not been us’d, they are less dangerous, there being  
a Possibility of preventing the ill Consequences by Bleeding, Ca-  
thartics, *etc.*

This Sort of Small Pox is not near so terrible as the *distinct  
malignant :* It is, however. Very dangerous, about the Time of  
Suppuration. When the Patient is first seiz'd, he must he  
blooded in the Arm, once or twice, if he is past Twenty, and  
of a sanguine Constitution ; and afterwards must be blooded in  
the Foot. “ . . . ss

Afterwards, Cathartics and Emetics must he us'd, but with  
sthis Precaution, that as there is not now, as in those of the  
*malignant* Kind, any Fever independent and distinct from the  
Small Pox to combat, for that Reason the Evacuations must  
he less: After proper Evacuations, the three principal Views  
must he, to dilute the Blond ; to promote a large Quantity of  
Urine; to attenuate; the Bile, and make it fit for Secretion:  
For no Part of the Body is so subject to he disorder'd in this  
Sort of Small Pox, as the Glands of the Liver, which often  
causes irregular Fits of a Fever, Haemorrhages, Vomiting,  
Weaknesses, *etc.* To satisfy these Intentions, the Patient  
must take fifteen or twenty Grains of diaphoretic Antimony,  
**and** half a Grain of soluble stibiated Salt, in four Ounces os  
some proper diluting Apozem. ‘When the Suppuration begins,,  
the diaphoretic Antimony and Salt must he discontinued, and  
the Apozem given alone. Or with some simple testaceous  
Powders.

It sometimes happens, that, at the first Days of the eruption,  
**the** Pock is not elevated as it ought, but is sunk at the Centre:  
In this Case, the diaphoretic Antimony must be us'd without  
the soluble stibiated Salt; and, if that is not sufficient, some  
Kermes Mineral, the Countess of .Kent's Powder, or the  
Species for the Confection of Hyacinth, may he join'd to it.  
Is the Urine is thick, of an ardent or deep-colour'd Yellow;  
one must have recourse to *Glauber's Sal Mirabile ;* Clysters are,  
also. Very useful: The Regimen must, also, tend to dilute and  
sweeten the Blood. Often, at the End of the Suppuration,  
arrive, a brifk Fever, Haemorrhages, Convulsions, a profound  
Heaviness, Weaknesses, or Syncopes, and Inclination to Vomit:  
**In:** this Case, if the Patient has not had necessary Evacuations,  
and these Symptoms have not yet appear'd in the Course of the  
Disease, he must he immediately blooded in the Foot, even  
though the Pock is still suppurating. In case the Symptoms  
require it, it may he safely repeated, ufing, at the same time,  
diluting Apozems.

When these Symptoms are preceded by a distinct Fit of Shi-  
vering, a Ptisan, of the *Pcruvian* Bark, must he us'd; but  
**after** Bleeding, and when the Fit is considerably diminish'd. **In**ease the Patient has a Propension to Vomit, or Weakness, Επι-  
ctation, or a swell'd Stomach, he must take a Vomit after  
Bleeding; but not unless the Diminution Of the Fever, and **the**End os the Fit, permit.

On the contrary, if the Symptoms have been eas’d by Bleed-  
ing and Diluters, the Patient must wait for his Cathartics and  
Emetics, till the Suppuration is entirelyxnded.

Sometimes these Accidents do not appear, till the Pock is  
dry'd, and the Suppuration ended: To avoid a Return of the  
Fever, the Patient must be purged, or Vomited, immediately  
after Bleeding: This Practice has always succeeded perfectly  
well with *Helvetius.*

' But if these Symptoms appear'd at first, or in the Course of  
the Distemper, one can expect no Success from these Methods,

but must have recourse to VesiccatorieS, the only Remedy that  
can he of Service; which will not avail, unless applied, at  
least, twelve or fourteen Hours hesore the SymptornS areat chein  
Height. Bleeding, after the Suppuration, succeeds, in thin sort,  
Oftener than in the *malignant* ones.

**THECONILUEKT MALIGNANT, CALLED CRYSTALLINE.**

All the four Sorts of the *confluent malignant* Small Pox have  
this common Symptom ; the Fever never ceases throughout the  
whole Course of the Distemper: The first Sort is distinguish'd  
by the Pocks, which are clear, transparent, and full of a lim\*  
pid Serosity; wherefore they are call'd *crystalline.*

Though it is difficult.To distinguish.thin Sort at first, yet it  
may he guess'd at, by a brisk Fever, a considerable serous  
Looseness, a great Headach, and great Thirst; the Skin of **a**white pale, and all the Parts a little fwell'd: At the Erup-  
tion, the Pock appears of a paler red, rises sooner, and higher,  
and becomes larger than in tho other Sorts ; the Circle at the  
Base remains always paler; the Pellicle, which contains the  
Humour, is very thin; often many Grains join, and form a  
Sort of Bladder full of Serosity, which, if pierced, and the Li-  
quor let out, looks pale at Bottom: All the Parts, in general,  
have an extraordinary cedematouS Swelling; and, at last, the  
*malignant* Fever manifests itself, by Symptoms proper to it, or  
a miliary Erysipelas. As the Blood, in this Sort os Small Pox,  
is too fluid, there is no Occasion to bleed so much aS in the  
other Sorts: But as the Head is always disorder'd, 'there is a  
Necessity for bleeding in the Foot, which has seldom Occasion  
to be repeated. One of the principal Accidents is, a Flux of a  
crude, serous Matter, of a green or whitish Colour; in which  
Cafe the Patient must he gently Vomited. *Helvetius* 'recom-  
mends one Ounce of the Magisterial Syrup, and ten or twelve  
Grains of Ipecacuanha, mix'd up with seine spirituous Cordial ;  
aster which, some Bolus, of the testaceous Powders, must bo  
given : The next Day, Or. Day after, some gentle and ashin-  
gent Cathartic; after that, a Draught, with some testaceous  
Powders, or very gentle Astringents, and in a small Quantity';  
for the Flux must he moderated only, not stopt; insomuch,’  
that, in case it should stop, or diminish so much that the Belly  
becomes swell'd, it must he promoted by proper Clysters. If  
there is any Occasion for Narcotics, Only the *Syrupus de Nym\*  
phaa* must be us'd. ‘ " -

' In case the Fever and Looseness return towards the End of  
the Suppuration, (for during the time of Suppuration the afore-  
said Conduct must be observ'd) proper Cathartics must be us'd,  
hut defer'd longer than, in the other Sorts; because the Hu-  
mour suppurates flower: When the Suppuration is entirely .  
ended, the Pus should be let out of the Pock all over the Body,  
**the** Face excepted. During the whole Course of this Distem-  
per, as the greatest Danger proceeds from a total Dissolution of  
**the** Juices, so the Design ought to he, to give them a Consist-  
ence. The Patient should never take, at the same time, Emul\*  
fions, or milky Liquors, and Acids; nor Acids, and testaceous  
Absorbents.

**THE SECOND SORT OF THE CONF LUENT MALIGNANT. .**

The Accidents that appear hesore the second Sortos the  
*confluent malignant,* are much the same as those preceding the  
first Sort of the *distinct malignant*; but the Fever is generally  
brisker, and the Returns of it longer, and more Violent; but  
it is not always attended with Vomitings,' or a Propensity  
thereto, with Drowsiness, Wanderings, and other terrible  
Symptoms. The principal of the Symptoms are, a Beating of  
the Carotid Arteries, a Redness of the Eyes, and Stiffness of  
the Tendons.

The Eruption is often sudden, the Figure of the Pocks more,  
irregular than in the other Sorts, are stat in the middle, and:  
have their Circles of a deep Red : They rise but indifferently,  
especially on the Face, which puffs and swells from the Very first  
Day of the Eruption ; the Cuticle of the Face rises, and ap-  
pears all one Pock, flat, and of an even Surface. If there is.  
any Interval betwixt the Pocks, it is mark'd with erysipelatous,  
and, often, purple Spots; the Skin is dry, and very burning;  
sometimes there are abundant Sweats, though the Skin remains  
still’ Very het 5 the Urine is in a very small Quantity, and of a  
high-colour'd Yellow ; the Pulse is either hard and small, or  
very large, and Very much elevated; the Eyes sometimes are  
**red,** sparkling, and incapable of suffering the Light, sometimes  
Very heavy, and the Pupil dilated more than usual: The Pa-  
tient has violent Headache, especially if he has neither Drow-  
siness nor Wanderings: Inflexibility os the Tendons, convulsive  
Motions, and Deliria; are more frequent, and considerable,  
than in the other Sorts ; the Patient, in this, must bo blooded,  
and purged, as soon as possible: If, aster a sufficient Evacua-  
tion, the Fever remains still very strong and ardent, diluting  
Apozems mint he given alone; if it remains brisk,but less vio-  
lent, with diaphoretic Antimony, and soluble stibiated Salt*r* but

is the Fever is but moderate, and the Pock remain sunk in **the**a Otth1 or a Grain of KermeS Mineral must he  
given, instead of the Salt. If the Intestines are too much re-  
sax'd,fome of the Species os the Confection of Hyacinth,or Con-  
section os KermeS, must he added to the Apozem; or thePow-  
ders may he taken separately, drinking a .Glass of Ptisan. after  
it, in case there appears any Danger of too great a Relaxation  
os the Intestines. Is, at the Suppuration, the Accidents return,  
notwithstanding all these Precautions, the Effects .of Bleeding  
and Cathartics would then he fatal the only Things'that can  
he of Service, are Vesiccatories. .... si . . . . ,

About the End os Autumn, In the Year 17 Io, a Small Pox,  
of the *confluent* and *malignant* Kind, appear'd at *Paris,* and  
raged with such Violence, that no Remedies could afford Re-  
lies to those who labour’d under itf The Symptoms could not  
he hinder'd, either from appearing, or returning again in the very  
Beginning of the Suppuration; and. though the Suppuration  
does not generally begin till the fifth, or End of the fourth Day,  
in this Species it often hegan on the End of the third. No-  
thing was capable of stopping the rapid Course of the Sym-  
ptomS, and sew Patients were so happy as to escape their'Vio-  
Ience, in whatever Method they were treated, but generally  
died on the fifth or seventh Day of the Eruption, and,.some-  
times, at the Beginning of the Suppuration. The only Differ-  
ence we could then observe, was, that those who were blooded  
and purged in the Beginning, were inore calm, and less agi-  
tated, during the first Days os the Disorder : But this was a fal-  
lacious Respite, always succeeded by fatal Consequences, and  
only capable os imposing on those who had not had an Oppor-  
tunity of observing a great Number of such Patients. ' The  
Pain, and other Symptoms, were less Violent, but the Death of  
the Patient was not less certain.

In reflecting upon the Causes os this terrible Disorder, **I**imagin’d, that the excessive Heat and Drought, which had lasted,  
without Interruption, from the middle os the Spring^ had in-  
**duced** a Change in the Blood, by depriving it of its most serous  
Tarts; a Misfortune which may easily happen in *France,* where  
the Inhabitants generally neglect to defend themselves.from **the**Heat of the Sun, and to correct their Blood by proper All-  
**mente. '**

The Characters and Obstinacy of some other Diseases, which  
then raged, made us conjecture, thatall the Fluids of the Body,  
and especially the Lymph, were much inspissated, and'wanteda  
sufficient Quantity of that aqueous Vehicle which is so neceflary  
for their free Circulation: We, also, observ'd, that, in this  
Pock, of the *confluent* and *malignant* Kind, the Spit discharg'd  
during the Ptyalism was more thick and Viscid, than at other  
Times. The Neck, the Face, the Hands and Arms of the  
Patients, were Violently inflated, and far more firm and hard  
than they usually are on the like Occasions. When the Insta-  
tion was arriv'd at its greatest Height, and the Fever of the  
Suppuration hegun, the Spots disappear'd gradually more and  
more, till, at last, nothing at all was expectorated ; a Symptom  
which always prognosticates a speedy Death. These Observa-  
tions laid a Foundation for our suspecting,

i. That Symptoms, so terrible and frequent, depended on  
the Inspissation of the Lymph; which, being depriv'd of its  
Serosity, circulated slowly in the Vessels, and especially in those  
of the Head. .

' 2.. That this Lymph was Very susceptible of Raresaction, and  
.greatly dispos'd to obstruct the Veffeis; a Circumstance which  
- interrupted the Circulation of the Fluids, and, in a sew Days,  
prov'd fatal to the Patient.

The Remedies generally us'd, on Occasions of a like Nature,  
fueh as spirituous Cordials, and others, seemingly calculated to  
attenuate the inspissated Lymph, excited too great a Raresaction  
in that Juice, and put all the Fluids into too Violent a Motion;  
they augmented the Fever, threw all the solid Parts into a fatal  
Rigor, and, instead of rendering the Lymph fluid, they thicken'd  
it more, and often hasten'd the Death of the Patient.

AS aqueous. and diluting Medicines were incapable of pene-  
trating this inspissated Lymph, so neither could they subdue the  
Symptoms of the Disease; nor-could a Cure he expected from  
any other mild and temperate Medicines, which were too weak  
to attenuate and colliquate the gross tenacious Lymph. We,  
therefore, thought, we had Reason to have recourse to Vesi-  
eateries, as seemingly best calculated to answer the several In-  
tentions of Cure; and though the Success of these Remedies,  
when us'd, did not answer our Expectation, yet we concluded,  
that the Error must have consisted in applying them too late:  
For both Reason and Experience eVince, that Vesicatories ge-  
nerally evacuate het a small Quantity of Serum; that they  
.operate much less powerfully by their attractive Quality, than  
*by* their acrid Salts, which mix with the Blood, and effectually  
attenuate the Lymph, without exciting violent Commotions in  
the Fluids. Hence Vesicatories must he applied in the first  
Days of the Disorder, to prevent, *if* possible, the Obstruction

of the Glands and Vessels; for if suen'an Obstruction is once  
form'd, and arriv’d2 at a certain Heighe^E.esicatofieS'Ydo no;  
operate efficaciously; even though they 'shouldprocure aJEs-  
charge of a large Quantity of Serum.^'sq sc.'..- si. .

These Reasons influenced ns to.apply"Vesicatories on. the  
first, the second; or the third Day of' the Eruption; by which  
means, we sound the Appearance os fresh Symptoms prevented:  
But, jor- sear of exciting a too violent Irritation, we always  
. delayed the Application of the Vesicatories, till the Operation  
of the Purgative was entirely over: AndthiTCaiition *is so much***the** more necessary, because the Vesicatories-might; be mid  
placed by the Motion the Patient must heeeffarily use duringthe  
Operation of the Medicine. In ordered hinder theseFindleiS  
from communicating a preternatural Heat Io the Urine;-.’the  
Patient must be order'd to use no other Kind of Drink,then a  
Ptisan prepar’d with Mallows, or Barley. Esses

But the Use of Vesicatories ought, not to so persede spat of  
simple Apozems, with which we may thin diaphoretic Anti-  
mony, or Absorbents, orstibinted Salt,. according as thesitete  
and Condition of the Patient shall require, sese ' \~ ..

But if the Body is not kept sufficiently soluble, Lrritationsof  
**the** Bladder are to be dreaded, and some .other Symptoms,  
which, however, are of .a sat less dangerous Nature than These  
intended to be remov'd by the Vesicatories.’/.\* ‘ .. J - . T

It is Jo he observ'd, that/ in the Small Pox, Vesicatories  
adhere with Difficulty, and act but (lowly, on account of the  
Inflammation produced in the Skinby. the Pustules : Forw.hich  
Reason, the Plaisters us'd in this Disorder must the newly made,  
richly. impregnated with Powder - of Cantharides, sufficiently  
moisten'd with Vinegar, and secur'd, by proper Bandages;  
These Vesicatories ought to the lest on the Part sor about  
twenty-sour Hours, aster which, we are to cut off not only the  
Blisters which are elevated, bus, also, the Whole os the Epi-  
dermis, which is separated from the Skinss

The Dressing is tohe of the ordinary Kind, with fresh But-  
ter and Beet-leaves. ' ς

It frequently happens, that the Part of the Skin from which  
the Epidermis is remov'd, becomes *dry,* in a .Very short time, a  
sure Proof of the small and inconsiderable Effects the.Vesicaf  
tones have produced on the Lymph.

To remove this Misfortune, instead os Beet-leaves, we are  
to apply .a Plaister prepar'd of an Ounce of suppurative Clint-  
ment, and two Scruples or a Dram of the Powder os Cantha-  
rides. When a sufficient Difcharge is made from the Part, we  
are to remove the Plaister, and dress with fresh Butter and  
Beet-leaves. ’ -- - , ..

If Vesicatories have been applied from the first, one may  
judge of their good Effects, by the following Symptoms: .

If the Spitting is more abundans, and more fluid.

Is the Pock, funk before, now rises.

If the swell'd Parts grow less firm, and yield to the Touch, i  
Two Inconveniencies may happen from thefe Vesicatories:  
i. That the Humour in the Pock remains mo clear, and fluid.  
And, 2. That the Fever of the Suppuration is prolong’d. To  
prevent the first, all the Pocks, unless those on the Face, must  
he cut; winch Method, sometimes alone, makes the Fever  
cease; if it does not, gentle Cathartics must he us'd.. The  
Regimen must be incrassating. There is no Danger in using  
these Vesicatories, even to Women who have actually their  
Menses. . ;

**THE THIRD SORT OF THE CONFLUENT' MALIGNANT7-**. The third Sort os the *censipeent malignant* is preceded by the  
same Symptoms as the other *malignant* Kind ; but the Enin rich,  
hegins on the second Day. The Pock is of a black Colour,  
and but little elevated; -when open'd, a black, and very livid.  
Blood issues out, and the Bottom appears gangren'd. The  
Patient generally makes bloody Urine; many render it by  
Stool, and some by the Nosie, others by the Mouth, in Spite  
ting. Coughing, or Vomiting; some by the Eyes. The In-  
tervais between the Pocks are of an obscure Black, the Fever is  
brilk, -and the Returns Violent: They are almost always  
mortal/

If the Physician is call'd in time, he must begin the Cure by  
bleeding often in the Arm: If the Patient fpits or Vomits Blued ;  
is he has with these a Bleeding at the Nose, Violent Headache,  
Convulsions, Drowsiness, and Wanderings, the Patient must  
he purged gently, as soon aS.possible: Is there is no Evacuation  
of Blood by Stool, or .Vomit, he must, also, be Vomited:  
After **the** Effect of each Cathartic, or at the Interval hetwixt  
each, he must take some acid Potion. *Sydenham* recommends  
Spirit of Vitriol. If, by these Methods, the Patient can he  
brought to the End of she Suppuration, which seldom hep-  
pens, **the** Patient must take some gentle Cathartic, aster  
which, he must conform to an incrasiating Regimen; and the  
**Cute** must he ended by some Antiscorbutic.

**THE- FOURTH SORT Or ΤΗέ CONFLUENT MALIGNANT'  
. SMALL Pox. . squ'**

This Species of Small Pox partakes of the Natupe both of the  
*constucrtt* and *distinct malignant* Kinds, though it has a greater  
Affinity to the latter Species, since it hardly differs from it, and  
ought to he treated in the-fame manner.

The following Symptoms are favourable, *its ism malignant*Soft of SmallPox.. "'si. so' *si sisci.. .*

If the Fever, and all theSymptoms which preceded the Erup-  
tion, abate at the Eruption. stale .

If the Eruption ^gradual. 'sass .

.. The Elevation of the Pock, and the Redness of the Circle  
atcheir Basic . . \* ...st -- ;.. ; ..... ..

. .The Whiteness and Consistence of the Liquor contain'd in  
the Pock... ' ~ .... - . - .......

\ A Softness of the Skin and Tendons. *.--.so,.- 'A.*

~ A gentle Transpiration.'

. A moist Heat, ... .) ...'- - . . .» .....

A large Quantity of Urine, and that of a good Colour.

. No Disturbance in the Head, Breast, or Belly. ἀπό\*.  
A Cessation of all the Symptoms which generally accompany  
the *malignant* Fever, join'd to the Small Pox.

*Division of the bad Symptoms which appear in the Small Pox,  
into those bofore the Eruption, those at the Eruption, and those  
' atithe Suppuration.*

t. r. . **BEFORE THE ERUPTION.**

An Inflammation of the Eyes. .. . . . ...

.... A Violent Beating of the Carotid Arteries, if Compar’d with  
the Pulse. " ;

**A dry, hard, burning, and painful Skim ... '  
AT THE TIME OF THE ERUPTION. ' ’**

. A too sudden Eruption Of the Pocks, in which most of them  
'appear in twenty Hours.

; . A considerable Swelling of the Face and Head.

A Stiffness of the Tendons, without Convulsions.

' ' Profuse Sweats. - - - -

A Depressure, and want of Elevation, of the Pock.

.’ An erysipelatous Inflammation in the Interstices between -the  
\_ Pocks.

" A small Quantity of Urine, -and that thick and cloudy.  
A too large Quantity and Crudity of Urine.

~ An involuntary Fluxion of Tears, from one or both **the**Eyes, without, any considerable Inflammation of the Eye-lids,  
or when the Patient winks withone Eye oftener than with the  
Other, or can't endure the Light. :

- Such a *Confluence* of the Pocks, as the whole Face seems to  
the but one, is Very dangerous.

When the Ptyalism, whichthappens at the Beginning of the  
Eruption,, is thick and glutinous.

**\* ' AT THR SUPPURATION. . z ...**

If, at the Suppuration, all the Accidents, which Ceas'd at **the**-Eruption, return with Vinlencej the Patient is in great Danger.

When the Pus is clear ; not so ill in the crystalline Sort, as  
the others.

The Blackness of the Pock is a Very bad Sign, unless, upon  
Opening, some Drops of Blood are mix’d with the Pus, and the  
Sian at the Bottom appears of a Vermilion Red; but if it is of  
a blackish deep Red, it is Very bad.

When the Pock finks suddenly, -or the fwell'd Parts fink. .

When the Stoois are greenish, and serous, it is bad; when  
thick, bilious, and like a Pus, it is a good Symptom, provided  
the Pock does not fall.

When the Ptyalism ceases suddenly, and, at the same time,  
the Glands of the Throat swell, there is no Hope. - -

*A Pomatum, to ba ndd in the* Small Pox.

Take two Ounces of the Oil of the Four cold Seeds; of  
*Spertna Ceti,* two Drams; and of Virgin Wax, three  
Drams: Melt all in *Balneo Maries,* .and strain ; then shoe  
it down with a wooden Spoon,, and put it, by small Por-  
tions, into a marble Mortar: Beat the Whole, for three or  
sour Hours, with a wooden Pestle, pouring now-and-then  
upon it a little pure Spring-water: Then add some Drops  
of the Oil of Citron, or a few Spoonsuss of Orange-  
flower- water. . .

When this Pomatum is to.be us'd, we are.to take someof it  
on the Point of a Feather, and gently anoint all the Pustales on  
the Face. '

. We may begin to use in when the greatest Part of the Pus-  
tules, being suppurated, appear white, which generally happens  
about the End of the seventh Day ; though there would he no  
Danger in Using it before the End of rhe Suppuration. Thin

Liniment may he repeated frequentiy every-Day, and aright .to  
he applied as often as the Face becomes dry, in order to hinder,  
as "much as possible, the exterior Pellicle os .the Pustules front  
becoming hard and dry too soon.

. In preparing this..Pomatum, it is-absolutely necesiary to heat  
if Very long, in order to procure an intimate Incorporation of its .  
Ingredients,' anffrenderit as white and light as possible.

si Lt may he preserve for several Days,, without Corruption,  
provided it is kept in a cool Plane: Is it should become too  
thick, .ir must be again beaten in the Mortar, observing, now-  
and-then, to mix some Drops os Water with it. But if it  
should become yellow; or contract a-had Smell, we must use it  
no inore, but make a fresh Pomatum of the same Rind\*  
*Helvetius. so . .si ' J*

'εἴ'The SmallPox is a.Disorder very frequent among Infants ;  
and though it is so accurately describ'd by *Sydenham,* that his  
Account os it deserves to be read with the greatest Care, yet **I**shall .specify some. Things which evince, that the Small Pox  
may be reduced ro tho same Simplicity with the other Diseases,  
and that something ; is,. as yet, waning, in the Method os  
.Cure.". . ἐν καὶ „ . si . . . ......... . .j.-..

The Small Pox is generally epidemical, beginning first in **the**Spring, increasing in the Summer, languishing in the Autumn,  
generally disappearing in..the subsequent Winter, .and. next  
Spring returning in the same Order. The sooner Johegina  
before the End of the Winter, the more malignant spits Na-  
ture; and, the later it begins, the more mild and benign the  
Disorder in Hence it is chVinus at what particular Season of **the**Tear it is most dangerous. . . /; ... I ἰ  
'\* It seizes Persons :os all Ages, and Sexes, hut especially Chil-  
dren, provided they have not hesore labour’d under it. The  
more- Age has dissipated the Fluids, and corroborated thefio-  
lids,.the more Violent the Disorder: Hence the SmallPox is  
milder, and more easily cur'd, in Children, Womenf.and those  
os soft'or lax Habits,\* than in those accustom’d to Labour, full-  
grown, and old Persons. ' \*

. Though this Disorder is epidemical, -it is, nevertheless, 'con-  
vey’d from an infected to a sound Person, by a certain Conta-  
gion, which, heing lodg’d in the Air, is with it communicated  
*to* the Lungs, Fauces, Nostriis, Qesophagus, Stomach, and  
“Intestines ; so that the Disorder seems, at first, to arise from **a**jinall Quantity of poisonous, or peccant Matter. - ...

This contagious Matter, when mix'd with the Fluids, imme-  
diately produces certain Effects, which mutually succeed each  
other, such as Horripilation, Rigor, an acute Fever, an intense  
and perpetual Heat; a preternatural Splendor os the Eyes, .arlsmg  
from a Defluxion of A hot and subtil Liquor; an intense Pain  
of the Head and Limbs, but especially about the Parts below  
the. Pit of the Stomach; a Vomiting, and Nausea;; an insup-  
portable Inquietude; a Stupor *y* a Drowsiness ; and, in Infants, -  
tepilepticFits.

Tn the Beginning os this Stage of the Disease, the Blood,  
taken from the Patientis Veins, is beautiful, and resembling  
chat of a sound Person; but, on the third or fourth D.ay, it ap-  
pears like pleuritic, or inflam'd Blood, and the more it assumes  
this Appearance, the longer, or more Violent, the.Disorder has  
heen. . . . ....in .:. i.

This Stage continues in Proportionsto the Variety, os epide-  
Itiical Causes, the Violence of the Disease, the Habit os **the**Patient, and .the various Seasons of the Year. The longer this  
Stage naturally is, the milder it will he, -through all its: Stages ;  
and the shorter, the more Violent. .

Hence this Stage of the Small Pox seems to consist in an in\*  
-creas'd Velocity Of the Fluids, by.means of an.inflammatory

Stimulus mix'd with all the Parts os the Blood. :. '

The Small Pox, therefore, winch bears an Affinity to all acute  
inflammatory Disorders, is, in this Stage, with Difficulty di-  
stinguished from them: A Knowledge that the Disease rages  
epidemically , that .the Patient is disposed to It; that there is a  
previous Contagion, and the Symptoms of it produced, evince,  
that the Small Pox is present, and that the Pustules will succeed  
in its other Stage, to be afterwards described.

When the . first Stage of the Disease is. known, the sole In-'  
tention os Cure seems to consist in removing the .inflammatory  
Stimulus, curing the present Disorder, hindering its farther Pro-  
.gress, and preventing a future Suppuration and .Gangrene.

The inflammatory Stimulus may he removed, by Correction  
**with** Specifics, or by an universal antiphlogistic Method. .

The specific Correction of the inflammatory StimnluS ought  
**.to the** obtained by Remedies opposite to the contagious. Poison,  
so small a .Quantity of which, admitted into the Body, produces  
all the other Symptoms of the Small Pox.

A .strict Comparison os the History of Antidotes, and the  
: Nature of the SmallPox, afford some Reason to hepe that.sech  
aRemedy may.he found, and that great Advantage.; rnfiy-ariseto  
i Mankind from it. ...

The Success of Antimony and Mercury, by Art rendered  
highly penetrating, mot corrosive with a too saline Acrimony,  
hut duly mixed with each other, induces us to seek for such A  
Remedy in these two Medicines. Thus,'

' Take of unwashed diaphoretic Antimony, six Drams; of  
*Mercurius Dulcis,* half a Dram; and *of* the best *Sal Poly-  
chrostum,* one Dram: By long Trituration reduce to a fine  
Powder-; to he divided into twenty-four equal Doses; one  
of which is to he taken every three Hours, drinking after  
it four Ounces of recent Whey. Orv -

Take of the Flowers of Sulphur, one Dram; of Cinnabar os  
- Antimony, one Scruple ; and of nitrated diaphoretic An-  
timony, and *Sal Polychrestum,* each one Dram and an  
" half: Reduce to a sine Powder ; to he divided and taken  
in the same manner with the former. ‘

- In the Small Pox we may, also, use the universal antiphlo-  
gistic Method, and take those Measures which, in all inflam-  
matory Disorders,-are.found effectual for hindering the Inflam-  
mation from degenerating into *Pus,* or a Gangrene. Nor, as  
these Measures prove successful in other Disorders, is it to be  
doubted, but they would, also, do so in this. Hence it is not  
impossible that a Variolous Fever may he often present, without  
the Small Pox. . '

That, the universal antiphlogistic Method may be observed, it  
is necessary, first, that the Patient should have a sufficient Quan-  
tity of Blood taken from him. Secondly, That the whole Skin,  
Fauces, Oesophagus, and Intestines, should be frequently re-  
laxed with Clysters and Fomentations. Thus,

Take of the Flowers of Mallows, Marshmallows, Dande-  
lion, Mullein, and Soapwort, each half an Ounce; and  
- \* of Linseed-meal, two Drams: Boil in twelve Ounces of

Water, for a Clyster; to be injected every twelve Hours.

Woollen Cloaths, also, wet in the same Decoction, are to  
he applied warm to the inferior Parts of the Body; such aS the  
Feet, Hams, Groin, - Thighs, and Legs: The Mouth, Fauces,  
and Nostrils, are, also, to he washed and moistened with the  
fame Decoction. Thirdly, The Patient must drink large  
Quantities of thin, acidulated, or nitrated farinaceous Water;  
he must, also, drink antimoniated Nitre, or the *Sal Polychrestus,*in Milk and Water. Thus,

*. ’ i. -*

Take of the recent Flowers of the wild Poppy, and Elder,  
each One Ounce; and of entire Oats, half an Ounce:  
Boil in a sufficient Quantity os Water, with each twenty  
Ounces of which mix. Of stibiated Nitre, that is, such as  
has heen separated from diaphoretic Antimony by washing  
and Crystallization, half an Ounce; os recent Citron-  
juice, one Ounce j and of the Syrup of Violets, one  
Ounce and an half: Ofwhich Preparation the Patient may  
drink as much as he pleases.

Fourthly, The Patientis Aliments ought to be light, the Air  
'drawn into his Lungs pretty cool, and his Body must be kept  
well covered, and perspirable. For Aliments of this Kind, **see**' the Artinle **FIBRA.**

Though in the Small Pox the Intention of Cure, and espe-  
" «tally the Method os obtaining it, already mentioned, are rarely  
thought of; yet such Measures have accidentally proved successful,  
even when Physicians have heen ignorant of the Disease.

When this Disorder finishes its first Stage, which is that of  
Contagion, it enters upon another, which may be described  
thus: The Skin, first. Of the Head and Face, then of the  
Hands and Anns, and, lastly, of the Trunk and interior Parts  
Of the Body, is infected with small red Specks, like those pro-  
duced by ths Bites of Gnats; soon after, all the Symptoms  
are mitigated, and every Hour the red Pustules are continually  
enlarged in Bulk, and Number! They are, also, more elevated  
and inflamed, till, at last, the Skin becomes tense: Heat and  
Pain are produced, and the Circulation crf the Blond, and Per-  
spiration of the Humours, are retarded. Hence arise the greater  
Repulsion of the Humours to the internal Parts; the Fever;  
**the** Anxiety; the Difficulty of Breathing; the Pain of the  
Fauces ; the Qpinsey; the *Diarrhoea*; the Dysentery ; the Dis-  
charge of bloody Urine; the Spiting of Blood; and the hot,  
red, and painful Inflammation of the Skin lying between the  
Pustules ; which, when they have continued four, five, or six  
Days, are absolutely suppurated, and converted into as many  
small Aposterns. I call this Stage of the Disease the Progress  
of the Inflammation into an Abscess; This Stage lasts, ac-  
cording tothe Variety of epidemical Causes, theTemperature  
of the Patient, the Violence of the Difeafe, the Regimen, and  
the VanouS Seasons of **the** Year, for the most-part, sour or five  
**Days; so that on the eighth Day, from the Beginning, there is**

generally a Suppuration, at which time the Blood is highly  
inflamed.

If the Contagion is Violent, the Pustules numerous, adjacent  
to each other, and, as it were, intermixed, all the Signs of the  
Insiainmationgreat,the Patient of a saline oleouS Temperament,  
in the Vigor of his Age, and accustomed to delicate Living; If  
the Regimen arid Remedies greatly increase the Circulation of  
the Humours, and is the Summer is Vesp hot ; then, towards  
the End of the inflammation, red Vesicles, distended with  
Lymph, appear, and are Marks of a gangrenous State of the  
Juices. Hence the Skin becomes unfit for the Circulation and  
Exhalation of the Fluids, which are, for that Reason, more re-  
polled to- the internal Parts. - Hence arises the excessive Sali-  
vation, and the Swellings of the Hands and Feet. ’ so"

From what has heen said, we may leam the Diagnostics and  
Prognostics of the second Stage of the Small Pox; as, also, the  
Nature of the Disease, and its Symptoms, which are generally  
circumscribed within these Rules.

The milder the Stage of the Contagion is, the gentier, also,  
that of the Inflammation will be.

The more llowly the Pustules make their Eruption, and,  
consequently, the longer the State of the Contagion is, the Dis-  
order is proportionably slighter.

The larger, fewer, more distant, more remote from the  
Face, the whiter, and, at last, yellower the Pustules are, or **the**more slowly they proceed, the better, and more favourable,  
they are. - 1 ,

The more numerous, small, and intricate, the Pustules are,  
the more there are on the Face, the more brown or black, or  
the quicker their Progress, the worse they are.

The more the Matter of the Pustules, resembles mild and  
perfect *Pus,* the hetter.it is.

The more the Matter of Pustules resembles a gangrenous  
Ichor, the worse it is. ς . - '

The redder the Interstices between the Pustules are, and the  
- more hot, tense, and tumid, about she Time of Suppura-  
tion, it is so - much the hetter, on account *os* the Circulation  
still remaining in these Parts. \

The more the Parts lying between the Pustules are pale, or  
blackish, the worse; since these Signs prognosticate a mortal  
Quinsy, or a Peripneumony, unless a copious Salivation, or an  
excessive Tumor of the Hands, should come on: For the Cir-  
culation of the Blood is retarded here, and, consequently, in\*  
creased towards the internal Parts.

If, in .the Places between the Pustules, purple-coloured Spots  
appear, a mortal Gangrene is denoted.

The Intentions of Cure to be pursued in this Stage of **the**Small Pox, are Various, according to the Degrees and Duration  
of the Difeafe: For, in the first Beginning of the apparent ex-  
ternal Inflammation, Care seems requisite, to prevent degene-  
rating into, a Suppuration, Concerning winch, we have already  
treated : Or,'if this Caution is neglected, we are to take care  
that the Suppuration be as small as possible, sar from the Head,  
and stow; which End is obtained, first, by the lightest Aliments,  
and such as resist Putrefaction. See FIBRA. Secondly, By  
diluting, mild, and somewhat acid Liquors, such as those al-  
ready mentioned. Thirdly, By deobstruent, aperient, and di-  
luting Liquors, continually drank in large Quantities.. Thus,

Take of the recentiy extracted Juices of Succory, Lettuce,  
Dandelion, and Fumitory, each .two Ounces; of **the**Roots of Vipers Grass,, four Ounces; and of pure Nitre,  
. one Dram and a half: Mix all together, and let the Pa-  
tient take one Ounce every Hour of the Day. Or,

Take of *China* Root, and the Roots of Sarsaparilla, **and**Grass, each two Ounces; os the Roots of Vipere-grass,  
eight Ounces; and of Elder-stowers, one Ounce: Boil  
for an Hour, in a sufficient Quantity of Water, to six Pints;  
Of which let the Patient take five Ounces every Hour.

Fourthly, By hashing the Feet twice a Day, and continu-  
ally fomenting them with a tepid Fomentation ; applying, at  
the same time, epispastic Planters to the Soles of the Feet, and  
the Hams. Thus,

Take of the Meli lot Plainer, of *Galbanum,* and *Sagapenum,*each one Ounce: Mix all, spread upon a Piece of Lea-  
ther, and apply to the Soles of the Feet. Or,

Take of the Crums of stale Bread, six Ounces; of Rue,  
a Handfid ; of bruised Mustard-feed, six Drams; and of  
Salt, and Vinegar, each four Drams: Mix all together,  
and apply to the Soles of the Feet, and the Hams.

Fifthly, By a somewhat cold Regimen, and especially by the  
Admission os a pretty pure and cool Ain; taking care, particu-  
larly, to guard the inferior Parts of the Body from Cold.

Fifthly, These Measures are to he taken in the very Begin- ;  
ring os the Disorder. And, sixthly. If the Disease is into-  
Llerably Violent, Opiates are to he used in the Afternoon, at  
Five o’ Clock; taking care not to neglect the other Circum-  
stances prescrihed. Thus, .

- Take of the Syrup of white Poppies, one Ounce: Make into  
*l* a Draught.- Or, '

Take of pure *Laudanum,* one Grain: Reduce to the Form  
- - - of a Pill. Or, . - st

\* Take of pure *Laudanum,* one Grain; and of distil'd Mint-

- water, half an Ounce I Mix for a Draught. γ

Aster this second Stage of the Small Pox, there succeeds a third,  
winch is that of the Suppuration; in which the Diseased gradually  
-increasedjarid perfected. During this Stage,the purulent Pustules  
are daily increased,, and then, heing maturated,.become white,  
or yellow, and break on the third or sourth Day of this Stage:  
.Then the whole Fat and Skin abound with a moveable *Pus,*whilst the external Parts are dry'd, and such of them aS are dis-  
engaged from Pustules,inflamed. Hence,by the Obstruction of the  
Circulation and Perspiration, by the Irritation of the nervous and  
.membranous Systems, and the Absorption of the Pus into the  
Veins, a malignant Fever, accompanied with the most terrible  
-Symptoms, is produced. If this purulent Matter is mixed, and  
:circulates long with the Blood, hence, according to its Con-  
gestion in Various Parts of the Body, it produces various, and  
hardly surmountable Effects, such *as u Delirium,* a *Phrenitis*,a  
Peripneumony, a Pleurisy, a Vomiting, a Dysentery, an *He-  
.. paiitis.* Apostems, Carbuncles, Tumors of the Joints, Ab-  
scesses, Stagnations of the Fluids, a tabid Disposition, a Phthisis,  
and many other terrible Disorders.

But if the Variolous Matter is subtile and acrid, and the  
Disease violent, the Skin, Fat, and Muscles, are corroded,  
whilst broad malignant Ulcers are formed, which often pene-  
trate to the Bone, and leave unseemly Cicatrices behind them.

In this Stage of the Small Pox, a Discharge of the *Pus* to the  
external, and a Repulsion of jt from the internal Parts, are to  
he obtained ; which Ends are best answered by relaxing the  
Skin with tepid and relaxing Fomentations, carefully and con-  
stantly renewed; by frequently washing and gargarizing the  
Mouth and Fauces ; by liberal Draughts of warm, cardisc,  
detergent, aperient, and antiseptic Liquors; by mild, diluting,  
emollient, and laxative Clysters, daily injected, and long re-  
tained ; by living upon Broths prepared of Flesh, and seasoned  
with Salt and Acids; and by the moderate, though not too fre-  
quent. Use of generous Wines; exhibiting, at the same time,  
proper Doses of Opium, against the Violent Shocks os the Dis-  
order. The Liquors and Medicines proper for these Intentions  
are already specified under this Article. - -

- If the Disease is Violent; if there is a gangrenous Ichor, in-  
stead of *Pus*; if almost the whole Skin is covered with Pustules;’  
it is sufficiently obvious, why the Small Pox is productive of so  
' unhappy Effects, and even of Death7 But this will be hest un-  
derstood by him, who, from Anatomy, knows, that not only

**. the** external Skin, but, also, the Eyes, all the Membranes of.  
the Nostrils and Mouth, the *Aspera Artcria,* the *Bronchia,* the  
*Oesophagus,* the Stomach, the Intestines, the Liver, the Spleen,  
and the Lungs, are full of these Pustules: For the Person who  
knows. this, understands the Reasons of whet has been said,  
perceives what is necessary to the Cure, and whether theVio..  
lence os the Disease, and the Death os so many Patients, always  
happening aster the Use of common Means, are not Circum--  
stances which ought to excite the Core and Industry of thePhy-.  
sician in the Beginning of the Disease, since, by the common  
Method, accidental Cures are only produced, by the Force os  
Nature. Inoculation seems to be a Practice sufficiently certain  
and safe. *BocrLaave: . ” .*

*Boerhaaugis* Judgment, with respect to the ordinary Method  
of treating the Small Pox, is very remarkable. His Words are,  
" Vulgata quippe Methodo nullus rusi sponte emergit*By the  
common Method, accidental Cures are .only produced, fponta-  
neonsiy, that is, by the Force of Nature.* I will not presume  
to determine how far this Assertion is true; though I should  
' sooner believe it os this Distemper, than of almost any other Ἱ  
am acquainted with ; and candid Physicians are sensible that it is  
not entirely without Foundation. - Whoever, therefore, pro-  
poses a more certain, and less exceptionable Method, deserves,  
at least, that his Sentiments should be examin’d with Candor;  
and, if Experience gives a Sanction to the Novelty, rhe Inventor  
merits all Kinds of Acknowledgments from Mankind, for the  
important Discovery.

AS I had heard os considerable Successes in the Treatment os  
the Small Pox, attending a Method within these sew Years in-  
troduced by Dr. *Thompson,* I judg’d it my Duty to enquire *os*

himself what .that Method wasp and upon whet Observation, '  
it was sounded. The *Doctor* has been so obliginn ro me, and  
the World, as to communicate what I ask'd, without Reserve ;  
and has given me Leave to make publick the foliowing Treatise  
on this hitherto invincible Distemper; which I hope and believe  
'will be agreeable to all those who consider Truth as rhe End of  
their Researches, and prefer the Welfare os. Mankind, and Im-  
provement os Physio, to all less generous Considerations.

τι The Small Pox is a Disease, that, at this time, is spread,  
in “a manner, over all the known World, seizing, first or last,  
all. Sorts of People,, not,sparing either Ser, Constitution, Cli-  
mate, *for* Age; find whether it be from a Violence peculiar to  
the Disease, or- from the various or improper Methods os Treat-  
ment, I. cannot say, but, at least, every .Day's Experience  
shews us, that it is, at this tithe, more universal than the Plague,  
and not-much inferior to it in Danger. The many Authors  
who have treated texprefly upon this.Subject, the many Revo-  
lutions which have happen'd, both in.the .Theory and Practice,  
the Controversies yet subsisting, and the Points in Debate of  
such Consequence, their Opinions being so extremely wide from  
each other, that any Physician, who attempts the Curs  
of this Disease, should he not he entirely in the Right, would  
be so far from relieving the,Patiens,,that he mushrather join

’ with the Disease, and render it more fetal, are the Mo-.  
fives that have induced me to give the Observations I have made-  
in the Course of my Practice, concerning the Small Pox, which  
was, aS it appears from History, unknown till the seventh  
Century, but now has taken such Root in the World, that it is  
even become hereditary to us.

The Small Pox, not being described by any Of our *Greek* Or  
ἰ *Roman* Physicians, proves almost to a Demonstration, that it  
never appeared either in the *Greek* or *Roman* World. Such  
Authors aS *Hippocrates, Aretaus, Celsius,* and *Caelius thc Afri-  
can,* (rather *Soranus* the *Ephesian)* who were so excellent in  
the descriptive Part of Physic; insomuch that I might say, we  
have rather the most finished Pictures of Diseases, than Histo-  
ries (for they excelled in Description, as they did in Poetry,  
Sculptures, and Painting); it was impossible this Disease, had  
it then existed, could have escaped their Attention : Yet it is  
not impossible, but It might have then, existed, in some  
other Parts of the World: And there have been those Physi-  
cians, who have endeavoured to trace it from *India,* from  
'thence to *Arabia',* but we all know it appeared in *Egypt,*brought there by the *Arabians,* when they conquered that King-  
dom, during the Caliphat of *Omerso,* from thence it spread  
where-ever they carried their Arms, their Religion, and their  
Commerce; through *Egypt, Syria, Palestine, Persia, Lycia*along the maritime Parts of *Africa,* from thence into *Spain,*and afterwards diffused itself, by the Progress of our *European*Discoveries, Wars, and Trade, over almost all the known Parts  
of the World. Phaser, who flourished in the Ninth Century, a  
*Syrian* by Birth, *Arabian* by Extraction, and *Mahometan* by  
Religion, appears to he the first Writer we have extant, who  
treats of this Disease.

We have had, at least, a thousand Authors, who have treated  
of the Small Pox: Those for the first five hundred Years Varied  
but Very little; neither can I say there have appeared any con-  
troversial Writings, among Physicians, of Moment, till by-  
*denham,* the great Observer, arose. The Practice for a Cen-  
tury or two before his Time was a common beaten Path,  
supported only by some foolish *Hypothesis,* or empirical Receipts.  
They aimed chiefly, with Cordials, and other means, to pro-  
mote the Eruption : Hence they imagined a kind of Poison  
expelled from the vital Parts to the Circumference. In the  
Course of Maturation, or the Fflling of the Small Pox, the.  
fame Method was continued, lest the Poison should revert **again**to the nobleParts. TheReasons which induced Physicians to this  
Comportment in their Practice, seem to me to be these: They  
observed, during the first Stage of this Distemper, that is, till  
the last Day of the Eruption, their Patients to be agitated  
with great Inquietudes, and the Symptoms to be extremely high,  
which generally abated, when the Small Pox was entirely out:  
Wherefore, by promoting the Eruption (which they thought  
could not he done, hut by Warmth, and hot Medicines) they  
imagined the Poison expelled; and expected the Symptoms  
would abate, which appeared to them a Demonstration of an  
Expulsion of morbid Matter. But how great will *Sydenham*appear, when we show the Motives which led that great  
Man to a Method of Practice, which entirely overthrew the  
vicious Practice that then prevailed with respect to this Distem-  
per? He took Nature for his Guide, depending chiefly upon  
Observation and Experience, supported by Reason, He ob-  
served, that, among common People, where nothing was done,  
that the flower, and the later the Eruptions appeared, the more  
favourable was the Sort ; and laid down this as a kind of Apho-  
rism, that if the Small Pox appears the first Day of the Sick-  
ness, it might be looked unon as a kind of Plague a if it came

out on the second Day,' extremely dangerous; if ort the third,  
less so; if on the fourth, the distinct Sort,and generally without  
any Danger. From whencehe justly concluded, that the Phy-  
sicians were entirely in **the** wrong to hasten the Eruption, which  
**a** prudent Man would dread to fee till the fourth Day.

*Sydenham* had his Followers: The Populace, who think they  
have a Right to give their Opinions in Physic, made this Di-  
stinction; the cool Regimen, and the het, observing one Set of  
Physicians confining their Patients immediately to theirBeds, and  
giving them Medicines of the warmest Kind, in order to drive  
out the Small Pox ; the others leaving, as it were, the Erup-  
tion to Nature alone; and sometimes taking a little Blood  
away, as their great Master *Sydenham* directsd. We shall omit  
speaking of the Variety of empirical or quack Medicines, since  
' they generally were of the stimulating and heating Kind, that  
were given, in order to promote either the Eruption, or, after  
they were out, to ripen and cany on Maturation ; for I allow  
- of no peculiar Virtues in any Medicines, but in the Applica- -  
- iron, according to the intention of an understanding Physician.

*Sydenham,* then, made no farther Discoveries in the Small Pox,  
if we except the elegant Description be gives of the Disease,  
than during the first Period, that is, till the sixth or seventh  
Day, when the secondary Fever begins to arise. At this Period  
he took Notice, that towards the seventh Day, at Night, all  
of.a sudden, notwithstanding the Symptoms were appealed, **the**Pulse became regular, and all the Small Pox out over the whole  
Body; the Water well coloured, or thick, the Eyes cool, and  
not with that fiery Lustre as before, the whole Storm allayed,  
that agitated the Sick, during this first Stage of the Small Pox :  
He observed, and, perhaps, this Observation may be looked  
upon as one of the most important in Physic, that, upon the  
coming on of the second ary he ver, it came not on by degrees, but  
like a Storm, which begins at once like a violent Hurricane ;  
**the** Patient becomes suddenly light-headed ; the Eyes blood-  
shot, streaming with Water ; the Urine pale ; the Pulse quick  
and hard, a sore Throat, *etc.* Here again he departs from  
former Physicians: He orders his Patient to be taken out of  
Bed, to be kept cool; the Feet bathed in warm Water, and  
Opiates repeated from time to Ume, till this Kind of Phrensy,  
and other violent Symptoms, cease. He then salis into the  
Practice of the Physicians he opposed, from this Time to **the**next remarkable Stage of the Small Ροκ, by allowing some cor-  
dial- Medicines to keep up, as they term it, the Pock; but  
upon the Face subsiding, the Spitring growing more viscid,  
and, at last, stopping, on the tenth or eleventh Day, he falls  
into the most fatal Mistake, as well as others, and thinks there  
can **be** no Safety, if the Spiting returns not again, and **the**-Hands fwell, unless these Points are obtained by the Admini-  
stration of the strongest and most powerful Medinines; and  
**this** fatal Mistake is owing to an *Hypothesis,* which involved **at**that nine all the World, and even *Sydenham* himself. For  
they supposed an essential Poison peculiar to the Small Pox,  
which, till this time, spent itself by Salivation, and the Swell-  
ding of the Face, reverted back to the nobler Parts ; that Na-  
ture bring weak and debilitated, unable to expel this morbific  
Matter, falls under the Weight, and the poor Patient expires.  
Notwithstanding he was unable to obviate this last terrible  
Stage of the Disease, and reasoned and aoled but as others did,  
however, like an able Mariner, whe had made many Disco-  
veries, and wanted still more to complete bis Voyage, announ-  
ces, like a Prophet, those Dangers he was unable to shun;  
and points out those Rocks, against which be and the rest hed  
been shipwrecked. He says, and, in this Part, he even excels  
the *Greeks* in Description, that if the Spittle grows thick and  
ropy, and stops entirely, the Face, which was elevated and,  
swelled before, suddenly filling, and the Hands not swelling,  
the Patient necessarily dies : But if the Face continues elevated  
beyond such a time, the Spitting continuing, also, heyond such  
**a** Period, the Pationt certainly lives.

We may compare what *Sydenham* did, to what my Lord  
*Verulam,* that noble and illustrious Observer of Nature, did  
On another Occasion: He not only made surprising Discoveries  
himself, but be laid down a Plan, and recommended a Conti-  
nuation of Natural History to Posterity to trace out, it heing  
. impossible for the short Lise of one Man to compile so im-  
mensi an History, as the heundless Field of Nature affords.  
The Honourable Mr. *Beyle* began where the other left off, and  
happily executed the Pfan the other great Philosopher had said  
then.

*Sydenham* then, having made many Diseoveries, in regard to  
the Small Pox, looked upon it as a true inflammatory f ever ;  
every Pustule he considered as a phlegmonous Tumor; he con.  
ducted bis Patient extremely well to the Beginning of the  
secondary Fever 5 but when that role too high; when **the**Matter was ill conceited; the Face sinking; the Spit growing  
viscid, and, at last, stopping; like **a** Prophet indeed, he an.

trounces the Danger, though his incomparable Skill in Physic,  
; great as it was, could not aven it.

Thus Physic stood, after his Death, with regard to the Small  
’ P9x, till *Helvetius* appeared, whe found, that, at the Turn  
of the Pox, when those fatal Symptoms, which *Sydenham* took  
Notice *of, profaged* certain Death, there had been no other  
Means used than by giving the Patient the strongest Cordials,  
which always failed; he introduced, therefore. Purging; **a**Method as essentially different from the then established Doc-  
trine in the .last Stage of the Small Pox, as *Sydenham’s* was,  
with respecti to the first: Here, then, they promoted, and raised  
a Fever, which was too high already ; there he restrains it by  
Purging. But *Helvetius* heing .led through a kind of Hypo-  
thesis to these Motives, and not from any Experience or Rea-  
son, noWonder he remained still in the Dark, unable to unveil  
the Difficulties attending this Disease. He divides rhe Small  
Pox into several Species, and notwithstanding his heing sensible  
of its being an inflammation *fui Generis,* yet is very far from  
treating it always as such. I can find nothing remarkable in what  
he has done, unless the Purging at the Turn of the Small Pox.  
This Method DI. *Freind,* in *England,* followed, and took a  
great deal of Pains to establish this Doctiine here among us.  
it was with the utmost Difficulty be carried his Point: This  
Practice being fo extremely wide of whet was then so firmly  
established for many Ages, the giving of Cordials to promote ,,  
the Eruption; as the Patient funk under the Load, still the  
more Cordials were given. And thus they continued augment-  
ing their Dofes, till the Patient was htimt up. This was the  
Docinne and Style of the Physicians, which the Standers by,  
and the Women, came readily into. Nurses, then, sound it  
no hard matter to conceive the Force of their Doctsine: They  
raw it only consisted in confining a Person to a warm Room,  
always in Bed; and with the greatest Diligence taking Care,  
that the Patient might not be exposed to the Air; and all this,  
lest the Eruptiossfhould fall hack., and giving the Panent con-  
tinually a Set of Cordials, to strengthen, support, and keep  
the Difcasc from the Heart. This Jargon squared with the  
common People; and, as they found one half of the Cure de-  
pended upon Nursing, they claimed soon the Province of heing  
Dheiors in this Distemper. No Wonder, when *Friend* intro-  
duced this *French* Custom of Purging, and at a Period of the  
Disease, when they imagined, that, if ever. Cordials were of  
Use, they were at that time, when the Patient was languisb-  
ing, and dying, on the eleventh Day, that his Method of  
Purging was si» great a Contradiction to their Method, that they  
theught it downright Murdering the Sick. *Friend* wrote to  
support this new Practice; and the Drs. *Mead, Frewin, and  
Coda* came into it. As a Controversy arose, *Waadward* and  
others opposed it. However, the Physicians, from that nine  
to this, have ventured, in extreme Danger, in the last Stage,  
to give a Dofe of purging Physic; and sometimes to take away  
**a** little Blond. But as *Freind* reasoned, also, on an Hypothesis,  
and considered a Poison to be carried off by Purging, he ven-  
hired not to give such a" Medicine as long as there was any  
Swelling, and till the Spitting was in a manner over. Thus  
he stayed till the Patient was upon the Point of expiring,  
before he began this Method, which was generally too late.  
Besides, this Hypothesis demined him in a most profound Igno-  
rance of the Nature and Cute of this Disease; for he reasoned  
thus: While there is any of the morbid Matter passing off the  
usual Way, by the Swelling of the Face, however little, as  
well as by the Spit, however viscid and detraining, we are to  
expeci no farther Assistance this Way, when we once begin  
Purging: For the Whole depends, then, upon carrying off the  
morbid Matter by Stool: He considered the Patient in a de-  
pressed State; not depressed by the Violence of a Fever: For,  
if he had considered this Case, as that of a Person sinking in a  
common Pleurisy, from **the** Height of the Inflammation, he  
would have avoided this Error. While he purges, he sears bis  
Pationt may sink, and so supports him with Cordials. By these  
means he is lost and puzzled, not acting rationally, as in an  
Inflammation well known, such as aPleutiiy; where Physicians-  
consider a depressed and undulating Pulse, clammy Sweats, great  
Weakness, *etc.* as Signs of the Effeit of an high Inflamma-  
tion ; they consider the Patient oppressed by the Violence of  
the Fever: Nay, should a Loofeness appear, it alters not **the**Case, their whole Aim is at curing the Inflammation by Eva-  
cuations, whence they justly expert the Pulse to rife,, become  
fuller and more distincti which, in Reality, if the Patient he  
recoverable, always happens. *Freind,* and his Followers, then  
reasoned not in the Small Pox, as *Sydenham* did in a Pleurisy ;  
but the Expulsion of the morbid Matter was what he chiefly  
aimed at; which Hypothesis kept him from the true Know-  
ledge of the Nature of this Disease. And, notwitbstandina he  
followed *Helvetius,* in Purging in the last Stage of the Small  
Pox, which Evacuation, I must Own, is one of the proper

**Means**

Means to limit the Fever: Yet, as what he did, proceeded from  
Hypothesis, and not from Reason, he deserves no just Praise,  
because Hypothesis kept him in the Dark, from knowing at  
what Time a Medicine should he given; how often it should  
he repeated; or whet kind of Purges were preferable; or what  
other Means would more effectually oppose that Fever, - which,  
if not checked betimes, most certainly destroys the Patient. His  
considering Purging in the Small Pox, without knowing the  
Reason for acting fo, is, after all, but a kind of Empiricism ;  
for he depends upon the specific.Force of one Medicine: .  
Whereas, had he been led by Reason, he .would have known,  
that, by subduing the Fever, he obtains his Ends; and that  
this Point may he obtained by various Means : For whatever  
Medicine that has Power to effect this, will both prolong the  
: Spitting, and the Swelling of the Face, the two principal Ob-  
jects, in the last Stage of the Small Pox, deserving the Atten-  
tion os the Physician : For, if these two Circumstances sue-  
.ceed, the Patient Certainly lives.

*Boerhaave* is the next Author who has wrote expressly on this  
Disease; an Author of the most profound Erudition, and ex-  
tensive Practice, who, after having read, as he fays, a thou-  
sand Authors, gives it as his Opininn, that there are scarce any  
worthy to he rherl, unless the second *Hippocrates, Sydenham.*

*Boerhaave* has gone farther towards a Discovery of the Na-  
ture and Cure *of* the Disease, than all the Physicians who pre-  
**ceded** him: He Considers the Disease as a true inflammation :  
He not only thought it improper Io force the Small Pox out ;  
Tor he Very well knew, the sooner the Eruption appeared, the  
Tnore fetal : But he, also. Ventured to restrain a too sudden  
Eruption: And he eVen Ventures farther, and recommends it  
to Physicians hereafter, to attempt to cure this Disease in the  
very first Stage, by preventing eVen a Suppuration of the Pus.  
rules. And he reasoned thus : in a Pleurisy, in a Quinsey, and  
-other inflammatory Fevers, is not the Physicians Attention  
-principally to resolve the Tumors; and do not they labour all  
-they can to prevent the Formation of Matter; why then do  
we suffer Matter to he formed in this Distamper? And is not  
the Resolution of such Tumors, by the Power of Medicines,  
in other Words, the curing of such Distempers?

- Although *Boerhaave* reasoned so justly,egiet he either was  
not capable of bringing this to bear, or the Disease is impossible  
to he subdued, without taking its usual Course, that is, by  
Suppuration: Yet this Advantage accrued from such Reflections,  
hy endeavouring to prevent the Eruption, which could not he  
retarded, generally, beyond the fourth Day; yet the Violence  
Of the Fever was so far abated, though not to be extinguished,  
that it produced the Eruption, later, and, of consequence, with  
fewer Pustules; and for the same Reason, the Suppuration was  
kinder; and, therefore, the Disease less dangerous.

. It seems wonderful to me, that so great a Man, who rea-  
soned with such Precision, and practised with so much Judg-  
mens, had not thoroughly Comprehended this Disease.

Upon theRise of the secondary Fever, as that increased, and  
the Spit became more viscid, the Face subsiding, he abandons,  
as it wertio his former Reasons and Method of Practice; his  
Views are now entirely for promoting Salivation: And, in order  
**to** promote this great End, he thinks some Means may be found  
**out.** Antimonial Medicines he seems to think the most proba-  
ble to effect it. Although he mentions no morbid Matter, yet  
what he proposes, implies as much. He must suppose, that  
the Spitting carries off some Poison, or morbific Mattes, aS  
People think a Salivation answers the same Purpose in the Ve-  
nereal *Disease.*

Here then he salis into an Hypothesis,. which points out to  
him the Use of an empirical Medicine ; for had he reasoned as  
justly on this Stage of the Disease, as he did on the first, he  
would have found, that the limiting the Violence os the Fever,  
let the Medicines or Methods be what they will, that controul  
it, would have' carried on the Salivation, and answered this  
Point, as it did in **the** first Stage of the Disease, when **the**Inflammation being abated, the Pustules rose higher, and sup-  
purated with kinder Matter. . .

. Authors, who have wrote fince, as they have said' nothing  
worth our Notice, hut whet they have gleaned, and generally  
misapplied, from the Writers I have already mentioned, we  
shall pass over in Silence; and come to the History of this kind  
**of** universal Disease.

The Small Pox, in general, is of the inflammatory Kind,  
having all the Signs in common with other inflammations ;  
but in Species it differs essentially from all these Diseases, But  
in order to prove that it is an Inflammation, it will be proper  
here to determine the true Signification of the Word *Inflamma-  
tion,* by giving as clear a Notion of it as the Nature of the  
Thing requires: Besides, it will he necessary to lay this down  
as a land of Theorem, agreeable to the Custom of Mathema-  
ticians ; because, when we have a perfect Notion of an Inflam-  
mation in general, we shall then proceed, by way of Analogy,

to treat Of the Nature and Cure of thss parfirther SpeciesE  
inflammatory Fever.

A Tumor, from whatever Cause, that arises upon an hu-  
man Body, attended with Pain, Pulsation, Heat; the Part be-  
ing, also, .discoloured ; the Blood, at the same time, sized; the  
Urine generally higher coloured; the Pulse quicker than ordi-  
nary, and Often harder: These Symptoms arising stili higher,  
such a Tumor, if not opposed, pastes on to Matter, or ends  
in Sphacelation, which is an entire Corruption of the Part as-  
.sected: Such a Tumor is called by Surgeons *Phlegmonous sou*- Term imported into our *Englisu* Tongue, that signifies burn-  
ing or inflammatory. As there is always a Fever attending the  
Progress of such Tumors, such Fevers are called *inflammatory;*and as the Blood is always sized, in proportion to the State of  
' such Tumors, such Blood may be properly called *inflammatory.*And as the Blood is one of the most distinguishing Signs of an  
Inflammation, it will be proper to shew, the Various Changes In  
this Vital Fluid, during the Course of fuch Tumors. Whe-  
ther a Tumor arises from a Contusion, fractured Bones, from  
'the Poison of Serpents, from Contagion, or from whatever in-  
ternal or external Quality or Cause, the Moment it hegins to  
'he formed, that Moment the Blood begins to he changed. If  
ten thousand Men were let Blood, and not one of them had  
'the least Appearance os Size in their Blond, and presently  
’after, if some Cause or other should produce an inflammatory  
.Tumor, the Blood soon .becomes fined, and, as that Tumor  
hastens on to Matter, or Sphacelation, that Size increases ac-  
cording to the Progress and State os the Tumor: So that in the  
time os Suppuration, the Size os the Blood will he more in  
Quantity than it was the Day before; and more that Day than  
the first of its Beginning. But, in a State of Mortification, the  
Quantity of the Size will still he in proportion equal to that  
calamitous State of an Inflammation. As to the Colour of the  
Size, there is, also, something necessary to he observed : The  
yellow Colour shews more of Heat, or Fire, or Inflammation,  
than the pale; the green, more than the yellow; and the dark,  
more than any. The Consistence of the Size, which is always  
upon the Sursace of the *Crasseamentum,* or Cake, which swims  
in the Serum, the more Viscid and tenacious, the less Fire; the  
more dissolved (which sometimes is like a Jelly half boiled) in-  
finitely the more Danger: For when it is thus in a State of  
Dissolution, the Parts inflamed always mortify; and, when **it**is in this State, the inferior Parts of the *Crasseamentum* are **a**black putrid Gore, and, also, in a. State of Dissolution. What  
I have here said, with respect to the Blood, is the Result Of  
aboVe a thousand Observations, On all Kinds of Inflammations  
in general.

This is the clearest Notion I am able to give of an Inflam-  
^.matron; and I may Venture to say, is what may he the most  
Certainly known in the whole Practice of Physic. I have fixed  
this, as it were a Basis, to build the whole Superstructure upon ;  
and what I thought absolutely necessary, because I shall have  
perpetual Recourse to it, in order to prove what I am about to  
treat of.

The Small Pox, then, answers, in general, to these Signs  
**os** an Inflammation; and, therefore. Ought to be looked upon,  
and treated, in general, as such: But as it differs, also, speci-  
fically from all other Diseases, it, also, requires a particular  
History, and Method of Cure.

The Small Pox being an inflammatory Disease, it is Certain  
that the Body must be disposed to receive an Inflammation ;  
and whatever Cause hath Power to produce an Inflammation,  
may possibly produce this Species of it. The Disease, then,  
may be produced from violent Exercise, Change of Ain, parti-  
cular Climates, drinking spirituous Liquors : For those Causes  
productive of Inflammations, in such as have had the Distem-  
per, also, produce the Small Pox instead of such Inflammations  
in those who have not had this Distemper: History proves this  
to he true; and daily Observation still confirms it the more.  
Whe has not observed, that, upon hard Drinking, upon Change  
Of Ain, upon Violent Exercise, People have fallen into the Small «  
Pox, Pleurisies, QuinseyS, or other Inflammations? But why  
these Causes should produce the Small Pox in some Subjects,  
and not in others, is, I must confess, as yet inexplicable to  
**me;** and will, perhaps, he for ever a Secret to others. When  
there is some particular Constitution Of Air producing Inflam-  
InationS, in general, it, also, produces the Small Pox at those  
Seasons; and as these are epidemical, so are, also, those: This  
explains the Reason, why the Small Pox hegins at those Times  
of the Year, which the Physicians call *an irregular Season* ; I.  
mean in the Winter, the Very Beginning of the Spring, or eVen  
**in the** Autumn; for **we** should naturally expect it from **the**Middle of the Spring to the latter End of the Summer, for,  
at this Season of the Year, we observe Fevers to bo generally  
of the inflammatory Kind, in those Countries where the  
Plague, and malignant Fevers, are stationary, according to the  
Climate and Disposition of the Air in those Countries, **we** oh-

serve the Small Pox to he, also, epidemical, and generally  
fatal. And, perhaps, under the Appearance of the Small Pox,  
thev sometimes have the Plague. . .

*Sydenham* observed this in our own Kingdom; and *Pros.pcr  
. Alpinus,* in *Egypt.* We have had many Physicians, who have  
laboured to solve the Phenomena, and to shew whet there is  
in Man which diipoies him to the Infection of this Disease,  
which, when he has once had its returns no more; *Fullcr,  
Dralie, Helvetius,* and many more, have Ventured to assign  
such physical and mechanical Reasons, that, out os pure Re-  
spect to their Characters, I am even ashamed to mention.  
And what they have sains with respect to the morbific Matter,  
seems, in my Opinion, to be just as much to the Purpose.  
What we have here taken Notice os, enables us to prognosti-  
cate, whet Seasons, and what Constitutions, are most probable  
To produce this Disease, and to whom the Small Pox is gene-  
rally most fatal. ......  
'' Since every Person in the World that is seized with the Small  
Pox, although his Blood was not inflamed before, must neces-  
Tarily now undergo a State of Inflammation; and which gene-  
Tally begins to appear so upon the second or third Day; there-  
Tore, all such as are of an inflammatory Habit of Body, whe-  
'ther hereditary or acquired, must, of consequence, be disposed  
. To have this Malady in an higher Degree than those of a con-  
trary Disposition. Such People, who labour under any inflam-  
inatory Disease, must, of course, be still in greater Danger;  
hecause, is the Small Pox seizes upon such, before such Mala-  
"dies are spent, they must expect the most satal Sort, because  
then, the Patients must struggle with two Diseases; the former,  
sand the Small Porfboth at the same time: For upon the second  
sor third Day, the Blood, that was inflamed by the preceding  
Disease, now beginsro acquire another Degree os inflammation,  
"peculiar to the Small Pox, which will then be as Fine added  
To Fire. But there are some again, in more danger on account  
'Of the Parts of the Bodyjthat were before in a State os Inflam-  
'mation before the Small Pox begins, that is, such whose Lungs  
ter Brain, or Throat,- are particularly inflamed, when this Ma-  
Jady first seizes: For as no Person dies of an Inflammation, till  
The Throat, Lungs, or Brain become affected; and, aS no  
Person passes through the Small Pox, without these noble Parts  
.heing, in a most particular manner, inflamed more or less, so  
such must be exposed to the greatest Danger, since, besides  
undergoing the Small Pox, they must, also, undergo at the same  
rime, a true Peripneumony, a true Qtiinsey, or a true Phren-  
sy that is, they will have the Small Pox complicated with an  
Inflammation of the Throat, Lungs, or Brain. And I believe  
no one ever died *os* the Small Pox, but of one or other of these  
Diseases. . \_ . ...

. In the latter Stages of Life, or in such Constitutions, with  
whom Contusions, Fractures, DiflooationS, and Ulcers, are  
more subject to inflame;, in these, phlegmonous Tumors are  
more difficult to resolve; which, os consequence, proves, that  
in such the Small Pox must be raised to an high Degree: There-  
fore, Women, before the Menses are over, have’ it more fa-  
vourable than aster; Women, than Men; and Children, than  
Men or Women : And this is so, generally speaking; not but  
particular Cases are Exceptions to this Rule.

Occupations of Lise, attended wish Labour, as Watching,  
., Fatigue,-Encampments, Sieges, bad Ain, Diet, or. whatever  
Accidents attending War, provided 'they excite Heat, inflame.  
If the Small Pox seizes at such times, and such Constitutions,  
it must be of a bad Kind. Such Seasons of the Year, such  
Climates, such Dispositions of Air,’ producing malignant Fe-  
vers; if the Small Pox comes on at such Times, in such Cli-  
mates, it always runs Very high..'

*' Sydenham,* as I said before, observed, that to those who had  
the Small Pox during the Years I 639 and I 669, when malig-  
riant Fevers raged in *London,* it was very satal. And *Pros.pcr  
Alpinus* says, that, in *Grand Cairo,* in *Egypt,* during the time  
os the Year, when the Plague rages in that populous City, the  
Small Pox is commonly attended with purple and livid Spots,  
J emulating even the Plague in Degree os Inflammation and Pu-  
tresaction. From hence we may certainly conclude, that all  
fuch People who are subject to Diseases, not attended with  
sized and inflamed Blood, such aS the aguish, hysterical, or fla-  
tulent Constitutions; those who have suffered the Loss of  
much Blood, either from Wounds, the Menses, Haemorrhoids,  
Miscarriages; or those whose Blood is impoverished by too low  
a Diet, can never have the Small Pox to an high Degree, pro-  
v.ded such Causes just precede the Disease. Wo shall now shew  
the Signs and State os the Disease which precede the Eruption.

T l.e r ever preceding the Eruption we will call *variolous,*(for, till the eruption appears, it cannot properly be called the  
*Small Pox),* arising from some Infection, communicated by  
the Air, or the Touch of a variolous Subject, Fear, or some  
ether Cau.se. winch hath Power to produce this Species of In-  
fiamntation, which begins generally with Shiverings, Rigors,

Paleness of the Lips; Lividness of the Ninis, with other infers-  
juratory Symptoms. Sometimes this Disease arises hy way of  
Revolution, from some other Disease to this, as a common  
Cold, a flight Pleurisy, or Quinsey, the Meaflim, the-Chieken  
Pox. And if it comes on before these Diseases have spent them-  
selves, yet are we able to distinguish the Origin of the Vario-  
lous Fever: Suppose a Person some Days ill os some one or  
other os these preceding Maladies, notwithstanding the usual  
Symptoms peculiar to these continuing, especially Heat, andra  
' feverish quick Pulse,, the Patient is suddenly seized with Shiver-  
ings, Rigors, or a Violent cold Fit, like an Ague, the Lips  
and Nails are pale or livid; and although the Hands and Feet  
are extremely cold and chilled, yet.in the Pulse, although quick  
before, now become much more so,, insomuch that we might  
plainly perceive the Addition os a new Fever. These following  
Symptoms presage a future Eruption of the Small Pox; Headach,  
Lassitude, the Limbs cramped,: painful, heavy; the Patient is  
thirsty, extremely sick, or vomits;.'if Women or Children,  
the Matter thrown up is-generally green, resembling an hysteric  
Case j the Eyes glaring, the Lids edged round with an Inflam-  
mation, resembling a Person who had drank much, unable to  
bear the Light; the Face glowing, great Heat and Dryness  
over the whole Body, Coshveness. But is the Inflammation  
runs Very high, the Patient purges; the Stools are generally  
dark and send; Pains in the Small of the Back, across the  
Loins, and an unusual Weight; Oppression at the Pin of  
the Stomach. These last Symptoms, when attended with  
Nauseas, with a drowsy foporiferous Aspect, are the most dis-  
tinguishing Signs, which Signs Physicians call *Pathognomonic,*distinguishing essentially this Variolous Fever from all others;  
unless we except the MeafleS and Chicken Pox; where indeed  
the Symptoms are somewhat equivocal: Put the Violence and  
particular Duration "of these Symptoms will always distinguish  
the Small Pox from these.

There is one Symptom yet, which *Sydenham* observed, .but  
that is peculiar to Children," I mean, a. Convulsion Fit; but  
an extraordinary Drowsiness must precede the Fit; and 4 more  
'than ordinary Lustre in the Eyes; such a Fit announces the  
Eruption to he near at hand. During the Variolous Fever, if  
the Patient is inclined to sweat, it rather presages the distinct  
.Kind. But we are not to depend too much on this Symptom;  
Tor the confluent Kind hath sometimes followed.

These are the Symptoms which precede the Eruption, and,  
also, continue increasing, and rising higher, till the Small Pox  
he, in a manner, entirely out; and the Pulse is remarkably  
quicker the last Day but one of the Eruption, than at any  
other time.

There is no Disease demands so much of the Physician's At-  
tention, in Observing the Time, Circumstances, and peculiar  
Stages, so remarkable as they really are in the Small Pox.  
Hence the most certain Indications arise, pointing out when  
we are to act, and when we are not. From hence we, also,  
may attain to a degree of Knowledge, so as to prognosticate  
either the Life or Death of the Patient.

The time of its first Appearance is, of all, the most import-  
ant, and, therefore, first to be well consider’d;. and as it is a  
Point of the greatest Moment, I wonder Authors have heen so  
loose in the Calculation of the Time. If the Small Pox ap-  
pears the first Day of Sickness, it is mortal; if on the second,  
not much safer; if on the third, dangerous; if on the fourth,  
or a little later, the Small Pox is generally of the *distinct* Sort,  
and without Danger. The summing up, and dating the Time  
of the Eruption, we will illustrate, by this Example.

A Man is seiz’d with a Variolous Fever at three, five, six,  
or eight in the Morning, at Noon, or at six at Night, or at any  
time between twelve in the Morning and twelve at Night; the  
Day consisting of twenty-four Hours, or a natural Day. Is  
the Small Pox begins to appear at Ten at Night, and the Patient  
sicken'd at Three, Five, or Eight, in the Morning, Physicians  
fay, .the Small Pox came out the first Day; but if the Patient  
sicken'd at Noon, Six in the Evening, or Eleven at Night, and  
the Small Pox begins to appear at Six the next Morning, at  
Noon, or at Eleven at Night, Physicians say, it broke out  
upon the second Day. If the Patient sickens, for Example,  
*fseril* I. at Three in the Morning, Six in the Evening, or  
Pleven at Night, and the Small Pox appears *Aprils,* at One in  
the Morning, Four in the Afternoon, or Ten at Night, they,  
still fay, the Small Pox came out on the third Day. If a Pa-  
tient sickens on *Monday* Morning at Two, One in the After-  
noon, or Eleven at Night, and the Small Fox makes its Ap-  
pearance on *Thurs.day,* about Two In the Morning, Five in the  
Afternoon, or Ten or Eleven at Night» we six the Eruption to -  
the fourth Day.. Any one may see how loose and equivocal,  
these Calculations, hitherto establish'd by Physicians, are.  
Hence, their not having fix'd theTime *os* the Eruption exactly  
enouoh, has heen the Occasion of the prognosticating the Small  
Pox ro be a kind Sorta when it was not; to be the *confluens,.*

**when**

when sometimes it happen'd to he the *distinct :* And ass there-  
fore, fixing the Time of Eruption with great Precssion, is One  
os the greatest and most certain Indications in our Practice, the  
Omission of this hath too often been the Occasion of fatal Mis-  
takes in Practice: Let us now shew the Incertitude of this  
rambling Method of reckoning the Eruption, and establish as  
exact an Account of the Time of the Eruption, as the Nature  
of the Thing will bear. In order to this, we must come to a  
Calculation by Hours.

A Patient sickens at Two in the Morning; the Small Pox  
appears at Eleven at Night; it comes out the first Day, **the**patient having been sick twenty-one Hours, and no more, be-  
fore the Eruption: Suppose, again, he sicken'd at Six in the  
Evening, and the next Morning it appear’d at Five; Physi-  
clans will tell you, it came out on the second Day ; yet the  
Patient, all the while, was only sick eleven Hours before the  
Eruptions and, consequently, the Eruption appear'd sooner by  
ten Hours, in this Case, than in the other ; which Case was  
call’d Eruption on the first Day. Again, a Man is siein'd with  
Jthe Small Pox about Eleven, for Example, on *Monday* Night;  
**it** makes its Appearance on *ifoednefday* Morning, about Two;  
the Small Pox, in the common way os reckoning, appear'd on  
the third Day; yet, after all, the Person was ill or the Variolous  
Fever but three Hours above one natural Day. Suppose one  
sicken'd of the Small Pox at Two on *Tuesday* Morning, and it  
made its Appearance on *Thursday* Night at Eleven, it is said to  
come out on the third Day ; in tins Cafe, the Patient labours  
under a variolous Fever the Space of fixty-nine Hours, in the  
former only twenty-seven Hours; and, consequently, there is  
forty-two Hours Difference: We may from, hence conclude,  
how uncertainly Physicians must prognosticate from such an er-  
roneous manner of calculating the Time of the Eruption. , \_

Let us fix this as a Truth in general, to he regarded, that by  
how much the later the Small Pox makes its Appearance, by so  
much the kinder, and more distinct; and that the former man-  
ner, os calculating by Days, is too equivocal to be depended  
upon: We will, also, fix upon this for such a Compass of time,  
to be call'd late or early: If the Small Pox makes its Appear-  
ance before the first twenty-four Hours of IlinesS are expir'd,  
we are to expect the Disease to prove as fatal as the Plague: If  
from thirty to thirty-five Hours aster the first Illness, extremely  
dangerous: Aster forty, to forty-seVen or .forty-eight Hours,  
less so, but rather the Flux Sort, thasenot: If it appear aster  
seventy to eighty Hours, commonly the *distinct* Sort.

Having now fix'd the Time of the Eruption, and shewn the  
Signs or Symptoms which precede this Stage; we shall now give  
a History of the Signs and Symptoms attending the whole  
Course of the Eruption. According to the Violence of the  
variolous Fever, the Eruptions appear sooner or later, and they  
are of the desueact or the *confluent* Kind ; that is, they are more  
or less in Number; or they are so few, that they are scatter'd  
over the Body, like so many Grains os Corn sown and spring-  
ing up distinct from each other; or, otherwise, in Heaps, or  
Clusters, the Roots being entangled together. Now the Small  
Pox, in the thick Sort, when they first appear, are extremely  
small; but, as they grow, their Bases enlarge ; so that, as these  
spread, several Pimples, that were distinct Yesterday, To-day  
become complicated ; as so many small Grains os Quicksilver  
screw’d thick upon a Table, is each Globule was to swell and  
extend, they must run into one-another. After this manner,  
we say, the Small Pox runs together 5 hence we call it the  
*distinct* Sort, or the *confluent,* and as it is impossible for a Very -  
great Number of these Pustules to be upon the Body, without  
running together, because they are all in a State of growing  
and extending at the Basis, after four or five Days, they must  
take up greater Spaces: We may conclude, then, the Fluxing  
is but the Effect of the Number of the Eruptions. But there  
is, indeed, something, here worthy a Distinction (for I think  
we cannot be too exact in the Description of this Disease) ;  
although we are principally to depend on the Number os the  
Pustules, yet the Distribution of them over the Body deserves  
fome Attention : In one Subject there may he a greater Num-  
her of Eruptions, and those, by their Situation,, distinct from  
each other ; in another Case fewer, and vet they run together,  
are complicated, or flux, *viz.* as, in the Field fown by a skilful  
Farmer, a greater Quantity of Wheat arises distinct ; in that  
sown carelefly, and in Heaps, it arises in Parcels entangled  
and matted together, with great Spaces between. Now should  
the Small Pox on the Face, or Body, appear in this *confluent*manner, it should he call'd the flux Sort. It is of much Im-  
portance what Parts of the Body are infected more or less:  
The Small Pox fluxing upon the Face and Head, although the  
other Parts of the Body were exempt from the Disease, yet is  
the Cose not without Danger.. But if the Face be entirely co-  
ver'd, and the Body too, tho Danger must he still the greater.  
We are not to be surpris'd at the Danger being greater, when  
the Face and Head are principally affected; because all Phy-

sicians very well know, that a Turgenoy of the Vessels abou?  
**the** Brain mushgive us Just Caute to sear a fatal Event.

Having thus given an Idea of what the *distinct* and *confluent*Sorts are, let us trace and describe theso Emotions from their  
first Appearance, till they are entirely out, and spread over **the**whole Body. This Period of Time, hitherto, has been said to  
take up the Space os three Days ; but this demands as scrupulous  
an Inquiry aS the Variolous Fever did: For Example, **the**Eruptions begin to appear this Day at Three in the Morning ;  
Physicians test you, they will be all come out on the third Day,  
dating the, first Day os their beginning to maturate, the fourth  
Day after the Appearance of the Small Pox; they, therefore,  
allow three Days for the Eruption.

The following Example will sufficiently shew the Fallacy of  
this way of calculating, as well aS the Necessity of a more exact  
History of the Breaking-out os the Pox : Suppose a Physician  
attends a Patient on *Monday* Night, about Eleven of the Clock,  
and discovers the Small Pox just appearing; he returns again on  
*JPednes.day,* no matter what Hous, whether in ths Morning, or  
Eleven at Night ; he declares the Eruption entirely over, as-  
signing this Reason, it appear’d on *Monday* ; and this being  
the third Day, the Eruption must be complete. How equi-  
vocal is this, as to Time ? As if the Appearance of the Small  
Pox at One in the Morning, Two in the Afternoon, or Eleven  
at Night, his Visiting on *lscednefday,* early in the Morning, or  
late at Night, made no Difference l when it is visible that there  
may he eVen twenty-three Hours taken out of the first Day,  
and aS many out of the third Day, which, together, make up  
forty-six Hours: Therefore their asserting, that the Small Pox is  
three Days in coming out, concludes as equivocally, as to Time,  
as if seventy-two Hours and twenty-six Hours differ'd not at all.  
Now there is nothing more uncertain, or, rather, impossible,  
than to fix one certain Period of time for the Eruption; be-  
cause it is an Effect stowing from a peculiar Cause, which varies  
perpetually, and therefore the Eruption must Vary accordingly.  
An inflammatory Fever is that Cause which runs higher, or not,  
and acts with more Force in one Constitution than another. A  
Man may, with as much Propriety, ask how long it will be be-  
fore this Tree buds, when it will blossom, or the Fruit ripen ?  
And although there must be necessarily a certain time, yet that '  
time will vary, and be circumscrib'd, according to the Climate  
it flourishes in, and the Soil that nourishes it, added to the Cul-  
ture and Skill of the Gardener. As the Violence of the Va-  
riolous Fever caus'd the Eruption of the Pustules sooner or later,  
according to the Degree of its Inflammation ; so the same Cause  
either forces it out by Degrees, or suddenly: Thus some little  
herd. Pimples appear on the Forehead, Nose, Cheeks, then upon  
the Breast, the Hips, Thighs,oyer the Trunk of the Body, and,  
last of all, upon the Legs, especially about the Feet: Or this  
Cause acts with more Energy; and then they break out Over  
the whole Body, like a Rash ; or the Fever being rais'd to an  
immense Degree, either from some peculiar Habit os Body,  
pestiferous Air, or hot Medicines, and then the reverse appears,  
the Pimples are few in Appearance, rather a Blush upon the  
Face, the Skin arid and dry, and, upon a closer Inspection,  
there appear Numbers sticking in the Skin, unable to break  
forth ; purple or livid Spots are sprinkled over the Body, but  
more about the Breast, Neck, Loins, and Hips, than any-where  
else: The Patient often makes bloody Water, and these two  
last Symptoms may be foretold by another Symptom, which is  
this, an excessive Pain across the Small of the Back.

As the Fever is higher in some Constitutions than others, and  
therefore occasions the Appearance of the Small Pox sooner or  
later ; so, also, there are some Parts of the Body where this In-  
flainmation exerts itself with greater Force, which is the Oc-  
casion of the Eruptions appearing sooner or later, in greater  
Numbers, or not, according to the Situation of that Fire, or  
Inflammation. We can compare the Time and Course of the  
Eruption to nothing more aptly, than to a Field sown with  
Corn; although sown at the same time, yet the Grain comes  
up, or is retarded, ripens, or is backward, according to the Si-  
tuation, the Soil, Or Manure, Of the different Parts os the  
Field. ' .

The fixing the Course of the Eruption to three Days, indis-  
criminately, in all Constitutions, as hath been done hitherto, is,  
for the Reasons I have given, without any solid Foundation ;  
hut, nevertheless, there is a certain Period of time necessary for  
an entire Eruption: Yet that Varies, according to the Force of  
the Fever, and which Time, also, may be Calculated.. But,  
certainly, such Calculation, by Days, would render this Part os  
the History of the Small Pox aS obscure, and equivocal, as Phy-  
ficians have been in calculating that Period os time from the first  
Attack of the Variolous Fever, to the first Appearance of the  
Small Pox. )

In *tiae confluent* Sort , we may look upon the Eruption to he  
entirely over between the fifth and the sixth Day, counting  
from the first Day os Sickness; the *distinct* Sort demands six

natural Days. We must expect some Cafes where the Small Pox  
Is retarded, or a new Eruption added to the former, occasion’d  
by some Accidents, or improper or rash Methods pursu'd.  
The FeVer, and other Variolous Symptoms, which ran very high  
before the Eruption, and, rising with greater Violence till the  
rnidst os the Eruption, now begin to relax, and entirely abate  
upon the total Eruption of the Pock, I mean in the *distinct*Sort, and ought, also, to be so in the *confluent, is* the Phy-  
sician does his Duty. The Equality of the Pulse, upon the sixth  
Day, resembling that os Health, will be the distinguishing Sign  
os this second Stage, winch may be look’d upon as the most  
remarkable Stage m the Small Pox: Heres then, is a Pause ;  
the Patient seems to rest, for a time s he is easy 5 the sirst Fe-  
ver, which was without Intermission, ceases now, and is the  
only time os Intermission Nature has allotted, till the Disease be  
entirely over ; it may be look'd upon as a Calm between two  
Storms; but this Calm precedes the most Violent Storm, which  
is to come: The Patient reposes thus for six, ten, or twenty  
Hours; and then, sooner or later, according to the Violence of  
the Disease, all on a sudden, the secondary FeVer comes on, by  
stow Degrees, if it be a benign Sort; or it bursts out, like a  
Hurricane, if the Inflammation be high; the Eyes becoming  
suddenly bloodshot, or streaming with Water; the Pulse quick ;  
the Throat sore ; the Urine crude, pale, or of a Straw-colour ;  
the Patient, agitated with great Restlessness and Inquietude,  
burning with Heat, starts from the Bed; unable to bear Con-  
finement, he seeks the Ain ; endeavours all he can to free him-  
self from this ardent Heat; he becomes delirious, and often  
oven phrenetic.

This last Symptom is the most violent during the Course of  
the Disease, as well as the most obstinate: The secondary Fe-  
ver, which is the Fever of Maturation, begins, aS I have said,  
about the sixth or seventh Day ; and, according to the Violence  
and State of the Inflammation, the several Eruptions begin to  
spread, grow redder, rife with a Point, elevated or depress'd;  
they hasten on to Matter sooner or later ; the Matter is benign,  
well-concocted, or sanious, or full of Water, like a Blister  
rais'd by Fine; they bleed; or, lastly, if the Inflammation be  
carried to the highest Degree, these small Tumors, or Erup-  
tions, pass beyond the State of Suppuration ; they are burnt at  
top, aS if sear'd with an Iron; the Skin, or Spaces between the  
Clusters, is no longer florid, of a Rose-colour, but dark, pur-  
pled, or black, or cover'd over with innumerable small Pimples,  
or erysipelatous; the Skin arid, stretch'd, or distended,  
like a Piece of Parchment; or a considerable Tumor arises,  
cover'd over with Numbers of the Eruptions, resembling a true  
Anthrax, or pestiferous Boil. No Wonder *Sydenham* call'd  
every Eruption a phlegmonous Tumor, fince, most certainly, it  
is fo; and all the Phenomena correspond, in every Degree,  
With a Tumor of that Species. . .

\* The Eruptions in the Small Pox arise, take their Course, and  
are subject to all the Variations, several Appearances, and Ter-  
minations, agreeable to all common inflammatory Tumors in  
general: Now all these Changes and Variations are purely the  
Effects of the Cause I mention’d before ; the Fervor, Inflam-  
mation, or Fire of this Fever. .

Physicians, not apprehending that an Inflammation was the  
Cause os the several Changes and Appearances os the Symptoms  
in this Disease, and not discovering that such *Phanomena* only  
skew'd that the Disease differ'd more or less, aS to Heat, In-  
flammation, or Fire, but differ'dmot at all in Nature or Kind,  
divided the Small Pox, as it were, into different Diseases : For  
Instance, *Helvetius* distinguishes many Kinds of this Disease ;  
one, whilst they have a Spotted FeVer attending; another, a  
Qttinsey, or an intermittent, *etc.* Thein not knowing the  
Nature of the Small Pox, but dividing it essentially into different  
Classes, their conceiving a Complication of Diseases with the  
Small Pox, differing essentially from it, led them to a Practice  
extremely dangerous, and often, I sear, fatal: But, above all,  
they err'd most in not distinguishing the Nature of the Small  
Pox : For although many knew this Disease to be art Inflam-  
mation/yet, led by some Hypothesis or other, they oonsider’d  
a Pleurisy, or Quinsey, as Diseases differing in Kind from that  
of the Small Pox ; and this one Example of their Practice proves  
the Fallacy of their Theory, as well as the Danger os their  
Practice. Let one of these Physicians attend a Patient in the  
Small Pox, complicated with an Inflammation of the Throat,  
Lungs, or Pleura;, if the Small Pox be past the Eruption, would  
they venture to cure that Inflammation of the Lungs, or Pleura,  
by the usual means ? No, they dare not: For should they bleed,  
or. purge, they imagine the morbid Matter, peculiar, to the  
Small Pox, would bo struck in from the Circumference to the  
nobler Parts; which-is a Demonstration, that they'are entirely  
ignorant os the Nature os the Disease. ...

The Small Pox, in its Nature, then, is wholly of the infiam-  
matory Kmd, and can only differ, according to the several  
Constitutions, Air, and Climate, of People': **Wherefore we**

will go on with a History of this Disease, considering ail the  
Accidents and different Appearances of this Distemper, as the  
Effect os more or less of the Degree of Inflammation, in the  
same manner as if we were treating of a Pleurisy, or common  
Tumor. We do not say these differ in any other manner than  
this : Is the Inflammation be very high, such a Tumor will he  
hard to resolve ; and those Tumors which are hard to resolve,  
rather incline to mortify, than suppurate kindly. Upon this  
Foundation, and no other, X shall go on to describo the Small  
Pox, and attempt the Method of Cure. I shall consider every  
Pustule as a common inflammatory Tumor, subject to all these  
several Stages, in common with such Inflammations, which are  
all the Distinctions this Disease admits of.

Now we are got to the total Eruption of the Small Pox,  
from henceforth we are to look upon the Progress os **the**Eruptions, and their several Changes and Appearances, as the  
most distinguishing and pathognomonic (Signs, enabling us to  
presage either a fortunate or fatal Event.

Let us first describe the *distinct* Sort, where the Inflammation  
is not high, where the Eruptions pass gradually to a proper  
State os Maturation. As, ehen in this, they make their Ap-  
pearance not all at the same time, so they rise, and go on to  
Suppuration, in the same Order, and Succession os Time 2. So  
those on the Face necessarily are ripe two or three Days before  
those on the Feet. When they come to the highest State of  
Maturation, they begin to dry, and therefore must begin to  
sink, of course; those on the Face come to this State about the  
ninth or tenth Day, dating the time from the fust Day os  
Sickness ;. of course, those about the Feet and Legs arrive not  
to that State till the eleventh, twelfth, or thirteenth Day.  
What, then, have Authors hitherto meant, in fixing the Turn ,

to one certain Day ? When, it is Visible, the Small Pox is as  
long in turning, as incoming out. That Period os the Dis- -  
ease, call'd the Turn, is a Point of tho highest Importance,  
because in is, at that time, those who perish by the Small Pox  
generally die, unless it be when bloody Urine is made, and then  
they generally die on the seventh Day; but the Torn *of* the  
Small Pox cannot be limited to any one Day, unless they all  
made their Appearance on the same Day; here is another Cir-  
cumstance which alters the Turn, and makes it impossible to  
fix this Change to a certain Day, any more than they could the  
Day of the Eruption: For the eruption appears sooner or later,  
as- -the -Fever is more or less Violent; so, also, the Eruptions  
turn sooner or later, according to the Force of the Inflam-  
Ination.

The Order, and several Stages, of these Eruptions, through  
which they pass, will be best understood by the following De-  
scription, which will illustrate that Period of the Small Pox  
call'd *the Change,* a Time more equivocally and uncertainly de-  
scrib'd than any other Stage of the Disease. To do this, we  
mush describe the Course of one single Eruption; for it would  
he impossible to describe the Whole at the same time, because  
some are just appearing, when others begin to maturate; some  
in the highest State of Maturation, while others are drying;  
theseorying, and others are scabbing, and falling away.

First, they are small, upon the Eruption, red, watery, and  
hard; To be felt, rather than seen;- the pathognomonic Di-  
stinctions with respect to the Mealies, which are an Efflore-  
scence. -It grows larger, rises sharper, and spreads at the Basis,  
making so little a Progress for two or three Days, that one  
would scarcely inink tt would ever come to any thing; but,  
on the Fourth Day after its first Appearance, it begins to look  
white,is much larger,but often depress'd ,and flattish at the Top:  
It grows now larger, whiter, and Very much inflam'd at the  
Bottom , the Skin round it, for some Distance, is extremely  
florid, like a red Rose-leaf: The Mattemow seems to be per-  
fect Pus, but white and thin, and this in six Days from its *first  
Appearance ; it is* then’ swell'd, and comes to the highest State  
of Inflammation: The. Matter now begins to grow thicker,  
and something yellower, and that in the middle of the Pustule;  
and, at last, chickens into a yellowish Scab, the Inflammation  
still continuing about'theBasis of the Eruption; and this, also,  
takes rip about three Days time; and, when it is thus scab'd',  
the Pustule can be no longer sin a State of Inflammation; and,  
of course, the Swelling subsides, which puts a Period to **the.**Disease. N . si. ’

The'secondary Fever, thatthegan with'the Maturation of the  
‘Eruption, rises gradually, and is a concomitant Symptom with  
the several'Stages of the Pustules, as the Pustules are of the  
Teves, "We are but to suppose all the Eruptions, in any par-  
secular'Case, ‘ to'resemble this I have describ'd, and we have an  
Idea oseadistinct and kind Sort. .

' :In such' a distinct Sort as this, the secondary Fever arising  
about' the seventh Day, the Small Pox, also, beginning to fist  
It the-same time, the Fever still increasing as the Eruptions go  
on to Maturation, the Fever, of consequence, will be rais’d to  
'the-highest' Degree at'that .time the greatest'Number of tho

Eruptions are at the highest State *os* Maturation: So that if  
all the Eruptions of ths Body were to come out at one and the  
fame time, and all the *several* Parts of the Body were of equal  
Heat and Warmth, the Pustules would then, on the ninth Day,  
be all in the highest State of Maturation; that is, they would  
begin to dry all at the fame time, and we could then fix the  
Turn not only to one certain Day; bus, as it happens quite  
otherwise, we cannot fix the Time Of the Turn to such or such  
a Day, much less such an Hour os a Day, as some pretend to  
do. As the Small Pox eVen takes up two or three Days in com-  
ing out on the Face, so some os these begin to turn two or three  
Days before others do; henceforth I would lay down this as a  
Maxim ; as soon as eVer any of the Eruptions begin to dry, I  
say, the Small Pox begins to turn, and that the Turn os the  
Small Pox Continues two, three, or four Days;.and that the  
Height of the Turn will be about a Dav and a half after the  
Beginning os the Turn ; and at this time the Fever ascends to  
the highest Pitch.

From the History I have now given of the *distinct* Kind, we  
find ourselves no longer puzzled about fixing the Time of the  
Turn, even in the *confluent* Kind, or the Time of its Eruption:  
For as the Eruption takes up two or three Days, so, also, does  
the Turn : But the Eruption, the Maturation, and Turn, are  
all controul'd and govern'd by the Inflammation, Fire, or Heat,  
peculiar to the Constitution, as will be illustrated by the History  
os the *confluent* Kind.

Let us now describe the *confluent* Sort, and by it will be shewn  
all the Variations, Changes, and Distinctions, peculiar to the  
Small Pox in general.

The Fever not running Very high, yet high enough to pro-  
duce the *confluent* Sort, the Symptoms attending this Stage of  
Maturation, in that Case, with respect to the Eruptions and the  
Fever, resemble, exactly, those of the *distinct* Sort, (only they  
begin to turn rather sooner on the Face, because the Fever, or  
Inflammation, was something higher ; but they take up a much  
longer time in turning, because there are a much greater Num-  
ber os the Eruptions) if we except a Looseness in Children, and  
the Spitting in grown People.

Spitting, or Salivation, is the most extraordinary Symptom:  
It begins, generally, with the-secondary Fever, and, sometimes,  
before the Eruption be over : It is more fluid, and copious, the  
first two or three Days, than afterwards; for as Maturation  
goes on, the Fever, also, ascending, the Spittle becomes thicker,  
more7 viscid, decreasing daily; but if the secondary Fever be  
carried immensely high, the Spitting ceases, and the Patient  
dies : But if the Fever of Maturation becomes not higher than  
necessary to produce a laudable and kind Suppuration, the Spit-  
ting goes on to the thirteenth, fourteenth, fifteenth, and, some-  
times, to the twentieth Day ; that is, till the Smail -Pox is en-  
tirely dry over the whole Body.

It will be necessary here to give three distinct Histories of  
three different Subjects labouring under this Disease, from the  
coming on Of the secondary Fever; as, also, the Beginning,  
Progress, State, and Declension, of the Eruption.

The first shews the kind and *distinct* Sort; the second a  
benign, but flux'd Pox; the third the flux’d or *confluent,* the  
most fatal; with all the several Accidents and Variations this  
Disease admits of.

.. About the sixth Day of the Disease, in the *distinct* -Sort, the  
secondary *Fever.*comes on ; the Pulse begins to quicken, and  
becomes harder; the Face begins to look more florid and red,  
the Urino something higher colour'd than natural, with a Cloud  
suspended in the Middle, or subsiding to the Bottom. This  
Night, that is, the first Night of Maturation, the Patient is  
restless, and steeps, with more Difficulty than at any other time  
in the Disease; the Eyes often water, or are bloodshot. The  
seventh or eighth Day the Face swells more than at any other  
time, the-Eyelids swelling first of all, and are generally blown  
up, and shining like a Bladder, and are generally clos'd, at this  
time. The Pustules on the Face are large, and hegin tossook  
white on the Top; the Interstices, that is, the Skin between the  
Pustules, seems to be extended, inflamed, of a red florid Co-  
lour ; and some few Pustules, even now, hegin to dry about the  
Nose, Cheeks, or Forehead; the Pulse still quickens, and  
grows herder; the Voice something alter’d, as if the Patient  
hatha Cold ; the Mind dejected, and sometimes Sighs break out;  
the Urine rather paler, and lessourbid: The Eruptions on the  
Breast, which ore sewer than on any other Parts of the Body,  
are as forward, very near, as those on the Face ; those on the  
Arms are now very large, whitish a-top, and very much in-  
flam'd at the Bottom-; those On the Hands and Feet come on  
but siowly. On the ninth Day the Face appears to be swell'd to  
the utmost; the Eruptions are now larger, and the Matter ex-  
tremely white, and the Skin, or Interstices, still more inflam'd,  
and redder, many on .the Face drying-on this Day, and some  
few heginning to dry on the .Breast; the Eyelids of a darkish  
red ; the Pulse now extremely quick, and very hard 5 the Water

Paler, thinner, and clearer, than at any other time r These on  
the Arms very much inflam'd, and the Interstices, or 5Pin, be-  
tween the Pustules, almost aS much 'inflam’d as on the Face;  
and, if there are many Eruptions, the whoso Arms seem to  
swell. At this time, some little Rigors appear, now-and-then.  
On the tenth, the Symptoms are much the same as the Day be-  
fore ; the Pulse as high, and as quick 5 the Water aS clear, the  
Face as much swell'd , only the Eye-lids hegin to subside a little \*  
many more drying on the Face, and turning to a yellowish Scabi.  
Sometimes the Face .finks a littie on this Day, which, *if in  
does,* the Hands begin to puff up, and swell on the Back. On  
the eleventh, the Face begins to fall, especially about the Cheeks  
and Eyes, the Hands swelling more; those on the Hands are  
quite green, but full ripe, as they were on the Face, on the  
eighth and ninth Day ; the Pulse now begins to become more  
regular, not so quick, nor hard, as on the two preceding Days 5  
the Urine not so thin, or so pale, but with a Cloud suspended,  
turbid, or with a Sediment. On the twelfth the Face continues  
sinking, drying, scabbing; the Patient has, perhaps, the Eyen  
still clos'd up, not so much of the Swelling, which now seems  
to be gone, as the Matter's gluing up the Lids; as the Face  
finks, the Hands continue swell'd; the Interstices between the  
Eruptions not so florid ; the Skin not so much extended, not so  
hard, more pliable and soft to the Touch; that is, the Inflam-  
mation remits round the Basis of each Pustule; those on the  
Hands are still full and white, but the Matter begins to thicken,  
the Pulse more regular, even than the Day before. On the thir-  
teenth the Hands fall; and if the Feet, as sometimes they do,  
that is, if there are many Eruptions on the instep, puff up,  
and swell, as the Hands subside, and at this time the Eruptions  
on the Feet are at the highest State of Maturation : And as those  
Pustules on the Face, aster they came to Maturation, turn'd  
and dry'd into a yellow Scab, these, upon the Body, break,  
and dry away: Upon this Day they are generally turn'd all  
over the Body, unless some few on the Hands, and those on the  
Feet: So that here we may say, the Distemper ends; insomuch  
that the secondary Fever, which began about the sixth or seventh  
Day, and continued rising gradually till the tenth, when it  
came to the ^highest Pitch, and continued, as it were, so for  
about twenty Hours, and afterwards sunk by Degrees, upon  
the thirteenth or fourteenth vanishes entirely. As there is no  
more Matter to he form'd now in any Pustules, so all the'  
Eruptions take the fame Course, ending in Matter, unless those  
at the Bottoms of the Feet, where the Skin, being thick, hard,  
and callous, resista the Eruption of the Pustules, and is the  
Cause of their ending in yellowish or dark Warts, resembling  
so many Corns. There is this Distinction to he made be-  
tween Children and grown -Peopled In those the Urine is more  
turbid, not straw-colour?d, but rather white, the Body not so  
costive; io these, when- the Fever is highest, the Water jo  
clear, of a Flame or Straw-colour.; in both, at the Declension  
of the Disease, the Urine becomes thick and turbid.

The *confluent,* when it is kind, differs not at all from the  
*distinct* Sort, if we except the Spitting, or Salivation, which  
continues during the whole Course of the secondary Fever.  
AS the Fever, in this *confluent* Sort, ascends froth Day- to Day,  
and conies to the highest State about the tenth or eleventh Day ;  
so the Spitting, which began with the secondary Fever, every  
Day, as the Fever increases, lessens in Quantity, and becomes  
Constantly more and more viscid ; of course, as the Fever, on  
the eleventh Day, is at-the 'highest Pitch, the Spittle must be,  
also, at this time, extremely Viscid, and therefore hard to be  
brought up. If it ceases sat this time, the Patient generally dies.  
The Pulse, the Urine, and the Eruptions, were the only Signs  
we could form Predictions from in the *distinct* Sort ; but they  
are not the only. Signs in:the *confluent,* since the Spitting, ia  
Symptom the-most considerable, always attends the Maturation  
Of the Pustules in the flux -Sort, which is over either on the  
thirteenth, fourteenth, or fifteenth Day.2 - -

- We have describ’d the second Stage of a regular and kind  
Small Pox ; but it will be necessary here to shew the Various  
Symptoms. We shall, now give the History of-this,  
' The Eruptions, and other Circumstances, of-this Disease Vary  
according to the Force of the Fever, the Inflammation, or  
Fire,-in' the Constitution ; so that it is impossible for any Man  
in the World tohave-the Small Pox, if some Cause or-other  
did not inflame his Blood. Neither is it possible for any of these  
Eruptions, Symptoms, Circumstances, or Variations, during  
the Course of the secondary Fever, to exist; hut what are na-  
tural to the- Distemper, and which are equally essential to all  
phlegmonousTumors-in general. Therefore, all these Phaeno-  
mena arise, - change, or fall, according to the Degree of Inflam-  
mation, in such a particular Man, at such a particular Time,  
whether:his-Diet he high or low ; whether he is an *Egyptian*or *Indian* ; let the Medicines, Regimen, Diet, Air, he what-  
ever they will; neither will -Constitution, Sex, Age, or Cli-  
mate, avail; the Small Pox will he always,the same; it can

'only differ aS to Degree os Inflammation : Bo that, the Physi-  
cian, who had known this, might have given an History os  
the Small Pox, that would have taken in People os all Degrees,  
Countries, Ages, Sexes, and Constitutions. Let us return back  
to the Beginning of the secondary Fever in the confluent Sort,  
**-of** an higher Degree than what we have already descrihed. This  
Fever coming on, as I shew’d before,not arising by Degrees,but  
all at once, like a Storm or Hurricane, altho\* the whole Body  
at this time labours under an Inflammation, yet this Inflamma-  
tion, as a real Fire, bums.and destroys, and acts with greater  
Violence On some Parts of the Body than others. About the  
sixth Day os the Disease, the Head seems to he the principal  
Seat of .the Inflammation; for the Patient suddenly becomes  
furioufly light-headed, the Eyes streaming with Water, blood-  
shot, glaring ; the Sick has a fierce Aspect; the Spitting, the  
Constant Attendant on Maturation in the Flux Sort, more co-  
pious, and more fluid in the Beginning, than afterwards; but  
is the Inflammation be very high, it is even Viscid at this time;  
*.a.* Quinsey, also, attends, a Strangury, and sometimes bloody  
Water, which is the most fatal Symptom of any in this Dis-  
ease, and, therefore, a Mark of the highest Inflammation; a  
short dry Cough, with Stitches, and what is spit up from the  
Lungs, not seldom streaked with Blood. For when the Lungs  
are much inflamed, the Patient, also, spits the Matter stowing  
from the Lungs, as in a Common Cold, Pleurisy, or Peripneu-  
Inony, and the Spittie Varies, is cruder, or more digested, or  
. tinged with Blood, agreeable to the several Stages of these Dis-  
eases ; or from the salival Glands, or Parts peculiar to a com-  
mon Salivation raised by Mercury, or produced by the Small  
Pox. This Spittle is, also, more or less fluid, or extremely  
viscid, just agreeable to the State of the Inflammation. An-  
other Mark of high Inflammation at this time are, profuse  
Sweats: If the Fever is not extremely high, the Patient is  
costive; otherwise has a Looseness, the Stools black and fetid ;  
if the Fever, or Inflammation, be still higher, they are tinged  
with Blond; Or ‘the Inflammation ascending still higher,  
**a** Bloody-flux may be produced. The Pulse, if the Inflam-  
mation be tolerable, is quick, hard, and full; if raised higher,  
At quickens'more, is still hard, but not so full. If the Lungs  
the principally inflamed, the Pulse undulates; if the Brain, de-  
press’d, small, and threading; the higher the Inflammation is,  
**the** colder and paler are the external and extreme Parts ; and  
**-even** sometimes to that Degree as to produce a cold Clammy  
Sweat: The Tongue and Voice faultering, the Lips trembling,  
**.or** convulsed, as, also, what Physicians call *Subsultus Tendinum.*The Urine being of a Flame-colour, is a Mark of high Inflam-  
mation ; but the crude Straw-colour marks an higher Degree;  
and, that the Head will be principally affected. Next to the  
making *of bloody Urine, there* is no Symptom more fatal than  
Spots appearing between the Eruptions of the Small Pox; the  
Red less dangerous than the Purple , and the Purple less than  
the Black : For, if the Patient recovers, these Spots return  
from Black to Purple, from Purple to Red, and from Red to  
**the** natural Colour Of the Skin. Although these *Purples, as*they, are called, are Marks of the highest Degree of Inflamma-  
tion, yet, if it is possible for any Symptom to exceed these,  
it is Vvhen the Skin, upon several Parts of the Body, especially  
the Legs and Thighs, in great Patches, is black and hard, as

. if burnt with a hot Iron, or Lightning. If the Inflammation  
in the flux Sort, on the sixth or seventh Day, be higher than  
it should be, the Face begins to swell soon, the Pulse is quicker  
- on that Day than it ought to be, and the Spittie too Viscid :  
If the inflammation be in an higher Degree at this time, the  
pustules, That came on and ripened stowly, are now many *of*them even passed Maturation; many of them scorched or burnt

-at Top, as is seared with an Iron: The Skin of the Forehead,  
Arms, and, Other Parts, either hard, stretched. Of a darkish  
led, and sometimes covered between the Pustules, with Very  
final! Eruptions like a Rash s or else, the Shin is os a palish,  
livid, cadaverous Aspect. With these Symptoms the Patient  
may .live from Day to Day, that is, from the sixth to the se-  
venth, from the seventh to the eighth, and so On, always in  
Danger, but does not die till the Face begins to sink; and then,  
If it sinks suddenly, the Spitting ceases, the Voice alters, he  
grows hoarse, unable to swallow, and then he dies ; or should  
**the** Face not swell at all, as sometimes it happens, yet he  
struggles through these horrid Symptoms, as long as the Pulse  
continues any thing full,, and the Spitting, however Viscid and  
decreasing, perseveres; but, whenever the Pulse quickens ex-  
cessively, and sinks, and the Spitting stops, then he perishes,  
-which generally happens about the eleventh Day. If the Pa-  
.tient survives beyond this Day, as the Face dries, it turns not,  
**aS in** the kinder Sort, to a yellowish Scab, hut a black dark  
Crust. If the Patient- dies upon the tenth, twelfth, or eVen  
later, on the fifteenth, or twentieth Day, a Looseness, pro-  
fuse Sweats, or an intolerable Smell, or Stench, resembling **a**putrefied- Carcase, precedes the fatal Events

It will he proper to mention here the Disposition of Mind in  
the Course os theDisease: Is the Patient appears to be lively,  
far from dejected, but speaks with Alacrity, and some Degree  
os Boldness, it is a Mark of the Height of the Fever, and very  
near allied to Lightheadedness; on the other hand, a Sighing,  
and great Dejection of .Mind, a sorrowful, mournful, and  
weeping Aspect, are Marks of the highest Degree of Inflam-  
mation.

Thus haVe we given an History of the several Stages of  
the Small Pox ; and it appears from this History, there can he  
no Changes or Variations, but what flow from one Cause, that  
is. Fire, lnflammation, or Heat, however produced ; that there  
Can be no Diseases complicated with the Small Pox, but of the  
inflammatory Kind ; so that this Disease will be the same in  
all Countries, and have the like Nature and Symptoms, in all  
Ages, Constitutions, and Sexes. The Eruptions of the Small  
Pox may he not improperly compared to some particular Kind  
of Fruit; the Maturation of this Fruit depending upon a cer-  
tain Degree of Heat, it will be ripened gradually, or Very soon,  
or not at all; it may be blighted or burnt up, just according  
to the Disposition of the Climate, the Soil, or Culture, or Sksn  
of the Planter, whether it be planted, inoculated, or grows  
spontaneoufly.

We come now to treat of the Cure of this Disease ; and, as  
. we have endeavoured to shew the several evident Causes that.  
produce the Small Pox, or have Power to raise it to an high  
Degree, so as to render the Distemper fatal to many ; and, if  
it be true, that such Causes, which I have mentioned, are  
found to have that Force or Power to dispose an human Body to  
Inflammation, Fire, or Putrefaction, the Consequence os these;.  
and, if it be certain, -that the Small Pox is a Disease founded  
upon an inflammation, and one of the most eminent among  
the Diseases os the inflammatory Kind, which I am convinced  
it is, and of which, the History I have given is a full Demon- I  
stration; it necessarily follows, that if we could evade thole  
Causes productive of Inflammations, in general, we evade the  
Small Pox; or, should we not be able to evade those Causes,  
could we at least find means to resist and oppose such Causes,  
that is, prevent such Causes to produce these usual Effects;  
Could we obtain this, could we prevent this, an human Body  
would not suffer an Inflammation ; and, therefore, we prevent  
the Small Pox. But should the Art of Physic, or the Sagacity  
of the Physician, not always .extend *so* far as to avert such'  
Causes, or so far oppose them, as entirely to destroy their Ef-  
sects, yet if we prevail so far as to lessen those Causes pro-  
ductive of Inflammations, or considerably lessen their Effects,  
we should then have Power to dispose an human Body to a less  
Degree of Inflammation; and of consequence, to render People  
lefs subject to the Small Pox; or, should they have it, less fatal.  
To be able to effect this, and lay down such Rules that are  
Certain, either to prevent People from falling into the Di stem-  
per, or to contronl the Violence of it, and render it more sup-  
portable, and more benign, it was necessary for us to collect  
such Observations as were sufficient to prove, that such evident  
Causes would always produce, raise, and exasperate this Dis-  
ease ; and, that it was only an Inflammation, tho’yus *Generis :*It wist he now necessary to shew, what are those Means that  
have, also. Power to avert, oppose, or controul this Disease ;  
which, if we are able to do, we are able to cure the Small  
Pox. '

. Whether the Physician obtains his Ends by the Use of Medi- .  
CineS, Choice os Air, Diet, Exercise, Repose, indulging of  
Sleep, Watching, or manual Operation, or some. Or all of  
these together, it matters not. For by whatever Means the  
Physician obtains his Point in View, they are just and necessary,  
and are all confined within the Verge Of his Prescription. What-  
ever there be within the whole Compass of Nature, that can  
possibly affect an human Body, ought, if possible, by the Phy-  
sician, to be taken Notice of and observed ; because, every Mo-  
ment there may he something that offends, and, therefore, to  
be opposed. Of what Extent then are the Physician’s Views ?  
How can he he Confined to One Medicine, or such a particular  
Method of Cure ? Curing then does not consist perpetually in .  
prescribing this or that Medicine 5 not but they are sometimes  
necessary. The Physician as often prescribes happily, and gains  
his Ends, by forbidding the Use of such Medicines, or order-  
ing such and such things to he avoided, which were injudi-  
cioufly directed. Suppose an ignorant Person confined to the  
Bed in a small Room, covered with a Load of Cloaths, and a  
great Fire, taking every Moment strong Broths, or Winej.  
his Pulse becomes quick, and the Man is all on Fine, as well  
he may be: A Physician comes; he orders the Fire to he put  
out, the Gloaths to he taken off s he suffers him to cool by  
Degrees, and the Man is well. I mention this, because I would  
be rightly understood, that I am not going to lay any Stress  
upon particular empirical Medicines ; for that would be Quack-  
ery: I would endeavour to shew a rational Comportment, a '

Conduct to he observed by all Physicians, the various Methods,.  
Regimen, and Medicines, to. he used in all Constitutions, Cli-  
mates, Ages, and Sexes. We insist rather on such Rules as  
f direct us what not to do, than on those which shew uS what  
to do. .

‘But, hesore we Come to those particular Precepts concerning  
the curative Part, it will he necestary for me to lay down some  
Rules concerning the Effect of Medicines, as well aS the Mo-  
tives a Physician acts from in the Choice of his Medicines: For  
unless the Physician acts by Motives that are rational and just,  
he can never judge and determine on the real Virtue and Force  
os a Medicine. The present State os Physic, built unhappily  
upon the sandy Foundation of *Hypothesis,* and the general  
Propensity to Empiricism, that is, the Use of Quack-medi-  
cines, deserves a more exact Scrutiny into the Efficacy of  
Medicines.

. Thus have I hitherto confined myself, before the Cure, to a  
bare historical Account of the Small Pox, and divided the Hi-  
story os it into several Stages; having, also, given my Opinion  
concerning the Nature of the Disease, as well as the several  
Maladies that are often complicated with it: Hence the Na-  
ture of the Disease (or, at least, as I imagine) appears to he  
fully proved to he an Inflammation *sui Generis ,* yet we **have**an Opportunity to confirm and illustrate this essential Point,  
**I** mean, . the Nature of the Disease, in considering **the**Regimen, Medicines, Diet, *etc.* which **1** propose ; the Re-  
salt of which will still, add a greater Weight, if possible, to  
the Doctrine I have already laid down, concerning the Nature  
os this Disease in particular, as well as all other Inflammations  
in general. This will be then proving *a postcriori,* whet I have

. asserted ; and I may Venture to say, there cannot he a more  
certain Method found out to discover the Nature of a Disease,  
then by that of observing, with the greatest Attention, the  
Power and Efficacy, as well as Various Effects of Medicines  
on human Bedies; which cannot be determined, unless the State  
and Circumstances of the Sick, existing at those particular  
Times, are duly considered, when such or such Medicines were  
administered. The Operations then os such Medicines will best  
shew the Nature os the Disease. \*

As the descriptive Part, then, of this Treatise on the Small Pox  
took in an Account of the Seasons of the Year, the Climates,  
Ages, Sexes, and Constitutions of People, which have an in-  
fluence so as to raise Or oppose this Disease j as, also, whet  
those Diseases were which dispose Men to imminent Danger,  
should they then have the Distemper, as well as the Various ap-  
parent Causes productive of the Small Pox ; this may he said  
to regard whet precedes the Distemper. Next to this, we  
described what preceded the Eruption; then,\* wherever relates  
to the Small Pox, during the whole Course of the Eruption,  
till that Period of the Disease he over.

I have next described the Rise of the secondary Fever, **the**Maturation of the Pustules, till they are fully ripe, till they  
dry and fall away, which is the last Stage,

This Order then should be observed in the curative Part, and  
such Precepts proposed concerning those Medicines, as well as  
Regimen and Diet, that may have Power sufficient to resist, or  
mitigate, to controul, or conquer, a Disease hitherto, in a  
manner irrestshble.

But, to obtain the End we have in View, let the Means or  
Method he whatever it.will, (whether by Diet, by Regimen,  
hy Medicine; whether by Exercise, Repose, the Change of  
Ain or Climate, by Watching, or indulging of Sleep, or, lastly,  
by what other Means soever) provided they are found to have  
Power to prevent, to restrain, or subdue an Inflammation, they  
are certainly necessary : Is it the true, that the Small Pox is  
nothing but one of the Species of Inflammations, of confe-  
quence, all such Methods and Means are absolutely necestary  
to be put in Execution.

But we are forced by Necessity to prove what those things  
are that raise an Inflammation, as, also, what those things are  
which produce contrary Effects; or we prove nothing certain  
to our Point. And there is nothing so uncertain in Physic, as  
she Knowledge of the real Effect of that almost infinite Num-  
ber of Medicines we have of late Years introduced among ns,'  
concerning which there are many things Very confidently and  
salsely-asterted.

*Boerhaave* himself laments this deplorable Branch of our Art,  
and is even unwilling himself to give particular Receipts when  
he treats of Diseases. And well he might: For the Effects of  
Medicines rather arise and take their Force from the Judgment  
of a Physician in their just Application, than from any Virtues  
inherent in themselves. An Example will illustrate this, and  
confound all the Empirics in the World. A Dispensatory will  
tell you, that Opium will put a Man to steep ; that a Tincture  
of *Hiera Picra* will purge ; that *Mercurius Dulcis* will abate the  
Inflammation of a Wound ; that Broom-ashes will promote

Urine; that the Bark is an Astringent \* It is true, these Medin  
cines are found to have such Effects; but that is, when they a^e  
applied in such particular Cases, in stich particular Constitutions,  
inshch particular Diseases; nay, limited to such particular Stages  
Of Diseases. Let but such Cases, such Constitutions, fuch  
Stages of a Disease Vary, behold these Effects of Medicines  
vanish in a Moment, and quite the contrary arise. Half a  
Grain, or a Grain of Opium, given to a Man upon his coming  
out of a tepid Bath, having been cupped or bled, the Body nor  
Costive, will dispose that Man to steep: But where the Body is  
costive, the Constitution adust, inflammatory, bring heated  
with Exercise in an hot Summer's Day, in fuch a Case the same  
Quantity of Opium will he found to have a quite contrary Ef-  
fect ; the Person, instead of bring drowsy, and inclined to steep,  
watches, and becomes delirious, for want of Sleep. *Aloes, in-*fused in Wine, purges easily a Person of a cold flatulent Con-'  
stitution, where there is no Inflammation: But with such whose  
Blood is much inflamed, who are costive, and whose Urine is  
high-coloured, should Aloes infused in Wine, or Brandy, be  
given in such a Case, it would not purge at all; and the Oftener  
this Medicine is repeated, the more it would act aS an Astrin-  
gent, and the more obstinately costive would the Body be ren-  
dered; the Person must certainly die of an Inflammation of the  
Bowels before the Medicine will be found to heVe the Effect of  
Purging. The Bark given after the hot Fit of an Ague is spent,  
is an Astringent; but given during the hot Fit, it generally purges:

.. When it binds, or is an Astringent, it puts a Stop to the Distem-  
per; when it purges,’ it has no such Effect. A Wound grow-  
ing foul, and obstinate to heal, requires the Administration Of  
some Medicines, in order to lower the Inflammation, and  
bring it to digest : If you bleed fuch a Man, and give him fifteen  
or twenty Grains of *Mercurius Dulcis,* prescribing a low Re-  
gimen, and let the Mercury purge freely, as it generally will,  
if there be not an high Inflammation in his Blood, and no great  
Costiveness preceding, the Mercury will he found to check the  
Inflammation os such a Wound: But should it be given where  
there is a great Inflammation in the Blood, the Body Very much  
bound, the Person exposed to the cold Air, or shut up in an hot.  
Room, the Mercury will then have a ouite contrary Effect ;: it  
will be found to add not only a new Degree of Inflammation  
to the Wound, but may, also, inflame the Bowels, Stomach,  
the Throat, or the Mouth, and eVen to fuch a Degree as if  
burnt with an Iron. Who has not observed the Mouth ulce-  
rated deeply, and in a Very littie Time, by Mercury's being  
given injudiciously ? Broom-ashes, being given to an hydropi-  
cal Woman, os a cold phlegmatic Constitution, no Fever os  
Inflammation attending, would promote Urine to a great De-  
gree,. that is," would be, as the Apothecaries call it, *diuretic ,*but given in a Dropsy, where the Liver, Or any other Part of  
the Boweis is ulcerated, tabid,, or highly inflamed, if so, there  
must then be a Fever, and the Blood will be, also, much inflamed ;  
this Medicine will then have no suchEffect, butquitethe reverse;  
the Urine will be less and less, higher coloured one Day than  
another, as the Fever rises from this alcaline Medicine, til!  
the Patient dies Of a Mortification.

This I think sufficiently proves, that the Effect and Property  
of Medicines, as the *Subject* varies upon which they act. Vary  
also ; and as this Subject, or particular Body admits of infinite  
Variations, so do Medicines. Who is there then that can limit  
the Effects and Properties of Medicines ? Or who is there, that  
can tell how far their Virtues may extend ? We can only de-  
termine their Powers and Efficacy, in some particular Cases,  
at such particular Times, and in such particular Constitutions.

. The more we consider Physic in this Light, the more we still  
recede from Empyrism: For rational Physic and Empyrism are  
as inconsistent, as common Sense and Reason are with Enthu-  
siasm. . .

- We shall now proceed to point out a certain Method of Cure:  
But the Means, or Instruments, necessary to effect this End,  
must he proved to have such Force and Efficacy, that may  
avert, restrain, or conquer, an Inflammation; since those Ac-  
Cidents and Changes in the Small Pox depend upon an Inflam-  
mation, and are the necessary Consequences thereof: And,  
at the same time that we prove such Medicines, Regimen,  
Diet, *etc.* to have such Virtues, bring applied at such particular  
Times and Circumstances .of the Disease, we shall, also, de-  
monstrate what those Medicines, Regimen, and Diet are, that  
act upon an human Body so as to create, raise, and exasperate  
an inflammatory Disease. This a Physician ought to know,  
hecause it is as incumhentupon him, and of as much Conse-  
quence in the Cure of his Patient, whet to fothid him not to  
do, as whet he is to do ; that is, to know whet to sorbidhim  
the Use os, as well as what to prescrihe : For that Physician  
often happily directs, whe only prohibits the Use of such and  
fuch things, and prescribes nothing.

.First, then, in order to prevent the Small Pox, could we  
propose something that hath Power to destroy the Infection ex-  
Citing this Species os Inflammation, we prevent the Small Pox.  
Or, could we find out some Means or other, that hath Power  
.over an human Body, so aS to prevent the usual Effects flowing  
from such a Cause, we then resist that Cause: Altho' the Cause  
he not destroyed, nevertheless the Effects can never arife : Is  
so, we equally obtain our Ends. We observe the Waters of  
a smooth and tranquil Sea soon arise, and swell, and roll, from  
a sudden Storm of Wind. Were it in the Power of any  
to stay that Storm of Wind, the Sea would be calm and not agi-  
tated : Or, suppose there were some Means to add a Vast  
Weight to those Waters, superior to the Force Of a Storm of  
Wind; if so, that Sea would he still and calm, notwithstand-  
ing the Winds were uncontroulable, yet they would blow with-  
out Effect, and have no more Power over the Waters, than in  
they blew over a dry barren Piece of Land. Causes exciting  
the Small Pox are infinite. Some are evident, but many more  
unknown to us as yet; but whatever they are, they must first  
raise an Inflammation in the Blood before this Difease can ap-  
pear, since all Mankind have their Blood inflamed before **the**fourth Day.

Since many then Of these Causes which produce the Small  
Pox are hidden Causes, it is impossible to endeavour at any  
Means to destroy those Causes: Yet could we propose such  
Means that have Power to prevent the Body's being subject to  
an Inflammation, we Could then resist those Causes productive  
of the Small Pox, by hindering those Causes to have their usual  
Effects. Hence then, we have indications sufficient for our  
Conduct in avoiding this Distemper. The Diet should he cool-  
ing, diluting, and subacid, *etc.*

In short, every Method must be tried that can lower and  
impoverish the Blood : Or, were it possible even to give a Dis-  
ease, such as a true intermittent Fever, or any Distemper of a  
contrary Nature from that Of the Small Pox; sor two Diseases,  
differing essentially in Kind, cannot exist at one and the same  
time. A Person who would avoid the Small Pox, ought to  
choose such Air, or Climate, where inflammatory Diseases are  
less frequent, for I believe there is not a Climate wholly ex-  
empt, especially such Places where inflammatory Diseases are  
epidemic, and at that Time stationary. A Man would be most  
likely at such Times, and in such Places, to be subject to the  
Small Pox, and that Constitution Of Air productive of the  
Plague, spotted Fevers, or whatever other Fever of the inflam-  
matory Kind at that Time epidemic, whether in a Camp, a  
besieged Town, in the hot Months of *June, July* and *August,*will add so much Fever, or Inflammation, to the Small Pox,  
as to render it fatal. Neither will it be sufficient to avoid Vio-  
lent Exercise, an high Regimen, strong spirituous Liquors, the  
Mind'S heing agitated with Passions, or depressed by too recluse  
a Life, intense Thought, Application to Bufiness, or hard  
Study; the Constitution is even to he lowered from that os  
a Vigorous State of Health: For a florid healthy State is Very  
nearly allied to whet we may call the *first Degree of Inflamma-  
tion. ,* A Man who would avoid the Small Pox, should betake  
himself to a lower and more cooling Regimen in his Diet than  
usual; the. Liquors, small, diluting, and of the acid Kind ;  
Repletion prevented by Bleeding, and cooling Physic; the Mind  
kept in a profound Repose; gentie Exercise: By these Mearis  
. the Constitution will he reduced, as I would have it, rather to  
the State os a convalescent, than one in a perfect State of  
Health. The cold Bath, in this Part of the World, hath been  
esteemed of late Years, by Physicians of Eminence, as a pow-  
erful Means to prevent the Return of inflammatory Diseases:  
Therefore it must he of Force, to oppose, in some Degree, the  
coming on of this Disease, since it is of the inflammatory  
Kind; eVen a perfect State of Health is thought to be too  
near a State of Inflammation to receive the Small Pox, either  
by Inoculation, or Infection. With how much Attention,  
then, ought we not to examine, whether a Patient, who  
would avoid the Small Pox, or have it in a favourable manner,  
is not already affected with some inflammatory Difease or other?  
And, if there should he any such Diseases, they are instant-  
ly, if possible, to be cured, lest the Small Pox should come on,  
and affect the Patient with a Complication of Diseases, which  
would be, in such a Case, as so many Fines multiplied by one  
another.

Now there are a thousand Medicines that will raise an In-  
flammation in the Blood; and the Cause, the morbific Matter,  
whatever it be, acts as these Medicines, by raising an Instain-  
ination: Why then should there not be some Medicines, or  
Means, powerful enough to prevent an Inflammation ? Cer-  
tainly there are; altho' not always powerful chough to prevent,  
yet they are always found powerful enough to restrain or lower  
**an** Inflammation; Therefore, it is in our Power to preVen t many  
rom sailing into this Difease; and even chOsc chat do, by ob-

serving proper Rules and Methods, will seldom be exposed to Dan-  
ger, the Difease not ascending to an high Degree of Malignity-

In Diseases, such as the Plague, Small Pox, or spotted re-  
ver, it is not sufficient to hegin to oppose the Disease, when  
the Disease begins ; we are, if possible, to prepare the Body,  
and prevent the Disease : For fuch as these, in some particular  
Climates, Seasons Of the Year, and Constitutions, concur m  
such a manner, that Inflammations of so high a Degree strike  
instantaneously like Lightning; they consume and burn with  
such Rapidity, that the Body is wounded, and some Parts de-  
stroyed on the first Attack. Whoever, then, stays till the  
Disease begins, generally comes too late. It is with us often  
as with those at Sea: A good Sailor, from what he has dili-  
gently observed, can by certain Signs foretel an approaching  
Storm: He lies by, furls his Sails, and Prepares himself *for the*Reception of a furious Blast of Wind, winch might otherwise,  
in an instant, shatter and tear his Vessel to Pieces. Thus then,  
the Means I have proposed, in order to avert or prevent the  
Small Pox, or, at least, prepare the Body, so that the Disease  
may be more gentle and benign, seem not to be Very extraor-..  
dinary, particularly to those, who have great Confidence in **the**Pomp of Medicine. Could we persuade Mankind to believe,  
that the Virtues of Medicines depend wholly on the Judgment  
of the Physician, we should have no Empirics. What, can  
living lower than usual, changing of Air, a little Blood taken \*  
away, or a little gentie Physio; can fuch common Means as  
these have fuch powerful Effects ? Those who are well ac-  
quainted with Physic know, that they have. But these Powers  
and Virtues depend upon the particular Circumstances osTirne.  
There is nothing more eafy than to prove this. Suppose the  
Sagacity of a Physician extended so far as to know, that such  
a Man would in ten Minutes fall down in an Apoplexy from  
a Fuiness of Blood might not the Loss of only eight or ten  
Ounces of Blood from the Arm, or the Feet, preserve that  
Man ? After the Vessels of the Brain are lacerated and broke  
with a Profusion of Blood pent up, the Bleeding to fifty Ounces  
would have no Effect. What, if a Man were seized with a  
Shortness of Breath, a Suffocation with an unusual Heat in the  
Chest, the Cheeks more than usually florid. Signs marking the  
Distention of the Lungs, from too great a Fulness of Blood ?  
At this time the poor Man, being ignorant of the State he is in,  
finds himself dispirited, drinks a Glass of strong Wine, or  
Brandy, or a Glass of Water, with perhaps foray or fifty Drops  
of Spirit of Hartshorn, or Tome such fiery Medicine: Upon  
this he Vomits Blood, he is seized with a cold shivering Fit like  
an Ague, he spits Matter, and at last dies of a Consumption.  
Had a Physician, in fuch a Case, directedonlya Glass of Water,  
and the abstaining from every thing that could heat or inflame,  
it is not improbable but that Nature alone, unopposed by Me-  
thoine ill applied, having only the Disease at that time to strug-  
gie with, might free herself. It is then the Timing and the  
Application os Medicines, or the Means we have proposed,  
that gives the Force and Efficacy. Bleeding a few Ounces, a  
Cordial, a few Drops os Hartshorn, a Fine in the sick Manis  
Room, may he said to be of no great Consequence: There are  
such Circumstances of a Disease, there are such Times, and  
such Occasions, when they are not of any great Moment, nay,  
of no EffectBut there are Times, when such things will ab-  
solutely kill, or absolutely cure.

We are every Moment so consider Nature, and the Disease,  
opposing each other, as Weights in a Scale: We are to add, to  
her Side, that she may preponderate; and there are such  
Times, when "the least Weight is of the greatest Moment, and  
will turn the Scale. A Cypher in Arithmetic, placed among  
Figures, affects those Figures just according to the Position or  
Application of that Cypher; the Value still rising, or decreasing,  
according as It is placed; So do Medicines, Diet, Exercise,  
Regimen, *etc.*

As I have already, tinder the Article INFLAMMATIo, treat-  
ed largely os the Treatment due to an Inflammation; a Repe-  
tition of what is said ’there would he superfluous: The prudent  
Physician, upon whose Conduct arid Abilities much depends,  
will judge the Occasions os preventing and checking a threat-  
ening Degree of Inflammation, and will discern the Seasons  
when Remedia are to be applied, and of what Sort they Ought  
tohe. .4.

Of **INOCULATION.**

. As Inoculation for the Small Pox has raised the Attention of all  
Nations, itcannothe thought improper, for the sake of young  
Beginners, to describe the Method Of this Operation, which  
may be so beneficial to’Mankind.

. The Design,'then, of Inoculation, Is, to communicate a  
mild Species 6s the Small Pox to Infants, or Adults; and **the**Methodis, ‘to shake a small’Incision in the Arm, or Leg, with  
n Knife,' and therein insertToine of the purulent Matter, taken

*from* Patients labouring under a mild Kind ; then dress the  
Wound with Lint, and a Plaister. Dr. *Harris, in Dissert.  
Chirurg.* orders only the *Cuticula* to he abraded, and the Mat-  
ter to he spread on the naked Skin. After the Operation, the Pa-  
tient should keep'himself moderately warm, and observe a pro-  
per Regimen ; by which means, the Diforder will appear in  
about seven Days, without any dangerous Symptoms ; and, is  
assisted by a regular Dies, and moderate Warmth, generally goes  
through all its Stages with Success. Experience evinces, that  
this Distemper is never caught a second time after Inoculation ;  
which is a sufficient Reason for the Opinion of those who assert,  
that this Operation might he of universal Benefit to Mankind,  
by saving the Lives of some, and preserving a Beauty of Coun-  
tenance, and Strength of Sight, in others.

We learn, from History, that *Inoculation* has, fora long time,  
heen practis'd by the *Greeks* and *Turks,* though it is of modern  
Date in *Eurepe*; and was first encourag'd by the *Englijh,* who  
met with so much Success, that King *George IL without any  
Hesitation,* had the Operation perform'd on all his Children:  
So that the *Germans,* especially the Inhabitante of *Hanoucr,  
Onolsbac,* and *Pyrmont,* came Very readily into it.

Some, I confess, amongst the *French* and *Englijh,* have, in  
their Writings, condemned this Practice, as satal to Mankind,  
and unhecoming a Cbristian ; but these Objections have been  
long ago fully answered by Men of great Learning. *If* the  
Reader defines a more particular Account of this Operation, he  
may consult *Pylarinus an Italian, Maitland* an *Englishman,* and  
the celebrated *Vitterus os iVirternberg*; and the *ActaErudit. Lips.  
An.* I723, I725, *etc. Act. Natur, curios. Vol.* L *Obs. 75.* and the  
*ActaUratisiaviensia* ; where this Subject is handled at greater  
Length. The Practice of *inoculation* has, also, the Sanction of  
Experience, the best Master and Instructor in every Science.  
For my own Part, I am so far from thinking *Inoculation* satal,  
that I am convinced it might be thoroughly beneficial to Man-  
kind : For, in my Opinion, the Small Pox proceeds from a pe-  
stilential Matter intermixed with the Blood from the Very Day  
of our Birth, and which generally breaks out in every Person  
sooner or later ; and the sooner, generally the hetter ; for this  
Distemper is often satal to Persons advanced in Years: So that  
the *Virus* seems to increase with the Patient's Age. And this  
seems the Very Reason why the Small Pox is more favourable to  
Infants than Adults. If, therefore, the Disorder he procured  
from a mild Kind, and the Venom discharged from the Blond,  
while it is small in Quantity, and the infant young, I make no  
doubt but many Children, especially those of Princes and No-  
blemen, might be preserved, not only from the most malignant  
Symptoms, but even from Death. When this Distemper is  
received from a natural Infection, it often proves Very mortal ;  
on the contrary, if procured by Art, the Patient is prepared by  
a proper Diet and Medicines, and usually finds it less severe.  
It is unnecessary to produce any further Reasons in Justification  
of this Practice, as these must he sufficient to convince every  
reasonable Man. *Hiifler. Chirurg.*

VARIUS, *seu Phoxinus laevis.* J. Jonst. IS a small River-  
Fish, which the *Italians* call *Morelia,* and the *French petite  
Truite,“* a small Trout." It is scarce above a Digit in Length,  
its Skin even, smooth, and polished. It is of Various Colours,  
whence it has its Name; yellow on the Back, silver-coloured  
on the Belly, purple on the Sides, and marked all over with  
black Spots; the Flesh is soft, tender, and good to eat. '

*As* to its medicinal Virtues, it is pectoral,, restorative, **and**aperitive. *Lemery des Drogues.*

VARIX, *plur.* VARICES. '

By the Name *Parices,* amo ng Physicians, are meant those  
unequal, notions, and blackish Tubercles ofthe Veins \*, which  
are subject to rise in any Part os theBody; but most frequentiy in  
the Feet, about the Ancles; though sometimes higher, as about  
the Legs, Thighs, and other Places, aS the *Scrotum*; and even  
in the Head and Belly, aS *Celsus* observes. *Lib. J.. Cap.* 3i.  
This Disease most frequentiy infesta pregnant Women, but is  
incident to any other Persons, especially those who abound with  
thick Blood, or are affected with a Pain of the *Hypochondria,*an 'Obstruction of the Diver, or a *Scirrhus.* The more **the***Parices* increase, the more painful and troublesome theyihe-  
come, on account of the more Violent Tension os the Mem-  
branes ; and, sometimes, they even Come to a Rupture, and dis-  
charge Plenty of Blood, or degenerate into malignant Ulcers, as  
1 have sometimes observed. The smaller'Kinds of *Parties* usu-  
ally create but little Uneasiness; and are, therefore, neglected by  
the Patient, as not requiring the Assistance of the Surgeon. -

In order, however, to prevent a small, and, at first, incon-  
siderable Evil, from increasing by degrees, and growing formi-  
dable, to the great Detriment and Annoyance of the Patient, it  
will be adviseable to open a Vein, with all Speed, and take away  
a Quantity of Blood.; and, after that. Io prescrihe a proper Re-  
gimen of Diet: This done, it will'he convenient to secure the

diseased- Feet-in the most Careful and exact'manner, with a re-‘  
pellens, os, as it- is commonly called, expulsive Bandage  
ζτικὸ. XXI V. *Fig.* I. FJ ; and whenever you perceive it to  
stacken, in any measure, or become loose, to straiten it anew,  
and never to remove, or throw it off, while you are under the\*  
least Apprehensions of an-Increase of the Disorder. The An-  
tients, as we learn from *Colsus,* freed their Patients from the.  
*Parices* by a speedy Cauterisation, or Excision; but we Mo-  
derns use a milder way of proceeding: If the *Parties,* then, are  
increased to a considerable Bigness, we apply the Bandage before-  
mentioned for the Constriction and Strengthening of the Veins,  
which are dilated heyond their just Measure, moistening the  
Fillet with red Wine warm, or a Decoction os Astringents, or  
Of Vinegar and Alum; and binding, also, a thin Piste os Lead  
upon the Part affected. *Dionis* assures ns, that there is no  
Method more effectual for repressing the *Parices,* than by Stock-  
ings made of Dog-lkins, or other Skins fit for the Purpose,  
and *so* contrived, as, by Help of a Cord, to be straitened, and  
drawn as close as the Patient can well suffer it; by which means,  
the Legs may be kept under a close and exact Constriction, both  
Day and Night. The Form of those directed by *Dionis,* is re-  
presented *Tob.LsVlI. Fig. ii.* Such Spatterdashes may, also,  
be made, in the fame Fashion, of grey linen Cloth, which is  
strong enough, as I have seen them myself. The most effectual  
Remedy against the *Farices,* in the Opinion of *Harris, Differ.,  
tat. Chirurg.* 8. is Tincture of Myrrh, if the Part affected be  
frequently anointed with jt, and then covered with *Rulandus’z  
Emplastrum Diasulphuris:* And if there he, afterwards, a  
Bandage applied, or a Constriction of the Place effected, hy  
means of Stockings, in the manner before described, the  
greater is the Success to be expected from this Remedy.

Where the *Far ices* are increased beyond Measure, and  
swelled to so enormous a Degree, as to threaten a Rupture, and  
a dangerous Haemorrhage is to be seared, or if they grow into-  
lerable to the Patient on any other Account, recourse must  
be had to the Knife, and Section must be used. In this Ope-  
ration we make a longitudinal Incision into those Tubercles of  
the Veins which are most swelled, or which excite the greatest  
Pain; and after evacuating the thick Blood, to the Quantity of  
eight, ten, or twelve Ounces, according to the Various Habits  
of the Patient, we dextroufly cover the Wound with Lint dipt  
in Bole Armoniac and Vinegar; and upon this applying a leaden  
Plate, we secure the Whele with a Bandage. If the Opera-  
tion he rightly performed; there generally succeeds a Coalition  
Of the Veins, in much the same manner as aster Phlebotomy,  
and the Vesicles are stregthen'd by their Cicatrices; so that the  
same Place is scarce eVer infested with *Farices* afterwards.  
The antient Surgeons, as we said, cured *Varices* by Cau-  
tery or Excision. See *Celsius, Lib.* 7. *Cap.* 3I. The Method in  
which the latter was performed, was thus: First, They cut **the**Skin upon the distended Vein ; then took hold of the Vitiated  
Part of the Vein with an Hook, arid with a Knife cut it quite off,  
and separated it entirely from the Body, after which they healed  
up the Wound with a Plaister. *Gtrvey,* in *Chirurgie veritable,*declares himself of Opinion, that the quickest, and, at the same  
time, the safest Method Of Curing *Farices,* is to pafs a  
crooked Needle with a double waxed Thread, quite under  
the distended Vein; and by drawing the same into a Knot, to  
make a firm Ligature upon the vein, then immediately to  
make an Incision with the Knife into the tumid Vein, and diss  
charge a sufficient Quantity Ofthe thick Blood: This done, the  
Wound is to he treated with some digestive Ointment, and **the**Patient is to keep his Bed, till she vVonnd is almost conglu-  
tinated. The antient Method thy Cautery was first to cut the  
Skin, then lay open the Vein; and this done, gently to press  
the fame with asstender, brunt, red-hot Iron; the Lips of the  
Wound being held asunder with Hooks, to prevent then heing  
burnt, *(Celsus,* in the Place before-quoted): When-this was  
over, they treated theWound with Remedies adapted to Com-  
bustions. *Harris,* indeed,- judges all Methods os Excssion and  
Burning not only rash,-but oruel; it must, however, be con-  
Tested, that the-MolestationS and Pains, created by the *Parices,*are sometimes so Violent; that a Rupture may he dreaded, and  
that in the Night, (of which I know a Very remarkable In-  
stance) with Danger of Death; for which Reasons - the Assist-  
ance of such putent Remedies, as The-Knife and Needle, is oh  
such Occasions necessarily required. ‘

‘' ButthywhateVer means-the *Notices* areoured,-in seems high-  
ly necessary, in order to.prevent the Return of .so.troublesome  
a Disorder, to fine the proper Cautions of avoiding too gross  
'and plentiful Feeding, and to drink smaller Liquors; such as  
Water, Water-gruel, Tea,'Coffee, orTnstrsions os other pro-  
per Vegetables; TheBody, also, as Very frequently to he ex-  
"erased ; the Feetrare every Day to be well Tubbed; and Phle-  
botomy as to he administered at least twice in the-Year, that is,  
inffipnng and Autumn. - Tho'same Precautions *-are* to he ob-  
served

served by those who are but newly or flightly affected, and are  
willing to avoid greater InconVeniencies, not to be removed  
bur by the Knife and Fine. *Muys* has a singular Instance os a  
Varix, combined with Ulcers, which he opened once every  
Year, and discharged a Pound of Blond ; by which Means the  
Eruption of the Ulcers was prevented. See his *Chirurg. Ra-  
tional. Dec.* I. *Obs.* 6. *Hiisieri Chirurg.*

VANUS. A Pimple on the Face. See **FURUNCULUS.**

VAS. A Vestel either for mechanical, chymical, culinary,  
or any other Uses. In Anatomy, all the Parts which convey  
a Fluid are called *Vessels,* as the Veins, Arteries, and Lympha-  
tics.

VASTUS EXTERNUS.

This is a Very large fleshy Muscle, almost as long as the OS  
Femoris, broad at the Extremities, and thick in the Middle,  
lying on the Outside of the Thigh.

Its upper Insertion being something tendinous, is in the po-  
sterior, or convex rough Surface, of the great *Trochantcr c* It  
is, also, fixed by a fleshy Insertion along the Outside of **the**Os Femoris, for above two Thirds of its Length downward,  
in the corresponding Part of the *Linea Aspera,* and in **the**neighbouring Portion of the *Fascia Lata.*

From all this Extent, the fleshy Fibres running downward,  
and a little obliquely forward toward the *Rectus Antcrior,* ter-  
minate insensibly in a kind of short Aponeurosis, which is fixed  
in all the nearest Edge of the Tendon of the *Rectus,* **in the**Side of the Patella, in the Edge os the Ligament os that Bone,  
\_ and in the neighhenring lateral Part of the Head of the Tibia.

The Body or Belly of this Muscle grows bigger gradually,  
from its upper Extremity to the Middle ; and from thence di-  
minishes again by Degrees. Its lowest Fibres run in a littie  
behind the *Pectus,* and are inserted there.

VASTUS INTERNUS.

This Muscle is Very like the former, .and situated in the same  
manner, on the Inside of the OS Femoris.

It is fixed above by a short flat Tendon, in the anterior rough  
Surface os the great *Trochantcr,* and, by fleshy Fibres, in that  
. oblique Line which terminates the Basis of the Collum Femoris.  
anteriorly, on the Foreside of the Insertions of the *Psoas* and  
*Iliacus*; in the whole Inside of the *Os Femoris*; and in the  
*Linea Aspera* on one Side of the Insertions of the three *Trici-  
pites,* almost down to the internal Condyle,

From all this Extent the Fibres run downward, and a littie  
obliquely forward ; and the Body of the Muscle increases, in  
she same manner as the *Fastus Externus.* It terminates helow  
in.an Aponeurosis, which is fixed in the Edge of the Tendon  
of the *Rectus Anterior,* in the Side of the Patella, and of its  
tendinous Ligament ; and in the Side of the Head, or upper  
Extremity os the Tibia.

The two Vasti and Crureus Ought to he looked upon as a  
true Triceps; the Uses of which, in relation to the Bones, are  
only to extend the Tibia on the Os Femoris, and the Os Fe-  
moris on the Tinia. The Extension of the Tibia on the Os  
Femoris happens, principally, when we sit or lie, and that of the  
OS Femoris On the Tibia, when we stand or walk. All the  
three Muscles move the Patella uniformly, in the Direction of  
the Os Femoris, on the Pulley at the sower Extremity of that  
Bone. The external or broad Portion of this Pulley, and of  
the Patella, answers to this Direction, and seems to be more  
exposed to the Action of these Muscles, than the internal and  
.narrow Portion, on which the necessary Obliquity Of that Pul-  
ley depends.

The Insertion of both the Vasti immediately in the Head of  
the Tibia, prevents the Patella from heing luxated laterally on  
some Occasions, in which the Muscles may act with more  
Force on One Side than on the other, or remain without Action,  
in which Case the Patella is loose and floating.

To be convinced os this Inaction, and of the Moveableness  
.of the Patella at the same time, let us either in Sitting or  
Standing, with the Leg extended, rest the Leg only upon the  
-Backside of the Heel, so as that the whole lower Extremity  
may he .supported on the Heel, and on the Head of the Os Fe-  
moris, the .Knee, and the Body Of the OS Femoris, resting On  
. nothing, and the Extension heing made only by the Weight of  
the Bones, without any Assistance from the Muscles. If in  
this Situation we lay the Thumb on the Basis of the Patella,  
and the fore Finger on the Apex, and press these two Parts al-  
. ternately, the Patella .will he perceived to he raised and de-  
pressed.

**in the** Description of these Muscles, I forgot an Observa-  
aion which I have made on the Insertion of several Fibres im-  
.mediately in the Capfular Ligament of the Joint os the Knee.  
**. I** have seen these Fibres run down, as if they came principally  
. from the Crureus ; and their Insortion in the Ligament was ob-  
lique, and made by degrees.

By the Insertion Of these Muscles in the Patella, their Line

of Direction is removed to a greater Distance from the Centre  
or Axis of Motion of the Joint, which facilitates their Action,  
and defends their common Tendon from Compression and Con-  
tusions. *Winsiaw.*

. VASUM, in *Scribonius Largus,* is a Vessel.

' VATICANIE PILULJE. The Name os some purging  
Pills, described in the Old London. Dispensatory, thus:

Take os Calamus Aromaticus, Anise, Mastich, Ginges,  
Cinnamon, Zedoary, the lesser Cardamoms, Mace, Nut-  
megs. Cloves, Saffron, Cuhebs, Aloes-wood, Turbith,  
Manna, Agaric, Sena-leaVes, Cassia-wood, and all the  
Species of Myrobalans, each one Scruple ; os the Leaves  
Of Scordium, and Carduus Benedictus, each half a Dram ;  
and of the best Rhubarb, one Ounce, two Scruples:  
Reduce to a fine Powder: To which add of the best Aloes,  
two Ounces, four Scruples ; and of the SolutiVe Syrups of  
Roses, and Violets, each a sufficient Quantity f Make into  
a Mass of Pilis, according to Art.

VAYNILLAS. The same as **VANILIA.**

UCAUNA. A Sort of Cray-fish ofan olive Colour, men-  
tioned by *Lemery,* in his Treatise on Drugs, which, he says,  
is pectoral and aperient.

VEEL-GUTTA is, according to *Blancard,* a Name for  
the **OREOSELINUM.**

VEGETATIO. Vegetation. See **BOTANY. \_**

VEHICULUM. A Vehicle, in Pharmacy, is any Liquor  
in which a Medicine is given to a Patient, in order to render  
the Exhibition more grateful and cornmodic4.

VELONAE. Certain Fishes mentioned by *Oribasius, Col-  
lect. Medic. Lib.* 2. *Cap.* 58. whose Beaks, he says, are horny,  
and that they afford a Very bad Juice.

. VENJE. The Veins. .

. The Veins are only a Continuation of the extreme Capillary  
Arteries, reflected back again towards the Hears, and uniting  
their Chaneis as they approach it, till at last they all form  
three large Veins ; the *Cava Descendens,* which brings the  
Blond back from all the Parts above the Heart; the *Cava Ascen-  
dens,* which brings the Blond from all the Parts helow the  
Heart; and she *Ponta,* which carries the Bleed to the Liven

The Coats Of the Veins are the fame with those of the Ar-  
teries, only the muscular Coat is as thin in all the Veins, as it  
is in the Capillary Arteries; the Pressure of the Blood against  
the Sides Of the Veins being less than that against the Sides of  
the Arteries.

In the Veins there is no Pulse, because the Blood is thrown  
into them with a continued Stream; and because it moves  
from a narrow Channel to a wider.

The Capillary Veins unite with one another, as has been  
said Of the Capillary Arteries.

in all the Veins which are prependicular to the Horizon, ex-  
cepting those of the Uterus, and of the *Porta,* there are small  
Membranes Or Valves; sometimes there is only one; some-  
times there are two, and sometimes three placed together, like  
so many half Thimbles stuck to the Sides of the veins, with  
their Mouths towards the Heart. In the Motion of the Blood  
towards the Heart, they are pressed close to the Sides of the  
Vein ; but if Blood should fall back, it must fill the Valves ;  
and they, being distended, stop up the Channel, so that no  
Blond can repass them. *Keills Anatomy.*

The Blood, distributed to all Parts of the Body bytwo Kinds  
of Arteries, the Aorta, and Puimonary Artery, returns by  
three Kinds of Veins, called by Anatomists *Vena Cava, Vina  
Ponta,* and the *Pulmonary Pein.*

The *Vena Cava* carries back, to the Right Auricle of the  
Hears, the Blond conveyed by the Aorta to all the Parts os the  
Body, except what goes by the Coronary Arteries of the Heart:  
It receiVes all this Blood from the arterial Ramifications, in  
Part directly, and in Part indirectly.

The *Vena Ponta* receives the Blond carried to the floating  
Viscera of the Abdomen, by the Coeliac Artery, and the two  
Mesenteric Arteries; and conveys it to the Hepatic Vein,  
and from thence to the *Pena Cava.*

. The Pulmonary Vein conveys to the Pulmonary Sinus, or  
Left Auricle of the Heart, the Blood carried to the Lungs by  
the Pulmonary Artery.-

. .To these three Veins two others might he added:. These  
which belong particularly to the Heart, and to its Auricles,  
and the Sinuses of the Dura Mater.

In describing the general Course of the Veins, we may either  
.begin by their Extremities in all the Parts of the Body, and end  
by the Trunks carried all the Way to the Heart, according to  
the Course of the Blond; or we may begin by the great  
.Trunks, and end by the Ramifications, and Capillary F-Ttre-  
mines, according to their several Divisions and Subdivisions.

This last Method is most convenient, and makes it a very  
easy Matter to pursue the first, whenever we think it proper to  
do it; and, for these Reasons, I have chosen to follow it, in  
tins Description.

We commonly talk of the *Vina Cava* in general, aS is it  
were but one Vein at its Origin, or had but one common  
Trunk; whereas it goes out from the Right Auricle of the  
Heart, by two large separate Trunks, in a Direction almost  
perpendicularly opposite to each other, one running upward,  
called *Ferta Cava J aperior* ;.the other downward, called *Vera  
Cava inferior.'*

It may, however, be said, that these two Veins have a Sort  
of Continuity, or a small Portion os a common Trunk, fixed  
Io the Edges of the Right Auricle, as is three Quarters Of the  
Circumference os a large strait Tube were cut off, and the  
Edges of a small Bladder applied to the Edges of the Opening,  
thus made in the Tube.

The Right Auricle may, also, be looked upon as a muscular  
Trunk common to these two large Veins, and may be called  
the Sinus of the *Vena Cava* ; but, in this respect, the Name  
**of** *Sinus Pulmonaris* agrees still better to the Lest Auricle.

The superior *Vina Cava* is distributed, principally, to the  
Thorax, Head, and upper Extremities, and but very littie to  
the Parts helow the Diaphragm.

The inferior *Vena Cava* is distributed,» principally, to the  
Abdomen and lower Extremities, and but Very little to the  
Parts above the Diaphragm.

The Antients called the superior *Vina Cava, Ascendens,* and  
the inferior. *Descendens* ; having regard only to the great  
Tubes, and to their Division into Trunks and Branches. Se-  
veral Moderns have retained those Names, but in a contrary  
Signification, to accommodate them to the Motion os the Blood,  
which descends by the *Cava Superior,* and ascends by the *Caua  
Inferior. -*

But to avoid the Mistakes that may happen in Reports made  
Of Wounds, or other Diseases, and of what is observed in  
opening dead Bodies, and in other Cases of these Kinds, it is  
best to retain the Distinction of *Vina Caua supcrior* and *in.,  
iferior.*

The Trunk of each of these two Veins sends off, much in  
the same manner with the Arteries, a certain Number of prin-  
cipal or capital Branches, which are afterwards ramified in dif-  
ferent manners. Each Trunk terminates afterwards by a  
Bifurcation, or a Division into two subordinate Trunks, each  
Os which gives off other principal Branches, ending in a great  
Number of small Trunks, Branches, and Ramifications.

They have, also, this common to them with the Arteries,  
chat the greatest Part of the capital Branches are in Pairs; as  
well as the subordinate Trunks. The Ramifications of each  
subaltern Trunk, taken by itself, are in uneven Numbers; but  
they make even Numbers with those *os the* other like Trunk.  
The *Pena Azygos,* and some other small Veins, are Exceptions  
from this Rule. . ’ -

Before I go on'to the particular Description of each of these  
Veins, many os which have proper Names, I shall give a ge-  
neral Idea or their Distribution, and an .Enumeration os their  
principal Ramifications. But I shall say nothing of the Coro-  
nary Veins of the Heart, because they are not immediately

1 joined to any other Vein. I begin by the superior *Vena Cava.*

**. . VENA CAVA SUPERIOR. ...**

The superior *Vena Cava* runs up from the Right Auricle of  
the Heart, almost in a direct Course, for about two Fingers-  
breadth, lying within the Pericardium, in the Right Side of  
the Trunk of the Aorta, but a little more anteriorly.. '.

As it goes out of the Pericardium, it is inclined a littie to  
the Lest Hand, and then runs up about an Inch, that is, as  
high as the Cartilage of the first true Rib, and a littie higher  
than the Curvature of the Aorta. At this Place it terminates  
by a Bifurcation, or Division into two large Branches, or sub-  
ordinate Trunks; one of which runs toward the Lest Hand,  
the other towards the Right.

These two Branches are named *Subclavia,* as lying behind,  
and, in some measure, under, the *Claviculae,* both in the same  
manner. They are of unequal Lengths, because the Trunk  
**os** the *Vina Cava* does not lie in the Middle of the Thorax,  
but toward the Right Side, where the Lest Subclavian arises as  
well as the Right, and is, consequently, longest.

. The Trunk *os* the superior Cava, from where it leaves the  
*Pericardium* to the Bifurcation, sends out anteriorly several  
small Branches, which sometimes arise separately, and some-  
times by small common Trunks: These Branches are, the *Fcr.a  
Mediastina, Pericardia, Diaphragmatica supcrior. Thymica,  
Mammaria Intcrna,* and *Trachealis,* the last of which go out  
sometimes behind rhe Bifurcation.

- All these small Branches from the Trunk of the *Cava supe-  
rior* are termed *Dextra*; and their Fellows on the other Side,

called *Sinistra,* do not arise from the Trunk, because of its  
lateral Situation, but from the Left *Subclavia.*

Posteriorly, .a littie above the *Pericardium,* the Trunk os tho  
superior *Cava* sends out a capital Branch, called *Vina Az'-rse*or *Pena sine Pari,* which runs down on the Right grde os sthe  
Bodies Os the Vertebrae Dorsi, almost to the Dinphraom; o!V-  
ing off the greatest Part of the *Vince Intercostales\** 2nd *Nsm...  
bares Supcriores.*

The two *Subclavia.* run laterally, or toward each Side, and  
terminate aS they go out os the Thorax, between the first jout  
and Clavicula, immediately before the anterior Insertion of .he*'Musculus Scalenus.*

The Right Subclavian, which is the shortest of the two,  
commonly sends out sour capital Branches ; the *fugularis eX-  
terna* and *interna,* the *Fcrtebralis,* and *Axillaris,* which lash is  
rather a Continuation than a Branch of the *Subclavian.*

.. The Lest Subclavian, being longer than the Right, gives off,,  
first of all, the small Veins' on the Lest Side, answering those  
on the Right Side, that come from the Trunk of the superior  
. Cava;- as the *Mediastina, Pericardia, Diaphragmatica superior.  
Thymica,. Mammaria Interna,* and *Trachealis.*

Next to these small Veins, called *Sinistra,* it detaches an.  
other small Branch, called *Intercostalis Superior Sinistra,* and  
then four large Branches, like those on the Right Subclavian,  
as the *Jugularis Extcrna* and *Intcrna, Virtebralis,* and *Axil-  
laris,* which are all termed *Sinistra.*

The external Jugular Veins are distributed principally to the  
outer Parts os the Throat, Neck, and Head; and send a small  
Vein to the Arm, named *Cephalica,* which assists in forming a  
large one os the same Name.

The internal Jugular Veins go to the internal Parts of the  
Neck and Head, communicating with the Sinuses os the Dura  
Mater, and in several Pisces, with the external Jugular Veins.

The Vertebral Veins pass through the Holes in the trans.  
Verse Apophyses of the Vertebrae os the Neck, sending Branches  
to the Neck and Occiput, they sorm the *Sinus Venales os* these  
Vertebrae, and communicate with the Sinuses of the *Dura  
Mater. .*

The Axillary Veins are Continuations of the *Subclavia,*from where these leave the Thorax, to the Axillae : They pro-  
duce the *Mammaria Interna, Thoracica, Scapulares,* or /so-  
*morales,* and a Branch to each Arm, which, together with that  
from the external *Jugularis,* forms the *Vena Cephalica.*

Afterwards the Axillary Vein terminates in the principal  
Vein of the Arm, called *Basilica* which, together with rhe  
*Cephalica,* is distributed, by numerous Ramifications, to all toe  
Parts of the Arm, fore Arm, and Hand.

**VENA CAvA INFERIOR.**

The Portion os the inferior *Vena Caua* contained in the  
*Pericardium* is very small, heing scarcely the twelfth Part os an  
Inch on the fore Part, and not above a Quarter of an Inch on  
the back Part. From thence it immediately perforates the  
Diaphragm; to which it gives the *Fenee Diaphragmatica Infe-  
riores,* or *Phrenic#.*

It passes next behind the Liver, through the great Sinus of  
that Viscus, to which it furnishes several Branches, termed  
*Fena Hepaticae.*

In this Course it inclines a littie toward the *Spina Dorsi* and  
*Accra Iniferior,* the Trunk and Ramifications os which it after-  
wards accompanies in the Abdomen, all the Way to the *Os  
Sacrum*; the *Arteria Coeliaca,* and the two *Mesenterica,* only  
excepted.

Thus the inferior *Cava* sends out on each Side, in the same  
manner with the Aorta, rhe *Fence Adiposa Renales, Sperma-  
tica, Lumbares,* and *Sacra.* . Having reached to the *Os Sa~  
erum,* it loses the Name of *Cava* ; and, terminating by a Bi-  
furcation, like that of the descending Aorta, it forms the two  
*Vcr.a Iliacae.*

These Iliac Veins having given off the Hypogastricae, with  
all their Ramifications, to the Viscera os the *Pelvis,* and to  
some other external and internal neighbouring Parts, go out of  
the Abdomen,. under the *Ligamentum Fallopii,* and there take  
the Name of *Venae Crurales.*

Each Crural Vein sends off numerous Ramifications to all  
the' lower Extremities; besides the *Pena Saphena,* which goes  
out near ths,0rigin of the *Cruralis,* and, running along this,  
whole Extremity, detaches many Ramifications, all the Way to  
the Foot.

**VENA A2YGOS and VENAE INTERCOSTALES.**

The *Vina Azygos,* or *sine Pari,* is very considerable, and  
arises posteriorly from the superior *Cava,* a little.above the *Pe-  
ricardium.*

It is immediately afterwards bent backward over the Origin  
of the Right Lung, forming an Arch winch surrounds the great  
Pulmonary’ Vessels on that Side, as the Arch οτ ute Aorta does

those of the Left Side; with this Difference only, that the  
Curvature os the *Azygos* is almost directly backward; whereas  
that of the Aorta is oblique. From thence it runs down on  
the Right Sine of the *Pertchra Dorsi,* on one Side of the Aor-  
ta, and before the Intercostal Arteries; and, getting behind the  
Diaphragm, it terminates by a very sensible Anastomosis;  
sometimes with the *Vesm Renalis,* sometimes with a neigh-  
bouring Lumbar Vein, sometimes immediately with the Trunk  
os the *Cava Inferior,* and sometimes otherwise.

I have seen this Vein extremely large, resembling the Trunk  
of the inferior Cava, from the Disphragm, to the Origin of  
the *Renales,* the true Cava being through all this Space Very  
narrow, or of the Size of an ordinary *Axygos.*

The *Vena Axygos* sends out, first of all, two or three small  
Veins from the Top of the Arch, one os which goes to **the**Aspera Arteria; the others partly to the Aspera Arteria, and,  
partly, to the Bronchia, by the Name of *Fana Bronchiales,* **ac-**companying the Ramifications os the Bronchial Artery.

Afterwards the *Axygos* detaches from the extremity of the  
Arch, a small Trunk common to two or three small VeinS,  
called *Intercostales Superiores Dextra,* which bring back the  
Blood from the first three Series Os Intercostal Muscles, and  
from the neighbouring Part of the Pleura.

Thefe Intercostal Veins send Branches through **the** Inter-  
costal Muscles to the *Serratus Superior Posticus,* and to the *Sor-  
ratus Mayor,* and afterwards they run along the Interstices be-  
tween the Ribs, communicating with the *Vena Mammaria.*

They, also, send small Branches backward to the Vertebral  
Muscles, and Canal of the Spine, where they communicate  
with the Venal Circles, or Sinuses, winch bring back the Blond  
from the *Medulla Spinalis.*

*As* the *Azygos* runs down, it sends off the inferior Intercostal  
Veins on the Right Side, one going to each Series of Inter-  
costal Muscles: These Veins run along the lower Edges of the  
Ribs, and perforate the Muscles by Branches, which go to **the**posterior and external Part of the Thorax.

They communicate with the *Pence Thoracica,* and most com-  
monly with the *Mammaria Interna,* and, lastly, more or loss  
with each other, by perpendicular Branches, near the posterior’  
Extremities of the Ribs.

The *Azygos* fends off, likewise, the Left Intercostal Veins,  
but seldom the whole Number ; for the superior Veins come  
-often from the Left Subclavian. The inferior Intercostal Veins,  
to the Number of six or seven, sometimes more, sometimes  
fewer, come Often from the Trunk of the *Azygos*; and run-  
ning between the Aorta and Vertebrae, to the Substance of  
which they give small capillary Twigs, they send off almost the  
fame Ramifications with the VeinS on the Right Side, and  
likewise some to the *Oesophagus.*

Sometimes these Intercostal Veins come from a small corn.  
Inon Trunk, which goes out from that of the *Azygos,* and,  
passing between the Aorta and Vertebrae, is bent downward  
along the Lest Side of the Vertebrae: in which Course it de-  
taches the Iutercostals laterally. This small Trunk is in some  
Subjects bifurcated upwards and downward, as it sends off the.  
Intercostais; and, in others,’ there are two small common  
Trunks.

Lastly, There is sometimes an entire *Azygos* on the Left  
Side, which proceeding from the Arch of the ordinary *Azygos,*Is afterwards distributed in the fame manner aS the other, on the  
Right Side: But this Disposition, likewise. Varies Very much.

The *Azygos,* having reached below the last Rib, sends off a  
large Branch, which, bending outward, perforates the.MuscleS  
of the Abdomen, is ramified between their different Planes,  
and communicates with the like Ramifications of the last, or  
last two intercostal Veins.

Sometimes it sends off the *Vena Diaphragmatica Inferior,*and, also, gives downward to the first, or first two transverse  
Apophyses of the *Virtebree Lurnbares,* .a Branch which forms  
the first *Irenes Lurnbares Dextra.*

These Communications between the last intercostal, and first  
Lumbar VeinS, are very irregular, being sometimes by a Series  
of' opposite Angles, sometimes by Areolae, and sometimes  
by a reticular Texture. Sometimes the Extremity of the *Varta  
Azygos* communicates either mediately, or immediately, with  
the *Pena Adipose,* and even with the *Fena Spermatica.*

**VENAE PECTORALES INTERNAE.**

The *Pectorales Interna* are small VeinS disposed in Pairs,  
towards the Right and lamst Hand, behind the *Sternum,* and  
Parts near it, including rhe *Diaphragmatica Superiores,* or  
*Pcricardio-diaphragmatiea^ Mediastina, Mammaria Internee,  
Thyrtices, Pericardia,* and *Gutturales,* or *Tracheales.*

All these small Veins aro divided into Right and Lest; and  
these are both distributed much in the same manner; but they  
differ in their Orlgin, heoause os the Inequality in the Bisur-  
Cation of the *Cccua Superior.*

The Right *Fetus Mediastina* goes out anteriorly from the  
Trunk os the superior Cava, a little above the Origin os the  
aseyJW ; the Lest comes from the *Subclavia.*

The Right superior *Diaphragmatica,* or *Pericardia Dla-'  
pihragmatica,* comes anteriorly from the Root *os* the Bifurcation  
near the *Mediastina*; and is distributed by several Branches to  
the upper, fore, and back Parts of the *Pericardium,* commu-  
nicating with those os the Left *Diaphragmatica,* and accom-  
panying the Nerve os the same Name. The Lest superior  
*Diaphragmatica CDsnes* from the Left *Subclavian,* a little below  
the Origin of the *Mammaria.*

The Right internal *Mammaria* arises anteriorly from the  
*Vena Cava,* a little below the Angle of the Bifurcation: It  
runs along the nearest internal or posterior Edge os the *Ster-  
num',* and on the cartilaginous Extremities of the Right Ribs,  
together with the Artery of the same Name. Having reached  
near the Diaphragm, it sends it a Branch, which runs toward  
the tendinous Plane, and communicates with the common dia-.  
phragmatic Veins.

Afterwards this Mammary Vein gives small Branches to the  
*Mediastinum,* and others, between the Ribs, to the Integu-  
rnents ; os which thole that pass between, and under, the Care  
tilages of the last true Ribs, run down on the inner or posterior  
Side of the *Musculi. Recti Abdominis,* being ramified among  
their fleshy Fibres, and communicating, really, with the Epi-  
gastric Veins, by several small Twigs.

. The Left internal *Mammaria* arises anteriorly from the Lest  
*Subclavian,* opposite to the Cartilage, or anterior Extremity of  
the first true Rib.

The Right *Vena Thymica,* when it arises separately, goes  
out from the Bifurcation; and when it is wanting, the *Thymus,*from whence it takes its Name, is furnished by the *Gutturalis,*or some other neighbouring Vein : This Vein often reaches no  
lower than the inferior Part of the *Thymus* ; and the Left Vein  
of the fame Name comes from the Left Subclavian, almost  
opposite1 to the Sternum.

The Right *Pericardia* seems to go out rather from the Ori-  
gin of the Right. Subclavian, than from the Trunk of the supe-  
rior CaVa; but in this there are many Varieties. It goes to  
**the** upper Side of the Pericardium, and other neighbouring  
Parts. The Left Pericardia comes sometimes from the Left  
Subclavian, before the *Mammaria . and* sometimes from the  
*Mammaria,* or *Diaphragmatica Superior,* on the same Side.

The Right *Gutturalis,* or *Trachealis,* goes out from the up-  
per Part of the Bifurcation, above the *Mammaria* of the same  
Side, sometimes more backward, and sometimes from the *Sub.  
clavia:* It is distributed to the *Glandulae Thyroidaa, Trachea  
Arteria, Musculi Sterno-hyoidaei, Thymus,* sand *Glandulae  
Bronchiales :* It communicates by lateral Branches, more or less  
contorted, with the internal Jugular Vein, and sometimes by  
another Branch, with a small Vein, which the internal Jugular  
sends to the *Glandula Thyroides.* The Lest *Gutturalis* comes  
from the upper Or posterior.Part of the Lest Subclavian, near  
its Origin.

The smallest internal Pectoral Veins do not always arise se-  
parately, but have sometimes a small common Trunk, espe-  
cially on the Right Side; and, of all these small Veins, **the***Mammaria Interna* is the most Considerable.

**VENAE SUBCLAVIAE. .**

The Right Subclavian Vein is Very short, and Its Course Very  
oblique; so that it appears to arise higher than the Left Vein:  
It sends off, first of all, four large Branches, the *Virtebralis,*which is the first and most posterior; the *Jugularis Intenta* and  
*Extornas* and the *Axillaris.*

The Lest *Subclavian* seems to ascend but Very little, after  
the Bifurcation; hecause it runs farther, and more transversely,  
than the Right: And in this Course it covers the Origin of  
three large Arteries, which come from the Curvature of the  
Aorta : It sends off four large Branches, besides the small Pec-  
toral Veins, and receives the *Ductus Thoracicus.*

It, also, gives off, before its principal Division, a small  
Trunk for the Lest superior Intercostals, which are sometimes  
fix in Number, and communicate with the inferior Intercostals,  
and with a Branch of the *Vena Axygos.* This small common  
Intercostal Trunk furnishes, also, the Lest *Bronchialis.*

Each Subclavian Vein, near the Middle os the *Clavicula,*sends off. a Branch, called *Cephalica,* which descends near the  
Surface of the Body, between **the** *Deltoides* and *Pectoralis Ma.,  
for,* and reaches the Arm.

**VENAE JUGULARES ExTERNAE.**

Each external jugular Vein arises from the Subclavian^ on  
the same Side; sometimes from the *Axillaris,* and sometimes  
from the Union of these two Veins. The Right and Left do  
not always arise in the same manner ; for sometimes the Right  
comes from the Subclavian, and the Left from the internal Ju-

gulas, on the same Side: They run up between the *Museulus  
Cutaneus,* and *Stecrso-mastoidaeus,* being covered by the former,  
and crossing over the latter.

Sometimes they are double from their Very Origins; and  
when they are single, each of them divides afterwards into two,  
one anterior, and”the other posterior, or rather superior. The  
anterior Vein goes to the Tbroat and Face, running up to-  
ward the Angle of the lower Jaw; and the posterior goes to  
the Temples and Occiput.

**VENA JUGULARIS EXTERNA ANTERIOR.**

The anterior external Jugular Vein is often a Branch of the  
*fugularis Interna*; and sometimes arises from the Communica-  
tions of the two *Jugulares,* in such a manner aS that it cannot  
he said to belong more to the one than to the other. Some-  
times, but very rarely, it comes from the *Vena Axillaris.*

It Tuns up toward the lateral Part of the lower Jaw, between  
the Angle and the Chin, like a *Vena Maxillaris ;* and sends  
several Branches forwards, backwards, and inwards.

Posteriorly it. gives, I. A large Branch On the Side of the  
upper Part of the Larynx, which communicates with the *ju-  
gularis Interna*; and, likewise, with a large short Branch of  
the posterior external Jugular. 2. A small Branch which has  
**the** same Communication, but which is not always to be found.  
3. Another small Branch, a littie below the lower Jaw, which  
communicates with the posterior external Jugular.

Anteriorly it fends several Branches to the Muscles of the  
*Larynx, Sterno-hyoidai, Thyro-hyoidai,* and to the Integu-  
ments ; and below the *Larynx,* it sends communicating  
Branches to the anterior external Jugular of the other Side.

A littie higher, opposite to the *Cartilago Thyroides,* it gives ’  
**off a** transverse Branch, which runs on the anterior and lower  
Part of the *Musculi Stemo-mastoidaei',* and communicates with  
the Jugular of the other Side, though not always by a Vein  
**os** the same Kind.

. The superior and inferior transverse Branches communicate  
**on** each Side, by Branches more or less perpendicular; and send  
a small Branch to the *Museulus squadratus* of the Chin, to the  
*Musculus Cutaneus,* and Integuments.

It sends another large Branch anteriorly towards the Sym-  
physis of the lower Jaw, which, aster having supplied the  
Maxillary Glands, is distributed to the Digastric Muscle, to  
the Chin and under Lip.

Interiorly at the same Place, it sends out a large Branch,  
which furnishes the *Glandula Sublinguales,* runs down toward  
the *Cornua* of the *Os Hyoides,* to Communicate with some  
Branches of the *jugularis Interna,* and sends several Branches  
to the Tongue, called *Vinee Ranina :* It gives off, also, a small  
Branch, which running upon the *Musculus Labiorum Trian-  
gularis,* to the Commissure of the Lips, is distributed to the  
neighbouring Parts.

The same Branch which gives out the *Vines Ranina,* detaches  
another to the lateral Parts of the *Septum Palati,* which is  
distributed to the *Amygdala,* and to the Uvula ; and sends  
Branches forward to the Membrane, which lines the Arch of  
the Palate. Another Branch goes out from it to the *Piery-  
goidaus Internus, Pentstaphylini,* and *CephaloepharyngaL*

Afterwards the Trunk of the anterior external Jugular Vein  
runs up on the *Museulus Triangularis,* where it receives the  
Name of *Vina Triangularis,* in a winding Course, from the  
Angle of the lower Jaw to the great or internal Angle of the  
Orbit, sending Branches on each Side to the Muscles and In-  
teguments. ....

These Branches communicate with each other, especially one  
which passes under the *Zygoma,* behind the *Os Malae,* to the  
inferior Orbitary or *Spheno-maxillary* Fissure ; and another  
small Branch, which runs along the inferior Portion of the or-  
bitary Muscle, to the small or external Angle of the Eye,  
where it communicates with the Temporal and Frontal Rami-  
fications. \* ....

It is here to be observed, that, under the Angle of the lower  
jaw, there is a great Variety os Communications between the  
external and internal jugular Veins; and; also, a great Variety  
in the Distribution os these Veins. . \_

Almost all the Ramifications, which, at this Place, go from  
the external jugular Vein, to be distributed on the upper Part of  
the Throat, and on the Face, in some Subjects, arise, in other  
Subjects, from the internal Jugular; and, sometimes, one Part  
os them comes from the external Jugular, the rest from the in-  
ternal.

The Trunk os *she Pena Angularis,* having reached the Bones  
of the Nose, sends out a Branch through the lateral Cartilages  
of the Nose, which is distributed to the *Nares*; and another,  
which runs down, in a winding Course, to the upper Lip.

-At the greats or inner Angle of the Eye, the same Trunk  
sends off several other Branches; the first of winch goes to the  
Root of the Nose, and .communicating .with its Fellow, from

rhe Other Side, gives several small Veins to the Holes of. the

*Ossea Nasi.*

The second Branch mns up on the Forehead, by the Name  
**of** *Vena Frcntalis,* antientiy *Praeparata* ; and is distributed to  
each Side, communicating with its Fellow, when any fuch  
Vein is found.

The third Branch enters the Orbit, in a winding Course, on  
one Side of the cartilaginous Piilley, and communicates with  
the Sinuses of the *Dura Matcr,* by the orbitary Sinua of **the**Eye.

The fourth Branch goes along the *Musculus Superciliaris,* and  
the upper Part of the *Orbicularis,* to the small, or external  
Angle of the Eye, to communicate with the *Pena Temporalis,*and with that Vein which runs along the lower Part of the or-  
bicular Muscle, with which it forms a kind of Circle.

**VENAJUGULARIS EXTERNA POSTERIOR, SIvE SUPERIOR.**

The posterior, or superior external jugular Vein, runs up to-  
ward the parotid Gland, and lower anterior Part of the Eye,  
giving out several considerable Branches toward each Side.

At its Origin it sends out, posteriorly, a principal Branch,  
with its Ramifications, to the Muscles which cover the *Scapula, .*and Joint of the *Humerus,* commonly called *Vena Muscularis,*and which might be named *Superhum oralis.*

A little higher, it gives off the *Vena Cervicalis,* which goes to  
the Vertebral Muscles of the Neck; this Vein communicates  
with the *Hamcralis,* by several *Areola,* or venous Mashes, and  
they are both ramified in different manners. - .

These Ramifications and Communications are, in Part, co-  
Vered by the *Museulus Trapezius,* and communicate, also, with  
some Branches of the *Pena Occipitalis,* and with a Branch of  
the superior intercostal Vein, which perforates the first inter-,  
costal Muscle.

Near the cervical Vein, but a little more outward, it gives  
Off, sometimes, the small *Pena Cephalica,* which runs down hey  
tween the *Pectoralis mayor* and *Deltoides,* and unites with the  
*Vena Cephalica* of the Arm.

Backward it detaches the *Vina Occipitalis,* which is distri-  
buted on the *Occiput,* and, sometimes, comes from the *Vena  
Vertebralis,* or *Axillaris, It,* also, sends out a small Vein,  
which enters the *Cranium* by the posterior mastoide Hole, and  
terminates in one of the lateral Sinuses of the *Dura Mater,*This Branch comes, sometimes, from another Vein.

Having reached as far as the parotid Gland, it forms Com-  
munications with the anterior external Jugular, under the Angle  
Of the lower Jaw, and then passes through the parotid Gland,  
between that Angle and the Condyle, giving off a large Branch  
which communicates with another Branch common to the in-  
ternal and anterior external Jugulars.

Sometimes there are several Branches, which, having run **a**very littie Way, unite together, and represent the short large  
Branch, forming *Areola,* or Mashes, through which the Nerves  
pass.

Afterwards, it passes before the Ear, taking the Name os  
*Vena Temporalis,* which is distributed to the Temples, and la-  
teral Parts of the Head, towards the *Occiput* and Forehead,  
Sometimes the temporal Vein has two Origins, whereof one is  
froth the *Jugularis interna. .*

The temporal Vein of one Side communicates above, withits  
Fellow on the other Side ; hesore, with the *Pena Frontalis*; and  
behind, with the *Vena Occipitalis.* Opposite to the Ear it gives  
out a large Branch, one Ramification of which runs under the  
lower Edge of the *'Zygoma*; and, then returning, communi-  
cates with another Ramification from the same Jugular, a little  
below the Condyle of the lower Jaw, forming a land of Bland  
irregularly round.

Behind this Condyle, it gives Branches to the Temporal  
Muscle, to the neighbouring Parts of the upper Jaw, and to  
the Inside of the lower jaw, almost in the same manner as is  
done by the Arteries. ' .

Only one of these Branches runs from without inward, be-  
tween the Condyloide and Coronoide Apophyses, to be distri-  
buted to the *Musculus Temporalis* and *Pterygoidaei,* sending off  
a Ramification to the Masseter, in its Passage.

**VENA JUGULARIS INTERNA.**

The internal Jugular Vein is the largest of all those that go  
to the Head, though not so large as it seems to be when inn  
jected.

It runs up hehind the *Sterno-mastoidaeus,* and *Orno-hyoidaus,*which it crosses, along the Sides of the *Virtebra* of the Neck,  
by the Edge of the *Longus Colli,* to the *Fosseula* in the *Foramen  
Lacerum* of the *Basis Cranti..*

The first Branches which it sends off, are small, and go **to**the *Thyroide* Glands: About two Fingers-breadth, higher up,  
it detaches a middle-sized Branch, which runs laterally toward  
the *Larynx,* and may he named *Vena Gutturalis.*

This guttural Vein divides, principally, into three Branches,  
the lowest of which goes t0 the *Thsmide* Gland, and neigh-  
bouring Muscles; the middle Branch to the *Larynx,* and *Muse  
cun Tbyrotdaei,* and the third runs upward, to the great Com-  
mtmication between the Two *Jugulares.* In this, however,  
there is some Variety, and! have seen the Left guttural Vein  
go out from the *Anil'aris.*

About the same Distance upward, almost opposite to the *Os  
"FIyoides,* the internal Jugular gives another Branch, which  
fends Ramifications to the Muscles belonging to that Bone, and  
others, which communicate with the foregoing Branch : This  
other Branch runs upward toward the Parotid Gland, and Angle  
of the lower Jaw, where it sends communicating Branches for-  
.. ward and backward, to the two external Jugulars.

It is at this Place, also, that the internal Jugular sometimes  
produces the *Fena Maxillaris Interna,* and all its Ramifications.

The internal Jugular sends another Branch backward, which  
Is distributed to the *Occiput,* where it communicates with a  
Branch os the *Virtebralis,* and through the posterior *Mastoide*Hole, with the lateral *Sinus* of the *Dura Mater :* This Com-  
munication is sometimes by an *Anastomosis,* with a Branch of  
the external Jugular, or of the *Cervicalis,* which goes thither.

Afterwards it reaches the *Foramen Lacerum* of the *Basis Cra..  
nii,* bending a little, and sending off small Twigs to the *Pha-  
rynx,* and neighbouring Muscles.

. VENA VERTEBRALIS. .

The Vertebral Vein arises posteriorly from the *Subclavia,* or  
*Axillaris,* sometimes-by two Stems, sometimes by one, which  
Toon afterwards divides into two.

The first and principal Stem gives out a Branch called *Vena  
Cervicalis,* which is distributed to the neighbouring Muscles,  
and afterwards runs up through the Holes os the transverse Apo-  
physes of the *Virtebra Colli.* This cervical Branch comes some-  
times from the *Axillaris.*

The other Stem of the vertebral Vein runs up on the Side  
of the *Virtebra,* and, having reached the fourth, or, sometimes,  
higher, it runs in between the transverse Apophyses of that *Vir-  
tebra,* and os the fifth, to join the first or principal Stein.  
. Thus the vertebral Vein accompanies the Artery of the same  
Name, sometimes in one Trunk, sometimes in several Stems,  
' through all the Holes os the transverse Apophyses of the *Vir-  
' tebrcs Colli,* all the way to the great *Foramen Occipitale,* com-  
municating with the occipital Veins, and small occipital Sinuses  
Of the *Dura Mater-.*

' In its Passage it gives off one Branch, which enters by the  
posterior *condyhide* Hole of *rhz Os Occipitis,* and communicates  
with the lateral *Sinus* of the *Dura Mater* ; but it is not always  
to be met with. .

As these Veins run through the Holes in the transverse Apo-  
physes, they send Branches forward to the anterior Muscles of  
tlie Neck, and to the small interior Muscles of the Head.

Other Branches go, also, outward, and backward, to the  
*Musculi Tranfversulis,* and *Port ebrales Colli,* and inward to the  
great Canal of the - spinal Marrow, where they form Sinuses,  
which communicate with those on the other Side.

These Vertebral Sinuses are pretty numerous, and placed one '  
above another, all the way to the *Occiput*; the lower commu-  
nicate with the upper, and at the great Foramen of the *Os Oc-  
cipitis* there is. a Communication between them and the occi-  
pital Sinuses of the *Dura Motor.*

**.. .. . '. VENA AXILLARIs. ’ "**

The Subclavian Vein, having sent off the Branches already  
described, goes out os the Thorax, and pastes before the anterior  
Portion of the *Musculus Scalenus,* and between the first Rib and  
the Clavicle, to the *Anilla:* Through this Course it takes the  
Name of *Vina Axillaris,* and gives off several Branches, the  
principal of which are, the *Pence Musculares, Thoracica,* and  
*Pena Cephalica,* which is sometimes double-

\* The first Veins which it sends off, are the *Musculares,* distri-  
buted to the middle Portion of the *Musculus Trapezius,* to the  
*Angularis, Infraspinatus* and *Subscapularis*; and as some of  
.these Branches .go to the Shoulder exteriorly, others inte-  
riorly, the *Vina Scapulares* are distinguished into external and  
internal.

' A little before the *Axillaris* reaches the *Anilla,* it sends out  
the *Pena Thoracica,* one os which is superior, called, also.  
*Mammaria Externa,* and the other inferior: It likewise sends  
- Ramifications to the *Musculus Subscapularis, Tores major. Teres  
minor. Supraspinatus, Latissimus DorsisiSerratus major. Pe-  
ctoralis miner. Pectoralis major,* and to the Glands os the  
*Au.lla*; and, sometimes gives a communicating Branch to the  
*Pena Basilica. & °*

The *Axillaris,* having reached the Side of the Head os the *Os  
Humeri,* produces a very considerable Branch, named *Vina Ce-  
phaltca* ; and afterwards runs along the Arm, by the Name of

*Pena Β silica,* which, however, appears, sometimes, to he ra-  
ther a Branch, than a Continuation, of the Trunk of the *Anil-  
laris* ; in which Case, the *Cephalica* and *Basilica* might he look'd  
upon as two principal Branches of the axillary Vein.

VENA CEPHALICA.

The cephalic Vein, which is a Branch os the *Axillaris,* at a  
small Distance from its Origin, joins the. small *Cephalica,* which  
runs down from the *Subclavia,* or *fugularis externa,* having,  
till then, run near the Surface of the Body between the *Ds.su  
toides* and *Pectoralis major,* and, sometimes, these two Veins  
communicate hefore their Union.

The great *Cephalica* runs down between the Tendons of the  
last-mentioned Muscles, and along the outer Edge of the ex-  
rental Portion of the *Biceps,* communicating several times with  
the *Vina Basilica,* and sending sinall Ramifications, on each  
Side, to the neighbouring Muscles, Fat, and Skin. Some  
Branches go out from its upper Part, which, lower down, unite  
again with the Trunk.

A little below the external Condyle of the *Os Humori* it de-  
taches a Branch backward, which runs up between the *Muse  
culus Brachialis* and the upper Portion *of* the *Supinator Longus .,*and afterwards bends back between the *Os Humeri* and *Anco..  
nexus Externus,* where it communicates with some Branches of  
the *Basilica.*

Having reached very near the Fold of the Arm, it is di-  
vided into two principal Branches, one long, the other short:  
The long Branch is named *Radialis Externa,* and the short one  
may be called *Mediana Cephalica,* to distinguish it from an-.  
other *Medicina,* which is a short Branch of the *Basilica,* and  
therefore ought to be called *Vena Medictna Basilica.*

The external radial Vein runs along the *Radius* between the  
Muscles and Integuments, giving off Branches toward both  
Sides,- which communicate with other Branches of the same  
Vein, and with some from the *Basilica,* forming *Areola,* much  
in the same manner as the *Saphena* does in the sower Extre-  
mity.

- : The *Mediana Cephalica* runs down obliquely toward the  
middle *of* the Fold of the Arm, under the Integuments, and  
over the Tendon of the Biceps, where it joins a short Branch  
os the same Kind from the *Basilica,* which I have already  
named *Mediana Basilica.* These two *Mediana* unite in an  
Angle, the Apex os which is turned downward.

Fromsthis angular Union, or Anastomosis, a considerable  
Branch goes out, which runs down on the fore Arm, uniting  
on one Side with the *Vina Cephalica,* and communicating, on  
the other, with the *Basilica,* by several irregular *Areola.* The  
Name of *Mediana* is given to this large Branch, as well aS to  
the two other short ones, by the Union of which it is formed;  
but, that they may not be confounded, this large Branch may  
he termed *Medictna mayor,* or *media,* the Names already given  
to the other two being retained.

From this Union of the two lateral *Mediana,* and, some-  
times, from the Origin of the *Mediana Media,* which is the  
true *Mediana* os *Riolanus,* a Branch goes out, which runs down  
on the Inside of the fore Arm, opposite to the interosseous Li-  
gament, and is called *Vina Cubiti Profunda.* It goes to the  
neighbouring Muscles, and communicates with the other Veins  
of the sore Arms. The *Mediana Cephalica* sometimes sends  
down a long Branch, called *Radialis Interna,* which lies almost  
parallel to the *Radialis Externa. '*

-. Afterwards, the *Cephalica,* having reached the Extremity of  
the *Radius,* is distributed, by numerous *Areola,* almost in the  
same Course with the radial Artery.

A particular Branch goes out from it, which runs more or  
less superficially between the .Thumb and *Metacarpus,* by the  
Name of *Cephalica Pollicis.* The *Areola* furnish the inter-  
osseous Muscles and Integuments, and communicate with a  
small Branch from the *Basilica,* called, by the Antients, *Safe  
vale Ila.*

**. VENA BAsILIcA.**

The Antients termed the basilic Vein os the Right Arm the -  
Vein of the Liver, or *Vina Hepatica Brachii*; and that of **the**Left Arm the Vein of the Spleen, or *Vina Splenica Brachii :* It  
has sometimes a double Origin, by a Branch of Communica-  
tion with the Trunk of the *Axillaris.*

It sends off, first of all, under the Head of the *Os Humeri,*a. pretty large Branch, which pastes almost transverfly round the  
Neck of that Bone, from within backward, and from hehind  
outward, running up on the *Scapula,* where it is ramified on  
the *Delicides,* and communicates with the *Pence Scapulares ex-  
torna.* This Branch may be named *Pena Subhumeralis, ot Ar-  
ticularis,* aS the Artery which lies in the same Place, they both  
having much the same Course.

This articular Vein fends down two principal Branches, one  
of which runs along the Inside Of the Bone, to which,, and to ’

the *Periosteum,* it gives small Veins: The other turns forward,  
toward the middle of the Arm, between the Bone and the *Bi-  
ceps,* and communicates with the *Cephalica.*

Below the Neck of the *Os Humeri,* near the Hollow of the  
*Axilla,Ru&* behind theTendon ofthe *Pectoralis major NaeBasilica*sends out a considerable Branch, winch runs down on the Side  
of the brachial Artery, and furnishes the neighbouring Muscles  
on both Sides. Tins Vein is named *Profunda Brachii,* or Pro-  
*funda /aperior.*

Immediately aftenvardt, the *Basilica* .detaches two or three  
small Veins, which run down very closely joined to the brachial  
Artery, surrounding it, at different Distances, by small Twigs,  
which communicate with each other: These Veins might be  
named *Pence Satellites Arteria Brachiales. . .*

These small Veins, which often arise sroin the *Profunda Su-  
perior,* communicate with the *Basilica* and *Cephalica* ; and,  
having reached the Fold of the Arm, they divide like the Ar-  
tery ; and the same Divisions are continued along the whole sore  
Arm, through all which Space they, accompany and surround  
the arterial Branches, in the manner already said.

Afterwards the *Basilica* continues its Course along the Inside  
**os** the *Os Hurncri,* between the Muscles and Integuments,  
forming many Communications *rtifessiae.VenaProsmtda, Satel-  
lites,* and *Cephalica,* and supplying the Muscles and Inte-  
guments.

Having reached the inner Condyle, and having sent off ob-  
liquely, in the Fold of the Arm, the *Mediana Basilica,* it runs  
along the *Ulna,* between the Integuments and Muscles, a little  
toward theOutside, by the Name os *Cubitalis Externa,* still  
communicating with the *Profunda, Satellites,* and *Cephalica.*

Having detached the *Medictna Basilica,* it sends out another  
Branch, which runs down along the Inside of the fore Arm  
near the *Ulna,* and'communicates with the *Medictna mayor.*This Branch may be named *Cubitalis Interna.*

The *Basilica* at length, reached the Extremity os the

*Ubta,* sends several Branches to the convex Side os the *Carpus ;*one of which, named *Salvatella,* goes to that Side os the little  
Finger next the Ring Finger, having first communicated with  
the *Cephalica,* by means of the venal *Areola,* conspicuous on the  
Back of the Hand : In the other Fingers this Vein follows nearly  
the same Course with the Artery.

In general, the external or superficial Veins of the fore Arm  
are larger than the internal, but they are accompanied only by  
small Arteries; whereas the deep Veins accompany large Ar-  
teries.

**VENA CAVA INFERIOR.**

- The inferior *Pena Cava,* having run down about a quarter of  
an Inch from the Right Auricle os the Heart, within the *Peri-  
cardium,* as has been already said, pierces that Membrane, and  
the tendinous Portion os the Diaphragm, which adhere Very  
closely to each other. - z .. .

At this Place it gives off the *Vena Diaphragmatica*, or *Phre-  
nicae,* which are distributed to the Diaphragm, and appear prin-  
cipally on its lower Side, one toward the Right Hand, and one  
toward the Lest : The right Vein is more backward, and lower,  
than the left ; the lest is distributed partly to the *Pericardium,*and partly to the Diaphragm; and sometimes they send Ramifi-  
cations to the *Capsular Renales,* much in the same manner-as  
the *Arteria Phrenica. ' ...... ' ssss*

The inferior *Cava,* having perforated the Diaphragm, passes  
through the posterior Part of the great Fissure of the Liver, pe-  
netrating a little into the Substance of that Viscus, between **the**great Lohe and the *Lobulus Spigelii,* being, however,- covered  
but very little, on the back Side, by the Substance’ of -the -Liver,  
till it reaches the *Lobulus.*

In its Passage it sends off, commonly, three.large Branches,  
called *Vince Hepaiicce,* which are ramified in the Liver. Some-  
times there are only two, and sometimes sour. *' l -*

Besides these large Branches, it sends out some other small  
ones, either hesore, or immediately after, it goes out os the  
Liver; which, according to some Anatomists, answer to the  
Branches os the hepatic Artery, as the large Branches do to  
those of the *Vina Partee.*

In the *Faetus,* as the *Vena Cava* passes by the Liver, it gives  
**off.** the *Ductus Vinosus,* which communicates with the *Sinus* of  
the *Vena Porta,* and, in Adults, is changed to a flat Ligament. -  
. After its Passage through the Liver, the *Vina Cava* turns  
from hesore backward, and from right to left, toward *the Spina  
Dorsi,* placing itself on the right Side os *orae Aorta,* which it  
accompanies from thence downward. . :

Having got as low as the *Arioriae Portales,* it gives off the  
Veins of the same Name, termed, formerly, *Fena Emulgentes,*and which are the largest of all the Veins that go from the Cmi-’σ  
*Inferior,* from the Liver to the Bifurcation. . : -.6 :

The right renal Vein is the shortest,, and runs down a little

obliquely, because of the Situation of tho Kidnevi The lest  
Vein, which is the longest.crosses on the fore Sidetis the Trunk  
of *tscae Aorta,* immediately above the superior mesenteric Ar-  
tery; and both Veins accompany the renal Arteries.

They send up the *Peace Capsulares,* which gq to the *Clan.,  
dulae Renales*; and downward, the *Vineae Adiposa,* which go to  
the pinguiouaCovering os the Kidneys; and, ordinarily, the left  
renal Vein furnishes the lest spermatic Vein r Afterward,they run  
to the *Sinus,* or Cavity of the Kidneys, in the Substance of  
which they are distributed, by numerous Ramifications.

\* A littie below the renal Veins, the Trunk os the *Cava* fends .  
out anteriorly, toward the right Side, the right *Fena Spermatica.*

The left spermatic Vein comes, commonly, though not always,  
from the left *Renalis* ; both Veins accompany the fpermaticAr-  
teries to the Parts to be mentioned hereafter.

In their .Passage they fund several small Branches, on each  
Side, to the *Pocitoneeum* and *Mesentery* ; where they seem to **be**joined, by *Anastomoses,* with the *Vena Mesurdica,* and, conse-  
quentry, with the *Pena Porta.*

They sometimes send a considerable Branch over the iliac  
Muscle, which, afterwards, dividing into two, one Branch runs  
up to the *Membrana Adipose* of the Kidneys, the other runs  
down on the last-mentioned Muscle.

About the same Height with the spermatic Vein, the inferior  
*Cava* sends off posteriorly, in some Subjects, a Branch which  
runs upward, and communicates with the *Pena Azygos.* Some-  
times this Branch goes out from one or other os the *Renales,*and appears to be a true Continuation of tile Extremity os **the***Azygos.*

The *Cava* sends, also, off posteriorly, the *Vina Lumbares,*which commonly arise in Pairs, in the same manner aS the Ar-  
teries os the same Name go out from the *Aortas* These may be  
divided into superior and inferior Veins.

Their Origins Vary in different manners: Sometimes the *Cava*gives off .a Branch to each Side below the first *Virtebra* of the  
Loins, which, like a common Trunk, furnishes the lumbar  
Veins: This Branch communicates with the *Axygos.*

. Sometimes a considerable Branch goes out from the lower  
Extremity *os* the *Cava,* near the Bifurcation, principally on the -  
right Side; which, afterwards, running up between the Bodies \*  
and transverse *Apephys.es* of the *Vertebra,* detaches the *Venar  
Lumbares,.* and communicates with the *Azygos.*

Sometimes a like Branch comes from the Beginning of the  
lest *Vena Iliaca,* and, running upon that Side in the same man-  
ner, produces the *Lumbares.* This Branch, also, communi-  
cates with tlte *Azygos,* and with the superior or descending *Rd. '  
mus Lumbaris.*

The *Vina Lumbares,.* on one Side, communicate, by transi.  
Verse Branches, with those of the other Side, and, also, with  
each other, by Branches more or less longitudinal. The first '  
and second often go from the *Axygos,* and thereby they comma-  
nicate with the intercostal Veins. .

The lumbar Veins send small Capillaries, in their Passage, to  
the Substance of the Bodies of the *Forte hrcs*; and they are dis-  
tributed to the Muscles of the Abdomen, *Fsuadratus LUm..  
borum. Psoas, Rud Iliacus.* They send Branches, also, to the  
neighbouring Vertebral Muscles, and to the Canal os the Spine;  
and communicate with the Venous Sinuses, in the same manner"  
as the Intercostals.

The inferior *Caua,* having reached aS low aS the last *Virtebra*of the Loins, and near the Bifurcation of the *Aorta,* runs in  
behind the right iliac Artery, and there is divided into two sub-  
altern Trunks, called the right and left iliac Veins.

. The Extremity of the Trunk of the *Pena Cava* passes, in  
sortie Subjects, behind the Origin of the right iliac Artery; in  
others, it is the lest iliac Vein which passes there, and, conse-  
quently, crosses the right iliac Artery : Afterward, the lest iliac  
Vein accompanies the inside of the left Artery, till it goes out  
of the Abdomen: Therefore the iliac Veins lie on the Insides  
of theArteries at this *Place... ,*

From this Bifurcation os the *Vina Cava,* and, often, from .  
the Origin of the lest *Iliaca,* the *Vena Sacra* goes out, and ac-  
companies the Artery os the same Name in its Distribution to  
the *Os Sacrum,* to the Nerves which lie there, and to the Mem-  
branes which cover both Sides of that Bone. .

**VENAE ILIACAE.**

- Each original iliac Vein is divided, on the Side of the *Os Sa...  
crundurmucb* after the fame manner at. the Arteries, into two  
large Trunks, or secondary iliac Veins: This second Bisur-  
cation is aheut a Fingerss-hreadth below that os the iliac Ar-  
teries.. *sus.s . .*

One, of these Trunks is named *Vina Iliaca Extema,* or an-  
terior; the other *interna,* or posterior. The external Vein is,  
also,: named, - simply,, *Iliaca,.,* and the .internal. *Hypogastrica.*The external Vein seems to he the true Continuation os the.

Trunk, and the *Hypogastrica* only a Branch. I here fpeak of  
adult Bodies, because, in the *Foetus,* there is a considerable Va-  
riation.

These Veins follow nearly the Course and Distribution of the  
iliac Arteries, except that the hypogastric V ein does not send off  
. the *Vena Umbilicalis.* The external iliac Veins lie more or less  
on the inside of the Arteries, in the manner already said ; but  
the hypogastric Veins, in the Bottom of the *Pelvis,* he almost  
behind the Arteries, on the same Side.

From the common Trunk of the iliac Veins, and, some-  
times, from the Origin of the *Iliaca Externa,* a particular  
Branch goes out, which is distributed to the *Museulus Pseas,  
Iliacus,* and *Quadratus Lumborum*; and, afterwards, sends a  
Branch on the fore Side of the last transverse *Apophyses* of the  
Loins, to communicate with the fast lumbar Vein.

The external Iliac, a little before it leaves the Abdomen,  
near the *Ligamentum Fallopii,*lying upon the *Pseas* and iliac Must ’  
cles, gives off almost the same Branches with the Artery of the  
same Name, and follows the same Course r The principal  
Branches are these.

A little before it goes out of the Abdomen, it fends off, from  
the Outside, a small Branch, which runs up along the *Crista* of  
the *Os Ilium,* and gives Branches, on each Side, to the lateral  
and posterior lower Portions of the *Mufculi Abdominis,* and to  
the *Musculus Iliacus.*

From the inside, before it leaves the Abdomen, it sends off  
the *Vma Epigastrica,* which, heving furnished some small Ra-  
mifications to the neighbouring conglobated Glands, runsup  
along the inside of the *Mufculi Recti,* on which it is ramified  
both ways; as, also, on the broad Muscles of the Abdomen, by  
other small Branches, which penetrate, from within, outwards.

Afterwards, the *Vena Epigastrica* runs upward, and joins the  
.Ramifications of the *Mammaria,* by an equal N umber, accom-  
panying the epigastric Artery ; from the inside of the epigastric  
Vein a Branch is, sometimes, detached to the *Museulus Obtu-  
rator Internus,* where it joins another Branch, named *Vena Ob-  
turatrix.*

Before the iliac Vein gets from under the *Ligamentum Falle-  
' pii,* it fends several fmall Ramifications to the neighbouring  
lymphatic Glands; and, immediately afterwards, losing the  
Name of *Iliaca,* it takes that of the *Cruralis.*

**VENA HYPOGASTRICA.**

- The hypogastric, or internal iliac Vein, runs hehind the Ar-  
tery of the fame Name, making the fame kind of Arch, from  
which the following Branches go out.

From the posterior, or convex Part of the Arch, it gives a  
Branch to the superior lateral Part *of* the *Os Sacrum,* which is-  
distributed to the *Musculus Sacer,* or *Tranfveasc-spinalis Lum-  
borum,* and other Musoles thereabouts, and to the Cavity of the  
Bone, which it enters through the first great Hole.

A little lower, on the fame Side, it sends out another, which  
is distributed much in the same manner with the former, and  
enters the second Hole.

From the external lateral Part of the fame Arch, a little an-.  
teriorly, it sends out a large Branch, which runs behind the  
great sciatic *Sinus,* and is distributed to the *Musculi Glutai,  
Pyr formis,* and *Gemelli. - ’*

Lower down, the same lateral Part of the hypogastric Vein  
gives out another large Branch, which, having run a little way,  
detaches several Ramifications; and, afterward, reaching the  
*Foramen Ovale* of the 0s *Imuminatum,* perforates the obturator  
Muscles, communicates with the crural Vein, and is distributed  
to the *Musculus Pectineus, Triceps,* and neighbouring Parts.  
This Vein is termed *Obturatrix,* from its pasting through the  
Muscles of that Name.

Among the Branches sentoff by the *VenaObturatrix,* before  
it perforates the Museles. one is situated exteriorly, which runs  
toward the sciatic *Sinus* to the *Musculus Iliacus,* the superior  
Part of the *Obturator Jniernus,* and to the *Os Ilium,* near its  
Symphysis with the *Os Ischium.*

Interiorly, the same obturator Vein sends oss another Branch,  
which is distributed to the Ureters, Blander, and internal Parts  
of Generation in both Sexes. It communicates with the fper-  
matic Veins, and is more considerable in Women than, in Men.

Lastly, The hypogastric Vein runs backward, and goes out  
of the *Pelvis,* above the Ligament which lies between the in-  
serior lateral Part of the *Os Sacrum,* and Spine of the *Ischium ;*and, as it goes out, it is ramified, principally, upward.and down-  
ward. . ..

- -It sends a large Branch upward, to the lower Part of the *Os  
Sacrum,* and two, or more, downward., which, running hehind  
the fame Ligament, are distributed to the Buttocks, *Anus,*neighbouring Portion of die *Museulas Pectineus,* and to the ex-  
ternal Parts of Generation, nearly in.the. fame manner with rhe-  
Artery which accompanies- them. .

. - The\* Veins that go to the *Anus,* are termed *Hiaenscrrhcidales*

*Externe* ; and they that go to the Parts of Generation, *Pu-  
dica Interna.* The external *Haemorrhsidales* communicate with  
the internal Veins of the fame Name, which come from **the**small *Venae Mofardica,* one of the Branches of the *Venae Pcrtae,*as we shall see hereafter.

**VENA CRURAL Is.**

The crural Vein goes out under the *Ligamentum Fallapii,* on  
the inside of the crural Artery, and immediately gives small  
Branches to the inguinal Glands, the *Museulas Pectineus,* and  
Parts of Generation : These last are named *Pudicae Externa,*and evidently communicate with the internal Veins of the same  
Name.

About an Inch below, where it leaves the Abdomen, the  
crural Vein produces a large Branch, which runs down ante-  
riorly between the integuments and the *Sartorius,* following  
the Direction of that Muscle, almost all the way to the inside of  
the Thigh.

This Branch, heving afterwards got beyond the Condyles of  
the *Os Femoris,* runs down between the Integuments and inner  
Angle of the *Tibia,* to the fore Part of the inner Ancle, and is  
distributed to the Foot: All this large Branch is named *Vena  
Saphena,* or *Saphena major. .. .*

After the Origin of the *Saphena,* as the Trunk of the crural  
Vein runs down, it sinks in between the Muscles, and is distri-  
buted to all the inner or deep Parts of the lower Extremity,  
accompanying the crural Artery to the very Extremity of the  
Foot, being all along more considerable than the Artery, both  
for Capacity, and Ramifications, a Thing very common in **the**Veins.

As the *Saphena* is a Vein of very large Extent, I shall here  
describe it all together, and afterwards return to the *Vena  
Cruralis.*

**VENA SAPHENA.**

The *Vena Saphena,* in its Passage from the inguen to the  
Foot, is covered only by the Skin and Fat j immediately after  
its Rise, it gives small Veins to the inferior inguinal-Glands;  
and then it gives out others more anteriorly, which, running  
under the Integuments, communicate with each other by nu-  
merous *Areolae,* or Mashes: Sometimes these Communications  
come all from the Ramifications of one Branch.

The *Saphena,* having run down on thcThigh, as low as the  
Middle of the *Sartorius,* sends off to the fame Side several  
Branches, which communicate with each other, and with the  
superior Branches already mentioned ; and, as they run down,  
they communicate again with the Trunk of the *Saphena.*

There two Sorts of Communications furnish a third collate-  
ral Kind'; from which, also, particular Branches are detached,  
which communicate with each other at different Distances all  
the Way to the Knee.

Between these upper and lower Branches, the *Saphena* sends  
backward a particular Branch, which, after being distributed  
to the Integuments which cover the *Gracilis internus* and *Tri-  
ceps,* turns backward; and, a little below the Ham, runs in  
among the Muscles situated there, and communicates with an-  
other Branch, which may be termed *Saphena minor.*

Afterwards the Trunk of the great *Saphena* runs down on  
the Inside of the Tibia, lying always near the Skin ; and, at  
. the upper Part os that Bone, it sends Branches forward, out-  
ward, and backward.

The anterior Branches go to the Integuments on the upper  
Part of the Leg ; the posterior, to those which cover the *Case-,  
trscnemii,* and communicate with the little *Saphena* ; and the  
external Branches are, alfo, distributed to the Fat and Integu-  
rnents ; and, having reached as low as the Middle of the Tibia,,  
it sends ^ communicating Branch to the Trunk of the great *Sa-  
phenae ,* ' o

From this Communication, a Branch goes out anteriorly,;  
which runs along the Integuments of the tibia all the Way to  
the outer Ancle, having in its Passage communicated again,  
with the great *Saphenae*

As the *Saphena* rurjs down on the inside of the Tibia, it sends,  
out a Branch near the Middle of that Bone, which runs up be-  
hind the Tendons of the *Sartorius, Gracilis Internus,* and  
*Semi-nervosas,* then between the Tibia and upper End of. **the;***Soleus,* and is joined by an Anastomosis with the Crural Vein. \_

It, also, detaches to the fore Part of the Tibia forne Branches  
irregularly transverse, which, having been distributed to the  
*Periosteum* and Bone, commuhicate with other Branches al-,  
ready mentioned.

At the lower Part of rhe Tibia, **the** *Saphena* produces a con-  
siderable Branch, which runs obliquely forward over the Joint  
of.the.Tarsus toward-the outer Ancle, sending oss several Ra-:misications, which communicate with each other, and with  
the.Trunkof the *Saphena, .. ... .*

Lastly, the Extremity of this Trunk passe- on the fore side  
**o?** the inner Ancle, and runs irregularly under the Skin, along  
the Interstice between the first two metatarsal Bones toward the  
great Toe, where this Vein terminates.

Having got helow the inner Ancle, it sends a Branch out-  
ward and forward, which runs under, and, in some measure,  
accompanies the anterior Tibial Artery. Interiorly it sends an-  
other Branch, almost from the same Place, which passes under  
**the** Foot, communicating with the external Tibial Vein by in-  
regular Arches, from which Veins are sent to the Toes.

Lastly, before the *Saphena* terminates at the great Toe, it  
detaches a kind of transverse Arch over the *Metatarsus,* which  
Communicates by several Branches with that Arch which lies on  
the Joint of the Tarsus, and sends others to the Toes. This  
Arch gives off, also, another Branch, which runs up behind the  
outer Ancle, and communicates with the *Pena Tibialis ex-  
terna.*

**CoNTINUATION OE THE'VENA CRURALIS.**

The Crural Vein having sent off the *Saphena,* and the small  
Branches for the *Pertineas,* as has been said, runs down  
On the Thigh behind the Crural Artery. Opposite to the littie  
Trochanter, it produces two large short Branches, or one which  
afterwards divides into two, whereof one is anterior, the other  
posterior.

The anterior Branch runs more or less transverfly forward,  
**to** be distributed to the *Fastus Internus,* lower Part os the *Pecti-  
neus,* and of the second *Triceps,* and to the other two Muscles  
of the same Name, running in between them as it goes from  
one to the other. - -.

. The posterior Branch, runs inore or less transverfly back-  
ward, and furnishes the *Glutas, Fastus Extcrnus,* and Begin-  
ning of the Biceps. .

A little below these two Branches, about the upper Extre-  
mity of the *Fastus Internus,* the Crural Vein produces a Branch,  
which runs down on the Side of the Trunk, covering the'Cru-  
**ral** Artery, almost aS low as the iiam, where it is again united  
to the Trunk by an Anastomosis ; and sometimes it is continued  
separate a littie Way down on the Leg. It has the Name of  
*Pena Sciatica,* from the Sciatic Nerve which it accompanies.

On the Outside of this Anastomosis, the Crural Vein gives  
off a Branch, which runs backward between the Biceps and  
neighbouring Muscles, and so downward on the back Side of  
the Leg a little exteriorly, and Very near the Skin, all the Way  
to the outer Ancle. This Vein is termed *Saphena minor,* **or***externa:'* - - ι

SAPHENA MINoR.

’ - The little *Saphena,* having got near the Integuments in its  
Course downwards gives out a Branch, which runs backward,  
and communicates with the great *Saphena* about the Middle of  
the back Side of the Thigh. ’ .

Immediately above and below the Ham, this Vein sends out  
other Branches, which, also, communicate with the *Saphena  
mayor’,* and, having run down about one third Part os the  
back Side of the Tibia, it fends off another Branch, which is  
afterwards reunited to the Trunk. ’ *'.s' . - . .*

About the Beginning of the *Tendo Achillis,* the littie *Say  
phena* runs outward in the Integuments, toward the outer  
Ancles, where it terminates in cutaneous Ramifications sent to  
every Side. -Ό V

**. . . - VENA POPLITEA. . .**

The Crural Vein having detached the- littie *Saphena,* nms  
down between the *Biceps* and. the other Flexors of the Leg,  
closely accompanied by the Crural Artery, -hetween winch and  
the inner Condyle of the *Os Femoris st is* situated. .

A little above the Ham, it takes theName of *Vina Poplitea,*and, aS it runs down betwixt the two Condyles, it gives  
Branches to the Flexor Muscles above-mentioned, totheilower  
and posterior Parts of both *Vasti,* and to the Fat which lies  
above the interstice of the two Condyles. *. c*

It, also, gives off several other Branches, one of which runs  
up laterally between the outer Condyle and the Biceps, and then  
turning forward, is ramified in the same manner with the Ar-  
tery. Another Branch goes backward,- sending Ramifications  
to the Beginning os the *Gastrocnemii* ; after which, it runs  
down on the back Side oft these Muscles, to the *Tonda Achil-  
lis. . ... . /. - A ... :. ;*

Near the internal Condyle, the *Poplitea* sends some lateral  
Branches to the Extremities of the-neighbouring Muscles,-espe-  
cially those cs the *Sarni-nervosus, znd Semi-membranofus. -* Lastly,  
it sends a Branch toward che external Condyle, which haying  
run tor a small Space on the *Peranaus‘Longus,* goes hack again  
into the Trunk. ’ ' ... - .-j. ; : ... . . .- ι

The.sahe. *Pepliiea* runs down .immediately behind the Mui-  
cle oi the same Name, at che lower Part os which it sends

off several Ramifications to each Side, which divide and unite  
again in different Ways and Degrees, and afterwards it losca  
its Name, being divided into three considerable Branches, called  
*Tibialis anterior. Tibialis posterior,* and *Pcronaa,* of which tire  
*Tibialis posterior* is most frequently a Continuation of the Trunk,  
and the other two like Branches.

**VENA TIBIALIS ANTERIOR.**

The anterior Tibial Vein, having distributed some small  
Branches from its very Beginning, to the Muscles behind the  
Heads *os* the two Bones of the Leg, perforates the interosseous  
Ligament from behind, forward, and runs between the fupe-  
rior Portions of the *Musculus Tibialis Anticus,* and *Extensor  
Digitorum communis.*

As soon aS it pierces the interosseous Ligament, it distributes  
small superficial Branches to the Head of the Tibia and Fibula,  
which run to the Joint of the Knee, and communicate with  
the lateral Branches os the *Vena Peplitea.*

Afterwards it divides into two or three Branches, which run  
down together on the fore Side of the interosseous Ligament in  
Company with the anterior Tibial Artery, which they surround  
at different Distances, by small communicating Circles.

These Branches, having reached the lower Extremity of the  
Leg, - unite in one, which afterwards divides into several, the  
Ramifications of which are distributed to the Foot.'

A particular Branch goes out from the reunited Portion,  
which at the lower Part of the Leg, perforates the interosseous  
Ligament from before backward, and communicates with the  
*Vena Tibialis posterior... .... :* j '. .'

**.VENA .TIBIALIS POSTERIOR.**

. The posterior. Tibial Vein gives off,-from its Beginning, a  
Branch toward the Inside, which is distributed to the *Gastrocr  
nemii Rnd Soleus.* This.Veih.is named.SuraΖἐν.T.j

Afterward the posterior *Tibialis* runs down between the *So.e  
lens* and' *Tibialis posticus,* giving Branches to each of them. It  
is divided in the same manner as the *Tibialis anterior,* in to .two  
or three Branches, which as they run, surround the correspond-  
ing Artery, by small communicating Circles formed at different  
Distances.:.:' ... ; ...

. It continues this Course in Company with the Artery aS low  
as the outer Ancle, furnishing the *Musculus Tibialis posticus,*and .the jong Flexors of the Toes; At the lower Part os the  
Leg, it communicates with a transverse Branch of the *Saphena,*and with the anterior Tibial Vein, in the manner already said.

Lastly, it passes on the. Inside os the Qs Calcis, under the  
Sole of. the Foot, where it forrns the *Penee Plantares,* by di-  
viding into several transverse Arches, which communicate with  
each other, and with the *Saphena,* and send Ramifications to  
the Toes, nearly In. the same manner as the *Arteria Plantaris.*

**.'. I 'i ί VENA PERONAEA.**

The *Vina Peroaa* is, also, double, , and sometimes Triple.  
It runs .down.on the Inside of the Fibula, almost in the same  
Direction.with the *Arteria. Pcronaa,* .which it,, also, surrounds  
at different Distances, by communicating Branches, aster the  
manner of the-*Tibialis posterior.* -:o n. . .

-- It runs : down aS low as the outer Ancle, communicating se-  
veral .times with the.*Tibialis posterior,* and sending Ramifica-  
tions to the neighbouring Portions of the *Mnsouli Pcronaei,* and  
long Flexors os the Toes.,.. . . .. . ..

The last of these CoInniunications makes the *Vena Plantares*in some Subjects, to appear: rather to come from this Vein, than  
*from* the *Tibialis posterior,* from which they commonly rise.

**VENA PoRTAE.;" ’ δ᾽"**

*- The Vina Porta* is a large Veinthe.Trunk, which is situ-  
ated principally hetween the Eminences on.the lower or concave  
Side os the Liver, called *Porta* by Anatomists; and from thence  
this Vein-has got the general Name of *Pena Porta, Qs Fena  
Portarunt: so* -ί. '. V- i: ..st. i

.. It may he considered as made up of Two large Veins, joined  
almost endwise-by their-Trunks ; from each of which, the  
Branches and Ramifications go our in-contrary, or opposite.Di-  
sections:) One of-these-T-runk-s adheres, .to the Liver, and is  
ramified' in that Visens, rite Branches accompanying the. whole  
Distribution of the Hepatic Artery. *-st.ctL.L'* **f .ini.i**

TheotherTrunk iswithout-the Lwer,-andsends its Branches  
to the Viscera, supplied - - by che : rest of *rsueo Artesia Cceliaca,*and by the two *Mes.encerica,* that-issitoi.the Stomach, In-  
testines. Pancreas, Spleen, Mesentery, and Omentum..-'

-- The first Portion of this Vein may he. termed *Fena Parta  
Hepatica, superior,* or-ininor;-the Trunk of which is common-  
sy known by the Name of *Sinus Vena Portarum.* The other  
Portionmay he called *Vina Portae Vintrulis, inferior,* or *major;*and -this- is What I am now. to- describe. ? ?-

The large Trunk of **the** *Pena Porta Inferior,* or *Ventralis,*Is situated under the lower or concave Side os the Liver, and  
joined by an Anastomosis to the Sinus of the *Vena Portee He-  
patica,* between the Middle and Right Extremity of that Sinus,  
and confequentiy at a good Distance from the Left Extremity.  
From thence it runs down a little obliquely from Right to Left,  
behind or under the Trunk of the *Arieria Hepatica,* bending  
behind, the Beginning of the *Duodenum,* and under the Head  
Of the Pancreas, its Length being about five Fingers Breadth.\*

Having reached to the Heed of the *Pancreas,* this Trunk  
Joses the general Name of *Vina Portee,* and terminates in three  
large principal Branches, - which are distributed by numerous Ra-  
mifications to the Viscera already named. The first Branch is  
termed *Vina Mefaraica,* or *Mefardica mayor*; the second. *Sple-  
nica* ; and the third, *Hiemorrhoidalis interna,* or *Mefaraica  
minor. '*

. . The *Vena Mefaraica mayor* appears to be a Continuation of  
the Trunk of the *Pena Porta inferior.* The *Splenica* is a capital  
Branch os that Trunk; and the *Hamorrhoidalis Interna* has  
sometimes a common Origin with the *Splenica,* and sometimes  
is no more than a Branch of that Vein. In some Subjects tile  
*Mefaraica major,* and *Splenica,* appear to arise by an equal  
Bifurcation of the Trunk of the inferior *Pena Porta,* and. in  
*.r* others, the *Hiemorrhoidalis* arises from the very Angle of that

Bifurcation.

The inferior *Vina Porta,* before the Formation of these three  
Branches, fends off from the Trunk several small Ramifications,  
which are commonly the *Vena Cystica, Hepatica minor. Pylo-  
rica, Duodenalis,* and sometimes the *Gastrica recta,* and . Co-  
*ronasia Verttriculi. ......*

' All these small Veins sometimes arise separately ; and in other  
Subjects, some of them go out by small common Trunks. It  
sometimes happens, that several os them do not come imme-  
diately from the Trunk of the *Pena Porta,* but from one of  
its great Branches. ... λ.

The Cystic Veins run along the *Visicula Fellis* from its Neck  
to the Bottom; and aS they are often no more than two in  
Number, they are called *Cystica Gemella,* a Name given, also,  
to. the Arteries which accompany them. They go out from  
the Right Side of the great Trunk near its Beginning, some-  
times separately, sometimes by a small and Very short common  
Trunk. . . .

The small Hepatic Vein is commonly a Branch ofone of  
the Cysticae, or os their common Trunk. . ' .: .

The *Pena Pylorica* arises from the great-Trunk, almost op-  
posite to the Origin of the *Cystic a,*. and sometimes is only a  
Branch of the Right *Gastrica.* It. pastes over *rffies.Pylorus* to  
the short Arch of the Stomach, where it is joined by Anasto-  
mosis with the *Coronario Ventriculi. - '* λ

The Duodenal Vein, commonly called *Vina Intestinalis,,* goes  
out from the great Trunk near the *Cystica,* and sometimes from  
the small common Trunk os these Veins. It is distributed  
principally to the *Intestinum Duodenum,* and sends, also, some  
Ramifications to *Pancreas.* . ThereJs another Vein called,  
also. *Duodenalis,* which is a Branch os the *Gastrica* of the..same  
Side.. . . . .. \*:

The *Vena Gastrica, or Gastro-epiploica Dextra,* and the Coro-  
*naria Fentriculi,* coine inore seldom .from theTrunk of the  
*Pena Portee,* than from its great Branches, with which! there-  
fore choose to .describe them. ... si:

V.ENA MESARAIcA ‘ MAJoRl ‘ '

. .The inferior *Vena Portee,* having given off the *Splenica,*changes its Name to.Ihat os *Mefaraica,.™ Mefaraica mayor,*which often appease to be rather a Continuation os the Trunk,  
than one of the greatBranch.es. “ '

- It bends towards the superior Mesenterio Artery, sendingOff  
two Veins; and, afterwards running -up over that Artery, it ac-  
companies it in those Portions os the Mesentery and Mesocolon,  
which .belong to.the small Intestines,. the.*Ccaecum,,*and Right  
Portion os the Colon. As it runs down, it forms an oblique  
Arch, almost like,that os the Artery,, which is, also, ramified  
on both the convex and concave Sides,.hut not so regularly.

- The first particular. .Branch from thin Trunk is .called by  
*Riolanus, Fena Colica,* it goes out from, the anterior .Part \_ of  
theTrunk, hefore jt Joins the Artery, .and runs directly to the  
Middle os the Colon, where it divides.-m-the Right and Left,  
and forms Arches. On rhe Left-hand it communicates with  
thesuperior or ascending Branch: os*ati^ Hamorrhoidasti^* and,  
on the Right, with the second Branch ed the *Mefaraica. - .. .*

This second Branch in a little under the . first, or *Colica ante-  
rior,* and something more toward the Right-hand. It may' be  
named *Gastro-eolica,* and is soon divided, into two Branches,  
Ove superior,, the other inferior. .gul.... ' . .

: I he tuperior Branch of rhe *Pena Gastra..colica,.*Tends small  
V eins to the Head of the Pancreas,, and forms the *seetta Case  
trica,* or *Castro-epiploica dextra,,* which goes from the *Pylorus*

to the great Curvature of the Stomach, and communicates with  
the *Gastrica Sinistra.'* In its Passage it supplies the Stomach  
and Omentum, and communicates with the *Pylorica, Corona.,  
ria Vintriouli,* &c. and sometimes it forms the *Pylorica. -*

The inferior Branch of the *Vina Gastro-colica,* winch may  
he called *Colica dextra,* goes to the Right Portion of the Colon;  
and from thence to the upper Part Of that Intestine, where it  
is divided archwise, and communicates with the Right Branch  
of the *Colica anterior,* and with a Branch of the *Pena Caecalis,*as we shall see hereafter.

The Trunk of the great Mesaraic Vein fends out sometimes,  
opposite to the *Gastrica,* a particular Branch to the Omentum,  
called *Epiploica dextra.* But almost immediately hefore it ascends  
over the Mesenteric Artery, it produces two large Branches  
very near each other, which pass behind and under the Artery,  
being distributed to the *Juunum,* and Part os .the *Ileum,* by  
numerous Ramifications, winch form Arches and Areolae like  
those os the Artery.

Afterwards the Trunk of the *Mefardica* passes over the su-  
perior Mesenteric Artery, to which it adheres very closely, and  
from the convex Side os its Arch sends out several Branches  
almost in the same manner with the Artery; but with this  
Difference, that oftentimes the Branches do not arise immedi-  
ately from the Vein in so great Numbers; and each of them  
sends out many more Ramifications.

From the concave Side of- the Mesaraic Vein, a little helow  
the Origin os the second Branch from the convex Side, arises **a**Branch called by *Riolanus, Fena Caecalis,* which runs to the  
Beginning os the Colon, crossing one os the Branches of the  
superior Mesenteric Artery.

- This Ccecal Vein divides by two Arches, the uppermost of  
which communicates with the lower Branch os the *Pena Case  
tro-colica*; the other, aster having sent Ramifications to the  
*Intestinum Caecum,* and *Appendicula Vermiformis,* communicates  
below, with the Extremity of the great Mesaraic Vein.

**VENA SPLENICA.**

The Splenic Vein is one of the three great Branches of **the***Vena Portee,* and may be said, in some measure, to be a sub-  
ordinate Trunk of. that Vein. It runs transverfly from the  
Right to the Left, first under the Duodenum, and then along  
the lower Side of the Pancreas, near the posterior Edge.

In this Course it gives off several V eins, υίζ. the *Pena Co-  
ronaria, Fentriculi, Pancreatica, Gastrica,* or *Gastro-epsploica  
Sinistra,* and *Epiploica Sinistra.* It, also, often gives Origin  
to the *Hiemorrhoidalis Intcrna,* **the** third capital Branch os **the***Pena Porta. .*

It terminates afterwards by a winding Course, being divided  
into several Branches that go to the Spleen ; one os which pro-  
duces the small Veins, called by the Antients *suasu Brevia.*‘. The *Coronaria Fentriculi,* **so** called, because it surrounds,  
more or less, the upper Orifice of the Stomach, runs along the  
small Arch of that ViseuS toward the *Pylorus,* where it joins  
and becomes continuous with the *Fena Pylorica.* In its Passage.  
it gives several Ramifications to the Sides os the Stomach, which  
there. form numerous Areolae, and communicate with the  
Veins os the great Arch.

. It arises pretty often from the Beginning of the *Splenica,* and  
sometimes from the Lest Side of the Extremity os the great  
Trunk of the *Vina Portay* hehind the Hepatic Artery ; and,  
in that case, it is the most considerable of all the small Veins  
that go out from the great Trunk.

The *Vina Pancreatica* are several small Branches sent by the  
*Splenica* to the Pancreas,-along its lower Side. There are  
other small Pancreatic Veins, which do not arise from the  
*Splenica,* aS has been said in the Description of the *Gastro-coUca,*one of the Branches os the great Mesaraic Trunk.

. The'Left Gastric, or Gastro-epiploic Vein, goes out from  
the *Splenica* at the Lest extremity of the *Pancreas',* from  
whence it runs to the great extremity of the Stomach, and  
along the great Arch, till It . meets the *Gastrica dextra,*which is continuous with the *Sinistra.*

In its Passage, it.gives several Branches to both Sides os the  
Stomach,, which are distributed by numerous Ramifications,  
form many Areolae ; and communicate with .the Branches *os  
the Cocenaria Fentriculi. si. '*

. Ata small Distance from its Origin, this Gastric Vein sends  
out a Branch, which is distributed to the Omentum ; and on  
this Account it 4ias been called *Gastro-epiploica.* This Branch  
feemsitOcommunicate with the *Hiemorrhoidalis interna.*

... The. *scena Epiploica Sinistra* arises at the small Extremity  
ossthe Pancreas, and is ramified on the Omentum all the Way  
to she Colon, where ilocommunicates with the *Hamorratidalis  
interna.* etVhen thin Vein is wanting, the Branch os the Left  
*Gastrica* supplies its Place. It sometimes comes from the most  
anterior Branch, which the *Sylenica* sends to the Spleen.

- Lastly, The *Pena Splenica* reaches the Fissure of the Spleen,  
which it enters, through its whole Length, by several Branches,  
almost in the same manner as the splenic Artery. It is from  
**the** most posterior of these Branches that the VeinS are sent off  
to the great Extremity of the Stomach, formerly known by the  
Name of *Paso Breuia,* which communicate with the *Coronaria  
Fentriculi* and *Gastrica Sinistra.*

**VENA HAEMORRHOID A LIS INTERNA, SIvE MESARAICA  
MINOR.**

. The internal haemorrhoidal Vein is one of the three great  
Branches of the *Vena Porta,* coming ordinarily from the Begin-  
ning of the *Vina Splenica,* and sometimes from the Extremity  
or Angle Of the Bifurcation Of the great Trunk of the *Vena  
Porta.*

At a small Distance from its Beginning, it gives to the *Duo-  
denum* a second *Vena Duodenalis,* which is sometimes more con-  
siderable then the first, or that which comes from the great  
Trunk of the *Vena Porta.*

Afterwards it is divided into two Branches, one superior, or  
ascending; the other inferior, or descending: The first runs to  
the upper. Part of the Arch of the Colon, where, after many  
Ramifications, it communicates with a Branch of the great  
*Mesuraica,* with the Ramifications of the *Gastra-epiploica si.,  
ttisira,* and with those of the neighbouring *Epiploica.*

The inferior Branch rims down on the left Portion of the Co-  
lon, on the lower Incurvations of that Intestine, and on the  
*Rectum,* all the way to the *Anus.* In this Course it supplies the  
Mesocolon, and forms Arches, which send out numerous small  
Ramifications, which surround these Intestines: It seems, also,  
to communicate, by some capillary Twigs, with the left sper-  
matic Vein.

This Vein has been named *Hamorrhoidaelis,* from the Tumors  
Often found at its Extremity next the Anus, which are called  
*Haemorrhoides.* The Word *Interna* is added to-distinguish this  
Vein, from the *Hamorrhoidalis externa,* which comes from the  
*Vena Hypogastrica,* and with which this Vein communicates by  
capillary Ramifications. The Name of *Mesuraica minor* agrees  
to it very well, because of its Situation, with respect to the in-  
ferior mesenteric Artery, which is, also, less than the superior.  
*Winstow.*

VENA MEDINENSIS. See DRAcUNcULI.

VENJE SECTIO. See PHLEBOTOMIA.

VENATIO. Hunting. . This, considered as an Exercise,  
is, perhaps, the best that can possibly be contrived, for strength-  
ening the general Habit, and procuring Health and Vigor.  
The Season os the Year, the Time of the Day destined for this  
Amusement, and the Motion necessary on this Occasion, are  
all admirably adapted to the Restoration and long Continuance  
*Css* Health: It is, besides. Of no small Importance, to have the  
Mind recreated, at the time the Body is exercised ; for this ad-  
mirably assists the due Circulation of the Fluids through the mi-  
nute Canals destined for their Conveyance: And, I believe,  
there are few People not utterly abandoned to Idleness and De-  
bauchery, of some Kind or other, who do not perceive a spon-  
taneous Flow of Spirits, when they ride on Horseback at or about  
the rising of the Sun, when they respire the purest Air, when  
Variety Of perpetually changing Scenes present themselves, and  
when the Mind is agreeably agitated concerning the Event of  
the Chace.

*' Focat ingenti Clamore Citharon,*

*Taygekiaue Canes, Domitrixque Epidaurus Equorum,  
Et Vox Assensu Nemorum ingeminata remugit.* Virgil.

I am sensible, that,by saying thus much in savour of Hunting,  
**I** may, possibly, expose myself to the Ridicule Of those who  
**esteem** it meritorious to laugh at every thing laudable and manly.  
But I presume I may, without Offence, remind these, that it is  
more prudent to make use of the most delightful Means of pre-  
serving entire, the vital, animal, and, in consequence of this,  
even the intellectual Faculties, than to undermine the Pillars of  
Health, by indolence. Taverns, Brotheis, and Physic.

VENEN *Sincnsium.* Martin. Ati. Sinens. *Lusitanis* Jambos.

This is a thorny Tree, bigger than the Lemon-tree, and which  
hears white Flowers, Of a very-pleasant Smelt The Fruit is as  
big aS a Man’s Head, with a Rind like that of a Quince, and a  
reddish Pulp, which has the Taste of Grapes before they are  
quite ripe. This Fruit, hung up in a House, or under Covert,  
will keep good for a Year.

The Tree grows in the Province Of *Fokian in China.* They  
extract a very fragrant Water from the Flowers, and from the  
expressed Juice of the Fruit they prepare a Liquor which serves  
them for Drink. *Raii Hisp. Plant.*

VENENUM. Poison. ’

Quick *Poisons,* when, by Ingestion, or Application, they be-  
come the Causes of Diseases, either through then Own proper  
Force, orthy first inducing a Corruption Of the infected Parts,

indicate, I. A Removal of the *poisonous Caus.e. pt.* ACorre-  
ction of the *Poisen* already received, or unavoidably to he re-  
ceived. Or, 3. Au Expulsion of it from the Body. 4. A Mi-  
tigation of the Symptoms. And, 5. A fortifying of the Body  
against the Force of any future Ingestion, or Application of the  
*Poison.*

The Couse which propagates the *Poison,* and communicates  
it to the Body, or which mixes its *Measinata* (contagiousTaint)  
with the Atmosphere, or conveys them, when applied to **the**Body, within the same, if sensible, and known, is easily re-  
moved,

i. By taking out of the way the poisonous Matter, either,  
(a) First, by Combustion, in kindling large and clear Fines;  
or so) by correcting the Air, the Vehicle of those *Miasmata,*which is generally best effected by the think Vapours that pro-  
ceed from the kindling or heating of such Things as have a  
Virtue opposite to the known *Parson.* Thus, for Instance, in  
the Pestilence, against the caustic, alcaline, and'putrid Exha-  
lations, proper Remedies are. Fumes of Vinegar, Spirit of Sals,  
and Gunpowder; against *poisonous* acid Exhalations, the di-  
spersed Odours of oleous alcaline Spirits are a good Preservative.  
Another way (γ) is, by altering, dissipating, renewing the Ain  
by a Wind procured by Art, especially if such Wind could, at  
the same time, by the Method of *Hippocrates,* be transmitted  
through great Fires, kindled up for the Purpose. The last  
Means (δ), to be mentioned under this Head, is, by flying the  
Contagion, or removing our Habitation to the other Side of  
some high Mountain. /

2. The Cause is removed by expelling or correcting the *poi-  
sonous* Matter, which, either by Ingestion, or Application, in-  
fests the Body.

The *Poison* itself, when known to he present, is corrected  
by the Application of such Things as render unactive those  
Qualities by which it injures the Body.

These Qualities, (I.) in many *Poisons,* are scarce hitherto  
known, but only by their deleterious Faculty, which hardly'  
discovers itself but by the Death of the infected Subject. The  
same noxious Qualities, (a.) in other *Poisons,* manifest them-.  
selves by their surprising, and hardly explicable Effects; (3.) in  
some *Poisons* by Effects which occur in other known Diseases ;  
and (4.) in some others these Qualities are understood *a priori,*as they call it, being very easily foreseen from a Knowledge of  
the Nature of the *Poison.*

The first Sort of these *Poisons* just mentioned, and which are  
said to be *hurtful to the whole Substance,* indicate such Reme-  
dies as are exactly opposite to them, and as little understood,  
with regard to the Reason of their Effects, as the *Poisons* them-  
selves : These Remedies go by the Names of *Antidota, Anti-  
do tot, Alexicaca, Alexipharmaca,* and *Theriaca*; and being  
known only by Experience, are to be learnt from the Accounts  
Of *Poisons.*

, The second Kind of *Poisons,* which are said to be pernicious  
from an occult Quality, require Remedies, equally unaccount-  
able, called *Specifics,* scarce to be found, unless by mere  
Chance: The best Account we have of. these Medicines, also,  
is to be met with in the History of particular *Poisons.*

The third Sortos *Poisons,* which, before they kill, produce  
such morbous Effects as corrupt the Fabric of the Body after  
the manner of some known Diseases, require such Remedies as  
are observed to he effectual for the Cure of such Diseases as di-  
stinguish themselves by the like Effects.

*Poisons* of the fourth Kind, which are known aS applied. Or  
.to be applied to ths Body, necessarily require such Medicines as  
are *of* present and ready Efficacy in subduing the known Malig-  
nity: Those Medicines, for the most part, owe their Virtue to  
an opposite Malignity, which would render them quite perni-  
cious to the Body, if it were not for the *Poison* before re-  
ceived.

Hence we see, that the Nature and Properties of *Poisons* are  
jearnt from natural and medicinal History, in Conjunction with  
the Knowledge of Mechanics and Chymistry, not omitting  
Anatomy, which represents to our View the Effects of *Poisons,*From the Knowledge acquir'd by these Studies, are we furnish'd  
.with Indications, in such Cases.

From these Indications, thus supplied, we come to know the  
Mattes, Preparation, Dose, Application, and Management, of  
the Corrective. \*\_

Primary, and almost general, or universal Antidotes, against  
all Sorts of *Poisons,* and, for that Reason,-highly useful, where '  
It is known that *Poison* is given, but not what particular *Poison,  
use,* principally, pure Water, a very little hotter than our Blond  
in its healthy State,plentifully, speedily, and for a good while toge-  
ther,received by the Mouth,injected in Clysters,and properly ap-  
plied ; a mild LixiVium, composed of common Water, and *Ve-  
nice* Soap, used in the same Mannes, Quantity, and Time, with  
.the Water before-mentioned; or pure Water, rendered sapo-  
naceous with Oxymel, and used as before; mild, recent Oils,

expressed from smooth, fat, and farinaceous Seeds, speedily,  
coproufly, for a long time together, swallowed, injected, ap-  
plied ; or the Oils of fresh-kill'd Animals, boil’d with all the  
Speed possible, in Plenty of Water, and used in like manner ;  
Vinegar, also, which is of general Use in many sudden Cases;  
and, in the last Place, Opium. As for an universal Prophy-  
lactic, or Preservative, against all Sorts of *Poisons,* none has  
been hitherto discovered ; and it is even inconsistent with the  
Nature of Things.

-In exhibiting a special, or singular Antidote, the highest Pru-  
dence is requir'd: For since every particular Antidote is endow'd  
with a peculiar Virtue of correcting this or that *Poison* Only,  
they have, for the most part, as much Violence, or rather more,  
than -the Thing they are to subdue: When these two Things,  
therefore, the *Poison* and the Antidote, enter into Conflict  
within the Body, they destroy one another, and, being render'd  
unactiVe, cannot do much Mischief; but if Antidotes are found  
-alone, or in a separate State from the Matter on which they are  
Io act, they often prove equally noxious with the *Poisons* against  
-which they are exhibited.

All these Antidotes, whether universal or singular, may and  
bought to be prepared, applied, and directed, in such a manner,  
. That they may be enabled, speedily, constantiy, and withoutDi..  
Ininution of Strength, to make their way to the Places where  
the *Poison* is lodged, and there subdue it. The Physician,  
therefore, ought, on all Occasions, to have ready present to his  
Mind a general List, comprehending all the Diversities of Ap-  
plications, Of which the primary are, Susthmigations of the Air,  
’ dry or moist Vapours for the Lungs, Potions, Clysters, Epi-  
thems. Baths, Fomentations, Injections for the Uterus, Bled-  
der. Fauces, and other Parts.

*Poison* received is expelled out of the Body, i. By diminish-  
ing the Resistance at the Place by which it may, with most Safe-  
ty, be discharged, where it does least Mischief, where it is near-  
**eft** to an Outlet, where it is least hurtful to the Vital *Viscera*for then it will, either by the Vital Forces, or the Strength of  
\* the Medicines, be propelled to the Place required, and thence  
he discharged. This, in former Times, was effected by what  
**was** then esteemed Very strange, and unaccountable; but is now,  
through the Industry of M. *Radi,* easily understood, the Suction  
of the *Marsi* and *Ps.ylli (state* Nations famous for extracting  
*Poisons* by Suction with the Mouth); but is now performed by  
means of large and strong Cupping-glasses, applied with much  
Flame, and Often renewed ; by warm, and highly-emollient  
Fomentations; by Leeches, Scarifications, Frictions, Heat-  
ings,Plalsters. 2. By magnetic Attraction, in which a certain  
-Substance attracts *Poison* by a fingular Virtue, and relieves the  
Patient 5 as we find it recorded of the Flesh of the Venomous  
Beast, the Stone of the Cerastes, and of other Serpents, and  
-the like. 3. By such Medicines as are Very potent Diluents  
and Movers: Of this Nature are quick Emetics, and Cathar-  
.ties, very strong Sudorifics, and, perhaps, diuretic Diluents.  
Hence, Diaseordium, Mithridate, Theriaca, OrVietan, and  
Opiates, are of Service, though not entirely to be depended on,  
.either as universal Therapeutics, or Prophylactics. 4. By a  
Separation *of* the affected Part, with as much Speed as possible,  
-to prevent the Spreading of the Insection; and this is best ef-  
fected by a Cautery of a hot Iron.

Those severe Symptoms, which are the sensible Effects of  
*Poisons,* are, according to the Doctrine of Pathology, easily  
enough reduced under proper Classes, and, in that Case, may he  
cured, as if they were each of them some fingle Disease.

‘ The Body is fortified against the Application of *Poisons,*I. By a free Use of Antidotes universal and fingular, which  
- may sometimes be safe, when the Nature of the *Poison,* against  
’ which they are given aS Preservatives, is foreknown. 2. By  
anointing the Part of the Body which is exposed, with Oleous  
Lenitives. 3» By preserving all the Parts of the Body in equa-  
ble Perspiration." But, as yet, we are acquainted with no uni-  
-Versa! Prophylactic, aS we observed hefore, tho' there are several  
extolled as such., 4.

What has heen spoken, hitherto, of *Poisons,* is applicable,  
also, to .the Pestilence, and other contagious Disorders; and  
“ may, probably, he best understood from the following, perhaps,  
mot ill-composed Synopsis of *Poisons* and Antidotes.

First, then, some *Parsons* are manifestly to be reduced under  
Acrids, but such aS have a peculiar Acrimony, which is phlo-  
-gistic, caustic, effective of a Gangrene, and septic: The chief  
of these are. Cobalt, yellow and red Arsenic, white Arsenic  
-Sublimate, Realgar, *Lapis Armenus,. Lapis Lazuli;* These,  
hy Application, either internal or external, inflame, corrode,  
excite Pains, burning Heats, Drynesses, first, in the Parts first  
-Injur'd; and, soon after, in the whole Body. Hence, they  
create Very acute inflammatory Disorders in the Mouth, Fauces,  
.Oesophagus, Stomach, and Intestines ; excite Nausea, Vomit-  
-ing. Dysentery, Cholera Morbus, and the Ileos; and produce  
**.a** Palenessj and LtVidness; whence proceed Vertigos, Convul-

sions, and Death ; or, if this be escaped, a Wanness of Co-  
lour, Palsies, and Contractions. Remedies, here indicated, are,  
warm, acidish, honey'd Water, most speedily, copiousty, and  
for a long time used, in Potions, Clysters, and Baths. If the  
*Poison* can he expelled by Stool and. Vomiting, it is so much  
the better, and the Remedy is to be the Oftener repeated. Far  
Broths, Milk, Oil, oleous Substances, Butter, are of Ser-  
vice here; and, after that, we must, for a long time, employ  
relaxing, soft, fat, acidulated Substances, both by Ingestion,  
and in Baths. ' .

Among Vegetables of this Quality, the principal are. *Aco-  
nitum, Alnacardictm, Anemone, Apium Risus,* (the Herb which  
excites the *Risus Sardonic us) Apocynurn, Arum, Axedarach, Ca~  
taputia, Chamalaea tricoccos, Chamaeleon .niger. Clematitis,  
Colchicum, Corona Lnepcrialis, Cyclamen, Dracontium, Elate-,  
rium, Esula, Eupherbium, Flos Africanus, Grana Nubia,  
Helleborus albus, nigcr, viridis, Hcrmodactyli, Hyacinthi, Lau-  
reolo, Mexereeurn, Mel venenatum, Napellus, Nigella Sylve..  
stris. Oleander, Ranunculi, Ricinus, Scammonium,* oleous  
Seeds by long Corruption become acrimoniously rancid, *Tithy-  
rnali, Thapsia :* The Effects of these Simples are like those of  
the Substances before-mentioned, and the indications are ex-  
actly the same.

There are, 2. Other violent and acrimonious *Poisons,* but  
which are, at the same time, os a sort os Viscid Quality, by  
which they stick in the Stomach, and thence affect the Brain  
and Nerves aster a fingular manner. Os this Kind are, the  
*Chrysomela,* the *Cicuta mayor,* the *Cicuta minor Petrose-  
lino similis,* the *Cicuta aquatica Ges.neri, Crocus, Datura,  
Hyoscyamus, Nux Fornica, Oenanthe Apii Folio Succo virosi.  
Opium, Solanum, Melanocerafos.* The Effects os thesi: are.  
Vertigo, *Scotomia, Delirium,* Madness, Nausea, Vomiting,  
Dysentery, terrible Convulsions, Apoplexy, and Death.  
The Indications here are, the most speedy Exhibition os a  
very quick Emetic, an immediate Ingestion os Vast Quanti-  
ties os aqueous, oleous, honey'd, acidulated Liquors, by Po-  
tion, Clysters, Baths, and continually repeated. The Disorder  
heing mitigated, and repressed. Sweating is strongly to be pro-  
voked by theriacal Medicines, and the same is to be frequentiy  
repeated; and this must he followed by a soft and thin Diet.

In the third Place (3.) There are acrid Poisons, which have a  
manifest Acidity ; for instance, (α) Spirit of Salt, Spirit of  
Nitre, Aqua-regia, Aqua-fortis, Spirit Of Sulphur, Spirit of  
Vitriol (β) The same Acids, united with metallic Bedies, and  
by that means extremely powerful, as are, for Example, a So-  
lution of Gold, and of its Crystal; a Solution of Silver, its  
Vitriol, and Iapis Infernalis ; a Solution of Copper, and the  
Salt thence proceeding; a Solution of Quicksilver in Spirit of  
Nitre, in Spirit of Salt, in Aqua-fortis, in Aqua-regia, or its  
Calcination with Oil of Vitriol, red, white, green Precipitate,  
corrosive and sweet Sublimate, Calx, Turpeth ; an Impregna-  
tion of Antimony with Aqua-regia, and the escharotic Calx  
hence produced: These Kinds of Poisons produce abomina-  
ble Tastes in the Mouth, acid Fetors, Inflammations, gan-  
grenous Eschars, Nausea, Vomiting, Dysentery, Cholera  
Morbus, most severe Gripes, Cardialgia, Ileos, Colic, Tu-  
mors of the Glands, a cadaverouS Smell, Salivation, Syncope,  
and Death. In these Cases are required Dilutions by aqueous  
Liquors; Obtundents, as Oiis ; Alteratives, as saponaceous  
or highlv alcaline Lixivia ; the strongest Absorbents Of Acids ;  
and, lastly, when the Violence of the Disorder is abated, **the**frequent Use of Oil, sat Broth, and the like emulsions.

Fourthly, (4.) There are Poisons manifestly acrid, which are  
known to be alcaline: Such are the Ashes of burnt Vegetables ,  
the Alcali thence produced; the same render'd igneous with **the**Calx of burnt Stone; Eggs, Humours, Flesh quite putresy’d;  
the Salts thence separated; the same render'd igneous by Subli-  
mation with a fixed Alcali, Lime, Lapis Calaminaris, Chalk,  
Iton, and the like. The Symptoms proceeding from those Poi-  
sons, are, a Very quick, violent, and igneous Inflammation,  
Erosion, Gangrene, Very burning Pains in all Parts, unquench-  
able Thirst, Convulsions, very high Fevers, a cadaverous  
Smell, an intimate Dissolution of the Humours, a Putrefaction  
of the same, and of the Viscera, and, lastly. Death. The  
Cure is effected by aqueous relaxing Diluents, oleous Obtun-  
dents, pinguious and earthy Substances, by inversion, or Alte-  
ration, by means of diluted, volatile, and easily moveable  
Acids. After these the Diet must for a long time consist of  
acidulous, oleous, and emollient Foods.

Some Poisons there are, (5.) Which are frequently mortal,by  
their fingular Acrimony; yet so as that this Acrimony shall  
scarce manifest itself otherwise than hy its deleterious Effects  
on the human Body : Such are Copper, burnt Calx of Cop-  
per, Calx of Copper by Corrosives, Flos sssris. Squama *LEDs,*Crocus of Antimony, Calx of the same prepared by burning,  
and the Glass made of it ; the pure Flower of .Antimony,  
prepared by Fire alone, or by’ the Help of Sal Ammoniac,

«nd then washed. By these Kinds of Poisons are excited a  
Nausea, Vomiting, Dysentery, Cholera Morbus, excessive  
Purgation, severe .Pains in the Viscera, Spasms, Tetanus, Syn-  
cope, dreadful Anxiety, and Death. The Cure is performed  
by an immediate Ingestion of Diluents, emollients, Ohtun-  
dents. Acids, and honied Substances, above, and below, and  
the same externally applied; and the Use of them continued  
in this manner for a long time together: After these. Opiates  
and oleous Substances are of Service.

Among acrid Poisons may he reckoned (6.) Those which are  
merely mechanical, aS the Diamond, Mountain Crystal, Filings  
of Iton, Filings of Brass, feathered Alum, pounded Glass, and\_  
the like. These prick the Nerves, and wound the Vessels,  
and, by so doing, excite Convulsions and Haemorrhages, whence  
proceed Ulcers, and the like Mischiefs. Tn these Cases the In-  
‘dication is a speedy and copious Use of Oil and Butter.

In the seventh Place (7.) There are Poisons which kill in a  
quick Or stow manner, by Constriction, Incrustation, Obstmc-  
tion, or Exsiccation: Of this Nature are, perhaps. Quick-  
lime, and Lime flak'd; also. Gypsum, Lead in the Ore, the  
Filings, Scales, Calx, Glass, of the same; White-lead, Red-  
lead. Litharge, the Ashes of burnt Tin, Earth of Sinope, the  
Seed Of Psyllium, the Sponge of the Cynoshatos, Funguses,’  
Agaric, Mifleto: These Substances conglutinate, and cause a  
Constriction and Strangulation; by which means they excite  
terrible Disorders, which, aster long and miserable Languish-  
ing, terminate in Death. Remedies here indicated aS neces-  
sary, are Emetics, Cathartics, Diluents, spirituous Acids, spi-  
rituous oily Alcalis, with all manner of saponaceous Things,  
to be immediately, and for a long Time, used.

Eighthly, (8.) There are some Poisons of an heteroclito  
Bort, directly destructive of all the Vital Functions, whose Effica-  
cies and Effects have not as yet been well explained; these prove  
mortal, whether inwardly taken, or outwardly applied, or by  
a Stroke inflicted. Under this Class are to be reduced Cantha-  
rides, the Spider, Tarantula, Asp, Viper, Cerastes, Presses,  
Seps, Scorpion, mad Dog, Toad, Buprestis, Stellio or Lizard,  
Salamander, Lepus Marinus, Pastinaca Marina, and the like:  
The Poisons of these Animals produce Various, furprifing, and  
scarce explicable Effects, which end at last in Death, indica-  
tions on this Head are, if the Poison he taken inwardly, to  
evacuate the same immediately by Vomiting ; to dilute it, in  
an extraordinary measure, by aqueous Ingestions; to mollify it,  
in an high degree, by relaxing, emollient, and oleous Reme-  
dies; and to resist the Putrefaction by spirituous and saline  
Acids. Is the Poisons are communicated by external Stroke,  
Bite, Or Application, Extraction os the same is. indicated at  
the Place affected by means os Suction, Scarification, Cauteri-  
sing, Mollifying, Fomenting; also. Sweat is to be powerfully  
provoked by penetrating diluent Antidotes, which resist Putre-  
section; and the Force os the Venom is to be weaken'd hy  
acid saline Medicines, or by specific Antidotes.

‘ In the last Place (9.) There are Substances which suffocate in  
a Moment under the Form Of an Exhalation. Such are, the  
confined Vapour of Coals, subterraneous Air long confined.  
Exhalations of Wine under Fermentation, the Volatile Farina  
Of a poisonous Fungus, the Fume of Sulphur, and many others  
Of the like Nature, which are best passed over in Silence.  
These Poisons appear, from what has been said, to apply them-  
- selves to the Lungs or Nerves, and will scarce admit of a Cure.

The more remote Causes of Diseases, which come under the  
- Cognisance of the Senses, are easily altered or removed ; for  
they indicate a Change in the Non-naturalS.

But if these Causes are less manifest, yet, as .they discover  
themselves by their sensible Effects, they indicate, by these very  
Phenomena, proper Remedies.

The Course of those Phenomena carefully observed, directs  
us to the Use of proper Means, Seasons, Order, Manner, and  
Way, either for the Correction or Expussion Of the proximate  
Cause of the Disease in the human Body.

The accurate Observation of the lame Phenomena teaches  
**US** what is wanting, and what Supplements are necessary.

AS, also, what Motions are to be excited, continued,, sup-  
pressed, diminished, with a View to the same end.

An orderly, therefore, anff exact Knowledge of Effects in  
**inch** Cafes, directs us in the hest manner how to correct or re-  
move the Cause.

Hence we, also, learn, that there are but two Ways as yet  
known, by which we arrive at the Knowledge of the Cause,  
and these are what we call the *methodic,* and the *specific.*

The *methodic* Way, in Order to attain to the Knowledge of  
the proximate Cause, that the fame may be removed, makes  
**Use** of the following Means.and Assistances. . First, (I.) It is  
. very careful and exact in examining and digesting into Order  
the Phenomenon before-mentioned, and attentive in observing  
the Course of Nature. Secondly, (2.) If it observes a Failure  
Of **the** vital Powers, under the Operation of such Remedies as

are required for subduing of the Disease, in comes in to their  
Relies, by the Administration of Cardiacs, or by a Removal os  
the impediments which obstruct the Operation of the Medi-  
cines designed to evacuate the morbific Matter. Bur, m chethird Place, (3.) When it observes the Vital Actions too much  
exalted ; and by that means more likely to perplex Matters,  
and intangle rather than disengage the Cause os the Disease, in  
has recourse to moderating means, till their Impetus is re-  
strained, and their Forces reduced within the Bounds required.  
This Intention is answered by aqueous Diluents, gentie Relax-  
ants, soft glutinous Remedies, such as evacuate the material  
Cause of the immoderate Exaltation, Opiates, Anodynes. And,  
lastly, (4) By neither doing nor changing any thing but whet  
appears necessary from the clearest indications.

The *specific* Way, as it is called, removes the Cause of the  
Disease, by a simple Application of something which is known  
to he effectual for the Purpose, merely by Use, without attend-  
ing to the four methodical means just mentioned. In this Case  
you have only .to inquire the Name of-the Disease, and then  
.administer the *Specific.* Thus it is, for Example, in the Cure  
of an intermittent Fever by the *Peruvian* Bark, of Pain by  
Opium, and of every particular Poison, by its known, parti-  
cular, proper, corrective, attractive, or expulsive Antidote.  
*Boerhaau. Institui. Med.*

VENER. Mercury. *Pulandus.*

VENEREA LUES. See **LUES VENEREA.**

VENERIS OESTRUMS See **CLITORIS.**

VENETICUS, *Fenetus,* ὸνετός. An Epithet importing a glau-  
cous or saint Sky-colour. Hence *Oculisienoci* are Eyes affected  
with a Cataract. *Castellus.*

VENOSA ARTERIA. - The same as **VENA PULMUNA-***LIS.* SeePULMo.

VENTER, κοιλία, is taken in several Senses. With the  
more modern Anatomists it signifies, in the most extensive Ac-  
ceptation, a remarkable Cavity, in which any one of the prin-\_  
cipal *Viscera* is contained. In this respect the whole Body is  
divided into three *Vintres,* the lowermost, commonly call'd the  
*Abdomen*; the middle *Vinter,* call’d the *Thorax*; and the high-  
est, or the Cavity os the Head. *Hippocrates* sometimes uses the  
Word κοιλίη, in a more restrained Sense, for the *Abdomen,* and  
the Cavity of *ffiEThorax-,* and, sometimes, by way ofDistin-  
ction, he calls the latter ή ἄνω κοιλίη, the upper *Vinter*; and the  
*Abdomen n rderarjativA,* the lower *Ventcr.* See 7 *Asch.* 38. with  
*Galen,* I *Corn.* and *Lib. i. de Morb.* But the Term *Vinter,* κοιλίη,  
is most frequently to be understood, in a still stricter Sense, for  
the *Abdomen,* or Region between the Diapbragm and Pudenda»  
Instances of this are needless, as being every-where to be met  
with. And, in the last, and strictest Acceptation, it in some-  
times restrained to the *Ventriculus,* or Stomach, and sometimes  
to the intestines: As where we find *Hippocrates* speaking of the  
LaxnesS or Astriction *of* the *Vinter, Kntlci»,* which are Affections  
chiefly regarding the Intestines, and, particularly, the great In-  
testines; whence some, as *Galen, Corn.* 4. *in R.P. I. A.* and  
*Carn, in* 7 *Aph.* 38. telis us, give the Name of *Vinter, zottsm. to*the *Colon Intestinum.* The *Greek Kothari (sccciieso* in a Passage  
4 *Epidern.* signifies no more than the Excrements of the Belly **a**and the *Latin Vinter* will bear the same Sense.

With the Chymists, *Vinter* is the same as *Terra,* Earth ; **and***Ventcr equi* is *Fimus equinus.* Horse-dung. *Theat. Chyrn.* Vol. I.  
p. 2OI, 378. *Pulandus. Castellus.*

VENTININA. A *Paracelsic* Term to signify the Art of  
Divining, or knowing by the Winds, the Courses and Difpo-  
fitions of the Heavens and Stars, with respect to their good or  
bad Effects upon Mankind.

VENTOS.dE, from *Ventus,* Wind, Cupping-glasses applied  
without Scarification, so called. *Vintofa* is, also, an Epithet of  
a Disease, called, *by Avicenna, Spina ventofa,* or *Spinae vento-  
sitas,* being a carious Affection of the Bones, attended with a  
Putridness. *Me A. Severinus* has an entire Book on this Sub-  
ject, in his Treatise *de Padarthrocace.* See OS.

*Ventositas,* Ventosi ty, is a Word often put for *Flatulentia,*Flatulence. *Castellus.*

- VENTRALIS *Dispositis, KntKsaccii* διάθεσος. The *Coeliaca  
Pastio.*

VENTRES, in the Language of some Authors, the same aS  
*Cavitates,* Cavities. *Blancard.*

VENTRICULATIO, in *Caelius Anrelianus, Lib.* 3. *Acut.  
Cap.iy.* is supposed to be the same as that he calls Femirim/seI  
*Passes, Lib. An Chron. Cap.* 3. that is, the κοιλιακήοί *the Greeks,*or *Coeliaca Passio.*

. VENTRICOSUS, VENTRICULOSUS, is either one with  
a great Belly, and the same with μεγαλοκοιλος *(rnegaloccslus)* or  
One labouring under the *Passio Coeliaca.*

VENTRICULUS. TheStomach. See Co ELIA, and IN-  
**TESTINA.**

. VENTRILOQUUS, ἔγγαστρίμυ-θος, a Ventriloquist» Seo

**.dESCULAPJUs, . - .**

VENTUS. The Wind. The Knowledge of the Nature,  
Properties, and Virtues os the Winds, is often inculcated by  
*Hippocrates* as necessary for a Physician. *Pentus* is, also, a  
Word frequently occurring in the Works of the Chymists:  
ThusPiintus *albus* is Mercury; *Pentus rubens* is red Orpiment ;  
*Pentus citrinus* is Sulphur ; and *Ventus Hcrmrtis, in Libandus, is*the Philosophers Stone. *Castellus.*

VENULA, φλε.βίον, a Diminutive of *Pena,* a Vein, is a  
small Vein. The Term φλεβίον, in 6 *Epid. Sect.* 6. *Aph.-2.*signifies an Artery. See *Galen, Corn, in Locum.*

VENUS.

Tho' the Word *Venus* was originally the Name of a heathen  
Goddess, celebrated as the Queen of Beauty and Love, yet it  
afterwards Came to signify what we commonly call Venery ; an  
Action which may either promote or destroy Health, according  
as it is regulated: For it is certain, from Experience, that too  
treat a Retention of the Semen induces a Torpor and languid  
tate of the Body, and often lays a Foundation for terrible ner-  
vous Disorders. And whereas the Semen is, as it were, the  
Flower, and choicest Part of the Blood, and nervous Fluid, so  
Venery ought to be only moderately used, lest too great an  
Evacuation of this Substance should prove prejudicial to IIealth.  
An Ejection of the Semen requires a sound and vigorous Habit of  
Body, because it exhausts the Strength, and weakens the Personi  
Hence *Pythagoras,* when ash'd when Coition was to be used,  
’ wisely answer'd, " When you have an Inclination to render  
" yourself weaker." For this Reason, weak Persons, those who  
are either too young or too old, and those lately recover'd from  
a Disease, Ought to abstain from Venery: Nor should Persons  
indulge themselves in Venery aster strong Application of Mind,  
or long Watchings; because these Things have a Tendency to  
weaken the Body. AS Venery only agrees with robust and Vi-  
gorous Constitutions, so the Use of it is principally beneficial to  
Health after the Stomach is empty, and Perspiration duly per-  
formed, especially if the Person has flept well, us'd the Bath,  
and taken Aliments of a nutritive Quality, and easy Digestion.  
It is, also, to be observed, that Venery is more salutary in the  
Spring, than at any other Season of the Year. All these  
Things are of such a Nature, as to increase the Strength and  
Vigour of the Body, and, consequently, favour Venery, or, at  
least, prevent the bad Effects it might otherwise have. The  
Person who would often engage in Venery, ought to  
guard against all Surfeits, Hunger, Labours, excessive Study,  
- Venesections, Watchings, Purges, and every thing which can  
in the least impair and destroy the Strengths Venery, accord-  
ing to *Celsus,* is beneficial, when it is neither succeeded by Lan-  
guor nor Pain, but, instead os oppressing, augments the Strength.  
But it is by no means to be used after Meals, Labour, or  
Watching. But as Moderation, in every thing, contributes to  
Health; so, likewise, does temperateVenery: And every one  
ought carefully to consider what his Constitution can bear.  
For a Very robust Person may safely indulge himself in a Degree  
of Venery which would remarkably weaken one who has a worse  
Constitution. Venery, according to *Celsius,* is to be abstained  
from in the Summer; because, at that time, it is subject to  
throw the Humours into too violent Commotions, st is, also,  
found, froth Experience, that immoderate Venery weakens the  
Force and Tone of the Solids, and brings on Colics and Cardi-  
algias. It is, also. Certain, from Experience, that Venery both  
alleviates and removes various Disorders incident to Women:  
For the male Semen, consisting of a fine elastic Lymph, ra-  
refies and expands not only the Eggs, but, also, the Blood and  
Juices in the Veffeis Os the Uterus, the Fibres Of which it like-  
wife strengthens. Hence the Reason is obvious, .why Venery,  
or Coition, cures Women, rendered cachectic by a Suppression  
of the Menses, and'generally restores that salutary Evacuation.  
" For, says *Hippocrates,* in his Book *de Genitura,* Coition  
" warms the Blood, and renders the menstrual Discharge  
" easier;” For a Defect of the Menses frequently happens on  
account Of the Narrowness and Contraction Of the Vesteis of  
the Uterus. *Hoffman.*

VER, ἔαρ, the Spring. Diseases most incident to this Season  
of the Year, are Lippitudes, Pustules, Haemorrhages, Ab-  
scesses, Melancholy, Madness, Epilepsies, Quinsies, cold  
Rheums in the Head, and Distillations: Those Diseases, also,  
which affect the Joints and Nerves, and have their Paroxysms  
and Remissions, begin and repeat their Attacks chiefly at this  
Season. *Celsus, Lib.* 2. *Cap.* i.

The most healthy Season os the Year is the Spring; next to  
that the Winter . the Summer iS more dangerous; but the most  
dangerous of all the sour, by many Degrees, is theAutumm  
*Ibid, in Init.*

In Spring we must somewhat diminish the Quantity os Fond  
Used in Winter, and Increase that of our Drink, which, how-  
ever, must be more diluted, or smaller, than before: We are  
to ear more freely of Flesh and Greens, and we are to  
Pass from boiled to roast Meat, by Degrees; Venery may

most safely he indulged in this Season, */bid. Lib. I. Cap.* 3»  
VERATRUM.

The Characters are ;

The Leaves are fibrous, and complicated, as it were, into  
Folds : The Flowers are rosaceous, hexapetalous, naked, fur-  
nished with six Stamina, and collected into Spikes: The Ovary  
grows in the Placenta, and consists of three Peds, each furnished  
with its Tube, and becomes a Fruit, consisting of three Sheaths,  
collected into an Head, and frill Of oblong Seeds, much like  
Grains of Wheat, marginated, and surrounded with a foliaceous  
Wing.

*Boerhaave* mentions two Sorts of Veratrum; which are,  
I. Veratrum ; store subviridi. *Tourn. Inst.* 272. *Bocrh. Ind.  
alt. ossa. Helleborus albus. Elleborus.* Offic. *Helleborus al.,  
bus.* Ger. 356. Emac. 440. Rail Hist. I. I68» *Helleborus  
albus store subviridi.* C. B. P. I86. *Helleborus albus store en  
viridi albescente.* J. B. 3. 63A. *Helleborus albus vulgaris.* Park.  
Theat. 2I7. Pared. 346. WHITE HELLEBORE. .

The Roots of white Hellebore are thick at the Head, of a  
white Colour on the Inside, and very full of Fibres all round,  
of an hot nauseous Taste; from which spring many large ner-  
vous Leaves, of a long oval Form, and a bright-green Colour,  
encompassing the Stalk, which grows to he two or three Feet  
high, having smaller and narrower Leaves growing on it, and  
branching out into several Spikes of imperfect Flowers, each  
cut into fix Segments os greenish, and, in some Plants, of  
darkish-purple Leaves, succeeded by triangular Seed: It grows  
in the mountainous Parts of *Swijferland, Austria,* and *Stiria;*and flowers in *fune* and *July.*

The Roots of this Hellebore, which are the only Parts in  
Use, are a strong Cathartic, working upwards and down-  
wards with great Violence; and, therefore, but rarely used in-  
wardly now-a-days, though frequently given by the Antients,  
especially to strong robust Bedies, and in Distempers that need-  
ed forcible Evacuations. It is more used as a Sternutatory; it  
casting violent Sneestng, and, therefore, to be used with Cau-  
tion, and mixed with milder Ingredients: They are of Service  
outwardly, in all Distempers of the Skin, as Tetters, Scabs,  
Itch, and Other Deformities thereof

The only Officinal Preparation is the *Electuarium ex Helle-  
bora. Mtllrtis Bet. Off.*

The Root Os white Hellebore, which is the only Part used  
in Medicine, purges so violently, both upwards and down-  
wards, that it is rarely ufed internally; hut the bisck Helle-  
bore sakes its Place. However, as *Tragus* fays, if it be mace-  
rated four-and-twenty Hours in Wine or Oxymel, and after-  
wards dried, it may he given to the Weight of half a Dram,  
in Wine, to mad and melancholy Persons. Both Hellebores,  
fays *Gefncr,* tempered with Vinegar and Honey, and boiled to  
a Syrup, are an harmless Medicine, and fays, he has often .  
found them, so used, very serviceable in most phlegmatic Dis-  
orders, especially of the Head and Thorax, as the Asthma,  
Dyspnoea, and Epilepsy; for they purge admirably, both by  
Stool and Urine, and by Diaphoresis, without Perturbation.

In the Ufe Of white Hellebore, fays *C. Hoffman, two* things  
are principally to be regarded ; the first is, that the Disease he  
very obstinate ; the other, that the Patient be very strong; for  
which Reasons, this Root is not to be exhibited to old Persons,  
or Children; nor to Women of a tender Constitution: A third  
Requisite might. be added, which is, that nothing ought to be ,  
done with it till after a careful Preparation, both of the Body  
and of the Hellebore. . .

The most antientWay of exhibiting it was with Radish, and  
this was done three Ways; the first was, by thrusting a Radish  
through the Root of the Hellebore, and suffering it to remain  
therein four-and-twenty Hours; after which they threw away  
the Root, and gave the Radish; or, secondly, they infused the  
Radish, aster it was pulled out of the Root of the Hellebore,  
in Oxymel, and only gave the Patient the Oxymel; or, lastly,  
left the Radish in the Root only for a Night, and the next  
Morning, throwing away the Hellebore, infused it in Oxymel,  
and gave the Infusion to the Patient. The best Way Of pre-  
paring it, according to *Parkinson,* is to infuse it in the Juice  
os a Quince; Or put it in a Quince, and so bake it in an  
Oven, or under the Ashes: For if the Patient be in danger of  
Suffocation from taking of Hellebore, eating of Quinces, or  
the Juice or Syrup of Quinces, are a present Remedy. The  
Root helled in Vinegar, and held for some time in the Mouth,  
eases the Tooth-ach: Boiled in a Lixivium, and the Head  
washed with it, it kills and absterges Lice and Scurf, and has  
the same Effect, if mixed with some Ointment: It cures the  
Itch, Tetters, and creeping Ulcers: And, given in Fond, is  
mortal to many Kinds of Animals, as Moles, Mice, LizardS,  
Birds, .and others. The Powder, snuffed up the Nostriis,  
causes Sneezing, whence it is called in *Englisu Sneezewort.*

The *Spaniards* have a Method of preparing a Poison of the  
Juice of the Roots, fermented in an earthen Pot, with which

they poison their Arrows, in order to make the Wounds they  
inflict with them incurable. Whet is remarkable in this Poi-  
son, is, that, being drank, it is harmless, or, at least, not  
deadly; but is so only when infused into a Wound, and mixed  
with the Blood; but the same is true os the Poison os the Viper,  
which, taken inwardly, is succeeded by no pernicious Symptom,  
but conveyed to the Blood, through the Orifice of a Wound,  
or a Puncture, immediately excites most formidable Symptoms,  
which, is not remedied, will, in a short time, destroy the Pa-  
tient.

Both Kinds os Hellebore were highly celebrated by the An-  
tients, for curing Maniacs ; and at present they are never used  
but in great and difficult Coses, aS the Epilepsy, Vertigo, Ma-  
nia, Dropsy, Sciatica, Convulsions, and the like. *Raii Hist.  
Plant.*

*y.* Veratrum ; store atro-nihente. T. 272. *Hielleborus, albus,  
store atro-rubente.* C. B. P. I86. *Boerh. Indi alt. Plant. Fol.i.*

The Leaves, Roots, Stalks, or Flowers of white Hellebore,  
applied to the Skin os a living Person, excoriate thePart, and pro-  
duce an Exulceration: They, also, burn the Tongue. The true  
Veratrum of *Hippocrates* is celebrated on many Accounts. This  
Plant has a caustic and burning Juice, which attracted into the  
Nostrils, after the manner of Snuff, excites an invincible Sneez-  
ing ; whence it appears to be a Ptarmic in the highest Degree.  
Taken into the Stomach it purges upwards and downwards,  
with severe Gripings. *Hippocrates* says, that it purges the  
most remote Parts os the Blood, and, therefore, before its Ad-  
ministration, he caused his Patients to bathe; and ordered them  
to drink Oil and Honey *for* some Days; by which means  
all the Parts being relaxed, he then administered Veratrum,.  
and directed Gestation, either on Horseback, or in a Ship:  
When the Medicine began to work, he ordered his Patients  
Rest. The same Effect would indeed, in some measure, fol-  
low from a right Use of our Veratrum: But *Salrnasius,* writ-  
ing os the *Veratrum,* says, that its Leaves are very finely jagged,  
which makes me doubt whether it be the same with ours.  
White Hellebore is much stronger than black Hellebore, and  
sometimes excites Convulsions, unless exhibited with great Pru-  
dence : Hence it is never given in Substance but to Persons of  
the most robust Constitutions; and in melancholy and maniac  
Cases; and then with great Caution : It is, also, exhibited in  
Quartan Fevers ; in which an Ounce of the Decoction, taken  
inwardly, has often had surprising Effects. It is a Plant, how-  
ever, more adapted to Horses than Men of though ufed as a  
Sternutatory in soporous Diseases, as the Apoplexy and Lethar-  
gy. *Hist. Plant, adscript. Boerhaau.*

*Hippocrates* purged with white Hellebore, in an immoderate  
Flux os the Menses, before the Use Of Astringents and Sweet-  
eners : He, aim, used white Hellebore as a Vomit; and gave it  
so those that were melancholy, or mad.

He, also, gave it in Fluxions, which fell upon the Nose,  
theEars, or the Mouth, or caused obstinate Pains of the Head;  
an unusual Lassitude and Heaviness.; aWeakness of the Knees,  
or Swelling of the whole Body: He gave it, also, to phthisical  
Patients, with a Decoction of Lentils.

. He gave whi te Hellebore, in a Leucophlegmatia, and in the  
Cholera Morbus. ’ .

To some he directed it fasting; but to most, after Supper.  
*~Le. Clerc* thinks, because the Hellebore being mixed with the  
Aliment in the Stomach, would lose a Part of its Stimulus.  
Sometimes he gave the Herb Sesamoides, and Hellebore, , toge-  
ther.' .........

In pome Cafes he gave the μαλθακὸς ἐλλέβορος. This *Le  
Clerc* thinks was some particular Preparation of Hellebore,  
which took off, in some degree, the Violence of its Opera-  
tion.

*Celsius, Lib.* 3. *Cap.* 26. recommends white Hellebore in an  
. Apoplexy. ‘ . '

It is said by some, that the Use of Hellebore was first dis.  
covered by a Man os *Anticyra,* who made an Experiment with  
it upon *Hercules,* who was mad; and who was cured by it.  
*" Herophylus* had a great Esteem for white Hellebore.

*- Aretaus* sometimes purged with Hellebore, and was extreme-  
ly fond os it.

He says it is not only a Vomit, hut; also, the most effica-  
cious and powerful Purge of all others: This good Service it  
does, he fays, is not owing to the great Discharge of Humours  
it makes; for in the Cholera Morbus, there is the same Sort of  
Evacuation ; nor is it owing to the violent Efforts it causes ;  
for Sailing upon the Sea causes more Violent Efforts : But it is  
owing to a particular Virtue in it, which cannot be enough  
admired; for though sometimes it purges but littie, yet it,  
. nevertheless, cures. . In old Disorders, where all other Reme-  
dies have sailed. Hellebore has succeeded. To those that  
breathe difficultly, it renders Respiration easy : To such aS are  
pale it gives Colour ; and makes those plump that were before  
lean.

*Alexander* prefers the *Armenian* Stone to Hellebore, as **a**Purge, in Melancholy; hecause it does it safely and effectually,  
without any ill Consequence, or Danger, which the other,  
rough Medicine too often occasions.

This Medicine, so samous amongst the Antients, was grown  
into utter Disuse, till *Asclepiodotus* revived it, about the Year  
5oo, and did many wonderful Cures with it, in the most obsti-  
nate Cases and Diseases.

*Cophon* gives a very extraordinary Receipt, io feed aGhickeh  
with white Hellebore, and after eight Days to kill it, and make  
Broth of it, which, he telis us, ISa very zgood gentie Purge

*Gilhertus Anglicus* orders Hellebore, Sena, and Spurge, **to be**distilled with Wine, for a Purge in a Vertigo.

. VERATRUM NIGRUM. See ASTRANTIA *NIGRA.* It is,  
also, a Name for several Sorts of HELLERORUs ; which see.

VERBASCULUM CYANOIDES. A Name in *Bocr\*  
haasue* for the *Cyanus; ynontanus; latifolius.*

**VERBASCULUM .SALVIFOLIUM.** A Name for **the** *Phlo-s  
mis ; fruticose ; folio subrotundo, breviore; store luteo.*

VERBASCULUM is, also, a Name for several Sorts of PRI- .  
MULA VERls; which see.

- VERBASCUM.

The Characters are ; -

The Leaves are alternate, and hoary, or of a smutty Green,  
and large i The Flower is monopetalous, rotated, pentapeta-  
loidal, disposed in a long Spike, and growing very closely to a  
Stalk, shorter than the Pedicle: The Emit is ovated, acumi-  
Dated, and divided by an Interclusure into two Capsules, or  
Celis.

*Boerhaave* mentions eleven Sorts of Verbaseulum; which  
are,

I ..Verbascum; mas; latifolium; luteum. *C. B. P.* 239.  
*Raii Hist.* 2. IO94. *Synop.* 3. 287. *Tourn. Inst.* I46. *Boerh.  
Ind alt.* 227. *Ferbafcum, Tapfus Barbatus.* Offic. *Verhaf-  
cum vulgare store luteo magnoolio maximo.* J. B. 3. 87 I. *Ver-  
baseurn album vulgare five Tapsus Barbatus communis.* Park.  
Theat. 60. *Tops.us Barbatus.* Ger. 629. Emac. 773. MUL-  
LEIN. - - fess

The Stalk of Mullein is round and hoary, arising, usually,  
single, about as tall as a Man: The lower Leaves are large,  
about, a Foot long, and three or four Inches broad, sharp-  
pointed at the End, stightiy indented about the Edges, covered :  
with an hoary Down, or Wooliness: Those which grow upon  
the Stalk, have their middle Ribs affixed to it.for half their'  
Length, which make the Stalk appear winged: The Flowers  
grow in' a long Thyrsus, set thick and close together, each .  
consisting of one Leaf, cut into five Segments, of a yellow  
Colour, with as many woolly Stamina, heving purple Apices i  
The Seed-Vessels are oblong and pointed, opening in two, when  
ripe, and shewing the small brownish Seed : The Root is ge-  
nerally single, with many Fibres, but not Very large, for the  
Tailness and Bigness of such a Plant. It grows in Highways,  
find by Hedge-sides; and flowers in *July.* The Leaves are  
used. . ..............

They are acconnted pectoral, and good for Coughs, Spitting  
of Blood, - and other Affections of the Breast: They are, like-  
wise, good for Griping and Colic Pains,’ arising from sharp Hu-  
mours. Outwardly used, in Fomentations or Fumigations, they  
are reckoned a Specific against the Pains and Swelling of **the**Haemorrhoids, or Piles. *MillrtisBoi.Os.fi.*

The Leaves of Mullein are of an herby Taste, a little salt-,  
ish and styptic; the-Smell like Elder; and give a pretty deep  
Tincture os Red to the blue Paper: .The I lowers give it a  
deeper : They are, also, styptic, but sweet. It is likely that  
the Salt of tins Plant, in some measure, resembles that of Co-  
ral. That of the white Mullein contains a great deal of Acid,  
and a littie Sal Ammoniac; but is united with a great Quantity,  
of Sulphur and Earth , so. that it is very lenisying and vulne-  
rary. The Decoction of this Plant is given to drink for the  
Colic, Dysentery, and Looseness. *Tragus* made use of the  
Root, boiled in Red-wine. *Maithiolus* made a Gargarism for  
the Throat, with a Decoction of its Leaves and Flowers,  
and prescribed it for a violent Cough. Mullein is boiled in  
CowS-milk, for the Tenesmus and Haemorrhoids: The Pa-  
tient must drink two Glasses of it every Day: Take it in **a**Glyster, and bathe the Fundament with it: Some add to it rhe  
Leaves of. Oak and wild Tansy. To stop the Flux of tho  
Piles, and’ cure the Dysentery, the white Mullein must he  
boiled in the Water which the Smiths use to quench their Iron  
in. For the Gout arid Inflammation of the Piles, the Juice  
*Os* the white Mullein is prepared after the following manner;

. ‘ Bruiseche Leaves and Flowers of this Plant; let them rot  
in wooden Tubs, well covered and plaistered: Aster three  
Months Digestion, collect the Juice, and express theFae-  
ces, and keep it in Bottles well stopped.

Some leave the Flowers only to rot in Betties. *Tragus* would  
have them exposed to the powerful Heat os the Sun: Some  
bury them in a great Dunghil. \*It is affirmed that Aloes, dis-  
solved in the Juice os Mullein, and thicken'd to the Consistence  
os an Extract, do not irritate the Piles, nor cause any Haemor-  
rhage ; hut it is more sase to correct it, by dissolving it in Wa-  
ter, and separating the resinous Part that remains upon the grey  
Paper, by Filtration, and causes the Itritations and Haemor-  
rhages. They evaporate, afterwards, the filtrated Solution to  
the Consistence os an Extract. *Tragus* anal *Motthiolus* say,  
that the distilled Water os the Flowers os the white Mullein  
is good sor Burns; for the Gout, St. *Anlhorfoe* Fire, and all  
cutaneous Diseases. This last Author prescribed for the Piles,  
a Cataplasm made with the Leaves of Mullein, and Leeks, to-  
gether. with some Yolks os Eggs, and Crums of Bread. *Mar-  
ty of s Tournefort.*

2. Verbascum; soemina; flore luteo, magno. *C. B. P.* 239.

3- Verbascum; soemina ; flore alhe. *C. B. P.* 239.

4. Verbascum; mas; angustioribus foliis; floribus pallidis.  
*C. B. P.* 239.

. 5. Verbascum ; Lychnitis ; flore albo; parvo. C. *B. P.* 240.

*Tourn. last. sgisc Bocrh. Ind. alt.* 228. *Virbascum album.*Offic. *Verbascum mas foliis longioribus.* Park. Theat. 6O. *Ver-  
bascum flore albo parvo.* J. B. 3. 873. Raii Hist. 2. I095. by-  
nop. 3. 287. *Virbascum Lychnitis Matthioli.* Ger. Emac. 775.  
MULLEIN WITH WHITE FLOWERS.

It grows by theSides of Paths in several Parts, and propa-  
gates itself yearly from shedding its Seed. The first Year it  
bears no Stalk, but only Leaves scattered on the Ground:  
When the Stalk is grown it perishes. The Virtues are the  
same with those of the common and black Mullein. *Ray. Dale.*

6. Verbascum; nigrum; folio Papaveris corniculati. *C. Β.  
P.* 240.

7. Verbascum; nigrum; flore ex luteo purpurafcente. *C. B.  
P.* 24o. *Tourn. Inst. sesp. Boerh.lnd. ali.* 228. *Ferbaseurn  
nigrum.* Offic. Ger. 63I. Emac. 775. *Virbascum nigrum itusu  
gare.* Park. Theat. 6I. *Verbascum nigrum store parvo apicibus  
purpureis, se* Β. 873. Rati Hist. 2. 1095. Synop. 3. 28S.

\* This has a Root and Stalk, like those of the common Mul-  
lein ; only the Stalk is less hairy : The Leaves, also, are less,  
more rare, and placed alternately: They, also, resemble those  
**Of** Sage ; but are much larger, and fetid. /

It grows in several Places in *Cambridgesuire.* And *Ju Pau.,  
hine* tells us, that it. is Very frequently to be met with, about  
*Basil* and *Pompelgard,* on the upper *Rhine.* It flowers in  
*July* and *August,* and the Root, Leaves, and Flowers are used.  
The Root is astringent, and of Service in a Looseness... The  
Leaves and Flowers have the fame Virtues with those Of the  
Common Mullein. *Ray. Dale.*

8. Verbascum ; Blattariae foliis; nigrum; amplioribus soliis  
aluteis apicibus purpurascentibus. *Flor.* 2. 98.

9. Verbascum; soliis nigris; amplis; flosculis albis; apici-  
bus purpureis; perenne. - ' " ‘

Io. Verbascum ; humile; Alpinum ; villosum ; Borraginis  
solio & flore. *II. L. 6ig. T.* I47. *Sanicula, Alpina, foliisBor-  
raginis, villosa.* C. B. R 243. *Aurioula Ursi, Myconi, pilosa,  
caerulea.* J. B. 3. App. 869.

II. Verbascum; Orientale; Sophiae folio. *T. Cor.* 8. *Boer.  
Ind. alt. Plant.'Pol.* I.

The first, second, third, and fourth Species are reckoned  
among emollient Herbs. The Leaves bruised, and applied to  
any Part affected with Pain, remove the same: They are of A  
demulcent Quality; for which Reason they are an ingredient  
in Decoctions, Clysters, and Cataplasms, in all Disorders where  
Acrimony offends; being of great Service by their insipid. Vis-  
cous, ' emollient, and smegmatic Juice. Os the Flowers, .with  
a Solution os Oil of Olives, is prepared Ost of Verbascum,  
which is very good to consolidate Wounds, and to mitigate  
Pains; and taken inwardly it is a Laxative. The Flowers are  
shade into a Conserve, which is excellent against all Haemor-  
rhages. Spitting os Blood from Contusions, bloody Urine, im-  
moderate Fluxes of the Menses, or Lochia, the Tenesrnus,  
Dysentery, and the Failing down of the Uterus and Anus. The  
Decoction os the Leaves is effectual in the Colic, Diarrhoea,  
and Dysentery ; and a Decoction of the Flowers makes a good  
Gargarism in the Quinsey, and a Violent Cough : The Leaves  
boiled in Milk, are effectual in the Tenesmus and Haernor-  
rhoids. The Juice of this Plant is of great Efficacy in the Gout.  
The Decoction of rhe Leaves inWater is used in Clysters, aS an  
Emollient for the Haemorrhoids; and may, also, be injected into  
the Uterus, for rhe Purpose os mollifying. The Plant, in short,  
is emollient,, aperient, and relaxing ; and therefore enters the  
Composition of all emollient Clysters and Cataplasms. .. Out-  
wardly the Leaves and Flowers are useful Topics, in mitigating  
all Kinds os Pain, particularly in Tumors of the Anus, and in  
**the** Haemorrhoids. *Hast. Plant, adscript. Boerhaau.*

V«RBASCUM SYLVESTRE. A Name for the *Phlomis.  
fruticoso; Sahara felio latiore et rotundiore* ; and sor the *Pblo-  
mis , fruticose ; oalvicefolio longiore et angustiore.*

**VERBASCUM TURCICUM.** A Name sor the *Primula  
vocis i Constaniinopolitana ; flore albo.*

VERBENA. '

The Characters are;

The Calyx is long, tubulons, and quinquesid ; the Flower,  
also, quinquesid. The Seeds fill the whole Pericarpium : And  
the Flowers grow in Heads, or Spikes, and not in Whorles.

*Boerhaave* mentions eight Sorts of *Verbena* ; which are,

I. Verbena; Americana; altissima; Urticas foliis angusti-  
oribus; spicis brevioribus; floribus coeruleis. *Flor. 2.* 8o. *M.*ZL 3. 408.

2. Verbena; Americana; altissima; Urticae foliis angustiori-  
Oribus; spicis brevioribus; floribus purpureis. *Flor. 2. 81.*

3. Verbena; Americana; altissima; Urticae foliis angustio-  
ribus ; floribus albis. *Flor.* 2. 8i.

4. Verbena; Canadensis; folio Urticae, *'ianon.* 2O3. Ha  
*R. Par. Flor.* 2. δι. *Μ. Ho* 3. 408.

5. Verbena; Lusitanica; latifolia; procerior. T. 200.

6. Verbena; Communis; flore coeruleo. *CscB. P.* 269;  
*Bocrh. Ind. alt.* I87. *Tourn. Inst.* 2oo. *Ferhena.* Offic. *Ver-  
bena communis.* Ger. 580. Emac. 7I8. *Verbena vulgaris. J.*B. 3. 443. Raii Hist. I. 535. Synop. 3. 236. *Fcrbena mas  
sive recta et vulgaris.* Park. Theat. 678. VERVAIN.

The Root os Vervain is white, slender, and full of Fibres,  
and spreading much about: The Stalk is shuare and linn,  
somewhat hairy., and often of a purplish-brown Colour: The  
Leaves are long, narrow, and sharp-pointed, cut into several  
Laciniae, somewhat rough and wrinkled, growing two at a  
Joint: The Flower grows towards the Top, in slender Spikes,  
being small, and of a whitish-purple Colour, of one Leas, cut  
into five Segments; the two uppermost supplying the Place of  
the Galea; and the three lower, that os the Labella : It being  
reckoned among the Verticillate Plants, having four small longish  
Seeds, set together in a small Calyx. It grows in Highways  
near Towns and Villages; and flowers in *July.*

.’ The whole Herb is used, being accounted cephalic, and good  
against Diseases from cold and phlegmatic Causes. It opens  
Obstructions of the Liver and Spleen; helps the Jaundice and  
Gout; and,supplied outwardly, is reckoned Vulnerary, and  
good for sore, watery, inflamed Eyes. *MellePs Bot. Off.*

This Plant yields, by, the chymicalAnalysis, several acrid ..  
Liquors, a great deal os Oil, and a pretty deal of Volatile con-  
Crete Salt and Earth: Thus it may contain some Sal Ammoniac,  
united with a great fieas of Sulphur. Vervain is Vulnerary,  
detersive, aperitive, and febrifugous. For the Green-sickness,  
drink a Night's infusion of it in Wine. *Ccesulpinus* recom-  
mends the Powder of it-sor the Dropsy. The Extract or Juice  
Of Vervain cures intermitting Fevers: A Tea of it is good sor  
the Vapours : The distilled Water, or depurated Juice, cleanses  
the Eyes, and clears the Sight.. A Gargarism of it is good for  
the Diseases' of ‘the Throat. The Cataplasm of its Leaves,  
bruised with Rye-meal, and the Whites of Eggs, is resolving:  
The juice and Infusion of its Tops in Oil cure Wounds.  
*Martyrsts Tournefort. -*

The Antients ascribe Very many Virtues to Vervain, which  
are summed up by *Schroder,* aS followsVervain is cephalic  
and vulnerary; its principal Uses are in Pains, and other Affec-  
tions Of the Head, from .cold Humours, in Affections of **the**Eyes and Breast, in old Coughs, and the like: In Obstructions  
of the-Liver and Spleen, the Jaundice, Gripes os the Belly,  
and the DysenteryIt is an excellent Lithontriptic, restrains  
libidinous Desires, cures a tertian Fever,’ mitigates the Pain of.  
the Gout,‘cures Wounds, and facilitates the Birth: Externally  
it is effectual in the Head-ach, Tooth-ach, Alopecia, Melan-  
choly, Lippitude, Weakness or Redness of the Eyes : Tn the  
QtIinsey and Hoarseness, a- Cataplasm thereof being applied  
round the Neck : In a Tumor os the Glands of the Fauces,  
being used’ in a Gargarism : In Pains of the Spleen, being ap- .  
plied with Hogs Fat; also, in mitigating the'Gout, in Astri-  
ction os Wounds, and Abstersion of putrid Ulcers, in **the**Falling down os the Anus, the Mariscae, and the like.

Vervain being endued with so many Virtues, it is no Won-  
der that it was thought by the Antients, to deserve the Name  
of ίεραὶ βοτάνη f *Hiera Botane),* the *Holy Herb.* For a Tumor  
os the Spleen, pound Vervain with the Whites of Eggs, and  
Barley, or wheaten Meal, and make them into a Cataplasm,  
which being wrapt in a thin Linen Cloth, apply to the Part  
affected upon the Tumor, where it attracts, as it were, the  
thinner Part of the Blood: Some add Betony. This is **a**popular Remedy. *Chelsusaui*

Vervain, applied upon the Head, or laid under the Pillow,  
or made into a Piaister, with very strong Vinegar, and Oil of  
Roses, eases the Pain of the Head proceeding from Wine. *D.  
Seame. Raii Hist. Plant.*

The Root of Vervain is accounted by some as an effectual  
Amulet against strumous Tumors; and hung about the Neck,  
by some old Women, as an efficacious Medicine for those Pur-  
poses. *Dale.*

7. Verbena; tenuifolia. *Co B. P.* 269. *M. Hi* 3. 4i9.  
*Verbenaca supina,* J. B. 3. 474. Doth p. 250.

8. Verbena; nodiflora. *C. B. Prodr.* I25. *Ic. et Desir.  
Bocrh. Ind. alt. Plane. Vol.* I.

It is called *Ferbena,* from *Virrere,* to sweep, because it for- '  
merly served to sweep the Altar; and *Pcristereum,* from wsex-  
στεραὶ *(PerisieraJ* a Dove, because the Doves are delighted with  
it. There is no Herb so much commended by the AntientS as  
this for Vulnerary Purposes, hecause it expels heterogeneous  
Particles, whence it is called *Hirba Vidneraria,* or a Species of  
*Siderites :* There is no Plant on which the Poets have more  
exercised their Talent of Fiction ; asus none more used in Sa-  
crifices, whence it was called *tffiCHolysiNcrb,* and *Mensu Jovis,*or *Jupiter's Table,* with which they shewed as well as swept their  
Altars: Whence the Servant in *Tcrence* says, *Tolle Verbenam ab ’  
Ara,* " Take off the Vervain from the Altar." There is,  
also, no Plant of which the Magi have related more ridiculous  
Fables; for Instance, they say, that if any Person describe a  
Circle about it, and then pluck it with his Left Hand, before  
he has seen either Sun or Moon, he shall be prosperous in what-  
ever he undertakes ; but if he pulls it with his Right Hand, all  
Things shall happen cross, and contrary to his Desires. These  
Superstitions are not yet quite eradicated from the Minds of  
Men; for there are Authors who still say, that Children, by  
chewing this Herb, will breed their Teeth without Pain; and  
it is said to be effectual against Convulsions and Inchant-  
ments. - . .

Vervain is aperitive, detersive, depurating, corroborating,  
and a Febrifuge. The Leaves infused in Wine, are serviceable  
in the Chlorosis and Jaundice. The Powder of the Leaves is.  
good for the Dropsy; and the Juice cures intermittent Fevers.  
An Infusion of the Leaves, aster the manner Of Tea, is good  
in the hysteric PassionThe Leaves bruifed, and applied in the  
Form of a Cataplasm, are a very good Resolvent in Pains of  
the Sides, and the Pleurisy. The distilled Water, as well as  
the Juice, cure Inflammations of the Eyes, and all Sorts of  
Wounds, increase Milk in Women who give Suck, break and  
expel the Stone in the Kidneys and Bladder, and give Relief  
under a flatulent Colic. *Hist. Plant, adscript. Boerhaau.*

- VERBENACA RECTA. A Name for the *Vitrberta,  
communis, flore caeruleo.*

VERBENACA suPINA. A Name for the *Verbena‘, ienui-  
folia. . . : - .*

VERBERA, *Plageae,. Percussiones.* Blows, Stripes, Per-  
cussions. They are reckoned among the Causes of Diseases 4  
and sometimes find a Place among Remedies. Thus we are  
allured by *Rolsinhins,* that a certain empiric cured mad and  
melancholy Persons, merely by the Use of Whips and Cud-  
gels- - ’-.et

VERBESINA. See BIDENS.

VERDETUM is a green Colour, produced from the.Va-  
pour of strong Vinegar, poured on Copper-Plates.

. VEREDARII, *Vermes,* Worms. The same aS CUT AM-  
BULi; which see.

\* VERETRUM. The same as PENIS.

vERGiLLE. See PLEIAS. -

VERMES. Worths. . . .

- Worms are living Animals, of Various Figures, Structures,  
and Bulks, which are formed in the Intestines, from.the Seeds.  
of some Insects, taken with the Aliments. These Animals are  
nourished and enlarged by a certain putrid Juice, herd greatly  
weaken and injure the Body, and its several Functions, '

The' Persons at no Period of Lise are absolutely free from  
Worms, yet they are most incident to Infants, and Children  
between Ablactation and the fourteenth Year of their Age. ὓ

We find from Experience, that, in the human Body; there  
are Various Species of Worms, which, by the antient, aS well  
as modern Physicians, are divided into three principal Kinds:  
The first are round, smooth, and hardly a Span in Length, by  
which-MarkS they are distinguished.from other Worms. These;  
have their principal Seat in the superior small Parts of the fe-  
*junurn* and the *Ileurn* ; thence proceeding, sometimes, to the  
Stomach, they go as far as the Mouth, or are Vomited up:  
These are generally the Worms which, according to *Hildanus,  
in 'Cap.* I. *Obs. psp.* are principally form’d in Children, and are  
sometimes found conglomerated in a large Ball, arid securely  
lodg’d in the *Ileum,* whose Membranes they Often corrode, so  
as to penetrate into the Cavity of the Abdomen. - - -

The second Species are those which, on account of their  
broad Figure, like a Bandage, are call'd Long Worms, or *Tee-  
nies.* They are so long, as to exceed two, and, sometimes,.  
ten Feet in Length. *Platerus,* in Adults, observed them forty  
Feet long. See *Me N. C. An.* 3. *Obs.* 29. and *Bartholin.*

*Histor. Anatom. Cent.* 3. *Obs.* I4. These generally possess  
the whole Tract os the Intestines, but especially the *Ilenm,* and  
are frequently observed without Heads and Taiis; for they a-e -  
not evacuated whole, but in Pieces resembling the Seeds of  
Gourds, or Cucumhers, which, according to *Spigelius, in Cap.*15. are nothing but the middle gross Nodes of the Worms  
remaining, after their lateral and membranaceous Parrs are con-  
sum'd by the Putrefaction.

The third Species os Worms are the *Ascarides,* or small {len-  
der Animals, which, lodging in the large Intestines, especially  
the *Rectum,* generally so Vellicate it, as to produce a *Tonesinus.*They are, alfo, frequently discharged, in incredible Numbers,  
with the Excrements.

Worms in the Intestines are known, if Children start in their  
Sleep, and are affrighted when waked out of it; if there is an  
Itching of the Nostriis, a fetid Breath, a Thirst, a Discharge  
of the *Saliva,* a Paleness of the Countenance, with interme-  
diate Flushings, Coldness of the Extremities, a turbid Urine,  
an Inflation os the Belly, sometimes an excessive, and at other  
Times a languid Appetite, irregular Fluxes, and other Sym-  
ptoms of a like Nature: But as these Signs are common to  
other Diseases, so there can be no better, nor more infallible  
Criterion, than the Worms themselves, discharged by Stool.

The Symptoms familiar to Patients of this Kind, are gene- ’  
rally Very different, according to the Parts where the Worms  
are lodg'd; but they are frequently so Very Violent, and some-  
times such Convulsions of the Limbs are excited, that the  
Country People often think the Patient hewitched: But, more  
particularly, if the Worms are lodged in the Stomach, they  
produce Nauseas, Cardialgias, Syncopes, Tossings of the Body,  
Grindings of the Teeth, Deliriums, and eVen Death itself, at  
last. When they are lodged in the small Intestines, they excite  
Gripes, biting Pains about the Navel, a Voracious Appetite, a  
Swelling of the Belly, and Fluxes; and when they are lodged  
in the. *Intestinum Pactum,* they produce uneasy Titillations,  
Corrosion, and an almost perpetual Tenesmus.

Worms are frequently accompanied with putrid, anomalous,  
and flow Fevers, like those of the quotidian Kind ; but these  
Animals more frequently accompany or follow other Disor-  
ders, such as the Meafles, and Small Pox; and not only increase  
the Symptoms, and impair.the Strength, but, also, render the  
Diagnostic, Prognostic, and Method of Cure, highly difficult.

At certain Seasons of the Year, especially in the Autumn,  
when,under a moist and unequal State of the Air, catarrhal Fe-  
Vers, MeafieS, and Small Pox, rage epidemically. Worms are  
generally most copiously generated; because, at that time, the  
Strength of the Solids heing impaired, more peccant and Viscid  
Humidity, disposed to Corruption, is accumulated in the Body *i*by which means, the verminous Seed receives more Nourish-?  
ment and Supply. This is, also, the Reason why Infants.,  
Children,, and Women, especially if habituated to a sedentary.  
Life, and a bad Regimen, are more terribly afflicted with  
Worms than young Persons, Adults, and Men ; whose Solids  
heing stronger, and their Circulation briiker, do-not so easily  
generate peccant and Viscid Juices.

... As for the Couses, certain Aliments savour the Generation Os  
Worths; and these are such aS partly produce peccant and pi-  
tuitous Juices; and, partly such as contain the Eggs and Seeds  
Of Insects, , which are, with them, conveyed into the Body.  
Of this Kind are Milk-ineats, Cheese, ripe Fruits, Sweet-  
meats prepared with Sugar and Honey, Pulse, sarinaceous Sub-  
stances, and others of the same Kind; which, above other Sub-  
stances, contain in them the hurtful Eggs of Animals ; withe  
out which there can be no Generation of Animalcules in Na-  
ture. This is sufficiently proved by the Experiments os *Rhedi*and *Malpighi* who, in the middle of Summer, put Things  
subject to Corruption, such as Fishes and Fleshes, into different  
Vessels, one of which was close shut, and the other lest open :  
In a short time they found the Substances left in the Vessel,  
to which the Flies and Insects had free Access, full of Worms ;  
whereas, in the Vessel which .was shut, they found not so much  
as one Worm. *Malpighi,* also, informs us, that tho'he fre-  
quently buried Pieces of Flesh under the Ground, and suffered  
them to remain there for. a long time, yet he never sound Ani-  
malcules in them. Now if it is so, the Reason seems plain,  
why Infants, living upon Milk alone, are not affiicted with  
Worms till they begin to eat other Aliments contaminated *by*the. Seeds and Eggs of Animals and Infects.

The.Symptoms, as we have already observed, differ, accord-  
ing to the Vigor or Tenderness os the Patients, and according  
to the different Nature- of the corrupted Matter, and the  
Worms, .. I have, however, often observed, that if exanthe-  
matous Fevers, Purples, Meafles, or Small Pox, are accom-  
panied with Worms, these Animals not only generally disturb  
. the calm and regular Progress os such .Disorders, but, also,  
induce a Coldness os the Extremities, a Weakness and In-  
equality os the Pulse, DelinuiumS, and,- often. Death. But

tnis happens more frequently in Children than in Adults and  
young Persons. Round Worms, of a variegated Colour, are  
almost always a bad S;gn; for they often ascend to the Sto-  
mach, and, by lancinating its Orifices, and sometimes perfo-  
rating it, produce epileptic Fits, Danger of Suffocation, and  
even sudden Death. The *Tania,* or long Worms, produce  
chronical Disorders, and sometimes prove mortal, before it is  
discovered that the Patient is afflicted with them. The *Asea-  
rides* are less dangerous; hecaufe, being lodged in the large In-  
testines, which are not possessed of such a quick Sense as the  
others, they do less Harm by their Corrosion. The Symptoms  
os Patients afflicted with Worms are observed to be increased  
about Noon, and towards the Evening; hecaufe, at these  
times, the Worms more strongly corrode and bite the nervous  
Canal of the intestines, which they find free from Aliments.  
If dead Worms are evacuated by Stool, they portend Danger,  
on account of the Putrefaction they discover; but it is other-  
wise, if they are killed and expelled by Medicines, in Violent  
Disorders, Worms coming from the Mouth' indicate that the  
. Patient will die, especially if his Breathing is frequent and  
Cold : Nor do they absolutely predict the Death of the Patient;  
because there ate Various Examples of Fevers os all Kinds ter-  
minated by the Expulsion os Worms. Thus in Me Na. Co  
*Fol.* 3. *in.Append. Obs.* 4.. we are informed, that a tertian and  
continual Fever were Cured by a Discharge of many Worms  
from the Mouth.

THE CURE..

Tho' Infants afflicted with Worms are in great Danger, yet  
we are never to despair, provided Remedies proportioned to the  
Diversity of Symptoms, Constitutions, and Circumstances, are  
exhibited seasonably, and in a proper Order. But in scarce any  
Disease are so different and active Medicines extolled, and used  
by Physicians, as in Disorders where Worms are to be expelled,  
or killed ; for which Reason, I shall briefly shew what Caution,  
. Prudence, and Circumspection, the Physician ought to use in  
exhibiting them. - '

First, then, among the AnthelminthicS are generally reckon’d  
Acids; such aS the Juices of Citrons, Oranges, Lemons, Cur-  
rants, Barberries, and PomgranateS, Phlegm and Spirit of Vi-  
triol, Cream of Tartar, Wine, especially tartish Rhenish Wine,  
and Vinegar: All these may be commodioufly exhibited, where  
Heat, preternatural Warmth, and febrile Commotions, are  
complicated; for they not only correct the Heat, but, also,  
excellently resist the Putrefaction, and avert' the dangerous  
Malignity of the Symptoms. ***i***

Among the Anthelminthies are, also, reckoned Bitters;  
such as Wormwood, the lesser Centaury, Scordium, Marsh  
Trefoil, Rue, and still more. Bitters possessed of a purgative  
Quality; fiIch as Aloes, Rhubarb, Coloquintida, and the  
Troches of Alhandal prepared *of it.* That these Medicines  
are not absolutely destructive os Worms, since Animals are not  
Only generated in Rhubarb andWormwood, but, also, accord-  
ing to *Hildanus, Cent.i. Obs.* I60. in the Gall-bladder; yet  
it cannot be denied, that Bitters are Very effectual against these  
Animals ; because, by their balsamic Quality, they partly cor-  
rect the crude and Viscid Matter with which they are nourish'd ;  
and, by stimulating the Fibres of the Intestines, they sometimes  
evacuate the corrupted Humours, together with the Worms:  
They, also, partly correct the Inactivity of the Bile, which, in  
Children, and moist Patients, is srequentiy the immediate Cause  
Of Worms.

Among Anthelminthics, great Efficacy is ascribed to oleons  
Substances, which seems to he Confirmed by an Experiment of  
*Rhedi*; who telis us, that Flies, and other Insects, remained  
alive aster they were immersed in Various Liquors; but that  
such as were immersed in Oil died, and did not recover Lise,  
tho' they were exposed to the Solar Rays. I willingly grant,  
that all this is consonant to Truth; and that Oleous Substances,  
such as Olive-oil, Rape-oil, and Oil of sweet Almonds, may,  
with great Success, be exhibited. But it is to be observed,  
’ that they are by no means to be exhibited with an Intention to  
kill the Worms; fince a Very large Quantity of Oil would be  
requisite, to reach all the Worms in the whole Volume of the  
Intestines. Oleous Substances, therefore, are much rather to be  
' exhibited in violent Symptoms arising from Worms ; because  
they relax the spasmodically-constricted Coats of the intestines,  
and, as it were, defend and fine them with a Mucilage, that  
afterwards more acrid and purgative Medicines may he exhi-  
. hired with more Safety. Thus, in order to kill Worms, and  
mitigate the Symptoms, I have, with Success, in Children, pre-  
scribed two or three Spoonsuis, or eVen an Ounce or two, of  
the Oil of sweet Almonds, to be taken at Bed-time, or early  
in the Morning, exhibiting, a few Hours after, Pilis prepared of  
the *Extractum Panchymagogum Crollii,* Refin of Jalap, and  
*Mercurius Dulcis.*

Saline Substances are greatly celebrated aS Antheiminthicss  
both because they are fatal to the tender Structure of these Ani-  
mass, and hecanse by stimulating the Intestines, they promote  
their Discharge, especially is dissolved in a sufficient Quantity  
of Water. This principally holds with respect to the neutral  
bitter Salts, especially that of *Glauber, Epsom, Sedlitz, Egra,*and the *Caroline* Salt, which when taken in \_ a proper V ehi-  
cle, and used for a considerable time, produce an excellent  
Effect, especially if Children and young Persons labour under  
that Species of Worms they call *Tania,* and the *broad Kind,*because thefe are not so happily exterminated by Purgatives,  
which produce Spasms, as by Salts, and saline Springs/ 'Hence  
the *Sedlitz.* Waters, which abound with bitter Salt, are justly  
extolled for killing Worms. And the same anthelminthic Vir-  
tue is ascribed to the saline Springs at *Hall,* by the common  
People, who now-and-then give their Chisdren large Draughts  
of that Water against Worms. Nor can we condemn the  
Practice of the People on the Sea-coast, who, for the same Pur-  
pose, drink Sea-water, or, if they are rich, the Broth of recent  
Oysters, with the Addition of Lemon-juice and Pepper, by  
which means they expel the Worms, and prevent a Consump-  
tion, and Various other Disorders incident to .Children. It is  
certain, that Salts, especially of the Vitriolic Kind, have long,  
been justly celebrated as AnthelminthicS; and the *Pyrmont*Waters, which partake of a subtile Vitriol of *Mars,* are so  
effectual for the Cure of *Tania,* and turbinated or spiral  
Worms, that the Patients are in a short time totally freed from  
all the Symptoms.

If any Disorder admits of Specifics, these are certainly re-  
quired in killing and eliminating Worms, For these Purposes  
then, the best Specifics are, among Gums, Asa-soetida, Saga-  
penum, Opopanax, and Myrrh. Among Herbs, Tansey,.  
Scordium, and Wormwood. Among bulbous Roots, the Va-  
rious Kinds Of Onions, and Garlick. Among Fruits, bitter  
Almonds, and their expressed Oil. Wormseed, the Seeds of the  
Caiputia, and others of a like Nature. All which by their sul-  
phureous and fetid Smell, are so peculiarly hurtful to Worms  
as to kill them. And these Specifics are *so* necessary, that un-  
less they are, in a due Dose, mixed with the above-mentioned  
Medicines, the desired Effect is rarely produced.

There still remains another not less efficacious Specific taken.  
from the Mineral Kingdom, which is Quicksilver; which being  
in a peculiar manner satal to Worms, destroys their Vital Mo-  
tion, tho' the Method in which it produces this Effect, cannot  
he accurately deduced from mechanical Principles. There have  
already heen Various Methods of exhibiting this Anthelminthic,  
which we shall briefly consider. . *Helmont* was the first who  
made an Experiment with this Medicine, whilst he boiled it  
either in pure Water, or some distilled Water, and with great  
Success gave the Water thus impregnated with the subtile Par-  
ticles of the Mercury, to Patients afflicted.with Worms.  
*Hinricus Mcebomius* followed another Method; for he let  
*Rbenifh* Wine, poured upon Quicksilver-, stand in a gentle  
Digestion without any boiling, for twenty-four Hours, and he  
found his Medicine produce more speedy Effects than the for-  
mer. The Chymists rather approve of *Mcrcurius Dukis* duly  
prepared : A few Grains of which, according to the State of  
the Patient, they exhibit with some Purgative, 'such as sulphu-  
rated Scammony, Refin of Jalap, and *ffiCExtractumPanchyma-  
gogurn Crollii,* made up in the Form of Pills ; and this Method  
they have found attended with Success ; or they exhibited it  
mixed withCoralline, either with or without a Purgative. Others,  
*as Harris,* sailing on a safer Method, successfully exhibited  
TEthiops Mineral, prepared of an accurate Mixture of Sulphur  
and Quicksilver. But I intimately mix in a Mortar the well  
depurated Quicksilver with Sugar-candy, and premising the  
things requisite, I have found, that under a good Regimen, this  
Preparation was far more efficacious than any others, especial-  
ly if the Patients, in order to prevent a Relapse, abstain from  
Flesh, Fish, Milk-meats, sweet Substances, Cheese, and other  
hurtful Aliments, and use for Drink a Decoction *of pure* Wa-  
ter, and calcined Hartshorn.

Among other Medicines I have with Success-used the fol-  
lowing Pills against Worms: s

Take os Asa-scetida, Extract os Rhubarb, Tansy, depu-  
rated Aloes, the best Myrrh, and *Mcrcurius Dulcis,* each  
one Scruple; and of the Extracts of Saffron, and Castor, oach  
four Grains; reduce to a Mass: From every Scruple of

. which make fifteen Pills: By taking stye, fix, or eight  
of which, according to the Age, and other Circumstances  
of the Patient, I have known many throughly cured,  
though before they were miserably tormented.

: They who abhor Pills, may have them exhibited in a Syrup, ι  
or twice a Day a proper Dose of the following Medicine may  
he exhibited :

Take of **the** Liquor os the *Terra foliata Tartars,* one  
Ounce ; and of the Extracts of Rhubarb, Tansey, and  
Wormwood, each half a Dram: Mix all together.

Nor heve I seen lest happy Effects produced by the following  
Powder.

Take of recent white Mechoacan, Wormseed, Coralline,  
Rhubarb, *Mercurius Dulcis,* Scordinm, calcined Harts- *c*horn, and purified Nitre, each half a Dram; and of  
Camphire, six Grains ; Make into a Powder, whichis to  
he distributed into Dofes, according to the Age of the  
Patient; or reduce it to an Electuary.

But it is to be observed, that acrid Purgatives, or hot Re-  
medies, are never to be used where there is A febrile Heat,  
unless we intend to augment it. We are, also, to abstain  
from Mercurials, and all drastic Medicines, when the Duode-  
num is full of a caustic and acrid Bile ; for by there means **I**have not ouly known the Symptoms augmented, but, also.  
Inflammations of the Intestines brought on.

Before expelling the Worms from the sinall Intestines, by  
Purgatives and Specifics, it is expedient to injedi a Clyster of  
Milk and Honey, that the Worms, being allured by the Sweet-  
riess, may quit their Lodgings, and descend more easily to the  
sinall Intestines.

If Afcarides are lodged in the Redlum, detergent milky  
Clysters, in which Tansey, Garllck, or the Leaves of Scordi-  
rim, have been boiled, produce an excellent Effect; as do, also,  
the Clysters of Brine, prepared by boiling in it Horehound, the  
Lesser Centaury, and Scordium, adding to it a sufficient  
Quantity of the compound Electsary of Hiera,

Emetics are, also, proper, if, aster Purging, the Worms are  
not duly evacuated, because if they are lodged in the Intesti-  
num Caecum, the Purge cannot always reach them.

Anthelminthics are, also, commodioufiy exhibited in Eledtu-  
aries or Syrups, such as that of Succory with Rhubarb, This  
is sufficiently known to Nurses, who to Children afflicted with  
Worm, give about a Scruple of Wormseed mixed with Ho-  
- Dey in Milk, before the Changes of the growing or decreasing  
Moon. Nor is this Practice without Success, provided the  
Wormseed is nor rotten.

Sometimes Topics may be usefully joined with internal Me-  
dicines: The best Topics are. Epithems prepared of Worm-  
wood, Bulis-galls, Aloes, Coloquintida, the Juice of the  
Lesser Centaurj', and Oil of the Flowers of Spike, and appli-  
ed to the epigastric and umbilical Regions. The Ointment of  
Sow-bread, alio, answers the fame End.

.; But the Physician ought, above all things, to be certain of  
the Presence of Worms by infallible Signs, st he intends th ex-  
hibit Medicines for killing and evacuating them, lest the Pa..  
tient labouring, perhaps, under another Disease, arising from a  
different Cause, should receive more Harm than Good, from  
his Prescriptions. *F. Hoffman.*

VERMICATA, a Word .used by some, who mean by it  
the fame as *Lentigines.*

VERMICELLI, *Vermicelli, Thgliarini, JAillofanti; in  
French, Verrnichel. ’*

It is a Paste made with the finest Flour and Water, and re-  
iluced into.Threads of the Figure of Worms, by means of *Sy-*-ringes bored full of small Holes, These Threads, or Filaments,  
are afterwards dry’d and kept; they are generally white, the’  
they, are, also, prepared of a yellow Colour, by mixing Saffron,  
or Yolks of Eggs, in the Paste; sometimes they add Sugar, to  
make them the more agreeable. This Composition is princi-  
pally prepared in *Italy,* where it is much more in Use than in  
*France.* They eat it in their Soop. .

They reduce this Paste of *Vermicelli* to several other Forms ;  
so. they flatten and widen it to the Thinness of a Ribband, two  
Inches broad. This is whet the *Italians* call *Vague*; the}' make  
it into Sticks of the Bigness of a Quill, which they call *Me-  
cairn*; and into small Grains of the Bigness of Mustard-feed,  
which the *Italians* call *Sernsule,* that is to *fay, fine Flour*; they  
reduce is. also, into the Form of Beads, and this is-what the  
*Italians* call *Patres.*

*Vermicelli* ought to be chosen new, well dry’d, and of a  
beautiful Colour; the white is most in Ufe. It is a PecIoral,  
.and of a sweetening, restorative, and strengthening Quality.

All the Names of the *Vermicelli* are *Italian,* because this Sort  
of Paste was invented in *Italy* ; audit takes theName of *Vermi-  
celli,* that is to fay, fmall Worms, because it is reduced into  
-Filaments resembling those Animals. *Lemery des Drogues.*

VERMICULANS, σκοληκίξων, vermiculatiog, an Epithet  
of a fort os creeping Pulse.. See PULsUS.

VERMICULARIS. Α Name lor the *Ssdunti sums,  
icretifoliuia ; album.*

VERMICULARIS CRUSTA. The interior villous, arJ.  
gyrous, or rugous Coat of the Intestinesi *Plantar di*

VERMICULATUM. Something in a. Plant, which appears  
red, and glittering like aRofe,

VERMICULUM. Elixis, Tin’clurei *BdeianAns.*

VERMICULUS. A small Worm. '

VERMIFORMIS, σζωλκκοεςδὴς, Vermiform, or Worth-  
like, is an Epithet of a Process in the *Cerebellum,* called *Pre.  
.cejsas vermiformis.* See **CEREBRUM.**

*Vermiformis Appendicula.* See AEEENoiCULA, and Che-  
**XIA. '**

VERMIFUGA. **ThesameasANTsiELSiINTICA;** which  
**see.**

VERMILION, Cinnnabar, or Minium. *Rulandus.*

VERMINA, *Verminatio, Verminosus,* στρὄφος, the Griped-  
*Vermind,* ih *Festus,* are the griping Pains of the.Intestines:  
Pain is, also, called *Verminatis.* See Stkophos. *Verminosus*is properly spoken of the Matter in which Worms are gene-  
rated. . .

VERMIS *Cerebri.* Tine Worm of the Brain, that is, the  
Epidemical *Hungarian* Fever..

VERNACULUS. The same as ENDEMIUS ; which seel  
VERNICE. Dry, guttous *Vernix. Rulandus. - .*VERNIMBOCK. A sort of Wand, *likeBrastlWocA,* used  
in Dying, and suspectsd to be whet we call *Redwood.* It takes  
its Name from *Fernamhuca,* a Town of the *Portuguese, in  
Brafil,* whence it is exported. *Rail Hist. Plant.*

VERNISIUM. The fame as, . ......

VERNIX, otherwise *Sandaraca, Sandarache,* and *Gumini  
Juniperinurn. Vernix,* Varnish, is, also, a Name "given to Ἄ  
certain liquid Composition, which induces a Crust over Wood;  
which preserves it from Putrefaction. Thus, a Vemix is pre-  
pared of Lacca, Mastich, Copal, Succinurn, either simple of  
mixed, and boiled and dissolved in Alcohol os Wine, Oil of  
Turpentine, or linseed-oil. *Blaneand.*

VERONICA.

The Charactsrs are; .....

The Leaves, for the most part, grow Opposite by Pairs ; the  
Calyx is monophyllous, quinquesid, and expands in form of st  
Star. The Flower is' monopetalous, generally osiadrifid, and  
expands in a circular Order. When the Flower decays; the  
Ovary becomes a membranaceous Fruit, divided into two Cells,,  
which are shaped like an Heart, and full of Seeds, sometimes  
sinall, sometimes of a good Largeness and Thickness.

*Boerhaave* mentions twenty-six Sorts of *Veronica.,* which  
are,

I. Veronica; major; latifolia; erects. *M. Hi* 2. 317.  
*Ic.* a.

2. Veronica; maxima; latifolia; erectii; ctenslea spied  
longissima.

3. Veronica ; spicata; longifolia. *T.* I43. *Lysimachia, spicata,  
caerulea.* C. B. P. 246. *Pseudo-lystmathium, caeruleum.* Dod.

4. Veronica ; spicata; angustifolla. C. B: P. 246.

5. Veronica; spicata; angustifolla; flore incarnato. *Flcr.*

**2. I04. /**

6. Veronica ; mas ; supina ; & vulgatissima. C. *B. P. Bail*durst. I. 85I. *Synop.* 3. 28I. *Poerh. Ind. A.* 224. *Vero-  
nica mas. Betonica Pauli.* Oshc. *Veronica mas vulgaris supi-  
net.* Park. Theas. 550. *Veronica vulgatior folio rotundiore.***J.** B. 3. 282. *Veronica vera et major.* Ger. 502. Emac. 626.  
MALE SPEEDWELL

This is a low oreepingPlaht, whofe Stalks generally lle oh the  
Ground, shooting out Fibres at the lower Joints. The Leaved  
f row.by Pairs, on short Foot-stalks; they are oval, about ari  
nchlong, hairy, andcrenated about the Edges, of a pale-green  
Colour. The Flowers grow on the upper Part of the Stalks  
among the Leaves, in short Spikes, each of one sinall bluish  
purple Leaf, cut into sour Paris ; to each of which succeeds **a**Seed-vessel, in Shape of that of ShepherdS-pouch, full of very  
small Seeds. The Root is a Bush of Fibres ; grows in Woods  
and shady Places, and flowers in *June.* The whole Herb is  
used.

This is reckoned among the vulnerary Plants, both ufedint.  
watdlyand outwardly ; it is, likewise, pastoral, and good for  
Coughs and Consumptions ; and is helpful against the Stone and  
Strangury, as, also, against pestilential Fevers. *Millers Dot.  
Of. ....*

The Leaves of Speedwell are bitter, and give a pretty deepmid  
Colour to the blue Paper, which gives us Reason to believe, that  
their Salt very much resembles that of Coral; but that of the  
Spcedwell is charged with a great deal more Acid than the omit  
nary Salt *of* Coral, and is joined besides with a great deni ofSni-  
phur: For, .

By the chymical Analysis, **we ishsain front this Plan; a great**deal of Earth, Acid, and **Qib ‘ -**

- tT-e Pfmciples render the Speedwell sudorific, vulnerary,  
detersive, diuretic, and proper to discharge the Lungs of gluti-  
nous and purulent Matter. *Tragus* affirms, that in malignant  
Fevers, two Ounces of tho Spirit of Speedwell, mixed with  
a littie Treacle, provoke Swear copjousty. This Spirit is made  
by distilling Speedwell infused in Wine for some Days.

Take two Ouncesand an half of the distilled Water, insuse  
\_. in it one Dram of the Leaves, and as much of the middle

Bark Of *Solanum Scandens, sive Dulcamara Pin.* and give  
It as an excellent Remedy for Ulcers in the Lungs, Stone,,  
and Vapours.

'. The Syrup and Extract of Speedwell purify the Blood, and  
. are good for cutaneous Diseases; but the affected Parts must  
be washed at the same time with the Water of Speedwell, in  
which some Vitriol has been dissolved. The frequent Use of  
Clysters, made with one Pound of the Decoction of this Plant,  
'an Ounce of Butter, and as much Sugar, are wonderfully  
praised for the Colic. Some boil Speedwell and Chamomile  
in Milk, and afterward add some Sugar. Speedwell is used  
now-a-days aster the manner of Tea. It is mixed, also, with.  
the Vulnerary Plants in Broths, Potions, and Ptisans. *Mar-  
iyofs Tournefort.*

*Veronica* is an excellent Vulnerary and Sudorific; its princi-  
pal Uses are in Erosions and Obstructions of the Lung and  
Spleen, whence it is of extraordinary Service in the Colic,'  
Phthisis, Scabies, Pruritus, Pestilence, and Wounds, Exter-  
nally it is much celebrated for absterging Woundsin Hardness.  
of the Spleen, and the Colic. *Schroder.*

Taken inwardly, it is good against the Coughj and other pul-  
Inonic Disorders, and against the Pestilence and contagious Dis-  
eases; outwardly, it is effectual in Wounds, . Ulcers, Itch, and  
cutaneous Diseases.

A Decoction of *Feronica,* taken In a gond large Dose, freed  
a Woman from a Stone in the Left Kidney, with which she  
had been afflicted sixteen Years ; the Stone was first protruded'  
into the Ureters, through which it was convey'd to the Bladder,  
whence by the continued Use of the fame Decoction,, it was at  
last ejected by the urinary Passage. *Eph, Germ.*

*Vcronica* is of singular Use in Barrenness. A Lady Of the  
first Rank, after seven Years Barrenness, took, by my Advice,  
the Powder of *Veronica* in the Water of the fame, for many  
Days together, and Very soon after conceived. After this, she  
advised some others, who were thought barren, to use the  
same Remedy, which had the desired Success upon ten or  
twelve of them. The Syrup Of *Veronica* is an. admirable Re-  
medy in Ulcers of the LungS. *C. Hoffman.*

The most illustrious *Guntherus* had for some Years laboured  
under an incurable Ulcer of the Legs, attended with periodical  
Pains, for which he found no better or speedier Help than  
Linen Cloths dipt in Water of *Vcronica,* and applied to the  
Place; for the Inflammation, and other Symptoms, ufually  
Consequent, immediately ceased.

' " The Herb is, also. Very remarkable for its vulnerary Virtue:  
A Fistula of the Thorax, which had eluded the Force of  
Bathing, Fomentation, and all other Kinds of Remedies, was  
at length perfectly healed by the internal. Use of thd Water os  
*Peronica* alone. *Esth. Germ.*

The Extract of *Veronica,* miked with the Extract of Juniper,  
is a most efficacious Medicine in Obstructions of the Viscera,  
and pectoral Diseases; I have often try'd it with extraordinary  
’ Success. It expels the morbific Matter by Urine; but Laxa-  
tives and Aperitives are first to be premised. *D. Tancred Ro-  
binson e Fabr. Hildano.*

*I* must ingenuoufly confess,- says 5. *Pauli,* that after I had  
in Vain try’d Various Medicines against the crusty Scabies os  
Children, I have at last, in Imitation of the Example before  
related, (of*Guntherus)* directed the Parents to applyLinen  
Cloths dipt in the Water of *Veronica,* and first compressed to  
prevent their dropping," to the Arms, and Calves of the Legs of  
jthe Children, and by that means- have perfectly cured them ;  
but I advised, that the Nurse should, at .the fame time, drink  
the Decoction of Fumitory boiled in Whey.

*Cratsc* had an extraordinary Esteem for this Herb in the Colic,  
. Stone, and the Pestilence itself; and he prefers the mere-simple  
Decoction of *Veronica szi* before all Other more generous Me-  
dicines for the Stone. 5. *Pauli.*

The Use of a Clyster, prepared only of a Decoction OsPe-  
*Tonica* and Sugar, is os more Efficacy than any thing taken at  
the Mouth. Ju the Decoction, let there be mixed some Fat  
os a Sheep’s Kidney, or fume Fat of a Rabbet, or of a Capon,  
in order to.give it a Lubricity ; if these are wanting, a littie  
fresh Butter may be added. *Idam.*

I can safely affirm, thar many Persons labouring under  
-'the tormenting Pain of the Colic, or Stone in the Kidneys,  
have often received more Benefit and Relies from the Use of a

simple Clyster, prepared of Cows Milk, and Sugar, In which,  
after the Example of *Crato,* I have only boiled *Virontca,* or  
the Flowers of Chamomile, not the *Raman,* but the common,  
and more temperate Species, than from those prepared with a  
greater Apparatus; as, for Instance, with Penyroyal, Origa-  
num, Rue, Calarnint, and other Ingredients, which often ex-  
agitate the Humours. *Idem.*

7. Veronica; major; frutescens ; altera. *M. Ho* 2. 3 Io.  
*Chamadrys, spuria, mayor, altera. Jive frutescens.* C. R P.  
248. *Teucrium,* IV. Clusi H. 349.

8. Veronica; major; frutescens; altera; foliis constanter  
& eleganter Variegatis.-

9. Veronica; minor ; virgulosa, fen multicaulis; Panno-  
nica. *M. Hi.* 2. 32o. *Chamadrys, spurias minor, latifolia,*C.-B. P. 249. *Teucrium* V. Clus. H. 350.

Io. Veronica; minor ; soliis imis rotundioribus. *Tourn. fast.*144. *Boerh. Ind. A.* 225.- *Chamadrys spuria latifolia.* Offic..  
J. B. 3. 286. *Chamadrys spuria minor roiundifolia.* C. B. P.  
249.- BASTARD GERMANDER,

*Ceesulpinus, Pena,* and *Lobel,* affirm, that it is excellent to  
open the Bowels, and cure the Green-sickness: It may be used  
in aperitive Ptisans and Broths, or aster the manner of Tea.,  
*Martyn’s Tournefort.*

IT. Veronica; maxima-; latifolia; seu folio QtiercuS. Me Hi  
*Tl.* 322. *Chamadrys, fpuria, latifolia, mayor.* C. B. P. 24S.

I 2. Veronica ; tenuissime laciniata; minor. Me Hi 2. 32i.  
*Chamadrys, fpuria, tenuissime laciniata.* C. B. R 248.

I3. Veronica; aquatica;, major; folio subrotundo.. See  
ANAGALLIS AQUATICA.

14. Veronica ; aquatica ; minor; folio subrotundo. Τ. I 45..  
*Anagallis aquatica, minor, folio subrotundo,* C. B. P. 252.

15. Veronica; aquatica ; major; solio oblongo. Me Hi 2.  
323. *Anagallis, aquatica, major, folio oblongo:* C. B. Ρ. 252,  
*Eerula mayor.* Tab. Ic. 719.

I6. Veronica; aquatica; minor; folio oblongo. T. I45.  
*Anagallis, aquatica, minor, folio oblonga.* C. Β. P. 252.

Iy. Veronica; terrestris; annua; folio Polygoni: flore  
alhe. Ma Hi 2. 322.

Iff . Veronica;.pratensis; Serpyllifolia. C.B. P, 247. *M. Hi*2. 3I9.

I9; Veronica; flosculis; caulibus adhaerescentibus. *M. Hi  
2.* 322. *Alsine, Veronica folio, flosculis caulibus adhaerescen-  
tibus.* C. B. P. 25o. *Alyfsan.* Col. Phytob.

2o. Veronica y Hederuhe folio. *Μ. Hi 2.* 322.- *Alsine,  
Hoderulafolio.* C. B.P. 25o.

2I. Veronica ; flosculis oblongis pediculis insidentibus Cha-  
maedryos folio. *M. H.* 2. 322. *Alsine Chamadryfolia, floscu-  
lis pediculis oblongis insidentibus.* C. B. P. 25o.

22. Veronica; flosculis oblongis pediculis insidentibus, Cha-  
maedryos foliis alternis. *Hi L.* 622.. ,

23. Veronica; coerulea; trifido, aut quinquesido, folio.  
*Flor.* 2. Io5. *Alsine triphyllos caerulea. C.D.P.* 25o.

24. Veronica ; Virginiana ; altissima; spica multiplici; flori-  
bus candidis. *Flor.* 2. IO4. ι

25.. Veronica, Chia solio Cymbalaria»;. verna; flore albo.,  
umbilico virescente. *T. Cor.* 7.

26. Veronica; Orientalis;, minima; foliis laciniatis. T.  
*Cor.- y. Hi R. D. Boerh. ind. alt. Plant.*

Veronica is commended for subduing Phlegm, for deterging  
the first Passages, for pulmonic Diseases, the Scurvy, Phthisis, .  
and Stone, being boiled with Liquorice. Infused in Water, it  
impregnates it with the Smell, Taste, and all the Virtues of  
the *Chinese* Tea, and has the same Effects. It relaxes with a  
moderate Astriction, whence it is recommended in a Scurvy  
proceeding from Relaxation ; thus it is proper, also, in a Pis-  
sing or Spitting of Blood, hecause it has an astringent and some-  
what os an aromatic Virtue ; it heats, dries, strengthens, and  
resists Putrefaction.

The thirteenth, fourteenth, fifteenth, and sixteenth Species  
. are scarce inferior to any in Virtues; they are Very succulent  
sand bitterish, their expressed Juice absterges and deterges in  
manner of Soap, and liquefies, not by its aromatic, but sapo.  
naceous Quality. Thus it purges Water, and renders the  
Blood aqueous without Acrimony., and by this means opens,  
dilutes, and is a Demulcent. Hence it becomes of Service in  
all Obstructions, and in all Sorts of Scurvy 5 and, where-ever  
Opening is required, without inducing a great Heat. For the  
fame Reason it affords us an excellent Remedy against the Stone  
and Gravel in the Kidneys, and is of Service in the Jaundice,  
Stoppages of the Liver, and all inveterate Obstructions.

This Plant is Very penetrating; for, if it be tasted, itpene-  
\* trates the whole Mouth, as is it were set on Fire. It affords  
not -much Salt, but a Very copious Humour; and has the  
Virtue, also, of resolving Humours. The Decoction of the  
Herb in Whey, daily drank, cures the Scurvy, as we are  
assured by *Eugalenus* and *Sennertus,* and resolves scorbutic Tu-  
mors 5 it is good, also, against the Scabies. The Juice drank

*et* a long time together, is effectual against the Gout; for let  
he Patient take but two or three Ounces every Day for a  
Month together, and all the morbific Matter will he discharged  
out of the Blood by Urine. The Juice may he preserved a  
long time in Winter, if to the Quantity of one Ounce you  
put four Drops of the Spirit of Sulphur by the Bell. It incides  
- viscid Phlegm molesting the LungS, and .Is good in Coughs,  
Colic, Nephritis, Pththisis, and the Itch ; it is excellent in  
Clysters for the Colic. The Infusion of it in Wine is effectual  
-in. the Chlorosis; and the Powder, according to *Cafalpinus,*cures the Dropsy. The Juice cures intermittent Fevers ; the  
distilled Water depurates the Eyes; and a Gargarism, prepared  
of a Decoction of the Leaves, cures the Quinsey.

*Francos* has written a whole Book os the Virtues of this  
Plant. The Use os it, after the manner of Tea, is effectual  
in Obstructions of the Spleen, Pancreas, and Mesentery; it is  
**of** excellent Use in the Head-ach and Vertigo, is of Service in  
the Fluor AlbnS, and all cutaneous Diseases, as well as a Can-  
cer. I have cured an hundred Diseases with this Plant; for it  
has the Virtue of dissolving pituitous, viscous, oleous, and al-  
most all other Kinds of Humours. *Hast. Plant, adscript.  
Poerhaav.*

An infusion of *Veronica* is recommended by *Haisier to he*used warm, aS a Resolvent in an *Epiphora,* Or *Oculus Lacry-  
mans ’,* he observes further, in his Note at the Bottom of the  
Page, that this Infusion of *Veronica* is highly commended by  
*Schobinger,* a Disciple of M. *St. Ives,* for an incipient *Fistula  
Lacrymalis,* in his Treatise *de Fist. Lacr.*

Besides the foregoing Sorts of *Vironica, Dale* mentions the  
following;

**CHAMAEDRYS SPURIA ANGUSTIFOLIA.** Offic. **J.** B.  
3. 2S5\* Hist- 1.847. *Charneedrps spuria major angusti--  
folia.* C. B. Pin. 249. *Vironica supina.* Ger. 5o3. Emac.  
628ῖ *Vironica Teucrii facie.* Park. Theat. 55I. *Vironica  
supina facie Teucrii, pratensis.* Tourn. Inst. I 44. GERMAN-  
DER-SPEEDWELL.

It grows in the Gardens of Botanists, and flowers in *feme.*The Herb is in Use; it agrees in Virtues with the *Veronica ;  
mas ; supina; et vulgatissima* ; or male Speedwell. An Infu-  
sion of its Leaves, is called the *Europee. Dale.*

**VERONICA AQUATICA FOLIO SUBROTUNDO. See SA-  
Mot.Us VALERANDL**

**VERONICA F0EMINA.** *A.* Name for the *Linaria; hirsu-  
to folio, subrotundestore ex herbido flavescence. -*

VERRES. A Male Swine. *Ferres siylvaticus,* the same as  
ATER, a wild Boar. d

VERRICULARIS, άμφιβλίΐστροειδὑς, a Coat ofthe Eye so  
Called. See AMPHIBLESTROIDES, and OCULUS.

VERRISTA, a Name given by *Paracelsus,* to what he calls  
**his** *Summum Arcanum,* ip Conjunction with his *Granagranu,*in the Cure of an Epilepsy; but he no-where tells ns what they  
are. *Tract, de Caduc. Martie.*

VERRUCA., A Wart.

A Wart begins in the *Cutis,* and seems to be either an  
Essiorescence of the Serum of the Blond, which hardening in  
the Surface of the Skin, makes a dry Tumor, or else some  
finali Luxuriancy of the littie Arteries of the *Cusis,* which  
thrust out themselves, making a petty Sarcoma, which we call  
**a** *soft Wart.* According .to the Variety of the Tumor, it is  
sometimes whole with a smooth Surface, sometimes chapt and  
uneven. According to the manner *of their* Production, some-  
.times they arise by a general Exhalation out or the *Cutis,* with  
**a** broad Basis, and are called *Verruca sessiles* ; sometimes a few  
Capillaries putting out together do, after they have grown to  
a small Length, enlarge themselves into a greater Compass, and  
make the pensile Tumor **we** call *Aero ch or don.*

' There need no Signs to be given of Warts, they being so  
. apparent.

Warts often fall away of themselves. -

The Medicines commended in the Cure of Warts are many.  
Those which are most easy to he had in the Country are, the  
green Rinds of Willows beaten, the Juice of Marigolds; Ce-  
landine, all the Spurges, a Garden-snail sprinkled with Salt,  
**if** you rub them with any of these, they will sail off. Oil of  
Vitriol, or of Sulphur, will certainly destroy them. I have  
sech some burn them out, by running an hot Needle into the  
Roots of them. There are other ways, as by rubbing them  
with raw Bees, and burying it. But when any great one salis  
into my HandS, T make a speedier Riddance of it by Ligature,  
or Caustic. Where it is capable of being tied, 1 make a Liga-  
ture; in others, where it is inos, the Caustic-stone alone will  
doit. -

*A* young Lady, having been long vexed with an unseemly  
overgrown Wart upon- one of her fore Fingers, desired my  
Help. I rubbed the chapt Head of it with a Caustic-stone, till  
it was soft and black; then scraped it off, and rubbed the re-  
maining Root with some os the same, fill I judged it was era-

dicated ; then washed out the Salts, and dressed it with etthe  
*guentum Basilican,* with a few Drops of Oil of Turpentine,  
winch made. Separation of the Eschar, and cured in

In another young Person, where they were final) in the Basis,  
I tied some of them close hy the Roots with a Silk 5 others I  
fnipt off with a Pain of Scissius, not regarding the Dropping  
of the Blood upon the neighbouring Parts, which is thought to  
infect them, and beget Others. Then I rubbed the Roots Os  
them all with a Caustic-stone, and digested the Sloughs out as  
abovesaid, and they Cicatrized of themselves.

Yet yon ought to he cautious hew you meddle with those  
growing upon the Knuckles ; for Warts there, heing, for the  
most part, near the Tendons, cannot well he extirpated with-  
out offending them; and so are consequently subject to Fluxions,  
and to corrupt the Cartilages, or Bone.

This was the Case of a Lady of Quality, aged about fifty  
Years, of a plethoric Body, who had a Wart upon the first  
Joint of one of her fore Fingers. It was imprudently under-  
taken by some Pretender to Surgery, and treated as ill; so  
that, aster many Months Endeavours, he was dismissed; and a  
more knowing Surgeon entertained, who found much Difficult  
ty in the Cure, yet made shift to cicatrize it; but it swelled  
again, and discharged Part of its Matter by the Side of that  
Nail. Upon Sight whereof I was consulted, and saw a thin  
Ichor, weeping through the old Cicatrix, at an Opening not  
bigger than a small Pinthole. The Lady importuning me to  
undertake the Cure, I sprinkled the Orifice with Precipitate,  
whereby I crusted in the Matter to thin the Skin, winch the  
next Day I opened, and, by Search of a Probe, felt the Car-  
tilages. rotted. I informed the Patient of the Necessity of  
making an incision proportionably large, in order to the Exso- .  
listion, and withal represented the Difficulty; and, offered to  
her Consideration, the more certain and speedy way, by cut-  
ting off that Joint. She with little Demur consented to it»  
All things being immediately prepared, I chopt off that Joint,  
dressed it up with Pulvis *Galeni,* and afterwards digested it,  
and cured it, as hath been shewed in fuch like Extirpations,  
*PVisemanIs Surgery. .. .*

*Warts* are known to be small brownish Excrescences in the  
Skin, and are incident to most Parts Of the Body; but most  
frequentiy affect the Face and Hands. In their Shape and. Size  
there is a surprising Variety; some are large and depressed, others  
slender; some again resemble the Figure of a Pear hanging by  
its Stem. And, indeed, it is not so much On account of any  
Pain or Danger from them, that they are usually extirpated,  
as because they are a kind.of Deformity and Desoedation; and  
most remarkably so, when conspicuous on the Face, Neck, and  
Hands, of fair and fine Women. And here, the’ there are  
Various Kinds of Remedies, some sympathetic, and others su-  
perstitious and insignificant, which are used by Women, and  
even by some professing Medicine, for the Removal os *Warts } .*yet, aster all, the most expeditious Cure is to be expected from  
the Hands of the Surgeon.

We, therefore, think it most proper briefly to describe the  
principal Means, which Surgery employs in extirpating this Kind  
of cutaneous Desoedation. And the Method, which deserves to  
be first mentioned is, by *Ligature,* or *Vincture* ; this is performed  
upon such of these Excrescences as are slender about the Root,  
and, in a manner, pendent; by firmly tying about them ari  
Horse's Hair, or a Silken or Linen Thread. The *Warts* be-  
ing deprived of the Juices which nourish them, through a Con-  
striction of the Vessels by the Ligature, gradually wither and  
fall away.

Another Method of Cure is, by the Surgeon's Instrument,  
in which the *Wart* iS taken np with an Hook, or Forceps, and  
then Very nicely separated with the Scissars. The Wound is  
treated for some time with an Application of the *Lapis infer-  
nalis,* or some other corroding Medicine, that if any Part of a  
Root should remain, from which a new Tubercle might arise,  
it might be consumed and destroyed.

If the *Warts* are of a larger than ordinary Size, recourse-  
must he had- to Corrosives. And, that these Medicines may  
the sooner work their Effect, and consume the prominent Part,  
it will he convenient, first, to cut off the hard Top of the  
Tubercle with a Penknife, Razor, or a sharp Pain os Scis-  
sors ; which done, the Wound is to he every now-and-then  
treated with Applications of Oil of Tartar *pcr Deliquium\**or some acid Spirit, of which the mildest is Spirit of Salt. IT  
these prove too weak for the Purpose, it will be proper to sub-  
stitute some stronger Medicine in their room; for Instance,  
Spirit, or Oil of V itriol, Aqua-fortis, or Butter of Antimony.  
On the other hand, the softer and tenderer Sorts of *Warts zse*sometimes removed only hy often rubbing them with the yel-  
low Juice os the Chelidonium majus, or the Milk of the Enda.  
But, by way os Caution, the greatest Circumspection is re-  
quired in the Use os Corrosives about the Eyelids or Eyes, that,  
nothing thereof may enter the Eye, and by that means induce

-Simssitels: Care, also, is to be taken, that the Parts adjacent  
m the Tubercle he not injured by the Corrosive. For this  
End it will he convenient enough to surround the *Wacr* with a  
**waxen** Ring, Or a perforated Plaister, in which **the** *IPart* may  
appear as an Eminence, and thus he corroded with Safety to  
**the** covered Parts. The Corrosive may he applied several times  
in a Day ; and, by the same Method, Other Tubercles, and  
**the** like Rinds of cutaneous Desedations, may be removed.

A fourth Meshed of extirpating *Warts is, by* the Application  
of a red-hot Iron adapted to the Size os the Tuhercle, in such a  
manner, as to penetrate to the Very Bottom of its Root. If  
there he any other violent Means of extirpating *Warts,* cer-  
tainly there can he nothing more Violent than red-hot Iron,  
which, tho' it excites indeed a Very acute Pain, yet the same  
is but for a Moment. To the cauterized Place must be applied  
some Portion of Basilicum, or digestive Ointment, and over  
that a cooling Plaister; such as, for Instance, the *Emplastrum,  
de Sperrnate Ranarum.* It can hardly be expressed how happily  
this Method of Cure succeeds in most Parts of the Body, ex-  
cept the Eyes; for these Excrescences, thus removed, are sure  
never to return.

There is a fifth Method, which is peculiar to Stage-quacks,  
and consists in, first, well rubbing and chafing the Tubercle  
with some emollient Ointment, and afterwards taking it be-  
.tween the Naiis of the Thumb and sore Finger, and with great  
Violence pulling or tearing it off. But as this way of Cure is  
very troublesome, so it has been found in many Cases to be  
quite useless. For this Method, by Avulsion, thus practised by  
these Strollers, seldom succeeds so well, but.that the *Wart* put.  
lulates afresh, and grows again out *of* the Place, affected, as  
from a Root lest behind.

In the last place, it ought not wholly to be Omitted, that  
sometimes may be observed, especially in the Face, on the LipS,  
and near the Eyes, a kind of livid and bluish *smarts,* which in  
their Tendency, are next to a Carcinoma, or Cancer; for  
which Reason it is much safer to let them alone, than endea-  
vour their Extirpation. For no sooner are they irritated by **the**Hand Of the Surgeon, than they degenerate into a Carcinoma;  
and, after an Erosion os the Face and Eyes, in a miserable  
manner destroy the Patient. *Heister Chirurg.*

*Of* **WARTS,** *and other Tubercles of that Kind, growing on the***PENIS.**

Tubercles, Of what Kind soever, infesting the Penis, are  
almost constantly the Product of some Venereal Distemper.:  
Their Seat is not always in one Place, but sometimes in the  
Prepuce, sometimes in the Corona Glandis, and sometimes in  
the Glans itself. Many of them appear like fungous or spongy  
Flesh, increase Very fast, and now-and-then excite Pains. Re-  
medies best adapted to their Extirpation are gentie Corrosives,  
such as Powder of Savine, either by itself, or mixed with red  
Precipitate, and burnt Alum, and twice or thrice sprinkled on  
the Parts, or worked up with Unguentum Basilicum, or Mun-  
tlificativum, and then applied. If the Tubercles are harder  
than ordinary, there seems to be no better Way than gentiy  
touching or rubbing them with the Lapis infernalis, till they  
quite disappear. If the Root of the prominent Part he but  
slender, it will be convenient to use the Scissars, or a Ligature,  
in the manner as was directed for .the Extirpation of Warts,  
and all other Kinds of Tubercles. But if the Tubercles will  
riot conveniently admit of a Ligature, On account of theWide-  
ness of their Root or Base, and their Extremity be remarkably  
hard, the prominent Parts are to he all cut off with. the Seise  
fars, and after suffering the Blood to flow for some time, the  
Wound is to be cleansed and fomented with warm Wine; and  
the Root is to be every Day rubbed with the Lapis Infernalis,  
till it appears to be quite extirpated. *Scultetus* indeed is said,  
*Ohs.* 65. to have used a red.hot Iron in the Extirpation of these  
Kinds Of TuheIcles of the Penis. And *Fabricius ab Aquapend  
dente,* and some others, advise the same: But to me this Me-  
thod of Cure seems too cruel. We are not, however, to omit  
this one necessary Observation, that not external Means only,  
but internal Medicines, and these in the first and principal  
Place, are to he employed, in order to expel the Virulent Ve-  
nereal Matter; for otherwise, by what outward Means soever  
the Tubercles are removed, they generally return in a short  
Time. *Heister. Chirurg.*

VERRUCA RIA. A Name for the HELIOTR0PIUM,  
because it removes Warts; and, also, for a Species of TI-  
ΤΗΥ-MALus, by whose lacteous Juice Warts are extirpated.  
*Elancard.*

VERSIO *Chymica* is a Change wrought by Chymistry, of  
manifest Forms into occult ones, which is done by a Corrup-  
tion of the specific Form, and the Generation of a more ge-  
neral one, that is, by a Conversion of decompounded Elements  
into Compounded opes;. and of impure into pure, *TheGi,.  
Cryrn.* /ἈΙ. ' .

VERTEBRA, *QrMnlume.* The Vertebrae.

VERTEBRALES MUSCULI. The' Vertebral Muscles,  
that is, the Muscles which assist in moving the *Ferocires.*Among these are reckoned the *Longus Colli, T.ransmrsolts Colli  
major, Trans.uers.alii Gracilis five Collateralis Colli, Semi-sipi..  
nalissafe Transit enso-s.pinales Colli, Spinales Colli parvi serve In..  
tcr~Jpinales, Trans.vers.ales Colli minores live inter-tranfoer-  
soles. Obliquus mayor. Rectus minor. Sacro- lumbaris. Lon-  
gissimus Dorsi, Spinalis Dorsi mayor. Spinales Dorsi minores,  
Transuersclis Dorsi mayor, Transuers.ales Dorsi minores, Semi.,  
spinalis five T.ransuerso-s.pinalis Dorsi, Semi-Jpinalissue Trans...  
der.so-sipinalis Lumborum, Saccr Vetcrum,. Spinales et Transuer-  
scales Lumborunt, S^uadratus Librnborurn sive Lumbaris externus,*and the *Coccygeei* ; which see, finder the respective Articles of  
their Names..

VERTEjL See C0RYPHE.

VERTIBULUM, from *vents,* to turn, is the round or  
globous Head Of a Bone, which, in Articulation, is inserted  
into the Sinus, or Cavity, of another Bone adapted to it.

VERTICELLI *marini, QrovfvKoi Sahahileos,* are tuberous  
Zoophytes, which are, also, called *Vcrtibula,* and *Tothsia.*

VERTICILLUM, in *Botany,* is the Whorle, or Circle of  
Flowers or Leaves, which surrounds the Stalks or Branches of  
Plants, so called from its Resemblance to the *Verticillum,* or  
Whorle of a Spindle. See the Article BOTANY.

**VERTICILLUM and VERTICULUM, are, also, Names for**theVertebrae.

**VERTICILLUM** ANi, *in Me Aural. Severinus,* is a Tuhercle  
on the Extremity of the Anus, resembling the *Ferric illum,* or  
Whorle on a Spindle. *Castellus. 1*

VERTIGO, δῖνος, the Vertigo, is a Disease in which the -  
Head seems to turn round. When a Mist, also, seems to be  
cast hesore the Eyes, it is called *Scotidinos,* ζῥαιτίδινος, or *Scar  
tedinos,* (τικτήδονος. *Galen, Com. An id Lib. de RcVi LAc  
Erotian* expounds δῖνος, by ζράτωσις, de φέρεὀ&ξ δόκότα τἄ όρώ-  
μὲνια, " An Obtenebration, in such a manner that Objects  
" seem to turn round.'' The Cause of this Affection is, by  
*Galen,* in the forecited Place, ascribed to a disorderly Motion of  
.the Spirits, which are generated and reside in the Brain ; Or of  
those which ascend thither from the lower Parts. *Castellus.*

This, according to *Willis,* is a Disorder in which visible  
Objects seem Continually to turn round, whilst the Patients are  
affected with a Perturbation or Confusion of the animal Spirits  
in the Brain, which hinders their influx into the Nerves. Hence  
it is, that the visive and locomotive Faculties often sail to such  
a Degree, that the Patient is ready to drop down, and Com-,  
plains Of Darkness. *Ettmullcr* divides it into three Kinds; the  
first of which is a simple Vertigo, in which there is only a  
transient and short-Continued Gyration of Objects, The se-  
cond is a dark Vertigo, or Scotomia, when the Eyes are dark-  
ened, or so affected, as if several Colours were before them:  
And the third is, the Vertigo Caduca, in winch the Patient  
presently falis down. .

A Vertigo may be produced by every Cause whichsoan disi-  
tend, press, and contract the Arteries; such as sudden Pear,  
Surprize, Ebriety, and Voracity, by which the regular Influx  
and Reflux of the Animal Spirits into the Optic Nerves, **and**Retina, are prevented. Sometimes, also, it may be produced  
by an Acid, or any other peccant Humour, lodged in the Sto-  
mach, and Vellicating its Nerves, which communicate with **the**Retina; for which Reason the hypochondriac and hysteric Pai-  
fions may produce a Vertigo.

With respect to the Prognostics. If a Vertigo is recent, if  
it happens seldom, and the Patient is young, the Cure is easy:  
But if it is original and consumed; if it happens frequently, or  
is apoplectic or epileptic; if it seizes old Persons, and is accom-  
panted with great Dimness Of Sight, and Inability to stand, **the**Cure is difficult. According to *Ettmuller,* a severe and long-  
continued Vertigo, in Old Persons, foreteis an Apoplexy; and  
in such as are young, an Epilepsy. Sometimes a Vertigo as-  
flicts the fore Part, and at others the back Part of the Head.  
The former Species is more easily Cured than the later, which ’  
is Very dangerous.

With respect to the Cure, the Regimen in general ought to  
be the same with tijat in an Apoplexy, or Epilepsy. If **the**Patient is plethoric, a due Quantity of Blood is to be taken  
away; and if a Nausea, Loss Of Appetite, or any other Dis-  
order of the Stomach remain, an Emetic is to he prescribed ;  
then Cathartics and Specifics are to be ordered. According **to***Mayerne,* Calamus Aromaticus, in whatever Form, is good  
for a Vertigo, and esteemed a Secret for that Disorder. The  
fame Author informs us, that a *Gorman* Physician cured a great  
many of Vertigos, by Pilis made Of. Sugar of Lead, and  
*Cypres.s* Turpentine ; four or five Grains of which were to **hr**taken for a Dose; and their Use persisted in for some Days.  
*Glijsiors,* a5 *Batci* informa Me, aftfr all olheso Medicines had

sailed, was cured of a severe Vertigo, os three Weeks Conti-  
nuance, by shaving his Head, and applying to it a Plaister,  
made os the Flowers os Sulphur, and Whites of Eggs. Some 1order a Caustic, or a Seton, to he applied to the back Part of  
the Neck; a Cautery to the Bregma ; and *Eaters* Epileptic Elec-  
tuary, or *Fullers Peruvian* Epileptic Electuary, to be used in-  
ternally. *Willis* informs us, that, after he had in vain tried 1  
all other Medicines, he with Success prescribed the following  
Powder.

Take of the Powder of the Roots of Male Pinny, two  
Ounces; of the Flowers of Male Pinny, one Ounce; of  
Peacocks Dung, of the whitest Kind, half a Pound;.and  
of white Sugar, two Ounces: Reduce to a Powder, the  
Dose of which is to he about the Quantity of a Spoonful,  
- twice a Day, drinking after it a Draught of a Decoction  
of Sage and Rosemary, impregnated with Coffee.

VERTO, in *Dornaus, Rulandus,* and *Johnson,* **is the**fourth Part of a Pound.

.. VERVA, in *Scribonius Largus,* Ν° I 6. is the Name of an  
Amulet of Ivory, to be worn on the Arm for the Epilepsy.

VERUCLA is the same as the preceding. *Rhodius, in  
Scrib. Largum,* N° I 6. '. .

.. VERVEX. A castrated Sheep.

VERUTA *Sectio,* ὸβελάῖα *A rent quirts,* from *Peru,* όβελός, a  
Spit, is a Chirurgical Operation, or Section; so called, and  
directed by *P. AEgineta, Lib. An. Cap.* 8. in the Cure of A  
*Diflichiasis,* to be performed with a σμηλίον ἀναῤῥαφικὸν, aKnife adapted to Sutures.

.' VESANIA, according to *Blancard,* is a Species of Mad-  
ness proceeding from Love. '

VESANUS, according to *Paracelsus, Tract.* I. *de Morb.  
Ament. Cap. 5.* is one who has contracted Madness from a had  
Regimen, or improper Medicines; But *Ins.anus,* he says, is  
the proper Denomination of one mad from the Birth; or whose  
Madness is hereditary. *Castellus.*

.. VESICA. The Bladder. See CALCuLUs, and RENES.

VESICARIA is a Name for the *Alcea Veneta* ; and, also,  
for the *Alcehengi*; either because its Fruit and Seed are contain’d  
in Bladders, or because they are good for the Stone in the Blad-  
' der. *Blancard. ' r ..*

\* . VESICATED. A Vesication, or raising of Vesicles, a  
Symptom succeeding Combustions by Fire or Water. The Ef-  
' sects of a Vesicatory Remedy are, also, called *stesicatio. Ca-  
stellus. :*

VESICATORIUM. AVesicatory. See **CANTHARIDES.**VESICULA. A Vesicle, or little Bladder; a Diminutive  
of *yes.tca*; it is often appropriated to the Gall-bladder. \*

7 VESICULAE SEMINALES.

? - The *Vijiculae Seminales* are soft, whitish, knotted Bodies,  
about tbree or four Fingers-breadth in Length, one in Breadth,  
and about three times as broad as thick,, situated obliquely be-  
tween the *Rectum* and lower part of the Bladder, in such a  
-manner, aS that their superior Extremities are at a Distance  
from each other,and their lower Extremities united hetween those  
Of the *Vdfa Deferentia* ; of winch they imitate both the Ob-  
liquity and the incurvation. -

' They are irregularly round on the upper Part, and their  
Breadth decreases gradually from thence. By the Union of their  
lower Extremities they form a kind of Fork, the Branches of  
.. .which are broad, -and bent like Rams Homs: These extre-  
unties are Very narrow, and form a small Neck, which runs  
hehind the Bladder, toward its Orifice, and continues its Course  
in the Groove of the *Prostates,* through the Substance of the  
contiguous Portion of the Urethra, till its Extremities pierce  
the *Caruncula. . .*

'. The inner Substance of the *Vijiculae* is plaited, and in a man-  
.ner distinguished into several *Capsulae,* by contorted Folds :  
Their external Surface is covered by a fine Membrane, which  
ferves for a Border and Fraenum to the Folds, and is a true  
Continuation of the Cellular Substance of the *Peritonaeum.*The *Vesiculae* may easily be unfolded, and all their Contorsions  
straitened; and, by this means, they become much -longer  
than in their natural State.

Their inner Surface is villous and glandular, and continually  
furnishes a particular Fluid, which exalts, refines, and perfects  
the Semen, which they receive from the *Paso Doferentia,* and  
of which they are the Reservatories for a certain time. *Win-  
strusts Anatomy. . \_*

VESPA. Offic. Mer. Pin. I96. Raii Insect. 250. Joust de  
Insect. Iy. AldroV. de Insect. i98. Mouff. Infect. 4I. Charlt.  
Exer. 37- THE WASP.

The whole Insect is used, and is supposed to open Obstruc-  
tions of the Kidneys and Bladder, to break the Stone ; and is  
thought by some to agree in Virtues with **the** *Asellus,* or Wend-  
louse. - *Dale. e '*

VESPA ICHNEUMON.

This is a Fly, with a flender Body, four Wings, 2nd arm’d.  
with a Sting.

It has been observed of the *Grana Radicum Breynii,* or **the***Coccus Polenicus,* [ see the Article KNAwBL] . and of **che***Grana Kcrmes,* or *Coccus Baphicus* Ossic. [See **CHERMESJ ;**that they are Nests of Insects, and not generated of the Plants  
in which they are found. But fince we Omitted, under those  
Articles, to inform the Reader to what Trihe of Insects they  
ought to he reduced, it is here thought proper to observe, that  
both of them arise from Eggs deposited, by the Parent insect,  
in a Wound they make in the Plans, so as IO raise a Tumor:  
From this Tumor, maturated by the Heat of the Sun, arise .  
insects with six Legs, which are, by degrees, metamorphosed  
into Wasps, called *Ichneumones.* This I am induced to helieve  
by two Reasons: The first is, that *Breynius* himself observes,  
that Animals of this Tribe are found in the Places where these  
Cocci grow. Secondly, The Wasps of this Tribe lay their  
Eggs not only in the Bark os Trees, and the Roots and Stalks,  
but in the Bodies of Animals, as appears from a Multitude  
of Observations in Authors, who have written of Insects. We  
have an Example in *Goedartiusts Metamorphosis of Insects, in*. the *Eruca Brasicaria,* or Caterpiller, which infests Cabbages,  
where writing of this Sort of Insects, the Author says, that,  
" After they had lain four Days without Motion, you may  
" see forty or more Worms breaking out *os* the Skin, on both  
" Sides of every single Insect, which afterwards became so  
" many- small Flies.'' *Ray,* in his History of *Insects,* takes  
notice of the fame; and I myself have made the like Ob-  
servation on the Caterpiller, and other Insects, which be-  
come Nests not only of *Ichneumon Wasps,* but, also, of other  
Flies. . . . - '

Some think the Worms hermaphrodite: Of this Opinion  
was *Cheston,* because he could never discover any Difference of  
Sex in them, or observe them joined in Copulation. The Mi-  
nuteness of the Animalcula might, indeed, he an Hindrance to  
any Observation of those Parts and Actions; whereas, in earth-  
worms, House.snaiis, and the Liinax, which are, also. Her-  
maphodrite, the Manner of their Generation, as being larger  
Animals, is plain and evident.

*. Gartilellus,* in his *Histoire des Plantes qui naisseent en Pro-. -  
venae,* has written largely of the *Coccus Baphicus,* but not **.so**accurately as there was Reason to expect, from a Person who  
had such Opportunities of making Observations. What the  
very learned *Breynius* has written of the Matter, in his *Hist.  
Nat. Cocci Radio. Tinct.* I shall relate in his own Words, ob-  
serving first, that the *Coccus Polonicus* is to be ranked with the  
*Coccus Radicum* ; as we are assured by *Breynius* himself, who,  
in the Conclusion of his Work, writes thus:

" The *Coccus Radicum* is an Insect, destitute of Wings,  
" furnished with six Feet, of no distinct Sex, as far as it ap-  
“ pears; which, fastening itself to the Tops of the Roots of the  
" Polygonum, and being deprived of local Motion and Sense,  
iC under the Appearance of a spherical Grain, seems to acquire  
" the Nature of Vegetables, and increases in Balk; out of  
" which, after a determinate Time, there comes forth another  
ee Worm, or Insect, different from the former, though re-  
" fembling it in many Properties: This Worm receives no  
" ^Nourishment, nor Increase, nor appears of a distinct Sex, -  
" hut brings Eggs to Perfection within itself; and, after a cer-  
" tain Time, is covered with a Down ; and, heing again de-  
" prived os local Motion, is contracted, and expels its Seeds  
" or Eggs, from which, after another determinate Time, by  
" Virtue of the Sun's Heat, are hatched, or produced Worms  
" like those first-mentioned.''

Now, though I. have not the least Doubt of the Veracity of  
*Breynius,* and the Truth, of his. Observations, yet, fince he  
confefles, that Multitudes of .the Ichneumon Wasps, are to be  
found jtear the Nests of these Animals, I cannot but suspect,  
that they owe their Original to them. *Garidellus,* also, owns  
that aster the Hexaped, or six-legged Insects, perish, these  
small Flies are produced, in the Grains of *Cherrnes. Dale.*

VESPERNA, the fourth Meal, or fourth time of Eating,  
in a Day, and next after the *Merenda,* or Afternoon’S Colla-  
tion. *Castellus. - . ; ί*

VESPERTILIO. Ofic. Aldrov. Ornith. i. 57I. Bellon-  
des Oyse. I47. Gefn. de Avib. 694. Jons, de Aviso 34. Charlt.  
;Exer. 8o. Ran Synop. A. 243. Sloan. Hist. Jam. 2. 330.  
*Andira.* Pifi (Ed. I656.) 29o. *Andira acre.* Marcg. 2i4.  
*Atndhura.* De Laet. Ind. Occid. 6I5. THE BAT, or FMT-  
TER-MOUSE. .

It appears in Summer Evenings; but in the Winter lies hid  
in Rocks and Caverns. The Flesh and Blond of thin Animal  
are used; the first of which, being prepared, is good for a Soir-  
Thus, and the Gout ; and the Blond cures .an Alopecia, *Dale ’*.from *Galenl .. .. 4. sc.*

*Ray* justly observes, that this Animal is, by some, errone-  
i»ussv reckoned among Birds, because of its Wings and Flight,  
since it has neither Feathers not Beak, nor lays Eggs. *Dole.*

V *ESTIBULUM.,* A Part *belonging to the Ear, io* called.  
See Auris.

VETERINARIA, κταιατρικὴ, is that Part of Medicine  
which treats of the Diseases incident to Horses and Cattle.

VETERNUM. The *Anasarca. Junius in Namenclat.*VETERNUS. The fame as LETHAROUs.

VETONICA. The same as BEToNIeA: Betony. It ts,  
also, a Name of the *Carjephylius altilis major.*

*VETTADAGOU,* H. M. is a low, bacciferous. *Indian*Shrub, hearing a whitish, pentapetalous, and fceofless Flower,  
and a round black-purple Berry, containing five solid triangular  
Seeds, which are first white, then reddish, and at last blackish.  
It is an Evergreen, and bear? Fruit twice in the Year, that is,  
*in March and September.*

Of the Leaves bruifed, and helled in Oil of Sesamum, is  
prepared a Liquid, which, applied to the Abdomen, is said to  
give Relief under difficult Labour; and to expel the Secun-  
dines, when retained.

The *Kal Vettadagou,* H. M. very much refembles the pre-  
ceding, only its Leaves arc lesser and rounder; the Flowers are  
red, and the Berries of an Orange-Colour, and have an acid  
Taste. *Raii Hist. Plant.*

VETT1 TALL See **AMVETTI.**

VEXATA, in the Language of *Ccifus,* are Contusions or  
Colllsions. Of the Cure of *Vexata* be treats, *Lib.y. Cap.* I.  
See CoNTUsto.

UHEBEHASON *Theveti.* J. B. Arbor Srassiac Folio *ex...*celsissima Americana. C. Β.

This is a Tree of surprising Tainess, with Branches stoop-  
ingone under another, and Leaves like Cabbage-leaves. The  
Branches are loaded, with Fruit, a Foot in Length. The Tree  
yields, also, a red Gum. When *Thevet* was in *America,* he  
observed this Tree at the Distance of six Mlles, when he looked  
upon it, he says, as something artificial, and not as a natural  
Produci.

' . Innumerable Multimdes of Bees have their Aliment from  
the Emit, and their Nests in the Holes or Cavities of the  
Tree, wherethey raise their Combs, and prepare their Honey.  
He describes two Sorts, of these Bees; the first are of the Size  
of our ordinary Bees, and make a very goed Honey, and a  
yellow Wax; the other Sort of Bees is less by half, and makes  
a Honey which excess in Goodness, but a Wax as black as a  
Charcoal. The Fruit *Uhebase,* though coveted by the Bees, is  
not eatable by human Creatures, becaofe.it is not easily brought  
to Maturity. *Sail Hist. Plant.*

VIA. This Word, which imports a Path, or Way, has rjo  
peculiar Seofe in Medicine, except that the Stomach, Intestines,  
and their Appendages, are called the *Prima Via. ..*

VIBEX. A livid, or biack Mark, on the Skin, from **a**' Contusion. It is the fame as an EccHYMosIs.

VIBRISSAE, or VIBRISCL - The.Hairs which grow in **the**

Nostrils. - ' -

VIBURNUM.

- The Characters are; .

The Flower is monopetalous, rotated, quinquesid, furnished  
**with** five Stamina, growing on the Inside of: the lowest. Part of  
the Flower, disposed in Umbelhe, and growing on the Ovary.  
The Ovary has its upper Margin surrounded with a quinquesid  
Calyx; is furnished with an erect, and, in a manner, trrglo-  
bularTube, and becomes a soft succulent Berry, which is com-  
pressed, striated, and full of a single stony Seed.

*Boerhaave* mentions nine Sorts of *Viburnum* ; which are,  
I, Viburnum. *Offic. Parkinson. Theat.* I448. *Raii Hist,* 2.

1590. *Synppo* 3. 46O. *Taurn. Inst. eflq. Eoerh. Ind.a.Q..u'i.er.  
Viburnum vulgo.* C. B. P. 429. *Lantana, sense Viburnum.* Ger.  
Itos. Emac. I49O. *Lantana vulgo, aliis Viburnum.* J.B.I.  
557. THE WAYFARING TREE.

*Mntthiolus,* who has given the .best Figure of this Tree,  
affirms, that its Leaves are ashingent, and goed to strengthen  
the Gums ; that its Fruit, reduced to Powder, stop a Loose-  
ness ; and that Birdlime is made of. its Roots maceratedin the  
Ground, and bruised. *Martyn's Tournefcrt.*

This is an arboreseent Shrub, sometimes pretty large, though  
rather spreading than tall, and consisting of a fungous and mer-  
dullous Wood.. From the Root, clofe to the Ground,.shoot  
scattering spriggy Branches, an Inch in Thickness,, and two  
Cubits, or more, in Length, covered with a reddish Bafe,  
sprinkled with a farinaceous Powder, and consisting of but little  
Wood, and that green, but of a very large. white medullary  
Substance. The Leaves much resemble.these of the *Alnus,* or,  
rather, of the *Sorbus aslpina,* and ate opposite, broad, fome-  
what long, and thick, crenated, hairy, and sprinkled with **a**white Powder, especially in the lower Parr, which, for that

Rearon, is whiter than the rest, and of an astringent Tasle.  
The Flowers grow in Umbelhe, finest like Ekier-flowers, and  
are white, caducous, and consisting of five Perils moderately  
indexed outwards, in the midst of which arise five long whitish  
Stamina. The Flowers are succeeded by Berries, which are first  
green, then red, and, when ripe, black, fiatthh, sweet, and  
viscous, and nor very grateful, at least, says *J. Bauhine,* to my  
Palate, tho’ many in the Country feed on them, and, in order  
to hasten their Maturity, shew them upon Hey,or Straw,Layer  
upon Layer .alternately. The Berries contain a broad .compress’d,  
and striated Seed, cover’d with a stony Cortex, or Shell.

It grows frequently in Hedges, especially in a clayey and un-  
cultivated Soil; and flowers in the Summer, earlier or later, ac-  
cording to the Weather, and the Temper and Condition of the  
Soil. The Berries are generally red in *July,* and ripe in the  
End of *August,* or Beginning of *September,* as we are told by  
*J. Bauhine. .*

The Leaves and Berries are drying, and astringent; whence  
they are commended for Inflammations of the Tonsils and  
Throat, the Falling-down of the *Columella,* the Loosening of  
the Teeth, and Fluxes of the Belly. The Leaves, boiled in a  
Lixivium, blacken the Hair, and repel an *Alopecia.* Of the  
Bark of the Roots, macerated under Ground, and now-and-  
then boiled, and pounded for a long time together, is prepared  
a Birdlime, which is none of the worst for Fowling. *Mat-  
thiel. D odent Ml to* doubt, with *J. Bauhine,* that *Matsmslus* has  
afcribed many Things to the *Viburnum,* which helong to the  
*Rios ,* because he once theught them, with *ILiellius,* the fame.

Of the small Branches ^.prepared a very good Water *for* the  
Eyes. *Camerarius.*

Our Country People, says *Ruellius,* call it *Viurna,* and use  
it for binding of Faggots, because of its invincible Toughness,  
It is applied to the fame Uses where-ev.er it grows, whence  
skilful Botanists take it. to. he the *Spiraea of Theophrastus.*

It is called *Viburnum a viende,* " from binding; for *Vibur.*is not a Name given, by the Antients to.any particular Shrub,  
but is appropriated, by the Moderns, to the above described, be-  
cause of the Flexibility or Pliancy of its Branches; whence it  
is, alfo, called *Lantana. Hist. Plant, adscript. Boerhaav.*

a. Viburnum, Americanum ; odoratum ; Urticse foliis la-  
tioribus.; spinosum; floribus miniatis. *P. B. Prodr.*

3. Viburnum; Americanum; odoratum; follis Urtiose;  
floribus miniatis. *Hi L. App.* 698. *Camara.* Piso I77. *et Ca-  
mara-Tinga.* Id.lb.

4. Viburnum,; Americanum; odoratumsollo parvo, or-  
hiculato; floribus & baccis foliolis interceptis. C. P. B.,  
*Proar. - ...; j* ι

5. Viburnum; Cisti foeminse, sive Salvia: foliis mucronatis;  
Americanum, odoratum ; rninus; fioribus incarnatis. P. B..  
*Prsdr. ‘*

*is.* Viburnum ; Americanum; Salviae fohis obtusis; floribus  
ashis. *P. B. Prode.*

*y.* Viburnum; Americanum , Cisti foeminse, seu Salviae, fo-  
his mucronatis ; fioribus luteis. *Par. Bat. Prodr.*

8..V iburnum; Americanum; folio Urticae latissimo , fio-  
Iibus aureis in globum congestu. *Hi 2L D.*

9. Viburnum Americanum; folio Urtica; floribus ex au-  
reo & roseo mistis. *Hi. P. D. Becrh. Inde ali. Piant.*

VICIA., : , ' .

The Charaolers are ; , ,

The Pod is full of roundish, or angniated Seeds; the Leaves  
are numerous, pinnated, and generally conjugated, by Pasts, to  
a Rib, which ends in a Tendril.

*Boerhaave* mentions twenty-two Sorts of. *Vicia,* which are;

I. .Vrcia.s fupina;. latissima;, sollo non. ferrato. *T.* 397.

*Palla, selvestris, fructu rotunda atro.*. C. Β. 538. *Bona fqui  
vestris.* Dod. P.5I6. *Arams, fabaceus, et Faba kairina, cui  
semina minora.* **J.** B. ai a86.

2. Vicia.; sativa vulgaris; semine nigro. C. *B. P.* 344.  
Tours. *Inst.* 396. *Boeris, Ind. A.* 2. 43. *Vicia.* Offic. GeI.

I052-. Troae. 2927. Raji Hist, *i.cyoo.* Synop. 3. 320. *Vicia  
vulgaris sativa:.* Parin Theas. IO72. J. B. 2.3Io. *Aphaca,  
Vicia,* Chub. ced. COMMON TARE.

This Stalks of Tares arc angular, weak,, and leaning, hefet  
alternately at the Joints with long Leaves, having a Tendril at  
their. End, made often of a dozen small roundish Pinna:, a  
little hollowed, in with a .Spinula at. the End.: They are some-  
times..a little hairy.. The Flowers grow usually two together,  
upright,, and less than Tea-blossoms, of a purplish Colour;  
after which follow fmall flatfish Pods, containing three or four  
small round . hiscit, Seeds, less than Pease. Tares .are sown in  
the Fields, flowering, in *Adas,,* **the** Seed being ripe *iss.Acgust*and *September.*

Tares are rarely ofed isvMedicines, though the Vulgar hell  
them in. Milk, and give the Decoction to drive out the Small  
Poland, Measles. *Millers Bat .Oof*

Common Tares are heating, drying, cleansing, abstersive,  
and astringent: They agree'in Virtues with the APHAcA,  
which see.

3. Vicia; fativa; alba. *Co B. P.* 344. *T.oum. Inst. pffy.  
Bocrh. Ind. A. Ί.* 43. *Vicia alba.* Offic. *Vicia alba semine.* J.  
B. 2. 3II. Raii Hist. I.9OO. Park. Theat. IO72. WHITE  
TARE.

This Species is distinguished by a remarkable Variety in Its  
Leaves, some of which are almost round, others long and nar-  
row ; the Flower is single or double, with many purple Spots,  
and growing on a short Pedicle ; the Pods, also, are different  
from the common Tare, being full of Seeds, sometimes nine in  
a Pod, which are altogether white, or purplish. Or Various, or  
of a pale green, resembling, in Shape and Colour, green Pease,  
to which they are equal, also, in Bigness, but distinguished from  
them in that they are not blackish in the Part where they are  
connected to the Pod, as Pease are.

The *Vicia Indica fructu albo* of *Gerard* differs not from the  
common *Vicia,* except that it is taller, and bears a larger and  
rounder Grain, which, in Colour, Shape, and Size, is equal and  
like to the common white Pea. *RaiiPiist. Plant.*

It agrees in Virtue with the common Tare, but is not used in  
the Shops.

.4. Vicia j vulgaris; acutiori folio; semine parvo, nigro. See  
ARAcUs.

5. Vicia; flore albo ; siliqua longa, glabra. *Ind.* I6O.

6. Vicia; folio, & siliqua istis, siliqua hirsuta. *Inde* I6O.

7. Vicia; flore purpureo; siliquis brevibus, crassis, penden-  
tibus. *M. Hi Defer. L.* 62.

8. Vinia; folio magno, atroviridi, apice aculeato; siliqua  
fingulari, quasi articulata, semine nigrescente cinereo.

‘ , 9. Vicia; arvensis; folio supremo emarginato, .aculeato ;  
flore & semine, alhe.

IO. Vicia; Orientalis; flore suave ruhente ; siliquis brevissi-  
mus. *Nifsale. -*

The twelve following Species of *Victa* have Flowers growing  
thicker together, and in Spikes.

: I. Vicia; Orientalis; flore maximo, pallescente, macula  
lutea notato. T. C. 27o.

' st.. Vicia, perennis maxima dumetorum; store obscure rn-  
hente. *MeHitL.Sa. . ' -*

' 3. Vicia; luteo flore; sylvestris. T. IS.-2. 313.

\* 4. Vicia ; multifloras *C. B. P.*345.. - . ' - . .. i-.

- 5. Vicia; Bengalenlishirsuta, incana:; filiquaPisi. Hi Z.

- 6. Vicia; angustisolia; purpuro-Violacea; siliqua lata, gla-.  
bra. *Magndl. Botan. - . ....... .. .*

7. Vicis; multiflora; Cassiibica; frutescens; siliqua lentis,  
*Breyn.Prodp.*

. 8. Vicia; major; folio cordato;, flore rubro; fructu albo.  
Pisi minoris instar. *M. Hi* 2.63.

t 9. Vicia; - segetumfingularihus siliquis glabris... *G. B. P.*345- .

- Io. Vicia; minima ; cum siliquis glabris. T. 397.  
e II. Vinin; maxima; tetraphylla, vel: pentaphylla. *PL Co.*929. . ' .;

-I2- . Vicia; maritima; flore alhe oblongo, *Bobart. Bocrh.  
Ind. alt. Piant. dur ' -: . -*

*' Vicia,* according to *Varro de R. R.* is derived d *Vincienda,*from binding; because, by its Tendrils, like the *Vitis,* Or  
Vine, it climbs, and binds itself about other Plants.. But we  
are rather of Opinion, with *Vijsius, sin Etymolog.* that. *Vicia*comes from the *Greek ", -for-* those*-of Asia* call this Plant βίκιον,  
*{Bicioof) as* we are told by *Galen,. Lib. Vide Alim.Fac.-Capo  
penult.. Raii Hist. Plant.* Ἀ ' ’ Ἀ

This Plant affords good Fodder, for Cattle; for its Seed sup-  
plies the Place of Oats ; and the Herb serves insteadiof. Grass.  
Men have, also, eaten the Grain, in Times of Scarcity, and  
sound themselves never the worse sor it. The Meal Of Tares is  
like the Meal of the Seed of Fenugreek. *Hiast. Plant, afcrips,  
Boerhaav. ......*

. VICIA LUTEA. See APHACA.

" VICI.E SIMILIS. ANamesor the. TintAyrus; ἀμφίκαρποςί  
*supra et infra terram siliquas gcrens.*

VICINITRAHA, or VICINITRACTUS. *Castellus* in-  
forms us, that *Felicianus* makes -Use of the first, and *Ingrassias*of the second, to express an *Erysipelas..* But this must have  
happened through a gross Blunder, with respect to the Deri-  
vationof the *"sNixd-Erysipelas. -*

-VICTICELLrE, or VITICELLAsi LIQUOR, *\DPara-  
Celsius,* is a Sort ofWine.

- VICTORIALIS. - See ALLIUM.

\* . -VICTORIATUS DENARIUS, in *Marcellus Empiricus,*is half a Dram. As a Coin, it is half a *Denarius.*

- VICTORIOLA. A Name for the *Laurus Alexandrinae  
Blancard.-* See RUSCUS ; *latifolius . fructu folic insidentes -*

VICTUS. Imports the same aS-DLETA. - .-

VIGILLE. *Sea Pervigiltum,* undec the Article PTRETOS.

VIGO *[Johannes de).* A celebrated Surgeon of *Gencur,*about the Year I5I7. There are some Compositions called hy  
his Name. Thus the *Emplastrum de Ranis Cum Mercurio is*called the *Emplastrum de Vigo cum Mercurio* ; and without the  
Mercury, *Emplastrum de Vigo simplex.* Some Troches are,  
also, called *Trochisci de Minto Vigonis.* See **CORRODENTIA.**

The *Emplastrum de Menio Vigonis* is thus prepared:

Take of Turpentined ten Ounces; of Hogs Lard, seven  
Ounces; of the Suets of Mutton, and Beef, and of Oil  
of Roses, each half a Pint; of the Oil of Myrtie, of the  
Ointment of Poplar, and of Ceruss, each four Ounces ;  
of the Litharges of Gold, and Silver, each three‘Ounces  
and a half; of red Lead, three Ounces; of the Fat of  
Fowls, two Ounces ; and of white Wax, eight Ounces:  
Make into a Piaister, according to Art.

After the Litharges, the red Lead, and the Ceruss, are re-  
duced to a fine Powder, they are to be mixed, in a Bason, with  
the Oiis, the Fats, and the Ointment of Poplar: To these add  
two Pints of common Water, and boil tho Mixture, constantiy  
stirring it with a wooden Spatula, till it has acquired the Con-  
fistence of a Piaister, and the Water is quite consumed, which  
is known when it ceases to boil: Then melt in it the eight  
Ounces of white Wax, broken in small Pieces, and the Tur-  
pentine, to make a Piaister, to be kept sor Use. ThiS PlaisteT  
is of a drying, cicatrismg, .and resolvent Nature. *Lernery,  
Pharrnacepee universelle. : :*

VIGOR, with respect to Diseases, is the same as AcME.

VILLI. Small Hairs, or Fibres, or the Nap of Cloth.  
Hence, from the Similitude, the shaggy Fibres on the Inside of  
the Intestines, and many Other Parts of the Body, are called

VILTRUM. The same as FI LT RUM, *Viltrum Philosm  
phorum* is an Alembic.. *A '*

VINCAPERVINCA. **SeePERvINcA.**

.VINCETOXICUM. **SeeAscLEpIAs,**

VINCULUM. A Bandage. *Vinculum Sosirati* is a Species  
of Bandage described by *Galen,* in his Treatise os Bandages,  
NumherSI.-

. VINDJCIANUS. *Marcellus Empiricus,* in *Cap.Ass.* gives  
a- Remedy for a Cough, which he ascribes to *Vindiciatius.*Rub, fays he, live Sulphur, mix it with Very Old Hogs Lard,  
and makerhem up into Pilis, of- fuch a Size, that they may be  
easily swallowed; Give three the first Day, two the second,  
and one the third. This-Medicine, he informs us, is excellent  
for Horses, aS well as- sor Mem -

.. VINUM. Wine.

;. The Principles, or Elements, Of which Wine is composed,  
are, first. An inflammable Spirit: Secondly, A Phlegm:  
Thirdly, An acid tartareous Salt: And, fourthly, A certain  
sulphureous andoleous Substance.

: Wines, ', therefore, differ from each Other, with respect to  
Taste, Smell, and Virtues, according to the Mixture and Pro-  
portion of these Elements. Such Wines as contain a large  
Quantity of inflammable Spirit, soon intoxicate, and heat the  
Body ; but Wines in which, the phlegmatic Or tartareous acI-  
dnlated Parts predominate, are of a laxative and diuretic Qua-  
lity, nor do they easily affect the Head. Wines, which contain  
a great deal of an oleous and sulphureous Substance, such as  
old Wines, are of a deep yellow Colour, of a strong Taste,  
and Smell ;\* and aS they are not easily transpired, so they remain  
long in the Blond, and dry the Body.

There’ is,..also, another’, essential Element, or Principle, in  
Wines, winch is a certain sweet, .oleous, temperate, and Viscid  
Substance,, discoverable in Wines which *are* not sufficiently fer-  
mented, urgently boiled; and such a Principle d, particularly,  
observed in strong .Sack, Frontignac, and Hungarian Wine.  
This.Principle- not only renders Wines grateful to the Taste,  
bus, also, *of a* nutritiveandrdemulcent Quality.

.. Tho’ all Wines may .be-resolved into their constituent Prin-  
ciples,-thatis,. a-Spirit,/an Gil, a Phlegm, a sweet Substance,  
and an acid tartareous Part , yet they differ in this, that some  
contain a Twhet and: .subtil Sulphur, whereas, others have a  
coarser Sulphur, which is not so grateful to the Taste.. '.

. 'Thus Rhenish and Hungarian Wines contain a far more  
grateful Spirit, and a -more sweet and subtil Sulphur than the  
Wines.’oft *France, Toertit, pnd Meessen,* in which the Spirit and  
Sulphur is foinewhat harshj.and disagreeable to Nature. Hence  
it is, that the Smell, only, of old and generouxRherush Wine,  
furprifingly refreshes the'Strength; which 'Effect is not to he  
expected from other Wines. \_ The tartareous Principle of Wines  
is, also, different;, finch some contain a large Quantity of coarfe  
Tartar,'.such as the ProVeneial Wines ; and others a mere sub-  
til Tartar, fuch as the Rhenish Wines. Some Wines, such a?

those os the *Mofelig.* contain a tartareous nitrons Salt, of. a  
somewhat bitterish Taste, On which Circumstance depends thein  
saxative and diuretJQ Quality.

In order to such au Analysis os Wines as may discover thein  
Principles, a due and careful Distillation is of great Importance-

Three Pints of the best Rheuish Wine, distilled in a glass  
Cucurbit, yielded thirteen Ounces of Spirit, with which,  
however, was mixed almost half that Quantity of Phlegm.

Three Pints of Franconian Wine yielded eight Ounces of  
Spirit, of the like Nature with the former. A Pint and three  
quarters of strong Hungarian Wine, subjected to Distillation in  
a Cucurbit, yielded eight Ounces and a half of a Spirit far  
stronger than the former; so that there was hardly a third Part  
Of Phlegm mixed with it.

From a Pint and six Ounces of Burgundian Wine, subjected  
. to Distillation in the same manner with the others, I obtained  
eight Ounces of Spirit,mixed with half that Quantity os Phlegm.  
Hence it is obvious, that Hungarian Wine is for more spirituous  
than Burgundian Wine, which is more spirituous than Rhenish  
Wine, which is more generous than Franconian Wine.

After abstracting the Spirit from the Wine, by Distillation,  
what remains in the Cucurbit acquires a deeper Colour, and is  
Of an highly acid Taste; only with this Difference, that the  
Remainder of the Hungarian Wine is of a somewhat sweetish  
acid Taste, that of the Burgundian of an astringent acid Taste,  
that of the old Rhenish Wine of a more acid Taste, and that of  
the Franconian Wine most acid of all.

ι . When the Spirit, abstracted from the Rhenish Wine,  
is again poured to ..the Part remaining after Distillation,  
or the acid tartareous Phlegm, its penetrating acid Taste is, by  
this means, greatiy corrected, and lessened; but its former  
-Taste and Smell of Rhenish Wine does not return, because  
the specific Taste of any thing depends upon a particular Mix-  
ture and Texture of the Parts, which are dissolved and destroyed-  
hy the Distillation. And hecause, by the new and mutual Con-  
fusion of the Liquors, the Particles are not so united as they  
were before, hence, also, the Taste is changed.

Since a Vinous Spirit corrects and infringes Acidity; and smoe  
Hungarian and Burgundian Wines contain more Spirit than any  
other Kinds of Wines, we may justly conclude, that these  
Wines are proper for those whose Stomachs generate large  
Quantities of Acids; such as old Persons, those subject to hy-  
pochondriac Disorders, and Quartan Fevers: And that they are  
principally beneficial, when Chylification is over,and many acid  
Crudities' of the digested Aliments remain in the Stomach..

AS the Remainder of the Burgundian Wine is .an acid and  
austere astringent Phlegm, we may justly conclude, that this  
Wine is proper for corroborating the Tone of the Stomach find  
Intestines; and that the Use osqit is more expedient when the  
Body is preternaturally soluble, than when the Patient is  
costive. . :

' The Colours Of Wines. depend on the sulphureous oleous  
Principle, which,by the intestine fermentative Motion, is inti-  
mately resolved and mixed with the Parts of the Wine: The  
'deeper the Colour, therefore, os Wine is, the larger Quan-  
tity oft Oil they contain. When, therefore,-the Spirit is ab-  
stracted from the Wine, the spirituous, aqueous, and acid Parts,  
are carried off, and there is left in the Vessel a thick Mass, of  
a darkish and very deep Colour; to which, if a considerable  
Quantity of Water is-poured, it is immediately tinged with  
the same Colour the Wine had in its natural State; which is a  
fure Proof that the Wine derived its Colour from the thick,  
sulphureous, and Oleous Mass, which remains in the Vestel after  
Distillation.

Red Wines receive thein Colour from the red Pellicles Of the  
Grapes, upon which they stand long infused; the Acid, there-  
fore,. which is in Musts, also, extracts and exalts the Colour  
which is contained in these Pellicles ; for which Reason, that  
Colour is purely adventitious. All red Wines are possessed of  
an astringent Taste and Virtue, hecause they stand long infused  
not. only with the red Pellicles of the Grapes, but, also, with  
thein small Stones,'which are of a manifestly astringent Taste.  
Hence they extract the astringent Principle from these two  
Substances, and receive it into themselves.

- Red Wines, especially of the Burgundian Kind, when di-  
stilled, and afterwards reduced to a thick Consistence, by Eva-  
poration, in a proper Glass, are of a deep-red Colour, and a  
- strongly-astringent Taste; and a Portion of the Wine, thus in-  
spissa ted, when poured into a considerable Quantity of Water,  
not only tinges it with a red Colour, but, also, gives it an  
astringent Taste.

When to red Wine, or the Extract of it which remains after  
Evaporation, there is poured a sufficient Quantity of the Oil of  
Tartar *per Deliquium,* the grateful red Colour of the Wine is  
destroyed, and changed into one of a brownish Kind; the Mix-  
ture becomes turbid, and deposits a certain Sediment at the  
Bottom ; a certain Proof that the beautiful redjsh Colour does.

in a great rneasiire, proceed from the Acid exalting the red  
Colour.

The yellow 'Colour of Rhenish Wines, also, proceeds from  
a sulphureous and oleous Principle ; and as the Sulphurs, which  
are, as it were, the Matrixes of Colours, are exalted, by the  
Admixture.of alcaline Salts; so the like happens in Rhenish  
and French Wines, the yellow Colour of which is changed into  
brown, by the Affusion of a sufficient Quantity os Oil of Tar-  
.tar per *Deliquium,* or urinous Spirit of *Sal Ammoniac.*

When an alcaline Liquor in mixed with Wines os a consi-  
derably acid Taste, the Colour is not only changed, but, also,  
.a gentle Effervescence excited and the Acid os the Wine,  
meeting with the alcaline Salt, passes into a neutral tartareous  
Salt, such as tartarifed Tartar, or the *Terra foliata Tartace,*which is generally prepared of Wine Vinegar, and the Salt of  
Tartar.

'Since neutral Salts, consisting of a subtil Acid, and an alca-  
line Salt, such aS the dry *Terrafeiiata Tartari,* or the*Arati  
num Tartari,* which is only the *Terra foliata Tartari* dissolved,  
are of a remarkably abstergent, aperient, and resolvent Qua-  
lity, and promote the Excretions by Stool and Urine, they  
are, therefore, highly beneficial In removing chronical Disorders.  
-And fince from the heft Rhenish Wine, mixed with Oil os *Tar.,  
tar por Deliquium,* the same Salt may be externporaneousiy  
prepared, it is obvious, that Rhenish Wine may, by this simple  
means, he rendered highly medicinal.

The Acid remaining aster the Abstraction and Evaporation of  
Rhenish Wine, if mixed with Oil of Tartar *per Deliquium,*produces so violent an Ebullition, that the Froth comes over  
the Lips of a pretty high Vessel; the Mixture becomes os a  
deep-brown Colour ; and, a few Hours aster, the Froth subsides  
and Vanishes ; and a Liquor highly similar to the *Arcanum Tar-  
tari,* both in its saline Taste, Colour, and Virtues, subsides to  
the Bottom. The Reason why, during the Effervescence, so  
great a Quantity of Froth is raised, seems to be this, that the  
Extract of Wine, besides an Acid, contains a large Quantity os  
Sulphur, and a Viscid Principle: Hence the Affusion os the  
Alcali excites a great Effervescence, from which arise numerous  
Vaporous and aereo-ethereal Particles, which, being sheathed up  
in the Viscid Principle, cannot sty freely *off* into the Air, but  
raise the Viscid Particles into Bubbles.

The Countries lying hetween the fortieth and fiftieth De-  
grees of Elevation of the Pole, fuch aS *Hungary, Spain, Por-.  
tugdees Ltnso, France, A ffCZt PZst q( Germany, .Austria, Than-  
fylvaniagi* arid a great Part Of *Greece,* produce the hest Wines;  
because, in these Parts, the Influende of the Sun is greater than  
in others." . so- \_ ἐν .'

It is, also, certain, from Experience, that mountainous steep  
Places, with Rivers at their Roots, produce\*the best Wines;  
for, hesides the Influence of the Sun, the Goodness of Wines,  
in a great measure, depends on the fine and subtil Nourishment  
of the Grapes. Now hecause the Mountains are exposed to the  
Night Dews, which abound about the Rivers,, and contain a  
subtil Water intermix'd with an ethereal Principle, it is not to  
he wondered at, is Dew should be the best Nourishment for the  
finest Vines. But Dew alone is not sufficient for the Nou-  
rishment of Vines, which, also, requires Rains.

‘ The Nature of the Soil, also, contributes much to the Pro-  
duction oscgood Wine; for we Observe, that the best Wines  
grow not in fat, clayey, gross, and black Soiis; but rather in  
such as are stony, sandy, or chalky; which Kinds of Earths,  
though apparently barren, are yet Very proper for Vines; be-  
cause they long retain the solar Rays, which, by cherishing the  
Roots, make the Nourishment pass through all the Pores of the  
Plant. Besides, the Waters, passing through such Earths, are  
attenuated, and strained, and their grosser Parts separated, and  
retained ; so that the nutritive Juice of the PlanI.must be the  
more pure, and subtil. .The Causes of the different Tastes,  
Salubrity,.and InsalubrityOs Wines, are, without doubt, placed  
in the different Nature of the Soil; fince Tracts of Ground,,  
lying on the same Mountain, with equal Aspects to the Sun,  
and bearing Vines of the same Species, yet yield Wines greatiy  
different, with respect to.Salubrity, Taste, and a penetrating-  
Quality. The superior .Virtues of the *Tokay* Wine, are, by'  
the Inhabitants of that Part Os the Country, ascribed to the  
Gold there produced,, but more justly to the large Quantity of  
corroborating Sulphur.contained in the Earth; since neither  
Gold, nor any other Metal, can contribute to the Fruitfulness  
Of the Earth, much less to exalt the Juices of Vegetables,, or  
render them more salutary. But the Reason why all the She-,  
*garian* Wines are more salutary than others, depends on the  
Subtilty and Fineness os the Nourishment with winch the Vines  
are nourished, and the large Quantity of the aereal and ethereal;  
Principle, which is intimately mixed with their Juices, and  
which.renders both Aliments and Medicines far more salubrious,  
than they would otherwise he. - .

The more subtil and light Waters are, and the more they  
abound with an aereo-ethereal Matter, the more who! some they  
are. Medicinal Waters are only efficacious in curing Diseases,  
en account of the Salts, together with the spirituous ethereal  
Element, which they contain ; and is, by Heat, and the free  
Access of the Ain, they are deprived of these, their salutary  
Virtue immediately is forthwith rendered languid, and de-  
stroyed. In like manner, an aereo-elastic Spirit, in the Wines,  
impeis and promotes the Motion not only of the Solids, but,  
also, of the Fluids, and stimulates the moving Fibres to gentie  
Contractions; so that the Circulation of the Blond and Hu-  
mours, together with the Work of Secretion and Excretion,  
so necessary to Life, are facilitated, and promoted : And, for  
this Reason, because the Hungarian Wines consist of highly  
subtil and spirituous Parts, they excellently restore the Strength,  
and, by promoting a gentie *Diaphoresu,* eliminate the crude  
and superfluous Juices from the Body. But we shall, for  
the Reader's Satisfaction, enumerate the most considerable  
Wines in *Europe,* and specify their medicinal Virtues and Qua-  
lines.

*Italy,* then, affords generous and delicious Wines; among  
which, we shall first mention that Wine produced at the Foot  
of Mount *Vesuvius,* call'd, by some, *Lachryma Christi,* and, by  
others, the *Virgin Wine,* because it stows spontaneoufly, like  
Tears, from the best Grapes, before they are trod. This is a  
strong Wine, of a splendid red Colour, a grateful Smell, a  
sweetish Taste, and a salutary Quality; for it soon proves a  
safe and effectual Diuretic, on account of its Thinness.

*\ Alban* Wine, so call’d from its growing at the City *Alba, is*beneficial, as well for those who are, as those who are not  
sound, since it gently promotes Perspiration and Urine." This  
Wine is of two Kinds, Red, and White.

Among the best Wines we may, also, reckon the *Tuscan*Muscadel, or the Wine of *Monte Fias.cone.* This Wine is  
highly palatable, and grateful to the Taste.

The Red Wine os *Monte Bolzano,* and the Moscadel Wine  
of *Perusu,* are both highly celebrated, and yearly exported in  
great Quantities, from these two Cities.

The *Punic* Wine was sussicientiy known to the Antients:  
It is produced on.the rocky Mountain called *Pserce,* situated in  
*'Capo district,* in *dae Adriatic* Gulph. This is a sweet Wine,  
of a fragrant Smell, and does not soon affect the Head, and  
Operations of the Mind. *Pliny* affirms, that, by the Use of  
this Wine alone, *Livia Augusta* lived to he eighty-two Years  
**of** Age.

Near *Vincentia* there is an excellent Wine produced, called  
*'Mearciminian* Wine, which is said to be less hurtful to gouty  
Patients than any other Wine whatever.

In the District of *Aquila* is produced a noble Wine, called  
*Rofaxer,* from a City of that Name in the *Julian* Forum.

The *VernaceanViliuc,* so called from a red Mountain, known,  
at present, by the Name of *Pernacia,* is a rich and generous  
Wine, and sussicientiy known, not only in *Italy,* but through  
*France* and *Britain.*

The *Rhrtian* Wines, produced in the *Tolinian* Valley, are,  
also. Very rich, and delicious; so that *Augustus* is said to have  
delighted in them. They are red, like Blood, sweet, and leave  
a somewhat austere Taste on the Tongue.

Though the Wines in *Italy* are generally sweet, yet there are  
austere Wines prepared in the northerly Parts; and these are  
used with great Success, in hot Weather, as, also, in hot Dis-  
eases, in order to extinguish the excessive Heat.

In *Greece,* the Wines of *Crete* and *Cyprus,* formerly known  
by the Name *Punic,* are eVery-where greatly esteemed.

Among the *French* Wines, *Champaign* is generally held in  
most Esteem: It is grateful to the Stomach, friendly to **the**Nerves and Head, and soon pastes off by Urine. It is of  
a delicious Taste, on account of the Admixture Of a subtil and  
spirituous Acid.

Next to' this are the *Burgundian* Wines. These are ge-  
nerous, in Colour resembling the Eye of a Partridge, os a  
grateful Taste, less Volatile, and better able to bear an Ad-  
mixture of Water, than *Champaign.*

*Paris* Wine, especially if made of npe Grapes, is thin, but  
grateful to the Taste, and not proper for being mixed with  
' Water.

In *Baurdeaupe* is produced Claret, which is a Wine of a  
somewhat austere Taste, does not affect the Head, and Opera-  
tions os the Mind, and excellently corroborates the Tone of  
the Stomach and Intestines. The best *Bourdeaux* Wine is that  
call’d *Pontac.*

The *Orleans* Wines, both of the red and white Kinds, are  
very generous, and heneficial to the Stomach; but they gene-  
rally affect the Head.

The white Wines of *Poitou* are, also, well known, and  
greatly resemble Rhenish Wines, only they are more Crude.

Among the hestsif the *French* Wines we may, aisOj reckon  
*Frontignac,* and Muscadine, which is red, highly generous, os  
**a** sweetish subaustere Taste, and, on account of ite Richness,  
requires an Admixture of Water.

Among the good *French* Wines, we may, also, reckon Hicr-  
*milage,* produced between *Faience* and *St. Faliere.* This is a  
redish subaustere Wine, resembling the Taste of Myrtle-  
berries.

*Spain,* alfo, furnishes excellent Vines, which; on account of  
the due Maturity os their Grapes, yield excellent Wines.

*Canary,* at present brought from the *Canary* Iflands, espe-  
cially the *Great Canaries,* is produced of the most rich and ge-  
nerous Kind about *Palma.*

*Malmsey* Wine is expressed from large round Grapes, os **the**hast Kind; and lasts so long, that it may be transported to **any**Part of the World.

*Malaga* Wine, or Sack, is fatter than Canary. The *Pe-  
tris.rnont* Wine grows, principally,near the Town *Gwaldaclazar,*on the Vines long ago transplanted by *Petrus Simon* from Ger-  
*many* to *Spain* ; for a Transplantation from one Climate to ano-  
ther will produce Fruit different in Taste, Sweetness, and other  
Qualities, according to the different influence of the Sun, Na-  
ture of the Soil, and other Circumstances.

The Country near *Hines,* of *Andalusia,* iS very fertile in  
Wine, which, however, is somewhat austere, and soon be-  
comes acid in warm Places. Of the same Kind are the Wines  
produced about *Madrid.*

*Alicant* Wine, produced in *Valentia,* is red, but thick, grate-  
ful to the Palate, but hurtful to the Stomach. What wecom-  
monly call *Tent,* is not unlike this Wine.

Wine, in general, is possessed of many Virtues, both for the  
Purposes of Prevention, and Cure: By means of this Liquor,  
moderately and duly used. Longevity is procured, and the Body  
preserved robust, and in good Plight: Besides, Wine has a happy  
Influence, not only on the Body, but, also, on the Mind,  
whose Powers and Faculties it invigorates beyond all other Li-  
quors, or Medicines, hitherto known. For, as *Gryllus, de Sup.  
dulc. Lib.* I. informs us, the *Greeks,* on account of the Ex-  
cellence of their Wines, were the glorious Sources from which  
Learning diffused itself through all the other Paris of the  
World ; but that they lost, at once, their Genius, and Repu-  
tation for Literature and Science, when the *Turks* extirpated  
their Vines: And it is certain, from Experience, that the *Ita..  
lians, French,* and *Germans,* in whose Countries good Wines  
are produced, are more ingenious and acute, than the Inha-  
bitants of other northern Nations, who use Malt Liquors.  
The Heathens were so sensible of the happy influences os  
Wine, that they placed *Pallas* and *Bacchus* in one Temple, in  
order to intimate that Prudence was increased by Wine. And  
the antient Poets have represented their Gods as wiser than Mor-  
tals, for no other Reason than that they used Nectar for their  
Drink, and Ambrosia for their Food. The Fire os the Poets,,  
-and all the happy Flights os *Homer, Ennius, Horace,* **and***Quid,* are the glorious Effects of Wine. Nor is this all; for  
this Liquor banishes Cowardice, eradicates a dastardly Turn of  
Mind, and inspires the Soul with Courage, Intrepidity, **and**Alacrity. Besides, Wine is an universal Preservative of  
Health, and long Life; for such as is the Circulation os the  
Blood, such the State of the Health will be. Now it is cer-  
tain, from Experience, that when the Humours are gross, and  
their Circulation flow, from a want os due Force in the Heart,  
or any other Cause, the animal Functions, and, consequentiy.  
Health, are greatiy impaired. But these Misfortunes are pre-  
Vented by Wine, the due Use of which augments the Heat os  
the Body, renders the Pulse stronger, and quicker, forces the  
Blood from the Centre to the Circumference, increases **the**Transpiration, promotes a Discharge of Urine, renders the  
Face red, and the Veins turgid, and, in a Word, refreshes the  
whole Body and Mind.

The Antients were so sensible of all this, that they recoma,  
mended Drunkenness, not.of the intense and habitual, but of  
the rare and moderate Rind; for excessive drinking of Wine,  
like the Abuse of other Remedies, instead of good, produces  
bad Effects: And this Liquor is at proper Intervals only to hedrank in greater Quantities than ordinary, with a View to roufo  
the Spirits, and animate the Soul, depurate the Blood, and re.,  
move Obstructions. Nor, for these Reasons, is it to be doubted,  
but Wine is an excellent Preservative against hypochondriac Dis-  
orders. Weakness of the Stomach, Cachexies, Suppressions of  
the Haemorrhoids, Tumors and Obstructions os the Liver **and**Spleen, the Stone in the Kidneys and Bladder, the Oout pro-  
ceeding from a cold Cause, catarrhous and other Desiuxions,  
Rheumatisms, Lassitude and Heaviness os Body, Loss of Me-  
mory, Duiness of Hearing, Dimness of Sight, Weakness of  
Sensation and Motion from a Fault of the Spirits and Nerves,  
Impotence in Men, and Sterility in Women r So that we

may justly, affirm, that if Mankind knew what salutary Virtues  
were implanted in Wme, they would not be subject to so  
many Disorders, nor stand in need of so many Drugs and Phy-  
stcians.

Having already considered the preservative Effects of Wine,  
we now come to inouire in what particular Disorders the Use of  
it is proper.

In malignant Fevers, then, nothing is more excellent than  
Wine. The Malignity of these Disorders is known from a  
Defect of Motion and Strength, and from a want of a due spi-  
rituous Quality in the Blood, arising from a flow Circulation of  
the same; all which indicate a certain Disposition os the Fluids  
to Putrefaction. It is, therefore, expedient, in all these Dis-  
orders, to restore the Strength, rouse the Spirits, increase the  
Circulation of the Blood, and promote Perspiration. These  
are the Designs of all Alexipharmics. But ch these Intentions  
are answered by Wine, aS is obvious, not only from the Au-  
thorities os practical Writers, but, also, from Experience: For  
I thyself have known many cured of malignant Disorders, only  
by the moderate Use os Wine.

In those Disorders where the peccant Matter Is to be expel'd  
to the Surface of the Body, such as the Mealies, Small Pox,  
and *Petechia,* when Nature is weak, and the Motion of the  
Heart insufficient for the Expulsion, or when, through Weak-  
ness, there is a Retrocession os the Eruptions, Wine is highly  
proper ; hut we are to abstain from its Use, when these Di for-  
tiers are accompanied with an excessive Heat, an - Ebullition of  
the Humours, and a quick Pulse.

In continual Fevers, *Hippocrates, in Lib.* **2.** *de Morb. a cut.  
Sect. 61.* recommends White-wine, both alone, and mix'd with  
Water.. Numberless Practitioners are of the same Opinioni  
Thus *Forestus, Lib. Observat*.1. *Obs.* I. recommends sine small  
Rhenish White-wine; and *Helmont, de Feb. Cap.* I2. tells us,  
" that .they who moderately use Wine in continual Fevers,  
" easily recover, preserve their Strength, and sooner recover  
" their former State and Condition.”

Wine is still more proper in Intermittents, which generally  
arise from Crudities, an Obstruction of the Evacuations, and  
especially a Suppression of Transpiration. ' This Liquor is to be  
exhibited pretty liberally, on the Days of Intermission; but  
sparingly, or not at all, during the Paroxysm, unlefs in the  
Decline of the Disease, and when the Body is disposed to  
sweat.

The Reason why Wine ought not to he prohibited in almost  
all Fevers, is. this: A Fever is an intense Commotion of Bleed,  
excited in Order to remove and expel whet threatens the De-  
struction of the Body. Now it is sufficiently obvious, that  
where this Motion is intense, and too strong. Wine is to he  
Iparingly used ; but if this Motion is so weak and languid, that  
Nature seems ready to fink, it is to be quickened by a pro-  
per Dose of White-wine, in Order to restore languid Nature.

In Syncopes, and Loss of Strength, nothing is more excel-  
lent than Wine. *Galen, in Lib.* 3. *de Medic. Facult.* orders  
those afflicted with a Syncope to drink Wine which is thin, of a  
yellow Colour, and old, rather than such as is new, or of a  
middle Age: Because the first not only restores the Strength,  
and recruits the Spirits; but, also, by its Smell, or when ap-  
plied to the Heart and Wrists, far surpasses all other Cordials,  
and Analeptics.

In Nauseas, Weakness, Indigestion, and inflation of the  
- Stomach, nothing is more beneficial than Wine. Hence  
St. *Paul,* as we see in I *Timothy V.* 23. advises *Timothy* to use  
Wine for a certain Disorder of his Stomach. *Galen, in Lib.* 4.  
*de Sanitate tuenda. Cap.* 6. telis -us, that the Wines which are  
yellow or white, fragrant and thin, are excellent Stomachics.,  
especially if they are gentiy astringent; and such are the Rhe-  
ntsh Wines, which, on account os their subtil, acid, spirituous,  
and ashingent Principle, are highly beneficial, in exciting the  
Appetite, strengthening the Stomach, and promoting the Di-  
gestion of the Aliments.

In a *Fames Canina,* or preternatural Voracity, *Hippocrates,*in *Sect.* 6. *Aphor.* 21. recommends the drinking of Wtne ; and  
his Advice is founded on Reason: But that Author did not, in  
this Passage, mean every Wine, bur only such as is generous,  
pure, and old. For the Cause of this Disorder is an acid cor-  
rosive Humour in the Stomach, which, by such Wine, is ex-  
cellently corrected, just as the corrosive Nature of Spirit of  
Nitre, or Vitriol, is corrected by the Admixture of Spirit of  
Wine; or aS the Acidity of Tartar, so longas it is in Conjunction  
with the Wino,is *so* corrected,as to prove grateful to the Palate.

Tn order to allay Thirst, nothing is more effectual than Wine  
mixed with Water; for, by this means, it far sooner extin-  
smithes Thirst, than if Water had been exhibited alone; fince  
Thirst arises from an Obstruction and Constriction of those  
Glands winch discharge the Saliva into the Fauces, for moisten-  
ing them, and the Oesophagus; but these Glands are better  
opened by Wine and Water, than by pure Water ; for which

Reason, *Hippocrates,* in acute Fevers, was not afraid to pre-  
scrihe a Mixture of Water and Wine.

In Vomitings, of the idiopathic Kind, or such aS accompany  
Fevers as a Symptom, thm Wine is preferable to all other Li-  
quors. ' '

In Colics, especially those arising from Flatulencies, or viscid  
Crudities, nothing is more beneficial than old Rhenish Wine.  
For this Purpose, *Hippocrates, Lib. 1. Eseidem.* 6. recom-.  
mends rich Wine, because it renders crude Matter fit for Con-  
coction, attenuates what . is thick, and discusses Flatulencies.  
*Crato,* also, *in Cons.* I 69. recommends Rhenish Wine in Co-  
lies, but forbids the Use os *Moravian* and *Austrian* Wines;  
as, also, the Malmsey Wines, whinh are sweet, thick, and  
turbid. .. ... .. .

In Diarrhoeas, and Dysenteries, which appear as the Sym-  
ptoms of acute Distempers, small Rhenish-wine, either alone,  
or mixed with a Ptisan, produces excellent Effects, since it is  
possessed of a subastringent Quality, by which the Tone of the  
Intestines, and their relaxed glandular Coats,are greatly strength-  
ened : And as, in these Disorders, it is highly expedient to move  
the Humours from .the Centre to the Circumference, to aug-  
ment Perspiration, and provoke Urine, hence Wine is excel-  
lent, because it produces such Effects. Red Wines, on account:  
of their greater Astringency, are generally recommended;  
and, if they are good, theV. may be used for that Purpose, l

In Obstructions os the Liver and Spleen, in the Jaundice,  
and Cachexy, Wine produces excellent Effects. *Solenander,* a  
celebrated Practitioner, recommends a Mixture of chalybeate  
Water with a Wine which is white,- pure, ripe, not strong»  
but pellucid, fitch as the Rhenish and Moselle Wines, as highly  
grateful to the Liver; and asserts, that, by their astringent  
Quality, they corroborate the Viscera. But sweet Wines, be-  
cause they increase the Quantity of the Blood, are greatly con-  
demned, not only by *Hippocrates, Lib.* 2. *de Morb.* hut, also,  
by *Guarinonius, in Cons.sij. ’*

In Dropsies, *Hippocrates, in Lib. de intern. Affect,* extols  
austere Wines; and aqueous Wines,in *Lib.* 3. *Epidem. Sect.* 37.  
And *Epiphan. Ferdinand. Hist. Med.* informs us, that Persons  
labouring under an Ascites have beep cured by the Use of Malm-  
sey Wine alone.

It is justly to be doubted, whether Wine is proper in hypo-  
chondriac Disorders; for I have srequentiy observed in Practice,  
that the Symptoms were exasperated by acid Wines, especially  
of the rough Kind. The Reason why hypochondriac Patients  
cannot bear Wines inclining to Acidity, seems to be this: On  
account of the flow peristaltic Motion of the Intestines, their  
Contents are not promoted, hypochondriac Patients being gene-  
rally costive, hut become stagnant; and, by their Continuance,  
Contract an Acrimony. Hence Wine, in such Patients, is by  
the Stagnation of the Faeces, converted into a strong Vinegar,  
which stimulates the nervous Parts to Spasms. But, since hy-  
pochondriac Patients require a Reinforcement of Strength, and  
call for additional Force and Heat in their Stomach, Wine is  
not to be absolutely denied them. Hence *Brunnerus,* in *Conf. '*9. in hypochondriac Disorders, prefers old *Rhenish,* or goed  
*Hungarian* Wines, moderately used at Meals. But those af-  
flicted with Disorders of this Kind, ought to abstain from red,  
austere, 'and sweet Wines, and from the excessive Use os all.

In a Scurvy, which generates a large Quantity of fixed tar-  
tareouS Salts, *RJjeniso* Wine is excellent, because it is diuretic.  
Hence *Sadisms,* in *Tract, de Vite Vinifera,* informs us, that  
*Rhenish* Wines are highly beneficial in a Scurvy, because they,  
by Urine, evacuate the tartareouS Sordes; and that, in scorbu-  
tic Patients, he has observed an Evacuation of thick Urine,  
abounding with Tartar, procured by *RJseni/h* Wine. *Reisner,*in *Lib. de Scorb.* recommends strong, generous,, and unmixed  
Wines, for scorbutic Patients ; but orders them to be drank in  
a small Quantity; and, if the Patient's Pleat is increased, to  
be diluted with Water mixed with Raisins.

In the Stone of the Kidneys, sweet, generous, and oleous  
Wines are by. *Crato, in Cons.* 53. justly condemned, because  
the Stone is generally formed by a Redundance of Blood ob-  
structing the abdominal Viscera and Kidneys, and producing,  
first, an Inflammation, and then an Ulceration os the Kidneys,  
and then the Stone. But that a Plethora is augmented by sweet  
Wines, we have already observed. The Stone is, also, gene-  
rated in the Kidneys, by turbid and austereWines, such as those  
Of *'Numburgen in Germany.* But *ELenisu* Wines are good  
against the Stone, hecause they are highly diuretic. *Schul-*ocius, in *Cons.* III. recommends the *Nectarine* Wines. *Ur...  
surus de Nephrit. Cap.* 23. extols rich Wines, moderately  
drank, after due Evacuation of the Body. *Montanus, in  
Cons,* 229. greatly recommends pure, ripe, and rich Wines  
of a white Colour, in nephritic Disorders. A Strangury, ac-  
cording to *Hippocrates, in Sect. η. Apis.* 28. is removed by  
drinking Wine; but this Aphorisin is to be understood princi-  
pally of generous Wine,, because the Disorder treated of gene-

rally arises from a Suppression of Transpiration, which is restored  
by Wine of this Kind.

It is a Question of great Moment, Whether Wine is proper  
in arthritic and gouty Disorders ? It is a common Persuasion,  
that these Diseases are produced by Wine, and that they are  
only to be cured by drinking Water, and abstaining from Wine.  
It is certain, that these Disorders arise from a subtile Tartar,  
which lacerates the Membranes. Hence Wines, which con-  
tain a large Quantity of Tartar, seem to he prejudicial in them.  
But these tartareous Diseases proceed from an Obstruction of  
the Emunctories, and a Viscidity and Density of the Humours.  
But Wine excellentiy conveys the morbific Matter through the  
Kidneys, which are the proper Emunctories of the Tartar.  
Hence, there is no Reason why Wines should not he admitted, -  
especially since the Gout generally derives its Origin from a  
Weakness of the Stomach, a Defect os a spirituous Quality in  
the Blood, and a flow Circulation of the Humours. Hence;  
Wine exhibited with a proper Regimen, and by the Direction  
of a Physician, may prove a Preservative against the Gout, if  
it is used out of the Paroxysm. But as there are great Differ-  
ences, not only hetween Wines, but, also, hetween Consti-  
tutions, so the Physician ought to be Very circumspect. Ge-  
nerous Wines that are not acid, such as the *Hungarian* Wines,  
agree with some Patients. *Crato, in Consil.* 253. orders gouty  
Patients to drink a little *Hungarian,* or *Malmsey* Wines, at  
Meals. And *Solenander, in Consil.* recommends the moderate  
Use of Wine for gouty Patients, on account of the Weakness  
- of their Stomachs. The fame Author in *Sect.* 4. *Consil.* 24.  
speaks in the following manner: " We are to observe what  
" the State of the Stomach, and of the rest of the Body, can  
" beat. Nor is absolute Abstinence to he injoined Patients of  
" every Temperament, Constitution, Age, and Method of  
" Life, because there are great Varieties of Patients. If Wine,  
cc especially of the gently astringent Kind, .is drank moderate-  
" ly, and at a proper Time, its Use will be beneficial, instead  
" os hurtful. Thus we see, that by the Exhibition os a jittle  
" Wine in the Decline of the Paroxysm, gouty Pains are  
" alleviated, because by the Heat and Spirits excited, the pec-  
" cant Humour is discuffed ; only the Patient must, abstain  
" from Wine in the Beginning os the Paroxysm."

Nor must we forget a singular Method of Cure, used by  
*Hippocrates* in the very Beginning of sciatic Pains,, and a fixed  
and wandering Gout. His Words on this Occasion,' are  
found in *Tract, de intern. Affect,* and are so memorable, that we  
shall here tranflate them : " From any Disorder os the Kidneys  
" arises a proportionable Disorder of the larger Veins: But  
V the Veins, when full os Blood, are indisposed by the. Ap-  
" proach of any thing foreign to them. Is the Disorder -is  
" .in the Right Kidney, a Pain begins to reach to the Aceta-  
" bulum os the Coxendix: The longer this Disorder has lasted;  
" and the farther it has proceededsithe more intense Pain de-  
" scends to the inferior Parts, ί And when this Pain has reach-  
" ed the external Malleolus of the Foot, and the Joint of the  
" great Toe, it is again convey’d to the Head ; and, when it  
" has there formed an Ulcer, the Head seems as if it would  
" burst, and the Eyes, and all the Body, are filled with  
" Phlegm. .” A little after he speaks in the following Manner:  
"If you are called in the Beginning of such a Disorder, you  
" must order a great Quantity os diluted *Mendean* White-.  
" wine every Day; and let the Patient he intoxicated till the  
" Blood bursts from his Nose; and, when the Blood once he-  
" gins to flow, there is some Discharge of it made, for at  
" least thirteen Days. Bus, when these thirteen Days are  
" past, the Patient is no longer to be intoxicated ; nor is such  
" an Attempt to be made aster the Blond begins to stow; het  
“ let him at Meals drink a little more Wine than usual,.  
" that the Blood may continue to flow." *Hippocrates* deduces  
these Disorders from a Plethora, which is confirmed by Expe-  
rience ; and this Plethora he endeavours to remove by an Hae-  
morrhage from the Nose, which he excites by copious drinking  
of Wine. But, whether it would not be more expedient to  
lessen the Plethora by Venesection, or procuring an Evacua-  
tion of Blood from the haemorrhoidal Veins, I leave it to  
others to judge.

Having thus considered the Efficacy os Wine for the Cure  
of internal Disorders, we shall now treat of the Injuries arising  
from its preposterous U se in some Disorders. It is, therefore,  
certain from Reason and Experience, that in all Disorders,  
where a great Quantity of Blood is congested, as in Inflam-  
mations, and most Disorders of the Head, especially an Head-  
ach arising from an hot Cause, a Phrenitis, Madness, Verti-  
gos. Epilepsies, Lethargies, and all drowsy Disorders, Wines  
of every Kind are prejudicial ; for fince in these Disorders the  
Blood is impetuoufly convey'd to the Parr affected, and con-  
gested there, it must circulate flowly. Hence Wine, which  
by its Spirit ascends to the Head, and produces a greater Rare-  
faction of the Blood,, which it forces more .copinusly and imps-

iuousiy from the Heart, to the Part obstructed,, must product  
an Exasperation of these Disorders. *Hippocrates,* also, in  
*Lib.* 2. *de Morits,* in a painful Repletion os the Brain, orders  
Abstinence from Wine, -and, in the same Part asserts, that  
apoplectic Patients, ought totally to abstain from Wine ; and  
*in Lib. Ade Morb.* he tells us, that in a Sphacelus of the  
Brain, and a Lethargy, the Patient is totally to abstain from  
Wine. A pbrenitic Patient, says he, should be warmed with -  
warming Liquors, and Potions ; but Wine must not he used  
for this Purpose. And, in his Book *de Insomniis,* he telis us,  
.that mad Persons ought not to drink-Wine. .

Wine is, also, hurtshl in a Cough and Phthisis, because the  
Ashers Arteria cannot bear its acrid stimulating Quality. But  
fines sweet Wine assists Expectoration, the moderate Use ef it  
is not injurious ; nor when the Cough is-on the Decline, is old  
*Rhcrdsu* Wine to be prohibited, but rather prescribed. ♦ -

*TireUus, in Hist. Vini,* telis us, that Wines support the  
Sound, recover the Sick, revive the languid, and perform Mi-  
racles. Extracts, Quintescences, Stones, Boluses, and Pills, are  
to he despised in Comparison of Wines, which are the trim  
Support os the innate Heat ; -and ought, therefore, to be cele-  
brated with Praises, proportioned to the Advantages Mankind  
reap from them. *F. Hoffman. . -:*

In *Spaniyh* Wine, os that Kind which in Our Country  
*(Holland) we* call *Sireefe Sei,* and Very excellent os the Sort,  
I discovered the like saline Figures, as I had before observed in .  
the *French* Wine, represented *Tab.* I. *Fig.* S, [See under AcE-  
tum] and others besides, which were of a kind os oblong -  
Form, *Fig.* T. The Number of these, however, was Very  
small, in Compari so nos what appeared in the *French* Wine, or  
Vinegar. But I did not doubt os discovering more faline Fi-  
gnres, had this Wine been as thin aS the *French*; for I per-  
ceived Multitudes of minute Particles subsiding in the Wine,  
of whose Figures I could have no exact View, because of the  
thick Matter which surrounded them. However, aster I had  
kept the Wine three Days in my Repository, without a Cover,  
I perceived great Numbers of Very minute Particles, some os  
which uniting together by their mutual Connexion,' resembled -  
the dry smass Branches os some Tree; others floated about  
promifcuoufly, aS soon as the-Wine was stirred. These last did  
not appear to me at first osany Figure ; but afterwards I found,  
upon a more accurate Inspection, that they were endowed with  
certain Forms and Shapes, and, indeed, the same as those of  
the saline Particles, which I had observed hesore in the Vinegars  
Among them were many representing little Planes, partly in-  
flected roundwise, but of such Minuteness, that, as far as I  
could judge by my Eyes, ten Millinns of them together were  
not so big aS a Grain os Sand. Os these saline Atoms, which  
presented themselves to my View, many were large and flat,  
others thick and sharp-pointed, -and these had not yet attained  
their due Perfection. The Contemplation os these Figures  
consumed .me in the Opininn which I had entertained os the  
FormationOf the acute, er sharp-pointed Atoms os Salts; and  
convinced me, that all the acute.saline Parts os Wine, as well  
as Vinegar, were at first but as so many little thin Planes, and  
that, by an Inflection of the -sew Angles, they assumed the  
Form of those saline Figures, which I had hesore observed in  
theWine and Vinegar. For Example, the *French* Wine, and  
what we call .Sher, exhibited to my View the little thin plane  
Figures, represented *Tab. I: Fig. abed, es.gh:* The Sides of  
one of these Figures have a Roundness -with an Irregularity,  
while the Sides os the other arethose of a Plane ; and these are  
all represented bigger than the Lise, that their Position may the  
hetter appear, and that you may conceive how the Angles *d*and *d* are inourvated in the manner as is represented in the  
Figure *i k l*; and how the Angles *a* and *b* unite, and form an.  
acute Angle at *i,* in the same Figure, and how, from a likd.  
Incurvation of the other two Angles *c* and *d,* there results a  
perfect; inline Figure. But where these little Planes are but  
short, they have but two Angles inourvated, and assume the  
Forms represented by the Figures *q* or *r,* or those os V and  
W, *Tab.* I. relating to the Wine os *Orleans,* under the Arti-  
cle ACETUM. I had as clear a View of the Figures reprei  
sented *i k l, m n o p, Rs 1* should have os half a Sheet os Paper  
rolled up at the two adjacent, or all the sour Comers, and re.,  
duced to an acute Angle *i,* or two acute Angles *m, o,* with

- an interjacent Plane, the' a Figure so exquisitely perfect, as  
that of these saline Particles, cannot be ascribed to Paper, or  
any thing of that Kind, however modelled: I could, alio,  
plainly and fully discern, not only the Angles, but the interja.:  
cent Cavity, which seemed to resemble the Cavity in a Pgper  
rolled up, in the manner before-mentioned.

These Experiments gave .me Occasion of considering whe-  
ther or no-these saline Atoms, existing in PlaneS, chaneed their  
Figure when pressed in the Mouth, and pasted from asplane to  
a Body furnished' with two acute Angles . and because they are  
hollow, by the- CurVity of their Angles, pricked the sensible

Parts of the Mouth, and lacerated them with their Edges, and  
so produced those uneasy Sensations on the Tongue and Palate,  
which we call an *Acid,* or the *Sense of an Acid.*

I placed some *Moselle* Wine in an open Vessel, and letting  
It stand in my Summer-room for some Days, I afterwards dis-  
Cerned swimming in it Multitudes of saline Figures, of the  
same Kind as those I had hesore observed in the Wine, Vinegar,  
- and *Sek,* with only this Difference, that in many of them I  
not only observed a Cavity and Thickness, but could clearly  
perceive, that they consisted os from seven to ten Scales, lying  
one upon another, which I took care to delineate at first my-  
self in a coarse manner, and afterwards had them delineated  
by a skilful Painter, as they were exposed to his View through  
a Microscope, and are represented *Tab.* I. *Fig. s.* I saw, also, -  
swimming saline Figures of different Sorts, from which again  
arose those half-form'd Figures, represented by the Figures  
in the Table under *t.* In the Wine of *Orleans,* I perceivd  
forne of these little Figures, but not in so great Numhers as in  
the *Moselle* Wine. I observed, also, some saline Partides,  
which were perforated by others, as in the Figures *u* ; and, he-  
sides these, 4 sew saline Planes, some os which had their Sides  
incurvated, or circumvolved, as you see in Figure *w.* There  
were, also, among them a sew, which had their shorter Sides,  
.as it were, gradually indented, as in the Figures under *x.* I  
took Notice, also, of a few, which made no more than half  
of the Figure *s, as you see* them under the Letter *y* in the  
Table, and a few others, which were fiat at their Extreinities,  
as you see under *z.* But what I highly wondered at was, that  
in the open Vessel Ieposited in my Summer-room, I could dis-  
cover none of the smallest of these littie Figures after four-and-  
twenty Hours; but aster another four-and-twenty Hours, **I**discerned saline Figuees, which were less than any before ob-  
served, and whose Position, on account of their extreme Mi-  
nuteness, I could not come to the Knowledge of, as they were  
besides, hidden under the Covert of some gross Matter in the  
Wine.

I took *Rheni/h* Wine, commonly called *Hochmar,* one Year  
old, well tasted and generous, before its Fermentation was  
quite Ceased, and placing it aside in an open Vestel, aster three  
Hours, I discovered in it the like saline Figures, which termi-  
nated at both Ends in an acute Angle, and had many of them  
an Eminence, in manner of a Back, or the Keel os a Boat  
. turned upwards, being in other Parts very pellucid. These you  
fee represented *Tab.* I. *Pig.* I. The same Figures I had before  
observed in the *French* Wine. But aster I had reposited the  
same Wine for two Days, I perceived some much larger Fi-  
gures, with different Circumferences, some having,two, others  
three or four, and others innumerable Circumferences, so close-  
sp united, that it was very difficult to determine how far these  
Circumferences extended, which were many of them so beauti-  
ful to the Eye, that nothing in the Sea, whether Coral, or  
Shells, though the fairest that can be seen, deserves to he com-  
pared with them ; these you see under Number 2. Among  
these Figures were Very many pellucid ones, which were destitute  
of any Visible Circumference, except a few, which consisted of  
various minute Figures, of the same Position with-those others.  
I discovered, also, Numhers os Figures, whose both Extremi-  
ties were Obtuse : The one Figure had more of a Plane, or was  
more Obtuse than another; others there were which had only one  
blunt, or obtuse End, as under Number 3. In another Place  
I saw 'swimming in the Wine saline Figures, which had not  
Only Circumferences, but were furnished with Steps or Fur-  
rows, as you see them represented under Number 4. Besides  
the Figures aforesaid, there was a great Number of lesser saline  
Figures, os different Sizes, and not only furnished with Peri-  
pheries, Or Circumferences, after the manner os the Figures  
just mentioned; but Constituted of various Forms, some of  
them exactly resembling a well-made Wine-hogshead, others a  
*PEenisu* Wine\* vessel, which the *Dutch* call *Rhiyns-wiyrrvoeder,*Others a long Vessel, which they call *Lange Aoelast,* as in Fi-  
gures 5. Some of them were of such Minuteness, that I was  
obliged to use the utmost Diligence to discover them; and  
when I had marked the Places, whence the more subtile Part  
of the Wine was almost exhaled, I, besides, observed lying Va-  
rious Kinds of ramous or branched Figures, some of which  
seemed to proceed from some (aline Figure; and, when I had  
attentively contemplated those ramous Figures, I found they  
consisted only of the most minute saline Figures connected to  
one another, and some of them very irregularly disposed, being  
often united by che EndS of them Branches to the largest saline  
Figures, in the manner, represented under Numhers 6, 7, 8,9.

In the Beginning of *Decembcr* 1684. I tried Experiments  
upon that Kind of *Rytenisu* Wine, which we call *Hochmar,* of  
the Growth of the Year I678. if we may believe our Wine-  
merchants, who import this Sort of Wine from *Germany,* after  
. I had made the Inspections into the like Wine, of which I  
have given an Account. In this Wine *I* discovered at first but

very few saline Particles ; but after I had kept the same Wine  
three or four Days in my Repository uncovered, I perceived a  
sar greater Number of saline Panicles, but in much less Abun-  
dance than I had before discovered in the same Wine, when  
but one Year old. I was Very well pleased, however, that I  
could observe Very distinctly, as I thought, most of the largest  
Particles to consist of a Multitude of minute ones, an hundred  
Of which I imagined, if I could have numhered them, might  
enter the Composition of one large Particle. These I have re-  
presented as well as I could. *Fig. Io. But,* aster further Con-  
fideration, and close Observations, I concluded, that the larger  
saline Particles were first concreted, and that afterwards, the  
lefler ones, which were big enough to come within my Cogni-  
zance, became united with the larger by Appulsion; fince no  
small Particles appeared in the Wine about these saline Parts,  
nor any thing like unto Salt, whereas in the rest of my Oh- .  
serVations (for I made a Dozen Experiments upon these Wines,  
neglecting the rest) I had found saline Particles almost of the  
same Magnitude, Very shining. Multitudes of small saline Par-  
tides lying near them. I discovered, also, sometimes a small  
saline Figure, which seemed to be no more than half the Figure  
mentioned, and is here delineated under Number ii. Near  
these were many remarkable small Figures, shining and pellucid,  
whose Apices, or Points, were not so acute as those of the  
.large Figures; they are represented under i2. I, also, saw  
some few saline Figures larger than the last-mentioned, which  
in their Middle contained another Figure, .No. I 3. Beyond  
these, in the same Place, appeared some small pellucid saline Fi-  
steres, whose Extremities were plane, (not pointed) No. I4. .  
There were, moreover, some very few small Figures, repre-  
senting the dry Sprags, or small Branches of Trees, as was be-  
fore observed in the same Wine but one Year old; which fa-  
mous Figures consisted of many minute saline Figures united,  
as in the other. These Experiments shewed me the Reason,  
not only why *Riteniso* Wine included in a large Vessel, filled  
full, and well stopped, will keep many Years without losing its  
Strength, but why, also, in Process of Time, it loses its *Rhe-  
nisu* or acidish Taste, and acquires a milder and sweetish one;  
which is, because the saline Particles in this Wine come to-  
gether, and are coagulated; and partly subside to the Bottom,  
partly adhere to the Sides of the Vessel; and these coagulated  
Parts we call the Tartar of Wine. Hence it follows, that the  
older the *REenisu* Wine is, the fewer saline Particles it con-  
tains. In *French* Wines the contrary happens, because **the**saline Particles, as sar as I have observed, in a full and well-  
closed Vessel, are less concentrated, especially in the Wines im-  
ported from *Bourdeaux,* for which Reason they never become  
milder or sweeter ; but in those Wines, which are imported  
from *Nantes,* the Salts are more congregated, tho' their Sweet-  
ness, however, goes off at the same time. ,

In *RienistsaNisae* sold for *Rhingow,* (tho' I understood after-  
wards, that it was only *Palatine)* Of the Growth of the Year  
I 683. and of a very grateful Taste, I observed at first Very  
few saline Figures ; but after I had set it aside in an open Vessel  
for four-and-twenty Hours, I discovered Multitudes os saline  
Figures acuminated about both EndS, as in No. I5. many of  
which had an oblique and transverse Eminence, others were  
Very pellucid. There was, also, so Vast and inconceivable a  
Number of saline Figures os the same Position, that they could  
by no means be observed by Help of that Microscope, through  
which all these Figures appeared of the same Size as you see  
them delineated. I, also, met with great Quantities of saline  
Figures, which appeared at first Sight, like handsome and well  
fabricatedWine-hogsheads; but, upon a more accurate inspection,  
**I** discovered that two of their Sides were incurvated, as under  
No. I6. From these Observations I learned, that the saline  
. Figures, which I had discovered in the preceding Wines, and  
which I said were like Wine-hogsheads, were os one and the  
fame Position with these Figures, and that I had not view'd  
them on the convolved Side, nor made so exquisite an Obser-  
vation of them, as I did of these. Besides these saline Figures,  
which I observed to be stat at one or both Ends, all the rest  
resembled the Figures, No. I 6, I 7. With these I saw small  
saline Figures, represented No. I5. with both their sharp or  
acute Ends rolled up, as in No. I7. I observed other saline  
Figures, which had only one Side incurvated, as No. I8. Some-  
times I took Notice of a small saline Figure, resembling a Py-  
ramid on a quadrilateral Base, or a Diamond cut in that Form,  
No. I 9. but there were so sew of these Figures, that some-  
times I could perceive no more than one or two in a Drop of  
Wine. With these I could sometimes perceive an oblong sa-  
line Figure, furnished in the Middle with another Figure, of  
the Form just mentioned, as you see represented, also. No. Ig.  
**I** met with the same Figures in other Wines, but did notjudge  
them worth recording. Besides these, I often met with saline  
Figures, whose Angles, or Apices, about the Contortion, or  
Incurvation, were not Closed, and winch had a Conspicuous

Aperture reaching lengthwise. No 20. tho\* many **others, which**were closer, seem'd only to have a Mark, distinguish’d by its  
Eminence, or Elevation. Sometimes I could, also, discern  
some little, long, and narrow Figures, as represented N° 2 I.  
About these last I began to exercise my Speculations, whether  
they were only the Rudiments, or Materials, os some larger  
Figure to he formed, the Cause of whose Imperfection con-  
fisted only in the want of sufficient Matter to complete those  
saline Particles; for I faw but a few of them swimming in the  
Wine, but the greatest Part lay at the Bottom, when the Wine  
**was in** part evaporated : Besides all the saline Particles hesore-  
mentioned, I discovered, in all the Kinds of Wine, an infinite  
Number of minute and delicate Particles, to which I could  
ascrihe no other Figure than that of Globules; and their Num-  
bers were so great, as to make one helieve, that the whole Sub-  
stance of the Wine, except the saline Atoms, consisted of  
Globules ; and I am persuaded, that they contribute, chiefly, to  
the Sweetness of the Wine.

I drew a small Quantity of that *RJseniJh-wine* which our  
People call *Risu-hawtjver Cavelwijn,* from a full Hogshead,  
which had fermented almost during the whole Summer, and  
had been drawn off the Lees for some Weeks, retaining a good  
laudable Taste: I placed this Wine in an open Vestel, in four  
different Places of my Summer-room, and in little less than  
an Hour discovered in it Multitudes of saline Figures; but,  
aster almost sixteen Hours, I discerned many Figures of a great  
Thickness, having a Cavity like a Cockboat, fuch aS I had  
hesore related that I had seen in Vinegar, [see **ACETUMJ and**are here represented N6 22. I could observe, also, different  
Sorts of saline Figures, which, about their Centre, represented  
other small, darkish, and oblong Figures, some of which had  
two, others three, and others four Circumferences, N° 23,  
Others, again, were marked with a Line, or Seam, thro' **the**Centre, N° 24. I saw, besides, several saline Figures, with only  
one Apex, the other End being obtuse; the Cause of winch  
seemed to be, that their constituent Particles were not yet com-  
plete, as we said before, and, consequently, neither the Figures  
themselves of this Sort, which were only pellucid, and are here  
represented No 25. I perceived, also, a sew saline Figures, re-  
sembling those under N° 26. And when I inspected the thinner  
Parts of the Wine, which had almost evaporated, I discovered  
innumerable Multitudes of saline Particles, most of winch had  
two acute Angles, but were so extremely minute, that I can-  
not but think ten Millions os them, in Conjunction, to he less  
than a Grain of Sand. I, also, perceived other Figures swim-  
ming about, in the Shape of a well-fabricated Wine-hogshead,  
as I mentioned before; but tho' J examined these last saline  
Particles with all the Accuracy I was capable of, I could never  
distinguish them by Parts, or Lines ; they were, also, thinner  
than all the rest, and pellucid : Lsaw, afterwards, many oblong,  
quadrilateral, saline Particles, which were, also, thin, in **the**highest Degree, and pellucid, aS well as extremely minute;  
and are here represented No2g. but a littie too big; the Rea-  
son of which was, that, with the same Microscope, which di-  
stinctly exhibited to View the Figures under No 22, 23,24,25,  
26, and 28. I could not discover those which you see under N°  
27. 29. and .this is the Cause that the Proportion could not **be**’observed. I perceived, also, about the thinner Parts *of* **the**Wine, various ramous saline Figures, which were again com-  
posed of other saline Figures, so extremely minute, that I di-  
stinguish'd the Shapes of but very few of them ; others,'of **the**like ramous Kind, consisted of such irregular Figures, that I  
. could distinguish them by no Position.

I made the same Experiments, aS before, upon another Sort  
of Wine, which our People call *Ceronce-rtijn*; and I observed  
most os its saline Figures to agree with those represented under  
NO 3O. some of them appearing, aS it were, convolved, others  
’ very thin and pellucid ; others, again, when the Wine had been  
suffered to rest for some time, were become so thick, as to  
shew a darkish or brownish Periphery round about, as in *Fig.*N° 3I. others there were which made but half N° 3o, 3i. and  
are represented N° 32. I began, also, to examine that Kind of  
French-wine which we call *Coteau,* and discovered in it Mul-  
titudes of saline Figures, like those N° 3o, 3I, 32. hesides  
others whose Sides were convolved, as N° 33. and others like  
Planes, whose longest Sides were right Lines, and both their

Extremities round, NO 34. some, also, had one acute Angle, '  
as N° 35. I discerned, also, many saline Figures, resembling,  
in a very lively manner, a flat-bottom.’d Boat turn'd over, NQ -  
36. in others, of the same Structure, there appear'd, aS it were,  
a Cavern ; near the foremention'd I could discern various mi-  
nute longish Figures, as NQ 37. which I supposed, had there  
been more Matter, would have assumed the Figure N° 34.

. Besides these, I saw some saline Figures in the Form of N° 38.

I made a full Examination and Inspection, also, into that  
Sort of French-wine which our People call *Tcufecan-wijn,*which was rich, and, at the same time, very sweet, tho’ many

among us believe the Sweetness of this Wine, which itac-  
quires after four Years, not to he natural, but artificial, and  
procured by means of Sulphur, or the Wine called *Hogeland,*or Honey, or Syrup of Sugarcandy. I observed in this Wine  
all the saline Figures which! had discovered in the Wine called  
*Coteau,* bnt in this of *Toufaan* there were not so many saline  
Panicles as in the other ; and there was, besides, some Differ-  
ence, in that I could discern in this Wine of *Toufaan,* at several  
Times, saline Figures cut, as it were, into Steps, or Degrees,  
as you see represented N° 39.

I took, for further Examination, some *Toufaan* Wine, ac-  
counted the purest, and observed in it all the saline Figures  
which I said I had discovered in the *Coteau* and the *Tous.aan;*but I judged the Number of the Figures contained in this last,  
called the *acidise Tous.aan,* to he twenty-five times as great as  
those in the sweet *Tous.aan,* but lesser: Besides, I could see in  
this last, or acidish *Toufaan,* the saline Figures floating, after a  
few Hours; but in the sweet *Toufaan* the saline Particles were  
flow in Appearance.

In the Wine called *Citerne* I saw all the saline Figures which  
I had observed in the *Toufaan* and the *Coteau,* and those Very,  
numerous.

I made Inspections, also, into *Hogeland* Wine, of the rich-  
**est** Sort, and sound but very sew Figures floating in it, the' **I**had set it aside sor three Days and Nights; but these Figures  
were much larger than those in the *Coteau* and the sweet *Tou..  
scan’,* and resembled those under N° 3o, 3I, 33, 36.

*I* made an Infusion of Tartar of Rhenish-wine, pulverized in  
pure Water; and, when the Water was become limpid, I ob-  
served in it many of the saline Figures, winch I said I had dis-  
covered in Wine-vinegar; among them some Very clear Figures  
armed with two acute Angles, aS in No 4o. but most of them  
were irregular ; the Reason os which, in my Opinion, was, the  
want of a Mixture of sweet or oily Matter, and hecause the  
saline Parts, especially where was littie or no Water, separated  
and fell off on all Sides.

After this, I took under Examination some Tartar, as it was  
said to be, of French-wine, in the same manner aS was de-  
scribed before ; and discoVered in it, also, some saline Figures,  
which agreed with those of the Wine ; but the other Figures  
were even more irregular than those observed in rhe Rhenish-  
**wine.**

I took some of the purest Wine of *Orleans,* and with every  
Drop, as near as I could conjecture, mixed a Bit os Crabs-eye,  
of the Thickness of the Back of a Knife, because the Powder  
os the same hinders a clear View, when put in the Wine :  
After three Hours I examined it, and could see nothing at all,  
as I may say, in the Wine, which had any Resemblance to such  
saline Figures as I had seen in the Wine which had no Crabs-  
ayes mixed with .it: I perceived, also, innumerable saline Par-  
ticles with an oblong quadrangular Base, and the Sides ascend-  
ing pyramidically, and ending in a kind of Ridge, or Back ;  
in others I could only see a plain Figure. See both represented .  
N9 4I. Some were Hexahedra, or Figures with fix Sides,  
N^ 42. There werejalso. Various saline Figures,which had two  
oblique Sides, N° 43. and a few quadrilateral Figures, con-  
taining within them a smaller quadrilateral one, as represented  
N° 44. but others of these Figures had Very short, and, in  
some measure, irregular Sides: I, also, happened on some sa-  
line Particles of the Figure NQ 45. in these last Particles I  
could perceive no Gibbosity, or Eminence; which was owing,  
**I** suppose, to their extreme Shortness ; and when I took a View  
- of a Bit of the Crabs-eyes, I observed in, perhaps, fifty Places,  
a Multitude of flender Tubes, proceeding, or formed, as it  
were, out of an Angle, or Apex, shining like Crystal, and one  
longer than another, tho' all nearly os the same Thickness,  
N° 46.

In the same Quantity of Wine I infused white Chalk, and  
disposed it at four Places together in my Summer-room . When  
I had stayed about a Quarter of an Hour, I inspected the Wine,  
and observed in it a vast Multitude of the above-mentioned sa-  
line Figures, but much inferior in Bigness/to those in the Wine  
with the CrabS.eyes : .But when I had left the Wine with **the**Chalk sor twelve or fourteen Hours, I found all the aforesaid  
saline Figures not only larges, but I perceived in various Places  
a great Multitude os littie Tubes, emerging, as it were, from a  
Point of the Chalk, and like those represented NR 46. but  
larger, and one thicker than another: And aS the Wine which  
had contained the -Crabs-eyes was covered with a Sort of Cu-  
ticle, the Cause of which I supposed to he a Kind of Coagu-  
lation of the Sweetness of the Wine, the contrary happened in  
the Wine with the Chalk, which was fine, and so continued.

Some time aster I insused in the Wine before-mentioned,  
commonly called\* *Riyn-kawer, Kavel-vjifoe,* some Bits of Crabs-  
**eyes,** and aster twelve or fifteen Minutes I sound in it some **few**faline Figures: But when I had set this Wine stand for some  
Hours, I observed in it not onlv a vast Nrrnnher nf all the **saline**

Figures represented under No 4I, 42, 43, 44,45, 46. but per-  
ceived, also, that the Figures which offered themselves to my  
first Inspection were increased in Magnitude, tho' I could dis-  
cern none of those Figures which are found in the Wine in  
winch no Crabs-eyes are infused.

Now fince it so plainly appears, from every one of thesis Ex-  
periments, that none os.the before-mentioned Rhenish or French  
Wines produces any saline Figures which have any Affinity or  
Similitude to the Salt os the Gout commonly called *Calx* ; we  
may, with more Safety, and greater Certainty, affirm, that the  
Salt of Wine is not instrumental in generating the Gout; And  
the same is affirmed by daily Experience. For we may. every-  
where observe Persons, who are great Drinkers of French and  
Rhenish Wines, and yet are never infested with the Gout.  
On-the other Hand, we *see. many* who never tasted either  
French or Rhenish Wine, all their Lives, miserably afflicted  
with arthritic Painsand Disorders.. From this Coagulation, or  
Transmutation os saline Figures in Wine, , we, also, confirm  
those Arguments by which we would prove, that, in a well-  
constituted Body, none .os the saline Particles os Wine pene-  
trate into the Mass os Blood, especially since we hold, and are  
well assured, that our Stomach and Intestines were made for.no  
other Ends than, in the first Place, for Contrition of the Ali-  
ments : Secondly, For Coagulation of the grosser Parts : And,  
thirdly, -For the Distribution os the most subtil Part of the Ali-  
ments, after they have undergone the Operations of Contrition  
and Coagulation, into all Parts, for the common Nourishment  
of the Body.

’ And tho' I am sensible that Men of Judgment and Learn-  
ing are more inclined to embrace and approve a single, good,  
and useful Experiment, than fond of applauding a whole Vo-  
lume of well-written Speculations, or Ratiocinations, because.  
these last are the work of the Brain alone; yet I have pre-  
sumed .frequently to interpose my own Thoughts and Reason-  
ings on the Subject, from a Persuasion, if I might have Li-  
berty to judge, that I could draw more Light from my own  
Observations, than it was possible for those, who had never seen  
or heard of such Experiments or Matters. *Leeuwenhoeck.  
Oper.*

**VINUM AMARUM PRO OENoPOLIs.**

*Bittcr Wine for Vintncrs.*

Take Tops of Centory, twelve Handfuls ; Gentian-root  
sliced, one Pound ; Juniper-herries, one. Pound , and an  
half; SeVil Orange outer Peeis,.and thein Juice, Number  
twelve; Lemon-peels, and Juice, Number fix.: Steep in  
a Bag, for fourteen or twenty Days, in white Port Wine,  
twenty Gallons; Canary, four Gallons.

Our common Taverns do not make a Bitter by much so  
good as this; and nothing can be more grateful, wholsome, or  
easier made. But this is to be said, in general, against that  
vWhetting, as it is usually called, in a Morning, which some  
accustom themselves th; for tho' one Glass, when the Sto-  
mach has, by Debauch, or any other Accident.from Distemper,  
- been pall'd, or weaken'd, is of Service, by warming its Fibres,  
. and giving them a due Tensity, In winch, principally, consists a  
-good Appetite, and Digestion; yet, when the .Stomach is, per-  
‘ haps, already too warm, from a high Diet, and frequent Tip-  
pling, this Practice helps to destroy the true Sense and Springy-  
' ness of the Stomach, and, in Process of Time, will disable it  
- from doing its proper Offices. After a great Debauch, indeed,  
~ there is somewhat, to be said in Favour of. the *Engli/h* Proverb,  
*i'A Hair of the some Dog,-* because the undigested Remains at  
. the Stomach, and the Quantity of siimy Juice which drains  
‘-into- it, during Sleep in the Nights cannot hetter be got off,  
- than by raising it with a small Glass or two next Morning ; but  
- that ought not to be carried any farther.

**VINUM ARTHRITICUM.**

*Wine against the Gout.*

Take .Sarsaparilla; and Guaiacurn, os each an Ounce;  
Mifletoe of the Oak, six Drams; Germander, Ground

- Pine, and '.dried - Sage,; of each: three Ounces ; Cowflip-  
flowers. Flowers *os* Rosemary,; and of Lilies of the Valley,  
of each half an; Ounce; St. John's-wort, fix Drams;  
-White-wine, five Quarts. . .

These are ordered to stand in Maceration three or sour Days,  
and then the Wine Io be strained for Use, and two Ounces  
- drank twice a Day, for.forty Days together. Its Tide denotes  
its principal Intention to he against the .Gout; besides which, it  
is, also, recommended for all nervous Weaknesses, and Decays  
from .Cold pituitous Humours, and the Rheums of Age, and  
said to warm and invigorate the whole nervous System.

**VINUM ARTHRITICUM ALTERUM.**

*Another Wine against the Gout.*

Take Guaiacum, two Ounces ; yellow Sanders, one Ounce;  
Cinnamon, *Spanish* Angelica-root, *Calamus Aromaticus,*os each two Drams; the outer Peels of Oranges dried,  
one Ounce ; Flowers os Rosemary, Lavender, and Tops  
of Marjoram, of each half an Ounce; Germander, Sage,  
and Ground-pine, picked from all the Stalks, and dried,,  
os each two Ounces ; the lesser Cardamoms, two Drains:  
Bruise all into a gross Powder, and infuse in three Gallons  
of Mountain-wine, sor two or three Weeks; and then  
strain, and hettie close, for Use.

This is art admirable warm Restorative in all nervous Decays,  
and cannot miss of Success, is continued for some time: For about  
two Ounces, or a common Wine-glass, taken two or three  
times a Day, will raise the most languishing Constitution, and  
preserve it against all Disorders of the Head and Joints, arising  
from nervous Decays. In most hydropic Habits, also, Medi-  
cineS of this Kind are of great Service, as they not only help  
to absorb and evacuate all superfluous Humidities, but, also, to  
fortify the Solids, so aS to prevent, by a brisk Circulation and  
Digestion, their future Increase.

***. I .***

**VINUM ARTHRITICUM PURGANS.**

*A purging Wine, against the Gout.*

Take China, and Sarsaparilla, of each two Ounces; Poly-  
pody, three Ounces; Rhubarb, and Sena, os each one  
Ounce; Hog-lice, six Drams.. Cloves, one Dram;  
White-wine, three Quarts: Infuse, arid strain, *sea.*

, This is not a Very judicious Prescription : For the China and  
Sarsaparilla are of no Use in it, whatsoever their Virtues may  
be elsewhere, which are much suspected; because the cathartic  
Ingredients carry them downwards without having any effect,  
the Boweis not heing a proper Scene of Action sor Alteratives,  
and Things of that Trine.

**VINUM ARTHRITICUM PURGANS ALTERUM.**

*Another purging wine against the Gout.*

TakeTurpeth, Herrnodactyls, of each two Ounces; Jalap,  
and black Hellebore, of each one Ounce; Cinnamon,  
two Drams; Ginger, half an Ounce ; ‘Lavender.flowers.  
One Ounce: Infuse in two Quans os strong White-wine,  
in a Vessel well stopped for fourteen Days; then strain for  
Use.

***a***

. This is a most pleasant End excellent Purge for all Distempers  
That have their Seat in the remote Parts, and nervous Colis.  
It is best . to be taken over Night, in such small Doses as will  
not work off before'Morning; because all of this Intention  
sought to pass into the Blood, and exert themselves much be-  
jyond the first Passages, else they can do littie good : By steep-  
.ing, therefore, upon them, they hetter soak thro' the Lsscteals,  
.and, as it were, transpire into the most minute Recesses, where  
. they "are most fitted for Operation. The Patient may hegin  
. with three or four Spoonfuls, and increase the Quantity at Dis- .  
- cretion; but it ought to he often repeated: For the Matter  
to be worked upon hereby is too remote, arid closely lodged, to

’ give way to a little Force: And a frequent Repetition hereof  
cannot but greatiy out off, as well as take Away the Supply of  
those Humours which ledge upon the. Joints, and do so much  
Mischief. So that, with Care, that dreadful Affliction, the  
Gout, may herewith be, in a great measure, kept off. And,  
. in these Cafes, Medicines of this Intention operate with much  
more Efficacy and Certainty upon the destined Humours, than

- when they are given in dry Forms; hecause the Subtiltvosthe  
Menstruum, by which their. Virtues are extracted, conduces  
. prod igiou fly to conveysthem to the proper Scene os Action,  
which they could never so well arrive at by any other Ma-  
nagement.

**VINUM BENEDICTUM.**

*The Blessed wine..*

Take of *Crocus Metallorum,* one Ounce; Mace, one  
Dram; Canary, one Pint and an half : Let them stand  
several Days in Infusion, and pour oft the Wine, as it is  
. used.

This has been a celebrated Emetic, but is now almost out of  
Ufe, for its Roughness. Its Dose is from two Drama m one  
Ounce. Is its Use is at all justifiable, it is in apoplectic Cafes,  
where some Violence is wanting, and the Shock upon tho Nerves

cannot be too great ; and *for* **such** Purposes it is **yet somewhat**retained in the present Practice.

VINUM CHALYEEATUM.

*Steel wine.*

- Take Filings-of Steel, one Ounce; Saffron, in Powder,  
two Drams; Mountain-wine, one Pint : Let them stand  
In Infusion three Days; frequentiy shaking them, and then  
filtre and keep for Use.

This is an' admirably good Medicine in the Green Sickness,  
where ChalybeateS are proper; it, also, wonderfully conduces,  
with Bitters, to remove all ill Habits that proceed from ob-  
structed Viscera ; and nothing is preferable to it in the Jaun-  
dice. It may be taken from two to four Ounces, once or  
twice a Day, when the Stomach is most empty: And the more  
Exercise is used with it, the more Good will it do.

*Anethcr* STEEL WINE.

Take of the Filings of Iron, eight Ounces; Roots of Eryn-  
go. Elecampane, of each one Ounce and an half; yellow  
Sanders, one Ounce; Raspings of Ivory, red Coral, in  
Powder, of each fix Drams; Cloves, Macc, Cinnamon,  
Ginger, of each three Drams; Ceterach, Flowers of  
Rosemary, of Broom, Epithymuth, of each -two Pugiis ;

. White-wine, three Quarts: Digest all together six or eight  
Days, and then filtre *for* Use.

It is good in all Uterine Obstructions; aS, also, in Cachexies,  
and Foulnesses of the Liver and Spleen ; but aS, at the heft, it  
is no elegant Composition ; we shall therefore, in its room,  
substitute the following *Steel Wine,* which is, also, easier made.

Take Filings of Steel, four Ounces-; Rue, Penyroyal, of  
each two Handsuis ; Peony, -and Caffummunair Roots,  
os each one Ounce ; Saffron, Two Drams Infuse in two  
Quarts of Sherry, for fourteen Days, ..and then filter for  
**Use. .**

This makes not an irksome Remedy, 'sartherthan what the  
rusty Taste os the Steel will give it; and it wonderfully pro-  
motes the menstrual Discharges ; and os all that obstructs and  
raises Disorders in the Womb: For which Reason many ’Kinds  
os Fits and Convulsions are removed by it; - and after a con-  
tinued Use of it fome time, it. so cleanses the Organs of Gene-  
ration, and fortifies the Tone of-the Blond, that it wonder-  
fully disposes to Conception; but then it is by all aneanSTo be  
left off, lest it destroys what itthas been so instrumental in pro-  
curing. The Quantity of two or three Ounces, twice every  
Day, is sufficient,'if'continued some'Weeks.

. - V1NUM CHALYBEATUM RESTAURATIVUM. . .  
*Restorative, Steel IVine.*

Take clean Filings of Needles,' two Ounces ; the Juice of  
eight four Oranges: Let them stand twenty-four Hours,  
then add White-wine,, two Quarts; Cinnamon,.half an  
Ounce; Cloves, two Drains ; Mace,, four Scruples; Af-  
ter some Days Digestion cold, strain, and filtre for **Use.**

- This is a. very serviceable Composition, for many Purposes,  
. and will infallibly cure a Green Sickness, or any Tendency of  
the Constitution that Way; which is-manifesta from, a pale  
Complexion, -Debility, or Listlessness to Action, and short  
Breath. In hypochondriacal Melancholy, and all Affections of  
the Spleen, it will do much good ; and, aster Fevers, or any  
Distemper that spoils the Juices, this will gready again restore  
them to their due Warmth and Vigour; and is much' better  
than any os the mineral Steep Waters, how much soever they  
-stand recommended in all such Cases : Fot.the Spices, in this,  
warm and strengthen the Fibres os the Stomach, - which other-  
wise would not lo well receive and bear the Twitches and Cor-  
rugations os the Iron, without Ejectment by Vomiting. It  
may be given from two to three Ounces, every Morning and  
Afternoon, when the Stomach is most empty.

VINUM CHALYBEATUM RESTAURATIvUM ALTERUM.

*Another Restorative Steel- Wine.*

Take Filings os Iron, two Ounces squeeze upon them the  
Juice os -three or sour *Seville* Oranges, and one. Lemon ;  
Aster twenty-sour Hours standing, together, , and'being,  
sometimes stirred, pour upon\*the Mixture, in a Glass Bot-  
tle, two Quarts os White *Pori* Wine, and one Pint os  
*Canary* ; in which’Infuse the Ingredients of\* the. Viper-  
wine, in proper Proportion, or so much of the Viper-'

wine itfelf, without the Sweets. After fourteen Days  
strain for Use.

This is a noble Medicine to recruit with, after the Constitu-  
tion has been almost torn to-pieces with the Fury of al Fever,  
or any acute Diseases ; and particularly for Women who have  
much suffered in Child-bed, and are reduced almost to a Con-  
sumption: For this will not only promote the necessary Cleans-  
ings, but, also, raise the Blood with new Warmth and Nou-  
rishment. Tinis indeed is an expensive Medicine ; but; then, it  
may he considered; that its wonderful Efficacy makes some  
Amends ; for two Ounces, twice in a Day, will certainly, in  
**a** littie time, be attended with Amendment, in the most lan-  
guishing Circumstances.

**.. VINUM ENULATUM.**

*Elecampane Wine.*

Take green Elecampane-root, white Sugar, and Currants  
cut small, of each four Ounces; Infuse them fourteen.  
Days cold, in two Quarts of White *Port.*

This.is an easy Liquor both to make and take, and will do  
Service in such who have weak LungS, winch are often subject  
**to he** stuffed with-Phlegm, which it deterges, and prevents Ul-  
cerations, and such injuries as would bring on a Consumption.  
All asthmatic Persons, therefore, would do well to use this in  
Plenty,-especially in the Winter-time, when the external .Cold  
lessening the Quantity of. perspirable Matter, by the Pores of  
the Skin, causes a much greater Pressure of the Fluids .upon the  
Viscera, of which the LungS have their Share, and, therefore,  
stand in need of such gentie Fortifiers and Cleansers aS this  
makes. The Elicampane has, also, that detersive Power by  
which it keeps open other Viscera; whence they better perform  
-their.Offices,Sand leave dess. Force.ro? protrude upon .the Lungs,  
**jt** is therefore of Use. in . all Cachexies, .and Tendencies to-  
-wards.a Dropsy. . Some, also, .will have there to he a Pro-  
perty in.this of.destroyingiWorms. Drink a.Glassof.it twice  
a Day.

**VINUM dHIEPOCRAdTICUM. SeeiCLARETUM.**

**'VINUM HYDROPICUM.**

*Wine against the Dr apse.*

Take blneFlower-de-Luce Root, one Ounce ; Elecampane,  
.and Squills .prepared, of each half.an.Ounce;. Horehound,  
one Handful; .Bark of .Elder-roots, and Dwatf-elder, of  
each one Ounce; Sena, one Ounce and an half; Agaric,  
:two Drams; Ginger, oneDram; White-wine, two Quarts:  
Infuse.all for fourteen Days, and then strain for /Use.

lOr-thusf

Take Ashes of Broom, and juniper, of each one Ounce;  
*RJjenisu* Wine, three Pints: Mix, and make a Lixivium ;  
to which add, blue-Rower-dec Luce Roots, one Ounce  
and an half; the inner Bark of Elder-root, and Dwarf,  
elder, of each one Ounce "Bark of Bitter-sweet, half  
- .an Ounce; Rhubarb,: two. Drams;’Mechoacan,, half an  
. .Ounce; Sena,.one.Ounce;r..Caratyay-seedS,.six Drams;  
. .. , .Bark of Sassafras, fand Winteri Cinnamon, of each four

Scruples :, Infuse-warm for twelveNours; then strain, and  
- : χ add white Sugar, four Ounces ; Damask Rose-leaves, two

Handfuls : After due Infusion, strain again **ior.Use.**

-Tf the Sena be lest out, Tris, Shatter-Diuretic; for the less  
it goes off by Stool, the more will it get.,into the Blood, and  
- discharge its serous Paxtshy Urine, - Jtis therefore designed for  
hydropic Constitutions, and will dojService where .there is a  
Tendency that Way, if begun with in time, and closely sol-  
lowed. The Dose as three Ounces, every. Morning fasting.

**fVINUM- IcTERIoUM.**

*s JVinesedguliinst. the sisiaundice. -A . J*

Take‘Turmeric,'m gross Powder, two ‘Ounces; . Saffron,  
i.two Scruples ; ’ Cochineal, sour Scruples; Millepedes, N°  
320». Canary,. one Quart. '-Infuse all for six or seven

L'Days ; then strain for Use. ss'E. '

..It is very- good, sor .what its Title, expresses, and may be.  
‘ drank.two Ounces,' three or four times in a Day ; but the sol-  
lowing we recommend as. the. most efficacious,

**~ ' ' VINUM' MILLEPEDUM,**

. . . .::r*:.:r:Ticg:stideslVinsu .*

Take Hog-lice; half a Pound T-Put- them- alive into one  
Quart of White *Port* Wine ; and aster some Days Insu-

Hon, strain and press our very hard; Theji put Saffron,  
two Drams ; Salt of Steel,, one Dram ; and Salt of Am-'  
her, two Scruples; and after three or four Days strain,  
. and filtre for Usta i

This is an admirable Medicine against the Jaundice, Dropsy,  
or any cachectic Habit: It greatly deterges all the Viscera, and.  
throws off a great deal os superfluous Humours by Urine. It  
may be given twice a Day, two Ounces at a time.

*Another* **VINUM MILLEPEDUM..**

Take four Ounces, or a Quarter of a Pint of Millepedes  
alive: Infuse them in one Quart of White-wine, with  
one Dram of *Englifh* Saffron; shake them often, and let  
them stand two .or three Weeks, then filtre the Wine for

’Use. ;

It is an admirable Cleanser of all the Viscera; and gives  
Place to nothing in a Jaundice; or any Obstructions os’ the  
Kidneys, or Urinary Passages: Which makes it a great Pity,  
that it is not more in Use; for there is hardly any chronic  
Distemper wherein it will not do Service ; and even in sero-  
phulous and strumous Swellings, a Course Of it will greatly  
waste them, if not quite carry them away . And in DestuxionS  
of Rheum upon the Eyes, it will do.Wonders, by turning  
downwards those hot Salts, by their natural Outlets, the Kid-  
neys, .. which had forced their Way through the Glands about  
the EVes. It may be given from half an Ounce to two Ounces  
in a Doses

**VINUM MIRABILE.**

*The IPorderful Wine.*

Take Cloves, Mace, Nutmegs, Cubebs, Cardamoms, Ga-  
langals. Cochineal, Saffron, of each one Dram: Infuse  
in one Quart of *Canary,* and Spirit os Cinnamon, sour  
Ounces, for fourteen Days; then strain for Use.

This makes a better Cordial than the *Aqua Mirabilis* of the  
College, without Distillation ; which will yet be much higher,  
if Ambergrife.or Mush .be added. A Dram of it now-and-  
then, in moist cold Constitutions, is of good Service; for it  
warms, and prevents the Blood from running into those RheumS,  
and piturtous Juices, which stuff up the principal Parts of the  
Machine, and obstruct them in their Offices; occasioning Le-  
thargies, Apoplexies, Palsies, Rheumatisms, and all that Train  
winch are the frequent Attendants upon a declining Age, when  
the Vigour of Youth hegins to wear off.. But in choleric and  
sanguine Constitutions, such Cardiacs as these are highly to be  
Condemned, because they inflame the Blood, and do much  
Mischief that way; the contrary Regmen, such aS Acids and  
Diluters, being there more necessary. .

**VINUM PECTORALE.**

*Pectoral Wine.*

Take Juice of Liquorice, one Ounce; Saffron, one Scru-  
ple; Seeds of Coriander, Caraway, Anise, of each two  
Drams; Salt of Tartar, half an Ounce; Penyroyal, and  
Hyssop-waters, of each four Ounces; *Canary,* one Quart:  
Let them all digest cold for some Days : Then strain for  
- We. ...

This assists in Expectoration, and helps to deterge and cleanse  
- the Glands of the Bronchia, and neighbouring Parts: This  
-may be drank two or three times a Day, or almost at Plea-  
sure: Warm is the best.

**VINUM SCELOTYRBICUM.**

*. Wine against the Scurvy.*

Take Sorrel, Brook-lime, and Water-creffes, Garden Scut-  
vy-grass, of each three Handsuis; Roots of Elecampane,  
blue Flower-de-Luce, Horse-radish, of each one Ounce  
and an half; Seeds of ScurVy-grass, one Ounce; White-  
wine, two Quarts: Let all digest two Days together, and  
then press out hard for Settling and Use-

A Wine Glass of it may bo drank twice a Day, for some  
Weeks together, and will do good in any scorbutic Disposition:  
These kind of Medicinos, used in the Spring, may be a Means  
to prevent many from falling into Fevers in the Summer-time,  
because they rince the principal Emunctories, and wash off such  
beginning Obstructions, as lay a Foundation for Fevers.

**VINUM SCILLITICUM. See ScILLA, '**

**' . ' VINUM ScoRBUTICUM.**

*. Wine against - the Scurvy.*

Take Garden Scurvy-grass (gathered dry and unbnnsed) one  
Handful; Horse-radish Root scraped, half an Ounce;  
Winters-bark, grossly powder'd, two Drams; Arurn-wa-  
ter, and White-wine, of each one Pint : Infuse them cold  
for three Days. .

The Whole makes a warm biting Medicine, and a good An-  
tiscorbutic : It helps to dissolve flay and Viscid Humours, which  
entangle the Salts, and stick with them in the secretory Ori-  
fices, whereby they are eroded; especially the small ones upon  
the Skin. It quickens the. Motions of the Fluids, and ρ«μό.  
motes the thinner Secretion; whence, in Dropsies, and all  
Cachexies from sluggish watry Humours, it will be of good  
Service, . It may be drank at Discretion.

**VINUM STOMACHICUM.**

*Stomach Wtne.*

Take Roots of *Virginia* Snakeweed, and Gentian, of each  
three Drams; Galangal, Cloves, Cubebs, Mace, Nut-  
megs. Saffron, of each one Dram; Cochineal, half a  
Dram ; *Canary,* three Pints: Infuse for some Days, and  
then strain for Use.

This is a warm Composition, and may be of Service to cold  
Stomache, and such aS are troubled with Wind and Flatulencies:  
But it is too hot son many,- and will he subject to breed Choles,  
and adust Humours; wherefore we prefer the following Sto-  
mach Wine.

Take of Gentian-root, half an Ounce, Galangal, Cala-  
mus Aromaticus, *Spanish* Angelica-root, os each two  
Drams; Centory-topS, one Ounce; the outer Peel of  
three *Seville* Oranges, with their Juice; Saffron, one  
Dram : Infuse in two Quarts os Sherry for fourteen Days,  
shaking the V effel often; then strain and filtre for Use.

This is a most grateful Stomachic, and greatly mends a bad  
Appetite: It is a wonderful Help to. cold Constitutions,, and  
such as are inclining to Dropsies and Cachexies from Corpu-  
lency. The acid Juice of the Oranges mightily takes off both  
the Heat and Taste of the Bitters'; and the Whole is worth  
every one's keeping in Readiness by them, to use upon Occa-  
sion, in any sudden Disorders of the Stomach, from Intempe-  
rance, or any other Cause. It may he drank twice dr three  
times a Day: When the Stomach is most empty it is the best.

**VINUM VIPERINUM.**

*Viper fpiine.*

Take Of dried Vipers, cut into Pieces, N° six: Digest them  
three Days, with a gentie Heat, in one Quart of *Canary,*and then strain out the Wine for Use.

**.whether VINUM VIPERINUM.**

Take live Female Vipers in the Spring-time, No six: Put  
them alive into three Quarts of *Canary.,* and let them  
stand close stops, without any Heat, for six Months.

It is a wonderful Restorative, and greatiy invigorates the  
whole Constitution, so aS to provoke much to Venery, aS well  
as other Actions of Vigour; bur it much more contributes to  
this latter Purpose, if it he warmed with some Aromatics,  
especially the Sweets, aS Muik and Amhergrise. It is almost  
an infallible Remedy in cutaneous eruptions, and even in a  
confirmed Leprosy;

*Another* **VIpER WINE.**

Take Vipers, NQ twelve; sine picked Flowers of Lavender,  
and Rosemary, green, of each four Ounces; six Nut-  
inegs; Satyrion.root, half a Pound, sliced small; Gum-

Benjamin, and Storax, of each two Ounces; Mush, and  
- Amhergrise, os each half a Dram: Put all together, the

Vipers alive, and the rest as fresh aS can be got, into six  
Quarts of *Canary*; and aster three or four Months Mace-  
ration, and sometimes in-the Warmth of the Sun, but  
close covered Strain the Wine, and. set it fettle fine,  
which decant for Use.

This is, perhaps, as stimulating a Restorative aS Medicine  
can produce; and, in the last Decs,\S of Lise, will still supply  
the Vital Lamp with some Recruits. It is an admirable Re-  
medy for those who have been almost wore out with Venereal

Engagements, especially if their Pleasures have been purchased  
at the Expence of a sew Salivations, or a frequent Ufe of  
Mercurial Medicines ; and it will revive any Constitution that  
is not quite mouldered into Rottenness. But they much best  
deserve such a Restorative, who by acute Diseases, as malignant  
Fevers, Small Pox, or the like, have been so broke, or shat-  
tered, in their Constitutions, as hardly to be within a Possibi-  
lity os Recovery I Tor in such, it will to Admiration, repair  
the decay’d Juices, and fill again the Veins with a warm, ge-  
nerous, nutritive Blood. In serophulous Habits, also, which  
are frequently leaning towards Consumptions, it will do great  
Service. And where youngPersons are not so early happy in their  
conjugal Embraces as some wish to he, and it be suspected from  
a Coldness, or Insufficiency upon that Account on either Side,  
rhe Use os this cannot sail to render their intercourse prolific :  
But the Usc os it is warily to be indulged, lest with it be  
kindled an Heat,-which reasonable Coition cannot affwage.  
And let such, also, who indulge themselves too lavishly in thofe  
Enjoyments, be Careful how they prompt with such Helps, lest  
they run off their Strength and Life too precipitately ; for the  
best Constitutions in the World wear out, and fink under the  
frequent Repetition of such Profusion ; aS the frequent strain-  
ing any elastic Body whatsoever will weaken more and more  
-its Spring, till it is quite lost, notwithstanding all the Helps of  
Art to preserve it.

Y VIOLA. ’ ’ ’ Ἀ . ' ’  
The Characters are ; ' /

.. The Leaves are alternate ; the Calyx is quinquefid, expand-  
ed, fin», and has its Segments rehexed backwards. The  
Flower is pentapetalous,. and anomalous, as consisting os a di-  
.petalous Standard, two Wings, and a Tail representing a Keel j  
It is furnished with five Staminal The Ovary in the Bottom  
of the Calyx, becomes a conic, triangular Fruit, which bursts  
asunder into three Keels, unfolding themselves into a Circle,  
and full of Multitudes os round Seeds.

*Boerhaave* mentions eighteen Sorts of *Viola* ; which are,  
ὓ I. Viola Martia ; purpurea ; flore simplici, odoro. *C. B.P.*I99. *Tourn. Inst.* 4I9. *Baerb. Ind. A.* 243. *Viola.* Offic.  
*Viola .Martia purpurea.* J. B. 2. 542. Ran Hist. 2. 1049.  
Synop. 3. 364. *Viola nigra sute purpurea.* Ger. 6o9. Emac.  
S50. *Viola simplex Martia.* Park. Parad. 282. PURPLE  
VIOLETS. - ' ' - f

The ordinary purple Violet has a thick fibrous Root, send-  
ing forth long, creeping Strings, which again take Root, and  
increase. The Leaves grow on pretty long Foot-stalks, some-  
what hairy, and in Shape of an Heart inversed, being hollow-  
ed next the Stalk, and indented about the Edges. The Flowers  
stand on slender Foot-stalks, os an irregular Form, consisting  
os five sweet-smelling purple Leaves, with an Hood, or Heel,,  
of the same Colour. The Seed-veffels are long, of an hexa-  
gonal Figure, when ripe, bursting into three Parts, containing  
Rows of round brown Seed.

Violets are sound frequently wild in the Hedges, flowering  
in *March,* though what are made use of in the Shops, are cul-  
tivated in Gardens. The Flowers, which are principally used,  
are one of the Four cordial Flowers.

They are cooling, moistening, and laxative, good in Affec-  
tions of the Breast and Lungs, helping Coughs, and pleuritic  
Pains. The Syrup is given to Children to open and cool their  
Bodies. The Leaves are cooling and opening, and frequently  
put into Clysters, aS well aS into Ointments, against Inflam-  
mations. The Seed is reckoned good for the Stone and Gra-  
Veh *s*

Officinal Preparations are only the *Syrupus Violarum. Mil-  
lers, Bot. Off.*

The Root of this Plant is a little faltish, glutinous, and de-  
-tersive; neither it, nor the Leaves, which are insipid, and pretty  
glutinous, give any Tincture of Red to the blue Paper; the  
fresh Seeds give it a little, and are falter than the Roots. There  
is a glutinous Sap in the Violets, which clogs the other Princi-  
ples, and hinders their Motion : For,

By the chymical Analysis, we obtain from this Plant several  
acid Liquors, a great deal of Oil, a pretty deal of volatile, con-  
crete, and fixed lixivial Salt.

Thus it is no Wonder, that it should lenisy by its Phlegm  
and Oil, and he diuretic and laxative, by the Mixture of the  
other Principles. The Saltos the Violet partakes of the Nature  
of the Sal Ammoniac, in that it is composed of an urinous  
Part. The Infusion of two Ounces of the Root of this Plant  
purges upwards and downwards. Some prescribe it to three  
Ounces, and add twenty Grains of Salt of Wormwood, to  
draw a strong Tincture from it. The Leaves are emollient and  
laxative ; they are continually ufed in Clysters, Fomentations,  
and Cataplasms. The Flowers loosen the Belly: *Poterius*affirms, that a Dram of their Powder purges well enough  
There are three Sorts of Syrup prepared with these Flowers ;

the simple, which has a very fine Colons, provided it doe; noi  
boil; the Compound, which is the Invention of *Mesue*and,  
the Purgative, of which M. *Lemery* has giyen the f)escrip-  
rion: The Simple and the Compound are very good for the  
Diseases of the Breast, occasioned by acrid and^faltifn Hu-  
mours. si

*The Purgative Syrup of* Violets is good, also, for the same  
Diseases, when it is necessary to purge ; for the Seeds and im-  
palements of the Flowers, which are used to make this Syrup,  
are very purgative ; the Roots, also, might be added. *Etsu  
muller* relates, that *siimaus* prepared an excellent laxative  
Conserve with Violets, by giving the Consistence os a Con-  
serve to Manna, with the Juice of these Flowers : This Con-  
’serve keeps the Bally open; if taken from two Drams to half  
an Ounce.

There is an excellent Sort of Cordial made after the follow-  
ing Manner, which is Very good for those that are usually  
bound i - .

In six Pounds of the Joice oTFlowers of Violets not picked,  
dilute over a clear gentle Fire, one Pound and an half of  
Manna ; strain it all thro’ a Cloth ; and add a Pint of very  
... Sood Spirit of Wine: Take, a Spoonful or two of it.

' ' Morning and Evening, if it is Decenary.

The following Emulsion is prepared for the Nephritic Colic,  
and Retention of Urihef ..

. Grind an Ounce, oir an Ounce and half of Violet-feeds in 2  
Marble Mortar, adding, by Degrees, six Ounces os the .  
Water of.Dogs-grass : Strain the Emulsion through a  
Cloth, and dilute in it one Ounce of Syrup of Violets,  
*Martyns, Tourtief art gul* - τ /

In the sweet-scented Violet, as well as in many other Plants,  
there are several Parts,-.which have their distinct Virtues : For  
the Root, Umbilicus, and Seedi are of a cathartic Quality ;  
and three Ounces os the Root cut in Slices, and put into boil-  
ing Water just removed from the Fire, or infused a Night in  
Wine, communicate to them a purgative Virtue. The Seed  
pulverized, and a Dram and half thereof mixed in any Liquor,  
has the same Effect. The Umbilicus is much weaker, and  
communicates the same Quality to the Water in which it is  
Infused; from whence they prepare what they call *Syrup of. Via.  
olets by Infusion.* They purge bilious and serous Humours, which  
are not Very stubborn.

The Leaves abound in a coldish and watry Substance; whence  
-they mitigate a Phlegmon, and cool the immoderate Heat  
affecting the Stomach or Eyes; and, eaten among Greens, loosen  
the Belly.

.' The fresh Flowers refrigerate, moisten, mollify, and render  
rhe Belly soluble ; they are in the Number os the Four cele-  
brated cordial Flowers, and a Pectoral. Their principal Uses  
are in mitigating the Violent Heat in Fevers, and the Pain of  
the Head thence proceeding, in Coughs, Asperities os the  
Throat, and the Pleurisy. The Syrup os the Flowers is very  
frequently prescribed to allay Thirst in Fevers, and gentiy to  
loosen the Belly.

The Seed os Violets is an excellent Lithontriptic, and was  
one of the Secrets of Dr. *Butler,* formerly a Very celebrated  
Physician of *Cambridge.*

*Diofcorides* and *Pliny* assert, that the purple Part of the  
Flower, taken in Water, cures the Quinfey, and the Epilepsy,  
especially in Children. As to the Epilepsy, says *P. Pene almus,*we are taught by Experience; that it is an Imposture ; but he  
had better, and with more Decency, have said, that the Writings  
of the Antients have not been transmitted to us without Cor-  
ruptions. . *Raii Hast. Plant. -*

2. Viola Martia; multiplici flore. *Co P. P,* Iqq.

3. Viola Martia; alba. *C. B. P.* I99.

4. Viola Martia ; store multiplici, candido. *Co B. P.* log.

5. Viola Martia; major; hirsuta; inodora. *M. IL 2.* 4y5.

6. Viola Martis ; solio eleganter Variegato; flore purpureo.

7. Viola Martin; inodora; sylvestris. *C. B. Ps* I99. *M. H.  
2.* 474.

8. Viola Alpina ; folio in plures Lacinias dissecto. *Co P. Pi*I99-

9. Viola Martia ; arboreseens; purpurea. *C. Β. P.* Ioq.  
*facea tricolor, surrectis caulibus, quibusdam arborea dicta,*so B. 3. 547.

IO. Viola ; montana , lutea; glandiflora. *C. B. P. 200.  
M. Hi* 2. *grsm..Juceae tricolors genus, store luteo, magno, ria.  
pens; non annuum.* J. B. 3. 548.

II. Viola; tricolor; hortensis; repens. *C. B. P.* iqq.  
*Tourn. Inst.* 420. *Bocrh. Lnd. A.* 244. *Viola tricolor.* Offic.  
Ger. 7O3. Emac. 854. Raii Hist. 2. IO52. Synop. 365.

*Viola tricolor major et vulgaris.* Parlt. Theat. 756. *\*facea.*. Schrod. Pharm. .4. 84. *facea tricolorsive Trinitatis Flas. J.* B.

'3. 546. HEARTS-EASE.

This does not creep so much as the common Violets, hut  
grows more erect, having roundish crenated Leaves set alternate-  
Iy on the Stalks, with two smaller and mere jagged one, set  
.. on by them, without Foot-stalks. Among these arise the  
^Flowers on long Stalks, in Shape os the common Violet ;  
. but, having the Leaves more erect and open, but differ from  
them in their Colour, some having the two upper Leaves of **a**. Tull Yellow, with a purple Spot on each ; the two Middle os a  
. ..paler Yellow, with a deep Yellow in each ; and the lower Leaf  
sqf a Velvet-purple, in. some Plants, having more of theYel-  
Iow, in others more of the Purple, the many Varieties render-  
ing it Very beautiful. The Seed-Vessel is longer than the Purple  
1 Violet, but fall os the like Seed: It is found wild sometimes  
In the Borders of Fields, and is frequently planted in Gardens,  
flowering a good Part of the Summer.

. . . The Leaves only are used, though but seldom: Yet they are  
accounted mucilaginous and Vuinerary, good to take off the.  
‘.Gripes in Children, aud io prevent Fits arising from thence.  
*Miller's Bot.Os.fi.*

'si It grows in the Northern Parts of *England* among the Com,  
and by Walis, and Banks os Hedges, spontaneousty; but the  
Beauty and Variety os its Flowers have Occasioned, its being

’ transplanted and cultivated in Gardens. It is supposed to have  
the same Virtues with the common purple Violet. *Ray. Dale.*

si Dr. *Baynard* says, that many have been Cured Of Madness by  
, the Use os *the Viola Tricolor.*

12. Eadem (II.) ὁ here albo, & luteo- '

ς I3. Eadem (II.); flore pallide coeruleo, purpureo, & lu-  
teo. : *'Flos Trinitatis, major, violaceus.* H. Eysh *IEse.* O. I2.  
F.6. *F.* 2.

14. Eadem (I I.J; flore Violaceo, holoserico, purpureo, &  
.aureo, sosc .

I5. Eadem (IL); flore magno, duplo majore. Coloris unius,  
purpureo, holoserico.

. . I6. Eadem (II.); flore pallido. ’ *Flos Trinitatis, pallidus,  
mayor.* H. Eysh Test. 0.12. *F.* 6. *F.* 3.

I7? Eadem (II.);. flore ex aureo & pallido.

Io. Viola; bicolor; arvensis. *C. B. P.* 2oo. *M. Hi 2.*476. *Jucea, Hcolor, frugum et hortorum vitium.* J. B. )3.  
548. *Boerh. Ind. alt. Plant.*

*Viola* is by Diminution from theGr«Z, ιον, *(Ion)* the *Spiritus  
lenis,* being converted into the Letter *F,* as in abundance os  
Instances. *Ray.- ..." . . ’*

The first six Species are officinal, pectoral, and cordial, and  
proper in Coughs, Dryness os the Tongue, and Asperities of  
the Fauces, as, also, in Catarrhs, Phthisis, and the Pleurisy;  
The Flowers have an anodyne, demulcent, and antiphlogistic  
Virtue; they are infused in the purest Rain-water, from whence,  
. by often repeating the same, is prepare the incomparable what  
they call *Syrupus Violarum some Coctione,* " Syrup of Violets  
" without boiling," by adding four times the Weight of  
Sugar. This Syrup is Very palatable, gently opening, corrects  
every thing acrimonious, and loosens the Belly. The Leaves  
have much the same Virtues as those of *Acanthus.* The Flowers,  
which are ranked with the Four Cardiac Sorts, as well on ac-  
count of their grateful Smell, or pleafing Volatile Spice, as the  
fine Viscosity os their Particles, which dissolve and lenisy what-  
ever is earthy and rigid, are to be gathered in the Morning  
while the Dew is upon them. The Leaves are emollient and  
laxative, and used in Fomentations, Cataplasms, and Clysters.  
The Seeds are seldom used, except in Obstructions of the Kid-  
neys, and the nephritic Colic. The Root purges upwards and  
downwards; the Calyces, which have a nauseating Quality,  
are to be rejected, unless you would have a pretty laxative Me-  
dicine ; for then the Calyces are to be taken with the Flowers;  
the Seeds are potent Hydragogues. *Hist. Plant, adscript.  
Boerhaau.*

VIOLA AQUATICA, *aquatilis,* or *palustris.* Names given  
to the HOTT ONIA ; which see.

VIOLA HYEMALIS, A Name for the *Hescpcris ; hortensis ;  
store, purpureo \* and for the *Hesperis , hortensis, flore candido.*

VIOLA INDICA,. SCANDENS. A Name for *tiaeA.criViola,*and for the *Acriviolamaximae odorata.*

VIOLA LUNARIA, or LUNARIS. . Nentes given m several  
Sorts of LUNARIA ; which' see.

VIOLA MARIANA. Ossic. Ger. 362. Emac. 447. *Viola  
. Mariana flore purpureo.* Park. Pa rad. 354. *Viola Mariana Do-.  
'dcnai, quibusdam Medium.* ju B. 2. 804. *Campanula hor..  
tenses folio et flord oblongo,' C.B. P.* 94. Raii Hist. I. 732.  
Boerlr.. Ind. A. 240. T0Urn. fnsh IOo. COVENTRY  
BELLS. :

In foreign Countries this grows in Hedges, and on moun-  
tainous Places J- but, with Us, in only, cultivated in Gardens.  
The Root, which is seldom used in Medicine, is, as a Food,  
esteemed refrigerating, drying, and astringent. *Dale.*

**VIOLA MATRONALIS.** A Name for several Sorts of He-  
sPERis; which see.

VIPERA. The Viper, or, as itis commonly called by the  
Vulaar, the Adder.

With respect to the Virtues of this Animal, one of the first,  
whom we find in Antiquity to have made use os the Flesh of  
this Creature to medicinal Purposes was, I think, *Antonius  
Musu,* the famous Physician to *Octavius Casar*; of whom  
*Pliny* telis us, that when he met with incurable Ulcers, he  
Ordered the eating of Vipers ; and, by this means, they were  
quickly healed. ...

It is not improbable, that he might have learned this from  
the great *Greek* Physician *Cratcrus,* mentioned often by *Cicero,*in his epistles to *Atticus*; who, as *Porphyrias* relates, very hap-  
pily cured a Very miserable Slave, whose Skin in. a strange  
manner fell off from his Bones, by advising him to feed upon  
Vipers, dressed after the manner of Fish.

Be this as it will, in *Galen's* time, the profitable Qualities  
of the Viper were Very commonly known, himself relating  
Very remarkable Stories of the Cures of the *Elephantiasis,* or  
*Lepra,* done by the Viper-wine.

*Aretaeus,* who most Probably lived about the same Time with  
*Galen,* and, of all the Antients, has most accurately described  
the *Elephantiasis,* commends, as *Cratcrus* did, the eating of  
Vipers, instead of Fish, in the same Diseases. And to this  
Purpose I remember, that as *Leper,,* in his Relations os the  
Kingdom of *Congo, in Africa,* takes notice hew greedily the  
Negroes eat Adders, roasting them, and esteeming them as the  
most delicious Food ; so *Dampicr,* also, informs us, that the  
Natives of *Tonquin,* in the *East.lndies,* treat their Friends  
with Arrack, in which Snakes and Scorpions have been infused,  
accounting this, not only a great Cordial, but, also, an An-  
tidote against the Leprosy, and all other Sorts of Poison..

The Physicians in *Italy* and *France,* Very, commonly pre-  
fcrihe the . Broth and Jelly os Vipers Flesh, for much the  
same Uses, that is, to invigorate and purify the Mass of Blued  
exhausted with Diseases, or tainted with some vicious and ob-  
stinate Ferment.

From all this it appears, that the. main Efficacy of the Vipe-  
rine Flesh as, to quicken the Circulation of the Blood, pro-  
mote its due Mixture, and by this means cleanse and scour the  
Glands of those stagnating Juices, which, turning to Acidity,  
are the Origin of many, at least, of those troublesome Distem-  
pers in' the Surface os the Body, which *go* under the.Names  
of *sicrophulous,* and *leprous.*

These good Effects are owing to that penetrating; strong Salt,  
with which the Substance of these Creatures does, in a Very  
great Proportion, abound ; and the Reason os this is from the  
Food they five on, which we have observed before to he Lizards,  
and Moles, whose Nature every one knows to he such as must  
necessarily, when they are dissolved in the Stomach, supply **the**Blood with a great Quantity of active and Volatile Parts. And  
herein lies the Difference hetween the Flesh of Vipers, and that  
of other innocent Serpents, which, feeding upon Grass and  
Herbs, do not recommend themselves to us by any of these  
Properties, which are in fo eminent **a** Degree found in **the**former.

Whosoever reflects on what has been said on this Head, will  
very readily acknowledge, that our Physicians deal too cauti-  
oufly or sparingly with a Remedy, which may be applied to  
Very good Purposes, when they prescribe a few Grains of the  
Powder of dried Vipers, or make up a small Quantity of their  
Flesh into Troches ; whereas, if Service be really to he done  
this way, the Patient ought to eat frequently of Vjper-jelly, or  
Broth; or rather, as the antient Manner was, to bod Vipers,  
and eat them like Fish; if this Food will not go down, (rhe'  
really Very good and delicious Fare) to make use at least of  
.Wine, in which Vipers have for *R* long time heen infused, by  
which I know a Very obstinate *Lepra* has been removed ; or,  
lastly, in some Cases, especially where Wine is not convenient,  
to take goed Quantities of their Volatile Salt, in which alone  
the Virtue of the hefore-named Medicines principally reside.

AS for the Teeth, they are of two Sorts, the great, or poi-  
fonousFangs, and the small.. .......

The great, being fixed in the first Bone of the upper Jaw,  
are crooked and bent, like the *Dentes canini,* in most carnivo-  
rous Animals. They' are manifestly hollow from their Root  
a considerable Way, not to the Very Apex, or Point, (which is  
solid and sharp, the hetter to pierce the Skin) but to a small  
Distance from it, aS is plainly seen by splitting the Tooth thro'  
the Middle. This Cavity ends at the convex Partin a Visible  
Slit, Very well resembling the Nip or Cut of a Pen, -which is  
the Emissary or Outlet to the Poison»

*Galen* has given us a considerable Hint of this Make os the  
Tooth : For, the Mountebanks, (he says) used to suffer them-  
selves to be bit with Vipers, having, first, with some Pastes,  
stopt the Holes of their Teeth, that the Venom being thus

kept in, the Spectators might think they did by their Antidote,  
secure themselves from its dangerous Effects.

The Reason why these Teeth are crooked is, that the Point  
of the Tooth, when the Viper bites, may he perpendicular to  
the Part to he wounded; for the Head heing raised back, in  
the Tune of Biting, and the Tooth erected, *if* this were strait,  
it would not, by reason of its oblique Situation to the Part,  
enter with so much Force, nor so deep into the Flesh.

As for the Number of the poisonous Fangs, I have observed,  
that there are, sor the most part, besides one, two, or three  
on each Side, fixed perpendicularly to the first Bone of the up-  
per Jaw, some others which are young, and of a smaller Size,  
adhering to the same Bone: Their Points are harden’d, and  
they have their Fissures formed as in the other; but their Roots  
are soft and mucilaginous, like the Roots os the Teeth in In-  
santS ; .and so they lie. always depressed at the Bottoms of **the**former. - ' ’ - : '  
- They drop off from the Bone at the least Touch ; and there-  
fore, some Anatomists have imagined them to he fastened to  
Muscles or Tendons,\* which would have rendered them alto-  
gether useless: For they are made to supply the Place of **the**greater, when they sail away, orare pulled out by Accident,  
and in order to do this, they do by degrees harden, and rife  
more and more, till' at last they stand upright, and come to a  
perpendicular Situation in the Bone. ' '

They are not all os the same Growth j- for in some we can  
only discern the Shape of a Tooth, without any Hardness, in  
others the Point, and in the next somewhat more is harden'd,  
and so on, to the greatest Fang.

- Their -Numher is very uncertain ; there heing sometimes fix  
or seven in each Side of the Jaw, sometimes sewer.

These seem to have occasioned the Disputes among the An-  
tients, concerning the Numher of the Viperine Teeth.

- The poisonous Fangs have small Holes at the internal Part  
of their Root, through which the Vessels pass, which carry  
their Nourishment. - "

It is remarkable, that Nature has provided young Vipers with  
poisonous Teeth, grown to their Perfection, that so they may  
kill their Prey as soon aS they come into the World.

The second Kind-os Teeth, or the small, are hooked, and  
bent,, as well as the former, but without any Slit or Opening:  
**Of. these** there are sour Rows, two on each Side os the Mouth..  
They, arefrxed tn the third Bone of the upper Jaw, and in **the**Tecondin the lower.

Their Ufe is to hold the Prey first, while Execution is done  
-by the Bite, lest, in struggling to get away, it should pull  
.-out.theFangs. . - .- - . - ' νύ- '

\* The Instruments that emit the Venom being thus described;  
we come next to these which servo to prepare and contain it.

This.Liquor is separated from the Blond by a Gland on each  
r SideOf. the Head, placed in the anterior and lateral Part of **the***Os Sincipitis, kias* behind the Orbit of the eye: It lies im-  
mediately under that Muscle which helps to depress the  
Fangs, so that by the Action Of this it is pressed ; which is an  
-admirable Contrivance,uro forward the Secretion of the Juice  
out os it..' - ” si *ll's. " ' '*

It is a conglomerated Gland, composed of many smaller  
ones, contained in a common Membrane: each Of these sends  
off an excretory Vessel, all which do afterwards unite and form  
one Duct, which running towards the Roots of the Fangs, dis-  
charges the yellow Liquor into a Bag.

\* This Bag is fixed to the Basis of the first Bone of the upper  
Jaw, and, also, to the Extremity of the second, covering the  
Fangs near the Root. To the upper Part of this Vesicula there  
is joined another, in the anterior Part of which there, is a Pas-  
sage for the poisonous Teeth. ' -

This consists of muscular Fibres, both longitudinal and err-  
cular, by means of which it can contract itfelf when the Fangs  
are erected ; and by this Contraction the Venom is pressed into  
the Hole at the Root os the Tooth, and forced out at theFis-  
- sure near the Point. ' ' ' - -

That this is so done, I have frequentiy observed with the  
naked Eye, heving cut off the Head of a Viper, and imme-  
diately pinching the Neck, to make it open the.Mouth wide ;  
for by this means the Venom was squirted Out aS from a Sy-  
-tinge.. - \* -

When the Viper lies quiet, with its Mouth shut, the Fangs  
**are** depressed and covered with the external Bag; when it in-  
tends to bite, it opens the Mouth very wide, at the same time  
the sower Extremity of the -second of **the** common Bones is  
moved forwards, by proper Muscles, and turns, as it were,  
upon a fixt Centre, thus pushing forward the upper and lower  
Jaws, whese Extremes .are united. By this means the lower  
Part of the first Bone of the upper jaw is thrust forwards, **the**other Extremity turning in .the Cavity of its Articulation,  
where it is fastened by Ligaments. The Fangs being, by this  
Mechanism, erected, the Bags which covered them, by the

Contraction of their longitudinal Fibres, are pulled hack. and  
the Action of the circular ones does, ar the same time, straiten  
the internal Bag, and force theJuiceinto the Teeth.

Besides this, when the Viper bites. It strikes in the Fangs to  
the Very Root; and thus the *Vesiculae* are still more squeezed,  
for the Discharge of the Liquor. . - .

’ It is worthy our Observation, that the Viper can move the  
Jaw-bones on one Side, without moving those on the other,  
for they are not joined together at the Extremes, as in other  
Animals; which Contrivance is Very beneficial to it in **the**swallowing its Prey; in that, while the Teeth on one Side  
stand unmoved, and fixed in the Flesh to hold it, those on the  
other Side are brought forward, to draw it in farther; then they  
keep it fast till the formerJaws advance again intheirTurn: Thus  
they act successively, and force -the Animal entire (there being  
no *Dentes Incisivi,* or *Molares,* to divide it) into the *Oesopha- .  
gus,* whose muscular Fibres are -very weak, and' can help but  
little in the Business. --' . ‘ . - -----

The Symptoms which follow upon the Bite of a Viper,  
when it fastens either one or both its greater Teeth, in any  
Part of the Body, are an acute Pain in the Placo wounded,  
with a Swelling, at first red, but afterwards livid, which, by  
'degrees, spreads farther to the neighbouring Parts with great  
Faintness, and a quick, though low, and sometimes interrupted  
Pulse, great Sickness at the Stomach, with bilious convulsive  
Vomitings, cold Sweats, and sometimes Pains about the Na-  
vel ; and if the Cure be not speedy. Death itself, unless the  
Strength of Nature prove sufficient to overcome these Disor-  
ders ; and though it does, the Swelling still continues inflamed  
for some time; nay, in some Cases more considerably upon the  
abating of the other Symptoms, than at the Beginning; and  
often, from the small Wound, runs a sanious Liquor, and little  
Pustules are raised about it; the Colour of the whole Skin is  
changed yellow, as if the Patient had the Jaundice. - --ί

These Mischiefs, although different Climates, Season oftbe  
’Year more or less hot, the greater or lesser Rage os the'Vsper,  
the Beast itself, of a larger or smaller Size, and, consequently,  
able to communicate more or less Venom, and the like Cir-  
cumstances, may varioufly heighten or abate them, " yet usu-  
ally discover themselves much aster the same manner in all;  
-unless the Bite happen not to be accompanied with the Esth-  
sion of that Liquor, which is the main Instrument and Cause  
of this Violent and shocking Disturbance. .

But before I proceed to inquire into the Nature and Man-  
ner of acting of this Juice, it may he worth the while to take  
notice, that this is not made on Purpose to be deadly and de-  
structive to Mankind ; but that the true Design os it is (tho\*  
Authors have not regarded it) to perform an Office and Ser-  
vice of so great Moment to the Preservation of the Individual,  
that without it this Creature could not subsist. I -

For Vipers live principallyupon Lizards, Frogs, Toads, Mice,  
Moles, and the like Animals, which they do not chew, but  
swallow down whole, and they lie in the Stomach} or if that  
be not big enough to receive them, partly in that, 'and partly  
jin the *Oesophagus,* winch is membranous, and capable of great  
Distention, till by the saliva! Juices of those Parts, together  
with the Help of the Fibres of the Stomach, and the Contrac-  
tion of the Mufcles of the Abdomen, they are gradually dis.  
solved into a fluid Substance, fit for the Nourishment os their  
Bodies, which is the Work of many Days: This is one Reason  
why thefe Creatures can live fo long without taking any fresh  
Food, which I have known them to do three or sour Months;  
as another is, that their Blood is a grosser and more viscid  
' Fluid than that of most other Animals; so that there is but a  
very littie Expence of it, by Transpiration, and, consequently,  
less need of Recruit ; stain not only Microscopes discover, but  
Reason teaches ; hecause there is but very little muscular Force  
in the Stomach to comminute the Food; and make a Chyle of  
fine Parts ; and therefore the Blood must accordingly be of a  
. tough and clammy Consistence. Besides, the Heart of a Vi-  
per has properly but one Ventricle, and the Circulation of **the**Blond is performed after the same manner as it is in a Frog  
and Tortoise, in which not above one Third of it passes through  
the Lungs; upon which Account its Comminution in them by  
the Air is proportionably lesser than in other Animals. Now  
fuch a manner of Feeding as this, does necessarily require,  
that the Prey should, upon the first Catching, he immediately  
killed, otherwise it were by no means fit to be let into the  
Stomach; for we are not to think, that the Force os this Part  
would be alone sufficient to destroy it, the Subtilty os a living  
Creature (hefides the Consideration of- the Weakness of **the**Fibres) heing in a great measure able to elude that, as indeed  
we do every Day find live Animals in the Stomachs of others:  
And therefore to do this, is the proper Use both of tho Teeth,  
and their Poifon ; for which being designed and adapted, it is  
no Wonder if the Viper, this same way by which it destroys  
its Prey, proves sometimes mischievous to any other Creature  
hefides.

besides, when it happens to he enraged, or by any Provocation  
stirred up to bite.

This Venomous Juice itself is of so inconsiderable a Quantity,  
that it is no more than one good Drop that does the Execu-  
tion ; and for this Reason Authors have contented themselves  
with Trials of the Bite upon several Animals, never essaying  
to examine the Texture and Make of the Liquor itself; for  
which Purpose I have oftentimes, by holding a Viper advanta-  
geoufly, and enraging it till it struck out its Teeth, made it  
to bite upon somewhat solid, so as to Void its Poison, winch  
carefully putting upon a Glass Plate, I have with a Micro-  
scope, as nicely aS I could. Viewed its Parts and Composition.

Upon the first Sight I could discover nothing, hut a Parcel  
of small .Salts nimbly floating in the Liquor; but in a Very  
short time the Appearance was changed, and these saline Par-  
ticles were now shot out, as it were, into Crystals of an lucre-  
dible Tcnuity and Sharpness, with something like Knots here-  
"and-there, from which they seemed to proceed, so that the  
whole Texture did in a manner represent a Spider's Web, tho'  
infinitely finer, and more minute; and yet withal so rigid were .  
these pellucid Spicula, or Darts, that they remained unaltered  
upon my Glass for several Months.

I have made several Trials with this Juice, in order to find  
out under what Tribe of Salts these Crystals are to he ranged;  
and not without some Difficulty, by reason os the minute  
Quantity of the Liquor, and the Hazard of Experiments of  
.this Nature, have plainly seen that it does, as an Acid, turn  
the blue Tincture of Heliotropium to a red Colour.

I did not succeed so well in mixing it with Syrup of Violets,  
and yet it did really seem to induce in this a reddish Hue; but  
I am Very certain it did not at all change it to a greenish Co-  
lour, as it would have done, if any ways alcalious.

This may suffice, in their own Way os arguing, to convince  
those Gentlemen, who, without the Assistance os any Experi-  
ments, merely to serve an Hypothesis, which they have too  
fondly taken up, have with great Assurance told the World,  
that the Viperine Venom is an Alcali, and consequently to he  
cured by acid Remedies. But it is by far more easy to spin out  
a salfe Notion into precarious Reasonings, than to make faith-  
ful Experiments, and fairly improve them by just and necessary  
Consequences.

To proceed, this Discovery agrees vepowell with a Relation  
communicated by an ingenious Person to Dr. *Tyfon',* which does  
so much illustrate this Matter, that I shall transcrihe it in his  
own Words, out of the *Philosophical Transactions:* He says  
then, that heing in the *Indies,* there came to him an *Indian,*.with several Sorts of Serpents, offering to shew him some Ex-  
periments about the Force of their Poison: Having therefore,  
first pulled out a large one, the *Indian* told him this would do  
no Harm; and making a Ligature on his Arm, as in letting  
Blood, he exposed it naked to the Serpent, being first irritated  
to make him bite it; the Blood that came out of the Wound,  
made by his Teeth, he gathered with his Finger, and laid it on  
his Thigh, till he had got near a Spoonful: Aster this he takes  
out another, called *Cobra de Capelo,* which was lesser, and en-  
larges much upon the Greatness of his Poison. To shew an  
Instance of it, grasping it about the Neck, he expresses some  
os the Liquor in the Bags os the Gums, about the Quantity  
of hals a Grain, and this he puts to the coagulated Blond on  
**his** Thigh, which immediately put it into a great Fermenta-  
tion, and working like Barm, changed it into a yellowish  
Liquor.

This, I say, does well enough accord with what we have  
been advancing, concerning the Nature os this Juice: For  
*Baste* hath long fince proved by Experiments, that there is  
nothing of Acid in human Blood; and *Pitcairn* has demon-  
strated, that the acid Substances of Vegetables, taken into the  
Stomach, are, by the Action of this Part, the Lungs and Heart,  
when they come into the Blood-vessels, turned to alcalious; so  
that the arterial Fluid must necessarily he considered as an Al-  
call; and therefore, according to the known Principles of  
Chymistry, its Mixture with such a Liquor, as we have disco-  
vered the Viperine Sanies to be, will always exhibit some such  
-Appearance aS this now related.

But not to engage any farther in this Sort of Controversies,  
we may, perhaps, from the foregoing Observations, receive  
. some Light, in order to understand the Nature and Reason of  
. all those Symptoms which attend the Bite of this Creature :  
For the pungent Salts *of* this Venom, when with Force thrown  
into the Wound, will not only, as so many Stimuli, irritate  
and fret the sensible Membranes, whereupon there necessarily  
follows a greater Afflux than ordinary of the animal Juices that  
Way, (as is manifest from the *Bellinian* Doctrine *de Siimulis)*so that the wounded Part mUst be swelled, inflamed, and livid;  
but, also, these Spicula, being mixed with the Blood, will so  
disjoin and disunite the Pans of is, that its Mixture must he  
quite altered ; and from the various Cohesion os its Glohales

will arise such different Degrees os Fluidity and Impulse to-  
wards the Parts, from what this Liquor had before, that Its  
Very Nature will be changed.

It is worth the while, in the next Place,, to consider the -  
Cure of this Mischief, which, without all Doubt, ought to he bv  
such external Management of the Wound as may immediately  
destroy the infused Venom.

*Boyle* experienced an hot Iron, held as near the Place as the  
Patient could possibly endure it Very effectual to this Purpose:  
But the same Method did not answer Expectation, in the  
famous Case related by *Charas.*

An extraordinary Virtue against this and other Venomous  
Bites, is ascribed to the Snake-stones brought from the *East..  
Indies,* one of which, is to be presently applied to the Part, and  
let shck till it drop off: These are said to be taken out os the  
Head of the Serpent, called by the *Portuguese, Cobra de Capelo,*and to fuck the Poifon out of the Wound. *Redi* made Trials  
with several of them, but found no Service from any: Yet  
*Bagliui* telis us, of a terrible Bite of a Scorpion cured this Way.  
Monsieur *Charasts* Pigeons all died, though these were imme-  
diately clapped on, and stuck close to the Wound : But *Ha.,  
vers* saw a good Effect of one upon a Dog, who, though se-  
verely bitten, suffered no Harm ; nor any farther Mark os **the**Poison, than a livid Circle round the Place.

In plain Truth, as thefe celebrated Stones do not seem to  
he what it is pretended they are, but rather factitious Bodies,  
compounded, it may be, of calcined Bones, and some testa-  
ceous Matters mint together; so, hy reason os their spongy and  
porous Texture, they do Very readily adhere to any moistened  
Part of the Flesh, and imbibe whatsoever Humidity they meet  
with: This their Quality any one may experience, by holding  
one of them to the Roos os his Mouth; And it is upon this  
score that, when put into Water, Bubbles are raised by the Air  
in their Interstices, which some have too sondly thought to be  
the Effects of their throwing out the Venom they had sucked  
in.

. . Their Make heing thus, some Part at least os the poisonous  
Juice may easily be drawn out os the Wound, by such an  
Application; andryet so much of it may sometimes happen to  
.remain in the Flesh, as may make the Bite however to prove  
mortal. And thus it fared with a Pigeon, to the Thigh of  
which, first bitten by a Viper, I applied one os the Stones; for  
though it stuck fast to the Wound, and thus saved the Lise for  
inbout four Honrs (whereas others usually died in about half an  
Hour), yet, aster this, the Mortification os the Part prevailed  
to that Degree aS to become fatal to the tender Creature.

But our viper-catchers have a Remedy far beyond all thefe,  
in which they place so great Confidence, aS to be no more  
afraid of a Bite than of a common Puncture, immediately  
curing themselves by the Application of their Specific.

This, though they keep as a great Secret, I here, however,  
upon strict Inquiry, found out to he no other than the *Axun-  
gia Vipcrina* presently rubbed into the Wound. And to con-  
vince myself of its good Effects, I enraged a Viper to bite a  
young Dog in the Nose ; both the Teeth were struck deep in ;  
he howled bitterly, and the Part began to swell. I diligently  
applied some of the *Axungia* I had ready at hand, and he was  
very well the next Dav.

But because some Gentiemen who saw this Experiment were  
apt to impute the Cure rather to the Dog’s Spittle (he licking  
the Wound) than to the Virtue of the hat, we made him Io  
be bit again in the Tongue, forbearing the Use of our Reme-  
dy, and he died within four or five Hours. . .

At another Time I made the like Trial with the same Sue-  
cess. .

As this *Axungia* consists of clammy and Viscid Parts, which  
are withal more penetrating and active than most other oily  
Substances, so these, without all Doubt, involve, and, as it  
were, sheath the Volatile Salts of the Venomous Liquor, and  
thus prevent their shooting out into those crystalline Spicula,  
which we have observed to be the main Instruments os that  
deadly Mischief which attends the Bite.

By this means it comes to pass, that this Cure, if rightly  
managed, is so eafy and certain, as not to need the Help of  
any internal Medicines to forward it ; but these however must  
take Place where, through want of the other, the Poison is  
spread farther, and has tainted the whole Mass of Blood.

Nor yet is it necessary, even in this Case, to fatigue the Pa-  
tient with a Farrago of Theriacas and Antidotes; *for* **the**volatile Salt os Vipers is alone sufficient to do the Work, if  
given in just Quantities, and duly repeated ; provided moderate  
Sweats he encouraged in Bed : Thus it succeeded with Mon-  
sieur *Charas,* and in some others I could relate; in one of  
which the Mischief had gone so sar as to induce an universal  
*Icterus.*

I must remark, that fince Dr. *Mead* wrote the Treatise os Poi-  
sons, from which these Particulars relative to the Viper are

extracted, a Man and his Wife, whe made it their Business to  
catch Vipers, came from *Bath* to *Oxford,* and from thence to  
*.London,* and, aster having shewn a great Number os Experi-  
ments, with respect to the Bite os this Animal, at last disco-  
vered an effectual Remedy, which consists, in nothing more,  
than chafing the Part wounded with Olive-oil, hesore the Fine;  
and, if the Case should he extremely had, wrapping the entire  
affected Limb in a Cerate, made of White-lead,, and the same  
Oil-- . .. . - . .. .. . fret'sa.fr sese.

I must further observe, that as the Viperine Poison acts by  
inducing a Coagulation os the Blood, which spreads gradually  
*from,* the wounded Part to the Heart, of which I have seen an  
hundred, incontestable Instances ; and aS rubbing in the Oil,  
prevents the Coagulation, and resolves the Blood already cod-  
gulated ; hence, perhaps, we may account for the Efficacy of  
Unctions, so much practised .by the antient Physicians, especi-  
ally those os theMethodicSect. . .-.t.:

. And, farther, may we not presume, that the Oil osAnimals,  
so exquisitely, treasured up in the Reservoirs of the Cellular  
Membrane, may,. upon some Occasions, by mixing with the  
Blood;, prevent Coagulations, and consequently Distempers,  
'from such a Cause *l. ...... -, . .*

. VIPERARIA. The same as SeoRzONERA, δ᾽\* '

.VIPERINA. The same as ScORzoNERA.

VIRGAAUREA. δ᾽, ς ' .-δ᾽

The Characters are ;

The Root is fibrous; the Leaves are alternate and entire, and  
the Calyx is squamous. The. Flowers are produced on the'  
- Tops of. the Stalks and Branches, in a-long Series like a Rod,  
are less than those of the Aster, have shorter Pedicles, and are  
generally of a golden Colour. .

*. Boerhaave* mentions fourteen Sorts of *Virga aurea*; which

are, *- ' ‘ A ‘ ' - - - ’ - — . . . : .*

.1. Virga aurea ; folio amplissimo ; dentato. *An,* Virga au-  
rea, Canadensis, latissimo solio, glabro. *N.* 485.

An., virga aurea; montana; . latiore folio, glabro. *Hi R.*

*Par.* 186... . . J ...

. 3. Virga aurea; annua. *Zanon.* 2O5. T. 48.4. *Conyza  
Canadensis, annua, acris, alba, folio Linarsm..Bocc. Sa. Astor  
Canadensis, annuus, flore pappose.* H. R. Pat. . .

-.4. Virga aurea.; Canadensis ; hirsuta; panicula minus spe-  
ciosa. *H. E. Par. .... \* . -.*

5.. Virga aurea'; Novae Anglite; altissima ; paninulis non-  
nunquam reflexam *Flor.* 2. 34. ......

. 6. - Virga aurea; angustisolia ; panicula speciose ; Canadensis.  
*FI.R.Par.M.Ii.p.* I25.. .. - ι

7. .Virga aurea; Novae Angliae ; foliis longissimis, glabris.  
*Flor.* 2.\_35» .. .. .. . . - . . :

- 8. Virga aurea; foliis angustis; laevibus; non ferratis; pa-  
nicula speciosa ; floribus magnis.

.9. Virga aurea; Noveboracensis; glabra; edulibus rubenti-  
bus; soliis angustis, glabris. *Flor.* I. 26.

. IO.Wirga aurea ; angustisolia Tminus serrata. *C. P. P.*268. *Bocrh. Ind. A. csesu Virga aurea.* Offic. Ger. 348.  
Emac. 43o. Raii Hist. I. 278. Synop. 8I. *Virga aurea  
vulgaris.* Park. .542. *Virga aurea vulgaris latifolia.* J. B. 2.  
1062. *Tourn. Inst.* 484. GOLDEN-ROD. ‘

The. common Golden-rod grows to be two or three Feet  
high, having round hairy Stalks, full of a fungous Pith ; the  
lower Leaves grow on pretty long Foot-stalks; they are three  
or sour Inches long, broadest in the Middle, and narrow at  
both ends, indented about the Edges, and hairy on both Sides;  
those, which grow on the Stalks, are less, and stand on shorter  
Foot-stalks, and sometimes without any. The Flowers grow  
thick together, io small Spikes, on the upper Parts of the  
Branches .; they are composed os small yellow Petals, set about  
a little sistular Thrum, which afterwards turn into Down.  
The Root is long, running aflant with many Fibres; it grows  
in Woods and Hedges, and flowers in *July.* ς ’ .

.The Leaves and Tops are used, this being accounted one os  
the heft Vulnerary Plants, and much used inwardly in Trau-  
mafic Apozems,. and Wound-drinks; and, outwardly, in Ca-  
taplasms, and Fomentations. ' . ’

- It in somewhat restringente and useful against Spitting of  
Blood, and other Haemorrhages; and is of great Service  
against rhe Stope. *Millpris Bot. Osssi .*

Golden-rod is styptic, bitter, and gives no Tincture of Red  
to the blue Paper. It is likely» that its Salt resembles that  
which is natural in the Earth; but it is mixed with a great deal  
. os Od, and terrestrial Parts. Thus this Plant is vulnerary, and  
diuretic. It is prescribed in Ptisans, - and Broths, for the Dy-  
sentery, and for ail Sorts os Haemorrhages. These Medicines  
are lenitive, also, and provoke Urine; The distilled Water of  
the Tops, and the Extract os’ thin whole Plant, have the same  
Virtues. The Leaves and-Flowers os the Golden-rod, are taken  
after the manner os Tea. It is used in the *Eatg dstArquebusudso*and Vulnerary Potions, *Mur isms Tourniferso '*

It is a most celebrated Vulnerary, both for. Internal and ex-  
ternal Use, and even to he preferred hesore the *Sctidago Sara-  
cenica.* For internal Wounds, says *C. Hoffman,* it is effectnaT,  
- hy carrying off the . Ichor with the Urine; which agrees with  
' the Observation of the most celebrated Physicians, that almost  
all Vulnerary Potions are diuretic; and it was customary for  
the Combatants at Wrestling and Boxing, in them ordinary -  
Drink, to take *Valerian,* which is a prime Diuretic. In exter-  
nal Wounds, this Plant is of- Efficacy by exsiccation-and Ab-  
frersion ; for which Purposes it is highly qualified.

That it is none of the least Lithontriptics and Diuretics, is  
agreed by all: It was first experienced by *Arnold. Villanouanus,. .*in the Stone, who used it in Powder; and it is celebrated for  
this Disease by *Barclay,* in his *Argenis,* and in his *Eaphormto.*The Dose is two Drains of the Powder every Morning in warm  
White-wine.^ ’ . '

*C. Hoflsinan* says, it is endued with a remarkable abstersive

Virtue; whence it is so much celebrated in Obstructions of the  
Viscera, where there is a Tendency to a Dropsy j for which  
Intention, the Decoction of it was a long time kept as a Se-  
cret, tho'- it be, also. Commended against all Fluxes of the  
Belly and Uterus, and internal Haemorrhages, which proves it -  
to he rather astringent than abstersory, unless, perhaps, it per-  
forms those Effects by its desiccative, or shying Quality, which\* -  
all ascribe to it. *Raii Hist. Plant.'*

**II.** Virga aurea; Mexicans. *C. B. Ps'App.* 5I7. \

I2. Virga aurea; folio hirfuto salicis raro & levissime serra-  
to ; caulibus atropurpureis. υ  
.. 13. Virga aurea'; major; foliis glutinosis ^graveolentibus.  
YE&her . '. E -'.etr :’  
. This *Boerhaave,* by Mistake, has taken notice *off* already,'  
under *Conseca-, mas; Theophrasti, major Dioscoridis , ' fac*which ! refer the Reader to CONYZA. /

I4. Virga aurea; omnium minimal *Hi Rc Par. Boerhs  
Ind. alt. Plant. c*

The *Virga Aurea* jo so acrimonious, that no Pepper can be  
compared with it, tho' it leaves not the least Relish of Acridness  
in the .Month, but proceeds through thewhole Body. It is like  
the *Rartunculits urens* of the Shops, 'and is of a moderately, or  
somewhat astringent Taste, which ' at first is not unpleasant,  
but leaves an ungrateful Relish in the Mouth. The Leaves are  
gathered in *May,sand dry’d for* Use. *Barclay,* in his *Satyricon,*says, that he cured a Person of Quality, to whom he was sent'  
on an Embassy, of the Stone, and a Suppuration of the Kidneys,  
with the Powder of the dry’d Leaves.' Tbree or four Ounces  
of the Plant macerated in Water, are a good vuinerary Dose,  
and proper for internal Haemorrhages, the Dysentery, and Di-  
arrhoea. Externally it depurates Wounds, absterges Putridness ’  
of the Gums,, fastens loose Teeth, and cleanses malignant  
Ulcers, and Fistulas. I have often exhibited it with great  
Success in all Sorts of putrid, viscid, and coldTndispositions.  
The Leaves duly dry'd, and infused after the manner of Tea,  
and drank with an Addition of Honey, arethighly corroborative  
and detersive, and of extraordinary Efficacy in Ulcers of **the**Lungs, and Wounds of the Breasts, and other Parts. - '

The *Virga aurea,* aS we are told by *Touryiefort,* is a Plant  
os *Canada,* but is now common throughout *Europe,* because  
the Seeds brought from that Country have diffused themselves  
through all the *European* Regions, and grow without Difficulty ;  
for the Seeds are agitated and dispersed into all Parts by **the**Winds, and where-everthey sell, easily-take Root, and spring  
up. *Hist. Plant, adscript. Boerhaav. ;*

VIRGA AUREA is, also, a Name for several Sorts of Do-  
RIA; which see. . .5 ’.. *-.c*

VIRGA AUREA, *Linaria foliis.* A Name for the *Comae  
aurea, Germanica. - \**

VIRGA PAST ORIS. A Name for the *Dips.acus y siyluestrisi  
capitulo minore ; vel Virga Pastoris, minor. ’*

VIRGA SANGUINEA; A Name in *Boerhaave* for the *Cornusi  
ifermina. \* . ' .* . - ι

VIRGATA SUTURA, is the *Sutura Sagittalis,* Sagittal  
Suture of the *Cranium.*

VIRGINALE CLAUSTRUM. The HYMEN. -

VIRGO. Besides the Various Kinds of acute and chronical  
Diseases, there are, also, some Disorders incident to Virgins,  
pregnant, and Child-bed Women,'as, also, to Children,

When the Body of a Woman has arrived at its full Growth,  
if her Constitution is good, more Blood is generally prepared  
than 'can be contained in the Vessels; for which Reason it is  
eliminated from the Uterine Arteries, under the Name of **the***Menses.* ἱ ’

If, in such a State and Condition of Body, this Blood is re-  
tinned, a Plethora, Slowness, a Sense of Weighs, Paleness, a  
Pain of the Loins, and Groin, and a Depravation of almost  
all the Functions, whether natural. Vital, or animal, are prO.r  
duced, and may be easily accounted for from the mo great

**pressere** Upon the Veffels, by tho redundant, stagnant, and  
suffocated Blood.

The Blond, when thus accumulated, often finds surprising  
Ways, not known in the naturalDifcharge of the Menses, since  
Physicians have sometimes seen it eliminated by the Eyes, the  
Ears, the Gums, the Salival Ducts, and the Oesophagus, by  
Stool and Urine, by the Breasts and Skin, as, also, by Wounds  
and Ulcers.

By this means all the Viscera are often weakened, and a fur-  
prising Numher of Disorders produced, partly by the conceived  
Putrefaction, and partly by the Injury done to the Vessels.

This Disorder is known, first, by the suise of the Patient 5  
secondly, from her full Growth; thirdly, from a Plethora;  
-and, fourthly, from the Signs of the Disease, subsequent to  
this Plethora.

It is cured by various Remedies adapted to the different  
'Causes from which io proceeds.

Thus it may proceed either from a natural or accidental Con-  
dretion of the Pudenda, in which Case the Surgeon is, with a  
proper Instrument, to make a due Incision.

But, when it proceeds from a Stagnation of the Humours,  
these are to he rendered fluid; first, by Fomentations, and  
Frictions of the Feet ; secondly, hy Venesection in rhe Feet;  
thirdly, by the Exhibition of uterine Purgatives, such aS Aloes,  
Myrrh, Betony, Coloquintida, Gum Ammoniac, Bdellium,  
sagapenum, Opopanax, Galbanum, Asa-see tide, and the  
Elixir Proprietatis; fourthly, by Emmenagogues, which hesides  
these already enumerated, are Birthwort, Mug-wort, Mo-  
therwort, Chamomile, Juniper, Marjoram, Murum, Fe-  
verfew, .Penyroyal, Rue, Savin, Sage, Elder, Mother of  
Thyme, Tansey, the Tree of Life, and Thyme ; fifthly, by  
Planters, Fomentations, Liniments, Vapours, and Heat. The  
Plaisters proper for this Purpose are, those of Cumin, Melilot,  
Galbanum, Bay-herries, Labdanum, and Oxycroceum, ap-  
plied to the Soles of the Feet, the Navel and Groin. The  
Fomentations may Consist of *Venice* Soap, and a Decoction of  
rhe above-mentioned Herbs. The Liniments are to he pre-  
pared os Soldiers Oinment, nervine Ointment, that of Ele-  
campane without Mercury, that Of Agrippa, and that of Sow-  
bread ; distil'd, aromatic Osts, and especially the disus'd Oiis  
of Juniper-berries, Hyssop, Mace, Marjoram, Origanum of  
*Crrete,* Rosemary, Savin, Spike, Tansey, and Amber; **the**Oils by Infusion of Wormwood, Dill, Chamomile, Catmint,  
Rue, Castor, Saffron, Orris, and Earth-worms. . Thus,

Take of Soldiers Ointment, and nervine Ointment, each  
One Ounce ; of the distilled Oil of Juniper-henries, one  
Dram ; of the distilled Oil of Savin, and of the Oils of  
Rue and Costar by infusion, each half an Ounce: Make  
into a Liniment, to be applied to the Navel, Pubes, and  
Groin.

AS for the Vapours, those arifingfrom a Decoction of the  
Herbs already mentioned, and received into the Uterus, are  
most proper. And, sixthly, by corroborating the Vefleis weak-  
ened by the Plethora, by means of Chalybeates and Astrin-  
gents: Thus,

Take of the Filings of new and unnrstylron, two Ounces;  
of *Peruvian* Bark, and Winter's Cinnamon, each two  
Ounces ; of dried Rhubarb, half an Ounce; and of gene-  
rous *Rhernso* Wine, two Pints: Make into a medicated  
Wine, os-which two Ounces may he taken thrice a Day  
upon an empty Stomach»

When the Cause of the Disorder is by these means removed,  
the Symptoms already mentioned either Ipontaneoufly cease, or  
-are to he cured in the same manner with the Disorder they most  
nearly resemble, which may be easily done from what has been  
said. *Boerh. Aph. et Mat. Med.*

.. VIRIZE, *ex* VIRIOLfE. Rings worn upon the Arms as  
Amulets.

VIRIDE IERIS. Verdegrise.

VIRIDELLUS. Vitriol; or the Epilepsy.

VISCAGO. A Name for the *Lychnis h facie Auriculae  
Ursi. .*

VISCAGO. Mucilage.

VISCALEUS. The fame as Viscum. *Johnson.*

VISCARIA. A Name for the *Muscipula,* Catch-fly»  
VISCERA. The Bowels.

VISCERALIA.

Visceral Remedies in general are, those which impart Strength  
and Firmnesa to the sanguineous Viscera, such as the Liver,  
Spleen, Uterus, Kidneys, and Lungs ; by which means they are  
qualified for a more happy and expeditious Performance of their  
respective Functions. To this Clash we may, therefore, commodi-  
oufly refer hepatic, splenetic, pneumonic, uterine, anti-cachectic,  
anti-hydropic, anti-icteric, anti-hysteric, and anti-phthisical Me-

dinines i But the most considerable Viscerals are, the Roots of  
red Gentian, long and round Birthwort, Succory, Zedoary,  
Fem, true Rhubarb, and Rhapontic,Tturmeric, and Rest-harrow,  
*Peruvian Busk,* Winter's Bark, the Barks ofTamarishs, the  
Ash, and Capers, together with Cloves ; the Herbs Worm-  
wood, the Lesser Centory, Fumitory, Carduus Benedictus,  
Marsh-trefoil, Golden-trefoil, Baum, spotted Lungwort,  
Spleenwort, Agrimony, Horehound, Dodder, *Paups* Betony,  
Scabious, Spurge, Maiden-hair, and Mouse-ear. The Vis-  
cera are, also, excellently strengthened by some of the resinous  
Gums, such as Myrrh, Aloes, Bdellium, the Gum of the Ivy-.  
tree. Gum Ammoniac, Olibanum, Sagapenum, Opopanax, and  
Asa-fcedida. Some Minerals are, also, excellent Viscerals, such  
as the Flowers of pure common Sulphur, Filings os Steel, and  
all Preparations of that MetaL Some chymical Preparations  
are, also, powerful Viscerals, such as the Salts of Herbs ob-  
tained by Incineration, the Arcanum Tartari, the Tena foliata  
Tartari, Cream os Tartar, Sal Polychrestum, antimoniated  
Nitre, Spirit of Sal Ammoniac, Tincture of *Mars* extracted  
with Spirit of Wine from the Flowers of Sal Ammoniac pre-  
pared with Blood-stone, the Tincture of Tartar, the Tinctura  
Antimonii Alcalisata, the Elixir Proprietatis prepared with a  
Lixivium, the Essence of Soot, the Visceral Elixir prepared  
with an aqueous- saline Menstruum, the Antimonium Martiale  
Cachecticum, *BeccheAs* Mass of Pilis, and others of a like  
Nature. To the Class of Visceral Medicines, also, belong  
Mineral Waters, especially such as contain a certain subtile  
chalybeate Principle, such as thofe of *Pyrmont, Spaw,* and  
*Swalbacen’,* and much more those which contain a larger Quan-  
tity of a chalybeate Principle,. Inch as those of *Lauchstad, Rude..  
borg, Bebra,* and *Frayenwald.*

These balsamic Viscerals, partly by a sulphureous, balsamic,  
and somewhat fixed earthy Principle, and partly by thein alca-.  
line, sulphureous, saponaceous, and bitter Quality, perform thein  
Operation upon the Viscera, whose Vessels are obstructed and  
insarcted by gross and Viscid Humours, by molding and diffolV-  
ing the tenacious Juices, and, at the same time, procuring a due  
contractile and elastic Force to the Veffels and Fibres os the  
Viscera, which had lost their Strength and Tone. Hence they  
are of great efficacy, both for the Prevention and Cure *os* those  
Chronical Diseases, winch arise from any Disorder of the Vis-  
cera,

Though all Viscerals agree in this, that they strengthen the  
Tone os the Viscera, and remove Infarctionsand Obstructions,  
yet it is necessary to Vary them, according to the Diversity of  
Viscera affected, and the Diseases thereby produced. Thus, sor  
instance, if the Liver is obstructed, and a.Jaundice, Cachexy,  
or Scurvy, produced by that means, the most efficacious Vis-  
' cerals are those possessed of a certain saponaceous and deter-  
five Bitterness, such as the Five aperient Roots, Rhubarb,  
Turmeric, Opopanax, Bdellium, *Venice* Soap, Elixir Propri-  
etatis without an Acid, Essence of Rhubarb prepared with  
Salt of Tartar, Essence of Trefoil, and all good Preparations  
of Steel. When there are too great a Relaxation and Infarction  
Of’ the Lungs, and the Diseases by that means produced are  
\* present. Myrrh, Gum Ammoniac, Flowers of Sulphur, *Paulls*Betony, Scabious, Chervil, Lungwort, Mouse-ear, Hore-  
hound, and Maiden-hair, are generally thought most efficacious.  
When the Spleen heing preternaturally large, and insarcted with  
Blood, savours the Generation of an impure Bleed, and espe-  
cially of a Cachexy, the Barks ofTamariflts and Capers, Fit-  
mitory. Spleen-wort, Dodder, Spurge, the .Roots of Rest-  
harrow, and Chalybeates, are preferable to other Remedies.  
When from a weak, and too much relaxed Tone of the Kid-  
neys, nephritic Pains and Stones are formed, the Bark of the  
*Egyptian* Thorn-root, and an Infusion os it; as, also, theRohs  
os Hounds.tongue and Juniper, are, in a peculiar manner, effi-  
cacious. From a weak Sure of the Uterus, and its Veffels,  
and a flow Circulation os the Blood and Humours, arise num-  
herless chronical Diseases, which are efficacioufly cured by long  
and round Birthwort, Mugwort, Myrrh, Feverfew, Gal-  
bannm. Bdellium, Opopanax, Amber, *BecchePB*, Mass of  
Pilis, and others, prepared in the same manner. Is the In-  
testines, and their Glands, the secretory, excretory, biliary,  
panrceatic, and lacteal Ductis, are so deprived of Strength, that  
by a copious Defluxion of Humours, excessive Fluxes are pro-  
duced ; or, if the Humours stagnating in the Veffeis lay a  
Foundation for febrile Motions and Paroxysms, Rhubarb, *Peru-  
vian* Bark, Winter's Bark, Cascarilla Bark, and the most sub-  
tile Crocus, and Essences of *Mars,* are found more efficacious  
than any other Remedies.

But, with respect to Corroboratives in general, it is to be ob-  
served, that they produce far better Effects, is not only before  
their Exhibition the redundant Blood is lessened, and the Sordes  
of the *Primae Via* evacuated by proper Laxatives ; but, also,”  
if, in order to render the Humours more fluid, they are exhibit-  
ed in Decoctions or Iafusions,eor winch is stilTbetter, with Me..

-dicinal Waters, or Whey; by which means, the Operation of  
these Corroboratives, winch are of an astringent Nature, is  
geatly assisted in removing violent chronical and inveterate

isorders ; especially when their Use is for a considerable time  
persisted in, and proper Exercise, whether by Riding or Walk-  
ing, used. *Fred. Hoffman.*

VISCIDITA6. See LENTOR.

VISCUM, VISCUS, 'ιξος.

The Characters are;

The Leaves are conjugated, narrow, and oblong; the Flower  
is monopetalous, shaped like a Bason, quadrifid, sprinkled with  
Warts, and male; the Ovary grows in a different Place from  
the Flower, and is of a tender Substance, surrounded with four  
small Leaves; and becomes a roundish Berry, full of a Glue,  
and containing a stat Heart-shaped Seed.

*-Boerhaave* mentions but one Sort of *Vifcurn*; which is,

I. Viscum; baccisalbis. *Co B. P.* 423. *Bocrh. Ind. A.* 228.  
Viscum. Ossic. Ger. II68. Emac. I35. Rafi Hist. 2. I583.  
Synop. 3. 46.4. *Viscum vulgare.* Park. Theat. I392. *Viscuss  
velVifcurn arborum.* Merc. Bot. 1.77. *ViseuslSsuercus, et alea-****rum*** *arborum.* J. B. 1. 89. MISSEL AND MISSELTO.

This Plant is never found upon the Earth ; it grows upon  
the Oak, Apple, Plum, Pear, Acacia os *America,* and several  
other Trees\* That which is found in the Wood of *Vincennes,*occupies the heft Branches of the White-thorn, on whose  
Branches neither earth, nor any other Matter, is to be found,  
which may seem proper to make the Seeds of this Plant chit.  
There in first discovered only a Tumor in those Parts to which the  
Misselto has fastened itself; its Flowers grow by threes, at the  
Division and Extremities of the Branches; each Flower is a  
yellowish Bason, os about three Lines Diameter, of the Thick-  
ness of *Spani/h* Leather, cut into sour Segments, rounded in  
three Points, and opposite to each other, in Form of a Cross,  
in such manner, that thofe which are opposite, are equal be-  
tween themselves, but unequal with respect to the others;  
each Segment is raised with a little Bump, paler than the rest,  
and divided Into Apartments full of little oval Holes, filled with  
Dust resembling Flour of Sulphur, or that which flows from  
the Summit, os other Plants.

The Flowers os Miffelto produce nothing; the Fruits grow  
upon different Branches from those which hear the Flowers-  
these Branches are found, sometimes, upon the small Plant that  
hears the Flowers; and sometimes, also, upon Plants which  
hear only Fruit.

These Fruits are disposed, alfo, by Tbrees, at the Extremi-  
ties of the Branches; each Fruit begins bV a littie oval Em-  
hryon, encompassed with four thick yellowish Leaves, half a  
Line long, pointed, and easily selling off; this Embryon thick- .

- ens insensibly, and forms an oval Berry, three Lines long, like  
. a little Pearl, filled with a flat Seed shaped like a Heart, co-  
vered with a silver-coloured Membrane, Very fine, and full of  
Glue, that is to fay, .a Very Viscid, whitish, and sweetish Sub-  
stance, in which- the Seed naturally germinates, and pushes  
forth two Radicles out of the Side of its Notch.

This Seed, in all Appearance, produces the young Plants of  
Misselto to be seen upon the Branches of the Trees now  
mentioned ; for some do but just peep, (if I may so say) and  
have only the Radicles which began to appear in the Berries.

. Nevertheless, we cannot say, that this Seed passes thro' **the**Root of the Oak, and the other Trees, and ascends into **the**Branches by the Sap-Vesseis ; for each Seed is two Lines dia-  
meter, and the Texture of these Vessels cannot be perceived by  
our naked Eyes. It follows, then, that this Seed must he ap-  
plied, by some external Cause, to the Branches of the Trees:  
These Causes may be reduced to two principal ones.

The Birds, perhaps, by crushing these Berries with their  
Feet or Bills, -may give them an Opportunity of fastening them-  
selves to the Branches, by their Glue : AS we see the Magpies  
and Jackdaws contribute to the multiplying of several Plants,  
by carrying about their Kernels, and burying them. It may  
happen, also, that the Birds which have-swallowed the Missel-  
to-berries may void them upon the Branches os the Trees on  
which they perch; which made *Plautus* say, *Ips.a sibi avis  
mortem cacat*; tho' it is not very easy to comprehend how the  
Seeds which pass tino' the Gizzards of the Birds should escape  
being bruised, and ground to Pieces.

It may happen, also, that these Berries, falling, either of their  
own Accord, or by the Violence os- the Winds, may stick,  
sometimes, against the Branches os-.the neighbouring Trees,  
especially if they happen to he applied-by that Part by which  
they hung upon the Miffelto ; for this "torn Part easily fastens  
itself to any Body on which it falls: But in whet manner soever  
these Berries stick, wo have Reason to believe, that the Glue,  
which they are filled with, insensibly softens the Bark to which  
it is fixed; and then the Seed, which had germinated hesore in  
its Berrv, as we observed above, pierces it easily, by its Ra-  
dicle. Perhaps this Glue, tho' it appears so mild and insipid

to us, ferments with the San of the Trees, and tears the Fshtus  
of their Bark, winch savours the Passage the Hbres of the  
Radicle considerably. Thus the *Ova sieeminea,* falling into the  
Body of the *Uterus,* fasten themselves to is, by means of the  
*Placenta-,* the Juice of which, fermenting with that of che  
Glands of the Bottom of the *Uterus,* makes a littie Inflamma-  
tion, by means of which these two Parts stick together.

The Radicle, then, of the Seed of the Miffelto, finding it  
**easy** to pierce **the** Bark of the Branches, lengthens into greenish  
Fibres, which run, at first, thro' the parenchymous, and  
piercing, afterwards, the ligneous Part, interlace themselves with  
the Fibres of the Branches, and insint rare themselves into their  
Vesicles, out of which they draw aJuice proper for their Nou-  
nshment. One may easily distinguish these Fibres, is one take  
the Pains to trace them, after having discovered the first Bark.  
It is no wonder, that the Place where they insinuate themselves  
should swell, fince they increase the Bulk of it; and, besides,  
these Roots, by taking hold, press the Vessels of the Branches in  
some Places, strangle them, and make them burst into others,  
which causes the Interception and Extravasation.

Misseltoe can live only upon Trees, hecause, perhaps, its  
Radicle, not having a Structure proper to separate from the  
Earth, and prepare the Nourishment necessary to the Vege-  
ration of this Plant, it is necessary that this Preparation should  
he made in the Root of another Plans, which is to it aS a  
Nurse; in the same manner as, the Stomachs of Children being  
too weak to prepare their Nourishment, they must either have  
a Nurse, or it must he accommodated to the Weakness of their  
Stomache. To satisfy myself concerning the Production of  
Miffeltoe, I have sown the Seeds os it for three Years together -  
but I have never seen any of them come up : I haVe softened,  
also, several Berries, in *March* and *April,* upon Voung Branches  
of the Apple-tree and White-thorn ; but the Violence of the  
Winds, and the frequent Rains which usually fall in that Sea-  
son, have not permitted me to satisfy myself entirely concerning  
this Matter : So that I only propose Conjectures, which have  
Probability enough to he received in Natural Philosophy.

The Wild Pear-trees are covered over with Miffeltoe, and !  
observed upon their Trunks, tho' the Bark was hard, the first  
Shootings of the Seed, which I had long sought, but could  
never find, in *France,* where this Plant is so common. These  
Seeds, which are of the Shape of a Heart, were our os~ their  
Cases, and stuck, by their Clamminess, to the Trunks and  
Branches of these Trees, when the Wind, or any other Cause,  
shook them out : Each Seed was laid in such manner, that the  
Point of the Root began to pierce into the Bark, whflst the Eye  
of the Seed shot out, and unfolded itself. All this confinmed  
me in my Opinion which I had mentioned concerning the Mul.\*  
tiplication of Miffeltoe, in my History of Plants which grow -  
about *Paris. Tourn. Voyage into the Levant.*

The Fruits of the Miffeltoe begin by Embryons crowned  
with four littie Leaves, or charged with a radiated Crown,  
composed of four littie yellowish Leaves, articulated about **the**Head of each Embryon; these Errfbryons proceed out os **a**yellowish round Mass, articulated with the Extremity of the  
Branch, and two opposite Leaves, which terminate it on **the**Sides. This Observation shews, that M. *Tournofort* was mis-  
taken in the Description which he has given us os these Em-  
bryons. The Berries of Miffeltoe, each of them, often inclose  
two Seeds; the Flowers of the male Plants are monopetalous,  
cut into four equal Parts, each charged, on its inner Surface,  
with a Summit, which is strongly fastened to it *s* It flowers at  
the same time with the female. *Faill.*

Miffeltoe is accounted a cephalic and nervine Medicine, par- ..  
ocularly useful for all Kinds os Convulsion-fits, for the Apo-.  
plexy. Palsy, and Vertigo; for which Purposes, some prefer  
the Miffeltoe of the Hasel to that of the Oak, They who  
have a mind to know all the Virtues of this Plant, may consult  
*Six John Colbatch’s* Discourse of the Misseltoe.

Of the Berry of this Plant was .formerly made the *Viseus Au.,  
cupum,* or Birdlime, by boiling the Berries in Water till they  
burst, when they are well beaten in a Mortar, and afterwards  
washed in Water, till all the branny Husk was cleared away ;  
but with us, in *England,* Birdlime is made of the Holly-tree,  
which they strip off about *Midsummer,* boiling a good Quan-  
tity of it in Water for about twelve Hours, till the whitish out-  
ward Bark is separated from the green ; this they lay in a cool  
Vault, or Collar, covering it with Fern, or such-like Matter,  
letting it lie for a Fortnight, by which time the Bark will he  
turned into a Jelly, which they afterwards beat in a Stone  
Mortar, till it becomes a tough Paste ; this they wash well in -  
running Water, till all the Sordes are cleared away, and then  
put it into earthen Veffeis.

Birdlime is a powerful Attractive, and good to ripen hard  
Tumors and Swellings : It is an Ingredient in the *Emplastrum  
Diachylon magnum. Miller's Bat, Cesse.*

The Birdlime,'’ or Glue, used for Fowling, was much  
used, by the Antients, in Medicine. It has the Virtue os mol-  
lisying and discussing Tumors, the Parotides, and Abscesses,  
bring mixed with Rosin, and an equal Quantity of Wax; it,  
also, cures the *Epinyctides,* and, as *Pliny* says, dries up stru-  
mous Ulcers, and cures the Epilepsy. It is good for many  
other Things, which may be sound in *Diosccrides, Pliny,* and  
*Galen. .. ;......*

The Wood is of principal and specific-Use in the Epilepsy ;  
it is, also,- prescribed for the Apoplexy and Vertigo, taken in-  
wardly, or hung about the Neck: For thefe Disorders it is  
acknowledged -to he effectual, by the unanimous Consent of  
antient and modern-Physicians. We know some, says *J. Bau-  
hine,* who thave-made use of the Wood of *Viscum,* macerated  
in. Wine, with Success, against the Vertigo. The Powder of  
Viscum, especially whet grows upon' Oaks, notOnly cures the  
Epilepsy, but provokes the Menses: It is, also, an *Arcanum*against a Pleurisy, being taken once and again, and a third time,  
inWater *os* Carduus and .Poppy.. *D. Bowles...*

*Jo Bauhine* writes, that.he has several tithes advised the Use  
**of** *Viseum,* bruised and macerated in proper Waters, against  
Worms of theIntestineSin Children. .. .. t-

. The Powder of *tiae.Vifcum* which grows on the *Oxyacanthus,***heing** infused in.White or.*Spanisch* Wine, and given two Hours  
hesore the Paroxysm, -Or Fit; .and the Dose repeated, if neces-  
sary, has often removed, and perfectly cured a Quartan.

The Leaves, aster they have been chewed, and ground by  
the Teeth of labouring Beasts, and Cows, are, by our rustic  
People, esteemed effectual for-expelling the Secundines.

*.Viis.cumis.stc* parasitic Plant, or .Shrub, which grows on other  
..-PlantssIr.Shrubs. . . *- i .... A-:. . : .. 2.*

It is much controverted whether the: Seed.Of this Plant,  
which is perfect and mature, ever produces,a Plant of the same  
Rind. *.Aristotle, Pliny,* and all the Antients, with One Con-  
sent, hold The Affirmative, and that *Viscum* is propagated.from  
the. Seed os the Berries passing thro' the Bodies os Thrushes,  
Wood-pigeons, and other Birds of that Kind, aster the pulpous  
Substance, involving the Grains, is concocted. Such is the Na-  
ture os the Seed, says *Pliny,* that, unless.it he maturated in  
the Bellies os Birds, it will not shoot.. But *Julius Scaligcr,*and, aster him, *J. Bauhine,* and most osthe .Moderns, assert  
the contrary, and endeavour to prove the same, by a Multitude  
**of** Arguments; some os which, however, are easily answered.  
It is. more difficult to answer the Argument drawn from the  
' Situation of the *Viseum* on the Branches ♦. For how is it possible  
for the Seed of the *Viscum* to settie on flender, erect Sprays, on  
which the Birds themselves can hardly rest, and those, too, agi-  
tated by the Winds, and washed with frequent Showers ? Or,  
what is more, , hew can the Seed lodge itself on the prone Part  
of the Branches, or that Side of them which faces the Ground ?  
To this Objection, however, it may, with seine Shew of Pro-  
bability,. be answer'd, that the Excrements os the Birds, fed  
with *Viscum,* participate of its Nature; and therefore the Seed,  
btf.neared with that viscid Matter, IItay be so firmly aggluti-  
**rat rd** to the Branches, as not easily to be separated from them  
by the Force of Wind or Weather. We, indeed, sor our Part,  
are not free to admit os spontaneous or equivocal Generation;  
and fince all Seed, as *Theophrastus* truly says, is sor the Sake of  
Generation, it seems to us absurd, and by no means probable,  
that Nature should have created any perfect Seed, and that too  
in great abundance, which yet, in all its Species, is wholly ufe-  
less, and unfit sor the Propagation of -its Kind. *Rail Hist.  
Plant. - ’*

*. Pliny* tells us. Lib. I6. *Cap.* 30. that, among other Products  
- of the *Euxus,* it bears *Viseum* on that Part of it which looks  
towards the North, and *Hyphear* on its South Side. And *Lib.*I 7. *Cap.qui* he further says, that there are three Kinds of  
*Viseum,* for what grows on Firs, and Larch-trees, in *Euboea,*is called *Stalls',* in *Arcadia, Hyphear*; and that the *Viseum*. [properly fo called] grows on the *Quercus, Robur, Ilex,* espe-  
oially the *Ilex Sybvestris,* and the *Terebinthus,* and on several  
-other Trees, but most plentifully onine *squcrcus,* .whence it is  
called *Dry at Hyphear, il* the *Hyphear* os the Oak And **a**little aster he fays, that the *Hyphear* is fittest to feed Cattie.

*Theophrastus,* whom *Pliny* transcribes with some Variations,  
and, perhaps. Mistakes, in the Beginning of *Cap.* 23. *Lib.* 2.  
*de Cans. Plant,* tells us, that it is Very surprising, and looks  
quire odd, and unaccountable, that some Seeds and Plants will  
not shoot or grow in the Earth : Os this Nature are the *Viseum  
[sp«], Stelis,* and *Hyphear. Stelis* is a Word they use in  
*Euboea,* bur *Hyphear* is an *Arcadian* Term, and *Ixia \Vifcwn\*is a Name they use in common. Some will have these three to  
be of the same Nature ; but there seems to he some Difference  
-hetween them, in that they grow on different Plants ; for the  
*. .Hyphear* and *Stells* grow on Firs and Pines, but the *Ixia* on the  
*lsitcercus* and *Terebinthus,* and many other Sorts of Trees.  
Others allege, as a good Argument sor their heing distinct, if

the Observation be right, that not only each os these is proa,  
duced on homogeneous Trees, aS, for Instance, the Pine and  
Fir, but more than one are to be sound growing on different  
Parts of the same Tree, where on one Side you may observe  
the *Stelis* or *Ixia,* and on the other the *Hiphear.*

Here *Theophrastus,* and his Transcriber *Pliny,* seem to make  
the *Hyphear* and *Stelis* distinct Species from the *Viseum,* but,  
fays *Ray,* erroneoufly; for if they were really different, how  
comes it to pass that, in so many Ages, and among such a Mul-  
titude of Authors fince the Time os *Theophrastus,* this Distin..  
ction could never be discovered, but has hitherto escaped the  
diligent Search, and curious Eyes; of the most sagacious Bo-  
tanists? Nor do we approve those Distinctions os *Viseum* which,  
are.taken from the different Kindsof Trees.on which it grows;  
aS is what grew on Trees of different Species were itself, also,  
specifically different. And whet *Theophrastus* haS written, that  
it'always preserves its Leaves on Evergreens, het loses them on  
Plants which shed their Leaves, is contrary to Matter os Fact ;  
for whet grows on Pear-trees, Apple-trees, Almond-trees, and  
many Others, whole Leaves are caducous, is perpetually green,  
and never loses its Leaves. ..ASIo .what *Matthiolus* says of the  
*Viseum* growing on the *Quercus,. Robur,* and.*Castanea,* that all  
its Leaves fall off at the Approach of Winter, let him answer  
for himself: For my Part; T could never make the like Ob-.  
servation on any Tree, at any time os the Year. - *Rail Hist.  
Plant. \* ,*

.: VISIO. Vision. ..... . . . ... .. : l .....

.. Light, which is an Aggregate of all Colours collected to-  
gether, sends forth Rays On all Sides: These Rays, tho'very  
subtile, are, in like manner, compounded os all Kinds of Co-  
lours ; whence they are again divisible into simple Rays, which,  
collected separately, or.of one Sort, or of different Sorts toge-  
ther,-represent Variety of Colours; but, all united,, form a  
very splendid lucid Beam, or Very white Brightness. These  
Rays proceed from a lucid Point, as from a Centre, towards all  
Points without it, in strait Lines, thro' an homogeneous Me-  
dium, in no .estimable Space os Time, passing thro' pellucid,  
and falling upon opake Objects. Hence, all Points of the  
Cornea are struck by Rays contained within a Cone whose  
Vertex is the lucid Point, and its Base the Plane of the Cornea,  
if there he no Impediment interposed between the radiating  
Point and the Cornea. ...

cr. The same Rays, approaching denser Bodies, are there incur-  
Vated, some more, some less: Hence they are separated, and .  
being separated, and reflected, exhibit Variety of Colours, salfly  
ascribed to the reflecting or refracting Body, unless so far as  
they are separated by its means: The Reflexion, then, is here  
Various, according to the Variety of the Colour latent in the  
Ray; the Angle, however, which the reflected Ray makes  
with a Perpendicular erected at the Place os Incidence, seems  
to be the same as that made by the falling Ray with the same  
Perpendicular; and in other Respects there seems to he no Al-  
teration at all. .

If these Rays pass out of one Medium into another, in their  
Approach to the latter they are incurvated, and, in that Con-  
dition, pass on thro' that Medium; and the more dense this is,  
the nearer incurvated are they towards a Perpendicular, and so  
ten the contrary: And the same is, also, owing to a singular  
Cause latent in some Fluids, not to be determined but by Ex-  
perimentS. This Inclination is called *Refraction.*

- This Refraction, with regard to Sense, is regulated by one  
certain Law, winch is as follows : If the same Ray falls into  
the same pellucid Medium in Variety of Anoles, the Sines of  
the Angles of Incidence will bear the fame Proportion to one  
another, aS the Sines of the refracted Angles.

Hence it follows, that Rays proceeding from a radiating or  
reflecting Point to the pellucid Cornea, are there refracted  
towards a Perpendicular, with X al most the same Alteration of  
Course as in Water; so they pass on thro’ the aqueous Hu-  
mour, and have their Course determined through the Perfo-  
ration os rhe Pupil to the Superficies os the crystalline Lens ;  
but those .;Rays which enter with so great Obliquity as to fall  
on the Iris, are thence reflected, and fall out os the Eye again,  
that they might not, by their Reflexion and Ingress into the  
Eye, disturb the Distinctness os Vision; and those other Rays,  
which, on account os then Obliquity, fall hetween the lower  
Part of the Uvea and the vitreous Body, or on the Superficies  
of the aitreous Body, are immediately suffocated in the black  
Pigment of the same, and lost, as if they had never been, that  
so no Rays might he transmitted thro' the Vitreous Humour,  
but such as, aster penetrating the Pupil, fall upon the crystalline  
Lens; the Iris, in the mean time, being contracted, or dilated,  
admits more or fewer Rays, in proportion aS the Object is  
. nearer, and more Vivid, or more remote and languid ; under  
this Law, or Regulation, that the nearer, or more luminous,  
the Object, the narrower, or more contracted, the Pupil. This  
happens from a Mechanism peculiar to that Parr, and defends

that very tender Membrane, the Retina, from .heing offended,  
dried, or scorched.

. The fiatter, therefore, the Cornea, the less it collects the  
Rays which fall upon it from one lucid Point, and the more it  
disperses them, so that the fewer in Number arrive at the cry-  
stalline Lens, , and even those Very divergent, unless they come  
from a very remote Object: On the contrary, the rounder the  
Figure of the Cornea, the more it will unite the Rays which  
strike upon it from One radiating Point, and the greater Num-  
ber will it collect in the crystalline Lens, and those Very diver-  
gent. And hence you may assign one Reason for the Vision of  
short-sighted and aged Persons.

. The crystalline Lens, after receiving the determined Rays  
from [the Pupil, unites them still more by a new Refraction,  
and renders them convergent, under the following Law, or  
Regulation, that those Rays which proceed from one Point  
without the Pye, being here collected into one Point not far  
remote, are thence conveyed thro' the vitreous Humour to the  
Retina, on which they paint only that One Point precisely from  
which those Pays proceeded. If the Crystalline Lens be very  
’ dense, or round, the Point of Collection [the Focus] is too near  
the Lens, which creates Confusion, if, on the Other Hand,  
the Lens he too rare, or flat, the Point of Collection is too  
remote, whence a Confusion is again occasioned ; and this af-  
fords us another Reason for the Vision Os Old Persons, and  
*Myopes,* or such as are short-sighted.

. From the two last Paragraphs we may account, or assign the  
Reasons why short-sighted Persons have their Sight helped by a  
concave dioptric Glass, or moving the Object nearer; and why  
aged Persons see more distinctly thro' a Convex dioptric Glass,  
or when the Object is more remote.

Both these Defects in the Persons just mentioned, are, also,  
remedied by bringing the Crystalline Lens to the Cornea, or  
removing it at a Distance ; which Purposes seem to he answered  
two different Ways ; as by compressing the Bulb of the Eye by  
a strong Contraction of all the four Muscles [See OCULUs] at  
once, whence the Bulb is lengthened; or by a Contraction of  
the Fibres which compress the Vitreous Body, and elevate the  
Lens. There appears no Other Method of answering these In-  
tendons. . . .. . . .. \*.

The Refraction which a Ray. suffers in pasting out Of the Air  
into the Cornea, is nearly equal to what it suffers in passing out  
of Air into Water ; and the Refraction of a Ray, passing from  
the aqueous Humour into the Lens, is equal to whet happens  
to a Ray passing out of Water into Glass; whence the Altera-  
xion is inconsiderable : And, in the last Place, a .Ray, passing  
from the crystalline Lens to the Vitreous Body, suffers but littie  
Alteration by Refraction, and, perhaps, .none at all, when the  
vitreous Humor is pretty closely compressed; by winch means,  
that Part becomes more dense. Hence the principal, arid most  
necessary Use ofthe Vitreous Humor seems Io he, that the  
Lens, by having free Space to move, might adjust: and accom-  
modate the Eye to different Distances, heing itself a Substance  
of a less mutable Figure than the vitreous Body.

. The End, or Design, of all this Apparatus, {of Humors and  
Refractions} is, that there may he a distinct and Vivid Col-  
lection of those Rays, which, proceeding from one Point of the  
Object, enter the Eye, and penetrate the crystalline Lens, in  
the Bottom of the Eye, directly under the Pupil, and that so  
there may he painted" in this Bottom as many Points as were  
conspicuous in the Image: Hence, the Picture, or Image, in  
Miniature, formed on the Retina, resembles the Object.

And since the mucous Medulla of the optic Nerve has ite  
Seat precisely in this Place, directly under the Pupil and here  
Lens, it appears, that this is the Part which receives the Pic-  
tures, and, by a Continuation of the Impression, presents them

, to the common Sensor}'; and excites in the Mind the Idea of  
the Thing seen.

-. It appears, alfo; from what has been said, that the Expe-  
riment of *Picard* and *Mariotte* is so sar from disproving what  
has been advanced in the preceding Paragraph, as some Authors  
have thought, that it is a clear Confirmation of it; and we  
have even Occasion hence given us, ro break forth into Praises  
os infinite Wisdom in placing the Entrance of the Optic Nerve  
hot in the Axis of Vision,, nor towards the extarior Angle of  
the Eye, but towards the Nose, in. a middle Altitude. r, The Perfection, therefore, of Vision, depends on such a  
Figure, Transparency, Fabric, and Energy of the Solids, and  
fitch a Denseness and Transparency of she Colourless Humors,  
as are qualified for collecting Multitudes oTRays from every  
Visible Point of an Object, unmjxed with others, upon one di-  
stinct Point of the Retina, this Foche being formed neither too  
near, nor remote; and, in the next Place,, on such a Mobility  
of thefe Solids and Humors, in Conjunction, as is necessary for  
**a** clear and distinct painting os Objects placed at different  
Distances; for, with, these Requisites, their. Size, Figure,. Dir  
stance. Situation, Motion, Rest, Light, **and Colour, are very**

wail represented. \_ In the Retina there is, besides, required fuel  
a Situation, Expansion, Quickness of Sense, Tenderness, and  
Justness of Proportion, between the medullary, arterial, Veh  
nous, and lymphatic Substance, as dispose it for tranimitting\*  
by a free and sound Optic Nerve, pure and perfect images to  
the common Sensory. .

There is, then, Ito Emanation of Rays froth tis, nor are they  
reflected from Objects hack again upon us, as the *Stoics* as.  
sorted; nor is Sight performed by Emission os a Visible Species  
from the Object towards us, as the *Pythagoreans* thought; nor  
by Emission of Effluvia from the Object and the Eye meeting  
together, and, after mutual Embraces, reflected, as the *Plen.  
tonsils,* by an extraordinary Way of Ratiocination, endeavoured  
to prove; nor, lastly, is it owing to a material Emanation of  
Corporeal Images, as was the Opinion os *Epicurus*; but is pepo  
formed in that simple and mechanic Way which we have above  
explained. . .

*ssueries* on this Subject are siich as the sollowing : ...

Why Objects placed at the least Distance, in which the Eye  
Can bear to see distinctly, appear most plainly ?

Why, when removed thence to a great Distance, they ap-  
pear distinctly, but affect us in a more languid manner? Why.;  
also, when placed too near, they seem confused ? What is ne-  
cessary to a distinct, what to a strong Vision ? And the like.  
Which are all easily answered, from the Premises; *Boerbaav.  
Institui. Medic. ' ' '*

VISNAGA. .

The Characters are; . \_

. The Root is fibrous, and annual; the Leaves are broader,  
shorter, and blunter, then those of Fennel. The Umbella is  
generally Contracted, and closed, and the Seeds are much  
smaller than those of Fennel.

*Socrhaave* mentions but one Sort of *Visuaga*; which is,

Visnaga. *Offic. J. B.* 3.3I. *Raii Host.* 1.456; *Boerh. Ind. A..*49. *Gingidium umbella longa.* C.B.P.I5I. *GingidiumHis.pani-  
cum.*. Ger. 885. Emac. IO42. *Visuaga Gingidium appellatum.*Park. Theat. 890. *Faeniculum annuum, umbella contracta oblonga.*Toum. Insta 3II. SPANISH PICKTOOTH.

This is a Plant of about a Cubit and an half in (growth,  
with the striated, glabrous, and geniculated Stalk os the *Ane-  
thum,* and the smooth heras of the *Pasiinaea erratica,* but di-  
vided into larger Segments: The Umbellas of the Flowers ate  
white, and their Pedicles, especially the external ones, are  
above a Palm in Length, and are hard, and stiff; and each Pe-  
dicle, both internal and external, bears on its Top a new Um-  
hella of numerous small Pedicles ; . every Urtihella, also, as west  
as every Top os a Branch, has small Leaves subjacent at its  
Base; the Seed is small, like that of the *Apium* of the Shops,  
arid acrimonious.

It grows in *Paly, Sicily,* and the southern Parts of *France,*ipontaneduby, but is cultivated, with us, in Gardens; and  
flowers in the SuInrner.

*Jo Bauhine* mentions a *Gingidium AEgypiittrn* with larger and  
firmer Umbellas and Pedicles than these which grow in our Gar-  
dens; and we, also, remember to have observed such.

The Description of the *Daucus Campestris, in Clesclpinus,*agrees, in all Respects, with that which he had before giveq of  
the *Vtfnaga* in the same Book j so that it seems quite the fame  
Plant.

The Pedicles, or Footstalks, of the Umbellas, on'account os  
their Stiffness, and sweet Scent, serve for Toothpicks with many  
Persons, especially among the *Spaniards y* whence we call it  
*Spaniso Picktooth. RjaiiHift.PJattt. .. . .. . . .*

The Virtues, according to *Bduhide,* are the same with those  
of *Fcent culum, or* Fennel. \_ *Hitsc. Plana, adscript. Bocrhaav.*

VISQUTIRO. The Name of ai *Brasilian* Tree, which  
affords a soft viscous Resins used for Birdlime. *Eaii Hist.  
Plant.* \ χ . .. - :

VISUMARUS. A Name for the *Trifolium,* in *Marcellus  
Empiricus, Gr 3. .s . .*

VIT & BALSAMUM. See ELIXIR BALSAMICUM Ho PP-

**MANNI. ... / .. .**

k I have, .by Mistake, made a Reference to this Article, frorn  
BtjSSti SriRITus BE2.OARDICUS, and front many other Ar-  
tides, which ought to have been to LIQUOR MINERALIS  
**AN0DYNUS.** This the Reader is desired to take Notice of. S  
.. .VITALBA. A Name for the *Clematitis, solveftris; lati-  
folia l*

*NYPNLlSa* Cardines. *Blancand.*

*NYLELAS* ACTIO. See ACT Iso...

VITALIS FUNCTICo See **ACTIO. ”...**

VITEALIS.CONVOLVULUS. A Nime for the Ὀράπ  
*volvulus ; minor ; arvensis ; store roseo.*

VITELLUS. The Yolk of an Egg. See OvUM.  
VITEX.

The Characters are; 1( . . ♦

The Leaves run, as It were, into five Divisions ; and/ in

*.European* Plants, are caducous. The Flower is monopetalous,  
tubulous in the lower Part; in the upper, as it were, bilabiated,  
and disposed in Spikes t The Ovary, which is seated in the'  
Centre of an indented Calyx, becomes a globous Fruit, divided  
into four Capsules, containing oblong Seeds. ‘

*. Boerhaave* mentions six Sorts of *Vitex ,* which are,

- I. Vitex; soliis angustioribus. Cannabis modo dispositis.  
See AGNUS CAsTUs. .

\_ 2. Viter; foliis angustioribus; Cannabis medo dispositis;  
floribus coeruleis. Hi L.

ῖ 3. Vitex; five Agnus; flore albido/ *H. Ri Par.*

14. Vitex.; five Agnus minor ; foliis angustissimis/ ’ *Hi R.  
dstari : "si*

*' .5.* Vitex;' trifoliaminor; Indica ; rotnndisolia. *Breyn.  
si sodr.le.frara Nasi.* H.Mal.I. *Negundo fas mina, Acosea.***H. A. I. T8I. "" ’ ' ’ 'si. \***

This is RShrub about.a Manis Height, of the Bigness os a  
Peach-tree, according to *Garcias gi er* of an Almond-tree, ac-  
cording to" *Acosea,* and growing in sandy Places : The Root is  
fibrous, os a brownish Colour without, and whitish within,  
with , a thin Bark, of a bitterish, but when chewed awhile,  
of a somewhat acrimonious Taste; the Leaves are generally  
three on cine Pedicle, two opposite, and the third at the End of  
the Rib larger than the others; they are of an oblong-round  
Figure, cuspidated in the sore Part, with an even Margin, mo-  
derately thiek, soft, smooth, with their upper Face of a dark'  
Green, but paler beneath, of a bitter and acrimonious Taste,  
and- a grateful Smell,, much like Lavender: According to  
*Acosea,* the Leaves have the Taste and Smell of Sage: The  
Flowers grow many together on common Pedicles, out of No-  
dules, which are produced by Pairs in a decussated Order above  
the Origin of the Leaves; these Flowers adhere to short Pe-  
dicles, are of a purple-ceruleous Colour, and have the same  
Smell as the Leaves, only brisker: They consist of five shape-  
less Petals, with a Bell-shaped Neck; one Os. the Petals is erect  
and broad, hut concave and hairy in the interior Part; the .  
Neck of the Flower towards that Part, of the Leaf has, also,  
its interior Part halry; the Other four Petals are expanded to  
almost their Breadth, and more like one another, only those  
next the erect Petal are somewhat broader and rounder, the  
others towards the anterior Parts. The Flower is furnished  
with four erect, purple-ceruleous Stamina, which have blackish  
and arched Apices, and in the Middle a flender, purple-Cseru-  
IeouS Stile [Pointal],' with a bifid Cuspis, inflected towards a  
ceruleous Leaf, and taking its Original from the Rudiment of  
the Fruit [the Ovary] within the Calyx; the Calyx, which  
straitly embraces the lower Neck Of the Flower, consists of  
five short, saint-green, cuspidated Leaves, and is striated with  
flender Ribs, Or Fibres, lengthwise: The Fruits are round, and  
somewhat ohlong Berries, of the same Smell with the Flower,  
the greatest Part os the Berry comprehended within the Calyx,  
and of a faint-green Colour ; but the upper Part, which, ap:.  
pears, above the Calyx, is at first redish and shining, but after-  
wards, when dry, of a black Colour, like Ink: In the Middle  
is an oblong-round Stone, under a green and hard Pulp, which  
is not thoroughly softened with Maturity ; the Stone contains a  
whitish, tasteless Kernel.'

The Oil of the Root, by Distillation, is clear, fomowhat  
greenish, of a sweet, acrid, penetrating Taste, and void of  
. Smell. . ' '

. This Tree, says *Acosea,* is of such frequent Use in Mediane  
in these Countries *[Malabar,* and the adjacent Parts], that  
unless it had pleafed God that a manifold Increase of young  
Shoots should succeed in the Room of thofe Branches which are  
cut off, the Trees had long ago been Consumed, or, at least,  
been extremely dear and scarce; but the more the Branches  
are lopped, the thicker they grow, and are always green.

The tender Branches, Leaves, Flowers,' and Fruits, bruised,  
and boiled in Water, or fried or boiled in Oil, are successfully  
- applied to all Pains, proceeding from what Cause soever, but  
especially to Pains of the Joints from a cold Cause; and in Tu-  
mors and Contusions they have surprising Effects. Some apply  
the fame to Wounds, and affirm, that in one Night it has re-  
moved the Pain, and digested the Matter,

The bruised Leaves are applied to old Ulcers with good Suc-  
cess ; sor they, digest the Contained Matter, cleanse the Ulcer,  
and cicatrize it; and they are really found to be of such Use in  
Wounds, Abscesses, and Contusions, as to render the Assistance-  
of a Surgeon unnecessary. The Women wash their whole Bodies  
at all Seasons with the Decoction os the Leaves, and are so firmly  
persuaded that the Flowers, Leaves, and Fruit of *theNegundo,*. have a Virtue of promoting Conception, that they would stone  
- any Person who should endeavour to convince them of the con-  
trary. The Leaves used in Mastication amend a fetid Breath.  
Thus far *Garcias* and *Acos.ta. Raii His.t. Plant.*

6. Vitex; trifolia; minor; Indica; serrata. *Breyn. Prodr.*

2. *PeiKrlcsi.* H. Mal. .2. Raii Hist. 2.-1575. *Negundo rnai  
Acos.ta.* H. A. I. I79. *Boerh. Ina. alt. Plant.*

The Leaves Of this Species grow by Threes and Fives on  
Pedicles, and are.of an oblong and pretty narrow Figure, and  
Contracted into an acute Point, but rounder and broadest at the  
Pedicle: In their fore Part they are more or less finely crenated,  
of a darkish-green Colour,- but clearer in the upperpart; the  
largest Leaf is at the Extremity of a Rib ; the two next, which  
are larger than the others, adhere to the Middle of the Rib by  
Pedicles not an Inch, in Length; the other two Leaves are  
very small, and seated on the common Pedicle.: in its other  
Characters it agrees with the preceding; its serrated Leaves,-  
resembling those of- the *'Sambucus,* shew-it to be the *Neganda  
mas* of *Garcias* and *Acos.ta. Raii His.t.Plant. -*

The Seeds of the Viter are’effectual m-the Hysteric Passion ;  
and provoke Urine, and the-Μ enses. *Hisp.' Plant ', adscript.  
Boerhaave*

VITICELLA. A Name for the *Bryonia alba. -*VITILIGO. A Species.of-white Leprosv.- See LEPRA..  
VITIS. Esu:-.. στὴ .

The Characters ere; *a ;*

r At the Joints of the Branches shoot forth Tendrils which  
Clasp and twine themselves about whatever lies in their. Way ;  
the Flower is rosaceous,.JientapetalouS, and furnished with five  
Stamina ; the Ovary .grows in the Bottom-of the Flower, is  
furnished with a short, hairy Tube,, and becomes a. soft,, she-,  
indent Berry, containing-several Seeds,-generally four; the  
Flowers and Fruit are disposed-in Clusters.

*Boerhaave* mentions twelve Sorts of *Vitis* ; - which are,  
ς I.Wttis; sylvestris; Labrusca. *Co B.* P. 299. *Labrusca..  
Lerners, s Hist .des Drogues. .* .Ἀ

s This is A Species Of Vine which grows, -without cultivating,  
by the Sides of Highways, and near Hedges; it bears a very  
small Grape, which, when ripe, becomes black, and sometimes  
ripens not at all. .../..

The Plant is detersive and aperitive, and its Fruit is astrin-  
gent. *Lemery des Drogues.*

2. Vitis; viniferaex cujus Uvis acerbis, immaturis, Om-  
phacium exprimitur. *Boerh. Ina. A.* a. 232. *Vitis.* Ossic. Ind..  
Med. I24. *Vitis Vinifera.* Mont. Ind. 55. -THE VINE.

The Vine is fo well known to every Body, that it would be  
needless Io spend time in describing it: With uS it generally .  
runs up the Sides of Houses, or Walls ;‘in the Wine Coun-  
tries it is planted in Vineyards, as a Standard Tree. The  
Differences of the Grapes, which grow on them, are almost as  
many as the Countries they grow in, as to their Colour,  
Taste; and Largeness; and there is as great a Diversity in the  
Wines produced from them. Amongst these, the Canary,  
the Malaga Sack, and the Alicant, for sweet Wines, are  
reckoned best; the Sherry and .Mountain, for dry Stomach  
Wines ; the Red and White Port, and the French, to drink  
with Food, are most in Esteem ; and to these, for their Ex-  
oellency, and grateful Taste, may he added the Muscadine, the  
Smyrna, and Cyprus Wines.

- AS to the Nature and Use of Wine, there have been so  
many Volumes written about them, that it would be super-  
fluous to say much here: Moderately used, it is Very cordial,  
and of great Service to Mankind. It strengthens the Stomach,  
helps Digestion, comforts the Boweis, and is the best Pre\*  
servative against the Plague.. *Miller\*s But. Oss'.*

The Vine is reckoned, by *Theophrastus* and *Farro,* among  
Trees; but because it stands in need os Assistance, and must  
be forced to trail on the Ground unless it meets with something  
to lay hold of, in order to support itself, it can hardly deserve  
the Name of a Tree, tho' its Trunk sometimes grows to the  
Size Of a Manis Leg, or, perhaps. Thigh. The Antients  
numbered it among Trees, with respect to its Bigness, in which .  
it really «exceeds some Trees, according to *Plins.s.* Account of  
it. *Lib.* 14. *Cap.* I. There is to he seen, he says, in the City  
*Pepulonia,* an Image of *fupiter,* made out of one Vine,  
which has stood uncorrupted for many Ages. At *Masisilia  
[Marseilles']* is a public Drinking-bowl, of the same Wood;  
and at *Metapontum* the Temple of *Juno* is supported by Pillars  
made of the Wood of the Vine. The Staircase by which  
you ascend to the Temple of *Diana, nt Ephesus,* is made; as  
they say, of the Wood of a single Vine, in the Ifle of *Cyprus,*where Vines grow to.an extraordinary Bigness: Nor is there  
any Wood of a more durable Nature. There is no Endos  
the Growth of this Plant ; a whole House, or Villa, has been  
incompafled and overspread with the Branches and sequacious  
Tendrils of a single Vine. At *Rome,* in the Portico of *Livia,*one Vine, extending itself upon Poles, overshades the whole  
open Walk ; and the same Vine has yielded twelve Amphoras  
of Must: They over-top the Elms in evepo Place; and it is  
reported, that *Cyneas,* the Ambassador of King *Pyrrhus,* ad-  
miring the Height of the Vines at *Aricia,* but difliking the

airstere Taste Of the Wine, merrily said of it, that its Mother  
deserved to hang on so high a Gibbet. Thus *Pliny.*

*\* . Co Bauhine* divides the *Vitis* into the *Sativa* and *Syluestris*; or  
cultivated and wild: Of the *Sativa,* or cultivated, there is the  
*greater* Sort, of. which there are very many Species, and the  
*lest.* The Grapes of the larger differ in Colour and Size; for  
in some they are green, in Others whitish; or of a deep yellow,  
or a deep black-red, or ceruleous, or a light-red. As to Form  
and Size in some Species, the Grapes are oblong, and of the.  
Size and Shape of Prunes, and this Sort may be called *Pergulana*(perched, or staked up); Of others the Grapes are round, and  
bigger or smaller; some again have no Grain, or Stones, Others  
a fingle one, or perhaps two ; a bearded Grape is more .rarely  
to be met with. The lesser Sort os *Vices* bears a black Grape,  
very seldom white or yellow, with a Very small soft Kernel;  
they differ, also, in Taste; some are sweet, others sharp, others-  
of a mushy Taste, fuch as the *Vitis Apiana* of *Pliny.*

. There is a Difference, also, in the Leaves; for some are  
larger, and more deeply cut, as the *Italica,* the Leaves being  
cut home to the Pedicle, and divided into acute Lobes; others  
are of a less Size. Some again are thinner, others thicker;  
some green, others red ; others., spotted; some: hard to the  
Touch, others soft; some smooth, others a little hairy. Thus,  
*Co Bauhine. . . ' r*

. Of the Kinds of GrapeSPZiny thus briefly speaks: The Kinds.  
of Grapes, in respect of Size, Colour, Taste, and Kernels, are  
innumerable, and they, are still multiplying upon us ; here they  
glitter in Purple, there they sparkle in Rose-colour, or shine  
in Green ; the whitish and the black Sort are Common ; the  
*Bumasti* swell like turgid Breasts, and others run into Length  
with long Kerneis like those of Dates, and fo on. ,.

\_. That the Kinds of the *Vitis,* as well as of the Pear-free and  
Apple-tree, are innumerable, was acknowledged by the An-  
tients ; fince, as *Pliny* truly says, they are almost as many as  
the Differences of Soil, and new Sorts are produced every Day,  
and ever will be produced ; but It would he extremely difficult,  
not to say impossible, to accommodate the antient Names of  
- Vines, to the most noted and cultivated modern Species, and,  
therefore, we shall not attempt it.’ as having neither Means  
nor Leisure for such an Undertaking. . .

3. Vitis; Corinthiacae ; five Apyrina. *J. B. 2. Iz. Boerh.  
. 2nd. A.* 2. 232. *Ulvee passes mitiores, Pessedae. Ossic. Vva  
passes minores, vel Pallulae Corinthiaca.* C. B. P. 209. *Co-  
rinthiaca.* Park. Theat. THE CURRANT VINE.

These are a smaller Sort of Grapes, which took their Name  
from their growing in Plenty about *Corinth,* though we have  
them principally from *Zant* and *Cephalonia*; these they only  
gather off the Bunches, and lay them to dry in the Sun, and  
. io put them up in large Buts.

. Both these, and the *Uvee passes majores,* are opening and  
pectoral, helpful against Coughs and Consumptions.

The Currants are more used in the Kitchen, than in Medi-  
.cine. *Miller’s Bot. Off.*

Currants are of a temperate Quality, mitigate the Heat in  
Fevers, allay Thirst, and loosen the Belly. *Dales*

An Vitis ; Apiana ; Plinin. *Co B. P.* 298» *Uva Muscha-  
tella.* Car. Step. Praed. Rush 342.

. 5. Vitis; Pergulana; acinis Pronorum magnitudine &  
.forma. *C. B. P.* 298.

6. Vitis; folio Apii. T. *P.* 2. 73.

. 7. vitis, alba ; dulcis. *J. B.* 2. 73.

8. Vitis; Frontiniaca. *C. B. P.* 299.

q. Vitis; nigra; dulcis; Vintintdicta.

**10.** Vitis; multiplex; alia; pro diversitate, quae obtinet in  
.acinis ratione coloris, saporis, magnitudinis, admodum Vari  
-Cultuque industrii Vindemiatoris semper nova.

**II.** Vitis; quinquefolia; Canadensis; scandens. T. 6I3.  
*Edera, quinquefolia Canadensis.* Corn, ιοο-

I2. Vitis; Vulpina dicta; Virginiana; alba. *Plulen. Alrn.*392. *Boerh. Lnd. alt. Piant.*

The Leaves, .with the Tendrils of the Vine, being bruised,  
and applied, mitigate Pains of the Head, and with Polenta,  
cool the burning Heat and Inflammation of the Stomach. The  
Leaves applied alone have the same Effect, as being of a' refri-  
gerating and astringent Quality. The Juice of the same drank,  
is effectual in the Dysentery, SpittingosBlood, the Stomachic  
'Passion, and the Green-sickness. The Tear of the Vine,  
, which is a sort of Gum, and concretes about the Stock, taken  
in Wine,, expels the Stone, and used by way of Unction, cures  
the Lichen, Psora, and Leprosy, first prepared by an Affection  
Of the Parts with Nitre.. The same with Oil, srequentiy used  
to anoint the Hain, has the Effect Of a Psilothrum ; hut the  
most efficacious for that Purpose is, the Liquor discharged from  
the green Sprays by Exudation when burning, which, also,  
removes *Myrmccia* [a kind of little black WartST The Ashes  
- Of the Sprays, with the expressed Husks of the Grapes in Vine-

gar, here a Condyloma and Thymus, affecting the Parts about  
rhe Assets, being anointed with in The same is effectual in  
Luxations, and the Bites of Vipers, and applied with Oil of  
Roses, Rue, and Vinegar, is good sor an Inflammation of the  
Spleen. ' Botanists ascribe still more Virtues to the Ashe? and  
Lixivium prepared of them ; but there seems to he hut little  
Difference between the Ashes of Woods and their Lixivia, ex-  
cept in their containing more or fewer Salts to emit them.

Grapes, in the Opinion of *Galen,* are the chief of all au-  
tumnal Fruit, more nutritive than any of the fugacious Sort,  
or such as will not keep, and have least of a bad Juice, especi-  
ally when perfectly ripe.

All fresh Grapes disturb the Belly, and inflate the Stomach,  
for which Reason they are forbidden to he eaten in Fevers; but  
after they have been gathered and hung awhile, they are more  
innocent, and not only good for the Stomach, but restore a  
lost Appetite, and consequently are of Service in Languishings;  
they, also, render the Body soluble. .. But there is a Very con-  
fiderable Difference in Grapes: The sweet are most nutritive,  
and fatten the Body, cause Inflations in the Stomach, and pro-  
voke to Stool; austere Grapes, on the contrary, nourish but lit-  
tle, and bind the Belly. *JD. .*

I. reinember to have read somewhere of a *German* Matron,-  
who, during the whole Time of Vintage, which lasted a Month  
or two, in which she lived upon Grapes, never used to drink,  
which shews that Grapes are good to quench Thirst.

Every body knows; says *Palladius,* that the larger Grapes,  
which make the finest Shew, and are of an hard and dry Grain,  
are brought to the Table ; but the most fruitful, which have  
the tendered Skin, and the richest Taste, and especially such as  
soonest fade, are set aside for the Press. '

*Vitis,* according to *Donatus, in Eunuch,* comes from *Vieo, '*which *Postal* expounds by *alligare,* to tye; and *Nonius,* by.  
*vincire,* to bind about; arid *inflectere,* to inflect or hendi  
*Raii Hist. Plant.*

The distilled Water Of the Tops of Vines cutin the Spring, ,  
' is aperient, detersive, and of Service in the Stone, and Nephri-'  
tis ; and, used externally, is good to deterge the Eyes. The  
Leaves and Tendrils are astringent and refrigerating, and pro-  
per in a Diarrhoea and Haemorrhages, and are used in Fomen-  
tations of the Feet ; the young Branches or Sprays, are aperi- \_  
five. The immature Fruits of the Vitis are called *Agrastsae,*and the mature *Uva,* which increase an Appetite, and provoke  
to Stool. The Fruits dried in the Sun, are called *Uva passes,*or *Pafsulae,* the largest of which are the *Uva Damascenes,* **the**smaller *Uva Corinthiaca,* which latter are serviceable in Coughs,  
and to expectorate Phlegm, and to render the Body soluble;  
The Leaves boiled, are astringent; the Water, which distils  
spontaneousty from the Plant, deterges cutaneous Desedations  
Of the Face, The Tartar extracted from *French* Wines,  
is red; from *German* Wines, white. *Hist. Plant, adscript.  
Boerhaau.*

There are several Sorts of Raisins used,-though *Dale metior*tions only the two following

I. *Pasesulae Damascenes.* Ossic. *Pafsulae maxima; sive Da»  
rnaseena, Zibeba dectes.* Schroff IV. p. **I 72.** *Vitis Damascena.*Host. Reg. Par. I86. Tourn. Inst. 6x3. - \*

The *Zibeba* stoned, and infused in a convenient Quantity of  
Spring-water, ora proper distilled Water, make a grateful-Sort  
Of Drink for sick Persons, and good to quench Thirst. The ..  
Stones have an astringent Virtue, and are proper in Vomitings  
and Fluxes of the Belly, whether used internally or externally ;

^they are roasted and triturated for these Purposes. *Schrnd. .*

**2. UvA EAsSA MAJOR, Ossic.** *Uva passea major &surit.c&  
Graces fortes C.B.P.* 299. RAISINS OF THE SUN.

Raisins of the Sun are made of the Grapes after the follow-  
ing manner ς Cut the Stalks off the Bunches they design for  
that Use almost in two in the Middle, and by that means hin-  
der the Sap from coming to them in any Quantity, and let them  
hang thus on the Branches, till by Defect of Nourishment, and  
the Heat of the Sun, they are sufficiently cured; when they  
are put up into Casks for Use. The *Malaga* Raisins are mar-  
naged another Way : They dip the Bunches of ripe Grapes in  
a boiling-hot Lye, made of the Ashes of Vine-stalks, taking  
them out presently, and then lay them on Boards in the Sun  
to dry, and afterwards they are packed up in Frails. *Millccis  
Bot. Oast. ζ*

Raisins of the Sun, as well as the *Zihebeae,* and Currants, are  
all hot or temperate, lenient, loosen the Belly, correct Acri-  
mony, are grateful to the Stomach, Lungs, and Liver, and mi-  
tigate a Cough. *Schroder.*

Raisins, by them acrimonious and penetrating Heat, vellicate  
the Teeth and Gums, and do them no small Injury, by disposing  
them, when frequently eaten, to Putrefaction. *Raii Hast.  
Plant.*

Vit **Is ALEA. See BRYONIA ALBA.**

**VITts ID AEA.**

The Characters are ;

The Flower is monopetalous. Bell-shaped, and has growing  
in it a globous Ovary, which becomes a soft umbiiicated Berry a  
full os Juice, and containing small Seeds.

*'Boerhaave* mentions five borts os *Vitis sidaea ,* which are,  
i- Vitis IdiEa ; foliis oblongis ; crenatis ; fructu nigricante.

*CAB. P. Tourn. Inst.* 60S. *Boerh.sind. A. Myr\*  
tillus.* Offic. *Vitis Idaa angalosu.* -J. B. I. 520. *Ruti Fscsi'*1488. Synop. 2. 457. *Vaccinia nigra..* Ger. I229. Emac.  
1415. BLACK WORTLeS, Or BILL-BERRIES.

The Bill-herry Push is a small sow Shrub about a Foot high  
or more, with many tough, flexible, angular green Twigs, bear-  
ing small, oblong, round-pointed Leaves, crenated about **the**Edges, among which the Flowers grow singly on short Foot-  
stalks, os a red dull Colour, in SltaPe of a Bottle, which are  
succeeded by round umbiiicated Fruit, as bigas Juniper-berries,  
and much of their Colour, full of a pleasant sweet purple Juice,  
It grows in Heaths among Fern, in a boggy Soil, and in thin  
woody Places; and flowers in *May,* and the Fruit is ripe in  
*July.* The Fruit Only is used, and that but seldom in the  
chops.

Bill-herries are cooling, binding, and grateful to the Sto-  
inach, and os use in Fluxes or Haemorrhages, *Simon Paulli*fays, they are much used against the Scurvy in *Norway,* and  
other Northern Countries. An agreeable Syrup may he made of  
the J nice, and used in all the fore-named intentions. *Millefs  
Eet.Osse* - ' . ι . ..

These Berries, according to *Dodonaeus,* are Cold and drying,  
with a manifest Astriction. They are good sor ah hot Stomach,  
.quench Thirst, mitigate the Heat of burning Fevers, bind the  
Belly, stop Vomiting, cure a Dysentery proceeding from yel-  
low Bile, and are effectual in the Cholera Morbus. But for  
these Purposes the Rob or Juice, inspissated with Sugar or Ho-  
Iiey, is far preferable to the Berries, because these heing of a  
Cold Nature, being eaten crude, are offensive to a cold and  
weak Stomach, and disturb rather than bind the Belly. But  
*Cas.p. Hessenan* thinks, that the Berries winch grow in the Sun-  
shine, and are throughly ripe, are by no means Of so cold a  
Nature as to injure a cold Stomach by their Crudeness.

The same Author is of Opinion, that the black Wortle-ber.  
vies may rightly and regularly be substituted in the room of  
Myrtle-herries with these Conditions: First, that you take such  
as growr in Northern Countries, and not in *Italy* or *Spain.*Secondly, that they he not perfectly ripe: Thirdly, that they  
he not green or fresh gathered, but dry'd: Lastly, that you  
take not the crude Juice, which is Considerably refrigerating  
from its immoderate Aqueoufness, and somewhat astringent,  
but inspissated into a Rob.

.. That this Juice is of fine Parts, and Vehemently astringent,  
. is evident from the-Marks or Stains which it leaves on the  
Hands and Mouths Of those who eat the Berries, and which can  
hardly be washed out ὁ hence it is used to dye Linen and Paper  
cf4 cerulean or Iky-blue Colour.

. The Shepherds and Peasants, who are Inhabitants of moun-  
tainous Countries, delight to eat the Berries ; for their Sweet-  
ness is accompanied with an Acidity, which is. very grateful to  
the Palate. *Raii Hast. Plant.*

*' i.* Vitis Idaea; Zeylanica; odoratiffims, T. 60S. *Myrtus  
T.eylanica, odoratijsima, Baccis niveis, monocoecis.* H. L. 435.  
. 3. Vitis Idaea; .dEthiopica; Buxi minoris folio; floribus al-  
bicantibus. Hi A. I. I25, *Buxus, Africana, folio oblongiori,  
non serrato.* Indin. 238. H. Rs DI

. An An Vitis Idina; foliis Myrti angustissimis ; longis; alter-  
**ius** *i .*

5. *An* Vitis Idaea? *Nurie Buxus, Africana, rotunde'solia, for.,  
rata. P. B. Prode. ? Plakn. Pbyt. T.* IS. *Hi R. D. Bocrh.  
Fnd. alt. Plant.*

It is called *Vitis* froth its tough flexible Branches, with the  
Epithet of *Idaea,* because in former Times it grew plentifully on  
Mount *Ida.*

The Berries are astringent, and Useful in the Diarrhoea and  
Dysentery: Of the expressed Juice is prepared a Rob, which  
is excellent for these Distempers. *Hist. Plant, adscript.  
-.Boerhaau.*

Besides the foregoing Species of *Vitis Idaea, Dale* mentions  
the following;

**VACCINIA.** Offic.. *Faecinia nigra fructu majore.* Park.  
Theat. 1455» *Vitis Idaa maigner quibufdam, five Myrtistus  
grandis.* Jo B. i. 5jg. jjyti Hist. 2. I487. Synop. 3. 457.  
Tourn, Inst. 6o8. *Vitis Idaea foliis subrotundis exallii dis.*C. B. P. 47O. *Vitis Idaa foliis subrotundis. Ger.* I29.

.Emac. I4I6. THE GREAT BILL-BERRY.

This Plant is pretty shrubby, with a Multitude of round,  
ramous Branches, a Cubit and half in Length, covered with a  
. fight-red Baris, and of a pretty solid and. aipfe Substande, *Clu-*

*sius frfn the* Branches sometimes spread oh the Ground, **are**tough, and covered sometimes with an ash-coloured, sometimes ’  
a reddish Bark. The Leaves are of the Size of those of the  
common *Vitis Idaea anguloso,* oblong, hut round, glabrous, and  
not at all serrated like those of the other, somewhat glaucous .  
in the lower Part, or, according to *Clusius,* whitish and Venous, -  
of an astringent and somewhat acid Taste, and caducous. The  
Flower is like that of the common Sort, White inclining  
to Purple, concave, the Lips heing cut into five Lobes, re-.  
flexed outwards, and furnished with its proper Stamina. The  
Berries, which are equal to those of the Juniper, or *Myrlus  
Tarentina,* have a broader Umbilicus, whence proceeds an  
Apex; whence it happens, that the Berries are not-so round  
as those of the Common *Vitis Idaea.* They adhere to pretty  
long Pedicles, are of a grateful, subacid, and Vinous Taste,  
and contain some minute yellowish Grains. The Root is hard,  
ligneous, and abounds with capillary Fibres. .c

It delights in cold and mountainous Places: *Clusius* found *it*among the *Austrian* and *Stirian* Alps ; and *fohn Bauhine* in the  
Mountainsof*Burgundy,* and other like Places. We have observ'd  
it in the mountainous Parts of *Cumberland,* and in great Plenty  
near *Gamblesoy* fix Miles from *Perith,* in the marshy Pastures  
on both Sides of the Road.

**The** Hunters and Ploughmen ascribe an inebriating Quality  
to ths Berries, as we are assured by *Du Choul, Camerarius,* and  
others, especially when eaten pretty freely. The Leaves and  
Branches are of the same Use to the *Silesian* Dyers, as the  
*Sedum Alpinum* to those who live in the Countries amongst the  
*Alps. Raii Hist. Plant.*

**VITIS MARINA.** See FUCUs **MARINA.**

**VITIS NIGRA. See BRYONIA NIGRA.**

VITIS sYLVEsTRIS, *trifolia.* A Name for the *ToxicodeAn  
drift', griphyllum, glabrum.*

**VITIS VINIFERA. See VITIs.**

VITISALTUS. The fame as **CHoREA SANcTI VITI.**

VITREA TABULA. The internal Table of the *Craniums*

**See CAPUT.**

VITREUS HUMOR. The vitreous Humour of the Eye.

SeeOcULUs. ’

VITRIFICATIO. Vitrification; thatis, the Conversion  
Of any Body into Glass.

VITRIOLUM. Vitriol. z

*Dale* mentions three Sorts ofVitriol; which are,

I. *Vitriolum caeruleum feu Romanum.* Offic. *Vitriolum  
coeruleum.* Charlt. Fossi ii. *Vitriolum Cyprinum caeruleum, i*Worm. 25. *Chalcalthum Cyprinum. '* Aldrov. Musi MetalL ’  
3 to. Match. I363. *Atramentum cCerul eum Romanum coctum.*Kentm. II. BLUE, Or ROMAN VITRIOL, and CE-  
LESTIAL STONE.

It is a chrstalline Substance, ceruleous, or resembling the  
Sapphire, compact like Sugar-candy, and of an acid, austere, '  
acrid, and astringent Taste. It is either made of a Solution  
and Crystallization of Copper, or imported from *Cyprus* and the  
*East-Indies. . '*

*Roman Vitriol* is heating, drying, highly astringent, and cor-  
stipating, provokes Vomiting, and expels Worms. *Schroder.*This Sort is . esteemed the best for Medicinal Use, and is Ve.y  
much Commended for the Scabies and Ulcers contracted from  
the *Lues Vinerea. Worm.* It is the Basis of *Digbfoe* sympa-  
thetic Powder, and cures the Scabies and Lepra.

2. *Vitriolum viride.* Offio. Charlt; Fossi II. *Vitriolum nd- ‘  
ride feu Romanum.* Tourn. Match. Med. I8j. *Ghalcantburn  
viride factitiurn ; Atramentum Sutorium Ostiariarum.* Schw.  
373. *Atramentum viride diirum solide coctum.* I3.- GREEN  
VITRIOL, or COPPERAS. '

This, also, is a crystalline Substance, but of an herbaceous  
Colour, and more granulated and grumous like common Salt:  
It has the Taste of the preceding.

There *are* two Sorts' of *Green Vitriol.*

**3. VITRIOLUM ALBUM. Offic. Worm. 25. GeQs.**Praelecti IO6. Charlt. Fossi I I. *Chalcanthum candidum.*Aldrov. Musi Metall. 339. *Atramentum album durum fosa  
siles* **Kentm.13.** WHITE COPPERAS.

*white Copperas* is a white granulous Substance; concreted  
like white Sugar, of the Taste os *Green Vitriol*; it is imported  
to us from *Germany,* being sound in the Mines of *Gosisilaer,*of the Figure of Icicles, and transparent.

It agrees in Virtues with *Greets Vitriol*; but is more used in'  
Collyria than the other Vitriols. There is, also, prepared am  
excellent Emetic of *Whitt Coppcras* dissolved in Water, and .  
coagulated by boiling to the Consistence of White Sugar, as  
we are informed by *Geoffrdy Preelect.* who thinks *Tournie..*

*fort* mistaken in affirming, that it is made of *Englijh Vitriol*dissolved in Water, and boiled till the Water is evaporated;  
what remains' consisting of pretty large grumous Masses re-  
sembling White’Sugar; which being exposed to the Air, affumo

a Yellowish Colour on. the Outside. This *Vitriol* is os great  
Vfe in Styptic Waters, in Dying, and in making Inlc. *Dale.*

Some derive the Name *Vitriol from Vitrum,,* because it has  
the Colour and Transparency of Glass; in *Greek* it is named  
χαλκἁί&όστ, aS if it were an Efflorescence of Brass; and in *La-  
tin Atramentum Sutorium,* because it is used in blacking Leather.  
Vitriol is either natural or factitious. The former is found in  
Crystals, or Striae, sticking to the Rooss of Mines; and the  
latter is made by boiling the Vitriolic Veins of some mineral  
Ores in Water, and afterwards letting them stand in the Cold  
:\_to crystallize ; or by corrupting and Fermenting the *Pyrites,* or  
Marcasite, and then mixing it with Water, from which Vitriol  
is afterwards obtained by Coction and Crystallization. This  
. Way *of* making Vitriol seems to have been unknown to the  
*Greeks. . . '*

White Vitriol is brought from *Germany,* made .up in  
Loaves, like Sugar, and is of a sweetish astringent Taster  
They are mistaken who think that white Vitriol of *Gosiar is*only the Green, calcined by the greatest Degree of Fire ; for  
it is found in proper Mines, like a downy Efflorescence, which  
being diflblved-in Water, to a due Consistence, is afterwards  
boiled till it concretes into **a** white Mass, like Sugar. Some-  
times littie Pieces of it are found in the same Mines, transparent  
like Crystal. This Vitriol contains an imperfect Iton Ore, Or,  
perhaps, an Iton Ore mixed with Calamine or Lead. Blue  
Vitriol is dry to the Touch, and concreted into blue Crystals,  
likeSapphires, of a rhomboidal Figure, flattened, and consisting  
of ten Sides. It is brought from several Pisces, especially  
from *Hungary* and *Cyprus,* and its beautiful blue Colour is  
owing to the Copper which .it contains. The Taste of it is  
very acrid and austere. Green Vitriol has different Names,  
from the different Places where it is found; as *Roman, Swedish,  
EngUJh,* and *French.* It contains a large Portion of Iron,  
from whence its .green Colour is derived: Tt in kept in **the**Shops, either in large rhomboidalCrystais, or in Heaps of small  
crystal Grains, sometimes a little unctuous, and stacking to the  
Hands. . It is of an acid styptic Taste; and indeed it cannot  
well be supposed to have any other; Vitriol being an acrid Salt,  
winch having corroded Iron or Brass coagulates with them, and  
concretes into a pellucid Mass, either os a .green or blue Co-  
jour, according to the Metal which it has diflolved. Some **Au-**chors mention likewise red Vitriol; but I have not heen able to  
learn what it is.

Vitriol is obtained by Various Arts from Waters, Earths, Vi-  
. triolic Stones, and especially from the *Pyrites.* **In** *Galesis*Time, blue Vitriol was made in *Cyprus,* by **the** Heat of the  
Sun exhaling the Humidity of a Vitriolic Water., in some  
Places os *Hungary,* the same Vitriol is now made by boiling  
and evaporating a Water of the same Kind, and the green Vi-  
triol is made by a Method not much different, in other Places  
6f *Germany.* In some Places it is made by frequentAblutions  
of an Ash.coloured Earth, marked with Spots of different Co-  
lours; some of which look like the Rust of Iton, others like  
Verdemrise, with a strong sulphureous Smell, and an unpleasant  
» bitter Taste : This Vitriol is therefore composed of a Mixture  
**of** Iton and Copper ; and accordingly its Colour is a Mixture  
of Blue and Green. In *England,* at the Distance of about **a**League from *London,* green Vitriol is made from *fre Pyrites,*which are heavy dehfe Stones of a dark Colour on **the Out-**side, but thein inner Surface is radiated from the Centre to the  
Circumference, the Rays shining like *Bath* Metal : They are  
perfectly insipid to the Taste, and by being exposed to the  
open Air, for a. sufficient Length of Time, they acquire an  
inward Kind of Fermentation, and spontaneously fall to Pieces.  
**In the** Cracks or Openings, we observe a certain Sort of white,  
saline, downy Efflorescence, os an acid styptic Taste. After-  
wards the whole Substance of the Stone is dissolved, and salis  
into a sine Powder of a saline and vitriolic Taste, and sulphu-  
reous Smell. If fresh *Pyrites* he burned, and calcined in the  
Fire, the Fumes which they emit smell like Brimstone, and a  
**red** Calx remains, which contains some Iron and Copper. The  
Way of extracting Vitriol from the *Pyrites* is this:

The entire Stones are spread about in a large Area, the  
Height of about three Feet; and there they lie exposed to the  
Air for three Years, heing turned one in six Months, that the  
Rays of the Sun may calcine them the hetter, and the Rains  
penetrate thein more easily. By this means they are reduced  
to a vitriolic Earth, which being well washed with Rain-water;  
the Liquor is afterwards conveyed by Pipes into Cisterns:  
Then they boil it to a due Consistence, in large leaden Vessels,  
throwing in a Quantity of old Iron, which is presently con-  
fumed by the Lixivium. Afterwards the Liquor isset to cool  
in other Leaden Veffels, with Sticks fixed a-cross, about which  
the Vitriol crystallizes.

The *Pyrites* os *Sweden* and *Liege* are very full of Sulphur,  
and the Way of preparing Vitriol from them, shall he related  
in speaking of that Mineral. Sulphur is obtained from these

*Pyrites, per Descensum,* and then the remaining Mass is cal-  
cined, and afterwards made into a Lixivium ; which heing  
strained, is boiled in leaden Veffeis, - and then ser to crystalline,  
as before, in a cold Place. .

. A Solution of Vitriol turns the Tincture of *Heliciropium*Into a saint purple Colour, coagulates Milk, turns Syrup of.  
Violets to a greenish Colour, hut does not change a Solution os  
corrosive Sublimate. When It is mixed with a Solution of Salt  
Jof Tartar, or Lime-water, the Colour becomes a little yel-  
lowish, and it communicates a black or dark-purple Tincture  
to the Infusion of Galls, which indeed is peculiar to Vitriol.

.. By Distillation an. acid Spirit Ἀ obtained from Vitriol, by a  
very great degree *os* Fine, called by the Name of *the Spirit er Oil  
As.Vitriol,* which turns theTInctureof/irf/osrgniuz», and Syrup of  
Violets, to the Colour of Fine, coagulates Milk and Blood, and  
. raises a strong Fermentation andHeat with any alcaline Salt. The  
Oil of Vitriol, or that strong acid Liquor obtained from it by  
Distillation, when mixed with commonWater, raises an intense  
Heat ; with Sal Ammoniac it raises an Effervescence, hut ge-  
Derates Cold, though the Fumes thatstrife seel hot.

After this Distillation is over, a blackish or red -Earth re-  
mains\* in the Retort, called *Colcothar,* and it is rhe Calx or  
Crocus of either Iton or Copper, according to The Nature of  
the Vitriol that hath been distilled. *Froth* this Process it is evi-  
dent, that Vitriol-is composed of an acid Salt, subdued by me-  
tallic Parts; which is, also, easily demonstrated from the arti-  
ficial Ways of producing Vitriol. If Spirit of Vitriol be  
poured on the Filings of Iron, a Very good Vitriol is obtained ;  
andss Copper Plates, stratified with Sulphur, he calcined in a  
Crucible, the Water in which this Calxis made to hell for some  
time, if evaporated, will leave behind a true blue Vitriol.

The Virtues ascribed by Chymists to Vitriol are past Belief;  
neither do we find the Event to answer thein Promises. *Diof-  
corides* mentions an emetic Quality of it ; and fays, .that, dis-  
solved inWater, it is good against Worms in the Intestines, **and**aster eating poisonous *Fungi.* He telis us farther, that this So-  
lution, snuffed up the Nose, purges the Head, and reckons in  
among the astringent, heating, and caustic Medicines. *Pliny -*commends it in Diseases of the Eyes, Fluxes of the Blond, .  
and for the Cure of Ulcers, and *Galen* made Use of it in  
Collyriums. At present it is used as. an Emetic, Vermifuge,  
Styptic, Detergent, and Antiphlogistic ; but is seldom .’given  
inwardly without Preparation. Externally, white Vitriol is  
principally used in Collyriums, to allay an Inflammation of **the**Eyes, and stop their Running . and it is thus prescribed:

Take of white Vitriol, One Scruple; of Rose Or Plantain-  
‘water, one Ounce: Let the Vitriol hedissolved.in the

Water, and strain the Solution, which, if it be too acrid,  
may he made milder, by the Addition of more Water. Or,

Take of the common or *Florentine* Orris, .a Scruple.; Rose  
and Plantain-water, of each three Ounces: Boil them  
over a gentle Fire till a third Part, be consumed; and in  
the strained Liquor dissolve eight Grains Of Vitriol sor **a**Collyrium.

Powder of blue Vitriol is applied to the ExtremitiesOf **the**bleeding Vessels in Wounds, and stops the Bleeding, by can-  
terizing the Veffeis, and Coagulating the Blood.

Among the Preparations of Vitriol, the first is Purification,  
called *Gilla* of Vitriol, in which white Vitriol is mostly made .  
use of; it is purified by Solutioris, straining and drying, twice  
or thrice repeated; and then being Taken, from a Scruple to a  
Dram at a Dose, in a proper Vehiclesiwill excite Vomiting:  
This is recommended by *Paracelsus,* and other Chymists, as an  
excellent Emetic, as not only cleaning the Stomach, by gentie  
Vomiting, but, also, strengthening both Stomach and Intes-  
tines afterward, by its Astringency : Whence it is given with  
Success in Diarrhoeas and Dysenteries. This *Gilla* was Very  
much in Use before antimonial Emetics were known, and the  
Lise of Ipecacuanha was discovered, but is now almost left off  
*Geoffrey.*

**THE ANALYSIS OF VITRIOL INTO SPIRIT, OiL, ANd  
COLCOTHAR.**

i. Take eight Pounds of the conimoin green Vitriol of  
*Gosclar,* put it into two earthen Long-necks, each Con-  
taining four Pounds ; cover them with a Tile; set  
them upon an Hearth, and surround them with Fire,  
that the Whole may grow gradually hot r The Vitriol  
will then begin to fume, and, upoff increasing the Fire,  
and bringing it nearer, to melt; and, upon making the  
Tire still stronger, to thicken and turn grey; Then fur-  
round the Long-necks on ail SideS *so* with Fire, that  
the Matter may grow yellow, -and begin to appear red

**at** the Sides of the Vessels. Now let all cool: The Long-  
pecks will he,cracked: Takeout the Matter, and beat  
**it** to Powder; it will be os a yellow Colour. This is the  
Calcination of Vitriol, in order for distilling the Spiris,  
and Oil thereof. This Operation ought to precede, other-  
wife the Distillation would he tedious, on account of the ,

. Time required to draw over the aqueous Phlegm, or else  
The Receivers would crack, on account of that Phlegm  
arising het into them; and the Distilling-vessels, also,  
burst, as being forced by the melted Matter. Hence **the**Matter is to he calcined only so long as till it ceases to  
melt in the Fine. In this first Part of the Operation the  
eight Pounds of Vitriol are reduced to‘five.

2. Put these five Pounds of calcined Vitriol, first bruised,  
into a strong Long.neck. Let the Long-neck he large  
enough to hold double the Quantity ; set it in a Furnace ;  
when properly placed in the Furnace, and the Wall is  
built up, apply an Adapter to the Mouth of the Long-  
neck, luting it on carefully, with a Mixture of Clay and  
Lime; wrap a wet Linen Rag about the other End of the  
.Adapter, and apply thereto a Very capacious Glass Re-  
ceiver, so aS exactly to fit, and so as the Adapter may  
not reach above two Inches into it. Let this Receiver rest  
horizontally upon a Bench, so that the Axis both of **the**Receiver, the Adapter, and the Long-neck, may lie in  
the same horizontal Plane, lest otherwise the Neck of the  
Adapter, or the Receiver, should be pressed upon. ‘ Lute  
the second Juncture in the fame manner as the first, and

' put Linen Rags about it, spread with the same Luting;  
and thus leave the Veiseis for twenty-four Hours, that  
the Luting may grow dry. v

Ἀ. Make the Fire with proper Cautions ; a white Fume will  
: first rise, and the Receiver grow warm; keep the Fire  
up in this State for six Hours ; oily Veins will afterwards  
run down the Sides of the Receiver; and in this State  
. again continue the Fire for fix Hours ; then for six Hours  
longer keep it up to its utmost Height, that the Long-neck  
may be thoroughly red-hot; a thick Oil will thus come  
over. If the Vapour should pass through the Luting, put  
a Linen Rag, spread with the same, and well heated upon  
the Crack; and thus it will be stopped: Though the Fire  
should be ever so long continued, the Vapour would not  
ceafe to rise, but the Produce would not defray the Cost;  
fo that I judge eighteen Hours sufficient. Now, .there-  
fore, let all cool, till the Adapter is but just warm, and  
the Receiver grown quite cold.

**4.** Have then ready at hand a Bottle with a narrow Neck,  
and fitted with a wide Glass funnel; then carefully moisten  
the Rags, and the Luting applied to the Mouth of the  
Receiver, and take them away gentiy, with Care to **pre- .**

. - vent the Dirt from falling in, the Fume from coming Out  
so as to prove offensive, and the Glass from cracking, by  
' heing moved obliquely. Take it therefore away in a strait  
Line, and avoid the noxious Fumes. Cleanse the Mouth  
of the Receiver, that no Luting may drop in; then pour  
the Liquor out of the Funnel into the Bottie, stop it up,

. and set by the Receiver for the like. Purposes. I have usu- -  
ally thus obtained one-and-twenty Ounces of thick, black,  
strong, and smoking Oil of Vitriol. A red, blackish,  
light, powdery, austere Calx, remains in the Long-neck,  
to the Quantity of fifty-two Ounces; so that five Ounces  
are lost in the Operation.

R Ε MARKS.

And thus the Oil or Spirit of Vitriol is prepared, which has  
numerous Uses in Chymistryand Medicine; for it is a most  
powerful ponderous Acid, and a great Preservative, though  
itself a Caustic; and hence Vitriol confista of this, and Col-  
cothar, and Phlegm. This Oil of Vitriol will scarce heil  
without a Fire of six hundred Degrees. If put into a Glass  
Body, and urged with a Sand-heat os five hundred Degrees,  
it yields its wild suffocating Spirit and Water, then changes  
from black to limpid, and becomes exceeding ponderous  
and fiery; and if poured into a Glass wet with Water, it  
' produces fuch a Heat as instantiy to crack the Glass: It at-  
tracts Water out of the Air. If four Ounces of this Oil  
he, by a Sand-heat, distilled in a little Retort, with a long  
and very curved Neck, fo aS that one Drop may follow an-  
other at the Distance os six Seconds, and fall into fair Water,  
contained at the Bottom of the Retort, as pure and perfect  
an acid Spirit will be thuS obtained, as Oil of Sulphur by **the**Bell: But this requires a Ikilful Operator. Each Drop,  
when it salis into the Water, makes an Hissing,.aS if Fine  
had fallen therein : But if a sailing Drop touches the Glass,  
it immediately cracks it, as if it were out with a Diamond.

If a stronger Fire he used, the Neck of rhe Retort cracks,  
the Labour is lost, and a pernicious suffocating Fume exhales,  
which ought th he cautioufly avoided. This Process is other-  
wise noble, and of excellent Use, at may he learnt from a .  
prudent Exercise os Chymistryand Medicine. *Paracelsus*descriheS the best Method os preparing this Spirit' to he by  
distilling recent Vitriol to Dryness, in a Vclsel of *Hesitant*Earth, and cohobating the Liquor upon the Remainder, the  
oftener the hetter, at last ufing the inmost Violence of Fire ;  
and by this means he promises a Liquor serviceable in many  
Cases. The Direction is ingenuous, and Artist-like, prss  
Vided the Vessel he kept from bursting by too large a Quanil  
tity os the dry Vitriol. The Caution is to ufe a little Quan-  
tity at once, in a Proportion to the Vessel. *Boerhaaves  
Chemistry.*

The Mass’that remains after the Distillation of Vitriol, called  
*Colcothar,* is a red martial Earth, still impregnated with some  
Quantity of acid Salt, and by often washing and drying, it be-  
comes an Astringent, which is used externally to stop Bleeding  
in Wounds; and from the Water in which it is washed, a  
Salt is obtained, called the *fixed Salt of Vitriol,* or *Salt of Col-l  
cothar.* When the Colcothar has not been much calcined, it  
remains white and pellucid, not emetic, but diuretic, and ape.;  
rient. Though this Salt is so much fixed aS not to rise by a  
Very great Degree of Heat, continued for several Days, yet it  
is easily made Volatile by means os Borax, and is sublimated in  
the Form os silver-coloured sitline Flowers. This is the seda-  
tive Salt of the great *Homberg,* and is thus prepared; ’ I

- Take the fixed Salt of Vitriol'well calcined, and Borax, os  
each two Ounces: Dissolve them separately in four Pints  
os warm Water; and then, having mixed the Solutions,  
pass the turbid Liquor through Cap-paper, and then distil  
it in a Glass Alembic, to Dryness; which being done,  
white saline silver-coloured Flowers will be sublimed.  
-These are to be gathered, and kept for Use. The fixed.  
Salt that remains in the Bottom of the Alembic, by a new  
Affusion of Water, may be fitted for a new Distillation,  
winch being continued to Dryness, fresh Flowers will arise;  
and this Operation may he repeated till all the Salt is sub-  
limed. The same Preparation may be obtained by taking  
Oil of Vitriol insteadOs the fixed Salt, and mixing it with  
twice its Weight of Borax. In this Case there is no Pre-

- cipitation ; but nevertheless Flowers are raised of the very  
same Rind with the former.

These Flowers are almost insipid to the Taste, and not easily  
dissolved in Water. They calm the feverish Heat os the Blood,.,  
and especially in burning Fevers, they prevent hr remove deli-,  
rious Symptoms, and allay spasmodic Affections, whether hy- 1pochondriacal or hysterical, at least for a time. In a Word,  
this Salt is an excellent Anodyne, and has a just Title, to **all**the Virtues ascribed by Chymists to Vitriol, Sulphur, or what  
they call the *Archaeus Sddator.* The Dose is from one to ten  
Grains, in any proper Liquor. It is however unsafe to order this .  
Salt in inflammations of the Lungs, Spitting of Blood, and  
other Inflammations of the Thorax; for though it be insipid ro  
the Taste, yet it contains latent *Spicula,* which being gradu-  
ally disengaged in the Body, may irritate and vellicate the Mem-  
branes os the Lungs, and fo bring on a Cough.

Vitriol is, also, the Basis of the famous sympathetic Pow-  
der, to make which they calcine *Raman* Vitriol by the Rays of  
the Sun in the Dog-days, to a white and yellowish Powder,  
and keep that Powder for Use in Veffeis close stopped. *Digby,*and others, have said wonderful things of this Preparation,  
which are not confirmed by Experience. However, it certain-  
ly stops Bleeding, when applied immediately to the open Ex-  
tremities of the Vessels; and hence some have endeavoured to  
cure Wounds by the Use of it, mining only a small Quantity

- of GumTragacanth in case of a purulent Discharge. *Geoffroy.***THE DULClEy'D- OIL OF VITRIOL.**

Ever since Chymistry hegan to be chltiVated and improved,  
**the** Distillation of a sweet Oil from Vitriol has heen known.  
*Basil Valentine,* and *Paracelsus,* make Mention os it; for as  
the antient Chymists endeavoured, hesides their own Secrets, to  
find a Substance for converting the more ignoble Metais into  
‘Gold, so they were persuaded, that the Matter of this Sub-  
stance was to he sought for in Vitriol; for which Reason they  
have subjected this Salt to various Analyses by Fire, and ob-.  
tinned several Preparations from it, as may be seen in the Wri-.  
tings of the most celebrated Chymists, who accounted Vitriol  
the Matter of the true Philosophers Stone, aS is evident from  
that remarkable Conon of the Chymists: *Visita Interiora Terree,  
Raepcries Ibi Occultum lapidem Verum Metallorum.* Visit **the**interior Parts of the Earth, and you .will there find the true

secret Stone of Metals. The initial Letters of the *Latin* Canon  
express the Name of *Vitriol,* from which various Preparations  
have been Obtained « but none more remarkable than that Pro-  
cess by which Oil of Vitriol is rendered sweet. This is men-  
tioned by *Valerius Cordus,* from whom *Conradus Gefner* has  
taken the Process, which in *Euonymuds Thesaurus de Remediis  
Secretis,* is ordered to hecarried on in the following Manner :

Take of the most acrid burning Wine thrice sublimated,  
five Ounces ; and aS much of the austere Oil of Vitriol:  
Mix in a *Vinetian* Glass ; put it in a small Cucurbit with  
a narrow Mouth, and lute up the Orifice close, and let it  
stand thus sor a Month or two: Then pour it into a Cu-  
curbit with an annexed Alembin ; then put it in a small  
Furnace, and cover the Half of it with Ashes; then ap-  
ply a Receiver, lute the Joinings well, and extract the  
' five Ounces of burning Wine which you have poured in :  
. But that this may be more safely done, place the Cucur-  
bit in *Balneo Mantee*; for thus the Wine will ascend with-  
**out** theOih. .When you have extracted the Wine, place  
what remains in a Furnace,, so that the Sand may reach  
the Middle of the Cucurbit; then applying another small  
. Receiver, lute the Joining carefully; then apply a mode-  
rate Fire, and gradually extract the Moisture till none ap-  
spears left at the Bottom, always taking care so to regulate

- the Fine, that the Liquor may not boil up to the Pipe of  
**the** Alembic; for if such **a** Boiling should happen, you  
. cannot check it, nor hinder it from going over into the

Receiver, so that all the Oil is lost; for it boiis Very easily.  
Then you will see, that an aqueous and pinguious Humour  
are contained in it. You must separate the one from **the**other, so that nothing aqueous may be left in the Oil;

' - for the Water corrupts the Oil, which, when separated,  
is to be preserved for Use. It is to.he carefully kept, he-  
... cause only a. small Quantity of. it is obtained from one.

Pound of the.austere Oil, and it easily evaporates on ac-  
- I count of its aereal Quality. It is good against all Putre-  
factions in the Body, and against the Plague; it is, also,  
proper for carrying Pus, and thick and Viscid Humours, out

-. of she Lungs, in a Pleurisy, a Peripneumony, and an  
uneasy Cough; for it may be safely taken internally, and  
neither suffers the Formation os the Stone in the Kidneys,  
nor in the Bladder.. It, also, cures the Bladder when ex-  
ulcerated. ' The Dose is one, two, or three small Drops,  
in moderately temperate Wine.

*Crollius,* in *Basilica Cbymica,* orders the fweet Oil of Vitriol  
to be prepared thus;

Take of the rectified Oil of. Vitriol, one Part; and of Al-  
cphol, four Parts: Digest in a Vapour Bath for some  
Months, and afterwards distil; and thus you will have  
floating on the Water an Oil of Vitriol of a grateful  
Taste and Smell, and of great Efficacy in Medicine..

These are the two Processes I have found in the Writings of  
the most antient Chymists. Now it may Justly be questioned,  
whether this Process answers, fince I never remember to have  
met with it in any other Author, especially with this Detail of  
Circumstances and Cautions. Hence, it is probable, that the  
Chymists of the succeeding Age either did not prepare it, or  
did not look upon the Process as genuine, thss. in reality it is  
most true.

That described by *Crollius,* is the true *Spiritus Vitrioli Dul-  
ces* ; and, as in th s Preparation, he has omitted the principal  
Circumstances added by *Gefner,* it is justly to be doubted,  
whether he ever prepared such a sweet Oil of Vitriol, especially  
because he informs us, that the Oil floated on the Water;  
whereas on account of its Weight, it rather subsides to the  
Bottom. *Hartman,* also, in his Notes on *Crollius,* doubts with  
respect to this Process, and substitutes another sweet Oil of  
Vitriol in its stead ; winch is prepared thus: .

Boil Oil of Vitriol In a new iron Pan with common Water,  
till the corrosive Salt is collected at the Bottom of the Pan ;  
and then the rest of the Ost of Vitriol becomes sweet.  
The same Effect is produced by extinguishing red-hot Iron,  
for several times, in Oil of Vitriol; but by this means the  
Virtues of the Oil are greatiy changed, and its medicinal  
Effects lost.

Every one must he sensible, that Oil of Vitriol, when mixed  
with Iron, loses its corrosive Quality, but degenerates into a  
vitriolic Liquor, which, in some measure, subsides to the Bot-  
tom. But this is not the sweet Oil of Vitriol which ought to  
refeinble that of OliVe-oil, to he inflammable, of a fragrant  
Smell, and aromatic Taste, leaving no Acidity on the Tongue.  
It ought, also, tn he dissolvable in highly rectified Spirit of

TV me, and to be possessed of anodyne and sedative Virtues.  
The celebrated Author ofthe Dissertation *de Fatiqndq Elogiis,*speaks in the following Manner os *xhApOleum Vitrioli Dulcet  
" Paracelsus* boasts, that he is able from Vitriol to obtain a  
" Spirit, or rather a sweetish Oil of a green Colour, by means  
"of which, he affirms, he can cure the Epilepsy. The Art  
" of obtaining this puzzles the most expert Chymists, since,  
" so far as I know orrememher, no one has venturedroaffirm,  
" that he was Master of such a Secret. " But I have observed,  
that two Centuries ago, the Preparation os this Oil was known  
to *Gefner,* and *scalarius -Cordus,* the Truth of which will be  
more evinced by what follows. When, without any Know-  
ledge of *Ges.nere,* Process, I above twenty Years ago had pre-  
pared some sweet Spirit of Vitriol, I found this highly fragrant  
Oil. The Process, as carried on by me, is aS follows 4. .

Take one Pound of Oil of Vitriol by Rectification, freed  
from all its Phlegm, and os highly rectisy'd Spirit of  
, Wine entirely free from Water, six Pounds ; to which  
pour the Oil of Vitriol. This produces a great Heat and  
Noise, resembling that produced by red-het Iron immersed  
in cold Water. The Mixture becomes warm, and ac-  
quires a red Colour, and a grateful Smell; a sew Days  
aster, distil from a Cucurbit, with the Sand laid pretty  
high about it.. Thus there is first obtained a pretty fra-  
grant Spirit of Wine, and afterwards a more fragrant one.

. Isthe Mixture begins to be changed into a black Substance  
at the Bottom of the Cucurbit, the Spirit is to be re-  
moved, and another small Receiver applied ; the Fire in  
the mean time being very mild and gentle ; sor unless this  
Caution is observed, the Whole of the black Mass sodden-  
ly comes over, and all the Labour is lost. But is we  
carry on the Process with a gentle Fire,.we obtain **a**Phlegm os a sulphureous Taste, together with at least five

\_ Drains of an Oil, which subsides to the Bottom. This  
sulphureous Water is decanted, and we obtain a sweet  
ethereal Oil, of a grateful and penetrating Taste and  
Smell; and this is to be carefully preserved in a Phial.

I. That there is an Acid in this sweet Oil os Vitriol.is ob-  
vious from this, that if any of it is put in a Silver Spoon, and  
held over a Candle, it contracts a reddish Colour, becomes  
acid, and tinges the Spoon with a black.Colour. -

2. If this aromatic Oil is for some Months kept in a Glass  
covered with a Swine's Bladder, it successively corrodes it, and  
that winch remains in the Phial contracts a red Colour, and an  
acid Taste.

3. If it is boiled in a Phial with Quicksilver, it attacks **the**QiIicksilVer. Ἀ

4. This aromatic Oil, when recent, is thoroughly diflolved  
by highly rectified Spirit of Wine, to which it communicates  
its Taste and Smell, together with an anodyne and sedative  
Quality, highly beneficial in all Pains and Spasms.

**5. This** Spirit of Wine impregnated with sweet Oil of **Vi-**triol, if mixed with a sinall Quantity of the Solution os Gold,  
makes a yellow Tincture, which, when dropped on Iron,  
tinges it with the Colour of Gold.

- 6. When this Solution os Gold- stands for twelve Hours, a  
black Powder subsides to the Bottoms a Sign that the Sulphur  
of the Vitriol unites with the Powder of the Gold, and that  
both of them are precipitated to the Bottom.

This curious and remarkable Process clearly discovers **the**Production of ethereal and distilled aromatic Oils. *Glauber*informs us, that highly-rectified Spirit of Wine may he con-  
verted into Oil, if it is mixed with Oil of Salt concentrated  
with *Lapis Calaminarisl* I tried this Experiment, but could  
obtain no Oil, besides the sweet Spirit *of* Salt; but by **the**Help of this Experiment I obtained an Oil, from the Pro-  
duction os which we learn, that highly-rectified Spirit of Wine  
is nothing but an .ethereal Ofl by the fermentative Motion re-  
solved into the minutest Parts, and intimately mixed with **the**Phlegm: But when the Oil of Vitriol intimately unites itself  
with the oleous Particles disjoined in the Spirit of Wine, it is  
again coagulated into an Oil.

Hence it is obvious, that an Acid may enter the Mixture os  
distilled Oils, and that without a manifestly acid Taste it may  
he concealed and covered by the Oil and Sulphur; By rhe Ad-  
mixture os the acid Sulphur of the Vitriol, since the whole Oil  
is sulphureous, the pinguious and oleous Parts of the Spirit of  
Wine acquire a new and penetrating Taste ; for which Reason  
the Sulphur of Vitriol, in a liquid Form, may justly be au.,  
counted an excellent Anodyne, of great Efficacy in the Cure os  
Diseases, as I have often found from Experience. *Hoffman.  
Obs. Phys. Chym. {*

**THE FIXED ANODYNE SULPHUR OF VITRIOL.**

We shall now consider that black Main .of rhe preceding  
Process, which, in Distillation, remains at the Bottom: If to

tois a sufficient Quantity os common Water.is poured, the Acid  
is diluted, and the Liquor, assuming a brownish Colour, is, by  
a due Evaporation, so concentrated, as again to.yield true Oil  
os Vitriol; with which, and the Addition os the highly-rectified  
Bpiris, we may again attempt the Preparation of the Spirit and  
Tweet Oil of v-itriol. All the Acidity bring washed away by  
the common Water, there remains, in the Filtre,.afubtilePow-  
det, of a blackish Colour, and which, when dried, andithrowti  
upon live Coals, sties all off with .a sulphureous hut not a. fetid  
Smell. If this Powder is put into .a Crucible, and urged by a  
strong Fire, it hecomes red-het, and a considerable Part of it is  
dissipated in the Air. -

Upon laying.this Powder, *stratum supcr.stratum,* with Plates  
**of** Silver, these were not dissolved, .as .theygenerallyare by  
mineral Sulphur; then I put two Drams Of Salt of Tartar .into  
theCrucible, in order to melt the .Silver; after the Addition *of***a** Dram and an half, I obtained an alcaline Mass, of a redish  
Colour, like that Liver of Sulphur which is obtained from **a**like Treatment of Salt of Tartar, *tiae Arcanum Dupllentum,*arid Powder of Charcoal. %

Hence we may conclude, that it is a fixed Earth; and we are  
carefully to examine whether its Origin is to he derived from the  
Oil of Vitriol, or from the oleous and sulphureous Part of the  
Spirit OfWine; whether there is a peculiar medicinal, sedative,  
and anodyne Quality in it; and whether there is not, perhaps,  
aii anodyne Sulphur of Vitriol in it.

Jt is a common Opinion, that, in the Distillation of Vitriol  
with an Acid, by means of the rapid Motion of the Eire, some  
subtile, chalybeate, or coppery Parts, are elevated, and ascend t  
Tor this Reason, the Antients, and especially *Basil Valentine,*preferred red Oil os Vitriol to that which is white, because they  
thought the former contained Sulphur of *Mars* and Copper, on  
which its Colour depended But that this is salse, is demon-  
strated, partly by the Rectification of the Oil of Vitriol, in  
which it becomes limpid like Water, without any Remainder of  
coloured Particles; and partiy by the momentaneous Conversion  
of white Oil of Vitriol into red, by the Addition of a small  
Quantity of Oil, any inflammable Substance, or of a Piece os  
Paper. .-. .-. ..

Many esteem, the' Earth, left after the Distillation of the  
highly-rectified Spirit of Wine, and the Oil of Vitriol, ame-  
tallic chalybeate Earth: But I tried an Experiment upon it with  
a large Burning-glass, upon which, it was immediately evapo-  
rated- into the Air; nor was there any fiery Ebullition like that  
which -always happens in the Fusion of Iron by means of solar  
Fire; nor did Spirit of *Sal Ammoniac,* when poured to it, ex-  
tract any Copper, as was evident from the want of a bluish  
Colour, which, by an Admixture of an urinous Spirit,, always  
discovers itself in Copper.

I am, therefore, of Opinion, that this highsy-black and light  
Earth remaining in the Cucurbit after the Distillation of sweet  
Oil of Vitriol, and edulcorated by Water, is the phlogistic Part  
of the highly-rectified Spirit of Wine, and of the Vitriol: And  
that it is so, may, I think, he demonstrated, in the following  
manner.: All Oils even of the most subtil and aethereal kind,  
when kindled exhale a black Smoak, which, when collected.  
Constitutes a black combustible Powder ; now it is equally cer-  
tain,- that all inflammable Spirits are only subtil Oils by a fer-  
mentative Motion united with Phlegm: But as distilled Oiis,  
when mixed with Oil of Vitriol, first become red, and then,  
after Distillation, and Evaporation, leave a large Quantity of  
phlogistic Earth , so st is not to he wondered at, if an inflam-  
inable-Spirit, in the same manner mixed with Oil of Vitriol,  
should, by its intimate Union with it, not only contract a red  
Colour, but, also, leave a large Quantity of combustible Earth,  
and diffuse a Smell lijte that of Sulphur ; for that fetid Smell,  
diffused by its Smoak, when kindled, arises from acid Particles  
mixed with a sulphureous Earth.

In this Experiment it is observable, that the thick and black  
Matter, swelling like kindled Sulphur, and the Phlegm of an  
acid Taste, do not appear till the Distillation is almost over,  
the superfluous inflammable Spirit consumed, and the earthy  
Particles of the Spirit of Wine, and Oil of Vitriol left: These  
volatile and oleous Particles, being mixed with acid fixed Par-  
tides, ought, also, to he separated by a gentie Fire; for by a  
strong Fire, they. will quickly elevate, and raise all that pon-  
derous Mass, so that it shall come over a long Cucurbit, and the  
Alembic. Hence we learn, that a small Quantity of volatile  
Matter is, on the Approach of Heat, capable of raising a great  
deal os the fixed Substance with which it as mixed. *Fr. Hoffmarn  
Obs. Phys. Chym.* -. ι - .

VITRUM. Glass. *..Vitrum Antimonii* is Glass of Anti-  
mony. *Vitrum Saturni,* is Glass of Leath

VITTA. That Parr ορ che Seoundines with which the  
Head of a Child, when hero, is 'sometime "covered aS with a  
€oif, is Called *Pitta* in a Female; hut *Galea* in a Male.

VJTTULUS. The Calf. For an Account of the alimen-  
tary Substance contained in Veal, fee the Article ALIMENT A.

Veal, I mean the Flesh of.all .the Farts of a Calf, is much  
used in Food, .and ought to he white, juicy, tender, plump,  
.and well-.tasted.

The. Head and Dungs .of.a Calf are pectoral, gond .to qualify  
the .sharp Humours .of the Breast and Throat, .and for the  
Phthisic. Calves Feet are, also, pectoral, their Substance is .  
.glutinous, qualifying, and moistening. They are boiled in  
.Broths to moderatethe Loss-ofBlood, in thelMenses. Piles, and  
.Spirting of.Blood. . .- 7- .

:. Veal, and the .ether .Parts of .a Calf heing endued with a  
-Juice that is temperate, produces ;no ill Effects ; but they are  
inot good, for those whe have .a .Looseness, caused by the Re-  
Location of the Fibres ; sor they will increase this Disorder.

Veal .contains much Oil, Phlegm,and Volatile Salt. .

; It agrees at all times, with any Age or Constitution ; but it is  
hotter for weak and tender People, and such as live a sedentary  
-Life, than for those that are strong, robust, and accustomed to  
.constant Exercise, who reqinremore inlid Food, .and that does  
not so soorsconsume.as Veal. . . ..

R. 'E M A R -.K R

A Cals ought to.he chose when Very young, add while it shake,  
hecause then its Flesh and other *Parts,* are tender, dainty;  
and easy of Digestion; whereas these same Parts will after-  
wards become dryer, harder, and consequently, not so easy  
Of Digestion. *Bruyerivus. lens,* the *Romans* and *Italians* let .  
their Calves sock fix Months, and .sometimes eVenia whole  
Year; and that during that Time, they took -care they  
should eat no Grass, as heing persuaded -their Flesh would .  
therebyhe more dainty, healthy, and better tasted: in short,  
as these Animals are naturally of a dry Constitution, the  
younger they are, the more good Effects their Flesh should  
produce, because it is in a better Temper.

*Avicenna* pretends Veal is very wholsome, and that .it produce .  
good Juices. Lastly, *Galen* says, that roasted Veal is easy  
of Digestion, and Very-nourishing.

Veal is nourishing, .cooling, and moistening, because it con-  
tains an oily. Viscous, and balsamic Juice, that is fit to unite  
with the solid Parts, to embarrass the sharp Humours, and  
to moderate their Futy and Impetuosity.. It loosens -the  
.Body, by making the Humours contained in the Vefleis  
more fluid, and the Passages more free and open. AS for a .  
Calf’s Liver, as it Consists of a compact and earthy Sub-  
stance, as well as those of other Animals, it is not shange .it  
should make the Humours gross, and bind the Body. They  
make use of the Fat or Suet of Veal, and especially that '  
about the Kidney’s, in Pomatums: This, as well *Aes* the  
Marrow of the Animal, is of a dissolving Nature. .

The Runner, which is made use of to curdle Milk, is *iDLatin*called COAGULUM; which see. *Lerncryon Foods. ,*It is Very remarkable that Veal, however easy of Digestion it

is generally esteemed, will not agree with some Stomachs,  
bur excites a kind of Sickness and .Uneasiness, for many '  
Hours after; a certain Evidence that it does not duly ;  
digest ; and these are generally the Stomachs, which digest  
Other Animal Fond without any Uneafineis,

VIVERRA. Ossie. Charlt. Exes, 2o. *Viverra, Ictis,  
Faro.* Mer. Pin. 167» *Mustela fyluestrisy* Gefn. de Quad.  
Digit. 762. Aldrov. de Quad. Digit. 327. Johnsi de Quad.

I cry. *Mustela fylvestris Viverrae dicta.* Kail Synop. A. 19S. '  
THE FERRET. "

The Flesh, and Gall of this Animal, are recommended in  
an Epilepsy, the Gout, and are said to be good against Poisons,  
*Dale. Lerncry. . -*

VIVIPARUS, An Epithet for those Animals which bring  
forth a young Animal, by way of Distinction from chose which  
produce Eggs,, and are called Oviparous. . .

ULCUS. An Ulcer.

What is meant by an *Ulcer,* seems so well known to every -  
Person as to require no prolix Description ; for the Definitinns  
which are usually given us, both of this and many other things,  
are generally more obscure and difficult to he understood than  
the Names themselves. The most clear,thowever,' and distinct  
Notion given of- an *Ulcer* is, by those who define it *a Solation  
ofthesoft Parts of our Bodies together with the Siin, produced  
by feme internal Cause,* as an Inflammation, Abscess, or acri-  
monious Humours. But Wounds which become - inveterate  
and even Contusions when difficult of Cure, Come within thin  
Definition, and pass at length into *Ulcers,* and are commonly  
so called. .

The proper andufual Seat ofan *Ulcer,* then, is in any of the.  
softer Parts of our Body, as the. Sltin- Fat. Glands, Resh,

and internal Viscera : For if there he any Exulceration Or Cor-  
fusion in the harder Parts, as the Bones, it comes rather under  
the Notion of a Caries; or whet is commonly called *Spina Ven-  
tose,* than that of an *Ulcer,* though on account *os some* kind  
os Resemblance which it has with an Ulcer or Erosion of the  
softer Parts, they are sometimes treated of in Conjunction.

How *Abscesses, Contusions,* and *Wounds* differ from *Ulcers,*will be sufficiently iIlnstrated by an attentive Consideration of  
the Nature of each Disease: For though *Wounds* and *Contusions,*as well as *Ulcers,* consist in a Diflolution of the soft Parts, yet'  
they differ from them in a Very material Point, as they proceed  
from an external Couse, and are produced, as it were, in a  
Moment; whereas *Ulcers,* on the contrary, owe their Original  
chiefly to some internal Cause, and form themselves by Degrees.  
As for *Abscesses* they are, as it were, the first Principles of  
*Ulcers,* or *Ulccrs* not yet arrived at Maturity, as when an In-  
flammation passes into a Suppuration, the Skin remaining as  
yet entire. But as soon aS the Skin breaks, and there is an Ef-  
fusion of mature PUS, the *Abseefs* is supposed to pass into an  
*Ulcer,* whether the Rupture happens spontaneousty froth an  
Erosion by the PuS, or the Skin be opened by the Surgeon's  
Knife.

*Ulccrs* dan by no means he reckoned all of one Kind, but are  
distinguished into Various Species on many Accounts; as (I.)  
with respect to the different Parts of the Body in which they  
ore seated ; for sometimes they insest the Skin, at other times  
the Fat, and sometimes the Glands and Flesh; (2J aS to their  
Magnitude; for some *Ulccrs* are large and extended; others  
small and contracted within narrow Limits ; some deep, others  
shallow and more superficial ; in particular. *Ulcers* os a con-  
siderable Depth, hut narrow, and more especially distinguished  
by the Narrowness of their Orifice, or Beginning, usually pass  
under the peculiar Denomination of *Sinus,* or *Fistula. Ulcers*differ, (3.) with regard to *Duration*; for some *tat recent.* Others  
*inveterate*; (4.) on account of them *attendant Symptoms* ; in  
which respect some *Ulccrs* are *mild* and *favourable,* others *ma-,  
lignant,* that is, *attended with very acute Pains,* or *fetid, putrid,  
pinguious, rheumy,* or *discharging much Ichor, creeping,* or  
*spreading, cancerous,* or *inclining to a Canccr, callous, fistulous,  
er verminous i* there is a Difference between them, (5.) with  
respect to their Causes, in winch Light they assume the Epi-  
thets of *scorbutic, venereal, carious, cancerous, pestilential,* and  
such as are supposed to proceed from *Fascination.* In the last  
place *Ulccrs* are distinguished (6.) by the Parts in which they  
are seated. Thus some infest the *Nostrils,* others the *Fauces,  
Palate, Breast,* and *Anus,* and one Sort has the Name *CsFistu..  
la Lacrymalis.* S .

The Opinion of Tome late Physicians, who ascribe the *prin-  
'cipal Cause* of *Ulcers* to some foreign *Acid,* corroding the Parts  
os the Body like Aqua-sortiS, seems too precarious and ill-  
founded to demand our Assent, fince there is hardly any Rind  
os *acrid Humour,* whether it be saline, lixivial, alcaline, or  
acid, that is not capable of corroding the Body, and exciting  
’an *Ulcer.* And indeed, as the Blood in Stagnation is generally  
Converted into an alcaline Acrimony, which has nothing at all  
of the Acid in it, as some would persuade us, since tho Very  
fetid Smell of Ulcers shews the’Alcali to have by much the  
Predominance, I think it appears Very plainly that the *Cause*os Ulcers is Oftener to be ascribed to alcaline than acid Hu-  
mours, as we know and take it for granted, that by *Adcali* our  
Physicians mean any Kind of acrimonious or salsuginous Sub-  
stance, which resists and enters into Conflict with all Rinds of  
Acids; as, for Instance, Salt of Tartar with Vinegar, and  
Oil of T artar *per Deliquium* with Spirit of Vitriol. Put to  
proceed. As there is a (great Variety of Poisons, so is there,  
also, of acrimonious Substances, and consequently of *Ulcers.*The more pestilential the corroding Acrimony, the more noi-  
some and fetid, the more phagedenic and dangerous are the  
*Ulcers,* and sometimes to such a Degree of Malignity as to  
become quite incurable, as in a Carcinoma, or Cancer. It is to  
the observed, also, that *Ulcers* may owe their Original not only  
to Acrimony, but to arty Cause whatever, which is capable  
os effecting a Stagnation and Corruption of the Blood. Thus  
*Tumors inflammations, Wounds, Contusions ,Fractures,Luxations,  
Siirrhuses, Cancers,* and *Caries,* Very srequentiy degenerate into  
*Ulccrs,* which, also, tho' they may happen at first to he mild  
and safe, often become at length malignant and dangerous,  
- either from a bad Habit of Body, an improper Regimen os  
Diet, or unjkilsul Treatment and Bandage, and other like  
Causes. i ' ’

Tho' most Kinds of *Ulccrs* may he discovered and known  
by the bare Sight, yet that we may examine more exactly the  
Depth of a Sinus, and which Way it proceeds and has its  
Course, and whether it be attended with a Caries, we use the  
Help of Probes. Whether it be a new or an old Ulcer is best  
.known by interrogating the Patient, who will, also, probably  
make the best Discovery of the Causes why the -Disease is be-

come inveterate; and whether it be owing to some subjacent .  
Caries, or to an improper Regimen os Diet, or Method os  
Cure. An *Ulccr* is to be judged mild and favourable principally  
on the following Account ; if, in the first place, it be not in-  
veterate, nor accompanied with any bad Symptoms; is again  
the Pus be moderately thick, whitish, smooth, and not very -  
fetid ; and, lastly, if the Patient he young and vigorous. Ora  
the contrary, *Ulccrs* are justly esteemed malignant and difficint  
of Cure, if the Patsent. be os an infirm, scorbutic, or hydropic  
Habit of Body; is the Pus be immoderately thin, acrid, fetid,  
yellow, whitish and reddish, greenish or blackish, or too thick,  
and much resembling Lard. No less Danger is to. be appre-  
hended, when the Patient labours under intense Pains, or the  
*Ulcer* is of such a Nature as to reject the Method of Cure used  
in Wounds, and recent Abscesses, by Digestives, and Vulnerary  
.Balsams,. ’ ..

*Impure* and *putrid Ulccrs* are so called, when the affected  
Flesh appears corrupted, soft, whitish, or. livid; or when the  
Matter discharged is thicker, and more glutinous than ordinary,  
or appears green, or Variegated. *Ulccrs ess* the *fluent* or *rheu-  
rnatic* Kind are such aS discharge Plenty os thin Sanies. *Pha-  
gedenic,* or *spreading Ulccrs,* discover themselves by corroding  
the circumjacent Parts, in a quicker or flower manner, accord-  
ing to the Degree of Acrimony in the Matter. We call an  
*Ulcer fistulous,* when it penetrates to a considerable Depth  
finder the Skin, or between the. Muscles, and especially when  
the Sinus is large, and the Cutlet, or Orifice, narrow. And,  
lastly, *Ulccrs* are said to he *callous,* when their interior Parts  
are covered with a Rind of hard, and, as it were, cartilaginous  
Substance. ’ t -

*Ulccrs ixC* judged to be *vencreal,* when consequent upon lying  
with an infected Woman, or after some venerea] Disorder, as a  
Gonorrhoea, VenerealBubo, or the Lues Venerea. Various is the  
Situation of these Rinds os *Ulcers,* tho', for the Generality,  
they are seated in the same Places in which venereal BuboS are  
produced; or in the Nose, Fauces, and Penis; which last are  
called *Ulcers,* or *Carcinomas* of the Penis, in *French Chancres,*6t Shankers." In the other Sex these venereal *Ulceus* are most  
incident to the *Labia Pudendi,* and the Neck os the *Uterus..  
Canccrous Ulccrs* are either the very same with thofe exulcerated  
*Carcinomas* treated of under CARCINOMA, [see that Article J  
or such as, in their Progress, and attendant Pains, most nearly  
resemble a *Carcinoma: Ulcers* are said to be *carious,* when  
some adjacent Bone is found deprived os the Periosteum, find  
corroded, or affected with a *Caries.* That *Ulcers* may be pro-  
duced by *Fascination,* or "Witchcraft, the common Proof is,  
that Pins, Hair, Threads,. Rags, Nails, Egg-shells, Coals,  
and other extraordinary and preternatural Things, aie some-  
times found, in Wounds, or Abscesses, Bus, is I may be al-  
lowed to speak my own Sentiments, in this Affair, I am of  
Opinion, that not only most of those Signs which are regarded  
by the Ignorant as undoubted Marks os Fascination, but the  
Very Thing, or Fascination itself, is, at least. Very much to  
be questioned, or else is absolutely counterfeit, and wholly  
directed and promoted with a superstitious View : For many  
*Ulcers* were, in former Times, esteemed the Effects of *Fas.csu  
nation,* when, in Reality, they were manifestly otherwise.

*Recent Ulcers,* of a favourable Kind, like recent Abscesses,  
are not difficult of Cure, especially if the Patient be young  
and Vigorous ; but the more inveterate an *Ulcer* becomes, and  
the worse the concomitant Symptoms are, the greater is the  
Difficulty which attends a due Conglutination , whence it is,  
that Very *putrid, rheumatic,* or *much-running, fistulous, callous,  
carious,* and *canccrous Ulccrs,* are not outed but with vast Diffi-  
culty, and by the utmost Skill and Management of the most  
able Surgeons. For as for those held and confident Quacks  
and Mountebanks, who boast and Value themselves at so high a  
Rate,son account of their secret Plaisters and Ointments, which  
they pretend to be of surprising Efficacy in all manner lof *Ulcers,*I am persuaded, and can appeal to Experience, shat they Very-  
grofly impose upon themselves, and others.-Tire more depraved  
or infirm the Habit of Body, the older the Patient, the more  
acrimonious the Blood, the worse the Smell of *fas Ulcer,* and  
the Colour and Acrimony of the Pus, the more difficult must,  
of Necessity, he the Cure. When the *Ulceus* are Very large, or  
numerous, and every Day discharge a vast Plenty os Matter,  
or Sanies, they Very much weaken, .and, by Degrees, exhaust,  
and. destroy the Patient. Old *Ulcrri* in .the Peet, especially in  
Personis far advanced in Years, and infirm, are by no means to  
be healed: For, as Experience almost universally shews, the  
Health of the Patient stands established on a goed and hopeful  
'Foundation, as long as the corrupted Matter, collected from all  
.Parts of the Body, is discharged by the *Ulccrs* ; but when this  
Essiux is suppressed by a Conglutination, the Consequence,  
after some time, is generally observed to he some very bad Dis-  
temper, such as Pains of the Head, Vertigo, Apoplexy, epi-  
lepsy, a Difficulty of Breathing, or a Suffocation, or, perhaps,1

*r* Oiarrhcea, Dysentery; internal Inflammations, and other  
Disorders os that Kind, which terminate in Death, according

. to the concurrent Observations of Very many practical Physi-  
cians. Thus, also, when any inveterate *Ulcers,* of this Kind,  
. dry up in old Persons, and their Lips contract a Lividness, with  
a Heat, there is great Danger of a *Sphacelus,* shcceeded by  
Death. But in young-r, and robust Persons, the Cure of in-  
Veterate *Ulcers* is attended with more Safety; but thenecessary  
Care to be taken in such Cases is, not only to remove the  
Cause of the *Ulcer, by* proper Medicines, but to restore **the**Blood to its former Purity ; which, oftentimes, is not effected  
hut with- great Difficulty. If the Disease, therefore, be too  
inveterate, and the affected Persons impatient of Medicines and  
Abstinence, it is no wonder *if Ulcers* cannot be cured, eVenin  
robust Constitutions. ' '

*Fenereal Ulcers* are seldom or never to be cured without **a**previous Expulsion of the Venereal Venom out of the Body by  
proper Medicines ; without which, all external Remedies are of  
no Effect, in this Case. ' *Fistulous, callous, zndcearious Ulcers,*are seldom or, rather, never cured but by manual Operation;  
for oftentimes after inducing a Cicatrix, they form themselves  
anew, and are more troublesome than before: In particular, **a***carious Ulcer,* if the Caries be great, and especially in the  
Joints, often discharges such vast Quantities of Pus,as extremely  
to weaken, and, without a seasonable Amputation of the Limb,  
to destroy the Patient. The Case is much the same with *can.,  
porous Ulcers* ; for here, also, unless the Part affected he sepa-  
rated from the Body, there can be no Hopes of a Cure, as we  
have before observed under CARCINOMA ; and sometimes the  
*Cancer* or *Carcinoma* returns aster the Operation, and is not  
io be removed till it terminates in the Destruction of the Pa-  
'tient. As for *Ulcpris* affecting the Viscera, fince they are re-  
moved from the Reach of manual Operation, or the convenient  
Application of Medicines, they are often Very justly esteemed  
incurable.

The Method of Cure in *Ulcers* is extremely Various, as  
adapted to the great Variety of the Disease: For when **the***Ulccr* is but recent, it is to be healed in the same manner as a  
. recent Wound, or Abscess. We must first, then, begin with  
*Mundisication,* or cleansing **the** *Ulccr*; aster that, proceed to  
incarne, or fill the Cavity with new Flesh ; and, lastly, cover  
and conglutinate the same, as much as possible, with a fair and  
even Cicatrix.

*Mundisication* of an *Ulccr* is usually performed in the follow-  
ing manner: First, The corrupted Matter is evacuated; or,  
when it discharges itself not so. freely as it ought, gently ex-  
pressed with the Fingers ; if there be a deep *Sinus* belonging to  
. the *Ulccr,* it is to be exterged, by some proper Injections; or,  
is the Place be open enough, by repeated intromissions of fresh  
Lint. Is there be any Pieces of Membranes, or other corrupted,  
pinguious Parts left in the *Ulcer,* **the** best way to eject them is,  
at every Dressing to introduce into the Place Lint moistened  
with some digestive Ointment, and cover it with a Plaister of  
Diachylon, Diapalina, or something of the like Nature; and  
upon that apply Compresses, and over the Whole a Bandage:  
This Method is to be carefully followed till the Place be tho-  
roughly cleansed, or till the Bottom of the *Ulccr* appears quite  
red, and covered with new Flesh.

Aster due *Mundisication,* our next Bufiness is, to sill the  
*Ulccr* with new Flesh, which is performed by Help of such  
Medicines as are commonly called *Sarcotics,* [from σάρξ. Flesh]  
that is. Flesh-gen eraters; among which, the best, and most  
effectual by many Degrees, is the *Digestive Ointment-,* for  
without some extraordinary Impediment, this *Digestive* is of  
itself sufficient to produce new Flesh. It is, indeed, the Man-  
ner of almost all Surgeons, Very gravely to recommend every  
one his proper BalsamicS *for* the procuring of new Flesh ; but  
there was no Necessity, as I imagine, for them to he so careful  
and solicitous on this Point, fince there is in this Very *Di-  
gestive,* a balsamic Virtue; and we ought, hesides, to consider  
that this new Flesh owes its Generation not so much to the  
Assistance of Medicines, as the Benefit of Nature: For all  
the Care and Diligence of the Surgeon have scarce any other  
Effect than to remove all such Things as are hurtful, and may  
prove Impediments to a Cure. If any one, however, should  
'think our *Digestive Ointment* not strong enough for his Purpose,  
I would advise him to *Bals.am of Arcaeus, Balsam of Peru,  
Ealsom of Meccha, Bals.am of Sulphur, Essence of Myrrh and  
Aloes, Oil of Myrrh* per Deliquium, *Oil of Eggs,* and other  
Vulnerary Balfams of the like Kind, to be used in its stead ;  
and, by the best Means he can procure, to accomplish a perfect  
Conglutination.

- Where an *Uker* has penetrated so deep as to have its Bottom  
’ remote not only from Sight, but from the Reach os Medicines,  
it may seem necessary, in every Dressing, aster expressing the  
corrupted Matter collected within, to make an Injection of some  
\_ cleansing and healing Liquor; such as a Decoction of Agri-

inony, er Birthwort mixed with Honey of Rosies, or Essence  
os Myrrh and Aloes, or what *Ballaste,* in his *Hospital Sur-  
geon,* recommends, a Decoction of Walnut-leaves, mixed  
with Sugar, before the Place he bound up, till the Bottom is  
congintinated ; and to continue the same till the *Ulccr* is filled  
up..

The *Ulcer* being, by some means or other, as may seem most  
adviseable, incarned, and filled up, the Induction of a sit and  
decent Cicatrix is, in the last Place, to he considered ; and  
there is no better Method to he taken, for this Purpose, than  
every Day to apply dry Lint to the Place, with a PLister, fist  
the Cicatrix be completed: But if, by such means, .Vou can-  
not prevent a Luxuriancy *of* Flesh, withaMoistnefs os **the***Ulccr,* it will be proper to sprinkle on the Part some drying  
Powders, such aS those os Mastic,Frankincense,Sarcocolla,Coio-  
phony. Lapis Calantinaris, and Tutty; applying afterwards, to  
the Place, dry Lint, and a Plaister accommodated to retain  
and hold together the Things applied, continuing the same till  
the Place be perfectly whole and sound: But is the luxuriant  
and fungous Flesh lras already elevated itself above the rest of  
the Skin, the best way to consume it is, to rub it with blue  
Vitriol; or, is this be not strong enough, to sprinkle on it  
some Powder of red Precipitate, and burnt Alum, till its  
Growth be enthely suppressed, and nothing appears pro-  
minent.

In the last Place, it is hardly to he expressed how much **a**prudent Regimen in Diet and manner os Living, contributes  
towards the Incarning and Conglutination os *Ulcers:* For it has  
been an old Observation os the Professars of the salutary Art,  
that Very bad *Ulcers* have often been cured by means os a Re- .  
gimen, without any 'considerable Assistance from Medicines;  
and, on the contrary, that the flighted, and most contemptible.  
Sores have, by a Neglect os the Rules os Diet, and. a pre-  
posterous way os Living, degenerated into Very bad, and even  
incurable *Ulcers.* Great Care, therefore, .is to be taken, thy  
every Person infested with an *Ulccr,* to avoid acrid, sals, and  
acid Food, and such as is too sat, or heating, with Swine's  
Flesh, and all such as is difficult of Concoction. Is a bad  
Habit of Body he an impediment to the Cure os an *Ulcer,* the  
Advice of a skilful Physician is required, who, by the Pre-  
scription os proper internal Medicines, may not only prevent  
*an Ulcer of* a mild and favourable Kind from becoming ma-  
lignant, and, perhaps, incurable,.but, as much aS possible, pro-  
mote and hasten its Cure.

For *fistulous Ulcers,* see the Article FISTULA.

**OF MALIGNANT ULCERS;**

There are *Ulcers* of so bad and malignant a Nature, as not  
to admit os a Cure by the common Method os Treatment of *Ul-  
ccrs* of an ordinary Kind; and these are, for that Reason, called,  
in medicinal Terms, *dysepulotie, chironian, eacoethea,* [ses DY-  
SEPULOT0S, CHIRONIUM, CACOETHES] *obstinate,* and *stub-  
born Ulcers.* It iS not to be doubted but that there are some  
proper Causes os their Malignity; but whet they are in par-  
ticular, in every Case, which render **a** Cure so difficult, is alike  
known to the Generality of Surgeons, and those who are quite  
ignorant of the Matter. *Ulcers,* however, os a *stubborn* and  
*malignant* Nature, generally infest Persons os a bad, scorbutic,  
cachectic, and hydropic Habit : They may, also, proceed from  
the *Lues Vfnerea,* a Caries, or a Callus, an extraordinary Acri-  
mony of the Blood, *or* a cancerous Disposition; and these  
Causes are diligently to be investigated, and extirpated, by those  
who attempt the Cure of those Kinds os *Ulcers, is* they would  
hope for any Success. But an Attempt os this Nature is **a**Matter of such Difficulty and importance, as, in most Cases,  
to require the maturest Thoughts and Deliberations of the most  
experienced Physician or Surgeon ; so much is it above the Ca-  
pacity of a mere Empiric, how impudently soever he may boast  
of his incomparable Secrets, and sovereign Remedies os Piasters  
and Ointments, which he has always in Readiness by him against  
the worst of *Ulcers.*

Is there he nothing of a Fistula, Callus, Caries, putrid  
Flesh, or Worms, belonging to the *Ulccr,* its Stubbornness and  
Malignancy must certainly proceed from a bed and infirm Ha-  
bit or Body, on account os a too glutinous, acid, acrimonious,  
or bilious Blood; or from an imprudent Regimen os Diet, or  
some Venereal Disorder ; or in Women, particularly, from an  
Obstruction of the Menses; in Men, from a Suppression of  
the Haemorrhoids: In such Cases, it is not only the Business of  
a Physician to prescribe internal Remedies, hut injoin, also, a  
strict Diet; which is os such extraordinary' Efficacy, that even  
the worst of *Ulcers* have been frequently cored by if, with  
hardly any Assistance from internal Remedies, provided they are  
every Day duly cleansed, and dressed with some common vul-  
nerary Ointment, Oil, or Balsam, wifi, some ordinary Plaister,  
aS the Lead Plaister, or Diapomphelygos, or the like, care-  
fully laid over st so as to cover the Whole. In Meats, and

τ Drinks tt must be observed, as an inviolable Rule, to chuse  
none but the lightest Kinds, and to he Very abstemious even in  
; the Use of these : But any thing too salt, acrid, acid, hard,  
or crude, or whatever is prepared os Fas, Bacon, Swine's Flesh,  
and farinaceous Masses, or whatever is taken in Quantities he-  
. yond the Rules of strict Temperance, is always sound to he  
extremely prejudicial. Patients of a hot Temperament are to  
avoid heating Meats ; those of a cold Temperament are to abs-  
tain from Foods of a refrigerating Quality ; but a good Diet,  
t or Abstinence, is, however, observed to be more effectual, when  
assisted with due external Treatment. The *Ulcer* must, there-  
fore, be Very carefully exterged and cleansed from the corrupted  
Matter, lest the-same, by its Stay, should become more acri-  
monious, and, by that means, the *Ulccr* should spread. Aster  
Mundification, you may apply the digestive Ointment, with  
which may be mixed Myrrh, Mastic, or Colophony, or a'  
Decoction of Walnut-leaves, with a littie Sugar, or a De-

. coction Of Verdegrise in Wine. In some Patients, simple  
Spirit Of Wine, or Lime-water, applied in Linen moistened  
with them, is of excellent Service in drying and healing those  
. Kinds of *Ulccrs*.. If there be any Fistalas in the Case, they  
are to be cut, then cleansed, and afterwards consolidated with  
Balsam of *Peru,* Balsam of *Capivi,* Balsam of Sulphur, with Oil  
- of T urpentine, or any other agglutinating Medicines; and if,  
at the same time, there be no Neglectos internal Medicines,  
there is no doubt but some of the worst of *Ulcers* may, by such  
Management, be brought at last to a perfect Cure.

If there he a copious Discharge of Humours from these stub-  
' hern Kinds of *Ulcers,* it is an Indication of a Mixture of too  
. great a Quantity os thin and acrid Serum with the Blond,  
which is often owing to the Patient’s drinking too much; and  
fucb *Ulccrs* are called *Rheumatic.* In this Case, since there can  
- be no Way more commodious for the Discharge of the Hu-  
- mours than by the principal Passages downwards. Cathartics  
- and Diuretics, *is* the Strength will perimt, are freely to be ad-  
ministered ; and, at the same time, the Patient is to drink less..  
Excellent Medicines, for these Purposes, are, prepared Mille-  
pedes. Essence of Amber, of Myrrh, of *Peruvian* Balsam,  
Tincture os Tartar, tartarised Tincture os Antimony, or any  
other Kinds os balsamic Tinctures, or Essences, proper for pro-  
voking Of Urine. Drinking too freely, or in great Quantities,  
which is often the Cause of such Disorders, is quite improper  
here ; on the contrary, the moderate Use of strong Beer, and  
old Wine, as ordinary Drink, is Very wholsome, and the more  
so if a littie *Hungarian* or *Spanisu* Wine be takenthow-and-  
then at Dinner ; except at Dinner, I would advise Abstinence  
from all manner of Drink. Of Meats, or Eatables, the most  
proper are such as are dried or roasted, or such as thicken the  
Blood ; Tor which Purpose, Barley and Rice-puddings, Water-  
gruel. Calves Feet, and Jellies, are accommodated. External  
. Medinines, also, of a drying Quality, are of principal and ne-  
oeffary Use; among which are. Lime-water, Lapis Calami-  
naris, prepared Tutty, Chalk, Massie, Frankincense, Colo-  
phony, and native Cinnabar prepared; with one or other of  
which the *Ulcer* is to he sprinkled, and afterwards covered with  
: the Plaister Diapompholygos, the lead Plainer, or a Plainer

os Lapis Calaminaris,

That Sort of malignant *Ulccr,* which spreads and extends  
itself gradually, by corroding the adjacent Parts on every Side,  
- has the Epithet of *corrosive,* or *phagedenic,* and indicates the  
State of the Blood to be highly acrimonious. The first Care os  
. the Physician, therefore, in this Case is, by internal, lenient,  
and emollient Medicines, to correct the ill State of the Blood:  
To this End are especially adapted Decoctions of the Roots of  
-' China, Sarsaparilla, Comfry, Polypody, Liquorice, Scoraonera,  
: the Lapathum Acutum, the Herbs Mallows,. Marshmallows,

St. John’s-wort, Sanicle, Agrimony, white Horehound, and  
- the like. Of Foods, the most proper are, such as were pre-  
scribed before for *rheumatic Ulccrs, for every* thing acrid,  
salt, or too much seasoned with Spices or Acids, and all Meats  
prepared with any Part belonging to a Swine, is highly  
: prejudicial, and therefore to be avoided. On the other hand,  
-. purging Medicines now-and-then administered with a Mixture  
of *Mercurius Dulcis,* are not only serviceable in diminishing the  
Sanies os the Blood, but of great efficacy aS Lenients, in cor-  
reeling the Acrimony of the Blood, and promoting’the Cure.  
Topical Remedies may be such as were recommended hesore,  
and the Use of them, after a careful and thorough Extersion or  
Mundification of the *Ulccr,* is to be continued till its Progress

. he .entirely checked, and the Place perfectly healed.

Somewhat of the Nature of phagedenic or corrosive *Ulccrs*are *cutaneous Ulcers,* or such as arise in the Skin, and most  
. commonly in the Face, aS well of Children, aS adult Persons ;  
- for they not only owe their Origin to an acrimonious Blond,  
. but dilate and spread themselves. In cutaneous, therefore, as  
- well as phagedenic *Ulccrs,* the most proper and effectual Medi-  
..Cines are luch as potently evacuate by Stool, and gradually

correct the Acrimony of the Blood, and are hesore specified.  
To Adults I would recommend, for thete Purposes, hesore other  
Things, the aforesaid Decoctions os the Woods,-orthe Del.  
coction of the Root of the Lapathum Aoutum, or of the Herb  
Fumitory. Of either of these is to he taken the Quantity of  
eight or ten Ounces; three or sour times a Day, warm; and',  
after the first Draught in the Morning, it will be proper fortlie  
.Patient to compose himself in his Bed, and to sweat. To  
these may not improperly he added, the Essences of Fumitory,  
Of the Woods, and of Amber, or the tartarised Tincture of  
Antimony, to the Quantity os thirty or forty Drops, robe  
taken several times a Day, with the sorementioned Decoctions;  
also absorbent Powders mixed with Antimony and Flowers of Sul-  
phur, and the Use of the same is to he continued for some time ;  
but a careful and exact Regimen seems as necessary here aS in  
any Case whatever. For Infants not weaned from the Breasts,  
it has been found of great Service to use Medicines which  
gently purge and correct the Biood, the Mother, or Nurse,  
who suckles the Child, heing injoineia strict Regimen, besides  
the Use of the Remedies before-mentioned. Topics proper in  
this Circumstance are, principally. Oil of Tartar *por Deliquium',*applied two or three Times a Day with a Pencil, or Feather,  
either alone, or mixed with Oil os Eggs and Wax; aster  
which, the Place must he covered with a Plaister, either the  
Lead Plaister, or *Emplastrum de Metnio,* or *Emplastrum de  
Spcrma Ceti cum Camphora,* to secure it from Injuries by the  
external Air. Where the Disease has spread itself over the  
Face, as it often happens in Infants, a Plaister is not conve-  
nient ; and it is better to adapt a Linen Mask, or Vizard, to  
the Face, as is advised in Ambustions: Also, *Oleum Philo-  
sophorum,* Oil of Eggs, Lime-water, and Water with which dia-  
phoretic Antimony has been edulcorated, are good Remedies, if  
the Face be every Day washed and cleansed with them. Instead  
of these, it may be sometimes proper frequently to anoint rhe  
Place with Ointment of Litharge, or *Unguent. Diapompholygos,*or *De Enula\*,* mixing therewith, is the Disease be more stubborn  
than ordinary, a small Quantity of Quicksilver, or red Precipitate;  
If the cutaneous *Ulcers* stow with Sanies, like those of the rheu-  
matic Sort, it may be necessary to treat them every Day, with an  
Inspersion of an absorbent and drying Powder, prepared of  
Tutty, *Lapis Calaminaris,* CerusS, Chalk, or the like, mixed  
with native Cinnabar, or red Precipitate ; or to anoint them  
very frequently with beaten Cream.

- But of all corrosive and malignant *Ulcers,* none are more vi-  
rulent or formidable than thofe of the *cancerous* Kind, since  
they are to he treated with the same internal and external Re-  
medies, as we have prescribed for an exulcerated Carcinoma  
[Tee CARCINOMA]; tho' *M. A. Severinus, a* very celebrated  
Physician and Surgeon, serioufly assures us, that we are to ex-  
pect more Relief from manual than medicinal Operations, in  
such Cases; for many have been cured by Steel and Fire,  
when Medicines have been of no Use. When, therefore, it is  
determined to treat an *Ulcer* of this Kind with Burning; or  
Excision, we are to take all possible Care that the same be en-  
tirely extirpated, and that no corrupted Part remain ; for that  
would entirely defeat the End and Design of the Operationi  
Some, instead of these severe Operations, use a phagedenic  
Water, prepared in the following manner:

Take Water of Quicklime, one Pint ; Sublimate Mercury,  
half an Ounce: Mix them together. Or, instead of Mer\*  
cury Sublimate, use an Ounce, or an Ounce and half, of »  
white Precipitate: This is to he applied warm frequently;  
with Lint dipped therein.

Instead of Sublimate Mercury, I have osten used, with very  
good Success, *Mercurius Dulcis,,* in Lime-water,- *for* stubborn  
*Ulccrs, as* a much safer Medicine than the other. As for di-  
gestive Ointments, they are quite improper in cancerous *Ulcers,*and even sound to be fatal. .. ’

If there.be a Putridness and Fetidness attending the *Ulcer,* it  
must proceed either from a very depraved Habit os Body, or  
want of Care or Skill in the Surgeon employed in the Dressing.  
It is the Physician's Part here, by proper Medicines, to correct  
and strengthen the Habit with all convenient Speed, while the  
Surgeon takes due Care frequently to exterge and cleanse the  
*Ulcer,* and so much the more, if the same he .affected with a  
burning and intense Heat: For when *Ulcers* are but seldom  
dressed and cleansed, as is usually the Case aster great and bloody  
Battles when the Number os the Woundedss very considerable,  
it can scarce be avoided, but that the vitiated Flesh will be in-  
fested with Heats, Putridness, or Worms. For preventing such  
Inconveniencies, there is no readier Way, than to apply our di-  
festive Ointment, mixed with *Unguentum AEgypiiacum,* or the  
*lnguentum Fuscum* of *igricrtzius,* or the. phagedenic Water, or  
red Precipitate, either by itself, or mixed with burnt Alum, or  
well worked into the digestive Ointment, and to continue the

Tssnie thl the corrupted Flesh he totally consumed, and the Bottom  
Os the *Ulcer carries* to itS natural red Colour. While'this is  
doing, it will he convenient to wrap the affected Part in linen  
moistened with Spirit of Wine., which is a Medicine that Very  
potently resists Putrefaction. The Sore being thus cleansed  
Irem the putrid and corrupted Parts, the Conglutination is to he-  
performed by rhe same Menns as have been prescribed for other  
Kinds of *Ulcers,* the Surgeon taking all due Care that the Pa-  
tient be frequently refreshed, and have his Spirits enlivened not  
Only with comforting Meats and Drinks, but by such cardiac  
and antiseptic Medicines aS are directed by the Physician, lest  
Nature should sink, and the Strength be exhausted under the  
Length of the Cure. *Verminous Ulcers* are to be treated in the  
Tame manner; for whatever resists Putrefaction, is, also, an  
Enemy to Worms, and all due Care is supposed to be taken,  
at *every* Dressing, for exterging the Worms and putrid Flesh ;  
aster which the Cure is effected by the Methods above pre-  
scribed.

In the last Place, there are some Ulcers so malignant and  
obstinate; that though they Cannot be discovered to have  
contracted any Venereal Contagion, they yet resist all the Me-  
dicines hitherto prescribed. In this Case I have learned by  
long Experience, that there is no Method of Cure so prevalent  
and effectual as what is performed by means os mercurial Me-  
dicines, or by a gentie Salivation. For I have found the  
Blood, in some Patients, corrupted to such a degree, aS not to  
. he lenified, much less corrected, without the Help os Mercury.

But if there be any manifest Signs of Venereal Contagion con-  
tracted by the Patient, this Method of Cure by.Mercury be-  
comes absolutely necessary, as we shall demonstrate below.

*Of the Cure of* **VENEREAL ULcERs.**

. Venereal Ulcers, as we have already observed, are generally  
seated in the Groin, or Inside os the Thighs, being the Effects  
of ExulcerationS of Venereal Buboes: They are, also, gene-  
rated in the Prepuce, Frenum, and Glans of the Penis; in  
which Cases they take the Name of *Cancri,* in *French, Chan-  
cres,* (whence the *English Shankers)*; in Women they infest  
the Vagina, and *Labia Pudendi,* sometimes the Nose, Palate,  
Lins, Fauces, Tongue, and Uvula, the Forehead, Cranium,  
and other Bones, are affected with them ; and one single Ul-  
cer os this Kind, is neglected, or ill-treated, is capable os ex-  
citing an universal *Lues Fenerea.* The whole Affair, theresore,  
os the Cure consists chiefly in evacuating and eliminating, by  
proper Medicines,- as soon as may be, the Poison of the V ene-  
real Infection.

No Medicines are better adapted to this Purpose, than Ca-  
thartics, incorporated with *Mercurius Dulces,* either in Pills or  
Powders, and frequently administered. With these must be  
.joined the Use of the Woods in Decoction, for correcting the  
Blood, together with Essences of the Woods, Pimpinella alba,  
and Amber, and Tincture of Antimony, and the like, which  
are of excellent Service, when taken in the Morning early, in  
Bed, by promoting a moderate Sweat. A strict Regimen of  
Diet is in no Case more necessary than the present: For Wine,  
and all other heating Liquors, as well as salt, acrid, and acid  
Meats and Drinks are highly pernicious. If these Remedies  
prove too weak and ineffectual on account of the Inveteracy  
Of the Disease, or its Complication with the Lues Venerea, it  
will be necessary, either to use stronger Sudorifics, such 'espe-  
oially as Decoctions of the Woods, with a proper Regimen ;  
or to call in the Assistance of Mercury, in order to excite a  
gentie Salivation, which at once cures the Ulcer, and expels  
the Venereal Venom.

Σ When these Kinds of Ulcers affect the Mouth, Uvula,  
Fauces, Tonsiis, or Tongue, not only internal Remedies are  
to be employed, but the Mouth itself is to be very Often washed  
with a Decoction of the Woods, either simple, or mixed with  
Honey of Roses. Aster this the affected Part is to be anointed  
and cleansed; either with *Hartman's* Green-water, or Honey  
of Roses, mixed with a few Drops of Spirit of Vitriol to give  
it a gentle Acidity; and, at last, it is to be healed by the Use of  
Essences of Amber and Myrrh, or Oil of Myrrh *per Deliqui-  
um.* Is the Ulcer appears in the external Parts, the best Way  
is to apply the Digestive Ointment, or Basilicum, mixed with  
Quicksilver, or white or red Precipitate in Lint, or *Vigdis*Frog-spawn Plaister, or Diachylum mixed with Mercury, in  
order to exterge and cleanse the Parts. After Modification,  
the Ulcers are to he sprinkled with the Essences just mentioned,  
or the absorbent Powders so often prescribed, which may have  
their Virtue augmented, by mixing with them a small Quan-  
tity Os red Precipitate, in order to Exsiccation and Congluti-  
nation : No less effectual for the Purposes of Cleansing and  
Healing are the phagedenic Water, or Lime-water, impregnated  
with *Mercurius Dulcss,* applied in Lint, moistened therewith  
several times in a Day; especially if the Parts he now-and-

then'gently touched with the Lapis Infernalis. Yen here, alsoy  
an excellent Conglutinant, after Mundificafion, in a simple  
Ointment prepared of Quicksilver, mixed with a sufficient  
Quantity of Turpentine, ot in the following Mercurial Oint-  
ment.

Take of Unguentum MundifioatiVum, or Dispompholygos,  
crude Mercury extinguished in a little Turpentine, each  
an Ounce. Or,

Take of an Amalgama os Mercury, and Lead, one Ounce;  
BoleArmoniac, two Ounces; Ointment of Roses, a suf-  
ficient Quantity: Make them into an Ointment.

If the subjacent Bone be carious, it is to be treated with such'  
Remedies aS are prescribed. sor the Cure os a Caries [fee the  
Article Os], and particularly with euphorbium; Oil of Cloves,  
the phagedenic Water, or Spirit os Nitre in which Mercury  
has heen dissolved, or, if it.may safely be done, with a redehot  
Iron. Sometimes these Kinds of Ulcers in the softer Parts of  
the Body, and particularly the Groins, make a constant and  
copious Discharge os a Lymph; and such Ulcers are found,  
ro be so stubborn, that no Medicines can be sound os sufficient  
Force to exterge and dry them. Such a Circumstance is usu-  
ally attended with a Rupture, or Erosion os some lymphatic  
Vessel; and here we are first to attempt a Suppression of the  
Flux by Compresses, and a strait Bandage, which has some-  
times happily succeeded : But if a Bandage proves os no Ser-"  
vice, there is no better Remedy for so soul and troublesome a  
Nuisance, than the Application of a red-het Iron; and the  
same must he repeated as often aS Necessity requires.

Venereal Ulcers os the Penis, or Glans, carelessly treated,  
usually terminate in the *Lues soonerea,* and Perforations and  
Corrosions os the Urethra, through which the Urine passes, as  
through a Sieve. Sometimes the whole Glans, or Penis, are  
affected with a Scirrhus, or Shankers, to fuch a Degree aS to  
require the Use of the .Knife. If the Disease infests the Noher  
it commonly produces a Very fetid Ulcer, called, in the tech-  
nicsl Way of speaking, *Ozcena,* which sometimes consumer  
the whole Part. Sometimes the Palate with its Bones is so.  
miserably corroded and perforated, that whatever Drink or li-  
quid Food is attempted to be swallowed, iS rejected through  
the Nostrils.. These Perforations are seldom closed, or brought  
to a Coalition, especially is larger than ordinary: They may,  
however, when their Orifices are consolidated; he closed up  
with a thin Piece of Gold or Silver. It is much more usual  
for the Tonsils, with the outer Membrane of the Uvula, or  
the entire Uvula, to be corroded and consumed. In all these  
Affections, Mercury, and the Decoctions of the Woods, are  
the principal Remedies. Sometimes it happens, as I myself  
have had several Opportunities of observing, that the Very Cra-  
nium itself, especially about the Forehead, is corroded and per-  
forated with a Caries, in so surprising a manner, as to discover  
the Very Brain, with the Pulse of the Arteries helonging to is,  
which are plainly to be discerned; whence Very formidable and  
dangerous Symptoms must arise, the Consequence of which is  
sometimes Death, unless it he prevented by the seasonable  
Administration of the before-mentioned Remedies.

*Of* **CALLoUS ULCERS.**

Ulcers of the callous Sort are seldom or never cured without  
a previous Extirpation of the *Callus.* Now there are three  
Ways by which the Callus may be extirpated. The first and  
gentiest, which takes Place in a recent and softer Callus, is by  
Corrosives, and those of the mildest Sort ; some of the princi-  
pal *os these* are burnt Alum, and red Precipitate, either used  
alone, or mixed in equal Portions, or with a Mixture of the  
Digestive Ointment, or Basilicum, orUnguentum.Egyptiacum,  
or the Brown Ointment os *lFurtxius.* With some or other  
of these Medicines are the callous Parts to be anointed several  
times in a Day, and these are usually effectual, especially those  
mixed with red Precipitate. But is none of these milder To-  
Pics prove of sufficient Force to eat away and consume the  
Callus, it will be proper, in the second Place, to make a tho-  
rough Scarification os the callous Parts, and afterwards rub  
them with the Lapis Infernalis, or Butter os Antimony. A  
third Method, no lefs expeditious than the former, is by Spirit  
os Nitre, or Aqua-sortis, impregnated with aS much Quick-  
silver as can be dissolved .in it over the Coals, and every Day  
applied to the Part.

There is yet a gentler Way of extirpating a Callus, described  
by *Le Dran. Tom.* 2. *Qbserv.* I I5. This Method is to apply,  
for four or five Days together, a Plaister compounded half of  
a Plaister of Diachylum with Gums, and half os *Vigos,* Plais-  
ter, mixed with sour times the Quantity of Mercuay, to bo  
renewed every Morning and Evening, in order to soften, in  
some measure, the Lips of the Callus. After thss the Callus

is m he scarified, all manner of Ways, to the Bottoms the  
Ulcer being covered afterwards with a Bit of Lint, till  
the Blood, which commonly flows in small Quantities from  
the Incisions in the Callus,, he stopped - This done, the same  
Plaister is applied over the whole Ulcer,, so as to touch the bare  
and newly scarified Lips of the CalluS. About four Days after,  
the Surgeon repeats the Incisions, or *Scarification,* aS it is usu-  
ally called, and renews the same the third or fourth time if  
there be Occasion, that is, if. the Callus he not dissolved. . By  
this Method, as the above-mentioned Surgeon affirms, is the  
Callus gradually subdued, softened,-and at length totally disap-  
pears, leaving in its room a Very- laudable Cicatrix, without  
the Assistance of-any other Remedy. I never had an.Oppor-

. tunity, I must confess, os trying this Method. - '

If the callous. Ulcer be, also, fistulous, an Incision is first to  
he made into the Sinus, in the same manner aS has been di-  
rected sor a Fistula, before we attempt to consume the-Callus;  
aster which-the Callus is to he consumed, by the Methods aboVe  
related. Is the Application of the Knife he too much dreaded  
by the Patient,-or otherwise unsafe, it will be convenient to  
introduce into the Sinus a Tent of *Unguentum AEgyptiacum,*or the Brown Ointment of *JViurtAius*; by which means the  
Callus, if not very obstinate, is insensibly consumed, and may  
be the sooner, if rhe sore Part of the Tent, before ’ its Intru-  
sion,, be rubbed with red Precipitate, Lapis Infernalis, or But-  
ter of Antimony, and this be continued till the Callus be con-  
fumed. Is these corrosive Tents will not penetrate to the  
Callus, the most convenient Method will, be to use the Syringe,  
and make frequent Injections of the Phagedenic Water,- or of  
*Unguentum eagypiiacum,* or *lVierfaittgis* Brown Ointment, disc  
solved in Spirit of Wine, into the difficult and winding Sinus,  
compressing afterwards the Mouth of the Ulcer, that the Li-  
2uor may he retained for some Space of Time, within. The  
lallus being thus removed, the Cure of the Ulcer is to he  
managed like that of a Fistula: . . ' . ” t -

It may sometimes happen, that in callous and fistulous Ul-  
cers which are of long Standing, or full of Turnings and  
Windings, these corrosive Medicines are of littie or no Service,  
or, whet is worse, may be more disposed to corrode and Velli-  
cate the Nerves, and excite most terrible Convulsions, sooner  
than consume the Callus, in such a Circumstance it cannot  
het be most proper to make an Incision in the Ulcer, in the  
same manner as directed for cutting the Fistula [see FISTULA j,  
but with all due Care and Circumspection, for Fear of wound-  
ing some Artery, Nerve, or Tendon. ’

Is neither the Method of Incision just recommended he  
thought of Force sufficient, or expeditious enough, in extir-  
paring the Callus : In this Case, if the Patient he endowed  
with a good Measure os Strength and Intrepidity, and the  
Place be .safe-and convenient, with respect to the Nerves and  
Arteries, . the most expeditious Method that can be used, is to  
separate or cut off all the Callosities with the Rnife, or caute-  
ri2e them with a red-het Iron. By this hold and resolute Opel,  
ration, the inveterate and stubborn Ulcer is, aS it were, con-  
verted into a very recent Wound; and, consequentiy, may  
be healed by common Remedies, unless rlje Cure he prevented  
by a Caries, a bad Habit of Body, the *Lues Venerea,* Scurvy,  
Dropsy, or some other Indisposition.

*Of the Cure of* **MAGIC ULcERs,** *or such as are supposed to be*

*’ ; . induced by Fascination.*

i For Ulcers on which they bestow the Epithet of *Magic,* on  
account of their strange Phaenomena,- as containing Threads,  
Needles, Nails, and. the like, *Paracelsus, Helmont, Agrioo..  
cola,* and many others, have been very careful to prescribe Re-  
medies, which are, for the most part, of no Significancy, and  
either superstitious or idle. The best os them, however, seem  
Io be Oaken and Willow-leaves, Maidenhair, St.John's Wort,  
by some called *Fuga Damonum* on this Account, Quicksilver.  
Asa-soetida, Antirrhinum,.-and.some others: Any one os these,  
either hung about the Neck,- or used in some other insignificant  
manner, according to Prescription, will, as it is pretended,  
secure the Body from all malevolent Influence and Effects of  
Fascination. Some prescribe the Ashes os a Woman burnt for  
Witchcraft ; others the Ashes of- burnt human Dung, to be  
sprinkled on the Ulcer. *IIeerius* and *Horstius* recommend  
especially the *Unguentum de Visco corylino,* or Ointment os  
Miselto of the Hasel, against magic Ulcers: *Mynsiche* pre-  
scribes his Foetid Plaisters ; Others advise other Things.

- Whatever our Sentiments ought to he on this Head, it is  
certain a Physician best consults his own Reputation, as well  
as the Health of his Patient, when he treats Diseases and Ma-  
ladies of this Kind, which, by the ignorant Vulgar are, for  
Reasons vain and ridiculusis, reputed the Effects of Magic,  
with natural ano common Medicines, or such as he esteems,  
upon careful and. due. Thought and examination, accommo-  
dated to the Nature of the Uloer, and especially to the Habit

of the affected Party ; fuch are the'Remedies recommended  
under the preceding.Heads2 For though we should be never  
so willing *to* grant, that *a Person* may stiffer in his Bode, and  
be disquieted, by the crafty and Cunning Tricks and Delusions  
os the Devil and Magicians, yet we have no sufficient Reason  
to convince ns, that the- Disorder thus caused,; is supernatural,  
and, on that Account, incurable by natural Means;, so aS to  
oblige us to have Recourse to superstitious, sordid, and absurd  
Remedies. TO this it may be added, that ignorant and. super-.  
stitious. "Surgeons,- and Attendants on Bagnios, report every-  
where as magical, all fuch Uleersas.they arenot.able to cure j  
whereas the same sailing afterwards into more: skilful'Hands,  
when the true Nature and Cause os their uncommon Maligni-  
ty comes to be discovered, are often healed iwithouto much  
Difficulty. There have been, also, pethaps, in former times,  
fome ill-meaning Surgeons who have pronounced an I UlceE  
*magical,* without Foundation, in order, to extort the more  
Money for-the Cure. *' i . i .* ...... ;.r.' t - :

*Of she Cure of* **OLD ULCERS,** *especially. tAAhe Legs:'*

Though no Part.of the Body be secure, from the.Danger. of  
old or inveterate Ulcers, vet are the Legs and Feet more.-subs  
sect to them than other Parts : And for. rhis-Reason; though  
we. have formerly, treated of - malignant\*, or: inveterate  
Ulcers in general, we think it incumbenc.on us.- to ..enlarge,  
more particularly, on those which insest, .the Legs lot Feet,.  
The Causes of Exulcerations, of the Legs .are generally..the  
same with those of malignant Ulcers in; general; for..one aa.  
well as the other proceed from a bad Habit of Body, a thin  
and acrimonious Blood, some adjacent Fistula, Caries, or  
Callus : In Women, from an Obstruction of the Menses, and,  
other like. Causes. - Whoever, therefore, pretends to cure an  
Ulcer in the Leg, must inquire-into its true Cause, and to  
the same accommodate the-Cure, in the Manner prescribed  
above. *.... i sc . νὰ~*

But hefore we enter-into the Method of Cure, nt 7 will-non  
be improper to inquire whether a Conglutinatinn. of such in-;  
veterate Sores or *Ulcers-* in the Feet and Legs can. be effected-  
with Safety j hecause there are Instances in the Writings of  
the most experienced Physicians, where the Consequences of  
such Caseshave been very severe and dangerous Disorders, and  
oftentimes mostcertam and present Death. Ihave, as I appreu  
bend, in a great measure, given a satisfactory Answer to thia  
Question near the Beginning os this Discourse, when I said, .that,  
in Persons far advanced in Years, and of a Very bad Habit of  
Body,' it is best to abstain from Conglutination os fuchinvete-  
rate *Ulcers,* because they are. a great means of Health, aS be-  
ing so many Issues or Outiets by which Nature is accustomed  
to expel the noxious or. superfluous Humours. I would not,,  
however, without some weighty Reason, have this Ruin ap- .  
plied to young and robust Persons; sor since the first. Causes  
of such stubborn *Ulcers,,* either-by Abstinence and a prudent  
Regimen,-or by Fontaneis, or proper Medicines, may, with-:  
out all Danger, in such Subjects, be removed, it cannot, he  
doubted but that the Conglutination may afterwards, be per-;  
formed with little or nolDetriment to the Patient.. .'

Tho' we have determined the Conglutination of moderate  
Sores *or Ulcers in* the Legs or Feet of aged Persons to be danger-  
ous, yet we are so far from thinking all Care and Medicines in  
their Case useless, that we rather pronounce them highly neoes-i  
sary; The Surgeon here has a double Duty incumbent on him.;.  
one Branch of which consists in alleviating aS much aS possible  
the. Pains .and Disorders which attend them; the other Part of  
his Business is.to take care that the evil may not increase, nor .  
spread ; arid that no new bad Symptoms, such as Pains and In-  
flammations, may add to the Disease by exasperating the *Ulcer.*

in 'the first place, therefore,- Abstinence, and a very exact  
Regimen os Diet is to be unjoined the Patient, that he may not  
eat to-Excess, nor os such Meats as are noxious and prejudicial  
in his Case; of which Kind, are all acrimonious, hard, and  
crude Aliments, and Swineis Flesh in particular. - Proper and  
gentie Cathartics are, also, of Service in attracting the redun-  
dant and malignant Humours from the lower Parts, and expel-  
ling them gently by Stool.. - Besides these, other internal Me-  
dicines, which are contrary to the Cause of the Disease, are  
occasionally to he prescribedsuch, sor Instance, as Elixir  
Proprietatis, and Essences of. Myrrh, Amber, and *Peruvian*Balsam, winch, as well aS all Bal sarnies, and Bitters, are highly  
serviceable sor correcting the immoderate Thinness and Acri-  
mony-os the Blood in Persons advanced in Years. ... :

With respect th external Treatment, it is above all things  
necessary, that the *Ulccr* he kept clean, and once or twice '  
every Day exterged from Sanies. -.After this it is to be silled  
with Lint, either dry, or dipt in a Decoction os the Leaves of  
-Walnut or Birthwors, sor the Reception of the acrid Humours.  
Upon this It will he proper to apply. *Bauhirns,* Plaister for old

*Dicers,* **or the** *Emplastrum Diasulphuris* **of** *Pallandus,* **the**Lead Pursier, the Plainer of Diapompholyx, or of *Lapis  
Calaminaris,* or any other of the. like Nature. These Direc-  
tions being carefully and regularly observed, and the affectsd  
Part guarded, **as** much as is possible, from the Injuries of **the**Air, or external Cold and Humidities, it is not to be doubted  
but the *Uleer* will prove of the mildest Sort, and serve as a  
Drain to the whole Body for the Evacuation of corrupted Hu-  
rnours, and consequently he found beneficial and salutary, and  
highly conducive to the Prolongation of Life and Health. And  
**really** it seems probable, that the Observation of those  
admirable and wholsome Effects of inveterate *Ulcers* in  
aged Persons induced the ansient Physicians, who followed  
Nature as the hest Guide, to raise Fontaneis in sick and vale-  
tudinary Bodies, which might do the Office os *Uleers* in dmin-  
ing and evacuating the Body of acrid and superfluous Humours.

Is it should happen, as is sometimes the Case, that by means  
of some Blow, or taking Cold, or by immerging the Leg in  
cold Water, or from a Fit of Anger, a Fright, Sorrow, or  
an improper Regimen of Diet, that the diseased Part he seized  
with a Pain or Inflammation, it will he convenient to wrap the  
Place in a Linen Cloth folded and moistened with *Hungary*Water, or with theriacal, or camphoraced Spirit of Wine, or  
with Lime-water and the said camphorated Spirit, and fre-  
quently to repeat the fame ; and the Pationt is to be strictly  
injoined to keep his Leg in Bed, and to guard it from external  
Cold, taking every Morning some Cups of'Tea, or some other  
Sudorific,, and to sweat well afterwards in his Bed ; by tbefe  
means rhe Pain and Inflammation are usually In a short tone re-  
moved. But the Case becomes dangerous, when the inflamma-  
tion is violent, especially in a corrupted and weak Bndy,and be-  
gins to pass into a Gangrene. In such a Circumstance the fame  
Remedies are to be employed, both internal and external, aS  
have been prescribed for a Gangrene [See the Article GAn-  
**GRENAl.** But Care isto betaken, above all things, that such  
infirm and aged Patients be every now-and-then refreshed with  
Cardiacs, and comfortiog Medicines, and frequently cast into  
a gentle Sweat. If theIe Kinds of Remedies he postponed and  
neglectis, the Danger ufually increases, and there is very great  
Reason to fear,.that the Disease will gradually degenerate into  
a Sphacelus, followed by Death.

. When inveterate *Uleers A* this Kind, in oldand infirm Sub-  
jects, dry up spontaneouily, and turn livid, the Patients, for  
the most part, are immediately seized with an Horror, Nausea,  
and Feebleness, which are Indications of a great Decay of Na-  
\_ ture, a Corruption of the assailed Part, and an extremely dan-  
gerous Condition, which often terminates in a speedy Death.  
Under such formidable Symptoms there is the greatest Necessity  
to have immediate recourse to a proper Diet, and corroborative  
Medicines for preserving the Strength. Topics convenient to  
be applied to the *Ulcer* are the Roots of Gentian, or Florentine  
Orris bruised ; or, if these prove not strong enough, the Root  
of Black Hellebore reduced to Powder, or in Globules; or, in  
the last place, if this he Ineffectual, Powder of Cantharides,  
or a Globule of a Blister-plaister of the Shops. By this Me-  
thod fuch *Ulcers,* when in a State of Exsiccation, or in a man-  
ner dry’d up, .are stimulated and irritated to fuch a Degree as  
' sometimes to stow afresh, and fo begin to relieve the Patient  
from the malignant Humours by which he was oppressed, after  
which the *Ulcer* is to be treated in the manner prescribed. But  
if these Medicines prove of no Effeci, and the *Uleers* continue  
in a State of Dryness, there remains no Hope of the Patient,  
whole Case is desperate, and Death unavoidable. *Pleisu Cbir.*

' ULEX. A Name for the *Genesta spartium ; majus ., bre-  
vioribus aculeis.*

ULMARIA.

The Characters are, ' . , '

The Leaves are pinnated, resemble thofe of Agrimony, are  
triangulated, and divided after the Manner of those of umbel-  
sated Plants. The Apex of the small Pedicle is expanded into  
a monophyllous, quinquefid Calyx, which is expanded like a  
Star. The Flowers are rosaceous, pentapetalous, collected  
into Panicles, fcarce visible, and furnished with numerous Sta-  
mina. The Ovary, which grows in the Centre of the Calyx,  
consists of three, four, or five little Pods, furnished with a Tube,  
and becomes a Emit composed of a Multitude of small mem-  
branaceous intoned Sheatlis, collectsd into an Head, and con-  
taining one small Seed.

*Boerhaave* mentions two Sorts of *Ulmaria* ; which are,

I. Ulmaria. *J. B.* 3. 488. *Fail Hist.* I. 623. *Synop.* 3.  
259- *sicerh. /nd. A.* 295. *Tourn. Inst.* 265. *Ulmaria Regina  
Prati.* Ossie- *Ulmaria vulgaris.* Park. Tineat. 592. *ljlma Re-  
gina.Prati.* Ger. 886. Emac. I043. *Ulmaria Barba Capristore-  
bus compactis.* C. Β. P. 164. MEADOW-SWEET.

Meadow-sweet has a long, reddish, fibrous Root, from which  
spring several pinnated Leaves, having two or three Pair of op-  
posite large serrated Pinna, with an odd onC at the End, Cut

into three Parts; they are hoary underneath, and green above,  
wrinkled, and frill of Veins, and having several very fmail-  
Pieces hetween the Pinnae; the Sulk is red and angular, grow-  
ing two or three Feet high, beset in an alternate Order with  
the likeLeaves. The Flowers grow upon the Top of the dtalks.  
Umbel-fashion, heing small, five-leaved, and full of Apices of  
a white Colour, and are followed by little round Hoads, made  
Screw-fashion, of several Seeds set together. It grows in moist  
Meadows, and hy River Sides, and flowers in, *June.* The  
Leaves and Tops are used.

They are alexipharmic and sudorific, and good in Fevers,  
and all malignant Distempers ; they are, likewise, restringent,  
binding, and useful in Fluxes of all Sorts; They are put into  
the *Aqua Lactis.*

The only Officinal Preparation is the *Aqua Ulmaria. Mil.*

*Ur’s Bat. Off.*

Its Leaves have sn herby, saltish, and glutinous Taste; they  
give a saint-red Colour ro the blue Paper; the Root gives it a  
deep one; it is styptic, and a little hitter; its Salt seems to  
resemble the Sal Ammoniac; but is united with a great deal of  
Sulphur, and a pretty deal of Earth.

By the chymical Analysis it yields **some** acid Liquors, some  
volatile concrete Salt, a good Quantity of Sulphur, and a pretty  
deal of Earth : Thus it is fudorific, cordial, and .vulnerary.  
The Decoction of its Root in Water is very good in malignant  
Fevers, and is preferable to that of *Scorsconera.*

The Extrail of its Root is faid to he sudorific, but it is very  
moderate; forthough you should give a Dram of it in **the**Morning, another in the Afternoon, and a third at Night, with  
a Grain of Laudanum, you must continue this Practice for  
two or three Days, before you can perceive any considerable  
Effects The fame is, also, observable in other Sudorifics. A  
Decoction of its Root is detersive and vulnerary'. Its Juice  
enters the *Emplastrum Fellcis Wurtocii. Martsn’s Tournefort.*

The Flowers, infused in Wine or Beer, communicate to them  
a grateful Smell and Taste in manner of the *Pirnpinella.* The  
Flowers are of a pleasant Smell, exhilarating the Heart-with-  
out oppressing the Head, whence they are very proper in Sum-  
mer-time to adorn or he strew Μ in Parlours and Dining-rooms.  
One *Renatus* of *Rachelle,* **as we** are told by J. *Bauhine,* affirms,  
that the Flowers communicate a grateful Smell to Metheelin,  
and improve it to fuch a Degree as to compare with the Wine  
of *Crete,* or *Candy,* which they call *Malmsey.*

I myself have seen, and can solemnly affirm, says *S. Pauli,*that *Queen of the Meadows* has had furprising Effects on **a**Girl who had a monal Wound in the Biadder, and in an al-  
most incurable Fracture of the Arm ; whence it justly deserves -  
to be an ingredient in the most celebrated and useful Plaister of  
*Felix Wourtocius,* who highly extols the Roots of this Plant, and  
feems to prefer it before all other Vulneraries, or any such as  
**are** recommended in Fraclures. *Rail Hist. Plant.*

*. 2.* Ulmaria ; floribus in longas spicas congestis. *Barba Co.  
prae, storibus oblongis. C.* B. P. I 63. T.- 265. *Barba Capri.***J.** Β. 3. 488. *Boerh. Ind. alt. Plant.*

*Ulmaria* is antispafmodic, antiepileptic, corroborative, and  
astringent. Hence our Peasants use it in a’Dysentery, and Diar-  
rhoea, and to repress Vomiting. I have found it, alfo, of *Ser-  
vice* in regulating the disorderly Motions of the Heart, Blood,  
and Spirits ; and where-ever Condensation, Strengthening, or -

, Astriolion are required, this Herb is of excellent Use. The  
Leaves are good for an Haemoptoe ; and the bruised Root is ap-  
plied to Wounds, inorder to stop the Blond, and consolidate  
the Part. A Decoction of the Roots is proper in malignant  
Fevers. *Hist. Plant, adscript. Boerhaav.*

ULMUS.

The CharaSers are;

The Flower is monopetalous. Bell-shaped, and adorned with  
many Sumina. The Ovary in the Centre of the Flower be-  
comes a foliaceous. Heart-shaped Fruit, soon mature, con-  
cealing in the Middle a membranaceous. Pear-shaped Capsule, \*  
full os a Seed of the same Figure.

*Boerhaave* mentions four Sorts os *Ulrnus* ; which are,

I. Ulmus, campestris, & Theophrasti. *C. B. P.* 426. *Teum,  
last.* 6ox. *Boerh. Ind. A.* 220. *Ulmus.* Ofic. J. B. I. I39.  
*Cimus vulgaris.* Park. Theat. 1404. *Ulmus vulgatissemus folia  
lato seabro.* Ger. Emac. redo. Rail Hist. 2. I425. Synop.

3. 468. COMMON ELM.

The Elm is one of the commonest Trees we have: It has a  
rough thick Bark, and **the** Branches arc cloathed with **some-**what rough, crenated, green Leaves. The Flowers are small  
and staminous, coming out early in the Spring before the Leaves.  
The Seed is round and foliaceous. .

, The Bark is principally ofed, being abstersive and cleansing,  
and is frequently used in Gargari sms for sore Mouths and Throats,  
to clear them of tough viscid Phlegm. It is, likewise, account- ..  
ed good for Ruptures, and to consolidate Wounds. *Mister’s  
Bit. Off.*

, The Seed of the *Ulmus* is called *Samera,* and is ripe about  
the latter End of *April.*

As to its Virtues, according to *Dioseorides,* the Leaves,  
Tops, and Bark, are of an astringent Quality. The Leaves  
bruised in Vinegar are effectual against the Lepra, being rubbed  
on the Parts, [Gass» ascribes this Virtue to the Bark, *Pliny* to  
both the inner Bark and Leaves J and conglutinate Wounds,  
and much more effectually if the Bark be bound about the  
Place instead of a Fillet. The Roots have the fame Virtue of  
conglutinating Wounds, and the Decoction of the Roots, or,  
according to *Dioseorides,* of the Bark of the Roots, is used by  
some to wash Fractures, in order to accelerate Consolidation by  
inducing'a Callus. The same Decoction is said to mollify Hard-  
neffes of the Joints, and to resolve Convulsions of the Nerves.  
The sat Substance swimming on the Decoction, restores Hain  
fallen off, being rubbed on the Place. The Bark of the Root  
bruised, and worked up with *Muria,* into a Malagma, miti-  
gates the Pain of the Gout.

A Dram of the Bark [an Ounce] taken in an Hemina of  
coldWater *\Dioscorides* says in Wine or Water] works by  
Stool, and particularly upon phlegmatic and watry Humours.  
*Plin. Dioseorides.* It is strange, says *Ray,* that an Astringent  
should purge. *Pliny* commends the Tear for Collections [Ab-.  
sceffes] Wounds, and Ambustions; but the Elin in our Coun-  
try, fays *Ray,* discharges no Tears, either spontaneousty; or  
from Wounds.

The Bark of the Tree boiled in common Water to near the  
Consistence of a Syrup, and then mixed with a third Part of  
.Aqua Vitas, is a singular Remedy against the Pain of the Sci-  
atica, the Part affected being fomented with it sor some time .  
by the Fire.

The Humour sound in the Follicles, which grow on the  
.Leaves, rubbed on. the Face, brightens the Skin; and makes  
the Countenance more amiable. *Maithiolus* writes, that it  
cures the Enterocele in Children, if Bolsters dipped, therein are  
applied to the Groin, and tied under their Thighs. *Fallopius*says, that he never found any thing more effectual in Aggluti--  
nation than this Liquor. Of the same is prepared an Oil, which,  
as we are assured by *Sylvius,* is os extraordinary Efficacy in  
Wounds; hut we could never observe, says *J. Bauhine,* that  
Oils had any good effect on simple Wounds, but rather fill  
them with Sordes, and prevent their Conglutination. *Raii  
Hist. Plant.*

2. Ulmus; solio latissimo scabro. *Ger. Emac.* I48I. *Raii  
Hist.* 2. I426. *Synop.* 3.469. *Tournl Inst.* 6OT. *Bocrh. Ind.  
A.* 220. *Ulmus montana.* Offic. C. Β. P. 426. *Ulrnus la-  
tiora folio.* Park. Theat. I4O4. THE WYCH HAZEL. :

This is found frequently in Hedges. The Bark is used in  
Medicine; and agrees in Virtues with that of the preceding  
Elm. \*

3. Ulmus; minor, folio angusto, scabro. *Gcr. Emac.* I4SO.

4. Ulrnus; folio glabro. *Ger. Emac.* I48I. Park. Theat.

I 4o4. *Boerh. sad. alt. Plant.*

ULNA. The Name of a Bone in the fore Arm. See  
**BRACHIUM.**

ULNARIS MUSCULUS. *Winflaw* describes three Mui-  
clcs under this Name ; the *Ulnaris internus,* the *Ulnaris Ex-  
ternus,.ζηά* the *Ulnaris Gracilis* ; for which last see PALMARIs  
**LoNGUS.**

. The ULNARIS INTERNUS is a long Muscle, fleshy at its  
upper-extremity, and tendinous at the other, situated on the.  
outer Part of the Ulna.

It is fixed by its upper Part in. the back Side of the long or  
internal Condyle of the Os Humeri, in that Part of the Ole-  
cranum which is next the Condyle, along the upper Half of the  
Uina Very nearly; and to the Middle common Tendon of the  
neighbouring Muscle, termed commonly *Profundus.*

It runs in the Direction of the external Angle of the Ulna,  
and ends by a long Tendon in the *Os Pisiforme,* or *Orbiculare*os the Carpus, reaching, also, to the *Os Vnciforrne,* being  
united to the Ligament common to these two Bones.

When the *Ulnaris Internus* acts alone, or as the principal  
Mover, it brings the Hand obliquely toward the internal Con-  
dyle, and toward the Olecranum, though with Difficulty.

When it- acts together with the *Radialis Internus,* it turns  
the Hand equally towards the two Extremities of the Bones of  
the sore Arm ; and thereby moves not only the Carpus in gene-  
ral on the sore Arm, but; also, the second Row of the Carpus  
on the first, and the metacarpal Bones on the second.

When it acts with the *Ulnaris Externus,* it turns the outer  
Edge of the Hand toward the Olecranum.

The ULNARis ExTERNUs is a long Muscle lying on the  
Outside os the sore Arm, fleshy toward the Os Humeri, and  
tendinous toward the Carpus.

It is fixed above to the external Condyle cf the Os Humeri,  
heing there united to the *Anconaus minor* ; to the annular Liga-  
ment of the Head of the Radius, and to the upper Half of

the external Angle ofthe Ulna. From thence it advances, and  
forms a Tendon, winch passes through rhe external Notch at  
the lower Extremity of this Bone, on one Sine of the Styloide  
Apophysis. . ~

The Tendon having afterward passed under a particular Lina-  
ment situated near the Os Cuneiforme of the Carpus, is insert-  
ed in the Outside of the Basis of the fourth metacarpal Bone7 .  
sending some tendinous Filaments to the Basis os the little  
Finger. It is, also, often fixed in the Basis of the thud me-  
tacarpal Bone.

When the *Ulnarti Externus* acts with the *Ulnaris Internus,*it turns the outer Edge of the Hand toward the Olecranum.

-W ith the *Radiales Extcrni,* it turns the Back os the Hand  
toward the outer Condyle. \_ This Motion is termed *Extension,*but very improperly, when applied to the Hand ; for the *Meta-  
carpus,* which is naturally bent this Way, will be still more bent  
by the Action of these Muscles. I should chuse, therefore, to  
term this Motion the Inversion, rather than the Extension, os  
the Hand. The.Corpus, indeed, may, in some Sense, be said  
to be extended, hecause the Bones os the second Row are brought  
to a straiter Line with thofe of the first.

When this Muscle acts alone, it brings the outer Edge of the  
Hand obliquely toward the *Olecranum,* and the external Con-  
dyle, at the same time; but this is performed with Difficulty.  
*IViinsiovsts Anatomy. .*

ULOMELIA, ουλομελια, Zoime, ιάλομελίη, from «λος, sor  
ὸλος, entire, and μελος, a Limb, in *Hippocrates,* signifies the  
entire, absolute, essential, and universal Nature os any Thing,  
This appears to be the Sense of the Word in the following Pas-  
sages, *Lib. de Artic,* περί ἀδένων ήλομελίης γεγραψεται," there  
"-will be a Treatise of the full and complete Nature os the  
" Glands;” where *Gasm,* in his Comment, expounds the Place  
by τὴν όλόκλκρον φύσιν τῆς τῶν άδενων φύσεως, " the perfect and .  
"entire Nature of what essentially belongs to the Glands."  
The Word is used in the same Sense in two Places of the Trea-  
tise *de Glandules,* from which *Erotian* expounds ήλομελίης by ολης.  
φύσεως, " the entire Nature." Again, *Eib. de Aliment,* where  
we read, κατὰ μέν ήλομελίην πάντα, the Passage imports, that  
all the Parts conspire, or are accommodated to the universal  
Good or Benefit of the Whole; and κατ’ ήλομελιην is there op-  
pofed to κατὰμέρος, which is used to express a particular Re-  
lation and Consent of the Parts among themselves. We read,  
also, in his Epistles, ήλομελήίντῦ σκήνεος, by which he plainly  
means, " the universal Nature of the Body,'' which he recom-  
mends to the Study of a Physician. *Hefychius* takes ήλομελί»  
for an Adverb, and expounds; by καθόλοῦ, συλλήβδον, " univer-  
" sally, comprehensivelyand adds, that some understand is,  
επἐ τῆς ἀθροας τῶν οΛων φύσεως, τὸ γὰρ όλον ουλον λέγες, " of the  
C( complex Nature of things ; for ολον he calls ουλον."

Οὀλομελίη signifies, also, a Perfection and Soundness in all the  
Members; and ήλομελῆς is absolutely perfect in all the Parts,  
and -is expounded by ὑγιὴς, ὸλόκληρος, " sound, entire:" And  
thus it imports, in *Lib. de Corde*; where we read, τὴν μὲν γὰρ  
καρδίηνΐδοις ἄν ῤιπταζομενον ήλομελῆ, " you rnay observe the  
" Heart agitated in every Part which belongs to it."

ULON, ουλον, in the Plural *Ula,. vka.,* are the Gums or Ca-  
runcles which are placed about the Teeth. Οὑλα, fays *Russeus  
Ephesius, de 'mati* τάς τῶν ὸδόντων ῥίζας σἀρκες ; " The *Ula* are  
" the fleshy Parts about the Roots of the Teeth.'' But *Pol.,  
lux* telis us, that the ῆλα are the Flesh which incompaffeS the  
Teeth on the Outside ; and that the Flesh which surrounds them  
On the Inside is called ἔνουλα *{strsula}*; see ENUL ON. The Gums  
are said to have this Name bestowed on them on account of  
their Softness and Tenderness ; sor ῆλος, in *Hefychius,* is ex-  
pounded τρυφερὸς καί ἀπαλὸς, " delicate and soft*Erotian*explains ἤλῳ εριῳ, τώμαλακώ, " soft Wool." The same Au-  
thor says, that οῦλον ὀρόβιον signifies τὸ πυῤῥὸν, " red, or russets.  
" coloured;” and by some is taken to mean τὴν ἰσομεγέθη ὸνύβῳ  
ἀκροχορδονην, "a Wart, of the Bigness os a Vetch." Οῦλα,  
*in Hippocrates, Lib.* 2. *de Morb.* is put sor a Tumor and Dis-  
order of the Gums.

U&e, ουλαιζ also, signifies the Gums, 7 *Epid,* where we read,  
ουλάων ὑπερσάρκωσις, "a fleshy Excrescence in the Gums,"Uy;  
But *Lib,* 5. *Epid,* we read it ἤλων, and the same' is repeated.  
Ὁολαἰ, also, in *Erotian,* is expounded by κριθαι' *(Crithdur,*" Grains of Barley.''

ULOPHONOS, ουλοφόνος. The Name of a poisonous  
Plant; the same as IXIA.

ULPHA. *Rulandus* explains this by *Laps.atura ; Castellas*by *Pecrementurn Cotis.*

ULRACH. Dragons Blood. *Rulandus.*

ULTRAMAR1NUM. Ultramarine. A *fine* Magistery of  
*Lapis Laruli,* of a fine blue Colour, much used in Painting,  
but not in Medicine, *funkcn* describes the Method os pre-  
paring it.

ULV A. A Species of Moss. See the Explication of bo-  
tanic Terms, under the Article Boss ANY.

ULULA. Offic. AldroV. Omith. 1.538. Bellon, des Oyse.  
172. Gesn. de AVib. 700. Mer. Pin. I7I. Jons, de Avin. 32.  
Charlt. Exer. 78. *Strixesnerea.* Will. Ornith. 68. Rati Or-

l nith. I05. Ejusd. Synop. A. 26. THE GREY OWL  
The Parts in Use are, the Gall, Fat, and Flesh. The Gall

. is commended sor the Albugo, Cataracts, and Films ; the Fat  
sor clearing the Sight; the Flesh boiled in Oil, and that Oil  
mixed with Sheep's Butter and Honey, is good to heal Ulcers.  
*Pliny.* It is esteemed by some *for* the Gout. *Dale.*

UMARL See CAMARINscAS.

UMBELLA. See FLOS UMBEI.LATUS, in the Explication  
of botanical Terms, under the Article BOTANY.

UMBELLIFERA ALSATICA. A Name for the *Oreosc-  
linum, pratense ; Cicutee folio.*

UMBELLIFERA CANARiENSIs. A Name for the *Bupleu-  
roides ; ques Sirnpla nobla Canariensium.*

UMBELLIFERA, FoLIO PANAcIS. A Name for the *Pa-  
stinaca, folio quasi Libanotidis latifolia* ; and, also, for the *Pa-  
stinaca , semine longissimo.*

UMBILICATA LINIFOLIA. A Name for the *Ompha-  
lodes; Lnsitantca; Lini folio. '*

UMBILICUS-MARINUS. .Ossicin. *Operculum Cochlea  
- calatae.* Bellon, de Aquat. 43o. Mont. Exot. 6. *Operculum  
Cochlearum marinarum subrotundum in se contortum.* Long..  
Math. Test. 56. This is the Cover of the *Cochlea Calata,* and  
is a stony kind of Substance, of a flat Superficies, remarkable  
for a spiral Line os a deep-yellow Colour, hollow in one Part,  
aster the Figure os a Navel, os a carnation, or igneous Colour,  
and an earthy Taste. As to the Virtues, *Johnson* says it sti-  
mulates to Venery.

*Augustinus Scilla* is persuaded, that these Substancesnre either  
the eggs of the *Cochlea,* or some other short, imperfect Pro-  
ductions of the same : But the ingenious Mr. *Ray,* when he  
was on his Travelsin *Italy,* and at *Rome,* procured the Fish itself  
just taken out of the Sea, alive, in its Shell, with this kind os  
Operculum or Cover over it. ~  
UMBILICUS VENERIS. A Name for the *Saxifraga ;*

*Sedi folio, angustiore, serrato.*

UMBILICUS VENERIS is, also, a Name for the *Cotyledon.,  
major.*

UMBILICUS, is, properly, the Navel.

UMBLA. The Name of a River Fish, somewhat like the  
Trout. It is esteemed very good Food, and to be aperient, and  
resolutive. ...

UMBRA. Offic. Salv. de Aquat. iI5. Raii Ichth. 299.  
Ejusd. Synop. Pisc. 95. Rondel, de Pisc. I. I32. Gesn. de Aquat.  
I029. *Umbra marina.* AldroV. dePisc. Si. Bellon, de Aquat.  
I24. THE GRUNTER, or SHADOW-FISH.

It is taken in the *Mediterranean* Sea. The Parts in Use are,  
She Bones found in the Head, and called in the Shops *Lapides  
Umbrarum.-* These are commended for the Colic, and, in  
*France,* are commonly set in Silver, and sold by the Goldsmiths  
under the Name os Colic-stones :. For, they say, if it be only  
carried about one, or worn about rhe Neck, it not only re-  
moves the Pain os the Colic, but prevents its Return. *Bellon.  
Dale. ...*

UMBR AGINES. Pigmies. *Rulandus.*

, . UMBRATILIS PUGNA, Griec σκιαμαχία, is a Species of  
Gymnastics, in which the Patient fights with Head and Heels,  
or boxes and wrestles with a Shadow. He is not only to use  
his Hands, says *Oribasius,* but his Legs, in this Encounter  
with a Shadow; and sometimes to put himselscin a Posture of  
Leaping, and throwing himfelf on his Adversary, and to use  
his Heels like a Wrestler; sometimes he is to press, or spring  
forward.; and sometimes to retreat, aS from a superior Force.  
The Patient, its this kind of exercise, did not always fight  
with a Shadow, but sometimes encountered a Pillar, or a Posh  
Os this *Umbratilis Pugna* we find not only Notice taken in  
*Plato,* who, in. his *Apology,* and elsewhere, says, of those who  
fought without an Adversary, that they did σκιαμαχεῖν, “ corn-  
-" bat a Shadow;" but, also,’ *by St. Paul,* who, I *Cor.* ix. al-  
ludes to it, in these Words,ουτω πυκτεήω, οῦχ ώς ἀέρα δέρων, *U so*" fight (box) I, not as one who beateth the Air." *Mercuri-  
alis de Art. Gymnast,* p. 191.

. The *Umbratilis Pugna,* or *Sciamachia,* is good to remove the  
Tense of *R* Lassitude, to strengthen the Shoulders, and sor Weak-  
ness of the Nerves, and a Tremorit, also, draws the Hu-  
urtourS downwards, especially in those who act the Wrestler in  
standing on Tiptoe; and it is of good Service to the Kidneys,  
and *Intestinum Colon,* and in Diseases of the Thorax. *Oribas.  
jMed. Col. Lib.* 6. *Cap.* 2o.

UMBU. See IvA-UMBU.

JUMBU. Pison. *Prunifera Brasiliensis Fructu magno, radi-  
eibus tuberosis.*

In Bigness, Structure, and Fruis, it appears, at a Distance,

like a small Citron or Lemon-tree; the Trunk is short, and  
not thick, but divided into a Multitude of twisted Branches, of  
a weak Contexture; the Leaves are not large, but smooth, and  
os a lively Green, het of an acid and astringent Taste ; it bears  
a whitish Flower; and the Fruit is css a yellowish White, and  
resembles a pretty large Plum, but.has a.harder Pulp, tho’ but  
littie in Quantity, because it covers a large Stone, as does the  
Fruit *Acacia* ; and when it is ripe, in the rainy Mcnths,becomcs  
of a Very grateful Taste, being os an acid mixed with a Relish  
os sweet; but is, otherwise, so harsh, as to set the Teeth on  
Edge; and is, therefore, reserved for the same Uses aS the  
Leaves, which are adapted to the Intentions os refrigerating,  
and astringing: The Root, which has something peculiar, and  
remarkable, beyond the Roots, of other Trees, spreads inl and  
wide under-ground, and swells to Various thick and ponderous  
Tubera, which, if you consider their Shape and Colour on the  
Outside, which is an Ash-colour, you would take for large Po-  
tatoes, or Roots of the *Linhyamat,* but, when their outer Pel-  
licle is taken ossa they will appear different; for, on the Inside,  
they are of a Snow-white Colour, and full *of* a soft and suc-  
culent Pulp, exactly like that of the Gourd, and disiolving, in  
the Mouth, into a cold watery Juice, Very sweet, and grateful  
to the Palate.

It is highly comfortable, and refreshing to feverish Persons,  
to such aS labour under Violent Heats, and to Travellers, aS I  
have often, experienced, says *Pise’,* and, in the Sweetness and  
Wholsomeness os its Water, is not at all inferior to the Citrul.  
*Raii Hist. Plant. ’ .*

UNCAM: Quicksilver. *Pulandus.*

UNCIA. An Ounce.

UNCINUS. A small Hook. *Castellus.*

UNCTIO. Unction. .

UNCTU APIUM. A Room, in the antient Baths, where  
People were.anointed. - 1

UNCTUOSITAS. Unctuofity, or Unctuoufness.

- UNCUS. An Hook: Os which many Sorts are used inMe-  
dicine. .

UNDATIO. A kind of preternatural Motion of the  
Heart. It should seem to be that Sort of Motion which makes  
an undulating Noise, perceiveable externally.

UNDIMIA. A kind os cedematous Tumor, the Matter  
of which is coagulated, and glutinous, like the White of an .  
Egg.

UNEDO. See **ARBUTUS. .**

UNGUEN.. An Ointment.

UNGUENTARIUS. A Vender of Ointments, and Per-  
fumes.

UNGUENTUM. Anointment.

Ointments are divided into simple and compound; though it  
so happens, that some of the former are considerably com-  
pounded : And,amongst the latter, there are some simple Oint-  
ments, and others Very little compounded

It frequentiy occurs, that Turpentine, Ceruse, Lard, and  
some other Things, are ordered to be washed in Rose-water,  
or the Juice of some Herbs; but this is a Circumstance that  
avails so littie to any Purpose of Moment, that I never knew  
it complied with.: So that a Continuation of such Directions  
seems principally to be in Compliment to the old Prescriptions,  
which abound in such minute Exactnesses. It may here, also,  
be observed in general, that where Oil is directed in an Oint-  
ment or Plaister, the wholesale Traders; who seek only Prosit,  
generally substitute Lard ; and where Ceruse, Minium, or  
Litharge are concerned, they are generally used in Over-pro-  
portions, because they make such a Weight come out much  
cheaper.

The *Unguentum album Camphoratum,* and *Rubrum desicca-  
tivum,* are much of the fame Intention, though the former is  
the more cleanly Medicine, and most in Use; and there is no  
Circumstance in their Making, of Consequence, but the mix-  
ing of the Camphire, when the other Materials are so cool,  
that their Heat will not evaporate it; but even long Keeping  
wfll, in a great measure, if not wholly, lose it: So that, the  
Goodness os these is solely known by their smelling strong of  
this Ingredient. The *Unguentum de Minto Camphoratum, e  
Plumbo,* and *Nutritum,* are within the same Intention But  
-the two former are not used ; and the latter is so inconvenient,  
upon account of its soon growing dry, and even milky, that it  
is, also, but in little Esteem: Tine common Diachylon, - also,,  
lowered into an Ointment, with a littie Oil, is the same thing,  
and os a much smoother and better Consistence. The *Unguen-  
tum Tutice* comes\*in too, as a Dryer, and a Cooler; but hath  
nothing remarkable in its Making, and is principally used against  
Inflammations in the Eyes.

' The *Unguentum AEgyptiaaem* is the only one, amongst many  
others, broucht to a Consistence with Honev., that is in Use t

and this principally in Sores of the Mouth, where those Things  
which are more properly Ointments, are nauseous. The green  
Colour os Verdegrise changes black in the Boiling.

The *Unguentum ex Apia,* amongst the lesser, and *Mundisi-  
cativum ex Apia,* amongst the greater Compounds, are exactly  
the same: But I never knew any thing made or prescribed un-  
der either of these Tities.

. The *Unguentum* e *Gummi Elemi,* most commonly called *Li-  
nimentum Arceei,* from the Name of its Inventos, and the  
*Basilicon Minus,* are the principal in Use amongst our Surgeons,  
for deterging Dressings; though there are others of like In-  
tention, and some os them newly added, from the Experience  
of Persons now living, which are not yet so much established  
in the Shops; as the *Unguentum Basilican stavum. Unguentum  
aureum, e Resina,* and *Detergens.*

There are some considerable Compositions os this Form, in  
the Intention os Emollients, at the Head of which is the *Un-  
guentum Dialthaa;* but the great Demand *for this,* as it is  
much used, hath taught the wholesale Men Very greatly to spoil  
is, in order to render it cheaper; for they accustom themselves  
to make it without the Mucilages, and counterfeit their Scent  
with a little Fenugreek Powder ; the Neats-foot Oil, also, is  
hardly to be expected from themWhen it is good, it is of a  
yellow Colour, and no ill Scent. The *Unguentum Liliorum,  
de Mucilagsoibus,* and *Emolliens,* are of the same intention,  
but not in Use.

Amongst the compound Ointments, there are some which  
take in a Number of very warm aromatic Ingredients, and  
seem designed for Paralytic Infirmities, and Cases that require  
brifk attenuating Applications : Of these are in most Esteem,  
the *Unguentum Martiatum,* and. *Ncrvinurn»,* both which are  
much the best when fresh made ; though that can be done but  
once in a Year, when the Ingredients are in their proper Sea-  
son. -

' There are Ointments, also, within the Intention of Strengths  
ners; but this at first View seems to be a Very improper Form  
for such Things 5 because an Astringent,in an unctuous Vehicle,  
is the most unsuitable manner possible for its Application; the  
Slipperiness of the one entirely frustrating the Efficacy of the  
other : For which Reason, those few, that yet keep a Place in  
the Dispensatory, are entirely neglected; neither the *Unguentum  
Mastichinum,* nor the *Astringent,* heing eVer made; altho' it  
hath so happened, that the latter is twice prescribed in the last  
Dispensatory, but the second time under the Tide of *Unguentum  
Sumach.*

The next Intention, of any Consequence, for winch we are  
provided by this Form, and which seems as suitable to it as any,  
is against cutaneous Fouineffes, as the Itch, and such-like Dis-  
tempers; and this seems to be the Reason that there is such  
Choice of them now given: But tho' most of these have the  
Reputation of great Antiquity, and hold their Places in abun-  
dance of officinal Dispensatories down to the present, especially  
the *Unguentum Enulatum Nicotianae,* and *Ex Oxylapatho* ; yet  
they are so uncleanly in Use, that they are almost altogether  
fallen to Neglect, unless in some of our Hospitals, those which  
contain Mercury heing much more neat, and efficacious,  
for the same Purposes, as the *Unguentum cceruleum*; but eVen  
this must greatly give Place to many Prescriptions, for Elegance,  
which are to be met with only in extemporaneous Practice for  
the same Intentions.

Some other Things, of this Division, are, littie less than  
Oiis brought into Ointments by the Exchange of Oil for  
Lard 5 as the *Unguentum Rosaceum,* and *Sambucinum,* with  
Tome others, newly added, not yet brought into Use; aS  
the *Unguentum Digitalis, Linaria,* and some few others ; but  
these require no particular Remark. Some others, also\* pretty  
difficult to tell what they were intended for, aS the *Valentia  
Scabiosa, Toepsi Valentia, Tapsirnel,* and *Unguentum Splanchnicum,*cannot be os any great Service to inquire into, especially as they  
are neither regarded in the fincos, or Prescription. The *Un-  
guentum Populneum,* and *Diapornpholygos,* are designed as Cool-  
ers, but now daily give Place to much neater Ointments in ex-  
temporaneous Practice. The Pomatum only remains, of this  
Division, to be taken notice os; but both the Making and Use  
of that is almost entirely got amongst the Women ; that which  
is directed in the Dispensatory heing of no manner Of Regard.  
*.dlsuincsis Preelect. Pharrn.*

**- ..UNGUENT UM7EGYPT1ACUM. See .lEGYPTIACUM UN-  
GUENTUM.**

**- UNGUENTUM rEGYPTlACUM MAGIS COMPOSITUM.**

*A more compound Egyptian Ointment.*

Take of Verdegrise, four Ounces; of the sharpest Vinegar,  
six Ounces; os Honey, one Pound: Let them all boil  
over a gentle Fire, to a dusky Colour ; adding, towards the

latter End, os Roch Alum, and Sed Ammoniac, of **pgwh**half an Ounce; and make them into an Ointment

**UNGUENTUM ALBUM. See ALBUM UNGUENTUAI**

**UNGUENTUM AMARUM.**

*The bitter Ointment.*

Take Os the Oiis of Rue, Savin, and Mint, os imch  
Ounces and an half; Juice of Wormwood, one Qtmce ;  
Powder of Rue, Gentian, the lefler Centory, and Myrrh,  
of each one Dram; of the Pulp of Colocynth, two Drams ;  
of Succotrine Aloes, three Drams ; of Lupin-flowers, half  
an Ounce;' of Ox’S Gall, and of Wax, of each one Ounce  
and an half: And hell up to an Ointment, with a suffi-  
cient Quantity of the Juice of Wormwood. . -

The *Augustan* Dispensatory hath a Composition of this In-  
tention, under the Tide of *Unguentum ad Vermes,* which agrees  
with this, in many Ingredients ; but that takes in many others,  
which *frwelser* justly finds fault with, as of no Advantage to  
the Medicine : This, therefore, seems to have had no Regard **to**that as a Pattern, but very plainly follows the Prescription taken  
into the fust Dispensatory of the College from *Foestus,* under the  
Title of *Unguentum ad Lumbricos mayus,* this differing from  
that in nothing but the Expulsion of some needless Ingredients,  
as the Juice of Peach-blossoms, *etc.* and changing Hepatic for  
Succotrine Aloes ; but this last Alteration is against the Opinion  
of those who prefer the Hepatic Sort in external Applications,  
aS this is designed principally to anoint the Bellies of Children  
troubled with Worms, heoause its more Vigorous and fetid Scent  
is most likely to pass thro' the Pores, and give the intended Dis.  
turbance to these troublesome Creatures.

**UNGUENT UM AD AMBUSTA.**

*Ointment for Burns.*

Take Os the inner Rind of fresh Elder, and of the fresh  
Leaves- of the same Tree, each two Ounces: Bruise them  
well, and boil them in two Pounds of Linseed Oil, till the  
aqueous Moisture is consumed ; then press out the Oil,  
and dissolve in it fix Ounces of white Wax ; and whilst  
they remain fluid, sprinkle the following Powders therein,  
keeping the Whole perpetually stirring ; Powder of Ce-  
ruse, three Ounces ; and of Calamine, one Ounce: Then  
taking the Mixture from the Fire, and permitting It to  
cool a little, add thereto two Drams of Camphire, reduced  
to a Powder, by being rub'd with a few Drops os Oil of  
Almonds: Lastly, mix all together, so as to make an  
Ointment.

This seems to be an excellent Ointment for the Purposes ex-  
pressed by its Tide, and deserves always to be kept in Readi-  
ness, to provide, in the best manner, against such Contingencies  
as we meet with every Day.

**UNGUENTUM ANTIPSORICUM.**

*Ointment for the Itch.*

.. Take of Elecampane-root, and the Root of sharp-pointed  
Dock, each three Ounces: Slice and bruise them ; then  
pour thereon three Pints of Spring-water, and a Pint of  
V inegar: Boil them to an half, and strongly press out the  
remaining Liquor; to which add six Ounces of the Leaves

. - of fresh Water-cresses; and two Ounces of those of Sage:  
Let the Herbs be well bruised, and mixed up with four  
Pounds of Hogs Lardy Then boil all together, till **the**aqueous Moisture is exhaled, and press out the Ointment,  
whereto put four Ounces of the Oil of Bays ; and mix **the**whole together. \*

. Sulphur may be hereto added, occasionally.

If that stubborn cutaneous Distemper, the Itch, be cnrable  
by Vegetable Preparations, this Ointment bids sair to effect it;  
but, in case of Failure, you see the Compilers order the Assist-  
ance of Sulphur, to be used at Discretion; and in the following  
Ointment, what rarely sails, the Assistance of Mercury,

**UNGUENTUM ANTIPSORICUM CUM MERCURIO.**

*Ointment for the Itch, With Mercury.*

This is made of the preceding Ointment, by adding thereto  
four Ounces of Quicksilver, killed by being ground with a  
proper Quantity of *Fenice* Turpentine ; and ruining them  
together, according to the Rules of Art, fo as t0 make an  
Ointment.

’ The three last Ointments are from the *Edinburgh* Dispen-  
satory.

UNGUENTUM ASTRINGENS SITE SUMACH. .- -

*An astringent Ointment.*

Take os Oil os Roses, often washed in Alum-water, one  
Pmt and an half; os white Wax, sour Ounces; of unripe  
Galls, Cypress-nuts, Myrtle-herries, Balaustines,' Pom-  
granate-peel. Acorn-cups, Acacia, Sumach, and Mastich,  
of each one Ounce: After all are well beat, macerate them

. for four Days rn the Juice of Medlars and Services ; then  
let them all be dried by a moderate Fine, and make them  
into an.Ointment, with the Oil of Wax.

-. UNGUENTUM AUREUM,  
*The golden Ointment.*

Take of yellow Wax, half a Pound ; of common Oil, two  
Pounds, os Turpentine, two Ounces ;. of the Pine-tree  
Resin, and Colophony, of each one Ounce and an half .  
of Frankincense, and Mastich, os each one Ounce; of  
Saffron, one shram : First os all melt the Wax in the Oil;

\_ then put in the Turpentine, and give them a Boil too-ether:  
. Aster they have stood to cool a lit le, sift in all the rest,

- finely powdered ; but add the S. ffr m last os all, and stir  
them about with a wooden Spatula, fill they become an  
Ointment. .

. This is a Composition originally of *Mesue,* and had a Name  
first given it, both on account os' its Colour, and the wonderful  
Virtues ascribed to it-; on which last Score, too, by some Au-  
thors, it is called *Unguentum Regis.* The *Augustan* Dispensatory,  
and all the Editions os the College, have received it, exactly the  
fame, down to the present; yet I Cannot learn, that it is in  
any great Esteem in the present Practice os our Surgeons: Tho’  
*Zwels.er* says, it is a wonderful goed Incarner, especially in the  
most tender Constitutions: But he says, that it is much better  
for several Purposes, especially in Wounds of the Head and  
Tendons, to use in it Oil os Turpentine, instead of the common  
Oil.. - ' ' " '

. UNGUENTUM BAS1L1C0N FLAVUM. See BASILICON.

UNGUENTUM BASILICON MINUS, sen TETRAPHARMA-  
cum. See BASILICON.

VNGUENTUMCaOERULRfrM»

*. The blue Ointment. . .*

Take of live Quicksilver, one Pound; of *Venice* Turpentine,  
fix Ounces: Nlix them together, in a Mortar, till the Glo-  
bules of Mercury disappear; and then add to it four  
Pounds of Hogs Lard made warm, so as to make them  
together into an Ointment.

**UNGUENTUM DE CALcE. See CALX.**

' UNGUENTUM C1TRINUM.

*The yellow Ointment.*

Take one Ounce of Quicksilver, and dissolve it in as much  
Spirit os Nitre aS will ferve for that Purpose: Then add,  
by Degrees, a Pound of melted Hogs Lard; and mix them  
into an Ointment.

For the Purposes os a DetergentYthis seems to be a sine Con-  
fnvanoe. *Edinburgh Dispensatory.*

UNGUENTUM DETERGENS.

i *A detergent Ointment.*

Take os yellow Resin, os Sheepsand Hogs Fat, os each one  
Pound ; Os yellow Wax, and Powder os Olibanum, os  
each one Pound and an half; Gum Enphorbium, and  
Powder os Verdegrise, of each two Ounces; of *Strascurg*Turpentine, three Ounces: Let the Fats, Refin, and  
Wax, be melted together, and strained ; then to them sift  
m'the Olibanum, Enphorbium, and Verdegrisesin Powder :  
And, lastly, put in theTurpentine; and, when the Vessel  
is taken off the Fire, keep stirring, till the Whole is cold.

UNGUENTUM DIALTH.EAE. See ALTHAEA.

UNGUENTUM Dr ALTHAEAE COMPOSITUM. . See AL-  
. THAEA.

UNGUENTUM D1APOMPH0LYGOs. See CADMIA.  
UNOUENTUMDIGITALis. See DIGITALIS.

UNGUENTUM E GUMMI ELEMI. See ELljMI GUMMI. -

**UNGUENTUM EMOLLIENS.**

*The emollient Ointment.*

Take of frosh Butter washed in Rose-water, fin Ounces; of  
Oil of sweet Almonds, four Ounces; Oils os Chamomile -  
and Violets, of each three Ounces ; of Ducks and Hens  
Fat, of each two Ounces; of Orrice-root, two Drams;  
of Saffron, half a Dram : When the Orrice and Saffron  
are powdered, and the rest melted together, make them  
into an Ointment.

UNGUENTUM ENULATUM. See HELENIUM.

UNGUENTUM 'ENULATuM CUM MERCuRio. Soo HE-

**LENIUM. .' ' '**

UNGUENTUM FUSCUM.

*- The brown Ointment.*

Take of Colcothar, and the Phlegm of Vitriol, of each one  
Ounce; of Vinegar, one Ounce and an half; *os the*Flowers of VerdegrisejfiVe Drams; of defpumated Honey,  
three Ounces : And make into an Ointment.

UNGUENTUM LILIORUM.

*Ointment of Lilier.*

Take of the Oil of white Lilies, six Ounces; of the Oils of  
Dill and Chamomile, of each two Ounces ; of the Oil of ’  
sweet Almonds, one Ounce; os Ducks and Hens Fat,  
of each two Ounces ; and of yellow Wax, three Ounces :  
And melt them all together into anOintment.

It seems calculated for the fame Intention as the *Unguentum  
de Althaea,* to soften and discuss Tumours.

UNGUENTUM L1NARIAE. See LINAR1A.

UNGUENTUM MARTIATUM. See MARTIATUM UN-  
GUENTUM.

UNGUENTUM MASTICHINUM.

*The Mastich Ointment.*

Take of the Oils of Mastich, Wormwood, and Spikenard, .  
of each two Ounces ; os the Powders of Mastich, Mins,  
red Roses, red Coral, Cloves, Cinnamon, Aloes-wood, -  
and Camels Hay, os each one Dram ; and of Wax, a suffi-.  
cient Quantity to make it into an Ointment.

UNGUENTUM MERCURIALE SEU NEAPOLITANUM. ’

*The Mercurial or Neapolitan Ointment.*

Take of Quicksilver, one Pound; os *Vincee* Turpentine,  
and liquid Storax, each two Ounces: Grind them to  
gether in a Mortar, till the Globules os Mercury are no  
longer visible; then add thereto three Pounds os melted  
Hogs Lard, and sour Ounces Of Oil of Bays: Mix all

. together into an.Ointment, according to the Rules of Art.

The liquid Storak .is here added with Judgment, both aS it  
promotes the entire Dissolution of the mercurial Globules, by  
its Viscosi ty,and gives the Whole a grateful Scent.- *Edinburgh  
Dispensatory. - ' '*

**"UNGUENTUM DE MINlo CAMPHORATUM.**

*? . Camphorated Ointment of red Lead.*

Take of Oil of Roses, one Pound and an half ; of red Lead,  
three Ounces; of Litharge, two Ounces; of Ceruss, one  
Ounce and an half; of Tutty, three Drams; of Cam-  
phire, two Drams; of Wax, one Ounce and an half:  
Make them into an Ointment with a leaden Mortar and  
Pestle, the Wax bring fust melted with a gentle Fire;  
and the rest heing added in fine Powder.

UNGUENTUM DE MUCILAGINIBUS.

*The mucilage Ointment.*

Take of theOiis of white Lilies, Orrice, Violets, and Cha-  
momile, of each six Ounces ; of the Mucilage os Linseed,  
Quince-seeds, Fenugreek-seed, and Marshmallow-roots,  
- of each four Ounces; of Ducks and Hens Fat, of each  
five Ounces ; of white Wax, one Pint: Mix, and make  
into an Ointment.

**UNGUENTUM NERVINUM.**

*Nerve Ointment.*

Take of Cowsiin-leaves, with thetr Flowers, of Sane,  
Ground Pine, Rosemary, Lavender, Bays with the Ber-  
ries, Chamomile, Rue,Small2ge,Melilot with its Flowers,

and of Wormwood, of each one Handful; of Mint, Be-  
tony, Penyroyal, Parfley, the lesser Centory, and St.  
Johnss-wort, of each half an Handful; of Sheep’s or  
Neat's-foot Oil, five Pounds; of Mutton or Beef-suet,  
or the Marrow of both, two Pounds; Oil of Spike, half  
an Ounce: Bruise them, and boil together with the Oils  
and Suets, till they become an Ointment.

This is much like the *Martiatum,* but the warmer os the  
two; and it is in Esteem enough to keep its Place in the Shops,  
and be sometimes prescribed. ..

UNGUENTUM E NIooTIANA SEU PETO.

*Ointment of Tobacco.*

Take of the depurated Juice of Tobacco, of fresh Hogs  
Lard, diligently washed, of each one Pound r And boil  
them together, to the Consumption of the Juice; then  
add, of Turpentine, four Ounces ; and of round Birth-  
wort, in Powder, two Ounces. And make them into an  
Ointment.

This is originally taken from a Dispensatory of *Laurentius  
Jobertus.* Its first Prescriber gives it an extraordinary Cha-  
racter for dissipating scrophulous Tumours, and healing green  
Wounds ; but the modern Practice directs it principally in cuta-  
neous Foulnesses; tho’ it is so uncleanly a Medicine, at best, as  
to be offensive to nice Persons.

UNGUENTUM NUTRITUM.

*An Ointment by Mixture.*- . A

Take os Litharge of Gold, in fine Powder, half a Pound ;  
of White-wine Vinegar, five Ounces; of Oil of Roses,  
one Pound \ Let the Litharge be stirred about in a Mor-  
tar, by Turns pouring in Oil and Vinegar, in little Par-  
cels, until the Vinegar ceases to be Visible, and the whole  
becomes a white Ointment.

It is very drying, and even, in keeping, will grow so brittle,  
as to want fresh Oil to make it fit for Use ; but it is not greatly  
in Use. . -

UNGUENTUM OPHTHALMICUM.

*' . - Ointment for the Eyes.*

Take of Tutty and Calamine, of each six Drams . of cal-  
. cined Lead, and Camphire, of each two Drams; of  
Myrrh, Sarcocolla, Aloes, and white Vitriol, of each one  
Dram; Make them all into a fine Powder. Then take of  
fresh Butter, twelve Ounces; of white Wax, two  
. Ounces ; and when these are melted together, by Degrees  
shake in the forementioned Powders, and stir all together,  
till the Whole is cold, and become an Ointment.

UNGUENTUM EX CXYLAPATHO.

*Ointment of Jharp-pointed Dock. '*

Take of sharp-pointed Dock-root, boiled in Water, and  
strained thro’ a Sieve, and live Sulphur, , of each one  
Ounce and an half; of Hogs Lard, boiled in the Juice  
of Scabious, to the Consumption of all the Juice, half a  
Pound ; of the *Unguentum Populneum,* boiled in the Juice  
of Elecampane, half an Ounce; some Drops of Oil of  
*Rhodium* Wood : And let them all be reduced, in a Mor-  
tar, into an Ointment.

. It is designed for the Jtch, and cutaneous Distempers, but is  
so troublesome to make, and so uncleanly, at best, that it is,  
seldom used. Or made.

UNGUENTUM PECTORALE.

*Pectoral Ointment.*

.Take of the Ointment of Marshmallows, two Ounces ; of  
*Sperma Ceti,* half an Ounce; of Oil of Mace, obtained  
by Expression, two Drams; of the distilled Oils of Ani-  
seed and Rosemary, each half a Dram ; of the Oil of  
sweet Almonds, one Ounce: Melt the Ointment of  
Marshmallows, the *Sperma Ceti,* and the Oil of Almonds,  
together ; then, having removed them from the Fire, put  
in the distilled Oils, and the Oil of Mace, so aS to make  
an Ointment.

There is nothing in the Composition of this Ointment that  
forbids its internal Use as a good balsamic or pectoral Medicine,  
provided the Oil of Mucilages be carefully made for the Oint-

ment of Marshmallows contained therein ; however, its Title  
denotes in designed for external Application . indeed, by  
being rubbed warm upon the Chest, it cannot hut’bs Of const-  
derable Efficacy, in some Diseases of that Farr. *Edinburgh  
Dispensatory. . ' -*

UNGUENTUM E PLUMBO.

*Ointment with Lend.*

Take of the Oil of RofeS, six Ounces; of calcined Lead,  
and Litharge, of each ten Drams; of Turpentine, one  
Ounce; of Ceruse, and Antimony, of each half an  
' Ounce ;. of white Wax, two Ounces : Make them into  
an Ointment, by mixing them together in a leaden  
Mortar.

UNGUENTUM POMATUM. See POMATUM UNGUEN- .  
TUM.

UNGUENTUM POPULNEUM. See POPULUs.

UNGUENTUM B RESINA.

*Ointment of Resin.*

Take of the finest Pine-tree Resin, of Turpentine, yellow  
Wax washed, and fine Oil, each equal Parts: Let the  
Wax and Resin be melted in the Oil, and then the Tur-  
pentine added to them, so that they may all have a Boil  
over the Fire together, arid be strained, S. *A.*

UNGUENTUM ROSATUM. ’  
*Ointment of Safes.*

Take of Hogs Lard, cleared from all its Membranes, and  
well washed, one Pound; and add to it ohe Pound of  
fresh red Roses ; which suffer to stand together for seven  
. Days; then boil them over a gentle Fire, and press our -  
the Lard; afterwards macerate again with stesh Roses, ..

1 for the same Space os Time, and boil and strain aS before:Lastly, put to it six Ounces of the Juice of red Rosas ; .

. of Oil os Sweet Almonds, two Ounces; and boil oyer  
a flow Fire, to a Consumption of all the Juice: Then  
strain it again, that it may become an Ointment, *S. A.*

UNGUENTUM RUBRUM DESICCATIvUM.

*Red drying Ointment.*

Take of common Oil, two Pounds ; of yellow Wax, twelve  
Ounces ; os *Armenian* Bole, and the Caput Mortuum of  
Vitriol, of. each fix.Ounces ; os Calamine levigated, sour  
Ounces ; of Litharge, and Ceruss, of each fix Ounces  
and an .half; of Camphire, half an Ounce ; and boil  
over a gentie Fire to the Consistence of an Ointment.

UNGUENTUM SAMBUCINUM. SeeSAMBUCUs.

UNGUENTUM SATURNINUM, *vulgo* BALSAMUM UNIVER-  
SALE.

*Ointment os. Lead, commonly called the* Universal Balsam.

Take of Litharge of Gold, and red Lead, os each one  
Pound ;.of Vinegar, four Pints ; and boil them together  
- till one half os the Liquor is wasted ; then strain off the  
other; to the Remainder add the same Quantity os Vine-  
gar, and proceed to boil and strain as before, till the Ope-  
ration shall have been performed six several times. Then  
mix all the Parcels of strained Liquor together, in a glazed  
Earthen Vessel, and exhale them to the Consistence os an  
Extract.. Take os this Extract, and of white Wax, each  
.. three Ounces ; of Oil-olive, a Pound; and mix them to-  
gether, according to the Rules of Art, so as to make an.

- Ointment.

As Vinegar is so good a Solvent for Lead and Litharge, it  
may be worth the Pains to prepare the Extract, for this Oint-  
ment, in the manner here described : It is, without Dispute, a  
much better way, than using calcined Lead and crude Litharge;  
and this, if it had no other Advantage, would give it the Pre-  
ference, as an Healer and a Dryer, to the UNGUENTUM E  
PLUMBO, usually ascribed to *Foesius,*. and above described.  
*Edinburgh Difpenfatory.*

UNGUENTUM SPLANCHNICUM.

*An Ointment for the Bbwels.*

Take of the Bark of Caper-root, six Drams; of Bryony-  
root, *Florentine* Office, Powder of sweet Fennel-seed,  
and

and Atnmoniacum dissolved in Vinegar, of each half an  
Ounce; of the Tops of Wormwood, and Chamomile-  
flowers, of each one Dram 5 of the Ointment of Bays,  
one Ounce and an helf; Les those things he powdered  
which require it, and sifted, and the rest mixed therewith  
in a warm Mortar, fo as to make an Ointment, *S. Ac*

**UNGUENTUM TUTIJE. See CADMIA.**

**UNGUENTUM VERMIFUGUM.**

*Ointment against the Worms.*

Take of the Leaves of Female ‘Southernwood, common  
Wormwood, Rue, Savine, andTanfey, each two Ounces:  
Bruise and boil them with a Pound and an helf of Oil-  
Olive, and a Pound of Hogs Lard, till the aqueous Moi-  
sture is consumed , then strain and prefs out all that will  
run ; to which add of the Gall of an Ox, and of Succo-  
trine Aloes, each one Ounce and an bass; of Colocynth,  
' and Wormseed, of each one Ounce: Boil them all tcge-  
ther, keeping them continually stirring, so as to make an  
Ointment. But observe, that the Aloes, the Colocynth,  
and the Wormfeed, are reduced to very sine Powder.

Here we have an Instance of a Composition, where the In-  
gredients, though numerous, conspire to the fame Intention,  
and feem to uphold each others Virtues ., there is nothing im-  
proper, or indiscreetly admitted in the Whole ; so that it cannot  
- well fail of aofwering its End, as an external Appllcation in the  
Case ofWorms. *Edinburgh Dispensatory. ' .*

UNGUES. The Nails.

The Nails are looked. upon by some as Productions of the  
cutaneous Papillae; and by others, as a Continuation of the  
Epidermis. This last Opinion agrees with Experiments made  
by Maceration, by means of which the Epidermis may he sepa-  
rated entire from the Handsand Feet, like a Glove or Sock.

In this Experiment we fee the Naris part from the Papilla.,  
and go along with the Epidermis, to which they remain united  
like a kind of Appendix; and yet their Substance and Struolure  
appears to be very different from that of the Epidermis.

Their Substance is like that of Horn, and they are composed  
. of several Planes of longitudinal Fibres soldered together.

These Strata end at the Extremity Of each Finger, and are all  
nearly of an equal Thickness, but of different Lengths.

The external Plane or Stratum is the longest, and the rest  
decrease gradually, the innermost being the shortest . fo that  
the Nail increases in Thickness from its Union with the Epi-  
dermis where it is thinnest, to the End of rhe Finger where it is  
thickest.

The graduated Extremities orRootsofall theFrbres of which  
these Planes consist, are hollowed for the Reception of the  
same Number of very final! oblique Papllhe, which are Con-  
tinuations of the true Skin, which, heving reached to the Root  
of the Nall, forms a semilunar Fold, in which that Root is  
lodged.

After this semilunar Fold, the Skin is continued on the whole  
inner Surface of the Nail. TbeFold ofthe Skin is accompanied  
by the Epidermis, to the Root of the Nall exteriorly, to  
which it adheres very closely.

Three Parts are generally distinguished in the Nail, the Root,  
Body, and Extremity. The Root is white, and in Form of a  
Crefcent; and the greatest Part of it is hid under the semilunar  
Fold.

The Crescent and the Fold lie in contrary Directions to each  
other. The Body of the Nail is naturally arched,, transparent,  
and appears of the Colour of the cutaneous Papllhe which lie  
tinder it. The Extremity of the Nail does not adhere to any  
thing, and still continues to grow as often as it is cut.

The principal Ufe of the Nails is to strengthen the Ends of  
the Fingers and Toes, and to hinder them from being inverted  
towards the convex Side of the Hand or Foot, when we handle  
or press upon any thing hard. For in the Hand, the strongest  
and most frequent Impressions are made on the Side of the  
Palm, and in the Foot, on the Sole; and therefore the Nalls  
serve rather for Buttresses than sor Shields. *VViasttrufs Anatomy.*See PoLLKX-

**UNGUIS,** is, alfo, the Name of a Disorder of the Eye,  
called *Pterygion.* See **OcULUs.**

UNGUrs odoratos Cic. *Onyx.* Diofcorid. THE  
SWEET HOOF.

. It is unknown in our Shops, which substitute in its stead, the  
*Blatta Byzantina* ; as we have demonstrated from the Obser-  
vations of the learned *Marein Lister,* under that Article. *Dale.*See BLATTA ΒΥΖΑΝΤΪΝΑ.

It is, also, a Name for the **BLATTA BYZANTINA.**

**UNGUIS, in Botany, is the white and infetiorPart of the  
Leaves of Roses, and some other Flowers.**

UNGUICULI. Tbe fame aj AnABAsTRA.

UNGULA CABALLINA, is the TUssiLAoo. Colts-  
soot.

UNGULA OCULI is a Pterygion, a Disorder of the  
Eye. See OcULUs.

UNICORNU, MONOCEROS. Offic. Park. Theat.  
I6ri. *Monccerus.* RaiiTchmi 42. Ejusd. Synop. Pisc. II.  
*Mono cores, Unicornu marinum.* Charlo Pisc. 47. *Cetus mari-  
nus Narvjal dictus.* Mont. Exot. 6. *Balaena decimum sextum  
genus dicitur Nahwal.* Schones Icht. 28. THE UNI-  
CORN.

It is taken in the *Davis’s* Straits; and the Part in Use is ‘  
the very large, white, round, striated, turned Tooth, grow-  
ing out on the Left Side of the upper Jaw, almost in rhe fame  
manner as that of an Elephant; but that on the Right Side  
soon falis off. It is distinguished from Ivory by the Fineness  
of its Fibres : It is, also, generally more solid and ponderous ;  
in other refpects it resembles Ivory.

As to the Virtues, it is fudorific, alexipharmic, and cordial,  
whence it is commended againft Poisons, contagious Diseases,  
and the like; it is, also, thought effeolual in the Epilepsy of  
Infants. *Schroder. Andreas Baccius* has written a whole  
Book of the Unicorn, in which he directs Fragments of it to  
be set in Rings, and worn upon the Fingers, or hung about the  
Neck instead of an Amulet, fo aS to touch the Skin. It has  
the same Virtues as Hartshorn, Ivory, and the like Sustances. ’  
The Fragments of Horns, which are sold under the Name  
*of Unicorn’s Harn,* are no other, as we are assured by *Paulus  
Ammannus,* then Bones cf the Whale, Sea-horse, or Teeth of  
the Elephant, which, as *Cardan* says, may be made, by arti-  
ficial Means, to resemble this Horn. *Dale.*

UNIcoRNU FossILE. Offic. Geoff, Pradecti 73. Schrod.  
359. *Cornu fostile.* Worm. 54. Charlt. 23. *Cornu fossile,  
vulgs Monocerotis Cornu.* Boet. 425. *Ceratitis.* Aldrov. Must  
Metall. 63o. Gesn. Lap. Fig. I54. *Ebur fofscle.* Cius. Exot.  
68. *Lapis Arabicus.* Caesalp. 6II. *Turquesia.* Ind. Med.  
47. *Dens Elephanti petrefactus, aliis, Litkcraearga, alba.*THE UNICORN-STONE.

The fossile Unicorn, or *Lapis Ceratites* of *Gefoer,* is a stony.  
Substance, Yefembling in Colour, Smoothness, and Shape, the  
Homs, Teeth, and Bones of Animals. It is made up of an  
outer, hard Part, of an yellowish, blackish, or Ash-colour, and  
a soft, friable, compact medullary Part, without Pores, of an-  
astringent and drying Quality, sticking very close to the Tongue,;  
and sometimes of an agreeable Smell.

It is often dug up in the Form of Bones turned to Stone,  
among which we often find the *Dentes Malares,* and *Inciserii; ‘*and we can perfectly distinguish between the Root of these  
Teeth, and that Part which appears without the Gums. Some-  
times we meet with Fragments of the Radius and Tibia, re-  
prefenting the natural Conformation of these Bones in a very  
perfect manner. There are, likewise, dug up large Branches,  
and Trunks of Trees, , in which the Species of Wood is still  
distinguishable. There is, therefore, no room lest to doubt,  
but that these stony Substances are really Petrifications of the  
Horns, Teeth, and Bones of Animals, or of Wood; which  
being putrefied, by remaining long under Ground, and, in a .  
manner, calcined, their Substance becomes more rare and porous, /  
as we fee daily in rotten and worm-eaten Wood. By the Afflux  
of a sine Marl dissolved in Water, these porous Substances are  
filled, and the Water iofeosibly evaporating, the Remainder  
’ incorporates with the Bones, or Pieces of Wool, into a stony  
Substance, of the fame Form and Figure with what they were  
before. Butifthefe earthy Parts, which concrete with them, he  
of the crystalline or flinty Kinds, then they turn to a Substance  
like Crystal or Flint, as we fee in several Sorts of fossil Shells.

The fossileUnicom is found in many Pisces of *Germany; and*atdfaet *Martyr,* near Penis, there were lately found many Bones  
hid in a stony Substance. The *Germans* esteem it for its astrin-  
gent, alexipharmic Qualities, and as a Provoker of Sweat, and ,  
accordingly, often ufe it in Diarrhoeas, Dysenteries, Haemor-  
rhages, the *Fluor Alius,* malignant and pestilential Fevers, and  
in the Epilepsy. The Dose is from ten Grains to a Dram.  
But they do not use all Kinds of it indifferently, but choose that  
which has a pleaiantSmelljand which has heen previousiy tried  
upon Dogs, or other Animals, because it sometimes contains a  
poisonous Quality, especially when dug out of the Earth,  
mixed with Arsenic ; and therefore great Care is required about  
it. *Geoffrey.*

Itagrees inVirtues with the *TerraLemnia,* and is recommended  
againft malignant Distempers; it resembles, also. Unicornis  
Horn, particularly in resisting Poison, and curing the con-  
vulsive Motions of Infants; and is often ofed in the Small Pox  
and Meafles. Of this Substance calcined, is prepared the  
factitious Turquoife. *Dale.*

UNLFOLIUM. A Name sor the *Smilax; senifolia. hu-  
millima.*

UNIO. A Pearl. See MARGARITA.

UNNI CHILENSIUMdeDaet.. *Hispanis MurtiUa.* The  
Name of an *Indian* Tree, which bears a Fruit in Clusters,  
about the Size of Peas, os a sweetish, and at the same time,  
somewhat acrid Taste. The Natives express a clear Liquor  
from it, which resembles Wine; and of this Juice they make  
. \* a sort of Vinegar.

UNQUASL Quicksilver. *Rulandus. ss*

VOARCHADUMIA- A kind os *Cabbala,* orAsnigmatic

Art, relative to Metals, which proposes the Exaltation of Gold  
by Cementations, and other Methods, in which the *Hebrew*Letters, of some Occult and mysterious Virtues, are employ'd.  
The Curious may see an Account of this in the *Theatrum Chy-  
micum, Fol.* 2. *p. 500. ' '*

*VOCIFERATIO.* Vociferation. See ANAPHONESIs.  
τ VOLA. The Hollow of the Hand, or Palm. -

VOLANS. Mercury. *Dorrueus.*

VOLATICA. The same as *Lichen..* See LEPRA. A sort  
of wandering Pain, attended with a Tumor, and affecting some-  
- times one Part, sometimes another, is called ’*of.Hannernannus in*the *Act. Haffiniens. Vilatica Scorbutica.*

VOLATILIS. Volatile. In Chymistry, those Substances  
are called *Volatile,* which rise, and fly off, upon the Applica-

\*. iron of Heat, or Fire; as those which endure the Fire without  
Dissipation, are called *fixed. ' ... . ? -*- VOLEMA. The Name of a certain Species of very large  
Pear. *Virg. Georg. -. . ,*

VOLSELLA,' λαβάστ, is the same as FORCEPS, [see the  
Articles FORCEPS and ACANTHASOLUSJ is a chirurgical  
.. Instrument,' contrived for taking hold of any thing, according  
.’ to the Etymology os the *Greek λαβίί [Labts], used* by *Hippo-  
\* crates. Lib. de Sterilih.* and *Galen, de C. M. S. L. Lib.* 3.

*Cap.* 3. and derived from λαμβάνω *[lamband]* to apprehend,  
or lay hold oft Its principal Uses are in removing Plaisters and  
Lint from Wounds and Ulcers, and in extracting Splinters, and  
r other things of that Kind; as, also, in taking hold of Various  
things, in *which* respect it is very useful in Anatomical Dis-  
sections: It is commonly made of Steel, but sometimes, for  
Brightness and .Curiosity, of Silver. *Tab.* XXII. *Fig.* E, re-  
. presents the. *Folse Ila, os Forceps,* which is denticulated; or fur-  
.- nished with Teeth, by which means it is enabled to hold a thing

.. the faster. ' ’ ' I ..

VOLVA, in *Scribonius Largus,* No. 104. is the middle  
\* Part, or Core of the Apple containing the Kerneis, prescribed  
hy him, among other things, for a Weakness of the Stomach  
rendering it incapable of retaining the Food.

VOLUBILIS, *a vobvendo,* from twisting, or twining, ae-  
cording to *Blancard,* is a Name fer the SMILAx.

VOLUNTARIUS, κατὰ πρααίρεσιν, ἐκήσιος. Voluntary, spon-  
taneous, is appled to any thing which is in our Own Power to  
have it done or not done. In this Sense *Motion, Tears,* and  
r ether Actions, are said to be Voluntary. *Castellus.*

VOLUNTAS, θἐλημα, according to Dr. *bVillis, de Anima  
Brutorum,* is an Attendant of the rational Soul, proceeding from  
the Understanding, and a kind of rational Appetite, in the same  
manner as the sensitive Appetite is connected with the Imagina-  
tion, and. is the procuring Hand of the corporeal Soul.  
*Castellus. ' . ’ s . ' ' . .*

VOLUPTAS, ήδονῆ. Pleasure, is the ultimate Perception  
of the sensitive Soul, in which all other Affections acquiesce ;  
and, consists, according to Dri *Willis,* who has attempted to  
describe it, in the Treatise just before quoted, in a grateful and  
elegant Alteration, Expansion, Agitation, and Motion of the  
Spirits, occasioned by sensible Objects. *Castellus.*

VOLVULUS, in *Pathology,* is the same withTLEOS, which  
see. In *Botany* it is a Name for the *Convolvulus , Linaria Fo-  
lios, afsurgens. mi.*

‘ VOMER, ῦἐνος,ῦννος, in Anatomy, according to the De-,  
scription given it by *Cheselden,* is seated hetween the Bones of  
the Palate, and the sphenoidal Bone, being, also, joined to the  
Process of the Ethmoides, and Part of the lower Jaw, and  
having its sore Part, which is spongy, continued to the middle  
-Cartilage of the Nose, and making in Conjunction with it, the  
*. Septum Nasi.* See a fuller Description ol this Bone under the

. Article CAPUT. . ' ‘ ‘ .

VOMICA is commonly taken for a suppurated Impostnme,  
or an Abscess with a Suppuration. *Castellus.*

*Vomica Pulmonumscs* a latent Disease of the Lungs,which often  
deceives under *a* Shew of Health. What goes by this Name is  
a small.Abscess seated in some Part of the Lungs, and. straitiy  
Inclosed within a Bag, or Membrane. This Disorder is most  
incident to those who are affected with a Tabes, or labour under  
an Anastomosis, or Rupture of a Vein in the Lungs. In this  
Disease, the Breath smells ill long before the *Fornica* breaks,  
sometimes Blood comes up with Coughing, the Body is perpe-  
tually dull and heavy, and the Cough Very long and troublesome,  
and sometimes followed with an Expectoration of the *Fornica ,*

in which Case the Patientis seized with no small Fever, sue\*\*  
ceeded by bloody Spit, and vast Perturbation os Body; the  
Consequence of which Circumstance may *polEbly* he a Reco-  
Very to a good State of Health. It has often happened, that  
the *Fornica,* thy a sudden Rupture, has discharged itself into  
the Heart, and occasioned sudden and unexpected Death.  
*Column Obs. Mei.*

*\_ Vortici,* in some Authors, are such as are affected with a To-  
*mica Pulmonum ,* and *Johnson Lexic. Chym.* calis Quicksilver  
*Fornica Liquoris aterni,*" the *Vitnica* ofthe eternal Liquor.”

VOMILIUM, supposed to the from *Fomo,* to Vomit, is a  
Name bestowed by *Lihavius, S. A. Chym. fab.* 6. *Cap.* 19,-  
2o. on *Mcrcurius Vita,* and *Aurum Vita,* on account os their  
Effects. It is extended, also, to other Emetics; so that *Vi milia, -*in the *Jargon os the Cbymifts, may he supposed to be the* same  
with *Pomitoria.* . I . 1’

VOMITIO, Vomition, or the Act of Vomiting.

VOMITORIA, V0MITI.VA, ἐμετικἀ. Vomitories, Eme-

tics. ' ‘

Vomitory Medicines, or Emetics, are indicated,  
. I. From the Foulness of the Mouth in the Morning, from.

its Bitterness, from Eructations, Nausea, a gnawing Pain of  
the Stomach, with a gradual Decay os the Appetite, neither  
excited nor attended by a Fever. ... .

2. From spontaneous *Parti ting,* together with great Facility

in the Action. - ;

3. From the Nature of the Matter, as it is known tope ‘  
moveable or immoveable, ς ‘

4. From the Situation of the Place affected with a Repletion  
or Obstruction helow ..the Diaphragm, and especially if. that  
Affection be primary, and nothing contraindicateSi . .

5. From the general or epidemic Nature of the Disease.

6. From the Constitution of the Year. .. . ἐνψ

Emetics are forbidden by the Contraries to the sore-mention-

ed Indications, δ᾽’ . ’.

The Body is prepared for taking a *Vim it* with the more Ease

and Safety,- S *x - ’*

I . By rendering the Matter moveable by Dilution, Attenua-:tion, and Dissolution.

2. By relaxing and lubricating the Passages with mollifying,  
Oleous, and gentle Medicines. . .

g. By premifing Phlebotomy, if the Body be plethoric, or - .  
excessively robust, and, at the same time. Very strongly agi-;  
rated. . -

*Virniiing* is excited,

I. By irritating the Spirits by presenting some very nauseous  
Idea, dr by some unaccustomed Agitation, as on the Sea, or  
otherwise. . , ’ .

2. By irritating the Fibres of the Fauces and Pharynx with  
a Feather dipt in Oil, or.something like it. ; - .’ .

3. By swallowing laigeDraughts os fresh warm Water, with  
Oil, Honey, Sugar, and the like.

4. By every thing highly acrimonious, and at the same time  
viscid ; by the Flower and Seed os Dill; by the’Leaves ofAsa-  
rabacca; and by the Root and Seed of *Atriplex;* or by  
more Violent Simples, as the Cataputia, Esula, the Root of \_  
Cyclamen, the Flower, Juice and Bark of the Ebulus, or  
Dwarf-elder; the Flowers, Seeds, and Root of Broom ; both  
the Hellebores, the Seeds of Nasturtium, Ricinus, Thymelaea,  
and Cnicus ; the Roots of Bryony, Iris, and Tithymaltts 7 the  
Herbs Gratiola, and Tobacco. -

5. By AntsmonialS, as the Crocus, Glass, Flowers, or Regu- -  
lus of Antimony, in Substance, Infusion, Rob; Syrup, emetic  
Wine, the Mercurius Vine, Emetic Tartar, and the like,  
which produce Various Effecti according to the different De-  
grees of Violence.-

6. By Mercury rendered acrimonious by Acids, in which,  
also, great Variety may be observed, in proportion as the Acid  
more copioufly and openly, ot.more sparingly and covertly, ad-  
heres to the Mercury.

The Choice, Dose, Form, with the proper Time for ad-  
ministering Emetics, are indicated by the Age, Sex, Tempera-  
ment. Season of the Year, the Nature of the Disease, and of  
the Matter to he evacuated. *~ c .*

*Vomiting* is promoted by copious Draughts of mild, aqueous,  
honeyed, and warm Liquor, taken aster every Paroxysm os  
Vomiting, and the same, aster being discharged, again re...  
peated.

*Fondling \s* repressed by swallowing some smooth Oil, by Opi-  
ates. Aromatics, grateful Acids, and Corroboratives, either taken sinwardly, or outwardsy apply’d. *Bocrhaav. Institut. Medic.*

VOMITUS. A Vomiting. See PvRETQs.

*Vomiting* and a *Nausea,* seem to be retrograde spasmodic. Mo.  
tions os rhe muscular Fibres os the Oesophagus, Stomach, and  
Intestines, attended with strong Convulsions of the Muscles os.  
the Abdomen and Diaphragm, which, when gentie, create a

nausea ; when violent,a *Vimiting,* These Convulsive Disorders  
-proceed from the immoderate Quantity, or Acrimony of the  
Toed; from Poisons; from some Injury of the Brain, as a  
Wound, Contusion, Compression’, or Inflammation of that  
Part; from an Inflammation of the Diaphragm, Stomach, In-  
testines, Spleen, Liver, Kidneys, Pancreas, or Mesentery; from  
.an Irritation of the Gula ; from a disorderly Motion of **the**Spirits by unaccustomed Agitations in a Coach, Ship, or other-  
wise; or from the Idea of something nauseous. *Boerhaav.  
institui. Medic.*

. There is scarce any Accident, in human Life, which occurs  
inore frequentiy than *Fondling*; for there is no Person but Vo-  
Tints at one time or other; and there are very few Diseases  
winch are not attended with this troublesome Symptom. Now  
*Vomiting* is no other than a preternatural Inversion of the peri-  
staltic Motion of the *Oesophagus,* Stomach, and especially the  
*Duodenum,* to the Degree of a convulsive Contraction, by  
which the Contents os the Stomach, accompanied sometimes  
with those of .the *Duodenum,* are discharged by the Mouth. ' \_

The Affection itself is too manifest, to require a Description  
h'y diagnostic Signs 5 but the Symptoms which attend it are to  
he regarded with Care and Attention, and the rather, as the  
Causes Of *Vuniting* are Various, to a great Degree. In general,  
we may observe, that some Persons are Very easy to Vomit, and  
disposed to that Action on the least Occasion; others, on the con-,  
trary, are with great Difficulty provoked to it, and find it no less  
troublesome, with much Striving, and after many Vain Efforts,  
**to** discharge their .Stomachs this way. ‘ The first os these Per-  
sons are called, by a technical Tenn, *Euemoci* [ἐυέμετοι, from  
eV, importing Facility, and.gnitio, to vomit]; and such are  
Children, in -comparison of Adults; Women, if compared with  
Men; and, among Men, they who are of a lax Habit of Body:  
They, on the contrary, who are of a close, well-set Habit of  
Body, short-necked, and of a robust System Of Nerves, are  
termed *Dys.emeti* .[δυσέμετοι, from δδο, importing Difficulty,  
and ἐμέωό to Vomit]. - . -

The antecedent and concomitant Symptoms of *Vomiting* are  
Usually a Very troublesome Nausea, with a Tension and Weight  
in the epigastric Region, a Bitterness in the Mouth, Heat, a  
gnawing Pain, and Loss of Appetite, with a great Anxiety of  
the *Praecordia,* and Restlessness. - Much Spittie distiis into the  
Mouth, and is evacuated by Spiting, and the Patient is, besides,  
affected, with a. Vertigo, Dimness of Sight, Heaviness of Head,  
Redness of Face, Trembling of the under Lip, and most of all  
with a Cardialgin, till, at length,. after much laborious and  
fruitless Eructation, he discharges the Contents of his. Sto-  
Inach. All these Symptoms plainly enough indicate a spastic  
and ConVulfiVe Subversion of the Stomach and adjacent nervous  
Parts.

. The Matter discharged by *Vomiting* is what gives the several  
Denominations to that Affection: A mucous, chylouS Dis-  
‘ charge of Reliques of Foods not perfectly dissolved, is called  
a *pituitous Vomiting* ; a Congestion of bilious Matters evacuated  
this Way constitutes whet we. call a *bilious Vomiting*; other  
.Denominations, as those of *blackish, corrupt, green, eeruginous,*and *porraceous,* are taken from Accidents owing to a Mixture  
of other Humours, and particularly such as are acid, or corro-  
ding. Sometimes Worms and Insects are thrown up by *Vomit-  
ing* ; and sometimes a stercoraceous Matter from the Very Bot-  
tom of the .intestines, is, by an Inversion of the peristaltic  
Motion, discharged the same Way. At other Times Pus and  
a saniouS Matter are evacuated ; and I myself once observed a  
fleshy find membranous Mass, like a Polypus, which was gene-  
rated in the Stomach, expelled by *Vomiting.* Frequentiy there  
. is a Discharge of pure Blood, and in such a Cafe the *Vomiting*

is denominated *sanguineous*; sometimes the Blood is black and  
corrupted, which constitutes what we call the *Morbus nigcr,* or

*1 Flach Disease* of *Hippocrates.*

' The proximate. Seat of the Matter discharged by *Vomiting*is the Stomach, by whose preternatural Motion with that Of the  
adjacent Parts the same is expelled; but the more remote Parts,  
as the Liver, Pancreas, by means of their Ducts, the Spleen,  
the Mass of Blood and Humours, and the Habit of the Body,  
as it happens in Tumours, by means of the Vessels and Glands,  
have their Contents attracted the same Way. The Causes  
which irritate the sensible and nervous Substance of the Stomach  
to a systaltic and compreffory Motion are to he sought not only  
in itself, but in the adjacent and remote nervous Parts, fince  
we may, on some Occasions, observe, that *Vomiting* is excited  
by Consent of Parts in a Multitude of spasmodic Affections :  
And this Observation is os s0 great Moment, that for its better  
Illustration, we cannot hut think it very proper to premise an  
exact Description of tho Fabric of the Stomach and *Duodenum,*according to the Discoveries of the newest and most approved  
Anatomists.

The first Parts, then, which here offer themselves to our  
Sight, are, the *Coats* of the Stomach, which hay four ascribed

to it. The outermost is *membranaceous,* and takes its Rife from  
the *Peritonaeum,* and is continued to the Coat winch surrounds  
the Concavity of the Diaphragm ; the second Coat is *muscular,*and consists of a double Series of Fibres, of which the external \*  
is constituted of longitudinal Fibres, which serve in contracting  
the Length of the Stomach ; the internal Series os Fibres con-  
fist partly of sirch as extend themselves from the *Cardia,* or **the**Mouth of the Stomach, to the *Pylorus,* and cause an Approach  
of both Orifices to one another ; and partly os circular ones,  
which are disposed over the Breadth of the Stomach, and are  
instrumental in its Contraction: The third Coat, which is sob-  
jacent to the former/ has the Denomination of *nervous,* and is  
furnished with tendinous Fibres, which are extended obliquely  
over the Stomach; this Coat is larger than the former, on  
which Account it is rugous, and provided with a Multitude of  
Glands: The fourth is called the *villous Coat,* and is composed .  
of nervous *Papilla,* and Ends of Vessels erected like *Villi,* or.  
coarse Hairs,and lined with a MucuS,derived from the foremen-  
tioned Glands; but between the outer Coat, and the muscular  
as well, as between, this and the nervous Coat, and be-  
tween this last and the Villous Coat, there is a triple cellulous  
Substance, containing very numerous Blood-vessels.

The next Parts which deserve our Consideration, are the  
*Vessels* of the Stomach: These are two *gastric Art cries,* the  
*right,* and the *loft,* and'*coronary Artery:* For the *Aorta Inferiors*after entering the Abdomen thro' a Perforation near the Spine, "  
immediately sends forth the *Arteria Coeliaca,* which is divided ,  
into three Branches, the first os which is the *hepatic,* whence '  
arise the *Artcria Pylorica, Gastrica dextra,* and *Duodena, s .*Another Branch is, the *Coronary,* whose RanaisactionS extended .  
over the Stomach are innumerable ; and the third Branch is the  
*splenic,* which taking its Course to the Spleen, sends forth fust  
the *pancreatic Artery* ; secondly, the *loft Gastric,* thirdly, the  
*epiploic Artcry*; and, fourthly, the *Fa]a Brevia,* one of which is  
*venous: By* this Connection Of Arteries it appears, that the  
Consent of the Humours, in their Circulation .thro' the Parts  
hefore-mentioned is Very considerable. The *Feins* are, the *coro..-  
nary,tiae right* and *left Gastric*,and one of the *suasu Brevia*; these  
all arise from the *Veda Porta,* whose Trunk, taking its Course .  
under the *Duodenum* to the *Pancreas,* sends forth, in the first  
Place, the *Pena Cysticas Pylorica,* and *Duodenales,* aster this,  
fends off three, and sometimes but two Branches t One of them,♦  
which is the *splenic,* is subdivided into the *coronary, left Gastric,  
pancreatic, epiploic,* and the Venous Portion os the *suasu Brevia ;.*another Branch, the *greaicr Meseraic,* supplies the *intestinal* and  
*gastro-epiploic* Veins; and the third Branch, *thtintcrnalhcemor-  
rhoidalsprcducxs* the *right gastric* and the *duodenal* Veins. Hence  
it appears, that an Interruption of the Circulation of the Blood  
in one Of the *Viscera* is succeeded by a Regurgitation to some  
other; the Veins are accompanied by lymphatic Vessels, as the  
Arteries are by Nerves; these Nerves proceed partly from **the***Par Fagum,* and partly from the intercostal Branch; the *Par  
Vagum,* descending in two Branches on both Sides of the *Oesm  
phagus,* distributes innumerable Ramifications over the whole  
Stomach, and afterwards concurs in forming the Plexuses of the  
intercostal Nerve: This latter, aster perforating the Diaphragm,  
forms,nearthe Coeliac Artery,semilunar *GangUa*; whence arise,  
on the right, the *Plexus Hepaticus,* and *Renalis mayor*; and, on  
the left, the *Plexus Lienaris, Stomachicus,* and *Renalis Sinister.*From the *Plexus Hepaticus and Renalis dexter,* with the semi-  
lunar Ganglion, arises the *Plexus Mesentericus Superior, by*whose intervention the five Plexuses, before-mentioned, on both  
Sides are fo united, that the Parts which are supplied from them  
with Nerves, are mutually related to one another by the strictest  
Consent.

In the next Pisce, the Structure of the *Duodenum* highly de-  
serves our Contemplation: This Part, with respect Io its Coats,  
Nerves, andVestels, agrees with the Stomach, and, beginning  
at the *Pylorus,* forms three Flexures ; the first Flexure, tending  
from the Stomach obliquely downwards is at the same time refle-  
cted backwards,and has inserted into it,nearits End,the common  
biliary Duct,which conveys’ the Bile and pancreatic Juice; aster  
this, when it approaches the right Kidney, it forms another Flex-  
ure, where it resta upon the Pancreas; and,lastly, near the Spine, -  
in its Approach to the left Kidney, it makes a third Flexure,  
over which the Artery and the *Plexus Mesentericus Superior* have  
both their Course; the Constriction os which immediately  
affects the *Duodenum* ; the Capacity os this Intestine far exceeds  
that of the others, contrary to the common Opinion, which  
makes it less.

These two Parts, the *Stomach,* and the *Duodenum,* which  
may justly be called a *lesser Stomach,* are not only connected  
with one another in a very remarkable manner, but with other  
nerveo-membranous Parts; as, first, with the *Oesophagus,* by  
a Communion os the same common Coats; and hence they com.  
munieate, also, with the Coat which surrounds the Fauces and  
the Mouth. Secondly, they have a Connection with the whrle

intestinal Duct, or Tube, not only by the Communication Of the  
same Coats, but, more especially, by means os the *Plexus Me-  
sentericus Mayor,* from which all the intestines are supplied with  
Nerves. And, thirdly, they have a strict Relation to the *Omen-  
tum,* which is Very firmly connected to the anterior Part of the  
Stomach. Fourthly, they have a Connection with the Dia-  
phragm by Branches from the *Par Fagumsesnd* intercostal Nerve;  
and, also, by a Coat which is common to the exterior Super-  
ficies of both the Stomach and the Diaphragm; and, by means  
hereof, fifthly, with the nervous and membranous Parts of the  
Breast, and with the Muscles of the Abdomen. Sixthly, they  
have a Correspondence with the biliferous Ducts, not only by  
**the** *Ductus Cholidechus,* which is inserted into the *Duodenum,*but principally by the *Plexus Hepaticus,* which supplies the *Duo-  
denum* and Stomach with Nerves, and communicates with the  
*Plexus Stomachicus,* by the Intervention of the *Mesentericus Su-  
perior.* Seventhly, they communicate with the Pancreas,  
which firmly adheres to the *Duodenum.* Eighthly, with **the**Kidneys, by the right and left *Plexus Renalis,* which is con-  
nected with the *Plexus Stomachicus.* And, lastly, with the Head  
and Brain ; as, also, with the Heart, by the Branch of theΡατ  
*Vagum,* which is common to them both.

\* By Virtue of the muscular Coat, and its Fibres above-men-  
tioned, which are common to the *Oesophagus,* Stomach, and all  
the Intestines, there is excited a Vermicular kind of Motion,  
which is peculiar to those Parts, and has the Name of peristal-  
tic : This Motion consists in an alternate Constriction and Re-  
laxation of the said Parts, and tends from the upper Parts down-  
wards. In the Stomach, by contracting and straitening at, after  
different manners, and dilating it again, with the constant As-  
sistance of the Motion of the Diaphragm and Muscles in Respi-  
ration, it promotes the Digestion of the Aliments, and their  
Expulsion thro' the *Pylorus.* In the Intestines it is the means  
of an Absorption of the laudable Humours by the lacteal or chy-  
liferous Vessels, and of the Protrusion of the excrementitious  
Parts to the lower Region, and their Elimination by the *Anus.*

Whenever this peristaltic Motion, which directs its Force  
downwards, is perverted into a Motion of the preternatural,  
spasmodic, and conVulsiVe Kind, there arise Gripes of the in-  
testines, cardialgin Pains about the *Pylorus,* Spasms, as they are  
dalledSos the Stomach, Colics, and Fluxes of the Belly.r But if  
this same Motion, hesides its spasmodic Contraction, be, also,  
inverted, and tends upwards, it first of all forces up the Con-  
tents of the Intestines into the Stomach, or if they are there  
already, impels and protrudes them upwards, whence *Vomiting*is excited, in which Action the *Pylorus,* together with the  
*Duodenum,* connected to it, and the lower and anterior Part of  
. the Stomach, thro’ a Violent Contraction of the longitudinal and  
circular Fibres, -are contracted to the upper Orifice, to which '  
the Contents are by this means applied, and the continued Force  
of the Spasm still pressing behind, are from thence forced into  
the *Oesophagus,* and, the same inverted Motion being propa-  
gated thro’ the whole *Oesophagus,* conveyed to the Mouth, and  
fo discharged. This Motion is assisted by a Violent Constriction  
of the Diaphragm and abdominal Muscles, caused by Consent,  
and by a Compression of the Sides of the Stomach, thence oc-  
casioned. Hence it is observed, that, after each Act of *Virnit-  
ing,* the Difficulty of Respiration still continues, and the Region  
os the Abdomen is more or less affected with Pain .; and, that in  
Animals dissected immediately after the Exhibition of an Eme-  
tic, a Compression of the Stomach by the Diaphragm and *Muse  
culi Recti* of the Abdomen, is evidently Visible; whence some  
*Englijh* Physicians are of Opinion, that the Fibres of the Sto-  
mach contribute nothing at all to the Action of *Vomiting.*

The weaker the Fibres of the Stomach, and the more copious  
and moveable the Matter to be discharged, the easier is'the Λο-  
*. mil ing* ; but if the Fibres be considerably robust, as in those who  
vomit with Difficulty,or the Cause of the *Vitmiting* consists in a te-  
- nacious,ViscidHumourfirmly adhering to theFoldS oftheStomach,  
or an acrimonious caustic Matter infesting the Nerves,the Action  
of *Vomiting,* is rendered difficult, find attended with formidable  
Symptoms: The Action in such a Circumstance is preceded  
by a Very severe Cardialgia, vast Nausea, Anxieties, and Per-  
' turbation of the Praecordia, laborious and fruitless Eructations,  
troublesome Concussions of the Abdomen, its Contents, and  
. especially of the Diapbragm; whence proceed singultuous Agi-  
tations ; a plain Evidence that the Stomach labours under a  
great Convulsion, winch is insufficient to expel the noxious  
Matter. It Very frequentiy happens at such a time, that the  
Convulsion is propagated to the bilious Ducts, which occa-  
sions an Effusion os Bile into the *Duodenum* and Stomach, and,  
being difcharged by Eructation, the *Vomiting* is not in the least;  
abated : The same Motion is communicated to the *Oesophagus,*and expresses the Lymph from its Glands, and those of the.  
Fauces, much of which is discharged by Spitting. Moreover,  
from a Compression of the Blood-vessels of the Stomach, and  
the adjacent Parts, by the violent Concussions, the Blond is im-

pelled in great Quantities to the superior Parts, and the Hhersp  
and causes an Infarction of the Vessels, a Distention of **the**nervous Membranes, and a Disposition-to the like SoafinS:  
Hence proceed Redness of the Eyes, Pains in the Head, Dim-  
Dess of Sighs, Vertigo, Trembling of the under Lip, and some.,  
times conVulsiVe and epileptic Commotions of the whole rrer-  
VoUS System. . :

The proximate Caufe which disposes to *Vomiting,* is aVelii-  
Cation or Stimulation of the nervous Fibres of the Stomach and  
*Duodenum:* Now the Vellicating Matter resides either in the  
Parts themselves, or in others remote, but connected with them  
by means of the Nerves: Hence arises a Distinction of *Farnit- .  
ing* into *siymptomatic* and *idiopathic*; the material Caufe *os* rhe  
latter is in the Stomach itself, or at least in the *Duodenum;*the other has its Cause more remote, residing in the -lower  
Intestines, the bilious Ducts, Kidneys, Head, or some other  
distant Part, and depends chiefly on Consent of Parts, by which  
the irregular Motions are communicated.' It is evident, there-  
fore, that there is no such thing as a monarchical Power, which  
*Holmarit* ascribes to his Regent of the *Pylorus,* from which, he  
thinks, the Origin of the Constriction and inverted Motion is  
always to be derived; For the’ it sometimes begins at the *Py.. -  
lorus,* yet the Principle of the Constriction is frequentiy rest-  
dent in the lowest intestines, as appears by the stercoraceous *Vo...  
rnitings. -*

Among the material Causes of *Vomiting,* which have their  
Seat in the Stomach itself, the first which deserves Notice is,  
the excessive Quantity of Things ingested, which, by oppressing  
the Fibres of the Stomach, and distending them beyond the  
Sphere of these Elasticity, and by that means occasioning a more  
than Ordinary Afflux, of the nervous Fluid and the Blood,  
excites them to conVulsiVe Motions, in order to expel the  
noxious Matter: Hence the Subjects most obnoxious to *Farmer  
ing* are, i. Excessive Drinkers, on account of the immoderate  
‘ Quantity of Liquors ingested. 2. Tender Infants, from seek-  
ing too much Milk, or a Premature Reception of more solid  
Food ; in which latter Cafe, *Ecrkringius,* not without Reason,  
imputes the Cause to the Straitness of the *Pylorus,* not aS yet  
capable of transmitting solid Aliments. 3. Persons weakened  
by Diseases, and fasting under them ; in which Circumstance,  
a moderate Allowance of Food, especially of the solid Kinds,  
may provoke *Vomiting.* .4. Voracious Children, who are much  
subject to HickupS and *Vomiting.*

Another Cause of *Vomiting* is the Vitiated Matter collected  
in the Stomach, which is frequentiy the Reliques of crude -  
Meats, and such aS are difficult of Digestion, salt Meats, such  
as are hardened in the Smoak, and the like improper Foods,  
which are hard to be concocted. Hence are excited *Vomitings*of a pituitous Kind, which are incident, I. To Persons'oi a  
weak Stomach, but Voracious Appetite. 2. To those who,  
being accustomed to softer Kinds of Food, enter upon a more  
solid and gross Diet. Hence, also, 3. They who indulge them-  
selves in plentiful Feeding, much Sleep, and a lazy Kind of -  
Life, are, also, much subject to *Vomiting.* The same Vitiated  
Matter, or foul Sordes, by long Residence, becomes acid, and  
. by an Accession of Bile from the *Duodenum,* procured by a Fit  
of Anger, or, perhaps, some other Cause, is rendered more -»  
acrimonious; whence arise,from the Stomach,biliouS *Fomitings.*

All bilious *Fondlings,* especially if they, are chronical, or pe-  
riodical, have their *Fomes* in the *Duodenum.* This Intestine is  
very well accommodated for the Entertainment of the Vitiated  
Sordes, on account of its Flexures, and because of an Affusion  
of Bile to the chylous Juice which happens in the same. If  
this Bile hecomes inert and unactive, or stagnates on account  
of the languishing Tone of the Intestines, and is not duly .  
mixed with the Aliments, or has its Substance more and more .  
corrupted by an'Aceession of acid Humours,, it is rendered acri-  
monious, and in a manner caustic; whence, by Vellicating, it  
excites bilious, green, aeruginous, and eVen black *Fomitings:*For Bile, by a strong Acid, is rendered green ; and after is has  
stood for a considerable time, it becomes os a black Colour; hence  
**the** Matter discharged by *Vomiting* is often acid to a high De-  
gree, so as to set the Teeth on Edge, and corrode the Very  
Stones of a Pavement,- and silver Vessels. Such was the Mat-  
ter of the *Vomiting* observed by *Henricus ab Heer,* Ohs. 2q.  
which had the Taste of Vitriol: And I myself, in my.NoteS on  
*Potcrius, Cent.* 2. Cas. 93. have related a Case where the  
Matter thus discharged was corrosive like *Aqua fortis',* and  
mixed with Filings of Steel, became true Vitriol.

Persons subject to *Forti tings* which have their Origin in the  
*Duodenum,* are, I. *Hypochondriac* and *melancholic* Patients,  
who, on account of the languid Tone of the Intestines, are  
much molested with acid and Viscid Crudities, from the Remains'  
of the Food in the *Stomach* and *Duodenum.* To this it must be  
added, that the Bile is unactive to such a Degree, that instead  
of a generous Chyle, there is produced nothing but a copious Col-  
lection of acrid and acid Humours mined with a corrupted Brie,

by long ReftdenCe become black, and Communicating the same  
Colour to the Humours, which, for that Reason, the Antients  
imagined to proceed from the Spleen. These Humours are  
constantly Vellicating the *Duodenum* and *Pylorus,* Parts quick  
of Sensation, whence the Stomach is easily subverted, especially  
since these Parts are of themselves subject toan Inversion of  
the peristaltic Motion. 2. The *scorbutic* are no less liable so  
this Affection, from the Thickness and Impurity of the whole  
Mass of Humours; as are, also, 3. The *cachectic,* whose Bile  
is Vapid, and insufficient for the perfect Dissolution of the All-  
mentS; whence their Vomit is more of the hilio-Viscid Kind..

4. Infants are much subject to these *Virniiings,* from their suck-  
ing impure Milk, rendered acid by the angry and fretful Tem-  
per of the Nurse,'which frequentiy is the Occasion of porra-  
ceous, aeruginous, and green Discharges of this Kind. And,  
lastly, Persons labouring under a Quartan are molested with  
these *Vomitings,* proceeding from the *Duodenum.*

*Vomiting* is, also, excited by the noxious and offensive Qua-  
litres of the Things received into the Stomach. Thus Aliments  
too sat, Fruits, and fermentibie Substances, undergoing a more  
acrid Fermentation, excite *Vomiting,* especially if the Stomach  
he already oppressed with bilious Humours. The same is effected  
hy Food which is ungrateful, and taken with a Loathing; and  
the more, if it be of an oily and pinguious Substance. Under  
.this Head must be reduced acrimonious Things, and such as are  
endued with a subtil caustic Principle, as are all Emetics,  
and poisonous Substances; particularly the eggs of. the Barbel-  
fish, for which see *Timaeus a Guldenklee, Lib.* 3. *Cap. J.* and  
poisonous Mushrooms, mentioned by *Hildanus, Cent.* 4. Obs.  
34. AS for Poisons themselves such as Arsenic and Sublimate,  
it is Very well known, that by their highly-caustic Principle,  
they excite not only *Forniting,* but very terrible convulsive  
ifymptoms in the whole System of the Body, which are the  
Effects, also, of the more acrimonious Emetics and Cathar-  
tics.

A subtil, acrimonious Humour, infesting the nervous Parts of  
the Stomach, is, also, a Cause of Very troublesome *Fondlings.*Sometimes this Humour is by a *Metastasis* transferred to the Sto-  
mach froth the Matter of the Gout, *Erysipelas, Scabies,* Ulcers,  
and Purples, to the Stomach. An Instance of *Vomiting* excited  
from the premature Consolidation of an Ulcer, we find in T.  
*Rhndius, Cent.* 2. Obs. 65. For the same Reason it happens,  
\_ that the Small Pox, Measles, and malignant and exanthematous  
Fevers,' are attended with most Violent *Vomitings :* For the acrid  
\_ and caustic *Meafma* os those Diseases, by infesting and irritating  
the nervous Fibres of. the Stomach, produces this Disorder.  
From the same Cause must we account for those dreadful *vo-  
mitings* in the Pestilence, where, upon dissecting a Carcase,  
*Helmont,* as he assures us, in his *Tumul. Pestis,* found the Sto-  
inach covered over with an *Eschar.* And *Diemcrbroeck, de  
Paste, Lih.* 4. Host. 13. tells ns, that he saw the fame Part  
affected with a Carbuncle. .

*A* Congestion of the Vital Blood in too great a Quantity in  
the Vessels os the Stomach, and by that means distending them  
to an immoderate Degree, is another usual Cause of *Vomiting.*Hence, I. Women with Child, in the first Months after Con-  
ception, are affected with it, from a Regurgitation of the Blood,  
caused by a Retention of the Menses, to the superior Parts,  
which ceases when the Foetus arrives at a considerable Bulk, in  
some Subjects after the fourth Month. We have a remarkable  
Instance to this Purpose in *P. Lotichius, Lib. tq.* Obs. 7.  
2. Women who have no menstrual Flux are, for the same  
Reason, molested with *Vomiting.* Thus *Panarolus, Sect.* I.

. Obs. 22.- relates the .Cose of a Girl from whom the Menses  
never flowed, who sor seven whole Years as soon as she took  
any Food, Vomited it up again; but, aster her Menses began  
to flow, was freed from that Disorder. 3. Men are subject to  
the same Distamper from a Suppression of the Haemorrhoids,  
\* which occasions a Reflux of the Blood,in too great Quantities,  
to the *Pena Porta,* and by that means a Congestion os the  
. Blond as aforesaid, whence *Vomiting* is frequently, excited.

A preternatural Constitution or Disposition of the Stomach  
.itself is a sufficient Cause of *Fomiiing.* For, first, if the upper  
Orifice be closed up by a Spasm,or any other preternatural Cause,  
it excites this Affection, which, however, cannot properly he  
called *Vimitlag,* but is rather to be esteemed a Spasm os the  
lower Part os the *Oesophagus*; fince the Food, before it ar-  
rives at the Stomach, is thrown up again, together with a  
- Mucus contained in the *Oesophagus.* Examples to this Pur-  
pose may be found in *JVillists Pharmacop. rat. Part.* I. *Sect.* 2.  
*Cap.* I. *Fernelius, Lib.* 6. *Pathol. Cap.* I. and*.Coiterus, Op-  
sera. Chirurg,* ρ. I2I. where you have an Instance of the *Car-  
. . dia,* or upper Mouth of the Stomache closed up with a *Scirrhus,*and herd Tubercle.

The Cafe is otherwise with the *Pylorus,* from whose preter-  
natural Constitution and Obstruction Occasion is given for  
cbronical and perpetual *Vimitings*; so that it may be taken sor a

Rule, that whoever is for a long time together molested with.  
*Vimiting,* especially after Meat, and at the same time pines,  
and wastes away in his Body, he has his *Pylorus* ill consti-  
tuted. We have an Instance of that Part hardened and in-  
crustated to fuch a Degree, as to he. incapable of transmitting'  
Pood, in *Sanchez,* Obs. **I.** p. 376. of a scirrhous *Pylorus* in’  
*Salrnuth: Obs.* **2o.** *Cent..* **I.** *lVillirs Pharmac. rat. p.* **I.** *Sect. N.  
Cap.* **I.** and in *A. Med. BeroL Dec.* **2.** *Vol.* 3. of a blackish and.  
corroded *Pylorus in Meiboin. Disc, de Pomit. Sect.* 3I. and of  
a *Pylorus* obstructed by a Piece of Money swallowed,, in *fiersi  
iringius, Spic. Anat.* Obsi I. in which Cases the Patients were  
molested with *Vimiting* aS long as they lived. .

A symptomatic *Fomiting* proceeds from the Irritation of **the***Oesophagus* or Intestines: Hence it happens, that from the Intru-  
sion of a Feather,or the Finger,into the FauceS,and a Titillation  
of the Beginning of the *Oesophagus* by the same, the Stomach' -  
is immediately subverted, or irritated .to Vomition, especially if  
it be oppressed with a Load of Humours. And that the Begin-  
ping os an Inversion of the peristaltic Motion frequentiy com-  
mences from the lower Intestines, and is propagated, by Con-  
sent of Parts to the Stomach, we are assured by those *Vomitings*which owe their Rife to the Colic, Gripes, and the like Dis-  
orders, in which Cases Vast Quantities of Humours, os Various’  
Colours and Consistencies, are often discharged. See *Hildanus,  
Cent.* 4. Obs 32, 35\* And *Marcellas Donatus, Lib. An Cap.* 3.  
affirms, that twenty Pounds of Sordes have heen, for several Days  
together, discharged by *Vomiting.* I have myself observed in old  
Persons afflicted with an Hernia, where the Falling down of the  
Intestines has been Very considerable, an extraordinary and fur-  
prising Discharge of a feculent Matter by Vomiting every third  
or fourth Day, for several Years together. . .

*Vomitings* are occasioned by some Disorder in the Intestines,  
in the following Cases: I. From their Distention by Wind  
and Faeces, an Example of which we have in *Do donates, Obs..  
Med.* 2. From an obstinate spasmodic Colic, as we are  
assured by Experience. 3. From a stubborn Obstipation of the  
Belly; aS it happens in that wandering spasmodic Disorder in  
which Clysters, aster Injection, are discharged together with  
the TieoeS,\_by the Mouth. An From the Iliac Passion, and  
Hernias. 5. From a Dysentery, according to *Platerus,* Obsi  
p. 875. - 6. From Worms Corroding the Stomach and lute- \*  
- stines. See *Amatus Lusitanus,Cents* I. *Cur. 5. Cent.* 3. *Cur.* 20.  
I knew a Girl, seven Years of Age, who, having laboured under .  
a Violent Cardialgia, Convulsions, and continual *Vimitings,* at  
length discharged a large Worm by the Mouth, and soon aster  
died. In these Cases there is Very often a total Inversion of the  
peristaltic Motion, which heginning from the *Intestinum Rec-  
tum,* afcends eVen to the Fauces, and conveying all the Con-  
tents of the Intestines to the superior Parts, expels them by the  
Mouth. " ....

There may he, also, a severe. *Vomiting* excited by Con-  
sent of Parts from a Disorder of the biliferous Ducts in **the**Liver : For as these Ducts are endued with the same constri-  
ctive and dilatatory Motion as the intestines, so their preter-  
natural Constriction or immoderate' Laxness provokes to To-  
*miting.* In the former Case there is not only a Violent Expres-  
sion of the Bile into the *Duodenum,* and from thence into the  
Stomach, in a retrograde way, Vellicating its Coats, and ex-  
citing to Vomit; but the Very Spasm Of the above -mentioned.  
Ducts is, by Consent of the *Plexus Hepaticus* and *Stomachicus,*propagated to the Stomach. In the latter Circumstance there is  
too great an Effusion of the Bile thro' the relaxed "Tubes into  
the *Duodenum. ' . .*

Causes of bilious *Vomitings* are, I. Enterics,'and strong Ca-  
thartics, which excite Spasms in the Stomach and biliferous  
Ducts, whence there is an Effusion of Bile into the *Duodenum.*2. A great Fit of Anger, especially when the Subjectis eating,  
and, in such a Circumstance, the Passion of the angry Mother,  
may have a pernicious Effect upon the. Child who sucks her  
Milk. 3. A tertian Fever, on account of the Spasms of **the***Prima Via*; in which Case bilious *Fomitings* are of Service.  
4. The *Cholera Morbus,* and bilious Fevers. 5. Hypochon--  
driacal Disorders, in which the *Primae Vice* are affected with  
Spasms. 6. The last Cause I shall mention is. Stones in the..  
Gall-bladder, or bilious Concretions, by winch Spasms are  
excited which produce bilious *Vomitings.* Remarkable Instances  
of this are to be found in the *Me N. C. An.* 6. *Dec.* I. Obs. 20.  
and *Scultet. Armament.* Obs. 6I. -

Nothing is .more common than for Persons under nephritic  
and calculous Disorders to be affected with a Nausea, *Fomiting,*and Gripes, especially if a Stone happens to stick in those sen-,  
fible Parts the Ureters, or even in the Kidneys. Observations  
to this Purpose occur in *Bonetus, Sepulchr.* Obs. 60. and I re-  
member a celebrated Physician, and Botanist, os this .Place  
[iscZQ, sixty Yeats old, who from a Stone which stuck Very  
fist in the. middle os his left Ureter, laboured under con-  
tinual *Vimitings,* and Loathings of all Food, for three Months

together, which, at length, induced a Decay of Strength, and  
Wasting of, the Body, terminating in Death. Some Weeks  
before his Decease, he complained of the corrupt and fetid  
Taste and Smell of the Matter discharged, imagining it to he  
mixed with the urinous Secretions, which passed off but in small  
Quantities. It Very frequently also happens, that nephritic  
Paroxysms after long Ceasing, are renewed and re-excited by  
Spasms of the Stomach and Intestines. The Reason is obvious,  
sor aS the left Kidney, by its nervous *Plexus,* thro' the Inter-  
vention of the *Mesentericus Superior,* Coheres with the *Plexus  
Stomachicus*; and the right Kidney.by means of the like *Plexus,*is immediately connected with the *Plexus Hepaticus* and *Stoma,  
ehicus* and besides as the *Duodenum* is connected with the *In-  
volucra* of this Kidney, hence it easily appears why Spasms of  
either Kidney, but the Right more than the Left, should ex-  
cite *Vomiting,* often of the bilious Kind, and so Violent, as  
hardly to be exceeded by Emetics. We have a remarkable In-  
stance, to this Purpose, in *Meibomius, Dessert, de Vomitu, Sect.*27. where Stones impacted in the Kidneys first excited terrible  
*Vomitings,* and, when these ceased, so Violent a Spasm of the  
*Oesophagus* was excited, that something, as it were, seemed to  
leap out of the Mouth.

*Fomiti ng,* also, may, by Consent of Parts, attend Affections  
of the Head, as *Hippocrates* long ago observed, 6 *Aph.* 5o.  
" A Wound of the Brain, he says, as necessarily succeeded by  
" a Fever, and bilious *FomitingsP* And we read the fame in  
the *Coaca Pranotiones*; and every Surgeon knows, That Inflam-  
mations, or considerable Wounds and Contusions of the Head  
and Brain, and its Membranes, are succeeded by *Vomiting.*And the same Consequence happens from violent Spasms of the  
nervous Parts os the Head, as in that severe Pain of the Head  
called *Clavus Hystericus,* an obstinate Cephalalgia, Hemicrania,  
Vertigo, spasmodic Apoplexy, and the like Disorders; in all  
which Cases a *Fomiting* is occasioned thro' that Consent which  
the Stomach, by means of the *Par Pagum* of Nerves, holds  
with the Brain; not to mention, that the Connection of the  
*Par Vagum* with the fifth Pair of Nerves, is the Cause of Fo-  
*stating* under difficult Dentition.

A Depression of the Ensiform Cartilage, by compressing  
and irritating the Stomach, may he reckoned among the exter-  
nal Causes of *Vomiting.* Examples to this Purpose we have in  
*Barbette, Anat. Lib.* I. *Cap.* 4. and *Deceor Prax. Barhett,*p. I 26. For this Reason Maids who much 1 straiten and  
compress their Praecordia with stiff Boddice, are subject to To-  
*mi ting.* To external Causes, also, is to be referred, an imagi-  
na tor y *Vinnitirig* excited from the Perception of ungrateful Ob-  
jects, by Sight, or even by Hearing; and, also, that *Vomiting*which is provoked by a whirling Motion of the Body, or Jacta-  
tion in a Ship, to Subjects unaccustomed to st.

There is, also, a critical Kind of *Vomiting,* when the mate-  
rial Couse which produces it is eliminated by the Very Vomition,  
which is therefore very salutary, and is sometimes to be observed  
Tn angry Persons, and Cachectics of a choleric Disposition;  
and, also, in Fevers, both acute and intermittent, and princi-  
pally about the critical Days: For, by means of this Action, the  
Stomach, *Duodenum,* the biliary Vesseisof the Liver, the Pan-  
. creas, with the intestinal Tube and Glands, are purged, and  
deterged from those Collections of Vitious Juices and Humours  
which otherwise might enter the Mass of Blond, and create  
various Disorders, which, upon their Expulsion by *Fomitings,*are hot to be apprehended. Os such salutary *suomiting, Celsus*excellently remarks. *Lib.* I. *Cap.* 3. " that it is beneficial to  
" all bilious and full Persons, who have either injured them-  
" selves by Repletion, or have bad Digestions. For if more be  
" received than can be concocted, we ought not to run the  
" Hazard of its heingcorrupted ; or if it be already corrupted,  
" there is nothing more commodious than to expel it, by the  
" quickest and most ready Passage. Whenever, therefore, we  
" are molested with bitter Eructations, attended with Pains,  
" and Oppression of the Praecordia, let us have immediate Re-  
" course to *FomitingP*

The Diagnosis of the different Causer of *Vomiting* is formed  
upon the Evidence *of* concurring Signs. Pituitous *Vimitings,*attended with a pressive Pain about the Region of the Stomach,  
are an Indication of Crudities adhering to the *Prima Via.* Bili-  
ous, chronical, and periodical *Fomitings,* signify too great a Lax-  
ness of the biliferous Ducts; chronical *siomttings,* particularly, of  
many. Years Duration, in which the Fond is thrown uphalf-  
Concocted, indicate some Injury or *Scirrhus* of one of the  
Viscera. That *Fortiting* has its Rise from the Stone, we infer,  
from a Pain in the Region of the Loins, attended with a Dimi-  
nution of the urinary' Evacuations, and with sandy Excretions.  
Paleness os Countenance, and Pains and gnawing Sensations in  
the Intestines, attended with frequent Spitting and Itching of  
the Nostriis give a Suspicion os Worms: But Judgment is  
necessary in these Coses, to explore, from the Various concurrent  
Symptoms which attend *Forni ting,* the true Cause of that As-

section, without **the** Discovery of which **we** can eYpect but **a**palliative Cure. »

By way of Prognosis, all critical Vomitings are salutary,  
fymptomatical ones bad, and worst of all when excited by **a**subtile caustic Acrimony Vctlicating the Nerves. All Vomiting  
more Violent than ordinary, is not free from Danoer; for it  
may cause Abortion, excite an Hernia, and dispose to a Retropui-  
sion of the arthritic, podagric, and erysipelatous Matter upon-  
the nobler Parts, to the no small Detriment of the Patient. It  
has occasioned a Rupture of the Omentum, as we read *Act.  
Med. Berd. Dec.sk. Fol.* 3. and a Laceration of the Very Sto-  
mach, as we are.told by *Sanchez, 0b. pract.* p. 376. Bilious  
Vomitings, especially the green, porraceous, and aeruginous,  
terrify us with Appearance of Danger, and threaten an Inflam-  
mation. Vomiting from Worms corroding the Stomach is ge-  
nerally pernicious; and *if* a dead Worm be discharged, and at  
the same time there he a Cessation of Very severe Symptoms,  
and terrible Convulsions of the Limbs, all at once, it is a mor-  
tal Indication of a supervening *Sphacelus,* which destroys the  
Worms, together with the Patient. All fetid-Vomitings are  
of bad Prognoshcation, as they indicate an internal Corruption.  
Sebaceous or Tallow-like Vomitings indicate a Redundance  
*of* corrosive acid Humours in the Stomach, by which the pin-  
guious Substances are coagulated, and an intolerable burning  
Heat and Cephalalgia are usually excited, l

Where there is a plentiful Discharge of a gross Humour'  
tinged with a brown Colour like Gall, to the Quantity of  
Hals a Pint, or a Pint, whether spontaneous, or procured by  
Art, aS it frequently happens in flow Fevers, it is a certain  
Indication, that the Tone of the Intestine next the Stomach is  
Very much decayed.

Constant Vomitings, for the Space of Half a Year together,  
or more, and attended with a stow Heat, and an Extenuation  
of the Body, give strong Suspicion of an ulcerated Stomach.  
X met with an Instance of this Nature when I practised Physic  
at *Minden in Westphalia,* fifty Years ago, and had a View of it  
in the Dissection *of a dead* Body. -

**THE METHOD OF CURE.**

Critical Vomitings, by which Humours of various Rinds  
are plentifully discharged, being salutary, scarce require any  
Cure, but are rather, on some Occasions, to he promoted. Bust  
symptomatical Vomitings, which are less sufficient or accom-  
modated for removing the Cause, are the more carefully to be  
treated, in order to their Cure: And the two principal curative  
Indications, or Intentions, to be answered, are, in the first  
Place, to quiet and compose the convulsive and unruly Motion  
of the Stomach; and, afterwards, to oppose and subdue the  
material Causes of the Disorder.

The first Intention is answered by Antispasmodics, Corro-  
boratives, and Apedynes, heginning with gentle, and proceed-  
ing to stronger Remedies of those Kinds. Of this Nature are.  
Saffron, and Cost or in the Form of Powders, Essences, or,  
Extracts; *Theriaca Coelestis,* incorporated with Powder of  
Amber, and Absorhents, as Hartshorn, Crabs.eyes, and red  
Coral: Powders composed of these Ingredients, with spirituous  
and Vinous Waters, such as the Waters of Lime-tree-flowers,  
Lilies of the Valley, Chamomile, Baum, Mint, Black Cher-  
ries, Cinnamon, and the like, are os signal Service in these  
Cases. Among Corroboratives are distinguished. Nutmegs,  
Mace,Cardamoms,Cinnamon,Cry?us *Virus,*Cloves,Orange and  
Citron-peeis, the Roots of Ied Gentian, Calamus Aromaticus,  
Galangais, the Herbs Marjoram, Rosemary, and the like; with  
the Oils and Essences prepared of these Simples. But of all  
the Remedies specifically appropriated to this Disease, the *Mtn~  
tha Cris.pas.Qt* curled Mint, is the most eminent and effectual ;  
for which Reason, the Oil prepared from it may be mixed with  
almost all the Remedies administered in these Cases, as being an  
eminent Paregoric as well aS Strengthener. Among Anodynes,  
I can affirm, that my own anodyne Liquor is as effectual as safe,  
. especially if it he mixed with my Balsam of Lise; or, if more  
powerful Anodynes are required, recourse may he had to tho  
*Pilulae de Styrace, Wildegansii,* or *Sydenham's* Laudanum.

With the Administration os these internal Medicines, it may  
be of good Service to join the Application of Topics to the epi-  
gastric Region, in order to repress, in some measure, the Vio.  
lence of the disorderly Motions. Externals proper for this Pur-  
pose are, the strengthening distilled Oils os Mint, Cloves,  
Nutmegs, Wormwood, Mace, Cedar, and the like, reduced  
with Balsam of *Peru* into an Ointment. Epithems,. also, sor  
the same Purpose, may he composed of the *Spirisus Matricalis9Spiritus Theriaealis,* Hungary-water, and Essence of Saffron ;  
and Cataplasms of camphorated Spirit of Wine, Ferment of  
Bread, the strongest Wine-Vinegar, with Balsam ns *Peru,* and  
an Addition of some Drops os the Oiis of Mace and Mint.  
Os ino less Efficacy is a Plaister of Crums of Broad, and Balsam  
of *Peru,* softened with a Drop or two os some distilled Oil;

over which it will be proper to apply resolvent and strengthen-  
ing Bags warm. Our Balsam of Life does excellent Service  
in this Case, the Praecordia, and epigastric Region being an-  
ointed therewith.

But we shall lose our Pains, if we only use these Things  
alone, without attempting to remove the material Cause of the  
Disorder. A Vomiting, then, os the pituitous Kind which  
depends on Crudities of the *Prima Via,* and a Viscid Mucus  
sticking in them, is best cured by an Emetic, especially if the  
Vomiting is not. of itself sufficient to eliminate the Sordes;  
and if the Patient is greatly afflicted with an .Effort to Vomit,  
a Nausea, and Cardialgia; for, in. this Case, after the Use of  
inciding and digestive Medicines, such as neutral Salts, the  
Roots of Arum, and especially of Squilis, we are to exhibit a  
gentie Emetic, such as tepid Water mixed with fresh Butter,  
and copioufly drank j or the Root of Ipecacuanha reduced to  
Powder. To Infants seized with a Vomiting on account of  
coagulated Milk, or the Meconium contained in the Stomach,  
is is expedient to give Oxymel of Squills mixed with Syrup os  
Rhubarb. .

A bilious Vomiting which arises from a weakened Digestion,  
and has its Fomes in the *Duodenums* aster the Use os Absorb-  
- ' ents, and gently-laxatiVe Preparations of Manna and Rhubarb,  
admits of a perfect Cure, by restoring the Strength of the Sto-  
mach and Intestines; which, after the Sordes are gradually re-  
moved, is excellently performed by my visceral Elixir, used for  
a considerable time together with a proper Regimen, and due  
Exercise : And as this Kind of bilious Vomiting is of a chro-  
nical Nature, so that Species is of a more acute and hurtful  
Kind, which draws its Origin from Violent Spasms of the Sto-  
mach and biliary Ducts, excited by Anger. . In this Case, it is  
expedient to. correct the Acrimony of the Bile by diluent and  
acidulated Medicines; by the *Spiritus Nitri Dulcis*; by the  
Spirit of Vitriol; by AbsorhentS, fossil Ivory, and Crabs-eyes:  
The spasmodic Motions are, in the mean time, to be allayed by  
gentle, antispasmodic, and anodyne Medicines; using for the  
Sake of Evacuation Potions impregnated with Rhubarb ; but  
where there is a Coagulation os the Bile, or a Gall-stone, no-  
thing is more effectual for resolving them, than the *Caroline*Springs, or any cold medicinal Waters, exhibited tepid. When  
too great a Relaxation of the biliary Vessels proves the Cause of  
chronical Vomitings, the most proper and efficacious Remedies  
are Corroboratives; the best of which are, the *Peruvian* Bark;  
the Bark of Cascarilla; essence of Gentian; and chalybeate  
Tinctures, exhibited in Vinous Waters.

A Vomiting which arises from an acrid Matter adhering to  
. the Nerves of the Stomach, or from a Retropulsion of a Gout,  
... arthritic Disorders, or an Erysipelas, besides mild Sedatives,  
and Medicines which excite the Motions necessary to the Ex-  
pulsion of the Matter, requires a recalling of the exanthema-  
tons Matter to the Surface os the Body : This End is obtained  
by exhibiting a diaphoretic Powder, which determines the Mo-  
tion of the Blood and peccant Matter to the external Parts of  
the Body ; and this Effect is more successfully produced, if a  
small Quantity of Camphine is added to the diaphoretic Pow-  
der, and Clysters, Frictions, and Bathe for the Feet, are used.  
When Poisons or poisonous Aliments excite a Vomiting,  
nothing affords more certain Relief than the immediate Exhi-  
bition of large Draughts of Milk and pinguious Liquors, by  
means of which the Spicula of the Poison are not only oh-  
tunded, but Vomited up along with the Liquor drank. Hence  
some Physicians, in Vomitings arising in Plagues and malignant  
Fevers from a Miasma stimulating the Coats of the Stomach,  
Order the Root of Ipecacuanha to he taken in some warm Li-  
quor; aster which, they exhibit Acids in Conjunction with  
Diaphoretics.. But this Practice is not to he used in Cases where  
there is an Inflammation of the Stomach.

. Acrid, acid, and bilious Sordes, selling into the Intestines,  
frequently excite a Vomiting accompanied with colical Pains;  
in which Case, we are first to exhibit internally diluting and  
demulcent Medicines, such as Decoctions of Oats and Hartshorn,  
Whey, or a few Spoonfuls of the Oil of sweet Almonds.  
2. Antispasmodics ; the best of which is, the anodyne mineral  
Liquor, mixed with a few Drops os genuine Oil of Mace, and  
exhibited in cold Water. The Laudanum of *Sydenham* may  
be, also, used for this Purpose ; and in Patients os cholericTem-  
Teraments, rectified Spirit of Vitriol, either alone, ormixed with  
- the anodyne Mineral Liquor, and exhibited in cold Water,

is an excellent Remedy. And, 3. Mild Laxatives; the best  
Of which are Clysters joined with the internal Use of Prepara-  
tions of Manna 2nd Rhubarb, or the Salts obtained from medi-  
cinal Waters dissolved. Where there are Worms in the In-  
.testifies. Clysters of Milk alone are most expedient, exhibiting  
at the same time internally, bitter Resolvents, or mercurial  
-Laxatives ; during the Use of which a sufficient Quantity of  
MIlk, or Oil of Sweet Almonds, is to be exhibited.

The preservative Method is principally to he used, when

from too great' a Relaxation of the *Prima Vied,* Crudities are  
perpetually generated, and periodical Vomitings by that means  
produced. In this Case, the Reginn of the Stomach, and of the  
Back about the first Vertebra sis . the-Loins,, with which the  
Stomach is connected by a certain Ligament, is to he defended  
from all Cold.. Saline, acid, crude, and smoked Aliments,  
together with such as are of. hard Digestion, .are fo he careful i v  
abstained from. .Nor mush :the Patient son ordinary Drink  
Use Malt Liquors, but some, proper Decoction in Conjunction  
with old generous Wine, especially *Burgundy.* Excessive Sleep  
is hurtful, but moderate Exercise heneficial. It is, also, expe-  
dient for some time to use Visceral Elixirs after Meals ; Cha-  
lybeate Baths, and Liquid Medicines prepared of Steel,-are  
very heneficial. It is, also, os great Advantage at proper Inter-  
vals to purge with gentle Laxatives.

To attempt to stop a Vomiting by Astringents and Anodynes,  
hesore the peccant Matter is removed, is an highly prejudicial  
Practice ; for when the spasmodic Motions are allay’d, worse \*  
Symptoms succeed, such as excessive Anxieties os the PIzcor-  
dia, Cardialgias, and Inquietudes. For this Reason, the Vo-  
miting generally does notecase by the Exhibition of Corrobo-  
ratives, before the Excretion of the peccant Matter ; for theso  
Remedies are only to be used when the Motions, but not the  
Matter, are peccant, or when there is no Proportion between  
the Motion and the Matter, or when the latter is subtile, and  
in a small Quantity, but the Efforts to Vomit strong and violent.

Hence if in Infants especially and Children a Vomiting  
is excited by the Chin-cough, on account of the Consent be-  
tween the Stomach and Diaphragm, the Disorder is to be al-  
layed by sedative and anodyne Medicines, such as the Syrups  
of white and red Poppies, Extract of Saffron, Oil of. Sweet  
Almonds mixed with Spermaceti, the Pulvis March ionis. Am-  
ber, Cinnabar, and a Grain or two Of the *Thcriaca. Coelestis,*Clysters may, also,, be injected, and the Breast, and epigastric  
Region may be anointed with a Liniment prepared of green .  
and red *May* Butter, the Fats of the Badger, Fox, and Beaver,  
and a little of the Oil of Henbane. ;...« . ψ '

The Vomiting of pregnant Women arising from a Regur-  
gitation of the Blood to the Stomach, which is, alio,observed  
in Women afflicted with a Retention of the Menses, and Men  
labouring under a Suppression of the Haemorrhoids, is most  
effectually removed by temperating Medicines, ;mild Laxatives,  
Clysters, Corroboratives, and best of all by Venesection, or  
a Recalling of the usual Excretions os Blond. In Cases of  
this Kind Emetics are highly prejudicial, since they either ex-  
cite a Vomiting os Blood, or, which I have frequently seen,  
bring on an Inflammation of the Stomach.

- A bilious Vomiting, accompanied with Spasins of the Prae-  
cordia, and excited by Anger, especially when the Patient is  
at a Meal, is to be treated with great Caution ; and the princi-  
pal Intention Of Cure ought to be directed to the Relaxation  
Of the Spasms. In siuch Cases it is customary with many to  
exhibit Emetics and Purgatives; but I would advise these to  
he carefully abstained from, since I have often seen Violent  
Symptoms, and sometimes mortal Inflammations of the Sto-  
mach brought on by this means.

When Efforts to Vomit Or actual Vomitings seize in the  
Morning, which srequentiy happens to those who use too  
much spirituous Liquors, especially over Night, then the pre-  
cipitating Powders, and such as involve the acid Crudities, to-  
gether with Medicines which promote Digestion, such as the  
Stomachic Powder of *Briokmannus,* and candy'd Citron, and  
Orange-peel, are the most efficacious Remedies.

If, as I have frequently observed, a chronical Vomiting at  
certain InterVais arises from long-continued Grief, I have  
found the most efficacious Relief in Analeptics, and especially  
in tile Balsam of Lise mixed with an equal Portinn of the ano-  
dyne Mineral Liquor, and used both internally and externally,  
Excellent Effects are, also, produced *by* the *Balfarnum Em-  
bryonum,* Cinnamon-water impregnated withQuinces, and ge-  
nerous Wines.

When Vomiting ’as joined as a Symptom to febrile  
Paroxysms, which frequently happens in Quotidians, both of  
the simple and double Kind, it is proper, if no Circumstance  
contraindicates it, to exhibit a gentle Emetic.' Tn the Small  
Pox and Measles the Vomiting ceases spontaneousty aster the  
Eruption; and a Mixture prepared os distilled Waters, the  
Juice of Lemons or Citrons, and the Salt of Wormwood, is  
*of excellent* Service. Nor does this Preparation want its proper  
Use in Tertians,

A Vomiting, arising from thePain of the Stone, is most effec-  
tually allay'd by the Anodyne Mineral Liquor, or the *Spiritus  
Nitri Dulcis* well prepared. Oleous Clysters, Baths of sweet  
Waters, Oil of Sweet Almonds taken internally, and Anti-  
spasmodics are, also, proper.' The Vomiting of Persons la-  
louring under Hernias, or the Iliac Bastion, rarely remits till  
the Tumor is mollify'd and reduced.

*\* Hippocrates* in *Epid. Lib.* 6. informs us, that Vomiting is  
cured by Vomiting; but because Contraries are cured by Con-  
traries, some Physicians have concluded from this Passage of  
*Hippocrates,* that Similars may he cured by Similars. But this  
is an Error; for, if Vomiting is Cured by Vomiting,, the Cure  
is performed by Contraries; for Vomiting often proceeds from  
peccant Sordes, and ill concocted Juices lodged in the Sto-  
mach, which Nature endeavours spontaneonfly to evacuate; and  
when she is not able to do so, her Force is tohe assisted by Art.  
For this Reason young Practitioners are to he advised not to  
abuse this Maxim, lest by a wrong Application of it they should  
be led into a preposterous and injuriousPractice ; for if an acrid  
caustic Matter adhering to the Coats of the Stomach, ot Blond  
stagnating in the Vessels of the Stomach, is the Cause of the  
Vomiting, it would be a terrible Error to attempt toincrease  
this Vomiting by Art.. .

In order to stop excessive Vomiting, Rest, and lying in Bed,  
contribute considerably ; for any Commotion of Body forthwith  
excites and augments the Vomiting ; and this Observation is  
os fingular Use in Practice.

In the Beginning of exanthematous Fevers, such as the  
Plague, Erysipelas, and Small Pox, Nature often attempts a  
Vomiting, which ought by no means to be stopped, or treated  
with Astringents. In Cases of this Kind, such Medicines as  
gently promote cuticular Excretion are proper; for when the  
Efflorescences begin to appear On the Surface of the Body, the  
.Vomiting ceases spontaneonfly.

The obstinate Vomitings of hysteric Patients ought not to he  
suddenly stopped by Opiates, Or Astringents; for by this Prac-  
tice I have seen Violent Convulsions of the Limbs, and Anxie-  
ties of the Praecordia produced ; and when these Symptoms  
ceased, the Vomiting returned.

When frequent Vomitings afflict and weaken the Stomach,  
-an exact Regard is to he had to the Regimen and Method of  
Life. It is expedient to eat frequentiy, though little at a time,  
and ofsuch Aliments as are proper, and easy of Digestion. Sweet  
Milk and white Bread agree with some, though not with all;  
and I can from Experience asters, that the drinking pure cold  
Spring-water contributes more to strengthen the Stomach, and  
remove the Custom of Vomiting, than any other Liquor what-  
soever : Rich and astringent *Pontac,* and *Burgundian* Wines,  
are preferable to others, especially *Rhenisu* Wine, which is pre-  
judicial to hypochondriac Patients. The Juices OT roasted  
Fleshes are more proper than those of such as are helled.

In Diseases where Nature is by a certain salutary Mo-  
ton employ'd in propelling a peccant Humour to the Sur-  
face of the Body, which happens in arthritic and erysipelatous  
Disorders, Topics, and especially Preparations ofCamphire,areto  
’ be Very cautioufly applied ; sor I have frequently observed, that  
by camphorated Spirit of Wine, which in some Cases is Very  
useful, used by infirm Patients labouring under arthritic Pains,  
an Hepatitis, and spurious Pleurisy, which are, also. Species of  
a Rheumatism, the peccant Matter has been forced back to the  
- nervous Coats os the Stomach and Intestines, and excited Vo-  
mitings, Cardialgias, and Hiccups. In Cases of this Kind, if  
an Attempt is imprudently made to. stop the -Vomitings by  
Astringents and Opiates, a mortal Inflammation of the Stomach  
is easily brought on in infirm Patients.

Immoderate and long-continiied Vomitings of pregnant Wo-  
men, which principally happen in the first Months of Gesta-  
tion, especially in those who indulge themselves too much in  
Venery, and are plethoric, are by no means to he cured by  
spirituous Medicines, such things as corroborate the Stomach,  
Astringents and Opiates ; but are to be removed by repeated  
Venesections, in tho Ancle, Rest of Body, and Tranquillity of  
Mind; and when a Vomiting of this Kind is so Violent as to  
threaten Abortion, I have seen it more effectually stopped by  
drinking pure cold Water, than by the Use of any other Me-  
dicine whatever. But when an Analeptic is requisite, one  
.Spoonful of Cinnamon-water taken after Meals, is sufficient.

*Fred. Hoffman. .*

VOMITUS CRUENTUS. See **MORBUS NIGER.**

VOPISCUS. The Twin which comes -to perfect Birth,  
while the other perishes in the Uterus. *Castellus.*

VORACITAS. Voracity. See **ADDEPHAGiA.**

VOSACAN. A Name in *Boerhaave* for the *Corona Solis',  
Rapunculi Radice.*

UPUPA. Offic. Schroff 5. 324. AldroV. Orrtith. 2. 7O4.  
Gesn. de AVib. 7O. Schw. *A..* 368. Jons, de Avib. 85.  
Charlt. Exer. 98. Raii Ornith. i45. Ejusil. Synop. A. 48.  
Will. Ornith. IoO. Bellon, des Oyse. 293. THE HOOPO.

It is a melancholy and very.unclean Bird, living on Worms  
found in Dung, Caterpillers, Beetles, and the like. The Parts  
in Use are the *Fles.a* and *Feathers.* The *Flesch,* and its Decoc-  
tion, according to *Avicenna,* have a specific Virtue against the  
Colic. And the *Feathers* applied, are said to mitigate Pains of  
the Heath *Dale.*

URACHUS, οὐραχός, from ουρον. Urine, and ἔχω, to have.  
Or contain, a Ligament belonging to the Bladder, and .of. par-  
ticular Use in the Foetus. See ALLANTOIS and. RE.N EE. : ’

URAEON, ήραῖτεν, in *Galen, Com. in R. V. Ju A.* **is the**the Extremity Of a Bone, particularly, the *Os Sacrum: Castel.*

URAGION, ὸραγιον, in *Hippocrates, Ltb.de Corde ,A* the  
the Apex, orPointmf the Heart. -- Te.ss. .,Cr

URAGOS, «ραγάστ, from *eigpris* Urine, and ἄγω, to convey,  
**in** *Artius, Tetr. An Serrn. An Cap. pi* is the *same* as *Urachus.* t  
- URANAE, *iasiraj,* from *scis&s,* Urine, the Ureters, by-somc  
so called. *Gorrceus. ' ' su ' νύ .*

URANION,' οὐράνιον, is the Name’of a Collyrium; of the  
Sort called *Adecta,* sisee ADEcTOsJdescrihedby *Paulus, Aetius,  
ntsdT.rallian, Lila?.. Cap.* 5. *.. - -l.. 's ir* .. yens’

URANIOS, ήρανιος, from οὐρανός, *CaelurnsisNs* Hea *. -A*in *Hippocrates,,* is commonly spokein of the Air, particularly  
**I** *Epid.. Sect.* 3. near the Beginning. - -

URANISCUS, οῦρανίσκος, a Diminutive os οὐρανός. Heaven,  
is a Name for the Palate, *uy Hypcroagion* account of its being  
the superior Part of the Mouth, and, also, arched in manner  
**Os** the Heavens. *Castellus. '' - - ‘ - - -*

URANOS, οὐρανός, Heaven, by *Hippocrates,* in Compliance  
with the Vulgar Way os Speaking, is commonly used for the  
Air, which is above us as far aS the Region of- the Clouds.  
*Galen, Com.* 2. *in 1 Epid. T. An* Iris, also; a Name- for -the  
Palate, as in *Aristotle, de Part. Anim. Lib.* 2. 'Cap. :I7jo"'\*n

URANOSCOPUS. Offic. AldroV. de- Piscx 264. RondeL  
de Pisc. I. 3O5. Jons, de Pisc. 61. Salv.- de -Aquat.\* 'spy.  
Raii Synop. Pisc. 97. *Uranoscopius sou Caeli* Sped furor.'-Ch ails,  
de Pisc. *Callioaprnus - vel Uranoscapus, nscapiApsism. -iCsppKAc.*THE STAR-GAZER. For a further Account of this Fish  
see CALLIONYMUS. ' ~ 1 λ/ ^30X2

URCEOLARIS, URCEOLA. Names for *side Parietariis,*from its Use in scouring Glass-veflels*:[Urceoli vifreis. -. l'- '-*

URCEUS. A Measure of Liquids, of various Dimensions  
in different Places; in the Territory *os Pergamus,* i toon rained  
twelve or fifteen Ounces of Wine. *Castellus: - -*

UREDINES, in the alchymistical Cant, are-the Virtues of  
Metals communicated to them from the Sun. *Uredo* in *Pliny,  
Lib.* 20. *Cap.* IS. is the Smut affecting Fruits ; and is a Name  
given, also, to a burning and Very severe Cephalalgia-in a re-  
markable Case related in the *Philosophical \* Transactions* foe  
*fune* I 668. ' -

UREMA, ἔρημα, in *Hippocrates, Lib. de Nat. Hortinis, is*the fame aS οὐρον. Urine. . .. ..

URENTIA *(Medicamenta),* the same as *Caustica,* or rather,  
according to *Blancard,* **PYROT1CA.**

URESIS, οὐρησις, in *Coac.* 263. is the same as ῆρανο Urine,  
but *ibid.* 348. signifies Miction, or the Action of urinary Ex-  
cretion. ....

URETERES, spflnces, from σρον, Urine. The Ureters.  
See RENES. ' .

URETHRA. See **GENERATIO.**

*The proper Method of opening the imperforated Urethra, or  
Glans. so*

Two Cases usually occur, in which the impervious Glans,  
Or Urethra, should he opened. I. When the Glans is im-  
pervious in a new-born infant. 2. When, in Adults, the  
Extremity of the Glans being imperforated, the Urine is dis-'  
charged under it. That the Urethra is impervious in Infants,  
may he gathered from hence: If, for some Days aster their  
Birth, we do not find the least Marks of Urine in the Cloths  
and Swaths about them, and if they cry Violently. : Upon this,  
the Operation must be speedily performed, lest- the ; Infant  
should lose its Life, through the Detention os too great *a* Quan-  
tity of Urine. But this Operation is cornmonsy varied, 'ac-  
cording to the Various Dispositions of the Disorder ’. For some-  
times we find some Mark, at least, Of an Urethra in the  
Glans, as the Passage of the Urine is’only .stopped by a very  
thin kind of Membrane. -In this Case, therefore, the Cure  
-may Very easily he performed, by carefully piercing that Mem-,  
-brane with a pretty fine Lancet,- or even with the Needle be-  
fore described in couching a Cataracts Yah. XXXVIIL *Fig. 5.  
or 6.J;* and, after a Discharge os Unne made by the Patient,  
by introducing into the Urethra, etcher a Tent-fastened to a  
Thread, and dipt .in the Oil of sweet Almonds, or-in-some  
other Vulnerary Oil, or a small flexible Candle, or a waxed  
coarse Thread, in order to hinder it sroin closing again? Is the  
. Membrane be somewhat thick and fleshy, it is better to use,  
instead of the Lancet, either the afore said Couching- needle, or  
even a finer -triangular-pointed Needle, commonly called a  
*Trocar,* like that in *Tab.* XLVIL- *Fig.* 6. and to perform the  
rest of the Operation in the Manner already directed. -’Bur .if  
not the least Mark of an Urethra can be perceived, then  
commonly the infants are lest by many Surgeons without  
any kind of Assistance, as incurable. Thought is better, in

,tny Opinion, to make the Experiment, and to attempt, tho\*  
, in Vain, some difficult Operation ,than, by neglecting all Me-  
thods, to exchange the doubtful Hopes of Recovery sor the im-  
\* mediate Danger of Death. Wherefore those Surgeons are to  
he commended, who, in such a Case, especially if the adjacent  
Parts of the Abdomen he distended with Urine, duly perforate  
**the** Penis with some of the above-mentioned Instruments; and,  
ι after a Discharge of the Patient's Urine, set about the rest of

the Cure in the Manner already prescribed.

But if this Method should not prove successful, then nothing  
seems to remain, but the Death of **the** Child, or piercing **the**Bladder, above the Os Pubis, or perforating the Perinaeum, in  
the Manner directed under that Article. Bus, whether this  
latter Method os Cure for this Disorder in Infants has ever heen  
tried by any Surgeon, I cannot he positive.

In Adults several Cases may happen which require the Assist--  
ance of a Surgeon to open the impervious Glans : For, some-  
times, it is true, the Urethra is pervious, but yet in fuch a  
manner that the Urine flows not sso much from the Glans, as  
from someother Pan of the Penis helow it, and that sometimes  
nearer, and sometimes farther from it, and even in some Cases  
from the Perinieum. Sometimes we find a Perforation in  
some other Part of the Penis and Urethra, besides the Glans,  
*so* that the Urine pastes two Ways: But almost always such  
. Disorders have been contracted in the Uterus; and consequent-  
ly they are natural, aS it were, to most of those affected with  
them, in the mean time it cannot be denied, but that they  
likewise arise from an Ulcer or Wound in the Penis, or some-  
times, possibly, on occasion of extracting a Stone out of the  
Urethra, or from the Acrimony os the Urine, which heing  
stopt by a Stone lodged in the Urethra, Corrodes, and makes a  
new Passage for itself. Such Apertures are all commonly hard  
to cure, yet those which are largest and nearest to the Bladder  
are worst; and if the Aperture is Very large, it can never he  
totally conglutinated. Those Persons whose Penis is perfo-  
rated near the Abdomen, are to he esteemed quite unfit for  
Marriage and Procreation; but the Case is otherwise with  
those whose Urine stows either about the Middle of the Penis,  
or near the Glans; for nothing at all hinders the subtile  
Particles, or Aura of the Semen of such Persons in Coition,  
from passing into the Uterus: So that here the greatest Care  
and Prudence is reqinsite in those Surgeons, who, in Cases of  
this Nature, are called upon to give their Opinion, before any  
Court of Judicature, as to Matters Of Ability or Impotence.  
If the Urine flow through the Glans, though at a preternatural  
Aperture; yet fince a Man is not unfit for Copulation, nor has  
any impediment in discharging his Urine,, it seems safer to for-,  
bear attempting a Cure, than by an Incision to occasion a dan-  
gerous Profusion of Blood, and an Inflammation in the Glans,  
a Part Very full of Blood-vessels. But if the Urethra be perfo-  
rated helow the Glans, or even below the Frenulum, then  
' two things are chiefly incumbent on the Surgeon. I. To make  
a proper Perforation through the Glans with some Instrument.  
2. To agglutinate and close up, as nicely as possible, the pre-  
ternatural, and Consequently incommodious. Passage os the  
Urine.

The Glans may be perforated most commodioufly in two Man-  
ners : The first is, after a Discharge of the Urine, to cut longitu-  
dinally in a strait Line the impervious Glans with a Knife, hegin-  
Ding at the preternatural Aperture, in such manner as to lay the  
Corpora Cavernosa bare, yet without wounding them in the least.  
Let the wounded Parts bleed plentifully, according to the  
Patient's Strength and Habit, the more readily to prevent  
any Danger of an Inflammation. Then if the Bleeding does  
not stop spontaneousty, fill the Wound with dry Lint, which  
cover with a Plaister and Compress,, and make a proper Band-  
age round it. About twenty-sour Hours after, semove **the**Dressings and Lint, and introduce a smooth leaden Cannula into  
the Wound, in such a manner as to pass from the *Extremity* of  
the Glans, heyond the preternatural Foramen, Into the Ure-  
thra ; and consequently receive and transmit the Urine, till  
the Cure is completed. Make repeated Scarifications in the  
callous Tips of the preternatural Orifice ; or. which is safer,  
. cut them away Very nicely with a Pair of sine Scistars; for the  
finer the Portions Cut off are, the better do the Parts aggluti-  
nate ; to promote winch, glutinous PlaisterS are exceedingly  
serviceable, provided they he narrow, but yet adapted to keep  
**the** Lips of the Orifice in Contact. .

But they must not he brought quite round the Penis, lest by  
hindering the Circulation they should cause too great a Swelling,  
and make the Lips of the Orifice part from each other. Put a  
Compress over the Plaister, and a stack Bandage round it, and last  
of all secure the *Cannula* from falling out. . After this is done,  
put the Patient to Bed, and let him keep himself Very quiet  
there, and forbear drinking for some Days, lest he should have  
too frequent Calis to make Water, or at least a Discharge of  
his Urine before the Wound is conglutinated should excite

Pain, and, by loosening the Planter, hinder the Cohesion os  
the Parts: For indeed the first Dressing should not he removed  
unless there he some urgent Necessity, before the third or fourth  
Day ; and then it must he done with the greatest Care, lest the  
Lips of the Wound, having still but a flight Cohesion, should  
he again separated ; and when the Parts are sound to cohere,  
the first Dressing must he kept on for some Days: But if on  
the contrary, they he not joined, it will he proper to lay on  
a new adhesive Plaister, till the Lips of the Orifice are firmly  
united; as to the rest, the same things are to he done, as di-  
**rected in** every Conglutination of Wounds.

The second Method of Cure is performed in the following  
Manner : Let the Needle,’ or fine sharp-pointed triangular  
Trocar, *(Tab.* XLV. *Fig.* 2. or *Tab.* XLVII. *Fig. 6.) he*pasted directly, and Very carefully, through the impervious  
Glans into the Urethra; then, aster a sufficient Quantity of  
Rood is discharged, let a pretty long and (lender Tent os clean  
Lint, in order to stop the Bleeding, be introduced into the new  
made Orifice, and a proper Dressing applied. But if the Bleed-  
ing imps spontaneousty, let a waxed coarse Thread, or a flexible  
Wax-candle big enough to enter it, be introduced, in order to  
hinder the Adhesion os the Lips of the Orifice. Next Day,  
let a new Tent, dipt in a digestive Ointment, be put into it,  
but with this Caution, that it reach not heyond the preternatu-  
ral Foramen from which the Urine has already flowed, so  
that as often as there is Occasion, the Urine may he dis-  
charged thro' it, till the Inside os the new Passage be lined with  
a Membrane ; for otherwise, should it flow tbrough it too soon,  
it would occasion Pain in the fresh Wound, and hmder the  
Production of the Skin. For some Days, therefore, let tite  
Tent, and afterwards the Wax-candle of a proper Thickness,  
he dipt twice a Day in some desiccative Ointment, and let the  
Urine be discharged through the preternatural Orifice, till by  
means Of the Wax-candle and desiccative Ointment, the Mem-  
brane he found to he grown over the Inside of the new Per-  
foration. For then, instead os a Tent, Thread, or flexible  
Wax-candle, a Very smooth and pretty long leaden *Cannula is*to he introduced into that new Aperture os the Penis, so  
as to pass heyond the old Orifice, and receive and discharge the  
Urine; by which means the Agglutination os the preternatural  
Foramen will he more conveniently accomplished. The follow-  
ing Method of Cure is most commonly made use of: Either **the**Lips of this Orifice are scarified with the Knife, or cut as  
nicely as possible, with a fine Pair of Scissars, and then joined  
by laying an adhesive and narrow Plaisterover them, aster which  
the Wound is to he treated in the same manner, as has been  
shewn .above in the first Method of Cure. The preternatural  
Foramen heing closed up, the leaden *Cannula* is likewise taken  
out; and thus the whole Cure is completed. Sometimes, such is  
the State of that preternatural Foramen of the Urethra, that it  
cannot be closed up or agglutinated; and yet duly perforating  
the Glans is not entirely an useless Operation ; for when it is  
properly executed, and a new Passage formed, the Patients be-  
come afterwards more fit for Procreation. For tho' by this  
means, perhaps, not all, nor the greatest Part, yet a consider-  
able Portion of the Semen can, in Coition, be thrown into  
the Uterus. By this Very Method of Cure, therefore, those  
have **the** Faculty of Generation restored, or at least pro-  
moted and increased, who otherwise, through a natural De-  
fect in the Penis, seemed almost or entirely unfit for Pro- -  
creation. Besides, it is Very necessary, after the Cure has heen  
completed, to open a Vein as soon as possible, and repeat Bleed-  
ing occasionally, especially in such Persons as are os a lauda-  
ble and plethoric Habit» For otherwise it may happen, espe-  
cially in Vigorous young Men, that an Erection and Expan-  
sion of the Penis should readily ensue, which may divide **the**Lips of the Orifice, and consequentiy retard the Conglutina-  
tion, or render it entirely impossible,

I know Very well, that there are some Surgeons, who, in  
order to close this kind of preternatural Foramen, stitch up.  
the Lips os the Wound. Others choose rather by Corrosives to  
consume the hard and callous Parts of the Foramen, than to cut  
them away. But neither os these Methods of Cure, in Cases  
of this Nature, is much to be commended. For the tender  
Lips breaking, as commonly happens when stitched, rhe old  
Foramen, instead of heing closed up, is rather enlarged. And  
by applying Corrosives the Skin may be corroded too much,  
and consequentiy the Orifice made so wide, that the Lips  
**can** never afterwards be joined together ; and both Pain and ι  
**a** troublesome Inflammation may he thereby caused.

URETICOS, ήρητικὸς, from οῦρον. Urine, is sometimes spoken  
of the Urinary Passages, in which Sense ήρήίικοί πόροι, are tho  
Ureters; sometimes it is apply'd to Medicines, and so is rhe  
same as *Diureticos,* sometimes to the Patient, and imports a  
Facility of Urine, and in that Sense is used by *Hippocrates, de  
R. Vi J. A.* in the superlative Degree, where οῦρήτεκῶτατος-, wish  
him, signifies a Person who has a very free and plentiful Flow of.

Urine; and, in the last place, it is spoken os a Disease, and  
apply’d to a Species of symptomatic Fever ; and thus *Uretica  
Febris* is a Fever attended with a Diabetes.

URIAS, ήρίας. The Urinary Tuhe; that is, the *Urethra.*

URINA. Urine. See RENES. .. .. ...

The principal Symptoms os Urinary Secretion injured are, .

**1.** Ἱσχουρία, an *Isehury,* or entire Retention os Urine, the  
primary Causes of which arc aPlethora, an Inflammation of the  
‘ Kidneys, Ureters, Bladder, the Neck of the Bladder, Urethra; ‘  
a Spasm, and Compression os the same Parts; also, an Ob- ,  
- "struction of the same from the Stone, Phlegm, Pus, 4 Throm-  
bus. Caruncle, lmpostume, or Tumor. . . ' . . .

2. Δυσουρία, a *Dsaury, Qr* Excretion of Urine with Trouble,  
Labour, or Pain. OneiSpecies of this is whet we call στραγζουρίια,  
a *Strangury,* in which there is an Emission os Urine by Drops,  
with a burning Sensation. The Cause of both these Disorders  
is manifold; as principally the Acrimony of new fermenting  
Beer or Wine, Or of their Lees; the acid, felt, alcaline, oleous,  
aromatic, bilious Acrimony of the Humours; an Excoriation  
of the Parts of the Bladder, or Urethra, by an Inflammaaion,  
some Ulcer, an Attrition by a Stone, and especially from an  
internal Exhibition of caustic Insects ; and, lastly, from a Stope  
page of the Passages by a Stone, or a Tumor in the Neck of  
the Bladder, or the Urethra. . .

. 3. *An Incontinence of Urine,* when the fame stows without  
Effort or Consent of the Will, or Respiration. This Disorder  
generally proceeds from a Resolution, Dilatation, or Discission  
of the Fibres of the Sphincter of the Bladder, Or a Consump-  
- tion os the same by a Suppuration, or a Putrefaction of them  
by a Gangrene. See INCONTINENTIA.?

4. Δναβήτης, a Diabetes which is asrequent and copiouSDischarge  
os chylous or lacteous Urine. The Cause of it is supposed to be  
too great a Laxness of the urinary Arteries, in Conjunction  
with an extraordinary Dilutedness os the Humours, both which  
proceed from Aquosities. *Boerhaav. Inst. Med.*

*An* **ISCHURY.**

**A** total Suppression, of Urine is called *Ischuria, iyiferct, Ci an  
" Isehury*;" but a Diminution os the Action of making Wa-  
ter, is termed *Stranguria, rgscspsugia.,* " a *Strangury* ; " tho\*  
this latter Word is of much more extensive Signification, as  
comprehending every *Stillicidium* of Urine,which if not attend-  
ed with Pain, and the Urine flows by Drops, is a lesser Degree  
os *Isehury*bur is -it be painful, is to be referred rather to a  
Dysury, or Heat of Urine.

An *Isehury,* then, or a total Suppression os Urine, is of two  
Kinds, as it is commonly distinguished into the *true,* or *genu-  
ine,* which attends a full Bladder, and the *spurious* or *bastard*Kind ; in which Affection the Bladder is empty, nothing de-  
scending into it from the Kidneys.-

A *true* and *genuine Isehury* depends on three Causes ; the  
first-of these is *an Abolition of Sense in the Bladder,* on account  
of a Resolution or Obstruction of the Nerve which supplies is,  
or a Diversion of the Spirits, for want of which the Bladder  
feels no Stimulation, nor is it at all irritated to Expussion, as is  
the Case in Deliriums, and. soporous Affections. .. ς

’ A second Cause is *a cold Distemperature of the Bladder,* con-  
tracted from refrigerating Caufes, either internal or external,  
.which obtund the Sense of the Bladder, and weaken its expul-  
sive Faculty.

A third Cause is *a Straitnesi of the Neck of tbe Bladder, in-*tercepting the essiux of the Urine. Of this *Straitnesi* there  
are three Causes assigned by *Galen, de Lac. Affect. Lib.* I. *Cap.*2. For either, first, he fays, the Muscle surrounding the Neck  
of the Bladder is swelled to such a Degree as to obstruct the  
Passage, which is the Case when it happens to be affected with  
an Inflammation, Scirrhus, Abscess, or any other Tumor ; or,  
in the second place, there is an Excrescence os some Caruncle,  
the Passage from some preceding Ulcer; .or, lastly, the Obstruc-  
tion proceeds from a Collus, or some other Substance, insensibly  
generated in Length of Time from a gross and Viscid Humour.  
The Passage may be stopped up, also, by a Stone, a crude and  
gross Humour, grumous Blood, or Pus.

M\*)reover the Urine may be intercepted by a Compression of  
the Neck of the Bladder, from a Tumor Of the incumbent  
neighbouring Parts;for Instance, the Uterus, when turgid with  
in largeFoetus; the Intestinum Rectum, when staffed with hard  
Faeces, or the Anus tumesy'd with the Haemorrhoids increased  
to a remarkable Bigness.

Again, a Suppression of Urine is sometimes occasioned by an  
excessive Quantity os Urine too long retained, by which the  
whole Body of the Bladder is distended in such a manner as to  
be incapable os contracting itself in order to Expulsion, from  
which Distension the Pastage must os Necessity he contracted  
and closed up. Now a Repletion of the Bladder from too  
long a- Retention os the Urine, happens in two Cases:  
**The** fiist is when a Person in Health, on occasion of ur-

gent Business, or when he is as Church, or at the Ahem-  
blies, at Feasts, riding in a Coach,-or in other like Circum-  
stances, sor want of a convenient Opportunity of Time and-  
Place, Voluntarily suppresses his Urine r And, secondly, the  
Bladder is .excessively filled and. distended, so as .tn he inca-  
pable of contracting itself, from an Insensibility os the Stimulus  
of the Urine, On account of the dulled Sense .os the Bladder,  
occasioned by an Affection of the Nerves which supply that  
Part, when the Nerves appropriated to the Constriction of the  
Sphincter. Muscle, may all the whtle remain unaffected., This  
was the Cose of a certain Person, aS we are assured hy *Galen,  
de Loe. Affect. Lib.* 6. *Cap. An.* from a Luxation of the Verte-  
brae of the Spine. \_ . j . *J ... ..*

A *spurious Isehury* so called is, when the. Urine is suppres- \*  
sed, the,. Bladder being empty, because there IS no Afflux of  
Urine to.that Part. The Cause.why no Urine.descends to  
the Bladder is' of two Kinds; being either, first, because  
the Kidneys;form ρ no Urine, nor. send, it downwards; or,  
secondly, because the Ureters receive it not. . The Kidneys  
may be injured in their attractive or expulsive Function; **the**first happens when either- the Faculty itself, receives Detri-  
ment, or the Object is unsuitable and wrong. The Faculty is  
injured by a Violent Disteinperature, and principally by a cold  
One, or is under an impediment from an Obstruction.either in  
the Kidneys, -or the emulgent Vessels, proceeding from the  
Stone, or a Conflict of gross Phlegm, or Put,, descending thi-  
.ther from some superior Part; sometimes, also, the emulgent  
Vessels are obstructed by a Repletion from an . immoderate Col-  
lection os Blood and Serum, an Instance *os,* which *Edveriut*gives in Oise I. iimt. 1ω ; j . / . ;, ῆ l. ψ

The Attraction os the Kidneys is injured through tbe Fault  
of the Object, when the Serum is either consumed, as in  
burning Fevers, or diverted to other Parts, which is thoCase in  
a Dropsy. . - ..... .

The expulsive Faculty os the Kidneys is in like manner in-  
jured by the. same Causes, that is, by a Distemperature,.Ob-  
struction by a Stone, grumous Blood, gross Phlegm or Eus, \*or  
by an Inflammation.

The Ureters receive not the. Serum, nor transmit it to **the**Bladder, on account of an Inflammation or Obstruction from  
the Stone, grumous Blood, Pus, or gross Phlegm,, or from a  
Compression of the neighbouring Parts by Tumors. .... .

It is to be observed, that both Kidneys, or Ureters, must be  
affected, in order to procure a total Suppression of Urine; for  
while there is an open and a free Passage through one of them,  
the Urine may continue to stow.

All the forementioned Causes may each of them be consider-  
able enough to procure an entire Retention of the Urine, called  
*an Isehury*; but if they are too weak *for* that Effect, they produce  
only a partial and diminished Excretion, which we call **a***Strangury.* Both Disorders proceed from the same Causes dis-  
feting only in Degree.

The *true* and *proper Isehury* is known by the Weight and  
.Tension of the Hypogastrium, and the circumscribed Tumor,  
.which has the Figure of the Bladder. Its Causes are discovered  
.from preceding and attendant Circumstances.;- for if the Disor-  
der proceeds from a copious Collection of Urine, which impedes  
the Contraction of the Bladder, it may be learnt by Relation  
from the Patient, who will, inform you,.that he has omitted the  
necessary Business of making Water for a considerable Time,  
either onlaccount of long Riding, or out of Respect to the Place,  
Or the Presence of some honourable Person, and that he was  
never affected in those Parts before. It he happens to labour  
under a Delirium, Palsy, or any other Disorder, above enume-  
rated among the Causes, the Suppression Of Urine is justly to be  
ascribed to it.

Constrictions from Tumors of the same or neighbouring Parts,  
or from other Causes above-mentioned, may he known from  
the proper Symptoms of those Affections. Obstructions of the  
Urinary Pastage may he discovered by introducing a wax Candle  
or Catheter, which, if they cannot penetrate, but stop by the  
Way, are a plain Evidence, that their Passage is obstructed by  
some Stone, Caruncle, or some other Matter that blocks up the  
Way.. And these offensive Substances may be distinguished by  
the following Characteristics: If a Stone be impacted in **the**Canal, and the same be descended .from **the** Kidneys, nephitic  
Pains have preceded ; if the Stone be generated,, or has long  
resided in the Bladder,. the Symptoms proper to a Stone in the  
Bladder have, at least; in some flight measure, preceded the  
Affection. If a Caruncle hinders the Passage of the Urine, it  
is the Consequence of a virulent Gonorrhoea, or some Ulcer in  
the Canal of the Penis, which has for . a-long time ..been dis-  
charging purulent Matter. If rhe Obstacle be a Grume of  
Blood, a Concretion of Pus, or gross Phlegm, they will ma-  
nifest themselves by an Excretion of some small Portions from  
the Penis in adhering to the Catheter, when extracted.

A *spurious Isehury* is distinguished bv its having no Tension,

nor any Tumor or Weight in the Region of the Pubes, but  
rather a Perception of a Lind of Vacuity, or Emptiness in these  
Parts. There is no Desire to make Water, no Irritation in  
the Bladder ; and when the Catheter is introduced, tho' the  
Passage be found free and open, no Urine comes away. Pre-  
ceding Signs are Stones io the Kidneys and Ureters, an Inflam-  
mation, or great Plenitude, or excessive Drinking, not follow-  
**ed** by a .copious Discharge of Urine, and by that means occa-  
stoning too great a Repletion of the Veins ; or, lastly, a burn-  
ing Fever, or a Dropsy, by turning the Course of the Serum  
another Way, may he **the** Cause os a spurious *Isehury.* v:.

AS to the *Prognostics : Ps.* Suppression os Urine is .Very dan-  
gerous, and is it exceeds the seventh Day, generally mortal. .  
For the Serum retained in the Vessels insects and contaminates  
the Blood, regurgitates upon the whole Body, endangers Suffoca-  
tion, and, being convey'd to theHead, there induces a comatous  
Affection. . - ’ ‘ - .

A Suppression of Urine, which proceeds from a Wound of  
the Spino, a- h all, or a Luxation of the Vertebra:,-is incurable.

Is the Smell Of Urine proceeds from the Mouth, and Nostrils  
of the Patient;\* there is no Hope left of Recovery.^ " «

A Tenesmus, supervening a Suppression os Urine, portends ’  
Death on the seventh Day ; a supervening Hiccough shews  
Death near at hand. \* - ... ..

In the Cure of an *Isehury,* whether total or partial, -our In-  
tention is to be directed to the Removal of the Couse. . And,  
first, with respect to the *spurious Isehury,* which depends on  
Affections of the Kidneys and Ureters, we are to address our-  
selves to the Cure of the-Inflammation, nephritic Pains, and  
Stone of the Kidneys. But such an *Isehury,* proceeding from  
a Repletion *of* the emulgent Vesseis, is to be treated by taking  
away a .large Quantity of Blood, and by Hydragogues. A *true  
Isehury* is cured by Remedies which remove the Cause that  
produces it. And here, first, is it proceeds from an Inflamma-  
tion os the Bladder, or adjacent Parts, such Medicines as are  
adapted to the Cure os snch Inflammatonsareto be employ'd. .

If the Suppression of Urine he caused by a Stone impacted  
in the Neck os the Bladder, it is to be removed by the follow-  
ing Method : . .

. First, let the Patient he placed on his Back, with his Legs  
elevated; and be strongly shaken for a good while together, that  
the Stone may flip back into the Bladder; and if it cannot be  
' moved by this means, it is to be impelled by introducing the  
Catheter. If the Stone lias penetrated deeply into the Urethra,  
its Excretion is to be promoted by all manner of Ways, by  
gently impelling it with the Fingers, and so bringing it to the  
' Extremity of the Penis; after that by Immersion of the Penis ‘  
in warm Water, or warns Milk, or by irnmerging the Patient  
in a Semicupium, in order to relax and dilate the Passages.  
If the Stone can neither be extracted outwardly, nor impelled  
inwardly, we are directed by practical Authors to make a Liga-  
ture above and below the Place, and then to make an Incision  
in the Penis, and so take out the Stone.

An Obstruction os the Neck os the Bladder from an Inflam-  
tion, is Cured by Remedies proper for an Inflammation. How-  
ever, if the Urine be retained sor a considerable time, a Wax-  
candle rubbed over with Oil of sweet Almonds, may be gently  
introduced, avoiding by all means the Catheter, lest, by exciting  
.a Pain, the Inflammation should be increased.

A Suppression of Urine from a Caruncle is cured by an Ex-  
tirpation of that Caruncle, which must be accomplished by pro-  
per Remedier introduced by Help os a Wax-candle, which  
must be managed by a Surgeon well skilled in such Operations.  
But when the Symptoms are pressing, for the Caruncle some-  
times swells to such a Degree as to obstruct the whole Passage,  
.. we are under a Necessity os making a Way for the Efflux of  
the Urine by the Introduction of the Catheter, though it is to  
be seared’, lest the Part being irritated should swell the more.  
Before we take this Method, however, we are to attempt a  
Revulsion by Phlebotomy and Vomiting, and, also, to try to di-  
minish the Inflation of the Caruncle by an Application os Re-  
pellents to the Pubes and Perinaeum, that aWay may be made  
for the Discharge os the retained Urine.

An *Isehury* owing to gross Phlegm requires Purgation, first,  
with *Diaphaenicon* reduced with Rhubarb into the Form os a  
Belus, and afterwards with Turpentine frequently exhibited  
with Powder of Liquorice. After these, a Decoction of the  
Opening Roots with Oxymel, or Syriipus Byzantinus, may be  
given; not omitting, during the whole Course, the Use of  
emollient and opening Clysters, Fomentations, and Semicupi-  
ums. All such Remedies aS are proper for dissolving and ex-  
pelling the Stone are, also, convenient in this Case ; and among  
other peculiar Remedies the following are approved by Expe-  
rience :

Take Benedicta Laxativa,' half- an Ounce; Troches os  
Myrrh, two Scruples j Decoction os Savin, three Ounces;

. mix them sor.a Potion. With this Remedy a Suppression -  
.of Urine, in a certain Woman, was cured in a short time. .

If. there he a Redundance of Phlegm in the whole Body, or  
particularly in the Head, an universal Purgation by Apoaems  
for three or four Days together in the Beginning of the Dis-  
order, will be of very good Service, Phlebotomy being pre-  
mised. '

A very good Medicine, also, in this Affection,' is a Julap pre.  
pared of the Juices of Pellitory of the Wall, Sear fennel, and  
Lemons, with Oil os sweet Almonds, prescrihed for the Cure  
of the Stone' in the Kidneys.

*. Syrupus Fernelii de Raphano, two* Ounces the Dose, is, also,  
very effectual in this Case.

*Dodonaus* relates. *Lib. Consorv. Cap. ssp.* that a Man os  
eighty Years was perfectly cured of a Strangury by once taking  
a Lixivium of Egg-shelis incinerated and mixed with Spirit of  
.Wine, ' J

*Arrtaldus* ζῖΖ/άἱἱσυσυιζΓrecommends Wine of Winter-cherries  
in the following Case, related io his Book *de Vinis:* " There  
\*6 was in my Time, he says, a1 certain Cardinal, who for Days  
" together had laboured under a Suppression of Urine, and was  
" swelled very big, and his Case was said to be desperate. When.  
" all Remedies were of no Effect, at last by the Advice of a  
" Quack, he took a Draught of Wine of Winter-cherries,  
" and made a vast Quantity os Water, and was freed from his  
" Disorder. By the good Success of this Experiment this poor  
" and illiterate Quack grew celebrated and rich.\*' This Wine  
is prepared aS *Arrtaldus* there describes it, by taking five, seven, -  
Or more Winter-cherries, and bruising them in White-wine,  
which must afterwards be strained, and so exhibited.

Millepedes, also, bruised in White-wine, and given, are  
very effectual in provoking Urine. The Oil of Scorpions of  
*Matthiolus,* to the Quantity of five or fix Drops, in Broth, or  
other Liquor, is a potent Diuretic.

\* The frequent Use of Crystal Mineral provokes Urine, eine-  
cially where an Inflammation is seared, which is very often ex-  
cited by too long a Retention of the Urine in the inner Coat  
Of the Bladder. ' ,

Spirit of Salt has the same Effect, and in a much greater De-  
gree. 6 E. . \

Of common Remedies the Juice of Pellitory of the Wall  
depurated, and exhibited to the Quantity of sour Ounces, with  
half an Ounce os Sugar, is os great Efficacy; it may be mixed  
with Sal Prunellas, or Spirit of Salt.

If a Suppression of Urine, which is owing to a pituitous  
Matter, makes frequent Returns, there is no better Remedy  
than the Use of the nitrous and sulphureous Waters of hot  
Springs, which by frequent drinking and bathing are of mighty  
Efficacy in dissolving, absterging, arid consuming the mucila-  
ginous Matter.

A Person of Quality os this City, labouring under a Sup-  
pression of Urine lor several Days, aster trying man)7 Remedies  
in vain, was cured by the Injection of the following Clyster, and  
retaining it two Hours.

Take os the Roots *os* Smallage, Parfley, ButcherS.broom,  
Asparagus, Mallows, Marsh-mallows, each two Ounces;  
Pellitory os the Wall, two Handfuls ; Seeds of Anise, ι  
Fennel, Dill, Caraway, Daucus, Bishops-weed, Bastard-  
saffron, Rue, and Cumin, with Bayberries, each half an

: . Ounce; Flowers os Chamomile,. Melilot, Dill, and  
Stoechas, each two Pugils: Boil them Jo red Wine to the  
Consumption of half; strain the Liquor, and in one Pint  
jos it dissolve sour Ounces of fresh Butter, two Ounces  
os Honey of Roses, one Ounce of brown Sugar, half an  
Ounce of Benedict. Laxativ. one Yolk of an egg, Oiis  
os Nuts, Dill, and Linseed, each one Ounce: Make

- them into a Clyster.

The Chymists, also, have Remedies which they highly extol  
for these Disorders, such as Spirits of Salt, Vitriol, Sulphur,  
and Turpentine, which they exhibit to the Quantity of half a  
Scruple in proper Waters, or in Chicken-broth. They recom-  
mend, also, for the same Purposes, Salt os Tartar, and Salt  
of Bean-stalks, exhibited from half an Ounce to an Ounce. "

To makea Revulsion of the Humours from the Parts affected  
they prescribe an Emetic, by winch means they boast to have  
cured not a few.

Through the whole Course of the Cure, Fomentations,  
Liniments, Cataplasms, Semicupia, and other external Reme-  
dies, the same as are prescribed in nepbritic Pains, are not to be  
neglected. A good Remedy, among others of that Kind, is **a**Cataplasm of Pellitory of the Wall try'd with Butter, or what  
is hetter, with Oil os Scorpions; also, a Bladder half full of  
Oil, which will be improved by boiling Scorpions in the Oil.

A common Topic in this Disorder is a Cataplasm os sry'd  
Onions with Swineis-fat, and an Addition of fume Oils, apphe  
ed to the Region *of* the *Pubes* and Loins.

But far more potent in Operation are taw .white Onions  
bruised in a Mortar, and with Oil reduced into the Form of a  
Cataplasm, and applied to the Kidneys, Ureter, and Region  
of the Pubes.

A Cataplasm os bruised Radishes has the same Virtues.

When an Ischury is produced by Grumes os Blood, we must  
attempt their Diflolution by Remedies adapted to that Purpose.  
Os the Number of thesc are. Troches of Amber, the Ren-  
net of a Kid, The *Coagulum* of an Hare, Oxymel simple,  
and of Sqnils. Syrup of Vinegar, and the like. Among ex-  
ternal Remedies, Cow-dung is of admirable Efficacy, accord-  
ing to *Aetius, Tetrab. 2. Serm.* 2. *Cap. o.y.*

In the last Place, when a Suppression of Urine, or a Stran-  
**gury,** proceeds from Pus, absterging and molding Remedies are  
required, and such as are usually prescribed in Ulcers of the  
Kidneys and Bladder. See **ISCHURIA. '' -**

*Of a* **DYSURY,** *or* **HEAT OF URINE.. - -**

By the Word *Dysury,* that is. *Difficulty of Urine,* we un-  
derstand any dolorific or painful Excretion os Urine, which the  
Moderns generally express by *Ardor Urina, "* an Heat of  
" Urine." - Numbers of Authors confound this Affection with  
la Strangury, which they will have to be attended, also, with a  
painful Sensation, and to he distinguished froth a *Dysury* only in  
that a lesser Quantity of Urine is discharged under *st*; for  
which Reason it is, also, called *Stillicidium Urina,* " an Ex-  
" cretion of Urine by Drops." But we chose, for the sake  
os Perspicuity, to call a Diminution, of the Quantity of the  
Urine, not' attended with Pain, by the Name of *Stranguria ;*and comprehended it under the same Chapter with *Ischuria,*because the- same Method of Cure serves for both ; and pro-  
ceed, in this Chapter, to treat of dolorific Excretions of Urine;  
comprising them all under the Name *Dysuria,* "Dysury;"  
because they all proceed from the same Causes, and require the  
fame Remedies. \*

The proximate and immediate Cause of dolorific or painful  
Miction, or making of Water, is, a Solution *of* Continuity in  
the sphincter Muscle, or *Urethra*; and therefore whatever is  
capable of making a Solution of Continuity in those Parts, may  
excite a *Dysury,* or *Heat of Urine.*

Amongst those Causes, the principal and most frequent is,  
the Acrimony of the Urine, which is sometimes simple, and  
without the Mixture of other Humours, as proceeding only  
from an hot Distemperature of the Viscera, or the Use of hot  
and acrimonious Food ; hut it is more frequentiy procured by  
**a** Mixture of acrid Humours, such as Bile, or salt Phlegm.  
Sometimes a Distillation os Pus from an ulcerated Bladder or  
Kidneys, is the Cause of this Acrimony in the Urine; some-  
times a kind of white and milky Substance, discharged in great  
Quantity with the Urine, excites this Heat of Urine : This  
Substance, the Generality os Physicians take to be purulent,  
and to proceed from the Kidneys: But their Opinion is rejected  
by *Sennertus,* for this Reason, because if the whole Kidneys  
were resolved into Pus, they could not supply such vast Quan-  
tities as are sometimes excreted every Day, sor some Weeks to-  
'. gether. He supposes it, therefore, to proceed from a depraved

Concoction, first, in the Stomach, and afterwards in the Liver;  
since ah Error of the first Concoction can never be rectified in  
the second. Hence the Chyle, and after that the Blood, is left  
in a crude State, without due Depuration from the saline and  
tartareous Parts, which ought to be separated in the first Con-  
coction ; and these Particles, being attracted by the Kidneys,  
and afterwards transmitted to the Bladder, exoite that dolorific  
Sensation in the Act of making Water. He confesses that he  
was induced to be of this Opinion, from observing the follow-  
ing Caser A learned Gentietnan, who had laboured for some  
Weeks under an Heat of Urine, and voided the same in consi-  
derable Quantities, but so full of a white Matter, that it took  
up half the Urinal, and with a great deal of Pain, was at last,  
aster trying various Solts os Remedies to no Purpose, perfectly  
cured only by drinking Malmsey Wine. . \*

A latent Stone in the Bladder, by Allision to its Neck, ere-  
. ates a Pain in making Water ; the same may be excited by  
gross Sand vellicating the Entrance into the *Urethra.*

An Inflammation or Ulcer of those Parts excite, also, an  
Heat of Urine, since the Parts, being rendered more exqui-  
steely sensible by those Affections, suffer considerably even  
' from Urine os a good Temperament, just as we see in external

Inflammations or Ulcers, the Parts affected not being able to  
suffer the least Touch from Objects otherwise suited to them.  
Tirus, in a Gonorrhoea, while the Inflammation of. the *Ure-  
thra* continues, an Hear of Urine is constantly felt.

The Diagnosis of this Distemper is manifest of itself; for  
the Pain, under Excretion of Urine, is fo sensible and acute,  
as frequently to make the Patient cry out: But the diagnostic  
Signs ot the Causes are to he distinguished in the following  
manner.

If the Heat of Urine proceeds from its Acrimonv,rt wsii  
appear thin, and high-coloured, and sometimes of a flammeous  
’Colour; or it will be remarkable fora Mixture of bilious,  
pituitous, or purulent Matter; or there will be a Distempers-  
ture of the Viscera, or an hot and acrimonious Diet, a sultry  
Season, or the like preceding procatarctic Causes. ''

As for Stone, and inflammations of those Parts, and the like  
Causes, they will manifest themselves sufficiently by their proper  
Signs. . - . . : - .......

With respect to the Prognosis, this Affection is not danger-  
Ous in itself, but is very afflictive to the Patient; and, with re-  
gard to the various Disposition.of' the Causes, is often difficult  
to be cured, especially in aged Persons, whom, If decrepit, it  
accompanies to the Grave ; and at whatsoever Age it happens,  
if it continues long, it causes an Ulceration os rhe Bladder,  
and its Necks ' . ’ '

The Cure consists, in the first Place, in the Removal os the  
Cause: And thus, if the Dysury proceeds from the Stone, an  
Inflammation, or an Ulcer of the Bladder, or its Neck, the  
Cure is to he managed with an Eye to Indications taken from  
these respective Diseases ; but such Remedies as are, also, pro-  
per for mitigating the Symptoms, will be proposed below. -

A Dysury proceeding from the Acrimony of the Urine; and  
the Heat of the Humours mixed with it, is to ba treated,with  
the following Remedies.

In the first Place, Phlebotomy is-necessary to be administered;  
in order to correct the intemperate Heat of the Liver, and  
other Parts; and the same is to be repeated several times, with  
regard to the Greatness of the Plethora, or the Danger of an.  
Inflammation : I. In the Right Arm, sor Evacuation and Re-  
vulsion ; after that, in the inferior Veins, for Derivation from  
the Part affected; on which Account *Hippocrates,* and his Fol-  
lower *Galen,* in all Affections of the Parts below the Kidneys,  
prescribe opening the inferior Vein. - \_

Purging is, also, proper in this Disease, but only with such  
Cathartics aS are of a lenient and cooling Quality; sor other-  
wise the Heat of Urine would be highly exasperated ; and  
therefore some, in this Case, will not venture to prescribe  
more than a Bolus of simple Cassia, which is indeed preferable  
to other Purgatives. But it will be still more refrigerating, if  
mixed with the Pulp os Tamarinds, or a Solution os Cassia in  
a Decoction os Lettuce, Purflane, and the Tops of Mallows,  
may he exhibited for several Days together., that the Conflux  
of the acrimonious Humours to the urinary Parts may be gra-  
dually derived to the Intestines. But if the Redundance of  
the depraved Humours seems to require stronger Medicines,  
we may have recourse *to* the following Potion:

Take Leaves of Lettuce, Purflane, Plantain, and Tops of  
Mallows, each half an handful; Tamarinds, Half an  
. ’ Ounce; citrine Myrobalans, one Dram: Boil them to -

*fix* Ounces ; strain the Liquor, and infuse therein, of re-  
cent Extract of Cassia, one Ounce: Strain the fame again;  
and diflolve therein, of Rhubarb infused in Water os  
Lettuce, with yellow Sanders,( one Dram and an half;  
Manna, and Syrup of Roses, one Ounce: *Make 4*Potion. .. - .

In a long Dysury, a purging Opiate would be of Service.

Vomiting excited by Emetics of the gentiest Sort, must **be**highly beneficial; for it makes a Revulsion from the Part af-  
fected, and avoids those Inconveniencies which usually attend  
Evacuations by Stool. It will therefore be proper to be used  
in such Subjects us can bear it with Ease, and to be repeated  
once or twice in A Week.

By Clysters, frequentiy injected, not only the acrimonious  
Humours are derived to the Intestines, and, by degrees, purged  
off, but the hot Distemperature and Inflammations of the  
Bladder, and adjacent Parts,: are mitigated and corrected. A  
Formula, for this Purpose, you have as follows.

Take os Roots of Marshmallows, one Ounce ; Leaves of  
Mallows, Violets, and Lettuce, each one Handful; Flow-  
ers of Water-Lily, and Barley cleansed, each one Pugil:  
Boil them to a Pint ; strain the Liquor, and in the same  
dissolve of Cassia newly extracted, one Ounce; one entire  
Egg; Oil of Violets, two Ounces; lor a Clyster.

Mucilages of the Seeds of Marshmallows, Quinces, and  
Fenugreek, may very properly be mixed with Clysters, in or des  
to mitigate Pain.

But as Lenients sor mitigating Pain, and Coolers for cor..  
recting the Heat, Clysters consisting purely os Milk, or os the  
same mixed with the above Mucilages, are usually most effi-  
cacious ; and we have known some Patients who, after long  
Pains and Afflictions under this Disorder, have received Relief  
only from\* this Remedy, and a Semicupium. ’ ‘

Remedies so he taken at the Mouth are very numerous, and  
found by Experience to he os Service, aS Demulcents, in cor-  
reeling the Heat of Urine, and rhe Distemperature of the  
Parts. Some of the principal are as follow: .

Take of the Waters Of Purstane, Lettuce, Roses, and  
Water-Ljlies,each one Ounce; Syrup ofViolets,and Nyrn-  
. phaea, each six Drams; Sal Prunelhe, one Dram: Mix  
them, for a Julap, to be often repeated. Or,

Take Roots of Marshmallows, ope Ounce; Leaves of Let-  
tuce, Endive, Pursiane, and Tops of Mallow, each one  
Handful; Seeds of Melon, Gourd, Mallow, Lettuce, and  
white Poppy, each three Drams; Jujubes, and Sebestens,  
each fir Parts ; Violets, Roses, and Water-Lilies,each one  
Part : Boil them to a Pint and affhalf; strain them; and

. in the Liquor dissolve of the Syrups of Vinlets, Jujubes,  
and white Poppy, each one Ounce and an half; Sal Pru-  
nelhe, half an Ounce: Make4julap, for four Doses, to  
be take nt w ice a Day.

Emulsions, also, are of Use, tho' they are diuretic; hecause  
they are cooling, and gently cleanse the urinary Pastages. ' Os  
this.Nature is the following:

\*- Take Of the Four greater cold Seeds, and those of white  
Poppy, each three Drams; sweet Almonds, blanched,, and  
infused in cold Water, half an Ounce : Pound them in a

- marble Mortar, pouring thereon, by degrees, of the De-  
coction of Barley decorticated. Liquorice, Purstane, and  
the Tops.of Mallow, one Pint and an half: Make an

' Emulsion for three Doses, adding, to every Dose, of Sy.,  
rup os Violets, one Ounce; Sal Prunelhe, one Dram. If  
the Pain be greater than ordinary, some Syrup of Poppies  
. - may be mixed with it. A Dram of the Powder of Gum

Arabic is, also, proper to be added, *ut sap Syrupus de Al-  
thaea Dernelii..*

Broths may, also, be prepared in the following manner: \*

‘ Take of the Roots of Marshmallows, half an Ounce. Mal-  
lows, one Handful; Liquorice, half an Ounce; Seeds  
- . of Quinces, one Dram : Boil them in Broth of a Chicken  
or Hen; Io be repeated for several Days together.

Whey of Goats Milk, taken in large Draughts, is, also, of  
signal Service. ' '

Of no less, or rather more Efficacy, in tho Absence of a  
Fever, is . Milk takers by itself, especially Asses Milk, which  
not only deterges, but is a Demulcens, mitigating Pain, and  
.. correcting the Acrimony of the Humours.

If the Disorder be os long Continuance, mineral refrigerating  
Waters, especially such aS are impregnated with Alum and  
Iron, or have a littieTincture os Vitriol, are highly serviceable:  
Tor it has been found, by Experience, that the Waters of  
*Mayenne,* which are endued with the like Virtue, have some-  
times cured these Disorders, tho’ become inveterate.

Instead of the JulapS above descrihed, a simple Decoction of  
.' Mallows, with Syrup of Violets, may be used ; by which Re-  
medy, *Forestus, Obf.An Lib.* 25. tells us, he was cured of a  
very severe Dysury. He found no Relies, he says, from any  
thing, so much as from the aforesaid Decoction ; and he informs  
ns, that, with the same Remedy, he cured others who were in  
the like Circumstances. . - - - # . -

The same Author, *Obs.* 3. of the fame Book, tells us, that  
. one *Jucobus Juannis,* .an Apothecary, cured himself,"and others,  
with Rose-water, beaten with the White of an Egg, and drank  
at two Doses. t ’

And he further informs us, that an old Man of *Delft* was  
cured of -this Disorder by a Decoction of Chamomile-flowers in  
Milk, to which he was advised by an old Woman.

*Amatus Lusitanus, Curat.su. Cent. 6.* relates, that a Wo-  
man who laboured under a Dysury, and could not be cured by  
a Number os Medicines, which he there describes, was per-  
fectly recovered by a Conserve of the Flowers of Mallows.  
Of this Conserve she took, every Morning and Evening, the  
Quantity of one Dram,' drinking afterwards a Quarter of a  
Pint of Water of Mallows. And the fame Author, *Curat.*59. *ibid,* tells us, that an old Man, who laboured under aDyf.  
ury, after excreting a Stone, was cured by the same Conserve,  
taken in the same manner, in less then three Days. The Con-  
serve of the Flowers of Marshmallows is os the same, or  
greater Efficacy.

Some experienced Physicians commend Troches ofAlkekengi,  
Ar Winter Cherries, exhibited a Dram ut a time, in some con-

Venient Liquor, hecause they are diuretic, and at the same time  
obtund and correct the Acrimony os the Urine.

Is the Pain be Very sharp and pressing, it may he os Service,  
while the Patient makes Water, to immerge the Penis in warm  
Milk, or a Decoction of Mallows, and the Seeds of white  
Poppies ; and even warm Water, by itself is of no small Effi-  
cacy in diminishing the Heat and Pain. ' .

. By way os Potion, a mild Decoction os Mallows, mixed  
with Syrup of Violets, or impregnated with Conserve os Roses,  
will he of signal Benefit. \_

For Mitigation os the Heat os Urine, it has been found he-  
neficial, to make Injections. into the *Urethra,* composed Of  
Milk, Emulsions of the Cold Seeds, Plantain-water, and Whey ;.  
with which may be mixed, the Liquor of thcVVhite *of* an Egg  
well beaten *, or* a Scruple os the Troches os Winter-cherries. ;

External Remedies, also, are riot a little conducive to the  
repressing Of thofe Heats: Such are Baths, and Semicupiums;  
Fomentations of the *Pubes* and *Pcrinaum,* by Decoctions of  
cooling Herbs; Liniments prepared os Oil. of Roses, Oil of  
Water-Lilies,Ointment os *RosCsssJnguentum refrigerans Galeni,  
Populism,* -with Camphire, and Mucilage os *Psyllium* (Fleawort)  
extracted ..inPlantain-water. Refrigerating Epitherns, and the  
aforesaid Liniments, are, aim, to he applied to the Kidneys and  
Liver, for mitigating theirshot Distemperature. ss...

When there is a Flux of acrid and bilious Humours, is  
will be. .convenient, in order to rheir Derivation, to apply  
a Caustic to the Right Leg; or to open the haemorrhoids  
Veins, which is of excellent Service in ail Affections of the  
Kidneys and. Bladder, according to 6 *Aph. si. since, from* the  
same Branch, called the *Ramus Splenicus,* are propagated those  
Veins which are distributed over the Kidneys, Bladder, and  
Haemorrhoids. *Riuerii Prax. Med Lib.* I4. *Cap.* 3,

**BLOODY URINE.**

An Haemorrhage from the urinary Passages, generally called a  
Discharge of bloody Urine, proceeds from a Rupture or Cor-  
rosion of the Vessels either of the Kidneys or Bladder, in such  
a manner, as that they evacuate their Contents sometimes with,  
and sometimes without any Urine. This Disorder is more or  
less dangerous, according to the Circumstances with which it is  
accompanied. : I .. ῖ

It frequently happens that Physicians are egregiouily deceived  
in determining, whether the Brood is discharged with .the Urine,  
or not. Is pure Blood, in considerable Quantities, suppose a  
Pint, or more, as it sometimes happens, he discharged with the  
Urine, or Blood, without any Mixture os Urine, be evacuated  
by the urinary Passages, the' Matter is past all Doubt: But if .  
the Blood is mixed in a small Quantity with the Urine, a more .  
careful Scrutiny is requisite; for often Urine of a bloody. Co-  
lour is discharged, and deposites a Sediment which exactly re-  
sembles Blood: On the contrary. Urine os a brown or blackish  
Colour is discharged, which is mixed with Blood, tho’ no such  
thing is suspected. For this Reason, we shall enumerate the  
certain Signs from which this Variation and Difference is to be  
judged os. If, then, the Redness os the Urine, by which it  
resembles Blood, proceeds from sulphureous Particles exalred by  
an Admixture, especially, os alcaline Salts, then, as soon as it is  
discharged, it appears clear and transparent, whilst the Sedi-  
‘ment is of an incarnate and cinnabarine Colour. But this Se-  
diment, by the Application of a sufficient Heat, again dis-  
solves in the Urine, which becomes clear and transparent as  
before; whereas, when the Urine is red, by means of Blood,  
it is opake, and somewhat thick, whilst the Sediment is gru-  
mous, of a black-redish Colour, and is either not dissolved at  
all, or again absorbed by the Urine Besides, is the Redness of  
the Urine proceeds from Blood, it tinges the Cloth thro'which  
it is strained, with a redish Colour, which does not happen  
when the high Colour of the Urine proceeds only from Salts?

AS there are various Passages for the Secretion and Excretion  
of the Urine, it is of Importance to know whence the Blood  
discharged stows : If pure Blood is copioufly and suddenly dis-  
charged, without Pain, *Hippocrates,* tn *Sect.* 4. *Apb.* 78. justly \*  
concludes, that the Blood comes from the sanguineous and vas-  
cular Substance of the Kidneys; But when the Quantity of  
Blood is smalL of an obfcure blackish Colour, with or without  
a purulent Matter, and especially if there is a Pain during or  
after the Discharge, then it is certain that it proceeds from a  
Wound or Ulceration os the Bladder. That the Discharge of  
Blood from the Kidneys is without Pain, and that from the  
Bladder accompanied with one os an highly intense Kind, is to  
he inscribed to the Diversity of the Structure of these Parts .  
-fur the Kidneys are not possessed of an exquisite Degree of  
Sensation ; but when rhe Blond attempts its Passage thro’ the  
highly-sensible nervous Coats of the Bladder, an intense Pain  
must necessarily be produced Nor is it surprising, that; on  
such an Occasion, the Patient should be seized with a Train of

violent Symptoms; such as Deliquiums, Difficulty of Breath-  
ing, an obscure, small, and sometimes frequent Pulse; a Nau-  
sea. Anxiety os Mind, and cold Sweats. Thus *Hippocrates,  
in Lib. 4. Aph.* So. informs us, Ci That ifany Person srequentiy  
" discharges by Urine Blood,and grumous Matter,and at the same  
" time labours under a Strangury jaccompanied with Pain in the  
5' lower Part of the Abdomen and Perinaeum, such a Person la-  
" bouts under a Disorder of the Parts adjacent to the Bladder.''  
When the Blood is mixed with the Urine in consequence of a  
Wound of the Ureters by a large or sharp Stone, there is an  
acute Pain about the Loins,and iliac Region, and a difficult Dis-  
charge of sandy Urine, whilst the Disorder is difcoVered by the  
other Signs *os* a Stone lodged in the Ureters. If, in conse-  
quence of a Wound of the Blood-Vesieis of the Bladder, and its  
Coats, any Blond is discharged, the Urine is not only evacuated  
with great Pain, and sometimes after a previous Obstruction ;  
but, also, grumous Concretions, full of gross sabulous Mole-  
cules, are sometimes discharged with it: And this, also, on cer-  
tain Occasions, happens, when a Stone, firmly impacted in the  
Kidneys, wounds them.

There is still another Species of bloody Urine, which is rarely  
mentioned by Authors, and which proceeds from a too great  
Distention and Aperture of the Vessels os the Bladder, or rather  
os the Sphincter. *Caelius Aurelianus, in Tract, de Morb. Chron.*speaks os this Disorder in the following Manner: " AS in the  
. Anus and Vagina or Neck of the Uterus of Women, fo, .

" also, in the Bladder, Haemorrhoids are sometimes generated,  
" which discharge Blood, at Various Intervals. This ought at  
".first carefully to be adverted to, by the prudent Physician,  
" fince the Effusion is not at its greatest Height at first, but is  
" gradually augmented, whilst the Patient is now-and-then  
" seized with Deliquiums, and the Blood retained about the  
" Pubes with considerable Pain; for sometimes inflated and  
" tumid Haemorrhoids produce a Difficulty or Suppression of  
" Urine, by the *Greeks* called *Dysury,cat Isehury.” Archigenes*affirmed, " That as the Menses and Haemorrhoids had stated  
" Periods ; so, also; a Plethora sometimes Vented itself, at cer-  
." tain Seasons, by the Kidneys and Bladder.''. *Heumius,* in

*Comment., in Aph.* 78. *Sect.* 4. when treating of the different  
Parts from which the Blood is discharged, speaks in the follow-  
ing manner: ci The Blond discharged from the Bladder is Rot  
" intimately mixed with the Urine, but becomes grumous  
" when it subsides ; and this grumous Matter, which is some-  
" times evacuated without Urine, produces a Pain about the  
" Bladder; but Blond discharged from the Kidneys is in a  
" large Quantity, and so exactly mixed with the Urine, that  
" the whole Urine seems to be nothing but a thin diluted  
" Blood: But the Blond immediately subsides, the' it remains  
ci liquid, and is by no means concreted."

But we are not to confound a Discharge of bloody Urine with  
' an Evacuation os bloody Semen; for it frequently happens,  
that, in Persons labouring under a Virulent Gonorrhoea, when  
the *Prostata* are relaxed, by the tco great Afflux of Lymph and  
Serum, not only the seminal Liquor, but; alfo, a mucid Se-  
rum, full of small Particles of Sand, and sometimes Blood eva-  
cuated from the Mouths of the Vefleis corroded by the Acri-  
mony of the Matter,, is discharged from the Urethra, without  
any Urine.

We are, also, carefully to distinguish hetween a Discharge  
os bloody Urine, and that Evacuation of Blond which is made  
.from the Integuments of the Penis. I have known several In-  
stances of Men, in whom, at certain Periods, a large Quantity  
of pure Blood has, for several Weeks, been discharged from the  
Penis, aster a preceding tensive Pain of the Groin and Tbighe.  
*Stalport Pander IViel. in Cent.* I. *Obs.* 80. has collected In-  
stances of the same Kind. But, in this Cose, the Blood dis.  
charged is not mixed with the Urine, but is discharged by itself.  
Drop by Drop, from the Ramification of the external hiemor-  
rhoidal Veins, which is distributed to the Pudenda.

We are, also, carefully to distinguish between a critical and  
salutary Discharge os Blood,and that which is morbid and preju-  
dicial : The former most frequently happens in large Quantities  
from the Kidneys, and sometimes but rarely in a small Quantity  
from the Sphincter of the Bladder, without Pain,or great Uneasi-  
ness,and returns at certain Periods. This principally happens by a  
Tranflation of the Blood which ought to he eliminated by the  
Menses or Haemorrhoids, when these Evacuations are either ob-  
structed, or suppressed. I have seen such critical Discharges of  
Blond from the Penis, in young and old Men of plethoric Ha-  
bits, succeed a Cessation of the haemorrheidal Flux, or an  
Omission of usual Venesection, without any manner of Dan-  
ger : I have, also, seen Discharges of bloody Urine, in Wo-  
men of eighty Years of Age, who lived high, and enjoyed good  
Health, especially if, after the Gestation os their Menses, they  
neglected Venesection.

Besides, I have srequentiy observed, that old Persons, when  
the htemorrhoidal Discharge ceased, and middle-aged Men,

afflicted with the blind Haemorrhoids, aster violent Commotions  
either of Body or Mind, have discharged a large Quantity of  
Blood of a brownish Colour, like Coffee, without any Difficulty  
of Urine; and this Blood, undoubtedly, proceeds from the  
Blood-Veffeis about the Sphincter os the Bladder : For the ex-  
ternal haemorrheidal Veins communicate with the Bladder, and  
distribute Ramifications to it. But it is not so with the internal  
Haemorrh.oidais, whese Ramifications distributed to theBlad-  
des, have not, as yet, been seen by any Anatomist. '

This Excretion os Blood with the Urine, arising from the  
Suppression os other sanguineous Excretions, especially the Hae-  
morthoids, principally happens from the Kidneys, whilst the  
Blood, accumulated and conveyed thro' the inferior rnesaraic  
Artery to the Coats of the *Intestinum Rectum,* not finding a  
Passage there, as it were, regurgitates to the Trunk of the  
great Artery, or is rather there collected in great Quantity ;  
and, heing conveyed to the arterial Vesseis of the Kidneys,  
which, both in Number and Bulk, exceed the emulgent Veins,  
by distanding and opening their Orifices, passes to the urinary  
Ducts which are connected with the Extremities of the small  
Arteries, from which it is conveyed to the Mouths of the Pa-  
pillae, thence to tire Pelvis, and thence into the Ureters and  
Bladder. In such a Case, therefore, neither *Anastomosis,* nor  
*Di ar esis,* nor *Diapedesis,* so much talked of by Authors, \*  
obtain.

The Bladder is, also, greatly subject to Excretions Of  
Blond ; because, on account of its perpendicular and low Situa-  
tion, the Return of the Blood from it thro' the Veins, is Very  
difficult. Hence it is, that, in rhe tumid external Haemor-  
rhoids, or the internal Haemorrhoids, when obstructed, especially  
in plethoric Patients, the Blood accumulated and stagnant  
there, preternaturally enters the Orifices of the capillary Vessels  
of the Bladder, or rather os the Sphincter..

The Suppression or Cessation of the hemorrhoidal Discharge  
by any Cause whatever, is the principal Cause of that Species  
os bloody Urine in which the Blond is conveyed .from the Kid-  
neys. *Hercules Saxonia,* in *Lib.* 3. *Cap.* 4. gives us an in-  
stance of a Person of Distinction who, during five Years, la-  
bouring under a Suppression of the Haemorrhoids, now-and-then  
evacuated from the Urethra large Quantities os Blood, hesore  
he discharged his Urine. *Rolfinclcius,* in *Dissert. Anatom. Lib.*5. *Cap.* 26. telis us, " that a Person of Distinction, subject  
" to the haemorrhoids! Flux, upon having it suppressed,  
" fell into a Discharge of bloody Urine, which lasted for several  
" Weeks, but disappeared when the Haemorrhoids were re-  
" called in a Very moderate manner.’\* *Raiselius,* in *EpistoL*64. telis us a memorable Story of a Shepherd, who, having a  
Suppression of the Haemorrhoids for three Years, evacuated  
sometimes such a Quantity of pure Blood, without any Urine,  
as to fill a Chamher-pot; nor. had the Patient, eVer in his  
Life, used Venesection : But after he had three Paroxysms of  
this Kind returning at stated Periods, limpid and natural Urine  
was discharged. But when, by the Advice os his Physician, he  
used Wine pretty liberally, took Pilis prepared of Aloes im- '  
pregnated with Juice of Succory, and Extractos the Troches  
of Alhandal, the Haemorrhoids returned, and his Disorder  
ceased. \ -. -

Tho' all Violent Exercise, in plethoric Persons, lays A Foun-  
dation for Haemorrhages; yet no Species of Exercise has a more  
direct Tendency to excite a Discharge of bloody Urine, than  
Riding. Various Instances of this occur in practical Authors:  
Thus *Riuerius, Cent. 2. Obs.* s3. gives us an Account of a  
Man, of fifty Years of Age, who discharged bloody Urine  
every time he rede. *Hollcrius,* also, in *Aphor.* 78, *Sect.* 4.  
*Hisipocrat.* speaks in the following manner" If some Persons  
" ride hard, or use immoderate Exercile, they discharge Blood  
" from their over-heated Kidneys.” And, a little aster, fays he,  
" I am os Opinion, that bloody and turbid Urine was dis.  
" charged by a reverend Bishop, both on account'of the Di-  
" latatron made in the Cavities of **the** Kidneys, and in **the**" urinary Passages, on account of the excessive Heat, first ge-  
" Derated by the Violent Motion of the Chariot driven quickly  
in a rough Road,which agitated his whole Body,and especially  
" the Region os his Back , and then, by the succeeding excess  
" five Heat; whilst, with a Coat of Skins, he ascended the  
" Mountain under a scorching Heat of the Sun. By all these  
" Things, so great an Heat was excited in the Parts about **the**" Kidneys, that, on account of their too great Dilatation;  
" bloody Urine was discharged. Hence it is, that even now,  
" when he is fatigued, or uses Violent Exercise, his Urine is  
" turbid, and bloody.'' The Reason why Riding, which is of  
great Efficacy in curing other chronical Diseases, disposes to  
Haemorrhages os the Kidneys and Bladder, is, that\* by **the**Compression os the Veins in the Thighs, the *Perinaum,* and **the .**Anus, the Return os the Blond is greatly retarded. Hence  
the Quantity os the Blood is enlarged in the Arteries, and its  
Motion in the superior- Parts increased, edgaitiolry about **the**

Loins, bv means of the succuffory Agitation, Thus the Afflux  
of the Blood being rendered brisher, the emulgent Arteries, at  
last, easily open. For *Malpighi, in T.r. de Rtenibus,* justly ob-  
serves, " That, if we except the Lungs, there is no Part of  
" the human Body more subjected to the Injuries cf a redun-  
" dant Blond than the Kidneys."

A Stone in the Kidneys is, also, frequentiy the Cause of a  
Discharge of bloody Urine, which is more troublesome **and**dangerous than the formerOf this there are many Instances;  
fuch as that related in *Horstius, Lib.* 4. *Obs. psp.* where, with-  
out any Pain of the Loins, nephritic Patients, especially when  
plethoric,-upon using Violent Exercise, are observed to dis-  
charge bloody Urine. This probably happens, hecause a pretty  
large Stone, of a sharp Figure, may for a long time remain  
without Pain in the Kidneys, and yet, by its Compression and  
Attrition, excited by Exercise, considerably injure the Vascular  
Substance os the Kidneys, greatiy hurt their natural Functions,  
herd, by that means, lay a Foundation for an Eruption of **the**Blood : For when the Stone, by its Bulk and Weight, com-  
presses the Ramifications of the emulgent Vein, by hindering  
**the** Passage Os the Blood thro' them, it proves the Cause why  
the Blood copioufly and impetuoufly conveyed thro' the small  
emulgent Arteries, and their capillary Ramifications, which  
terminate in the urinary Ducts, greatly distends the former,  
and at last makes its Way into the latter, which, in a natural  
State, were only destined for the Conveyance of Urine: And  
this happens more Violently and infallibly when in Persons dis.  
posed to the Stone, Various Medicines which force. Urine, and  
the Stone, are exhibited; which is a common tho’ a wretched  
Custom, especially if these Medicines are of the hot Kind ;  
inch as Preparations of Turpentine, Amber, and Juniper:  
For, in such a Case, the Stone, pent up in the Kidneys, by cor-  
roding, excoriating, and dilacerating the small Vessels of the  
Kidneys, produces an Exulceration; in which Case, Pus and  
Blood drop thro' the Ureters into the Bladder, and, conse-  
quently, a painful Discharge of some Portion of the Urine,  
with which Corrupted Pus and Blond are evacuated, is produced.  
This, also; happens the more rarely, when the Ureters are ex-  
ulcerated hy a Stone.

There is, also, a copious and dangerous Discharge of bloody  
. Urine, when, from an exulceration of the Bladder, arisrng from  
a copious, acrid, and stagnant Blood, a mucous, purulent, and  
bloody Matter descends into its Cavity; for, in this Case, the  
Urine, is discharged with intense Heat, intolerable Pain, and  
Difficulty, whilst the Disorder is accompanied with Tremors  
and convulsive Motions of the Limbs, attended with Colds  
and Tremblings. I have,.also, frequentiy seen this happen in  
Persons labouring under Virulent and inveterate Gonorrhoeas,  
whilst an acrid and corrosive Matter flowed from the Genitals,  
and corroded the adjacent Parts. When this Case happens, and  
when the Substance of the Kidneys or Bladder is corrupted, and  
a purulent and putrid Matter is secreted, furfuraceous Urine is  
discharged, with small Caruncles or Substances resembling Hairs  
or Worms in it, which can never come from the Bladder, since  
it is not possible they should he its Filaments. They mush  
therefore, proceed from the mucous Matter contained, either in  
the Kidneys, or Bladder, concreted into such a Form and Con-  
Essence. .

Another Species of bloody Urine may he produced by exter-  
nal Causes, such as Contusions, Falis, Blows, and the lifting  
of .Burdens: This frequentiy occurs in Practice, the' in is not  
very easy to account for it: For if it proceeded from a Rup-  
ture of the Veffeis in the Kidneys, or a Solution of Continuity  
in them, it could not he so speedily Cured by Venesection, and  
fuch Things as dissolve the Blood. I am rather of Opinion,  
that, by the Contusion or Contorston, especially of the Blood-  
Veffeis, and the Stagnation of the Blood there, its Circulation  
through thofe wounded Parts is hindered, by which means the  
Impetus and Quantity of the Blood is increased in the internal  
Veffeis ; and when these, especially in plethoric Persons, are  
distended, the Blood is easily discharged from them. This  
very easily happens in the Kidneys, if a Blow has heen in-  
flicted on that Region. Hence there are Instances in which  
- Discharges of bloody Urine have succeeded Luxations of the  
*. Vertebrae.* As *Hildanus, in.Cent.* 2. *Obs.* Io. observed a Dys-

entery produced by the Amputation *of* a Leg, so I knew a  
Discharge of bloody Urine succeed a Fracture of the Bone of  
the Leg: So that it is easy Io Conceive how, by a Contusion of  
the Veins, and a Stagnation lof the Blood elsewhere, some Part  
Of it: may he discharged through **the** *Urethra.*

It is. certain from experience, that Discharges of bloody  
Urine may he produced by Violent Gripings of. the Abdomen,  
by acrid Purgatives, and by strong Diuretics, such aS Cantha-  
rides but this Symptom is owing to the spasmodic Stricture  
of the Veins, by which the free Circulation of the Blond is in-

tercepted : Hence we may easily give a Reason why the Meastes  
and Small Pox, especially of the malignant. Kind, are sometimes

accompanied with this terrible Symptom. There are Observ-  
ations in.some Authors, in which it is affirmed, that, by Vest-  
catories, in which there are Cantharides, a Discharge of bloody  
Urine is sometimes produced : Betas I never observed any such  
thing, we may justly suspect that the bloody Urine proceeded  
from some other Cause.

No Discharge of bloody Urine is free from Danger: For  
though, at the Beginning, it may-appear critical and salutary',  
on account of the Redundance of Blood produced by a Sttp-  
pression of the Menses, or Haemorrhoids, yet it is dangerous,  
because it not only easily recurs and exhausts the Strength, but,  
also, if an Error in Regimen is committed, or if itis impru-  
dentiy treated with Styptics, an Inflammation and Corruption .  
are readily induced on the Kidneys; or Bladder -. It, also, fre-  
quently happens, that a certain Portion of grumous Blood de-  
scending from the Kidneys, is so firmly impacted in that Part of  
the Ureter, where it is obliquely inserted into the Bladder, as  
to produce a violent Ischury, not to be cured without the great-  
**est** Difficulty. Sometimes, also. Blond becomes grumous in the  
Cavity of the Bladder; and, adhering firmly to the Sphincter,  
produces an intense Pain, and a total Suppression of Urine.  
The same, also, happens, when the Blood-Vessels of the  
Sphincter, like the blind Haemorrhoids become turgid with  
thick Blood.

The most dangerous Species of bloody Urine is that which  
proceeds from a profound Wound or Ulceration of the Kidneys  
or Bladder, and is accompanied with an intense Pain, and an  
Evacuation of Pus: We are not, however, to take the mu-  
cons and glut.nouS Sediment, sometimes observed in. bloody  
Urine, for Pus, which generally floats on the Surface; sor the  
Quantity of this .Sediment is often so great, that is it pro-  
ceeded from an Exulceration of the lddneys, they would soon  
he consumed by it: It is rather a Mucosity which drops from  
the too much relaxed glandular Coat of the Bladder and Bike-  
*thra,* or from the wounded *Prostata*; after which, it is mixed  
with the Urine.

Having thus considered the Various Causes and Seats of bloody .  
Urine, it is incumbent on the ikilful Physician to have a due  
Regard to all these, both in his Measures for the Prevention  
and Cure of this Disorder: When, therefore, a Discharge of  
bloody Urine arises from a Redundance os Blood, or is to he  
dreaded from that Cause, nothing is more safe and efficacious  
than Venesection; only observing this Caution, that, during  
the Paroxysm, it is to be performed in the superior Parts, that  
is, the Arm; and the Quantity to he taken away is to be esti-  
mated by the Patient'S Strength, and Habit of Body. But if  
a Discharge of bloody Urine arises from a Suppression of the  
Haemorrhoids, it is safer, in order to prevent a Relapse, to  
open a Vein in the Foot; The fame Practice is, also, to he  
observed, when, in a spasmodic Colic, and Violent Gripings *of  
the* Abdomen, a Discharge Of bloody Urine happens, on ac-  
count os the Stagnation and Congestion of Blood about the  
Coats of the Intestines, and its Incapacity of being discharged  
from the haemorrhoidal Veins. Besides, as this Disorder gene-  
rally returns at stated Periods, it is so much the more necessary  
we should prevent its Approach by seasonable Venesections.

When this Disorder derives its Origin from a Violent Ebul-  
lition or Expansion of the Blond, with or without a *Plethora,*which generally happens by Violent Commotions either of Body  
or Mind, or by the Abuse of hot Medicines, which too strongly  
agitate the Blond, besides Venesection, nothing is more effica-.  
cious than the Use of nitrous Medicines, and such as check the  
classic intestine Motion of the Blood; or Refrigerants, the best  
of which is depurated or artificial Nitre prepared with Spirit  
of Nitre and Salt os Tartar, mixed with earthy and absorbent  
Substances, and. exhibited either in the Form of a Powder, or  
a Potion. The best Vehicles for this Medicine are, sweet  
and acidulated Whey, a Decoction of Barley, pure Spring-  
water, or Spring-water mixed with an equal Quantity of *Sel..  
teran or Tonstein* Waters, a Decoction os Hartshorn and  
Vipers-grass, or small Ale into which a sufficient Quantity of  
the Tincture of Roses, or Daisy-flowers, with Spirit of Vi-  
triol, but not of Salt, whose Volatile Acrimony is prejudicial to  
the.Lungs and Kidneys, has been dropped.

AS Costiveness is of great Force, not only in generating,  
but, also, in sustaining this Disorder, partiy because by the  
Flatulencies and Spasms arising thence the equal Circulation .  
and Distribution of the Blond is hindered, and more copioufly  
conveyed to one, especially the weakest Part, than others,  
and partiy because many impure, acrid, and bilious Sordes, are  
conveyed from the *Primee Vide to* the Mass of Blood and Hu-  
mours, hence nothing is a hetter Preservative against this Dis.

. order, or more efficacious for preventing a Relapse, than keep-  
ing the Body duly soluble: But this end is not to he procured  
by Purgatives, acrid Stimulants, or large Doses of-Salts ; much  
less by Preparations of Aloes,or Pilis which contain even the least  
Quantity of that Ingredient: The Intention is rather to he an-

fwered by mild Laxatives of a corroborative Quality, which,  
as they are best in all preternatural Excretions os Blond, fo,  
also, they are most efficacious and safe in this. The best of this  
Kind are. Preparations of Rhubarb mixed with Raisins; such  
as Currans rendered laxative by a gentie Inspissation with a So-  
lution of Rhubarb, or Powder of Rhubarb, mixed with Cream  
of Tartar.

In order to corroborate and gently Constrict the dilated and  
opened Veffeis of the Kidneys, or in order to consolidate their  
Substance if wounded, the most efficacious Medicines are.  
Decoctions or Infusions of gently vuinerary and astringent In-  
gredients, such as Agrimony, Gnound-ivy, Horsetail, Yarrow  
and its Tops, Golden Rod, and the Root of the greater Con-  
sound edulcorated with *Prussian* Honey, which is highly friendly  
to the Kidneys. These Decoctions may be, also, mixed with  
Milk, according to the Situation of the Patient. Almond  
Milk, especially when used as a Vehicle sor *Armenian* Bole,  
is, also, of fingular Efficacy in healing and consolidating these  
Parts.

If a Corrosion or Ulceration os' the Kidneys, Ureters, or  
Bladder, are prescnt, which often happens when the Disorder is  
os long Standing, and atcornpanied with Pains, the principal  
intention of the Physician ought to be, to correct the Acrimony  
os the Humours ; and so long as this is neglected, neither an  
Alleviation of the Pain, -nor a Consolidation and Cure of the  
wounded Part, are to be expected. This Intention is therefore  
excellently answered by *Ferneliusts* Syrup of Marshmallows,  
*Foresius's* Decoction, and that recommended by *Mynsicht* against  
a Discharge of bloody Urine. The same End is, also, an.  
fwered by an infusion, which, besides the above-mentioned vul-  
nerary Herbs, has, for ingredients, the Bark of *Egyptian* Thorn-  
root, and Cherry-tree Gum: A Powder, also, prepared of the  
Roots of Marshmallows and Liquorice, *Sperma Ceti,* the Four,  
cold Seeds; white Poppy-seeds, the Seeds of Club-moss, and  
Saffron sweetened with a sufficient Quantity of Sugar-candy,  
are, also, of Service. .

For a Dysury or Ischury, which are frequently dangerous  
Symptoms of an Haemorrhage from the Kidneys or Bladder;  
whilst grumous Concretions of Blond obstruct the Ureters in  
that Part where they are inserted in the Bladder, or the Sphincter  
of the Bladder itself, no Medicine’affords a more efficacious or  
instantaneous Relief, than large Draughts os tepid Water, and  
the external Use of Baths. In this Case it is, also, expedient,’  
to inject into the *Urethra* and Bladder tepid Water, in order to  
dilute the acrid Humour, and dissolve the grutnous Concre-  
tionS. *Hippocrates,* as we have already observed, recommends  
these Very Remedies ’. But if, on account of grumous Concre-  
tions in the Bladder, or its Sphincter, such Spasms are excited,  
as to induce a total and hurtful Ischnry, excellent Effects are  
produced by an Emulsion of the Four cold Seeds prepared with  
Crabs-eyes and diaphoretic Antimony ; aS, also, by a Powder  
prepared of *Sperma Ceti,* Crabs-eyes, and Nitre; externally a  
Bladder, full of a Decoction of emollient Flowers, is;to heap-  
plied to the Abdomen; the Body is, also, to he rendered so-  
luble, by a Laxative of Manna, or by an emollient oleous  
Clyster.

Besides all thefe Remedies for curing recent, and removing'  
inveterate Disorders- of the Kidneys and Bladder, nothing is  
more efficacious than temperate medicinal Waters; such aS the  
*Selteran, Antonian,* and *IVildungensian* Springs, - especially if  
mixed with Milk, buf rather Asses Milk. This is sufficiently  
obvious from the salutary Elements of winch they are: com-  
posed, \_ and the unanimous Consent of those who have wrote  
concerning their Virtues.

Milk and Whey are, also; excellent Remedies against this  
Disorder : For *Hippocrates, in Lib. de Intern. Affect. Sect. fa.*speaks in the following manner: " If the Urine is discharged  
" like the Juice of roasted Beef, the Patient is to drink Whey  
" and Milk; Whey till he is sufficiently purged, and Milk for  
" forty or fifty Days ; by which means, the- Disorder is alle-’  
" Viated." The Milk of Sheep and Goats is, also, recom-  
mended by *Rivcrius,* in *Obs.* I3. *Cent.* I7. as, also, by *Gasi-  
narias* and *Fetrestius,* who affirm, that, by this single Remedy,  
they have effectually cured a Discharge of bloodyUrine, mix-  
ing with each Dose one Dram of *Armenian* Bole. *Rivcrius* is,  
also, of Opinion, that this Practice is proper in Violent Dis-’  
charges of bloody Urine; though he thinks it less expedient in  
those of a moderate Kind.

With respect to Venesection, which is of the greatest Im-  
portance both for curing and prevenfing a Return of the Dis-  
order, if it proceeds from a Suppression of critical Haemorrhages,  
we are to observe, that, in the Beginning, a large Quantity of'  
Blood is to he taken away ;’forby this means the Design not  
. only 'of Evacuation, but, also, of Derivation, is answered: \*  
But when a Discharge of bloody Urine is periodical, a Vein is  
to be opened two or three Hours before the Paroxysm,

.and such a Quantity of Blood taken away aS the Patient can  
bear.

*Hippocrates,* in the Part last quoted, in a Discharge of bloody  
Urine arising from an Exulceration os the Kidneys or Bladder,  
orders the Patient to drink temperate White-wine of in yellow-  
ish Colour 7 for too spirituous Wines, or such aS abound with  
an Acid; such as Rhenish-wine, are by no means proper where  
there is a painful Discharge of bloody Urine ; hut rather sweet  
Wines, fuch as those of *"Spain,* the *Canary* IflandS, and *Han- '  
gasp, sot* they not only promote Digestion, but are, also,  
friendly to the affected Bladder.

Since it is os great Importance what Rind of Liquor a Person  
labouring finder any Disorder of- the Kidneys and Bladder  
drinks, we are to observe, that he is carefully to abstain from  
thick and acid Ales, but to use large Quantities of small pure  
Beer, which, like an aqueous Medicine, resolves and Carries off  
the acrid and sandy Matter.' This is confirm’d by the cele-  
brated *Sydenham,* in his Treatiseink *Mictu cruento a Calculo Rae.,  
nibus impacto.* And that Physician, aS soon aS he entered his  
Coach, took a large Draught of Small Beer, which he repeated  
hefore he return'd Home, if he chanced to stay a considerable  
time; by which means he affirms, that he prevented a Dis-  
charge of bloody Urine; But the Ale used on this Occasion  
Ought to be well heil'd, and fermented. et '

. Though proper Exercise is of great Importance for the Pre-  
vention and Cure of chronical Disorders; yet it is quite other-  
wise in Excretions of Blood, especially from the urinary Pas-  
sages ; for nothing is more effectual in bringing on this Disorder  
than violent Exercise, especially Riding: And I have, also,  
seen loud and long-continu'd Speaking prove highly prejudicial  
in a painful Discharge os bloody Urine, arifing from a Disorder  
of the Bladder. Thus *Hippocrates,* in the Passage already-  
quoted, tells us, "that when Blood is discharged with the  
" Urine, the Patient is soon cured, if he enjoys a State os  
“ Rest; whereas by Exercise his Pains are rendered far more  
" intense.'' *Sydenham,* also, in the before-mentioned Trea-  
tise; determines the Matter by, his own Example; for when  
he walked much, or rode in a Coach, though veryfiowly, in  
the Streets, he was seized with a Discharge os bloody Urine;  
whereas, when he performed long Journeys in a Coach on the  
high Road which is not paved with Stones, he was never af-  
flicted with that Symptom. He, also, tells us, that he went  
soon to Bed, that the Concoctions, which are diminished by  
nocturnal Lucubrations, mioht be the more duly performed.

- In a Discharge os bloody Urine, whether froth the Kidneys,  
or the Bladder; whether critical, or symptomptieal; nothing is  
either more common, or more prejudicial, than the Use of  
Astringents, which too suddenly stop the Evacuation of the  
Blood ; for by this means inflammations. Exulcerations, and  
Putrefactions are produced, by the grumous Concretions re-  
tained in the V effeis: For as a Spitting of Blood, treated by -  
these Remedies, easily degenerates into .an Inflammation,  
Phthisis, or exulceration of the Lungs, so, also, a Discharge  
of bloody Urine terminates in an Inflammation, Ekulceration,  
and Putrefaction. When, however, the Effusion of Blood is  
Very Violent, and accompanied with excessive Loss of Strength,  
I have found excellent Effects produced hy the following Mix-  
ture, successfully used by *Sylvius,* in Discharges of bloody  
Urines - ' . .

Take of Plantain-water, two Ounces; of the Waters of  
PurIlane and Cinnamon, and of distilled Vinegar, each  
one Ounce and ah' half, of prepared red'Coral, Crabs-  
eyes, and Seal'd Earth, each one Scruple ; of liquid Lau-  
danum; three Grains; and os *eluercetarsts* Syrup oi-Coral,  
or *FerneliuPs* Syrup os Comfrey, a sufficient Quantity to'  
render the Preparation grateful.

Topics are; also, adyahsageoully applied to the lumbar Re-  
gion: For this Purpose we Iiiay use the Frog-spawn Plaister  
mixed with Alum, or Sugar os Lead, and a little Cainphire r  
The White of an Egg, beat with Aldus, and applied pretty  
cold to the Pubes, by way of Epithern, is, also, of consider-  
able Service: For these, by their mild, refrigerating, and astrin-  
gent Quality, in some measure check the Impetus ofthe Blood.

Those who’are now-and-then afflicted with this Disorder, or  
disposed th it, ought to be very careful with respect to their  
Regimen and Diet, carefully abstaining- from Wins, all Aro-  
matics, especially Garlic and .Onions, together with'aperient  
Roots, fuch as thofe’ of Parfley, Parsheps, Celery, and Aspa-  
ragus. Nor ought thesito fleep upon their Baeks, or lay them  
upon too warm Cloths, or Skins: Excessive drinkingof warm  
Infusions of Tea, or other Herbs, is to he avoided, and rather  
cold; or somewhat cold Liquors, are to be used. I' others, with ’  
great.Success, order a Decoction os dried Cherries’in Ptisan, to  
he used aS’common Drink. *Frederic Hoffman.*

*Of Predictions from* **URINE ;** *of the Nature and Causes of***URINE ;** *ana of what Importance it is with respect to Pro\*  
gnostication.*

Since it has been demonstrated that **the** Life or Death of **the**Patient in acute Diseases may he predicted from the *Stools,* [see  
DEJEcrIo] we are now in course to examine into the Signs  
and Prognostics which may be afforded from *Urine* relating to  
the same Subject; for the Observation of the *Urine* is of no less  
Importance than that of the other Excretions towards the pre-  
- faging a good or bad Event to Diseases. *Galen, de Loc. Affect.  
Lib.* 6. Cap. An telis us, that the gibbous Parts of the Liver,  
and all others which are superior to these, are subjected to an  
Expurgation by *Urine* ; and *Com.* 2. *in Lib. Prognost. y.* 26.  
. he fays, that the *Urine* is an Indication of the Affections os  
the Bladder and Kidneys; and more than this he telis us. *Cam.  
a.. in* I *Prorrhet. T.* 2. that it indicates, also, the Strength or  
Weakness of the Blood-Vessels, and of the Faculty which gene-  
rates the Juices. Many Disorders, therefore, though not all,  
as is Vulgarly imagined, in a great many Parts os thC Body,  
may he judged *os by the Urine, as may, also,* all Fevers, Hectics  
excepted, and inflammations, though these latter, when affect-  
ing the Thorax, are first signify'd by the Spit, as those which  
affect the Belly are indicated by the Stools ; but even in these  
Cases, the Judgment which may he made of them from the  
*Urine,* is not to he defpised.

Since theresore the Obfervation.of *Urines* is of Vast Moment  
towards **the** Prognostics of many Diseases, it justly deserves OurInquiry how sar we may venture to prognosticate from them  
with respect to **the Life** and Death os the Patient. FOr thin '  
End it will be proper to premise a sew things concerning **the***Differences* and *Causes* os *Urines,* which are necessary to he  
known, in order to predict Events from them in Diseases.

Every Physician knows, that the *Urine* is a serouS Excre-  
ment, secreted by the Kidneys, and from them by the UreterS  
transmitted to the Bladder, from which it is excreted and dis-  
charged from the Body. But by *Urine* we understand not only  
. the serouS Humidities, but all other Substances which are evacu-  
» ated by *Urine,* since they are of great Moment towards a Pro.  
f nosis. For the Matter of *Urine* seems to he of three Βο^ .  
ometimes the Excretion consists of the Humidities of the  
Meat and Drink, which, from those who drink much, are com-  
monly discharged in a crude and aqueous State. Secondly, the  
*Urine* is sometimes nothing but the serouS Humidity of the  
Blood impregnated with the Quality of the predominant Hu-  
mour ; and, in the last place, it may he composed of Humidi-  
ties proceeding from a Colliquation, as when it is of a sottish  
Substance. This triple Matter of the *Urine* is Very elegantly  
expressed by *Hippocrates,* 6 *Epid. Sect. 5. Apis.* I4. in the fol-  
lowing Words; ήρον όμόχροον βράματι καὶ πόματι, και ῶς έσωἐνν  
ἐὸν, ὑπὸ τοῦ ὑγρϊ ξύὑτηξις, " *Urine* is of the same Colour with  
" the Meat and Drink, and is, as it were, **a** Colliquation of  
" the internal Humid. "

But let us now take a distinct View of the Differences of  
*Urines,* and they may he distinguished with respect to their  
*Substance, dualities, quantity,* and *Contents.*

J As to their *Substance,* some are thin, others thick, and others  
are of a middle Kind ; os the thin Sort some continue so a long  
Time, others soon become thick; after the same manner, of  
*Urines* voided thick, some continue in that State, others become  
thin.

With respect to their *Qualities,* there is a triple Difference  
observable, one in regard to their *Colour,* another as to their  
*Clearnefs* or *Obs.curitysa.nd* a third with respect to *Smell.*

*‘' Urines,* with regard to *Colour,* are distinguished into *white,  
pale, yellow, gold-coloured, red, green, livid,* and *black.* There  
are several other Colours of *Urine* enumerated by forne ;. but  
these, which are the principal, will he sufficient to furnish us  
with Prognostics: And some *of these* Colours are .united with,  
or proper to *Urine* of a thin Substance, others to thick. Urine.  
To thin *Urine* helong the *light-red, yellaw, green, livid,* and,  
also, the *black* Colours. Some think, that only the *pale, light'  
red,* and *yellow,* are proper to thin *Urine*; but it is certain,  
that the *green, livid,* and *black,* are sometimes observed in *Urine*of a thin Consistence, as, for. Instance, in the Cases os *Hiro-  
phm,* the Wife of *Epicrates,* and *Meton,* observed by *Hippo-  
crates, I Epid. AEgr.* 3. 5.7. Of *Motors,* he says, ". that his  
*" Urine* was thin and blackish." It cannot, however, be de-  
nied, that *black Urine* is commonly thick; but *the stale, light.,  
red,* and *yestoui,* are never Voided thick, but are constantly thin;  
for these Colours are imputed to a Want of Matter.

With respect to *Perspicuity, csTDbseurenefs,* **in the** second  
place, some *Urines* are *altar* and *lucid,* others *turbid* and *ob-  
scure,* and of those which are voided clear some remain so,  
others, in a littie time, become foul or turbid ; in **the same**manner, os *Urines* excreted turbid some continue so, others, by  
**a** Subsiding of the gross Matter, become clegc .

**With respect to** *Smell,* **also, in the last place, some** *Urines***are** *fetid,* others not...

*Urines,* as was said, are distinguished, thirdly, with respect  
to their *Quantity, sot* sometimes the Excretions are copious,  
sometimes small, sometimes moderate, and, on some Occasions,  
wholly intercepted.

. The last Distinction mentioned *os Urines* regards she *Con-  
tents* **; and** under this Head may he observed a Multitude of  
Differences in *Urine.* **We** call the *Contents of Urine* that Sub-  
stance which appears in any manner separated from the Body of  
*thcUrine,* and is observed sometimes on its Superficies, sometimes  
in the Middle of the Vessel, and sometimes at the Bottom.  
This last the *Greeks* call *Hypostasis,* and we (the *Latins) Sub.,  
sidentia. Residentia, Sedimenta,* and *Subjecta* (the *Hypostasis,*Settlement or Sediment, which subsides to the Bottom os the  
Urinal). When the *Contents,* or separated Corpuscles, occupy  
the Middle os the Vestel, they are called by the *Greeks Enaeo-  
remat a,* and by the *Latins Sublimationes, Suspensu, Sublimia,*and *Suhlimamenta* (the *Enaorema,* or pendulous Substance in  
**the** Middle of the *Urine,* see ENAEoREMA). If the *Contents*appear on the Superficies os the *Urine,* they take the Name  
of *Nubes ζηά Nubeculae, " Clouds* and *Mists,* or Films.” Un-  
der the Head of *Hypostasis,* or *Sediment,* may he reduced .a  
Variety of subordinate Distinctions ; for some *Hypostases* are .  
thick, others thin, some continuous, others discrete, or inco-  
herent, and not at all united, but unequally dispersed through.  
**the** Substance of **the** *Urine. .* They are, also, distinguished into.  
*white-pale, yellow-pale,* or *deep-red, green, livid* and *black,* and  
into *iferid* and *not fetid.* Again, os *thick* Sediments, some con-  
fist of crude and gross pituitous Humours, others are of a me-  
lancholic, or black adust, and others, to name no more, os a  
red and sanguineous. Consistence. These *thick* Sediments, or  
*Hypostases,* appear, also, of Various Forms; some appear in the  
Shape of Grains, and are for that Reason called by the *Greeks  
Oroboides',* sometimes they shew like Scales, and have the  
Name of *Petaloides;* sometimes like Bran, narrower but  
thicker than the scaly Sort, and take the Appellation of *Pi-  
tyroides* ; and, in the last place, these Hypostases sometimes re-  
semble a kind os Meal, and are hence called by the *Greeks  
Crimnodes* ; and like these last, in Appearance, are the purulent  
*Urines,* which consist of Pus. Sometimes, also, .there appears  
in the *Urine,* a thick, pituitous Substance, and a mucous Hue  
mour. , . ' .. ... ζ

in the Enzoremata, or suspended Corpuscles, as, also, in  
the superficial Clouds, or Filrns, appear the same Varieties,,  
with respect to Continuity and Division, Equality and inequa-  
lity, Thickness and Thinness, Difference of Quantities, and  
Diversities of Colours, with those before ascribed to the Hypo-  
stases. But it is proper to the superficial *Contents* to Consist -  
sometimes of oily and pinguious Particles.

*Of the different Causes of the* **URINE.**

In treating on this Head, we shall begin with the *thick* and  
the *thin Urine:* The last Sort in Fevers always indicates 4  
Weakness of Concoction, and is occasioned either from an Oh-  
struction of the Blood-Vessels, Ureters, Kidneys or Bladder,,  
by which means only an ichorous, or thin serous Humidity is  
excreted, or when the Humours take their Course to the;  
Head, as the Case is in Phrensies, where a *Tbinnesis* os *Urine*is a common Symptom. Hence we conclude, that, a *thin Urine*is excreted when nothing of the Humours happens to he mixed  
with it, and that a *thick urine* is occasioned from a Mixture of  
something which is the Result of a Concoction attempted\_by  
Nature, or the Removal os some Obstruction. That a *thin .  
Urine* in Fevers always signifies Crudeness we are taught by  
*Galen* in many Places ; and *Hippocrates* 3 *Epid. Sect.* 3. *Stat.  
Pest,* speaking of epidemical burning FeVers,tells us, they were  
attended with " plentiful Excretions of *thin Urine,* winch, had  
" nothing Critical, nor were of any Service to the Patient./'  
This *Thinnes.s* of the *Urine* sometimes continues, sometimes  
alters to *Thicknesi c.* The latter shews, that Nature has begun its .  
Work or Concoction ; but the other indicates, that the Busi-  
ness is as yet unattempted, and is a Sign of an extraordinary

- Crudeness, as we are taught by *Galen, Lib. de Urines, Cast.* 3.

*T.hici Urine* is occasioned by A Mixture us *Humours,^* and if  
it appears in the Beginning, indicates a: Redundance of gross  
Humours, as we are told by *Galen, Lib. FCrasita inHippocratem  
dictat,* but in the State or Height of the.Disorder, it shews,i.that Nature attempts an Excretion of the Humours.,

*Much Urine* proceeds from plentiful Drinking, or a Re-,  
dundance os Humidities, as in a Dropsy, and a Suppression  
of Evacuations by Stool in an humid State of. the Belly,,  
on which Occasion we are told by *Hippocrates,* 4 *Aph.* 82.  
" that copious excretions of *Urine* by Night, are an Indica-.  
" tion of small Discharges by Stool. '\* An immoderate Quan-,  
tity of *Urine* may be occasioned, also, by an Inflammation of.  
**the** Kidneys attracting to themselves a Vast Plenty of Humidi-'

ties, aS in the Diabetes, or from a Mutitude ofHurfiburs'when  
the Patient undergoes a critical Expurgation by the Kidneys, as  
was the Cafe with many observed by *Hippocrates,* 3 *Epid.*

*. Urine* in too small Quantities proceeds from-contrary Causes,  
as from drinking but sparingly, from a too plentiful Discharge  
of the Humidities by Stool or Sweat, or a Consumption os them  
by an immoderate igneous Heat, as it usually happens in bunt-  
ing Fevers, in which Cases it is often totally suppressed. Some-  
times, also, as it is well known, the *Urine* is excreted in small  
Quantities from an Obstruction of the Passages, by which it  
makes its Way through the Kidneys or Bladder.

As to the CaufeS of the *Colours* of *Urines,* we shall begin  
with the white *Urine,* which is either *thin* or *thick, lgrhite thick  
Urine,* aS we are taught by *Galen,* indicates a Redundance of  
crude and gross Humours, especially what is excreted thick, and  
continues so. *Urine* of this Kind, in which nothing subsides,  
indicates an extraordinary Crudeness, and an extreme Weak-  
ness of the Faculty of Concoction. Hence such *Urine* in acute  
Diseases is pernicious, as it proved in the Cases of the Wife of  
*Philinus,* and the Wise of *Drorneades,* I *Epid. Algr. An Ii.*But *Urine* of this Kind, which begins to grow thinner, shews  
that Nature has begun Concoction.

*. White thin Uriue,* which *Galen, Com: in* 4 *Lib. Aph.* calis  
*aqueous Urine,* has for its Causes either a Weakness of the con-  
coct ive Faculty, as in old Persons; or an Obstruction of the  
Kidneys, as in nephritis Disorders before the Stone is discharged;  
or an Obstruction of the Liver; or, which often happens, a  
total Diversion of the bilious Humour to the Brain ; for which  
Reason fuch *Urine* portends a Phrenfy, aS *Galen* assures us,  
*-Lib. de Uriis. Cap.* 6. As this Kind of *Urine* indicates an  
highly crude State of the Disease, with an extreme Weakness  
os the concoctive Faculty, it is of all *Urines* the most pernici-  
ouS, especially in bilious Diseases, aS we are allured by *Galen,*I *Lib. de Crisibus, Casi.* I 2. and *Com.* 2. *in Prognosi. T.* 32.

The Cause *Cd pale Urine* is the Mixture of .too small a Quan-  
tity of the yellow Bile with the serous Humidities; but this  
.Sort of *Urine* seems not far removed from a State of Concoc-  
tion, provided It he not Very thin.

*Yellow, light-red,* or *saffron-coloured Urine,* if *thin* at the  
same time, indicate the Disease to be in an absolutely crude  
State, and the Viscera affected with a Violent burning Heat;  
but when *thick,* it is a Sign, of Concoction, and sometimes of  
a critical Excretion.

*Red,* and *reddest) Urine* take their Colour from Blood, as wo  
learn from *Galen, Lib. de Oris,* and *Com.* 2. *in Prognosi; tss\d*more fully. *Com. in* 3. *Epid.* They are occasioned by an Ex-  
cretion os half-concocted Blond by the urinary Passages, and  
indicate, as he says in the Treatises just mentioned, a Redun-  
- dance of an unconcocted and serous kind of Blond in the Ves-  
sels, and the inner Parts of the-Body; such *Urine is,*also, an Indication to us of the Imbecillity of the secretive  
Faculty whence *Hippocrates, Lib. Prognost.* telis us, that  
reddish *Urine* signifies a long Duration of the Disorder, or  
.that a long Space of Time is required for the due Concoction  
-of the Blood. *Reddest, thin Urine,* though the Author of the  
.Book *de Urinis* denies there is any such *Urine,* IS occasioned by  
a flight Tincture of ichorous Blood; but the *thicb* and *reddish*IS from a Redundance of unconcocted Blond, as may he often  
observed in that burning Fever called *ZSynochus.*

Resembling the former is that *Urine* which iS coloured with  
.Blood, and called *bloody,* or *sanguineous Urine.* Such Excre-  
tions are occasioned from the infirm State of the Kidneys, and  
a Relaxation os the Vessels which terminate in those Parts, called  
;an *Anastomosis,* or a Relaxation of the Ducts which lie hetween  
the first and second Sinus; from such CaufeS proceeded  
*-ffit. bloody Urine* discharged by *Apemantus* and the Carpenter,  
/mentioned by *Hippocrates,* 4 *Epid. T.* I9." Sometimes a Dis-'  
charge os Blood is occasioned by a Rupture or Aperture of the  
: Veins, or an Ulceration of the Kidneys or Bladder, as we may  
learn *lenrit. Hippocrates,* 4 *Aph.* 86. where he says, " If Blood,  
" or Pus, or Scales, ate excreted by *Urine,* and this *Urine* has,  
" also, a fetid Smell, the same indicates an Ulceration of the  
" Bladder ; " and *ibid. JJ.* " A sudden [ἀπὸ τάυτομάτου, spoh-  
. t" taneoufly, see AUTOMATOS] Discharge of Blood by Urine,  
r" indicates aRuptureOs some small Vein in the Kidneys. "

*Green Urine* is either from porraceous Bile, generated in **the**.Stomach, as *Galen* says, from the Crudenefs of the Humours,  
or else from an seruginous Humour in the Veffeis, which owes  
its Original, according to the fame Author, *Corn. i.in Prognost.*to a burning Heat, and vehement Adustion of yellow Bile. In  
Persons who are in Health, or free from a Fever, such *Urine*is generally a Sign of porraceous Bile; hut in acute Fevers and  
Inflammations of the Viscera, it indicates an zruginous and  
bilious Humour, according to *Galen, Lib.* **2.** *de Crit.* where  
he determines this Colour in particular to proceed from an Al-

fetation of yellow Bile, by the Force of a burning Heat: into  
Bile of a black Colour.

: Next in Colour to *green is oily Urine,* which however is not  
sat, or pinguious; but as *Galen, Com. in staEpid. T. Ji.* and '  
*de Crisibus,* describes it, resembles Oil in Colour and Consist-  
ence; and this Sort os *Urine,* as he telis us, he had sometimes  
observed,'proceeding from a Concoction os the Disease, **with-**out any bad Consequence to the Patient.

But *pinguious,* or *fat Urines,* which by their Fatness resemble  
Oil, or are called *oily,* because, like Oil, they swim on the  
Superficies, have quite another Cause; as proceeding always from  
a Colliquation of the Fat, either of the whole Body, or only  
of the Kidneys. To this Purpose we read in 7 *Aph.* 35. thee  
" a pinguious and compact Hypostasis indicates an acute Dis-  
" Order of the Kidneys." And we may know, says *Galen,*in his Comment on that Aphorism, when there is a Colliqua-  
tion in the whole Body from the feverish Heat, if it were only  
by an Excretion of Fat with the *Urina* successively, and not  
all at once, as in a Colliquation only of the Kidneys. Hence  
we conclude, that there are two Sorts of *oily Urines* one,  
which in Colour and Consistence only appears very like Oil,  
and another, which is of a pinguious Substance, and which  
*Hippocrates,* in the Aphorisms hesore-rnentioned; says, con-  
tains Fat. Of this latter Sort of *oily Urine,* he says, in bis  
*Prognostics,* " If there he a‘ Fatness on the Superficies resem-  
" bling a Spider's Web, it is to he condemned, for it is a Sign  
" of a Colliquation." *Galen, de Sanit. tuend.* telis us, that.  
this Fat swimming on *Urine,* is like that which concretes - on  
the Superficies of Broths when cooled. And, *Lib. de Untnis,*a Treatise ascrihed to him, he makes three Distinctions of this  
kind of sat or *oily Urine*; the first is what the *Greeis* cast ‘  
*Elaochroos,* which is of the Colour of Oil, and indicates a he»  
ginning Colliquation; the second is called *Elaephanes* ; .this has.  
a more exquisite Mixture os oily Particles, and shews that **the**Colliquation increases; the last is the *Elaodes,* which in its  
whole Substance, and in all respects resembles Oil, and shews  
the last Degree, or Height, os a Colliquation. But the **same**Author, *Com. in* 3 *Epid. ηο..* makes two Rinds of *oily Urine,.*one like Oil in Colour and Thickness, but void of Fatness; an-  
other Fat, of which there are two Sorts, one with a Fatness '  
swimming atop, like the Eyes of Oxen, called bv the *Greeks  
Elaeephanes*; and another, which has its Superficies covered  
within fat Substance resembling a Spider's Web, and is called  
*Elaeodes.* All these Kinds of *oily,* or more properly, *pinguious  
Urine,* proceed from a Colliquation of the Fat by an igneous i  
Heat, aS was before observed.

*Urine* of a *livid* Colour proceeds from an immoderate Cold-  
ness, according to *Galen, de Cois. Lib.* I. *Cap. 12.* and is  
therefore pernicious in acute Distempers, as indicating an Ex-  
tinction *os* the natural Heat. It is however sometimes occa-  
sioned by a gross, livid Matter;- and on that account not deny \*d  
by *Hippocrates* to he good; and sometimes critical.

*Black Urine* is either the Effect of an immoderate Coldness  
(though in that Case it may more properly be styled *obscure*than *black},* or of a burning Heat. *Galen, Com. in* I *Prorrhli*telis us, that *black Urine* is occasioned by a Mixture of black  
Bile with the Serum, which finges the *Urine* with a black Cc-  
lour; and *Com. in -%. Epid.* he says, that it proceeds from **a**melancholic Blood, which like Soot, communicates its Colour  
to the Serum. Hence, *Lip.* I; *de Cois. Capi* I2. he says, that  
*black Urine* is a Sign of a Redundance of black Bile, or adust  
Blond in the Body. But here we Are to make **a** Distinction  
of this Kind of *Urine* into those of a thick and a thin Cofist-  
**ence.**

*Thick black Urine* always derives its Colour from a more thati  
ordinary copious Excretion of **a** gross atrabilious Humour, **or**black Bile, or adust Blood, whence in Quartans, and Diforders  
proceeding from the Spleen and Melancholy, a thick and  
black Kind of *Urine* is evacuated.

A *thin* and *black Urine, Galen, Cons. 2. in Prognost.* and -  
*Lib.* I. *de Cris.* supposes to proceed either from excessive Cold-  
ness, which occasions, also, a Blackness os the Blued, or from  
an immoderate Heat scorching the Blood. We know and cart  
predict these Kinds of *Urine,* because they are preceded by  
*Urine* of a yellow, light-red, or safiron-coluur; livid *Urine,*also, changes to *black. so-*

**We** should next in Order, after *blade Urine,* **treat -of the**Causes of *clear* and *fond, or turbid Urine.* AS for *clear Urine,*which is permanens, or continues in a State of Clearness, if in ‘  
included in what has been said of the Colours of Urine in its  
'thin Consistence, and therefore we are to treat only of fuch  
Brine as is excreted *clear,* but after some time become\* *turbid.*This Kind of Urine every one knows to he crude, and to be-  
come foul and disturbed from aRedundanoe of groin Flatulences,  
and consequently it is regarded by every Physician of the least  
Experience, as an Indication Of-Nature's Efforts toward a Con-

Coctron. *Galen, de Sanati iuend. Lib. 4. Cop.* 4. says, " If  
" the *Urine* he excreted pure and clear, but is immediately dis-  
curb'd, it shews that Nature sots about the Concoction .of  
the crude Juices; if the *Urine* becomes not soulimmedi-  
" ately, but after some time, it is a Sign that Nature has not  
." yet hegun its Work, but will attempt it hereafter.” The  
same Author, *Com. in 2 Epid, in* 4 *Asch\** δΓ *Lib. An de Sanit.*

*. tuena. et Lib.* **1.** *de Cris.* makes three Sorts of *turbid Urine ;*one excreted clear., and becoming *turbid* afterwards, of which

**- we** now speak; another excreted *turbid,* and becoming clear;  
anda third which is.excreted *turbid,* and always remains in that  
State. This last is by Physicians generally call'd *Subjugalis,*with reference to Horses *sub yugo, “* under the Yoke," or us'd  
.to draw;-because in Colour, Thickness, and Foulness, it re-  
Temhles the *Urine* of a working Horse. Such Sort of *Urine* pro-  
ceeds from crude and gross Humours agitated by Heat, and an  
Elevation of numerous Flatulencies thence occasion'd, which  
mix with the Serum, and render it confus’d and turbid. For  
this Reason *Hippocrates,* 4 *Aph. Cap.* 9. says, " That *turbid  
" Urine,* like that of Horses, in Fevers, indicates a present

. " or future *Cephalalgia*as it is a Sign to us, he means, that  
Multitudes of Vapours are elevated and convey'd to the Head.  
*Galen, Com.* 5. *in* 6 *Epid. T.* I5. says, " that *turbid Urine,*ce like that of Horses, is proper to those whe abound with crude  
**f \*** Humours, winch are put in a State of Fusion by the Heat."  
By this means, heing converted into a spirituous Kind of Sub-

, stance, they furnish Plenty of Matter for flatuous Exhalations  
to the Head. *Turbid Urine,* then, we find, proceeds from crude  
andgross Humours agitated by Heat.

*Turbid Urine,* which hecomes clear, is, from the natural  
Heat, employed in Concoction; but *Urine* always remaining in  
**a** *turbid* State is generally the effect of a febrile Heat agitating  
and consoimding the Mass of Blond, and is such as we fee in  
the Beginning of malignant Fevers, when Nature has done no-  
. thing towards a Concoction. *' Avicenna,* and the other *Arabian*Physicians, tell us, that *turbid Urine,* which never setties, fore-  
shews an Ebullition of the Humours, on account of the Vio-  
lence of an extraneous Heat, and the Weakness and Indispo-  
sition of the natural Heat towards a Concoction. But *Galen,  
de Cris. Lib.* i. *Cap.* i2. says, that *Urine* remaining *turbid,*without hecoming in the least clear, indicates that Nature has  
begun an Agitation in. the Blond, and is in full Vigour and  
Strength, sufficient for Concoction; but that *Urine* excreted  
clear, and soon after becoming *turbid,* signifies that the Agi-  
tation of the Humours towards a Concoction is not yet begun,  
hut may he expected. For these Reasons, he prefers that Kind  
of *turbid Urine,* which always remains in that State, because  
they indicate a beginning Concoction, as he more clearly ex-  
presses it, *de Sanit. tuend. Lib. An Cap. An* where he says, that:  
*" Urine foul,* or *turbid,* like that of Horses, indicates a Re-  
" pletion of the Veins with fitch Humours as are called crude;  
" hut that Nature, however, ceases not from her Work, but  
powerfully concocts them."

. And of *Urine* which becomes *turbid* after Excretionshe there  
adds, " If It he Voided pure, and immediately turns foul, it  
" shews that Nature attempts a Concoction; but if it grows  
*AViturbidAt* some Distance of Time, it is a Sign that Nature is

" not at present, but will shortly he, employed in that Work."  
A little after the seems to affert the contrary, when he says,  
" If there he no Separation, or what subsides is had, it shews  
or that Nature is weak, and wants Assistance in concocting the  
" Juices.'\* Dpon the Whole, it must be said, that *turbid  
Urine,* continuing in that State, is sometimes the Effect of an  
extraneous Heat agitating the whole Mass of Blond, and some-  
times proceeds from the natural Heat, or Nature itself employ'd  
- in Concoction; and that in the latter Case it is distinguished  
from the other by its not appearing in the Beginning, but in the  
Increase of a Disorder, when Nature manifestly attempts a Con-  
coction ; after which the *Urine* has a Sediment, or becomes less  
*turbid,* the Strength not much impair'd, and the Disease is free  
from mortal Signs; And this perhaps is no more than what *Galen*means in the. Chapter above quoted, by the following Words:  
" Of all *turbid Urines,* let the general Character be aSepa-  
" ration of the *thick* from the more *liquid* Part, which is either  
" quick or flow, or none at all. If it be quick and imme-  
" diate, and what subsides he white, smooth, and equal, it  
" shews Nature far superior to the Juices which it concocts ;

\* " but if what subsides he bad, Imhecillity of Nature is signi-  
" sied.'' If then fuch *turbid Urine* appears, as we said, in the  
Beginning of a Disorder, at which Season Nature attempts no  
Concoction, on account of the Ebullition and Agitation of the  
extraneous and febrile Heat, it indicates a Turbation from a Re-  
alundance of crude and gross Humours put in a State of Fusion  
by the Vehement Heat, which, in Conjunction with the Violence  
-os the Distemper, and the extremo Weakness of the Patient,  
may he justly esteemed a satal Prognostic, *Galen,* therefore,  
\_ might well say, *Corn, in* **4** *App. T. rjQ, « Toepest Crsm.* which

" Comes to no Settlement, if the Patient he strong, shews the  
ic Disease wist be of long Duration ; if weak, that it will he  
" mortal.'' *Urine,* then, which appears *turbid,* and continues  
so in the Beginning of a Disease, proceeds not from the natural,  
but an extraneous Heat, which is confirmed by the Weakness of  
the Patient, and some pernicious concomitant Sign, and from  
its having nothing of a laudable Sediment.

We have spoken largely of she Causes of *turbid Urine,* and  
would treat, in a few Words, of the Origin and Cause of *pun.  
gent Urine,* or such as is excreted with Pain, and a pungent Sen-  
sation : This, in short, proceeds from highly-acrimonioUS and  
hot Humours, which are Voided together with the *Urine,* and,  
according to *Hippocrates,* r *Epid. Sect.* 2. are the Occasion of  
a Strangury. . And *Galen, Com. in* I *Epid, to* the fame Pur-  
pose, telis us, " that when the excrementitious Parts of the  
α whole Body are purged off by the Passages of the KidneyS,  
" the Patient is seized with a Strangury, aS well upon other  
" Accounts, aS principally from the Acrimony os the confluent  
*" Urine*this Acrimony is the Effect of an immoderate De-  
gree os Heat.

*Fetid Urine* is known by every Body to be the Effect of an  
extraordinary Putridness either in the Vestals, or the Kidneys, or  
the Bladder.

As to *Urines* of an equal and unequal Consistence, *Galen,  
Com. in* 7 *Aph. T.* 33. makes the following Remarks: " If **we**" take the Word διεστηκῶς (distant or separate) in its proper  
" Sense, the Thing is impossible ; because *Urine* is al ways con-  
" tinuous, without Interstices; but if we understand by this  
" Term an Inequality os Substance or Consistence, he (Hipo  
*" pocrates)* rightly says, that such.an Inequality, indicates a **Ve-**" hement Perturbation in the Body: For when Nature pre-  
" Vails, and is predominant, all Things are equally united-;^  
" but when it is repelled and controlled by Variety of stubborn  
" and rebellious Matters, that Portion of them which is sub-  
« dued and concocted, takes one Form; and what is renitent  
" and refractory, another ; and when there is a great Variety  
" of these contumacious Particles, it shews rhe Inequality in  
" the *Urine* to be Very considerable, as well as the Perturbation,  
" which is the Cause of it.''

We have given you the Causes of the various Rinds *es Crine,*and proceed to treat of the Causes of its Contents; under  
which Head we are to inquire the Reasons of those Contents  
at the Bottom, which we call *Hypostases, Subsidences,* and *Sedi-  
ments* ; and what are the Causes of those pendulous. Contents  
in the Middle, which pass by the Names of *Enaoremata* and  
*Sublirnamenta*; as, also, the Reasons of the Nhherand *Nape-,  
eulae.* Or the Clouds and Films which swim on the Superficies of  
*Urine.*

In general, the Variety os Contents in *Urines* depends on the  
various Generation and Mixture of Flatuosities; for when there  
is a Redundance of these in the *Urine,* the excrementitious  
Particles are conveyed to the Superficies ; when there ia but a  
moderate or small Quantity os them, they make this Settlement  
in the Middle ; and if there bemone at all, they reside at Bot-  
tom. Hence it is that an Hypostasis indicates a good Con-  
coction, in which the Flatuosities, being discussed, cause no  
Perturbation. This, however, is no necessary Consequence  
from the Contents heing lodged at the Bottom, fince not every  
Hypostasis, or Sediment, infers, of Necessity, ’ a Concoction,  
but that which is white, smooth, and equal at all Times, aS we  
are taught by *Hippocrates,* in his *Prognostics.* Nor do *Clouds*and *Films* always signify Crudeness: For, as we are told by **the**same Author, in the Book just quoted, " Clouds on the Sure  
" face of *Urine,* if white, are good.'\* And *Galen, Lib.* i.  
*de Cris. Cap.* I2. telis us, that in Patients inured to Fasting  
'and immoderate Labour, the Disease often has its Solution he-  
fore any thing subsides in the *Urines* and it is generally suffi-  
cient if there he a white Cloud, and a white, smooth, and  
equal *Enaorerna. . . . ’*

But white, smooth, and permanentiy equal Contents, in **the**Bottom of the Vessel, or Urinal, constantly signify Concoction,  
an *Enaeorema* of that Kind a less Degree of Concoction; and a  
Cloud of the same Sort, aS bring situated highest of all, a still  
lesser Measure of Concoction of the Disease. . . . .

The Contents, or excrementitious Particles, elevated in **the**Form of a Circle, to the Superficies of the *Urine,* is a certain  
Indication of a *Del’trium, as* was observed by the Author os  
**I** *Prorrhet.* and I have frequentiy sound the Truth of it by Ex-  
perience.

*A* copious *Sediment,* though it occupies the lowest Place in  
**the** Urinal, indicates a Redundance of crude Humours, as  
*Galen, Lib.* I. *de Cris. Cap.*. I2. has demonstrated, from Ex-  
amples of Children bred in Idleness, and pamper'd with full  
, Diet, whose *Urine* abounds with Crudities, from a Repletion  
of the Body with crude Humours. And, *Corn. An in Prognosi.***he says,** that there appears a copious *Sediment in Urine,* when  
the Disease is fomented by crude Humours; and that there is

. very littie or no *Sediment* in the *Urine* of those who labour under  
bilious Diseases, or are used co Fasting, and hard Labour. . .

A *then Urine,* Sediment, or Hypostasis, is a Sign of thin Hu-  
mours ; but a *pure* Hypostasis, which scarce rises upon shaking  
the Vestel, shews a great Weakness of Nature in the second  
Concoction.

*Thick* and *gros.s Sediments* are, in like manner. Indications of  
- gross Humours, agreeably to what we are told by *Galen, Com.  
in* 4 et 7 *Lib. Aph.* and *Lib. de Plenitud.* where he says, that  
" the *Urine* of voracious Persons has a thick Sediment.\*' We  
- affirm, therefore, that a gross or think Hypostasis is an Indi-  
cation OP gross Humours, and consequently of difficult and  
troublesome Disorders.

An *united,* or *continuous,* and *equal Hypostasis,* of a pyra-  
ι midal Figure, is highly commended, as heing a Sign of a Very  
good Concoction; aS, on the contrary, a *discrete* and *unequal  
Sediment,* or *Hypostasis,* has a quite different Signification.  
*Galen, Lib.* I. *de Crisu Cap.* i2. For an *Hypostasis* which is  
*unequal,* and *discrete,* or consisting os loose and separate Parts,  
shews a Redundance os gross Flatuosities in the Veins, which  
are incapable of being dissolv’d and discuss'd by Nature, .as we  
are told by the Author of *Lib. de Urints.*

As to the Colours of the Contents of *Urine, white,* as we  
said, is judg'd the best, if the Matter he, also, continuous;  
smooth, and equal; and such is the Result of a perfect Con-  
coction. :

Unequal discrete Contents are distinguish'd from an *Hypo,  
stasis ,3s* making a Substance disjunct, or disunited,and dispers'd,  
like small and minute Partinies of Sand, through the Body of  
the *Urine.* These are the Effects of a copious Phlegm, or pro-  
ceed from Pus, or a Colliquation of the solid Parts; and of  
this Nature are the Contents resembling coarse Flour, and the  
*Hypostasis* which the *Greeks* call *Crimnodes. . -*

Red and redish Contents signify Crudeness, and Want of  
Concoction; whence it is justly said by *Hippocrates, Lib. Pro.,  
gnost. “* that redish *Urine,* with a redish and smooth Sediment,  
" shews the Disease to he of longer Duration than in the first  
" Case [where the Sediment is white, smooth, and equal] ;  
." hut is, however. Very salutary.'' The Author of the Book  
of *Urines* says, that red Contents proceed from an ichorous  
Blood, and signify Want of Concoction.

. Yellow and green Contents are bad, because they shew, that  
rhe Disease is fomented by a yellow, aeruginous, or porraceout  
Bile.

. The worst Colours in the Contents of *Urine* are the livid and  
the black. A. livid Colour soon changing tn black, proceeds  
-from a Refrigeration of Heat; and a yellow, light-red, or  
green Colour, quickly altering into black, is the Effect of an  
igneous Heat burning the Humours. Justly, therefore, does  
*Hippocrates, Prognosi,* pronounce black Clouds in *Urine* had. - -  
. Os Contents in *Urine* which proceed from a Colliquation,  
and therefore appear in various Shapes, those *Hypostases* which  
are call'd by the *Greeks Oroboides,* because they referable the  
Pulse *Oro bus,* arid, also, *Sandarachoides,* are the Effects of a  
beginning Consumption of the Flesh after the Fat is consum'd;  
and are Indications of a Colliquadon either of the whole Body,  
or of the Kidneys.

‘. The Contents, or *Hypostases,* call'd, in *Greek, Petaloides,*that is, squamous, or scaly, appear, according to *Galen,* when,  
astes a Colliquation of the Fat and Flesh, the superficial Parts  
are abraded by the igneous Heat.- . . ... ς .- ἐν

I The *Pdtyroides,* or *furfuraceous Hypastas.es,* which are nar-  
rower and straiter, but yet thicker, than the scaly Sort, are the  
Effects of a Dilaceration and Consumption of the Veffeis of the  
solid Parts by the igneous Heat.

In .the last Place, the Contents or *Hypostases* call'd Grike-  
*. noides,* which are like coarse Meal, or Flour, proceed-from a ‘  
’ Consumption of the solid Parts more Violent than the former:

Of these Kinds of *Hypostases, Tea* find: *Hippocrates* pasting his  
. Judgment, *Lib. Prognast.* in the following Words: " Xf the

*" Hypostasis* of the *Urine he Crintnoides* [like coarse Flour], it  
"is had; but the *Petaloides* [resembling Scales] are worse;  
" the-white and thin is Very had; but the *Pityroides* ssursu—  
". raceous] is still worse." Here *Galen,* in his Comment on  
the Place, telis us, that These Kinds of *Urine* are the Effects of  
an igneous Heat scorching the Blood, or consuming the Flesh in  
an unequal manner.

**DT &nd URINES,** *portending Recovery.*

*. Urine,* as well aS other Excretions; affords Indications in Dis-  
eases for a *Prognosis* of Death or Recovery, two Ways: First,  
as it. is a Sign os Concoction and Malignity ; and, secondly, as  
It is ACause, in discovering itself to be a good or bad Excretion.  
Os *Urine* portending a good Event, .in both these Respects, we  
find *Galen, de Cris. Cap.* I2. and *Com. in* 3 *Epid,* giving the  
sollowing Description : " The best Kind os *Urine* is what isos  
" a moderate Consistence, answering in Proportion' to the

“ Quantity of Drink, of a lightish Red, or yellowish Colour»  
" with a white, smooth, and equal Sediment, or *Hypostasusa*" The best *Urine, lens Hippocrates, Lib. Prognast.* is what has  
" a white, smooth, and equal Sediment, during all the time  
." before the Crisis; for this signifies that the Patient is in a safe  
." State, and that the Disease will not he of long Duration t  
" But if there he an Intermission, and the *Urine* he sometimes  
" pure, and sometimes with a white and smooth *Hypostasis.,* the  
" Disease will he the longer, and the Patient the less secured\*  
*Galen* adds, " The *Urine* ought to he of a moderately saffron  
" Colour,and of a mean Consistence hetweenthin and aqueous,  
" and thick like that of Horses.'\* The same Author, *Lib.* I.  
*de Crisibus, Cap.* I2. says, « that the best *Urine* is rather of a  
" lightish-red, than yellowish Colour;" And *Corn, in* I *Epid.*and *Lila io. SimpL* he makes it moderately yellow;.and *Lib.*

2. *de Sanip. tuend. Cap. 2.* he says, " that a lightish-red and  
" bilious *Urine,* is an Indication of a perfect Concoction in  
" Diseases." . . ;

In many Cases concocted *Urine* has hut littie Colour; in  
others it is more deeply tinged ; whenceitappears, that the best  
*Urine* is not always observ'd to he of tho fame Colour. The.  
divine *Hippocrates* was of Opinion, that we were not so much  
to regard the Colour or Consistence of *Urine,* aS its Contents,  
in order to a *Prognosis* ; fince. In the Place just quoted,- where  
he describes the heft *Urine,* he says not a Word of- the Colour  
and Substance, but only of the Contents: For he telis us, that  
An the hest *Urine* is what has a white, smooth, and equal Sedi-  
" mens," omitting the Colour and Substance, which .are-not  
observ'd to be always the same in such an *Hypostasis. :* And  
though, indeed, it he necessary for the *Urine,* when furnish'd  
.with the best *Hypostasis,* to be of the hest Colour, and of a mo-  
derate Consistence, and in temperate Bodies such Colours are  
usually observ'd, as before describ'd, and reputed laudable, yet  
as there is a vast Variety in *Urine* with respect to the Various  
Constitutions and Dispositions of Bodies, we are to hare recourse  
to a general Method for discovering the best Kind of *Urine in*all particular Cases. Here we are well directed by *Anistetk,  
Lib.* I. *ProbL T.* 52. " The best *Urine,* he fays, is moderate  
" in all Respects, find most like that of the Person in Health ;  
" which is a Precept to he regarded by the young and unejo.  
" perienced Physician, in his Inspection of *Urines^,* in which,  
when he sees any Alteration from what it was in a State of  
" Health, he may safely pronounce the Person to whom it be-  
" longs fallen from a perfect State of Health and Soundness." .  
This of *Aristotle* is certainly a good Rule for judging of good  
and had *Urine,* since the Theory of *Similars* and *Dissimilars is*one of the chief Principles of the *Nstus Prognosticating.* Upon  
these Considerations we, also, conclude, that in Diseases such'  
*Urine* is to he esteem’d: the best, as approaches nearest to the  
*Urine* ofthe Patient in Health; and this is the Characterwhich  
*Galen,* also, has given of It, *Lip.* Is *de Cris. Cap.* I2.

But, for our clearer and more exact *Diagnosis* of the best  
*Urine,* we are attentively to consider the Temperament os the  
Body and *Viscera,* with the Age, Sex, Dies, and Way of Liv-  
ing, of the Patient: For the *Urine* of Bodies of an hot Tem-  
perament is of an higher than ordinary Colour =; and the *Urinae*of Persons of a cold Temperamens, of a sewer Colour than is  
consistent with Mediocrity. In respect of Age, -young adult  
Persons make-thinner *Urine,*--.and more colour’d than Children;  
and the *Urine* os Children is thicker than ordinary, as that of  
old Persons is thinner, and more colourless. With regard J6  
Sex, the *Urine* .of Women is thicker, and more colourless,'than  
that of Men, and more abounds with Contents: In other  
Respects, the *Urine* of voracious Persons abounds with crude  
Sediments; on the contrary, the Urine, of those who are us'd to  
Fasting has but little Sediment, and is more coloured than the  
former ; and the same Appearance in the *Urine* is effected by  
W archings and Fatigue;- whereas the *Urine* of chose whe live in  
Idleness abounds with Sediment, and is less colour'd.- - .

Hence we conclude, that in Children the best *Urine* is whet  
appears of a thickish Consistence, is but ssightiy tinged, and  
abounds with a copious, white, smooth, and constantly equal  
*Hypostasis..* In Youth and Manhood the *Urine.*ought to he more  
deeply tinged, and of a yellowish or lightish-red Colour, and of  
a thinner Consistence, with fewer Contents, imd To much the  
thinner, and more colour'd ,-as the Body is of an hotter Tempel.

’ rament; -andso much the less colour'd, as the Temperament os  
the Person is colder. In Woman the *Urine,* on some Occasions, .  
must be thicker, and more colourless, than ordinaryin Per-  
sons finder Circumstances of Fasting, Fatigue; and Watching,  
higher-colour’d, and thinner, with fewer Contents; and in  
those who indulge themselvesi in plentiful Living, and Idleness,  
the *Urine* must he expected less colour’d, os a thinker Consist-  
ence, and with a more copious Sediment. . . ..

But in Bodies of a moderate Temperament the bestDrim is,  
*as Galen* says, of a moderately croceous -Colotir, of a mean  
Consistence, answering in Quantity t0 the Drink, with a

white, smooth, and constantly-equal Sediment, and, in short,  
most refembsing the *Urine of* Persons in Health. In all Cases  
the best *Urine* has a white and equal *Hypostasis,* or Sediment;  
*Urine* with a pendulous Substance, or *Enaorema,* is not so good,  
and that with a Cloud, or Film, worse than the former. We  
are, however, taught by *Galen, Com. in* 3 *Epid,* that an *Ena-  
orema* is sometimes good ; and that even a Cloud may he good  
enough to prove a salutary *Prognostic,* according to *Hippocrates,*4 *Apr.* 7o. where we read, that " Persons in whom the Fever  
" comes to a Crisis on the seventh Day, have a red Cloud in  
" their *Urine* on the fourth Day, and other Things in Propor-  
" tion.” And not only a red Cloud, says *Galen,* which was  
not seen hefore, prognosticates a Crisis; but a white Cloud much  
more ; and a white, equal, and settied *Enaorema,* more than  
either: But is the Disease he Very quick in Motion, and there  
he a Change in the Colour and Consistence of the *Urine,* there  
are sufficient Grounds *for* prognosticating an approaching Crisis.  
*Hippocrates, Lib. Prognosi,* says, that " a Cloud floating in the  
*." Urine,* If white, tiogoed.'' And a little after, " we are to  
" consider in these Clouds, whether they move upwards or  
" downwards, and, also, what Colour they are of; for if they  
" tend downwards, and are of the Colour aheve-mention'd  
" [white], they are good, and laudable."

With respect to the Substance, *Urine* of a thin Consistence,  
with a good Colour, is landable. Hence *Galen, Com. in* I *Epid.*fays, " It is plain thatinin *Urines,* but of a good Colour, pro-  
“ raise a Recovery on account of the Goodness of their Co-  
" lour; but, in respect only of their Thinness, they require a  
" longer time for Concoction.'' So that this Kind of *Urine*prognosticates, indeed, a Recovery, but it is after a considerable  
time ; aS it happen'd in the Cases of *Cleonactidei* and the *Cla-  
zornenian,* I *Epid. AEgr.* 6. IO. and *Chaerion,* 3 *Epid. Sect. I.  
Abg^S.* t

. . Thin and colourless *Urine,* where there are Signs of Recovery,  
indicate an Abscess, as we are taught by *Hippocrates, Lib. Pro-  
gnost.* quoted by *Galen, Com.* I. in 3 *Epid. T. An* to this Pur-  
pose : u Thin and equal *Urines,* he says, excreted for a long time  
" together, if there be other salutary Signs, indicate an Ab-  
" scess in the Parts helow the Diaphragm.'' Thus it happen'd  
*.to Pythion,* 3 *Epid. AEgr.* I. who liv'd near the Temple of  
*Tellus,* of whom it is said, From the first to the eighth Day  
" his *Urine* was thin, and colourless, and had a cloudy *Enea-  
“ crema ;* on the tenth he fell into a Sweat, his Spit was  
" somewhat concocted, and he had a Crisis, about which time  
" he Voided a thinnish [for ὑπόλευκα, aS all the printed Editions  
" have it, I read ὑπόλεπτα] *Urine so* On the fortieth Day after  
the Crisis, a Suppuration appear'd in the Parts about the Anus,  
and the Abscess produc'd a Strangury.

Of Colours in *Urine,* the laudable, as we said, are the yei-  
Iowish, lightish-red, subcroceous, or somewhat saffron-like  
Colour, the moderately pale.and fubluteous Colour. The red-  
ish Urine, with a redish Sediment,.is said, by *Hippocrates,* to he  
salutary, though it indicates a long Disease; the black Colour  
*in Urine* is not always bad; it is not so, for Instance, in Dis-  
orders os the Spleen, aS appears in the Case of *Herophon, i Epid.  
AEgr. %.* and in those who abound with melancholic Blood ;  
and the same is agreeable to what *Galen, Corn, in Epid,* remarks  
of a female Patient, where he says, " that the Colour of her  
*" Urine,* though black, indicated no Danger, hecause pro-  
-" Ceeding from a Retention os the Menses, which were of  
" a more melancholic Cosh'' Plenty, alfo, of black *Urine,*which changes not to aqueous critically excreted, is of Service.  
Hence *Galen, Com.* 3. *in* 3 *Epid. T. sa.* says, he knew a Wo-  
man who was Very much reliev'd by a plentiful Excretion of such  
Kind of *Urine*; besides, black *Urine* with a plentiful Haemor-  
rhage from the Nostrils, as in the Case of *Meton,* I *Epid. AEgr.*sp. or a copious Flux of the Menses, as was observ'd of the mo-  
rose Woman, 3 *Epid. Sect.* 3. *AEgr.* XI. are.not in the least *xq*he dreaded:' \_ ; . ......

*Of* turbid, or foul Kinds of *Urine,* what soon fettles or sub-  
sides is good, especially if the Sediment be white, smooth, and  
equal, according to *Galen, de Sanio, tuende Lib. 4. Cap. An*where he writes, " that is there appears a Separation of the  
" thicker from the more liquid Substance in the *Urine, and* what  
"sshbsides is white, smooth, and equal, it indicates a Superio.  
" rity of Nature in subduing and concocting the Juice.”

Clear *Urine,* which soon becomes turbid, may, alfo, he  
esteem'd henesicial, aS it signifies, that Nature is at work in con-  
cocting the Humours.

With regard to Alterations in *Urine,* **those are** esteem'd laud-  
able which are made for the better, either in Colour, Consist-  
ence, or *Hypostasu.* Hence thick *Urine,* excreted after the Be-  
ginning of a Difeafe, is accounted henesicial, fince Excretions,  
after the Commencement of a Concoction, become thick, if  
they were thin before; as, on the other hand, when from thick  
they change to thin, it is a very good Sign; agreeably to the  
**Doctrine of** *Hippocrates,* **4** *App.* **68. where we read, «t chat**

\*\* they who Void a thick, grumous Urine, and in small Quan-  
" tities, and are not free from a Fever, are reliev'd by a fuper-  
" vening plentiful Excretion of thin Urine, which is most likely  
" to happen when there has heen an *Hypostasis* in the Urine  
de from the Beginning, or not long aster.'' Here *Galen,* in his  
Comment, says, " that Plenty of thin Urine is beneficial, aS it  
" indicates the morbific Matter to he more attenuated."

It is best for Urine, from turbid to hecome clear, from co-  
lourless to grow colour'd, from too high a Colour to become  
less colour'd, and from wanting Contents to assume either  
a Cloud, *Enaeorema,* or *Hypostasis,* which are white and  
equal. ’

Such, then, are the Properties and Qualifications of Urine,  
by which it indicates a Recovery in acute Diseases, as it is a  
Sign of Concoction ; in the same manner it portends a good  
Event as a Cause in shewing itself to he a salutary Evacuation-.  
.. For this Reason, Plenty os Urine excreted on a critical Day,  
indicates a salutary Crisis, and with the greater Certainty, is it  
he in its own Nature of a laudable Kind, aS it was in the Case  
of *Nicodemus,* 3 *Epid. Sect.* 3. *AEgr. to.* os whom *Hippocrates*observes, 3 *Epid. Sect.* 3. " that on the twenty-fourth Day he  
“ Voided much white. Urine, which had a copious *Hypostasu,  
“ and* he fell into a plentiful het Sweat, underwent a Crisis,  
" and was freed from his Fever." And of *Pericles, ibid. AEgr.*6. he says, " On the third Day his Fever was abated, and he  
" voided Plenty of concocted Urine, with a copious Sediment?’  
*Charian,* also, *ibid. Sect.* 2. *AEgr.* 5. is said to escape, by the  
Benefit of a copious Effusion or bilious Urine. To the same.  
Purpose we read, 4 *Aph.* " that where an Abscess is ex\*.  
-" pected in the Joints, the same is prevented by an evacuation  
" of much thick and white Urine." And, 6 *Epid. Sect.* 4,  
*Aph. Λ.* " that an Evacuation of thick white Urine, fuch aS  
" happen’d to the Servant of *Archigenes,* sometimes happens in  
" Quartans attended with a Lassitude, and prevents an Abscess.”  
But that Kind of thick Urine which resembles coarse Meal,  
portends Death, or a long Duration of the Disease ; as we are  
taught.by *Galen, Com. in* 7 *Aph.* 3I.

. Acrid Urine, evacuated with Pain, and in great Quantity,  
frequentiy happens to be critical in acute Diseases, agreeably to  
the Observation, of *Hippocrates,* I *Epid. Sect.* I. where, after  
describing an epidemic Disorder Very satal to Children, he says,  
:" that the only serviceable, and most important es all the Judi- .

cations, and by which many escap'd the greatest Danger,  
" was, an Alteration of the Disease to a kind os Strangury;  
" and/Abscesses in’ the Parts affected.’.' And a-little after,  
de with regard to the Strangury; it was-tedious, and .Very Iron-  
es blesome to the Patient; the Urine, .in this Case, was co-\*  
" pious, thick. Various, red, mix'd with Pus, and excreted  
" with Palm" To which he adds, " All who were in thisCir-  
" Cumstance recover'd, and not one of them, aS far aS I know,  
" dy'd.'' The Case .of *Python,* 3 *Epid. AEgr.* I. which was  
much of the same Nature, had probably the same happy Event ,  
of whem we read, that " on the fortieth Day aster a Crisis, a  
so Suppuration was form'd about the *Anus,* and converted it-  
" seif into a Strangury after which, it is probable that he  
recover'd by the Benefit of copious Evacuations by Urine.

There are some Kinds of oily Urine, not sat, but resembling  
Oil only in .Colour and Consistence, which are, also, salutary;  
these never happen but from a perfect Concoction of the Dis-  
ease, and.have heen several times observ'd by *Galen,* as he says.  
*Corn, in* 3 *Epid. T.y2.* from' a Concoction of the Disease,  
without any Detriment to the Patient. And so much for good  
- Urines, which are of salutary Prognostication.

*- - Os. bad which portende Death.*

.. Thin,, white, aqueous. Urine, of long Continuance, in a  
Disease not of a favourable;Kind, is destructive, aS we are as- s  
fin'd by *Galen,* because it indicates a Very high Degree of Crude-  
ness; and it is no less pernicious in acute Fevers, hecause, ac-  
cording to the same Author, irshews that the yellow.Bile has its  
Course upwards, and is carry'd towards the Head, from whence  
we may predict a Delirium and Phrensy. And such Urine we  
find condemn'd by. *Hippocrates, er Aph.Jr:,* where he says,  
" that white pellucid Urine is bad, especially in a Phrenfv.''  
And *Galen,* in his Comment on the Place, says, that he never  
knew One in a Phrensy, from whom such Excretions of Urine  
proceeded, recover. For it is much better, as the Disease is  
wholly Of a bilious Nature, that the Urine should appear bi.  
lions, and worst of all that it should be thin and transparent, aS  
it was observ'd in *Philistes,* labouring under a mortal Phrensy,  
*3 Epid. Sect.2. AEgr.4.* We conclude hence, that thin and  
aqueous Urine, in all acute Fevers, is bad, as portending,  
at least, a song Duration of the Disorder, with Relapses; sor  
Nature requires a long time for the Concoction os Humours, in  
fo highly crude a State, when, if the Fever he not extremely  
violent, and the Strength not much exhausted, the Patient has  
heen sometimes known, though after a long time, to recover;

but is the Disease he Violent, and the Strength much impair'd,  
such Urine is absolutely satai: And this is what *Galen* means,

*. Com. in* 4 *Aph. yl.* when he says, " If the Strength was hesore  
" exhausted, such white perspicuous Urine is pernicious, as in  
U Phrensies ; in which Case we have no Instance of Recovery."  
We may add, as a stronger Confirmation of their Fatality, their  
long Continuance, and Appearance after the Beginning of the  
Disorder, as it happen'd in the Case of the Woman who lay ill  
*in Phases,* 3 *Epid. Sect.* 3. *AEigr.* 2. who, on the eleventh Day,  
evacuated such thin aqueous Urine, and continu'd so to do till  
the fortieth Day. We have already observ’d from *Hitesiocrates,  
Lib. Prognostic,* that a Continuance of .such Urine, with salu-  
tary Signs, prognosticate, a Solution of the Disease by an Ab-  
fcess, as it actually happen'd in the Case of *Pygihion,* who liv'd  
near the Temple of *Tellus,* 3 *Epid, ea.gr.* I. and is demonstrated .  
by *Galen,* in his Comment on .the Case. But, on the other  
hand, where are no salutary Signs to accompany it, a Continu-\_  
ance of such Urine is always mortal. Hence *Hippocrates, Pro-  
gnost.* pronounces aqueous Urine one of the most destructive ..  
Kinds, and worst of all in Children.

Thick Urines, according to *Hippocrates,* in the same Book,  
are bad, especially if they appear in the Beginning; at winch  
time, -ashertim-will have it. *Comment, in A Aph.* 6. the Urine is  
generally thin; But those Kinds of thick .Urine winch have  
either- none. Or a: bed.*Hypostasis,* are very bed; and of these,  
*Galen, Corti in* 4 *Lib. Aph.'..* lays, " thick Urine, without a Se-  
" diment, is the Strength be pretty entire, portends a long

Continuance os the Disease ; but if the Strength be much  
" exhausted, the Death os the Patient.'' And *Hippocrates,*I *Epid. Sect. i.* describing an epidemic Fever of the semitertian  
Kind, says,- that " in some Subjects the Urine was thick, and  
" had hut a small *Hypostasis,* and the same not of a due Con.

sistence, but crude and unseasonable." *Galen,* also, I Corn,  
*in* 3 *Epid.* L5. speaking of these Kinds of Urine, says, that  
*Hippocrates,* in that Case of- *Hermocrates,* by " hinting that his  
" Urine was thick, and without *Hypostasis,* plainly intends,  
“ lint it was soul and turbid, as he here usually calls that  
" Urine which always appear’d in a crude, disturb'd State, and  
" impregnated with a flatulent Spirit, like Mush" Since Urine,  
then, in which nothing subsides, is of the Number of turbid  
Urines, thick Urine, also, destitute of.a Sediment, is to he  
esteem’d a turbid Urine, which, says *Galen,* besides indicating  
a flatulent and crude Perturbation of the whole Mass of Blood,  
shews the Disease to be fomented by gross Humours.

- Having first obferv'djthat turbid Urine may he either thin or .  
thick, we proceed to inquire into the *Prognostics* which may he  
drawn from turbid Urine in acute Diseases. *Galen,* aswehefore-  
observ'd, makes three Sorts os turbid Urine; one voided thin.  
and clear, and afterwards becoming soul and turbid; a second  
Voided turbid, and continuing in that State; and thelast voided  
foul and turbid, and afterwards growing pure, and cleat. These  
last mention'd, *Galen, de Cris. Lib.* I. *Cap. i2.* makes to have  
a less Degree of Pravity ; because it shews, that something os an  
unequal Turbulency remains, and that the Disease will be con- .  
cocted in a short time. Worse than the former is that kind of  
turbid Urine which is discharged clear, and becomes turbid af-  
terwards ; because such a posterior Turbation signifies that Na-  
tnre wants to begin its Work of Concoction of the Disease,  
but has not actually begun it; and therefore requires a longer  
time, and a goed measure of Strength in the Patient, to per-  
sect tlie Concoction. Of a mean Kind between the two for-  
mer, according to *Galen,* is that Urine which is excreted turbid,  
and continues in a State of Turbation, without growing in the  
least clear, or subsiding. And this Sort of turbid Urine, he  
says, indicates, that the Agitation in the Blond is still promoted,  
in order to a Concoction. The same Author, *de Sanit. tuend.  
Uh.* 4 *Cap. An* telis us, that " if the Urine appears turbid, like  
" that os Horses, it shews the Veins to he replete with what  
" they call crude Humours; but that Nature, however, is not  
" idle, but hard at work in concocting them." Hence it ap-  
pears, that turbid Urine, which becomes not clear, nor sub-  
sides, is better than such Urine as is excreted clear, and after-  
wards becomes turbid. This Distinction, however, *Hippocrates*seems not to he sensible of, fince he no-where says that this last  
mention'd is of worse Signification than the other; but con-  
demns, in general, those Kinds of turbid Urine which never  
subside, nor grow clear, more’than the others4. and pronounces  
them pernicious. Thus it prov’d, for instance, in the Case of  
the Wife of *Philinus,* I *Epid. AE.gr.* 4. who dsid ; of whom it  
is said,Under her Convulsions great Quantities of Urine  
" came from her, for the most part, involuntarily; white,  
" thick, like what is disturb’d by shaking, after long Settlement  
" in the Urinal; it did not subside, but in Colour and Thick-  
" ness was like the Urine of a Horse ; fuch was the Na-  
" ture of her Urine, fays *Hippocrates,* as far as it appear'd to  
" me." And of the Wife of *Dromeades,* another fatal In-  
stance, we read, *ibid. /Egr.* II. " that the Day after she was

" seiz’d with a Rigor she had a commodious Evacuation by  
" Stool; that her Urine was thick, white, turbid, like Urine  
" agitated after long Settlement, and did not subside.'' The  
fame turbid, and not subsiding Urine, was observ'd in the Man  
who, " being in a feverish State, made a Supper, and drank  
" freely;'' I *Epid. AEgr.* I2. and in *Hermocrates,* 3 *Epid.  
Sect.* I. *AEgr.* 2. who both died of acute Fevers. *Galen,* also, \*  
seems to assert the same *Prognosis* from tuthid Urine, in his ‘  
Comment on 4 *Aph.* 70. where he says,." Some Sorts os Urine '.  
" remain turbid sor a long time, others soon acquire a thick  
" Sediment, and signify a quick Solution of the Disorder; bint-  
" turbid Urine in which nothing subsides, if the Patient he  
*“ strong,* shews the long Duration os the Disease; if weak,  
" Death.'' And *de Sanit. tuend. Lib. An Lap.* 2. he gives us  
his Description and Judgment os these turbid Kinds os Urine,  
in so clear a manner, that we may from thence conclude this  
kind os turbid Urine to he more pernicious than the rest. “ Of .  
" all turbid Urine, he says, the general Mark or Character by  
" which it is Judg’d, is a Separation of the thicker and grosser  
" from the thinner and more liquid Substance.;’and this Sepa-  
" ration is effected in a quick or flow manner, or not at all ;  
iC if the Separation be quick,, and whet subsides be whited  
" smooth, and equal, it shews that Nature has the Dominion  
“ over the Juices, and concocts them. Is .the *Hypostasis* the  
" good, but acquir’d at some considerable Distance os'time, it  
" prognosticates that Nature will prevail over the Juices'in .  
" Length os time. But is there be either no Separation at all,  
" or what subsides is bad, it indicates that Nature is weak, find'  
" wants Assistance in concocting the Juices." ' sta

We conclude, then, from the Premises, that turbid Urine,  
in which nothing)subsides, is more pernicious than other Urine  
os that kind. The same may be demonstrated froth the Rule)'  
of Contraries : For fince *Galen* himself confesses, that turbid  
Urine, which collects an *Hypostasis,* is good, and signifies that  
Nature will overcome the Disease ; the contrary Urine, there-  
fore, which is destitute of all Sediment, and always’remains tur-  
bid, must have a contrary Signification, and portend that the  
Disease will prevail over Nature : For tuthid Urines, also, not  
to grow clear, indicates their Turbation to proceed not from  
the natural Heat employ'd in Concoction, but from some ex-r  
traneous and preternatural Heat working the Ruin os the Pa-,  
tient. For turbid Urine, which acquires that Property from  
the natural Heat, terminates in Clearness; but turbid .Urine  
which is the Effect of a Turbation by the febrile Heat, always  
remains turbid, and collects either none, or a bad *Hypostasis.,*

Moreover, among the Kinds of turbid Urine, what remains  
turbid in the Beginning os a Disease, is worse than the like hap-  
pening in the Increase; at which time the natural Heat is em-  
ploy’d in Concoction, and often causes a Turbation in the Urine  
by silling it with Flatulencies ; but in that Case the Urine in a  
httie time deposites a goed Sediment, and becomes cleat.

AS to that kind of foul or turbid Urine which is evacuated  
clear, and becomes turbid afterwards, whether it has a greater  
Degree of Pravity than the other Kinds of turbid Urine, as  
*Galen, de Cris. Lib.* I. *Cap.* I2. will have it, I am not per-.  
fectly fatisfy'd: For if by Urine becoming turbid after Evacua-  
tion, it be signify'd, aS he there, and *Lib.* 4. *de Sanit. tuend.  
Cap.* 4. tells us, that Nature has not indeed yet begun, but is  
preparing to set about its Work of Concoction; and that by  
turbid Urine growing dlear, it be indicated, that Nature has  
actually begun a Concoction; it seems to follow, that, turbid  
Urine, depositing no Sediment, is the most pernicious, at least in  
acute Disorders, and is justly indeed so esteem'd, since it indi-  
cates the Presence of a Multitude *of* Crude and gross Humours,  
which requires a long time for Nature to concoct and subdue,  
and a great measure of Strength is, also, necessary, for such a  
Work. Hence, in weak Bodies, and Violent Disorders, such  
Urine portends Death.

. With respect to the Colours osUrine, the white,thin,and aque-  
ous, in acute Diseases, are the worst,because, aS we learn from Gin-  
*len,* it is best, in bilious Diseases, for the Urine and Excrements  
to appear pretty much colour'd. *Hippocrates, Lib. Prognosti*condemns the thin and fiery red Urine, as “ indicating the Dis-  
" ease to be in an absolutely crude State ; and that if it eonii-  
" nues long, it is to be fear'd the Patient will not be able to surH  
" port himself till the Urine he .concocted.'' And such is its  
*Prognosis,* because a .thin and fiery-red Urine is a Sign os a vio-  
lent Disease, and an internal burning Heat, or Vehement In-  
flammation, either in the Liver, Stomach, or Diaphragm.

In Inflammations of the internal Parts, and in acute Fevers,  
gold.colour'd Urine, os long Continuance, is Very much to be  
.suspected, because It indicates a high Phlegmion, or Inflamma-  
tion, in some one or other of the Viscera.

Black Urine, in acute Disorders, is always attended with  
Danger, unless it he critically excreted, or flows in a copious \*  
manner, Under a Suppression of atrabilious Menses, ora plentiful  
Hemorrhage from the Nose.. In what Cafes black Urine is Hot

Vo be dreaded we have showed before; but in acute Diseases, is  
not excreted under the Circumstances before-mentioned, it  
imports Danger, aS indicating Plenty of adust Blood, which it  
will be difficult for Nature to concoct. For this Reason *Hip...  
pocratcs. Prognosi,* pronounces *blade Urine* more destructive than  
- the *thin nrA fiery .red,* and worst in adult Persons ; on the same  
Account he condemns black Clouds floating in *Urine* as a per-  
nicious Sign.

*Thin black Urine,* excreted in small Quantities, I *Epid. Sect.  
'2. Stat.* 3. was one of the Symptoms which attended the Be-  
ginning of a .very mortal epidemic *Causes,* or burning" Fever,  
and portended a fatal Event.

*. Black Urine* changing *to aqueous,* aS in the Woman who lay  
ill near the cold-Water, ,3 *Epid. Sect.* 3. *AEgr.* 2. is destruc-  
tive. Of her it is observed by *Hippocrates,* that on the eleventh  
-Day she voided Plenty of *then black Urine,* and on the twen-  
-tieth great Quantities of *aqueous Urine* flow’d from her; on  
'which *Galen,* in his Commentary, observes, that *black Urine*changed *tu aqueous is* a mortal Sign. The Author of I *Prorrh.*T. 4. writes, that " in Persons under Perturbations and  
.Watchings, colourless Urine, with a blackEnaeorema, is phre-  
’ " nitic," that is, prognosticates a Phrensy ; and we may say,  
nphrensy of a malignant and mortal Nature, because proceed-  
ing from a black and adust Bile. \*

*Black* and,*fetid Urine* is observed by *Galen, Comment, in Aph.*and *Corn. o.. in Prognosi. T.* 32. to be destructive. And con-  
. tinually *black, thin,* and *aqueous Urine,* with bad Signs, por-  
tend Death, as it happened in the Case of the Woman, 3 *Epid.*before-mentioned, os whom it is said by *Hippocrates,* at the  
End os his Account, that " her Urine was perpetually *black,  
" thin,* and *aqueous,* attended with a Coma, Loathing, De-  
" spondency. Watching, PronenesS to Anger, Anxiety, and  
" melancholy Disorderssos Mind." \

But the worst of all is *black Urine* with a *black Sediment.*On this .Kind of Urine, *Galen* passes his Judgment, *Lib.* I.  
*de Crisibus, Cast.* I2. in the following Words: " Worst os all,  
he sayS, is *Urine* black in its whole Substance, and I never  
" knew one Person recover after Voiding such *Urine*; but it is  
" less pernicious if what subsides of it only he black, and less  
" so still, if no more than Whet floats in the Middle (the enae-  
" orema) be black, and much less pernicious than this last, is a  
" Cloud only of that Colour. "

*Oily* Kinds of *Urine,* particularly such as have a Fatness on  
the Surface, resembling a Spider's Web, are condemned *sm.Hip-  
pocrates* in his *Prognostics*; and *Galen, - Lib.* 4. *de Sanit. tuend.*fays, they are pernicious, aS indicating a Colliquation. Of  
*Pythion,* 3 *Epid. Sect.* 3. *AEgr.* 3. who lay ill near the Tern.  
ple of *Hercules,* it is said, that " he Voided an *oily* Kind of  
*" Urine. \*\** Next to *black, oily Urine* is the worst, because it  
is a S:gn of an extraordinary Colliquation, and that the igneous  
and febrile Estuation prevails over the natural Heat, as it did,  
for instance, in the aforesaid *Pythion,* and the Woman of *Cy-  
sticus, ibid. AEgr.* 14. who both Voided fust *black,* and seen  
after *oily,* or *fat Urine.*

No less pernicious is a *fat.* Kind of *Urine* succeeding a *thick,  
turbid Urine,* which deposits no Sediment, because it signifies,  
that the igneous or febrile Heat, which first excited the Tur-  
bation, is not only undiminished, but Very much increased.  
Such was the Circumstance os the *Urine* observed by *Hippo-  
crates* in the Case of the Wife of *Dromeades,* and of him, who  
heing feverish, supped and drank freely, I *Epid. AEgr.* II. I2.  
In the latter Case the Patient on the first Day Voided *red, thick,  
turbid Urine,* which deposited no Sediment; on the fifth and  
seventh he excreted great Quantities of a *fat, oleous Urine,*and died on the eleventh Day os his Illness. In the Other In-  
stance, " the *Urine* on the second and thud Day was *thick,  
6t turbid,* and had no Hypostasis; on the fourth and fifth oily,  
" and on the sixth the Patient died. ”

In like manner Plenty of *thin* aqueous *Urine* without Con-  
tents, no way relieving the Patient, or Vitious in any manner,  
in acute Disorders is Very much to he dreaded. Thiis *Hippo,  
'crates,* 3 *Epid. Sect.* 3. *Stat. post,* describing the Symptoms of  
an epidemin *Causes* generally attended with a Phrensy, and  
very mortal, tells us, that the Patients excreted Ci great Quan-  
" tities of *thin Urine,* which were of no Service, nor had any  
" Relation to a Crisis." And afterwards, speaking os the same  
Subjects, he says, " The *Urine* was in Vast Quantities, and not  
" in proportion to the Drink, but far exceeding it; and it had  
" hesides an extraordinary Degree of. Pravity, being neither  
" thick nor concocted, nor duly purged. ” The fame Author,  
3 *Epid. Sect.* 2. *AEgrAys.* relating the mortal Case of the Wo-  
man who lay ill *ea E0r0 Mendacium,* says, that on the tenth  
Day she Voided great Quantities os *Urine,* which had no Hy-  
postasis. And of the siek Woman by the oold Waters, he says,  
that her *Urine* was always much in Quantity, black, thin, and  
aqueous..

*Much thick.* **Or** *turbid Urine,* **not subsiding,, and no way**

henesicial is, also, very much condemned, as are generally all  
great Quantities of *Urine* in the Beginning os acute Distempers, -  
heing justly esteemed os no Service, because at that Time no-  
thing concocted can he excreted, nor any good Purgation he  
made.

*Thin Urines* in small Quantities, under burning Fevers, and  
acute Inflammations, are Very bad, as indicating the Serum of  
the Blood to be consumed by the'fiery Heat, and if the *Utine*has besides any manner os Pravity, it is so much the worse, aS  
it proved in the Cases of the Wise of *Dromeades* hefore men-  
tinned, the young Man of *Meliboea, 2 Epid. AEgr. ult.* and  
the Virgin Daughter of *Euryanactes,* 3 *Epid. Sect.* 2. *'AEgr.* 6.  
in the two last of which the *Urine W2S* little, thin, and not of  
a good C dour; and in the first Case the *Urine* was littie, thin,  
and oily. And in the Cafes os the Woman who lived with  
*T.ts.amenus,* and another Woman who belonged to the Family  
os*Pantimides,* 3 *Epid. Sect. y. AEgr. g. io.* the *Urine* was ob-  
served to be thin, and in small Quantities. All these Patients  
hefore mentioned died in a short time after the Appearance of  
this Symptom which we are speaking of.

An utter Suppression of *Urine* from a total Consumption of  
**the** serous Humidities of the Blood by the igneous and febrile  
Heat, or from an extinction of all the Functions, as *Galen*expresses it. *Corn.* 2. *in* 3 *Epid.* T.4. is asatal Prognostic in Fe-  
vers. Of *Silenus,* who lay sick of a mortal Fever, I *Epid.  
AEgr. u. Hippocrates* observes, that " On the sixth Day his  
*" Urine* stopped, and that on the seventh he made no Water;  
" but that on the eighth he made Water in small Quantities  
" with Pain and a pungent Sensation. ” This is an indication  
to us of **a** vehement Heat consuming the Serum of the Blood,  
and rendering it highly hot and acrimonious. In the Woman  
of *Cyzicus,* 3 *Epid. Sect.* 3. *AEgr.* 14. the Woman who was  
**a** Domestic os*Aristion,* and lay ill os a Quinfey, *ibid. Sect.* 2.  
*AEgr. J.* and the young Man os *Meliboea* before-mentioned,  
there was a Suppression os *Urine* a littie hefore their Decease  
from an Extinction of the Faculty.

*Urine* little in Quantity, acrid, and os no Benefit to the Pa-  
tient is, also, mortal, as it is a Sign, that all the serous Hu-  
midity is consumed by the burning Heat which affecti the in-  
rental Parts, and that the Humours are inflamed; and it was  
observed by *Hippocrates* of *Silenus,* that before his Death he  
Voided a small Quantity of pungent acrid *Urine.* And ! have  
myself, says *Prosper Alpinus,* observed these small Excretions  
os highly acrid and Vellicating Urine in my beloved Wise *Gust-  
dagnina,* and several others, labouring under a mortal burning  
Fever, a littie besore their Decease.

*Urine* Void of Contents, and having neither Hypostasis,  
Enaeorema, nor Cloud, isthad, unless it he occasioned through  
Fasting, Fatigue, Watching, or an highly bilious State of  
Body, in which Circumstances it is a bad Sign sor the *Urine* to  
appear without Contents, as we are taught by *Galen, de Cois.*Lib. I. *Cap. An*

*Thick Urine,* without a Sediment, in acute Distempers, is  
affirmed by *Galen* to be mortal.

*Urine* with a *small* or a *crude* Sediment is bad : Such was  
that observed by *Hippocrates,* **I** *Epid. Sect.* I. in thofe who  
laboured under an epidemic Kind of semitertian Fever. "The  
"Urine, he says, was thin, unconcocted, colourless, and lit--  
" tie in Quantity, or else thick, with a small Hypostasis, of  
" no laudable Constitution, and depositing a crude and un-  
" seasonable Sediment. "

*Galen, Com. in* 4 *Aph.* 69. condemns *thick Urine* on account  
of the Heaviness of its Sediment; and the Author of the Book  
*de Urinis, Cap.* 42. telis us, that sometimes a white and crude  
Humour is excreted with the *Urine,* and subsides to the Bottom  
like a good Hypostasis. And *Galen, Dorn.* 2. *in Prognosi, lens,*that a copious and crude Sediment is an Indication that the  
Disease is fomented by a Multitude of crude Humours, and  
by that means rendered difficult and dangerous; sor the same  
Reason he absolutely condemns a thick and gross Hypostasis,  
*Com’ in* 4 *Aph.* 69. Of such an Hypostasis is *Hippocrates* to  
be understood, 7 *Aph.* 3I. where he says, " That an Hyposta-  
" sis with a branny Sediment *(Crimnodes)* in Fevers, indicates  
" that the Disease will be of long Continuance. \*' We have  
already observed from *Galen, Lib.* **I.** *de Cois. Cap.* I2. that  
those thick Sediments, which the *Greeks* call *Crimnodes,* sig-  
nify a great Colliquation, and therefore in acute Diseases are  
mortal. The same Author, *Corn, in* 7 *Aph.* 3I. speaking of  
those Sediments, he says, " It appears then by these Examples  
*" [Silenus,* and the sick Man in the Garden of *Dealcegi\* that  
" whenever Patients void an *Urine* with this branny Sediment, if  
" ever they recover, it is but Very flowly; but if the Disease  
" be mortal, they die in a Very short time. " *Galen* therefore  
pronounces such *Urine* destructive, by hinting to us, that great  
Numbers whom it concerns, are destroy'd hefore the Di lease is  
protracted to any considerable Length ; and that whoever hap-  
pen to escape, recover with much Difficulty, and not till after

undergoing a long and tedious Sickness, and for this Very good  
Reason, because such a Disposition aS is the Cause of these Ex-  
cretions by *Urine,* requires a Vast deal of Concoction. *Hipr  
pocrates. Lib. Prognosi,* highly condemns the *Crimnodes* Hy-  
postasis ; such an Hypostasis had the *Urine* of *Silenus,* I *Epid.  
AEgr. L.* who died on the eleventh Day; and that of the sick -  
Person in the Garden of *Dealces,* 3 *Epid. Sect.* I. *AEgr.* 3.  
in whom the Disease came not to a perfect Crisis till the fortieth  
Day.

- We have before observed,, that the *Sediments* resembling **the**Pulse called *Orobus,* the *squamous,* or *scaly,* and the *furfura-  
ceous,* which the *Greeks* call by the respective Names of *Oro-  
boides, Petaloides,* and *Pityroides,* are mortal in acute Fevers,  
as proceeding from the Tame Colliquation, unless they are the  
-Effects os some Disease in the Kidneys or Bladder. *Hippocra-  
tes,* in his *Prognostics,* passes his Judgment on all these Kinds  
of *Urine* in the following Words : " A *Crimnodes* (branny)  
" Hypostasis in *Urine,* he says, is bad; but the *Petaloides  
" (suuanaus)* worse ; the white and the thin *Urine* have a con-  
" fiderahle Degree of Pravity; but the *Pityroides ss.urs.ura~*μ *ceous)* is yet worse. "We know these Sediments are not the  
Effects os a Disorder in the Kidneys from the Presence of an  
actually incumbent, acute, and colliquating Fever, and the  
Appearance of no Sign by which we can judge the Kidneys  
to be injured.

- A *loose, discrete Sediment-* is, also, disapproved, aS it indi-  
cates Crudity; and when an Hypostase Of this Nature appears,  
we can never safely predict the Recovery of the Patient.

The same Judgment is to he pasted on an *unequal Sediment-,*according to *Hippocrates Prognost.* where we read, " If there  
" he an Intermission, and the *Urine* be sometimes excreted  
" pure, and at other times deposites a white and smooth Hy-  
" postasis, the Disease becomes the longer, and the Patient  
" the less secure." - '

A *reddi/h Sediment* is disapproved by *Hippocrates, ibid,* be-  
cause, though it he in a good measure salutary, it indicates the  
Disease to be of long Duration. And the Author of the Book  
*de Urinis,* says, that a *reddest Sediment* shews a Defect of Con-  
coction, but is no mortal Sign. A long Disease is however to  
be suspected, and therefore such a Sediment seems not free from  
Pravity, especially in weak Bodies, and Violent Diseases, which  
soon exhaust the natural Strength, and oftentimes before the  
Disease is concocted. - - '

*PsblackSedement,* or Hypostasis, is Very bad in acute Diseases,  
and, if attended with black *Urine,* is affirmed by *Galen* to be  
The worst os all Sediments; a black Enaeorema is less pernicious,  
and a black Cloud least of all the three.

Os *Enceorernas* the *sublime* [μετέωρον] is disapproved, as indi-  
curing-a Delirium ; an Instance of which we have in the Virgin  
of *Laris.su,* 3 *Epid. Sect.* 3. *AEgr.* I2. where *Galen,* in his  
Commentary says, that this *Enaorema* signisy’d a Delirium,  
not in itself, but by Accident, as it was an Indication of a  
fiatuous Blood, since if there were no Flatuositiesin the Blood,  
the Enaeorema would subside to the Bottom of the Urinal.  
The Author of I *Prorrhet.* 4. 32. 37. makes a sublime sus-  
pended Substance in the *Urine* to portend a Delirium, and *so*much the more, says *Galen, Corn.* 2. *in* χ *Prorrhet. T.* i. if  
it be attended with a Ringing of the ears, or a Gestation of a  
Pain in the Hip, or some other inferior Part remote from the  
Viscera.

A *black, loose,* or *discrete* and *unequal Enaorema,* is had;  
but not so bad aS a Sediment of that Character, according to  
the Author of *Lib. de Urinis,* supposed to be *Galen, Cap. iy.*

*An black Cloud* is condemned by *Hippocrates, Lib.. Prognost.*as is, also, a fat Substance swimming on the Surface of the  
*Urine,* because it indicates a Consumption. I have several times  
observed a Cloud os a circular Form elevated near the Surface  
in the *Urine* of those who have died phrenitic; and thence con-  
eluded such an Appearance to be a pernicious Sign in acute and  
turbulent Fevers. If therefore the Contents of the *Urine,*though constituted according to Nature, are by an undue Quan-  
tity of Spirit elevated to the Surface, it portends some Diforder,  
and that no inconsiderable one, of the Head.

To the fore-mentioned Characters os *bad Urine* **we** may  
add, that Excretions of *Urine* not rememhered, or not per-  
ceived by the Patients themselves are, also, of bad Signification;  
Thus, I *Prorrhet.* 2o. we read, that " a Flowing of *Urine*" from a sick Person without his remembering it, is pernicious;",  
for it indicates, as *Galen* says in his Comment on the Place, a  
Deprivation of all Sense of the natural Functions.

There remains one thing which highly deserves our Remem-  
brance on.this Head, and is aS follows: In many Verydestruc-  
five Fevers, *the Urine* in Colour, Substance, and Contents,  
appears like the *Urine* of Persons in Health, and on that Ac-  
count is esteemed and pronounced laudable by the mistaken and  
unexperienced Physicians, though at the same time it portends  
inevitable Death, by indicating to us that the Bile, by which

the *Urine* is Coloured, has its Course wholly diverted upon the  
Brain, or one of the Viscera, and that nothing of the noxious  
Humours is excreted with the *Urine,* which is observed by Phy-  
sicians to be highly destructive in Phrensies, and, also, in **a**Pleurisy and Peripneumony. *Prosper Alpinus de Prascg. Vit.  
et Mont. AEgrot.*

URINACULUM. The URACHUS. \* .

URINALIS HERBA. A Name for the LINARIAt *IflaAn  
card. . ..*

URINARIUS. The fame as URETIhos;

URNA A Measure of Capacity among the *Ramans,* de1rived, according to *Farro, ab urinando, ίί* from Diving," he-  
cause, aS he says, *in aqua haurienda urinat, hoc est, mergitor  
ut Urinator,* " in drawing of Water it *dives,* or is. immerg'd  
or like *a. Diver ."* It is the fortieth Parr of the *Culeus,* and  
half of the *Amphora, Columella, Lib.* 3. *Cap. 2. Vctusius Ma\*  
tianus. Columella, ibid,* speaks of Vineyards, which yielded six  
hundred *Urnee* the *Jugcrum,* which is at the Rate os above fifty.:  
four Hogsheads and an half to our Acre. *Arbuthnot of weights and  
Measures.*

UROCRISIA, or UROCRISIS, ουροκρισἰα. The Judgi  
fnent formed of Distempers by the Urine ; from ουραν. Urine,  
and κρίνω, to judge, ἐν

UROCRITeRIUM. The same as UROCRISIA.  
UROCRITICA. The Signs taken from Urine;

UROGALLUS, *Jo Jcast.* Tetrao. *Aristotele* A Species  
Of Pheasant ; there are two Kinds of this Bird, the great ana  
the small; the first is as big as a Turkay-cock, with a black  
Head, and short Beak, a Neck almost a Foot long, and blackish  
and reddish Feathers ; the second, or smaller Sort, is called **the***Mountain Pheasant.* These Birds live in Northern Countries,  
add are said to keep themselves for two or three Winter Months  
under the Snow; they are Very good to eat.

Thein Fat is emollient, resolvent, strengthening, and her-  
Vine. *Lemery des Drogues.*

UROMANTeS, from ουρον. Urine, and μάντις, a Pro-  
phet. A Water-caster; or, in the Vulgar Phrase, a Piss-Pro-  
phet. ’ .. « . -

UROMANTIA. The same as URocRisIA.

URON, ουρον. Urine. See RENES, and URINA.  
UROPYGION. See ORRHonYGION.

UROSCOPIUM. An Inspection of the Urines .

URSUS. Offic.' Schrod. 5. 312. Raii Synop. A. I7i.  
Schw. Quad. I3I. Aldrov. de Quad. Digit. I i7. Jons, de  
Quad. 86. Charlt. Exeri led *Geso. de* Quad. Digit. 942.  
THE BEAR.

The Parts of this Animal, which are used in Medicine, are  
the *Fat* and the *Gall.* The Fat is emollient and diseussive,  
and is of principal Use in the Alopecia; it cures, also. Pains os  
the Gout, the Parotides, and other Tumors, and heals Ulcers  
in the Legs. The *Gall* is recommended to be taken inwardly  
for the Epilepsy, Asthma, and Jaundice. Outwardly it is of  
Service in cancerous and spreading Ulcers, the Toothach, Dim-  
ness of Sight, and other like Diseases. *Schroder.* The *Shin*is good for a Person bitten by a mad Dog to lie upon ; and  
serves instead of a Rug to Travellers in the Winter-season.  
*Schwenhfeld. ' ...*

URTICA. - si

The Characters are; ' . . si.

The Stalks are not branched. The Leaves on the; Stalks  
grow opposite by Pairs, and are serrated, triangular, and ini  
**the** *European* Kinds set with stinging Spines. The Flower id  
apetalous, stainineous, male, seated, for the most part,, in **a**tetrapetaloidal cruciform Calyx, and having a Calycule in **the**Middle. The Stamina are sometimes four, sometimes more,  
and theTesticules are parted into foliaceous Planes. The Fruit  
generally grows on **a** Plant distinct from that winch bears **the**Flower, and is either a bivalve Capsule, full of Seed, and con-  
sisting sometimes of a Collection of Globules, or a Pincer-  
shaped Substance holding the Seed in its Gripe, and furnished  
with a. filamentous Tuhe and Calycule. 'There are sound  
Ovaries, also, in the Male Plant; so that there are Male,  
Female, and Hermaphrodite *Urticce* or Netties; . .

*' Boerhaave* mentions eight Sorts of *Urtica*; which are, .

**i.** Urtica; maxima; racemosa; Canadensis. *Ho R. Par. .*

2. Urtica; urens; maxima. *Cy B. P.* 232. *Tourn. Inst.*534. *Bocrh. Ind. A. 2.* IO5. ’ *Urtica.* Ossie. *Urtica race.,  
rtifcra mayor perennis.* Ran Synop. 54. *Urtica major vulgaris,*J. B. 3. 445. Raii Hist. I. I6o. *Urtica mayor vulgaris et  
media silvestris.* Park: 440. *Urtica urens.* Ger. 57 *oi* emaci  
706. COMMON STINGING-NETTLE.......

- The common Stinging-nettle has a creeping spreading (lender  
Root, full of Fibres, sending forth squarish Stalks, a Foot and an  
half, or two Feet high,' having two oblong sharp-pointed Leaves  
growing on long Foot-stalks, deeply serrated about the Edges,  
and covered, aS wall as the Stalks, with’short stinging Hairsj  
that cause a Burning and Itching in the Flesh; The Flowesa

are small and summons. growing on long slender Bunches ὁ  
some Plants bearing larger Flowers, and no Seed, and others  
small round Seed, and smaller Flowers. They grow every-  
where in too great Plenty. The Roots, Leaves, and Seed are  
used. . . .

They are cooling and restringent. The Juice is good for all  
Kinds of inward Bleedings, Haemorthages, and Fluxes. **A**Tent dipt into it, stops the Bleeding of theNosie, or ofWounds.  
.The Root is diuretic, and are accounted a Specific *for* **the**Jaundice. The Seed is commended for Coughs, Shortness of  
Breath, and Obstructions os the Lungs. *Mellen's Bet. Off.*

The Leaves of this Species os Nettle have an insipid, glu-  
tinous Taste, and give no Tincture of Red to the blue Paper ;  
the Roots stain it very htde ; they are insipid also, but a littie  
styptic ; from which we may conjecture, that the Netties cone  
tain a Salt resembling that which is naturally in the Earth, that  
is Io says composed os' Sal Ammoniac, .Nitre, and Marine  
Salt; but in these Plants it is clogged with a great deal of glu-  
tinous Phlegm, and united with abundance os Sulphur and  
- ' terrestrial Parts For,\* ' ‘ ; - u

By the chymical Analysis we obtain from the'Nettles some  
Volatile concrete Salt/a great deal os Sulphur and Earth, and  
several Liquors, which give a greater Indication of an acrid  
than an acid Salt; so that it is very likely, that the Phlegm of  
these Herbs is thlcknedrather by the terrestrial Parts, than by  
**the** Acid; But this thick Phlegm, which is very considerable,  
jo entirely destroyed hy the Fire. Nevertheless, it is no Won-  
der, that the Nettles should be detersive, diuretic, and good to  
restore the Motion of tbe Fluids; for this glutinous Phlegm  
only moderates the great Activity of **the** acrid Salt, and of **the**Sulphur. ;

\* The Juice of Nettles depurated either of Jtfelf, or by gentle  
boiling it up, stops the Spitting os Blood, and the Fluxos the  
Piles: It is Very good sor the Dysentery and Fluor Albus. The  
Cataplasm os Nettles is emollient and resolvent, and conse-  
quently good to dissolve Tumors accompanied with an Inflam-  
Ination ; it relieves the Gout, and dissipates sometimes malig-  
nant. Ulcers, and cold Tumors. The Leaves of Nettles may  
the taken aster the manner of Tea, for the Stone, and Gravel;  
some drink the Wine in which they have been 'infused. The  
Roots of Nettles preserved with Sugar, procure Expectoration  
in an old Cough, ’ Asthma, and Pleurisy, especially if the.  
Leaves be applied as a Cataplasm upon that Side where the Pa-  
tients seel their Pain :I Some drink their Juice sor the same Dis-  
eases. The young Shoots of Nettles, taken in Broths, purify  
the Blood.' The Conserve os their Clusters, and the Extract

" os the whole Plant, have the same Virtues. The Ptisan os  
Nettles is Very good in a malignant Fever, Small Pox, or

- Meafles; Emulsions may be made with **the** Water and Seed of  
this Plant. *Martyns, Toumes.ort.*

All Netties are diuretic and lithontriptic, and are'said to  
' have a particular Antipathy to the *Cicuta,* and *Hyoscyamus.*’Eaten as a Green, they loosen the Belly, cleanse the Kidneys,  
expel the Stone, and promote Expectoration, and the emp-  
‘ xion of the Meafles. The good Wives in our Country use to  
/ gather the fresh Buds of Nettles, and the Leaves at their first  
coining forth in the Spring, and boil them in Broth, to purify  
the Blood. The Juice of the Herb, or a Syrup prepared of it,  
are Very effectual in Spitting of Blood.

Take of the Juice Of Netties, four Ounces, for five or six  
Days together in the Morning fasting, and boil the Nettles  
in Broth. This Remedy has recovered those who have  
been left by the Physicians,

-' A .Woman who had -a\* Bleeding from a Vein opened in her  
.Stomach, which returned upon, her at every new Cold or Indis-  
position, found the same Medicine of most immediate Efficacy,  
-when all others sailed. The distilled Water, mixed with Spirit  
os Wine to a great Degree of Acidity, is admirably effectual  
.In restraining an HcemoptysiS. *Hier. Rahlingerus,* and *Udal-  
ocicus Junpius,* two Persons of Quality, who were both Very  
subject to Haemorrhages - at the Nose, used, as a never-sailing  
-Remedy, -to take a Piece of the white, ligneous, and round  
Root os the Red Nettie, and pur it up their Nostriis, fnussing

. tip-some Water. . ' P . - - . . . r ... - - - -

-. Externally it is of Service m putrid, gangrenous, and malig-  
nant Ulcers,, and diseuffes Hardnesses and Tumors, and rey  
'presses an Inflammation of theUvula. The lesser *Urtica* bruised,  
:or theJuice of the-saine-putup the Nostriis; stop their Bleed?  
ing. - su-et.sa- squ.et squ  
V The-Seed ofthe- *Urtica,* especially the *Roman* Kind, is of  
frequent-Use in- Affections of. the Lungs, aS theAsthma, stohe  
born Coughs, the Pleurisy; and Peripneumony. Ἄ Conserve  
prepared of the Bunches of sthe Flowers and of the Seeds,.is a  
-most effectual Remedy in the Stone of the Kidneys, Affectioris  
of the T horax, and Spitfinft of BIood. - That .the Seed'of

*Nettlen* provokes Urine and the Menses, and stimulates to Vo-  
Itery, is agreed by Physicians ;’ whence it is commonly given by  
lewd Women to those who address them. The Root os the  
*great Nettle* is highly commended for the Jaundicethe same  
boiled in Wine and Honey, is an excellent Medicine in old  
.Coughs, and an Orthopnoea.

For the burning Heat, Pustules, andsstching, excited by  
*Nettles,* the Remedies are Oil os Olives, Oil of Rosos, the  
Juice os Tobacco, or a green Leaf of rhe same applied ; and,  
to name no more, the expressed Juice of the Nettie itself, as  
*Parkinson* tells us. . -

An immoderate Flux of the Haemorrhoids, after all manner of \_  
Remedies try'd in. vain, and the Patient was Very much weak-  
ened, has been-cured only by theJuice os *Nettles* depurated by  
a flight Ebullition, given to the Weight of two Ounces with  
a little Sugar. . examples of tins have been collected from *Ri-  
verius,* and other practical Writersof Medicine, by Dr. *Toncrcd  
Robinson.* I.

The People in my Country, fays *S. Pauli,* know by certain ,  
Experience how to prevent the unseasonable Fermentation of  
their new Beer, and to defend it from the Thunder, by placing  
in their Veffeis a Very large Stinging-nettle, with some Biss of  
Steel. *Raii Hist. Plant. ....*

3. Urtica; urens; minor. *Co Β. P.* 232. *Me Hi 3.* 435...

4. Urtica; urens; pilulas ferens; prima Dioscoridis; se-  
mine Lint. *Co B. P.* 232. *Toum. last.* 434. *Boerh.. Ind. A.*2. I05. *Urtica Romana.* Offic. *urtica pilulifera folio pro-  
fundius Urticae majoris in modum ferrato, femine magno Lini.*Raii Synop. 5.4. *Urtica Remana.* Ger. 57O. Emac.706.  
Park. 44O. Raii Kist. i. I61. *Urtica Romana sive mas cum  
globulis. JoB.* 3. 445. ROMAN NETTLE.

This Nettle has rounder Stalks,and darker-green Leaves, more  
deeply serrated, than the common Nettie; thay are neither so  
large, rough, nor hairy, but full of small shining Prickles,  
that are rather more stinging and burning than the common.  
Towards the Top of the Branches, from the Bosom of each  
Leaf, arises a round Ball on a long Foot-stalk, about aS big as  
a Pea, and thick set with sharp stinging Hairs, including seve-  
ral shining Seeds, in Shape like Linseed. It grows in. several  
Places of *England,* as about *Tarmouth,* and in *Ramney-Marsa* 5  
but it is not .Very common. - -j

This is much of the same Nature with the common Nettle; -  
but the-Seed is reckoned more pectoral, and os greater Service  
against Coughs, and Affections os theLungs; but is very, seldom  
used. *Mellen1 s Bot. Osse* . . .r

It grows in sandy Places, and the Parts in Use are the orbs-  
cular, compressed, smooth, shining Seeds, which are of a  
blackish-red Colour, of a somewhat acrimonious Taste, with  
a kind of Fineness. They are frequentiy used in pulmonary  
Affections, the Asthma, stubborn Coughs, Pleurisy, and P«-  
ripneumony. . *Dale. -*

5. Urtica ; altera, pilulifera; Parietariae foliis. *Hi R. Par.*

I3I. ‘ ς .ά ς Ἄ . ἄκί - I

6. Urtica; Romana; facie Urticae vulgaris.

7. Urtica; pilulifera; folio angustiori; caule viridi;.Bale-  
arica. *Salvador^ : . ....*

8. Urtica; Americana; cattle . rubro; folio laete Viridi;  
splendente. *Bocrhe Ind. alt. Plant. ‘ .i*

TheNettle iscalled *Urtica,ab urendo,* "fromburning,” because  
it is Very burning when handled. The four first Species are fur-  
pished with small, slender Spines, os so flexile a Nature at the  
Extremities, that when they enter the Skin they easily hend ;  
but when they penetrate the Flesh they cannot be drawn forth,  
but are there broken off aS it were into Fragments, and excite  
an Inflammation and Vesicles, which continue till the Pieces  
are expelled, ῆ. t

The Decoction of the Leaves is aperitive, and commended,  
against the Gout. The greenest and freshest Stalks are used to  
whip the Limbs affected with the Gout or Palsy, in order to  
excite an Inflammation in the external Parts. This Plant is  
of Service in Diseases of the Kidneys and Bladder, Coughs,  
Phthisis, internal Haemorrhages, HoemoptysiS, Vomiting of  
Blood, an immoderate Flux of the Haemorrhoids;, and bloody  
Urine. The Leaves bruised and applied, resist a Gangrene,,  
and a Decoction of them drank in the manner of Tea, is an  
excellent Laxative. *Hist .Plant, adscript. Boerhaau. - -*

URTICA AoULEATA A Name for the *Cannabina;  
store purpurascente,* arid *sor the. Caanabtnastore albo.*

“ URTICA HERcULEA. A Name .for the *Galeopsis', pro.,  
ceriory foetida; sipicata. . . .....*

" DRTICA INERs. A Name for several Sorts *cd Lartium-,*it is, also, , a Name for the *Galeopsis.i siveTJriica triers y store  
lutea. .si ... - - - .*\* URTicA .MORTUA. A Name. for the *Galeopsui lutea.gi  
amplioribusfoliis; maculatis. .* ... . t νύ

/ URTICA MARINA. Ostic. Charlt. Exer. 68.; Schonefr  
Ichti 77. *Urtica.* Jons. Exang. 54. *Urtica marina* 5 Gr 6.

*ilcndelctii.* C. BE. 369. *Urciea rubra.* Rondel. 1.530. Bellon.  
Aquae 34a. Gesis. I039. Aldrov. Exang. 568. *Urticae velPul-  
monis marini Species.* Mer. Pin. I94. SEA BLUBBER.

It swims on the Water,- and is often east by the Tide on  
the Shore, being a round, compressed, pellucid Substance, re-  
sembllng a Jelly, with red Veins interspersed. The Virtues are  
the fame with those of the *Lepus marinus.*

URTICATIO.' A kind of chirurgical Operation, which  
consists in striking an}’ Part of the Body with Nettles, in order  
to recall the natural Heat. -

**URUCU. SeeAcHtoTL.-**

URUCATU *Erastlienstbus. Marcgr.*

This is a Plant which grows upon the Tree *Urucari-iba* with-  
out a Root; but it has sour or five Leaves, which are broad  
heneath, and make an oval Bulb, about four Digits in Length,  
and containing a fat, medullary Substance, of the Appearance  
and Consistence of a factitious Ointment, cold to the Touch,  
Of a white Colour, inclining to green, and interspersed with  
many fine whitish Filaments. Above rhe Bulb the leaves part,  
and become narrow,' but shoot up to a Foot or more in Height,  
wider above. Tongue-shaped, and green like those of the Squill;  
every Leaf has three Fibres extended according to its Length.  
It bears neither Flower nor Emit, and has no Smell, as neither  
has its Ointment. - . .

This Ointment is cold, and esteemed very proper and effec-  
tual for mitigating Pain r and is, also, sound by Experience to  
induce a-Sopor. *Raii Hist. Plant.*

URUCURI-IBA. See PALMA. '

URUMENA, οῦρέμενα. The Urine; or Substances dis-  
charged together with theUrine. ‘

URU-PARIBA. See GUIRA-PARrBA.

U RUS. The wild Bull.

USFIDA. The Scoriae of Gold. *Rulandus.*

USNEA GRANII HUMAN! - Ossic. *Museus ex Cra-  
nio Humane.* Ger. I374. Emac. I 563. .Park. I3I3. *Muse  
cus Cranio Hamano innatus. Ufnea Osseeinarurn nostratium.*Raii Synop. 36. MOSS OF A DEAD MAN’S SCULL.

They find it frequently in *Ireland:* whence it is imported to  
us. The whole Plant, which-is in Ufe, is commended by very  
manyAuthors for Haemorrhages; and is an Ingredient in that  
celebrated Composition called *lJnguenturn armarium. - -*

There are two Sorts of *Useua humana* ; the first, which is  
used in our Shops, is imported from *Ireland,* and is nothing but  
**a** smaller Species of the *Museus vulgaris terrestris Adiantbi au-  
rei Capitulis,* and differs not from the Moss which grows to  
Stonesand Trees, which it exactiy resembles, so as not to be  
distinguished from it neither by Form nor Smell. Mr. *Doody,*an Apothecary of *London,* and a very good Botanist, has oh-  
served it growing to the Pones of Horses and Oxen lying in  
the Fields.

- The other Species is crustaceous, and grows to Sculls after  
the Manner of the *Lichen petraeus,* and spreads itself. And  
this Sort is preser’d by Authors to the preceding, as it is sup-  
posed to be endued with a peculiar Virtue of subduing and re-  
moving feveral Kinds of Difeafes. *Ephem. Germ. Raii Hist.*

This Species of Herb which adheres to the Sculls of Car-  
cases exposed ro the Air, is by different Authors recommended  
as highly beneficial in various Diseases. Thus it is extol’d as a  
Specific in Epilepsies, and all Disorders of the Head, in H:e-  
morrheges produced by whatever Cause, and in Dysenteries.  
It is used internally, externally, alone, mixed with other Sub-  
stances, and as an Amulet. It is an Ingredient in the *Unguen-  
tum Armarium, Magneticum,* or *Sympatheticum.* In Haemor-  
rhages it produces its Effects, if only held in the Hand. Thus  
*Baste,* in his Specifics, informs us, that he himself had an  
Haemorrhage of the Note stopt by using it in this manner.  
*Juncker,* in *Therap.* informs us, that it renders the Body so  
unpenetrable as not to he pierced with a Muiket-hulleI. Some  
affirm, rhet the Virtues of that Ufnea are greater which has  
been gathered from the Sculls, during a certain Position of rhe  
Stars ; when, for Instance, the Moon is in the Increase in the  
House of *Venus,* when she is in *Pisces, Taurus,* or *Libra.*Others affirm, that the Ufnea gathered from the Heads of  
bang’d Perrons is best : But *Paracelsus* asserts, that what is found  
on the Sculls of Perrons broken on the Wheel, is no less valu-  
able: See *Schred. Ph. Hoffman, - Cl. Scared. Boeder. Etimul-  
ler, Hilment, Barbet, st/led. Paulli Qpesdrip. Konig. Valent.  
.Must. Hildan. Grube in Arcari. Med.* informs us, that thofe  
who greatly extol the Ufnea in Medicine, suppose, that,the  
vital and animal Spirits of the deceased Person are coilectsd in  
it, and by a certain medicinal Force derived to any Part affects  
ed in a living Person: But as every one knows, that a Car-  
ease has neither vital nor animsl Spirits, those seem to be in the  
right who give no Credit to the peculiar Power of this Plant,  
or its stjecific Virtues in removing obstinate Disorders, *"yunc-  
ierus.* in the Work already quoted, affirms, that the Virtues of

this Plant are sounded on Credubtv, ot some ether Err..\*,  
Besides, the Force of Imagination may be supposed ro co-op--  
rate strongly with this Medicine, as *Baste, de Specific.* thinks;'  
where he informs us, that if a certain Perfori, when Blood wasl  
taking from him, took Ufnea in his Hand for the fisse of Ca-  
riosity, the Blood ceafed to flow till he laid it aside again. :  
*Marx,* the celebrated Dealer in Aromatics, in *Narembergul*does not hesitate to affirm, that the'Usoea. of the human Cain  
nium is of no other Use hut to he preserved as a Rarity. And:*Boecler* is of Opinion, that, as with the Bones of dead Bodies; -  
so, also, with the Usnea, many superstitious andimpious things’  
are done. . But I am of Opinion, that in Haemorrhages, where  
styptic Tents, or Pessaries, are expedient, the Ufnea mixed  
with other proper ingredients, may produce happy Effects. Be-  
sides, where exsiccant and astringent Medicines are proper, its.  
Powder, whether used externally or internally, mnst certaiuly  
produce forno Effect; for it is‘of *a* drying and astringent Na-\*  
ture. Thus I agree with *Pauli de Mcd. Corp. hum. Sect.* 8.\*  
where he speaks in this Manner : " Thoughthe Uinea may  
" produce good Effects in Spittings of Blond, Hzmorthages;.  
" and other Fluxes; yet there is no Necessity why a Physi- .  
" cian should disgrace his Profession by prescribing st, since  
\*" there are other Substances equally astringent; and which neF  
“ Patient will refuse on account of the Horror and Nausea:" they produce. ” *Ettmuller* informs us, that some supply1the Place of the true Ufnea with the Mofs of a Tile, which  
in Haemorrhages of the Nose, they immerse in Vinegar, and  
apply to the Crown *of* the Head ; whereas instead of the true  
Usnea, which is rare, others use lone of the artificial Kind,7which they obtain in the following manner: They take the  
Mofs of large Meadow Stones, gathered in the Month, of'  
*April* ; this, when gently dried, they reduce to a grofs Powder  
in a Glass Mortar, sprinkling it with *Malmsey* Wine, or that of  
*Petrus Simon,* till it has acquired the Consistence of a thick  
Poultice. Then with a Knife they spread this Preparation very  
thin on the Cranium of a Carease broken on the Wheel. A’a  
it becomes gradually dry, they spread more ofit oh the Cranium,  
which in the opcn Air they expose to the Rays of the Sun, re-  
moving it when Rainscomeon. This they repeat till the Plant-  
begins to flourish, and afterwards gather from it anUsnea notin.  
rior to that which grows spontaneoufly from the Scull. Ζχιἀο-  
*vici, in Pharm.* when treatiog of Volneraries and Astringents,  
speaks in the following manner : “ Most may be every-where  
“ found ; and that obtained from the Oak, and the common  
*" Egyptian Thotn,* for medicinal Purposes, in Pessaries for.

Instance, Tents and Ointments are not inferior to theUsuea,’  
gathered in the most superstitious manner, or even that grow.\*  
"" ing in human Sculls. ’’ *Rieger.*

USRUB, or URSUB. Lead. *Rulandus.*

USTILAGO. Blighted Corn,

USTIO. Burning, either relative to the Simples of the  
*Materia Medica ‘,* or to **the** chirurgical Application of **the**aolual Cautery.

USTULATIO. The toasting, or roasting any moist Sub-  
stance, in order to render it dry. It is, alfo, used with respecti  
to Wine which is heated, or, as it is usually expressed, burnt.

USUALIA MEDICAMENTA. Medicines which are in  
common Use.

' USURAE Tin. *Rulandus.*

UTERARIA. Uterine, or hysteric Medicines.  
UTERINUS FUROR.

The *Furor uterinus* is a Species of Madness proceeding from  
an ardent and inordinate Desire of Coition, which deprives **the**Patient of the Use of Reason, so that she speaks all manner  
of obscene Words, and abandoning all Shame invites; by all"  
Sorts of immodest Gestures and Expressions, the Men to  
venereal Embraces.

This immoderate Desire of Copulation is produced by. **the**Plenty, Acrimony, and Heat ofthe uterinejuices, exceedingthe  
natural Bounds, and creating an extraordinary Turgency in **the.**seminal Vessels, which stimulating, and in a manner inflaming  
the genital Parts, excites a vehement and unruly Appetite to  
venereal Commerce. From the same Matter and Fomes ascend  
Vapours to the Brain, which disturb the Reason, and interrupt  
the Use of it, tho’ indeed the furious Desire of Coition alone;  
without the Assistance of Vapours, might very well he supposed  
topreduce the same Effecti since all violent Passions are known  
to create the like Disturbantes in the Mind, and parti.,  
cularly an inordinate and extravagant *Lime,* which has **the .**Name of *Erastcus Affectus.* [See AiioR].

The Juices acquire thefe Qualities by long Retention in hot  
and salacious Bodies; for which Reason, this Affection is pro.

. per to Virgins, and young Widows, the’ it may possibly happen  
to young Wives, whose Husbands are either impotent, *cat*hated, and not qualified fora sufficient Depletion ofthe Spermatic  
Vessels, or satiating the venereal Desires.

**Some are of Opininn,, also, that the** Juices putrefy, inndss  
contract a malignant Quality, productive of those severe sqinss  
**ptoms. Bur** they will find it difficult to shew the Differende,  
**between** the *Furor uterinus* and rhe *Hysteric Passion,* which owes.  
**its** Original to corrupted and malignant Juices. For **the** Vari-...  
ous. Degrees of Putrefaction create different Degrees of Ma- .  
lignity,. whence arises a .great Variety of Symptoms*; yet rhe'*manifest Qualities of the Juices, such as its Redundance, HeaI.ss  
Acrimony, and immoderate Turgescence, together with the .  
excessive Heat of the genital Parts, are sufficient to excite this. I  
Affection. ’ . . \_

The Causes productive of this Disorder are hot, copious, and  
acrimoinous.uterine Juices, Youth, a sanguine and bilious Tem-i ...  
perament, participatingofan adust Quality, and atrabilious Food  
ofhad Juice, rich and plentiful Living, and especially spiced and  
high-sessoned Dishes, with the frequent Smell of Spices, as Nut-’  
rnegs, Cubebs, arid the like, long Sleep, and on soft Feather-  
beds, the Courtship and Caresses of Lovers, the Reading of  
obscene Books, Dancing, and Other Pleasures and Sports en-  
Joy’d in Company with young Persons. "si'

The, Diagnosis of this Affection is easily formed from the Pre-,  
mises;, hut because it comes on gradually, and’ by stow Steps,:  
its Progress is to he explained: In the Beginning, while Reason,  
is yet entire, the Patient becomes more sad and silent than or-  
dinary, has. a wanton Cast of the Eye, and a red Colour im  
the Face, which is heightened at Interyais, and especially **nt**the Relation of amorous Adventures; at which Time the Pulse  
and Respiration are altered, through Sympathy of the Hearth.  
Hence Gncesshoasts, that he had discovered the mad and ungo-  
vernable Passion os Love in Women by the Pulse, which suddenly  
alters, and beats in Various Manners ar the Sight, or recalling to  
. Mind the beloved Object. In Process ofTime, as the Disorder  
increases, shebegins to he quarrelsome, and to shed Tears, and  
now-and-then to hurst into Fits os Laughter, and to speak  
manythings inconsistent or indecent; from which, however,  
nothing certain canthe inferred : Aster this she repents, and is sorry  
for whauis past,, till the Return of another Paroxysm, which  
happens, according to the irregular Motion of the Matter,  
without any certain Period. When the Disease is arrived at  
its Height,, the Patient invites the Men to Venereal Commerce  
openly and in a public Manner, and talks of Venereal Affairs  
in coarse and.common Terms, calling Things by thein proper rNames. ' '

As to the Prognosis, the Dsseafe is curable is treated in Season ;  
but if suffered to continue for a considerable Time, till it has  
'taken firm Root, it degenerates at last into a true Mania.

There is great Hope of Recovery, when the InterVais begin,  
to he long, when .the emaciated Body begins to recover Fsests,  
and when the Patient is not much affected or disturbed at the  
Mention Of Love Affairs. Ἀ -

. The Cure of this Affection is to be directed with a View to  
the Correction of,:the hot Distemperatine of the Viscera, par-  
ticularly the. Uterus, and os the Blond, and uterine Juices,  
and to the Evacuation of the acrid Humours, and -seminal  
. Matter.. These Intentions are answered by the following Me-  
thod :.οῦ?:.ῖ . j . . '. \_ ‘ .

' First, then, we are to begin with Phlebotomy, and repeat  
the same several, times, and as often as the Strength will permits  
that the whole Mass of Humours, and the Uterus itself may  
he refrigerated, and a Revulsion Of the fervid Blood from the  
Veins of the Uterus procured. . ...

*If* there be a Suppression of the Menses in the Case, the  
Veins are to be opened in the inferior Parts, in order to pro-  
voke that. Course of **the** Humours which Nature has appoint-  
- ed..δ- ; ......

If the Binod seems to, tend towards the hemorrhoidal Veins,  
winch is known by-their Swelling and Redness, these Veffeis  
ase to be opened with Leeches..

After this. Cathartics are to he administered os the milder  
Rind, and. fuch aS evacuate Bile or Melancholy, as either of  
them most abounds. ,,

Aster the Use os Purgatives are required Jalaps preparatory  
**os** the peccant Humours, or such as are refrigerating and gently  
opening, to be used three Days. . . χ

' Soon after this, a pretty strong Purge is to be given in order  
**to** evacuate the obstinate and deeply fixed Humours. For this  
Purpose the same Cathartics aS are prescribed in a Manin,  
**are here,** also,.. proper to he used, and to be repeated at hi-  
tervalsss ‘ \ : 4- - *~ f'f*

- Aster repeated Purgation, in order to the Refrigeration of  
she Uterus and the whole Body, and to allay the Heat os the  
Humours, the following Bath will he of excellent Service, be-  
ing frequentiy used during the Course of the Distemper ; am

Take of Leaves of Lettuce, Willow, Water-lily, the Vine,  
si. PiIrstane, NaVelwort, each one Handful; the Flowers of

δ᾽MioletS, .'Water-lily, and Roses, each twe Handfuls:  
Boil them all together for a Bath, which the Patient is to Juse warm, without sweating,τ twice a Day, lung before ’  
and . after the Times os Eating.

; PntEnce an entire Path cannot easily be continued for many :  
Days together;, a Semicupitim at least of the Decoction afore-  
said, or even Of simple Water, is srequentiy to he used quite  
tepid, or warm ;-for the principal Part os the Cure consists in  
potently refrigerating the Uterus'. And this is confirmed by a  
remarkable Case related by *Harvey* in his Treatise *de Partu,*os a Woman os Quality, who was delirious for above ten Years  
from *zPuror* and *Melancholia Uterina.* After trying all manner  
os Remedies without Effect, she happened to he seized with a.  
Palling down os the Uterus, which was not suffered to he re-'  
placed till its hot Distemperature was throughly qualified by the  
external Cold. The Success answered Expectation, and the .  
Lady recovered the perfect Use os her Reason in a short, time,  
aster which the Uterus was reduced to its proper Situation;

For the farther Refrigeration os the Body, it will he conve-  
nient to drink Whey sor many Days together.

In short, all those Remedies which are prescribed for the  
Cure of the Hypochondriac Affection and Mania, are os Ser-.  
Vice, also, in this Disorder; Respect being had to its. Origin, ’  
whether from Bile or Melancholy.

To all the Remedies besore-mentioned, may he added such,  
as are endued with a specific Property of extinguishing and re-  
frigerating the uterine Juices , among which are the.following -  
Preparations: " -" .

Take ofLeaves os theWater-hsy, Willow, and AgnusCastuS,  
each four Handfuls; Lettuce, Purflans, Navelwort, each  
one Handful; the Four greater cold Seeds, those of Lettuce,  
White Poppy, each hals an Ounce; Seeds of Dill, two  
Drams; Flowers of Water-lily, and Violets, each one  
Handful: Bruise them fresh together, sprinkling thein  
with the Juice of Lemons, and distil them in *Balneo  
Maria,* and ro each Pint of Water add a Dram of Cam-  
phire: The Dose is an Ounce, to he taken frequent-  
II: ‘ .

- ' - . or,

. Os the sorementioned Simples, or some of them, may he  
. - prepared- a Decoction, which may he taken at several  
Doses, sweetened with Sugar, withan Addition of a little  
Comphire.

**: ‘ Os,***e.. . " \* i:.~ z z .. ' - A*

. An Emulsion may he prepared of the Four greater cold Seeds,  
those of Lettuce, and White Poppy, extracted with Wa-  
ters os the Water-lily, Lettuce, and Willow, withSyrup  
of Violets.' \_ ....

Opiates may, also, be prescribed Of the following Forms:

Take Conserves os the Flowers of Water-lily, Violets, and  
the Vitex, or Agnus Castus, each half an Ounce; Con- '  
serve of Roses, an Ounce and an half; Stalks of Lettuce  
preserved, one Ounce ; Coral, and Emerald prepared, each  
one Dram: Make them into an Opiate with Syrup of Vi-  
olets, and Water-ljly.

When the Delirium is at its Height, Medicines which pro-  
cure Sleep are Os greatest Service, both internal and external,  
and such as ate prescribed for the Cure of the Phrenitis and  
Manin. '.

During the whole Course of the Disease, cooling Clysters,  
and gentle Cathartics are to be used, avoiding the stronger and  
more acrid Purgatives, which thy Exagitation of the Matter  
contained in the Uterus, or its Veffeis, may cause an Exacer-  
bation of the Symptoms, as is usually the Cafe.

Injections may, also, he made into the Uterus of the De,.  
coction of those Herbs which have been prescribed for Baths,  
and other Remedies; and with those Infections Salt of Lead  
may properly he mixed.

Clysters of Oxycrate frequently administered are of good  
Effect. ..

External Remedies are cooling Liniments, applied to the  
Loins, Pubes, and Perinaeum, prepared of Oil of Water\*  
lily. Ointment of Roses, or the White cooling Ointment,  
with the Juice of Nightshade, Henbane, and Water-lily dis.  
solved, with an Addition of a littie Camphire.

\_ A leaden Plate perforated is to he continually worn npon the  
Kidneys. ' -

With regard to the proximate Cause of this Disorder, **finee-**the .Evacuation of the acrid and corrupt Juices may remove  
the same, the most proper Means would be, in the Beginning  
of the Disease, hesore the Fit of Delirioufness becomes Very  
manifest, or in some more lucid Interval, to dispose of the Pa-  
tient in Marriage to a young and lusty Man,, by whose  
Embraces the Uterus heing satiated,.and the Matter con-  
tamed in its Vessels discharged, the Cure is effectually accom-  
plished.

. Pessaries may be prepared Of Leaves of *French NL&rcury*bruised, with a littie Myrrh, Or Powder os Birthwort. These-  
are to he introduced while the Patient is in the Bath, that the  
Uterus, may not he over-heated, and after an HouPSTime he  
removed. And soon after Injections are to he made into **the**Uterus of Whey, or a Decoction of Barley, with a littie  
Juice of Nightshade, Houfleek, or *os* Hemlock, which last  
Herb is peculiarly recommended in this Affection.

- For Expurgation Of the Juices, the following Bolus is of  
great Service: ..........

Take of *Venice* Turpentine, three Drains; Troches of.  
Agaric, half a Dram ; Seeds of Carrot,. Hemp, Powder  
of.Wood of Aloes, each eight Grains 2. Make them into  
.a Bolus with Sugar.*: sc.-A .. .*

Is the Disorder continues,. .Cauteries are to he applied to the  
Leg5 s .sor there is no Method more effectual than to derive the. -  
Matter to the inserior Parts by means of those Drains.

If the Spleen he affected with a Tumor, th Obstructions,  
aS isoften the Case, it is to he treated with Remedies properly  
adapted to those Affections. '’i.

And, in the last place, because the Brain and Heart are great  
Sufferers in this Disease from Vapours ascending .thither from  
the Uterus, proper Relief is to he provided sor each Part-;, the  
Brain 5s to be eased aS much aspoffible by Frictions, and Ligature  
on the inferior Parts, and Application of Cupping-glasses to  
the Hips and Groins; and the-Heart must be relieved by Epi-  
thems, both liquid and solid, such as are prescribed in Decays  
Os the vital Forces. *Eivcrii Prax. Med.*

' UTERUS. The Womb.

In investigating the curious Structure of the uterus, we shall  
first take notice of the surprising Force, or elastic Power, of its  
muscular Fibres and Vessels,' which are capable of heing lucre-  
dibly distended, and of fpontaneousty returning to their former  
State.. This is principally .obvious in pregnant Women, whose  
Uterus is sometimes incredibly distended by a large Foetus, or  
Twins, and the Secundines and Waters ; but when these are  
excluded, the Uterus is again lessen’d, and contracted; so aS  
hardly to be an hundredth Part so big, as during Gestation:  
And though other Parts of the Body, such as rhe Skin and Scro-  
tum, when distended by a dropsical rumor, or the Stomach and  
Intestines when turgid with Flatulences, are capable of yield-  
ing in a surprising manner, when acted upon by an interior  
Force, and of contracting themselves into their natural State and  
Space, when that Force ceases ; yet this Power of Dilatation and  
Contraction is no-where so conspicuous aS in the Uterus. Be-  
sides, what is still more surprising is, that though the Uterus,  
which,, out os a State of Gestation, is hardly equal to a Pear in  
Figure and Bulk, grows to so Vast a Largeness, yet its Thick-  
ness is not lessen’d by this- Expansion, but rathut remains **the**same. su .

Besides, no Part os the human Body is furnish'd with such  
numerousWeffels as the Uterus. The first of these Vessels are,  
the spermatic Veinsand Arteries, which are contiguous to the  
*Ovaria* ; and, being in numerous Ramifications convey'd to the  
Bottom of the Uterus, terminate there, which is sufficiently ob-  
vious, from this, that, by blowing into these spermatic Veffeis,  
the Bottom of the Uterus, is distended. After the spermatic  
Veins and Arteries, the next most conspicuous Vessels are, "the  
Ramifications of the hypogastric Artery and Vein, which sun  
to the middle and inserior Part of the Uterus, as, .also, to the  
Vagina; to which, also, especially where it is connected with  
file Rectum, are distributed, the Ramifications of the external  
haemorrhoidalWeins, winch are by an Anastomosis join’d with  
the Ramifications os the internal haemorrhoid al Veins; and,  
. which is particularly to be observ'd, these Blood-veffeis, eopioufly  
distributed through the Body os the Uterus, not only run every-  
where, in a winding incurvated Direction, but are, also, Very  
small in .Virgins, barren Women, and such as are not with  
..Childnotwithstanding which, aster Conception, in pregnant  
Women, these Vessels are so .enlarg'd, shothewith respect to  
Length and Breadth, that their smallest Ramifications become  
-capable os admitting a large Prohe. C

Besides the large Congeries and winding Direction of the Vess  
..Teis in the Uterns, there is so remarkable and singular a Con-

**ttrrrence** of these Ducts, that there, is no-where *s0* frequent **Slid**great an *Anastomosis* or Cory unction both of arterial and ventari-  
Veffeis distributed from different Parts of the Body: For when  
the spermatic Vesteis are blown up, the hypogastric are; alsis,: t  
dilated ; and when these are expanded, the former are so too.  
The external Haeinorrhoidais, when blown up, distend the in- :  
ternal, which, when expanded, dilate the former: Besides, there, c  
is a manifest Connection observ'd he tween the spermatic Vesteis  
of the Right and Left Side But there is this peculiar in the ex- r  
quisite Connection of the Vesteis of the Uterus, that their Ex-  
trernities terminate in such a manner, as to form mutually com-  
municating oval *Cellulae* of different Bulks, which render the .  
Substance of the Uterus fpongeous and fungous, and which, in  
pregnant Women, are surprisingly enlarge. Hence it is that  
the Uterus, especially of a pregnant Woman, when cut trans-  
verily, exhibits large and almost numherless Cavities ; By means  
of this sinuous and cavernous Conjunction of the Veffeis it is, \*  
that not only the Uterus in pregnant Women is greatly distend-  
ed by the contain'd Blond, and itS Compages, which was hesore  
tense and constricted, render'd more lax and soft, but, also, that .  
the Orifices of the Extremities of the Veffeis, which -under **the**Membrane of the Uterus open obliquely into its Cavity, and  
through any of which, when Airis blown, it easily passes intoss  
the Cavity of the Uterus, are more dilated; by which means, .  
the perforated Filaments of the Vascular Membrane os theCho-  
rion can receive Nourishment from them, and convey it to the -  
Foetus. .-jό. :

Nor in this anatomical Consideration of the Structure Of **the**Uterus, and especially of. its Veffeis, are we to forget, that nob' ‘  
only the hypogastric Veins, which return the Blond, have Dia-  
meters as large again as the hypogastric Arteries, but, also, that  
the spermatic Veins do not run strait, but in a winding manned;:  
so that if they were stretch'd out, their Length would amount-:  
to some Elis, and be three times greater than that Of the speed  
mafic Arteries. All these Circumstances sufficientlyevince, that-  
the Motion of the Blond through these Veins is flow, especially  
since they are destitute of Valves, by means of which, in other.  
Parts of the Body, the otherwise flow Return of the Blond to the'  
Heart is greatly promoted and assisted. With respect to the:  
Structure of the Uterus, it is, also, remarkable, that it isdesti- ’  
tute of Fat, with which other internal Parts are eopioufly co-.  
‘ Ver'd, for this Reason, no doubt, lest its Membrane, being fur-  
nish'd with adipose Veffeis, should hinder the free Expansionand  
Contraction of its Sides. .:

From what has been said, many difficult Phenomena, with  
respect to the natural and preternatural State of Women, may:  
be more clearly explain'd ; many Errors in the pathologic and  
therapeutic Parts of Medicine detected ; and a finer and more  
compendious Method of treating Diseases, arising from Indispo-  
fitions os the Uterus, establish'd.

To begin, then, with the most usual Disorder of this kind:  
It is sufficientiy known, that, every Month, Women, from **the**time of Puberty till they are pretty far advanced in Years, have  
a salutary Excretion of pure Blood from the Mouths of the Ves-  
seis, whether dispersed through the Uterus, or the Vagina; bur  
when this Excretion is either totally suppress'd, too scanty, or  
returns at irregular Periods, Violent and terrible Disorders are  
produced; so that Physicians, in all Disorders incident to Wo-  
men, ought to have a just and careful Regard to the State of **the**menstrual Discharge. But in specifying the Causes of this Eva-  
cuation. Physicians run into different OpininnS, finde some as-  
sort that it is owing to a certain specific Ferment ; others,, that  
It is produced by a certain determinate Effort of an intelligent  
Principle, endeavouring to expel what is disagreeable to Nature:  
Others affert, that this Evacuation is produced by the Influence  
of the Stars, and especially of the Moon; whilst some main-  
tain, that it is the Effect of a Redundance of Blood, which .is  
denied by others; because, say they, by Venesection, which  
hinders the Generation of a Plethora, this menstrual Discharge  
cannot he totally remov'd, or check'd. .-

' But the Person whe carefully considers the mechanical Stru-  
cture of the Uterus, with respect to its Vesteis and Fibres, will  
easily perceive, that the true Causes, and even the Effects, os  
this periodical Evacuation, are expressive of the greatest Wisdom  
and Contrivance in Providence: For as the Uterus, on account  
Of the numerous Vessels with which it is furnish'd, and their  
winding Direction, as, also, on account os the easy and sura  
prising Dilatation, os which it is capable, affords a fit Receptacle  
for the redundant Blood; hence, if this vital Liquor in Women,  
who are always greatly disposed to the Generation of a Plethora,  
is, in process of time, gradually accumulated in the uterine Vef-  
seis, and not return'd in a due Degree and Proportion thro\* **the**Veins, the vascular Sinuses are fill'd and infarcted with it, till  
their Extremities, which terminate obliquely in the Uterus,  
heing too much distended, at last open,, and discharge a pure  
Blood into the Cavity of the Uterus, orThe Vagina. But when '

*'t* sufficient Quantity of the redundant Blood is evacuated, the  
-Mouths of the Vessels again collapse, and are contracted; and  
the Plethora heing diminish’d, the Circulation os the rest of the  
. Blood is render'd freer, not only through the Uterus, but all the  
other Parts-of the Body. Thus, on account os the exquisite  
Relation every thing in the animal Oeconomy. bears to the  
Circulation of the Blood, this salutary Evacuation. is pro-  
duced.

Since, ‘then, a Redundance of Blood is the principal Cause  
**os . the** menstrual Discharge, it is sufficiently obvious, that those  
Physicians commit a terrible Error, who, in Cases where the  
Menses are stop'd by previous Disorders, or excessive Haemor-  
rhages from other Parts, endeavour to recal that Discharge by  
. strong, forcing, and emmenagogue Medicines ; whereas their  
Intention ought rather to he, aster the Disorder is surmounted,  
**to** restore the Appetite and Digestion, and, by salutary Ali-  
ments, which are easily digested, and generate a laudable  
Chyle, to ronde and augment the depressed Sanguification; ’  
- and, when this End is obtain'd, the Menses again flow sponta-  
neoufly.' : , -i ".

. But since the Structure of the Uterus, with respect to its  
Texture, contractile and expansive Power, Largeness and Smal-  
..ness, is not the same in all, but differs, with respect to Age, he-  
reditary and native Construction of the solid Parts, and Method  
of Life, it .is absolutely incumhent on a Physician, who endea-  
vours either to judge os. Dr. cure Disorders, arifing from the  
Uterus, carefully to investigate the Nature and Disposition *of*that Pars,.and afterwards to treat the Disorder by proper Re-  
medies. - Nothing is more frequent in Practice, than, when in  
Virgins, and tender Women, the Menses do not return at their  
proper Periods, To advise Venesection; and, after that, to pre-  
scribe forcing Medicines, and even such aS excite a Violent Tur-  
gescence and Commotion in the Blond ; by which means the  
miserable Patients are thrown into a worse State than before;

/since a Chlorosis is'brought on, and accompanied sometimes  
with Convulsions, sometimes with Distentinns of the Limbs, or  
with flow Fevers, Violent Head-ache, and other Disorders, of  
**a** like Nature: This, in my Opinion, happens, for no other  
Reason, than that the Suppression or scanty Discharge os the  
- Menses derives its Origin from the tense Stricture of the Fibres  
of the Uterus, and the excessive Smalness os the Vessels, so  
that they are difficultly distended by the Blond:-For it is certain,  
from experience, that young and tender Giris, by the Abuse of  
Acids, or' by the too free Admission of COld to their inferior  
Parts, whilst they sit almost naked on the cold Ground,  
have Contracted an anomalous State of the Menses, accom-  
psnied with terrible Symptoms, and hardly capable of being  
Cur'd. .

. If an irregular State of the Menses proceeds from this Cause,  
forcing Medicines are not only useless, but, also, prejudicial; for  
when the Vessels are contracted, and closed up, and the Blood  
thrown into a quick Motion and Ebullition, a greater Infarction  
and Obstruction, and a Regurgitation of the Blood to the more  
noble nervous Parts, will happen, and, by that means, produce  
Spasms and Convulsions. Nor is Venesection in the Foot, in  
other Cases highly beneficial for the Alleviation of the Sym-  
ptoms, os any great Service; but frequently, on account of the  
greater Derivation it occasions to the Uterus, confirms the Ob-  
struction, and hinders the Blood from being discharg'd from the  
Orifices os the uterine Vessels. Almost theonlyRelief, in thisCase,  
is found in tepid emollient Fomentations, and Baths, which relax  
the constricted Fibres. This Intention is excellently answer'd  
thy Baths of pure light Rain-water alone, or by those of the sul-  
phurated *Toeplitz* Waters, seasonably used ; but, internally, re-  
jectingdall hot; acrid, and balsamic Substances, let the Patient  
drink mineral Waters; and, is she has not an Opportunity of  
doing *so,* the next most efficacious Medicines are, neutral Salts,  
os an inciding, aperient, gently diuretic, andjaxative Quality,  
exhibited in a sufficient Quantity of some proper Liquor. The  
most considerable Salts of this Kind are. Borax, *Sedlitz* Salsa,  
the *Terra foliata Tartars,* a Solution of Crabs-eyes, the *Arca-  
rtum Duplicatum*; and, in Persons of bilious Habits, Nitre is of  
uncommon Efficacy. But, if the *Primed Fia* are full of acid  
Sordes, the Liquor of the Salt os Tartar, with a small Quantity  
os the Mass os balsamic Pilis dissolv'd in it, affords the most fur-  
prising Relief.

But aS the Suppression er scanty Evacuation of the Menses  
arise principally from a Narrowness, Compression, and Stricture  
of the Arteries of the Uterus, so excessive Discharges of.this  
Kind derive their Origin from the too great Largeness, Relax-  
ation, and weaken’d Tone os the uterine Vessels, and the Si.  
nuses form’d by them in rhe Substance of the Uterus, and from  
the flow Return of the Blood through the Veins to the Heart,  
occasion'd by that mean;: For, if we except the Liver, there is  
no Part cs the Body in which rhe Morion and Return of the  
Blood to the Heart is observ’d to he so difficult, aS in the Uterus;

which happens not only on account of the perpendicular Situa-  
tion of this Part, with respect to the Heart; bat, alio, becausc  
the Vessels, and especially the Veins,-as we have already ob-  
serv'd, run in a very, winding and incurvated manner, through  
.the Texture of the Uterus. Besides, since, both on account  
v.of the Distension of the Uterus by the Foetus, and the winding  
Direction os the hypogastric and spermatic Veins, the quick  
-Motion os the returning Blood is greatly retarded, the Reason  
is obvious, why the Diameters os the uterine Veins should he as  
large again aS those of their correlponding Arteries : So that we  
may.reasonably conclude, that four times as much Blood is con-  
tim'd in\* the uterine Veins, as in their Arteries. If, therefore,  
.the yenosis Sinuses, with which the Compages of the Uterus  
abounds, are preternaturally distended by a thick stagnant Blood,  
by this means the Blond, being strongly convey'd through the  
Arteries, and. denied' a Passage through the Veins, it by its  
Quantity and Force at last opens the distended Orifices of **the**

' Vessels, so that their Contchtsareoopioufly discharg’d.

From what has been said we may easily understand why Vir-  
gins have more rarely excessive menstrual Discharges, than Wo-  
men who have brought forth Children,' or sometimes pregnant  
Women, in whom an excessive Haemorrhage from the Uterus  
frequentsy proves the true Cause os Abortion: For it is suffi-  
ciently known, that an abortive Exclusion of the Foetus rarely  
happens without an excessive previous Haemorrhage from the U te-  
**rns :** For when, in pregnant Womens, the Venous Vessels os the  
. Uterus are preternaturally distended; by the copious Afflux of  
Blood, and when the Blood becomes grumous, and coagulated  
in the small Colis of the Uterus, not only the Orifices os the  
Arteries, but, also, the insarcted Sinuses, heing open’d, and a  
convulsive Motion of the Uterus and adjacent Parts, without  
which an Abortion is not easily produc'd, happening, the Ar-  
teries and Sinuses discharge a large Quantity os Blood\*with Im-  
pctuosity, the Uterus becomes flaccid, the Placenta is separated  
from the Filaments of the Uterus, and from the Apertures of  
the Veffess, and, lastly, the Foetus, is excluded, two or three  
Days aster the Hemorrhage.

Hence pregnant Women, is in the last Months os Gesta-  
tion Nature attempts an Abortion with an excessive Haemor-  
rhage from the Uterus, are often in great Danger; nor is the  
Danger less, when the Exclusion of a mature’ Foetus is pre-  
ceded by a large Discharge os Blood. It is certain from Ex-  
perience, that by this Misfortune, both the Mother and Infant  
are exposed to the most imminent Danger, ard unless the latter  
is brought into the World, both are destroy'd by the Haemor-  
rhage which cannot be stopt; sor so long as the Infant, whether  
mature, or only an Embryo is retained in the Uterus, the "Ute-  
rus, with its Vessels, is not only greatly distended, but the  
Orifices os the Vessels, on account of the more impetuous  
Assiux of Blood to them, being more opened, discharge a  
greater Quantity of Blood, which flows continually ; whereas  
when the Foetus is excluded, though the Mouths of the Vessels  
. opened by the Removal of the Sec undines, with which they  
were hesore covered, discharge a large Quantity of Blond, yet  
when the Distension of the Matrix ceases, the open Orifices of  
these Veffeis collapse, and, upon their Contraction, the Haemor-  
rhage ceases. In such a Case, is we' intend. to preserve the  
Mother, and prevent a mortal Haemorrhage, nothing remains  
but to extract the dead Foetus with all Expedition, or in the- -  
. safest manner possible, to procure a seasonable Abortion. This  
Doctrine is sufficiently consumed by *Bhonius, in Dissert, de  
Abortusulubri.*

Though Violent Affections of the Mind, especially Frights,  
or intense Commotions, and Rarefactions of the Blued, arising  
from violent Exercise, too hot Bathe, or the Use of drastic Pur-  
gatives, Emetics, Sudorifics, or EmmenagogueS, are the fre-  
. quent Causes of Abortion, yet unless the VeflelS of the Uterus  
' are preternaturally distended, relaxed, and insarcted by a Re-  
dundance os Blood,, and the Matrix subject to spasmodic and  
. .convulsive Motions, an Abortion is not greatly to he dreaded.  
’Hence we may justly reckon it an error, not only in the Vul-  
gar, but, also, in several Physicians, who are os Opinion, that  
some Remedies infallibly, procure Abortion ; whereas it is cer-  
tain from Experience, that Women of Pleasure, when pregnant,  
cannot sometimes obtain their wicked' Ends by copious Vene-  
sections, and the Use of drastic Purrgatives, Emetics, and’  
EmmenagogueS, though when the Matrix is disposed to a too  
speedy Exclusion of the Foetus, Abortion is procured by the  
fiightest Cause. It is, therefore, a smgular Proof os the Good-  
ness and Wisdom of Providence, that there are not sound in  
Nature Remedies universally and infallibly capable of procuring  
Abortion, since by their means numherless Murders might be  
committed.

Nothing happens more frequently than that Women' who have  
. once suffer'd Abortion, are again easily subject to the like Mis- .  
..fortune, at the same Period of their Gestation. It is, also.

.certain from Experience, that generally sanguineous Masies, as  
large as an Hen's egg, together with a large Quantity of gni-  
mous Blood, are excluded from the Uterus before Abortion  
.happens, which is **a** manifest Proof, that the Strength **and**Elasticity of the Uterus and its Vessels, are so weakened by  
**the\*** precening Abortion, that they could not soon return to  
their natural State; for the so frequent Disposition of the Uterus  
to Abortion is only to he accounted for from the excessive Re-  
taxation and Dilatation of the Veffeis. And this Dilatation  
must he removed, and the Tone of the Vessels restored by a  
prudent Physician, in the first Days or Weeks after Abortion,  
or natural Birth, by mild Laxatives, and temperate balsamic  
Corroboratives, duly repeated, or by a proper Diet; or if the  
.Patient is plethoric, and has conceived, by proper Venesection  
in the first Months of Gestation ; and unless these Measures are  
.taken, this peccant State of the Uterus is not removed with-  
out great Difficulty; for, what is carefully to he adverted to,  
too great a Redundance, of Blond with respect to the Veffeis  
and Strength, to which Women *os* spongious Habits, those  
. who are costive, and.such as lead a sedentary Life, are princi-  
.pally subject, proves the material Cause os Abortion. Hence,  
if in the first Months os Impregnation the Blond is not by the pro-  
vident Force os Nature discharg'd from the external Region of  
.theUterus,at the usual Period,which srequentiy happens ; or if  
too small a Quantity of Aliments are taken into the Stomach,on  
account *of* Inappetence, Nausea, Subversion of the Stomach, and  
Uneasiness of the Praecordia,which in the first Months after Im-  
pregnation are Very common Symptoms; or if in Proportion to  
the redundant Blood Venesection is not duly performed, and the  
Patient's Body kept soluble by proper Rernedies,the Foetus rarely  
.arrives at Maturity, and seldom is retained in the Uterus till the  
full Time. . . . ) .

There is, also, another no less satai Error in Practice, which  
is an Attempt by frequent Venesections in the Arm, the libe-  
ral U se os refrigerating, or actually astringent Medicines, such  
as Opiates, and Narcotics, to put an imprudent Stop to men-  
- strual or lochial Discharges, either in Childbed Women, or  
. filch , as have suffered Abortion ; for by this preposterous Me-  
thod, and the Use of improper Remedies, the natural Strength,  
Tone, and Elasticity, not only of the Uterus, but, also, of  
all the. Solids, are greatly diminished, and the Misfortune ten-  
. odered either incurable, or far worse than it would have other-  
wife been ; for whet to some may perhaps appear a Paradox,  
we rather affirm, that the same Method, and almost the same  
Remedies,by winch a Diminution and Suppression os the Menses  
are removed, are most beneficial for checking them when im-  
.moderate, and reducing them to a natural State: For it is cer-  
tain from Experience, that both an excessive and too scanty  
menstrual Discharges, have been cured by a proper Use of het  
and cold medicinal Waters, Bathe of nervous and emollient  
Herbs, uterine Clysters, Preparations os Steel, the balsamic  
Pills, those of *Becher,* and others made in the same manner,  
Baths for the Feet, and the Use of detersive nitrous Salts; for  
in both States the Tone of the Uterus is destroy'd, the Vessels  
distended with Blood, the Circulation of the Humours through  
the uterine Ducts not free and easy, but intercepted by In-  
" sanctions. Obstructions, and Stagnations ; for removing or cor-  
Iecting which, the forementioned Remedies are Veryproper.

We now come to consider another Disorder os the Uterus,  
.which in to he derived from the same Structure of the Matrix  
we have already mentioned; for in the Compages os the  
Uterus, the Direction of the numberless Veffeis is winding  
and intricate, and the Circulation of the Blond through them,  
' highly flow and difficult; so that it is hot to he wondered at,  
if, inconsequence os a depraved Nutrition, both the internal  
fiursacej intefnal Cavity,'Neck, or even Vagina of the Ute-  
jus, should he preternaturally subject to fleshy and fungous  
Excrescences of Various Figures, Bulks, and Structure, which  
sometimes so augment it, as to resemble a State os Pregnancy.  
Fibrous bloody Masses, and polypose Concretions formed of  
Membranes, are, also, more srequentiy generated in **the ute-**rine Veffeis than any where else, and lay a Foundation either  
.for Sterility, or immoderate Haemorrhages from the Uterus,  
which are succeeded by Abortion. Concretions of this Kind  
are commonly called *Meles,* of which there are various Species;  
*by Lamsuverd* distributed into Moles of Nutrition, and those  
os Generation; but led these should he confounded ,as they easily  
are, we shall consider their Difference somewhat accurately, *x*\ First, then, the SecundineS, with a tender Foetus of ooe *ot*two Months old, excluded by Abortion, is by ignorant Persons  
. taken for a Mole, because it resembles a fleshy Concretion.

Besides, though more rarely, globulouS Masses formed in **the**Uterus itself, often create a Suspicion of Pregnancy, and are  
frequently sound in such Persons when deed, or are excluded by  
’a preternatural increase of the Motion and Constriction of **the**Uterus; besides, it sometimes happens, that; a sew Months  
**after Abortion, or SI legitimate DchVeay,. Women who have**

**been** Jadg’d pregnant,' have discharg’d from the UteruSsijlid  
fleshy Masses, of Various Bulks and Figures, which, aS they **are**deform'd, and resemble Ἀ Mole, large Mouse, or some other  
Animal, are not only, by the Vulgar, ascrib'd to Incantation,  
and said to he Moles, but, also, by some Physicians, given out  
for preternatural Condeptions,arifing from theImbecillity **ofthe**seminal Fluid. Thefe Concretions are often carried in the Uterus  
for **a Year,** and longer; and, by reason ofthe Various Symptoms  
peculiar to the Mother,create d Suspicion of a true Embryo ; bur -  
are generally excluded on the tenth or eleventh Month. \* But  
Mr. *Rjeyfch, in Observat. Anatomico-Chirurg.* 28. et 58. **seems**to have advanc'd a more solid and rational .Doctrine, when he  
assarts, that all these Concretions arise from Pieces Of the Secun-  
dines left after the Exclusion of the Foetus, and firmly con-  
nected with the Veffeis os the Uterus ; and that these Pieces, \*  
being nourish'd by the Afflux of the Blood, increase; and, in  
Process of time, becoming more compact, and hard, assume **va-**rious Figures, according to the different Compression of the  
Uterus: For it often happens,that the Secundines are discharg'd  
dilacerated; for which Reason, it is expedient, after the De-  
livery, to inspect whether they are entire, or separated: For.  
if any Portion remains, the Patient is often subjected to Violent  
Symptoms; for which Reason, the remaining Piece is to he ex-  
peditioufly expel’d ; which I have known successfully done by **a**proper Clyster, or by the *Pilulae Balfamica.* But Masses of  
Blood, and membranous Fibres, by some call'd Polypuses, **are**more srequentiy observ'd, and these, being form'd in the dilated  
Vessels os the pregnant Uterus, and at last propel’d by **the**strong effort of the Matrix and adjacent Parts, frequently cause '  
Abortion, which they either precede, accompany, or follow. .

Having thus traced the Difference, and inquir'd into the Ori-  
gin of Moles, we may the more easily determine that impor-  
tant Question, Whether Virgins can he pregnant with Moles.  
Tor it is sufficiently obvious, that the Species of Moles, arising  
from enlarg'd Pieces of the Secundines, can by Ito means he  
found in Virgins. Nor are the Pieces os fibrous and coagulated  
Blood, which are thought Moles, or Polypuses, found in the  
Uterus of Virgins, the Vesteis of which are Very small, and  
narrow; but they are principally observ'd in pregnant and  
Child-hed Women. .But it is neither unusual, nor impossible,  
that fungous Bedies should be produc'd, both on the external  
Surface, and in the Internal Cavity, os the Uterus of a Virgin,  
who has heen subjected to some external Violence, such as a  
Fall from an Height on the Abdomen, as we are inform'd by  
*Bartholine, Cent.* I. *Hist. cyy.* and by *Honstius, in Lib. An de  
Morb. Mulicr. Obs.* 39. .Nor is it to he deny'd, since it is cer-  
tain, from Experience, .that married Women, Widows, Wo-  
men advanc'd in Years, .those above Fifty, and those of san-  
guine and corpulent HabitS,: have, after a long Cessation Of the  
Menses, evacuated fleshy and bloody Moles, sometimes as large  
as an ordinary Fist, and of different Degrees of Softness and  
Hardness, accompanied with immoderate Effusions of Blond.  
Of this we have Instances in *Marcellus Donatus, Lib. An Capo  
o.Se Job. RJondius, Cent. 2. Cap.* 53. and *Rodericus A Castro,*who gives us an Instance os this Rind in a Woman of seventy  
Yeats of Age. : i .

On account .of the . difficult and stow Return ose the Blood  
through the Veffeis of the.Uterus; especially the spermatic Vef-  
' seis, which run into Various Windings and Curls, like the Ten-  
drils of Vines, and, consequently, make the Way to the Heart  
longer than it. would otherwise be, it, also, . happens,-that, in  
the Uterus, and adhering Parts, especially the Tubes and Ova-  
ries, there sometimes happen inundations of Serum, and aque-  
.. ous Tumours ; Tor never does the fluid and aqueous Part of the  
Blood sooner recede from the rest, than when it- passes through  
the Viseera in a flow and languid manner ; as in sufficiently ob-  
vious in the Liver; for which Reason, in I no Part are there  
more numerous lymphatic Veffeis observable, than in the Sub-  
stance of the Uterus and Liver, and adjacent Parts ; and these  
lymphaticWesselstheing, by the Afflux of the Lymph, distended,  
**are** rais'd into large Blisters, or. Hydatides, which heing bro-  
**ken,** a Dropsy is sometimes quickly generated, and **a** surprising  
Quantity of. extraVasated Serum lodg’d in the Cavity of the  
Abdomen. Thus *Sabnui bus, in Cent.* I. *Obs.* 38; informs ns,  
that,.after ^difficult Labour, he sound many Hydatides in the  
Confines of .the Uterus. *Pechlinus,* in *Obs.* 19. telis us, that  
. he sound the .same in an hysteric Patient, whedysd pregnant.

And: *Todpius,* in *Lib.* 4. *Obs.* 45. gives us an Instance of a Wo-  
.. man, in whornthe Horns of theUterus contain'd aheutnine

Pints, or more, of Water and Pus, included in numherless Ve-  
sicles. \* More Instances of this Kind Occur in *Schenclcius, Lib. 3.  
Obs.* 6,*1. Rolsinciius de Organ. Genital. Cap. 20.* and *Syden-  
ham, de Hydrope. - Harderus,* also, informs us, that, in *Λ  
Countrywoman,* the Left Ovary contain'd three Pints os a salt-  
ish and fetid Water, and that the *Fallapian* Tube annex'd  
to.it had **a** remarkable Hydatid on it. About twenty Years  
**ago» I remember to have seen produc'd, in a Woman Of forty**

Years of Ages' by a violent Fall On the hypogastric Region,' a  
Swelling in that Part, accompanied with a tensive Pain; and this  
Swelling was succeeded by a large Discharge of limpid Water,  
which was first evacuated with, the .Menses ; and when the Dis-  
charge of the Blond ceas'd, that of-the Lymph continu'd sor  
half a Year, so that the Patient daily discharg'd almost a Pint;  
till, having ray'd all Remedies in Vain, she at lastdy'd of a Con-  
sumption, and stow Fever. ; r ‘

: I have, also, frequently observ'd, that a Dropsy is conceal'd  
Under a State of Pregnancy, which frequently lays.a Founda-  
tinn for -Physicians passing a fallacious Judgment; but 1 have  
seen pregnant Women, labouring under a Dropsy at the same  
Lime, preserv'd by a copious Discharge of the Serum; hut  
when the Humour is discharg'd into the Cavity of the Abdo-  
men, it proves mortal.. *Platerus, in Lib.* 3. *Observat;* gives us  
a memorable Instance of a Woman .who was afflicted with an  
*Asset lies* every time she was pregnant. . I myself have successfully  
.restor'd Women, who, from a Cachexy, arising from irregular  
jLiving, and .2. Defect of the Menses, have fallen into a Swel-  
ling of the whole Body, accompanied with a. Difficulty of  
Preaching, Drowsiness, and Defect of Strength: From **these**.Women, aster the Use of .the balsamic Pilis prepar’d in my  
manner, and of the aperitive Sals, a large Quantity of Water  
was evacuated, not only by Stool, bus,.also, from the Uterus,  
both at the time of their Menses, and out of it ; and when  
this Water was evacuated, all the Violent Symptoms were gra-  
dually abated : Hence I am of Opinion, that dropsical Tumours  
in Women, arise rather from a Fault os the Uterus, than of the  
Lwer; and that .when they arise from the former alone, they  
are more easily cur'd than when the latter is affected; because '  
there is a freer Discharge, .to. the stagnant Serum through **the**Uterus. - et.su.. . ... . ' ' .

Hence it is easy to perceive the Reason why not only Virgins,  
hut, also, .married Women, are. so .frequently afflicted with a  
Iong-continu’d. and .uneasy Discharge of Serum of Various Co-  
lours and Consistences, from the Uterus : For because the Tone.  
and MotioIYof the Matrix, which consist in the equable Con-  
paction and .Relaxation of Its Fibres, are easily injur'd, and  
weaken'd, and the Motion of the Humours through the wind-  
ing uterine Wessels flow and languid, and the Return of the  
Blood through Veins destitute os/Valves, also, very flow j not  
only Infarctions, and Stagnations of the Blond and Serum, easily  
arise in the Matrix, but, also, the serous and lymphatic Juice,  
becoming viscid by its flow Circulation, prepares a Way for it-  
self, and din discharg’d through the Orifices which every-where  
occur in . the Uterus and Vagina. It is the common Opinion  
of most Authors, that this Humour is secreted from the *Lacuna*of *De Graaf, Ax* the small Pits remarkable about the *Urethra,*and the small Glands lodg'd there: .But in these *Lacuna* there  
is no Perforation found capable of admitting eVen a Bristle ; but  
rather, on both Sides of the Orifice, and through the whole  
Substance os: the Vagina, there appear more numerous *Lacuna,*which easily receive half a Finger's Length of a Bristle, and  
. whose Ducts, when compressed,, discharges Liquor not unlike  
the seminal Fluid. . See *Horsier. Compend. Anatom.*

But though these Glands, when greatiy relax'd, may dis-  
charge \_a. copious Humour, yer they are not the only and ge-  
nuine Seat. *Cst .2. Fluor Albus* ; but there: are sar more numerous  
Passages, from. which the Matter of the *Fluor Albus,* and the  
impure serous Liquor discharg'd : with and after the lochial Flux  
in Child-bed. Women, derive their Origin. And though Mr.  
*Euyseh* denies,chat Glands have ever, been seen, *or* their Exist-  
ence demonstrated, .in the Uterusyet it is not to he doubted  
hut the Serum may attempt its Discharge from the stnall Mouths  
os the Veffeis,. which evacuate the. Blood during, the Menses A  
For the celebrated *Fantoni, ia. AnaL* makes memorable  
Observation,, .which is, that Airiinay he blown through the  
Veins of the Uterus into the Cavity of the Matrix and Vagina,  
and .from the latter through the sonnet. Besides, according to  
*de Graaf,* .and. *Hornius,* Pores .and small PerforationS-arieobr  
. serv'd in the Neck .of the Uterus. r *Virheyen,* in *Anatom. C. Hi.  
' Cap. ystt,.e,s.,Tap.* I y.Try. 2,-3 ..informs us, that in a Uterus  
macerated inWater, and retain'd in a moderate Heat for some  
time, he saw many globularDorpuscles, not only in the interior  
Sursaceof the Vagina, in some Parts form'd into Clusters, and  
elsewhere disseminated through it, but, also, in the inferior-Part  
os the Cavity of the Urenrs; and these Corpuscles,-he thinks,  
ought. to he justly .look'd, upon .as. small Glands,- subservient to  
the Secretion.of a.serous .and pituitous Humour. . \* .

. This Disorder.; winch at first Sight appears so flight, as to he  
only esteemed aserous Destuxinh, .is, nevertheless, highly obsti-  
nate, and not to he cur’d.without the greatest Difficulty; which,  
in my Opinion, is owing to this, that most Physicians only seek  
for the Cause .of it in a deprav’d Sanguification, a want of a due  
. spirituous .Quality in .theBlood, and. a Redundance of Serum ;

whilst, little solicitous to restore the Tone of the Uterus, -and  
promote the briIk.Ciroulationcrsthe Blood-through-it, **they at-**

tack the Disorder with Anticachectics, Purgatives, and such Me-  
dicines as eliminate the Serum, -omitting Corroboratives, which  
are highly necessary. L, in order to remove this obstinate Dii-  
order, recommend the Use of balsamin Pills, prepar'd aster, the  
manner of *Bechcr,* of bitter Extracti, balsamic temperate  
Gums, and a small Quantity os Extract of Aloes and black Hel-  
lebore, especially if ufed with some chalybeate Medicine : For  
ordinary Drink, the Patients Ought to use a Decoction prepar'd  
of the Wood of the Mastich-tree, the Roots of Sarsaparilla,  
Shavings of red and yellow Sanders, Currants, Hartshorn, and  
Fennel-seeds; externally. Morning and Evening, balsamic Fu-  
migations of Mastich, Amher, Olibanum, Tacamahaca, and  
artificial Cinnabar, are to he used; or, by means of a Syringe,  
the *Aqua Sclepetaria* is to he injected into the Womb, or a Li-  
quor prepar'd of the Root of Birthwrfrt, the Herbs Mngwort,  
*.Feverfew,* Agrimony, Silver-weed, Myrrh, Mastichf Myrtle..  
.leaves, and the Flowers of red Roses bon'd in Red-wine; which  
proves highly heneficial, not only when injected into the Uterus,  
but, also, when frequently apply'd with linen Clothe to the  
Region of the.Pubes. Put tn all these we prefer natural Baths,  
which, on account of their chalybeate Principle, are of a cor-  
roborating Quality; such aS the Waters os *Lauchstad,* especially  
when boil'd with nervous Herbs, which corroborate the Uterus;  
such as Baum, Mint, Origanum, Mother of Thyme, Clary, *Ro-  
man* Chamonnle, and Marjoram; for these, frequently exhibited,  
after tne Use of Balsamtcs, and, when the Body is duly purg'd,  
are of singular Efficacy, not only in this, but in other Disorders  
arising from a Fault os the Uterus, especially if at the same time  
temperate mineral Waters are drank.

But as the Disorders of the Uterus, hitherto specisy'd, arise  
principally from its Relaxation, and want ofTone ; so there are  
others which derive their Origin from its excessive and spasmodic  
Stricture: For the Matrix has this in common with all other  
Parts compos'd of muscular and nervous Fibres, that it is, on  
certain Occasions, seiz'd with Spasms, -andsometimes evenagi-  
rated with convulsive Motions: But aS in the internal Orifice  
of the Womb, which is of an exquisite Sensation,'the Remission  
of the Motions, so, also, the intense and preternatural Rigour,  
is principally perceiv'd in the same Part, because it is in a great  
measure compos'd of nervous Fibres connected with each other,  
and running in a spiral Direction : For sometimes an excessive  
Constriction os the internal Orifice os the Uterus not only ren-  
ders Birth difficult, but, also, unless relax'd by emollient Baths,  
Ointments, and Fomentations, absolutely prevents the Exclu-  
sion *of* the Foetus. It is, alfo, certain, from Experience, that  
**a rash** Admission of Cold to **the** inferior Parts, especially rhe  
Confines of the Uterus, during thedochial or menstrual Dis-  
charges, puts a Stop to these Evacuations.sc The same Effect is,  
also, produc'd by Frights,, which, aS they are of great Efficacy  
in constricting, especially the Fibres and Ducts os the external  
Parts, so thislnsiuence is in a particular manner observ'd in the  
nervour and muscular Substance of the Uterus, and its Parts ;  
and frequently proves the Cause of Abortion, or of an excessive  
or suppress'd lochial or haemorrhoidal Discharge. Emetics, acrid  
Purgatives, and all Kinds of Poison, induce a great Change on  
**the** Uterus, and, by exciting Spasms in it, easily procure Abor-  
tion, in Women of delicate Habits. . .

ItIts,also,-dertain,-that, inorder to exclude not only the  
Foetus and. Secfindines,-he tf also. Moles, and Masses of coa-  
gulated Blood-, it is necessary there should be an intense systaltic  
or Constrictory Motion of the Uterus, so that its Bottom being  
Constricted and corrugated, its-Orisiceand Vagina may be dilated.  
When, Therefore, in-Womefrin Labour from a Defect of  
Strength; this intense Motion -find constrictory Force of **the**Uterus satis; Analeptics are to he us'd ; such aS Cinnamon, and  
the-Oil and spirituous Water of Cinnamon; as, also, other  
Corroboratives, such as the Essences of Amber and Myrrh, the  
Balsam-os-Lise, the *Spipitus Oleosus* of *Sylvius,* and the Bezo-  
ardic Spirit of *Bujsius* j Ernmenagogues, also, are of great  
**Use,** as Borax ; and Vomitsare, by sorne-Physicians, greatly re-  
. commended, in orderso stimulate the Fibres ofthe Uterus to **a**brisker Motion, l -feints - ----

On the contrary, when Before- or during the Labour, the  
Uterus is sein’d with-spasmodic orconvulsive Motions, which  
often, . either hesore or during the Birth, - invert the natural Si-  
tuation of the Foetus, and when The Mother inaffiicted with an  
intense Heas,- it is highly prejudicial to exhibitsuch-spirituous  
Substances 7 because they hinder the Exclusion Of the Infant;  
and excite a Fever, or Delirium, in the Mother s But, in such  
Cases,- the most salutary Effects are produc'd' by’antispasmodic  
and sedative Medicines,'-which check and allay the-Impetuosity  
of the Motions r Thetnost considerable Remedies of this Kind  
are. Saffron, Castor; the Gail of an Eel, ‘ Powders of ViperI.  
**of** humanSedundines, and of Worms; *rcae-Pslula-IVildigansis,*the Tops'of white Dilies, and the Waters'-of the Flowers of  
the Lime-tree, of Elder,- ofthe *EgyptiarrTriurtr,* of whiteLi-  
lies,- and- of Primroses.. Itssspalso, expedient, in-sech.Cases,

when the Patient is plethoric, to open a Vein in the Arm,  
immediately before the Labour, lest the Nerves of the Ab-  
domen being comprelPd by the redundant Blood, the Motion ,  
-not only of theUterus, het, also, ofthe Museles subservient to  
the Expulsion of the Foetus, should he suppress’d and hinder’d.  
Almost the same Method is to he used, when the *Lochia* are  
retain’d, in Pain arising from excessive Striolure, which, in  
Child-bed Women, is known from Pains of the Abdomen:  
When such a Cafe happens, the lochia! Discharge is riot to he  
procur’d by forcing Medicines, but by Sedatives ; for which  
Reason, *E smaller,* in *Dissert .Ac Vi Opii Diaphoretica,* greatly  
.recommends Preparations of Opium for this Purpose; But if,  
on account of a Diminution of the constricting Force of the  
uterine Fibres, the impure and stagnant Blood is not, after the  
-Birth, duly evacuated from the Uterus, besides internal Medi-  
cines which excite the Discharge of superfluous Humours, no-  
thing is more beneficial then a Clyster prepar’d of uterine Herbs,  
fuch as Southernwood, Pennyroyal; Rosemary, Mugwhrt,  
Baum, and Flowers of the Wall-flower, with the Addition of  
a small Quantity of the Mass for the balsamicTilis. " τ  
.' There is,therefore,in the Uterns a constrichory and relaxatory,  
which, in-my Opinion, may be justly call’d a peristaltic Motion ';  
'for whilstlone Part is contracted, another is dilated f by which  
reciprocal-Morion every thing preternatural is effedlually ex-  
cluded from the Uterus. That Child-hed Women often com-  
plain of Flatulences bursting from the Uterus, is a Sign that  
a tenacious Humour, which, by the Hear, is resolv’d into Va-  
pours, remains in the Uterus, and that in the Substance of the  
Matrix this peristaltic Motion is still carry’d on: Besides, that  
this alternate Motion of the Uterus, just as it heppens to the  
Stomach in Vomiting, is sometimes inverted, is certain, from  
this, that the menstrual or locbial Blood, usually discharg’d  
through the Vagina, is, on certain Occasions, forc’d through  
the *Fallapian* Tubes into the Cavity of the Abdomen, a Cir-  
cumstance which always proves mortal.. An instance of this,  
Mr. *Ruyseh* has given us, in *Observat. Anatomico- Chirurg. Obs.*84. et 85. It is, also, to be carefully observ’d, that, when the  
*Fundus* of the Uterus is olofely contradled, and its inferiorTars,  
together with the Vagina, too much relax’d, the Matrix itself  
iriiy he so contorted and subverted, that Midwives are often  
deceiv’d, and imagine that a Foetus still remains in the Uterus.  
See *Ruyseh,* in the Work already quoted. *Oof.* 93. Besides, to  
the preternatural Motion of the Uterus, which is inverted from  
the external to the internal Paris, we ought, in my Opinion,  
to afcribe^ those violent and fatal Symptoms, which frequently  
afflict Child-bed Women, fuch as Fevers, acute Pains, Con-  
vulsions, Delirinms, mortal Apoplexies, and Purples ofthe red  
and white Kind ; because all these Disorders derive their Ori-  
gins from the corrupted Blood which ought to be evacuated  
from the Uterus, repressed to the interior Parts, and becoming  
stagnant. . '' . si , .Ϊ .

*Hippocrates* exprefly assigns, as the Cause of these Diibrdere,  
an intercepted Passage of the Blood through the Uterus; mi the  
following manner: “ The Blood,returning from the Uterus,  
" and pressing upon the Diaphragm, produces a Strangulation,  
by a Retraction of the Uterus ; when entering the Head,, it  
‘“ gives Rife to Madness, "Epilepsies, “a Catochris, and App-  
\*" plexies; when possessing the Thorax, itexcites Coughs;  
" when rushing into the Heart)si produces Palpitations, I rer  
\*\* mors, and sometimes Syncopes; and when it enters joe  
" Nerves, it gives Birthto Stupors, jinmobilities; and passies.y  
For all those Symptoms; commonly callrd ssyst'eric, which' fre-  
quently afflift Women, and have a great Agreementwlthithe  
Symptoms ofthe fpastnodic.and flatulent hypoctioadnac.Dii-  
order, arise ptiocipaily from ά Finiit of the IJteruS;„fof there is  
a great Consent between the’ tItertis' a’nid; the principar fibris of  
the Body , and thisConferitisndt.so much to be accounted for  
from the Communication of Nerves; mid the niutted .Concur,  
' rence of the irregular Motions in the nervous Parts,.aisfrom/the  
System of Blood-vessels, and the disturbed Motion ofthe Blood  
in them : For as in hypochondriac. Patients, when 'the Blood,  
passing with Difficulty through the Liver,‘is accumulated in  
thefe Parts, especially of the nervous Kind, fuchar the'Sto.  
meh and Intestines, to which the Ramifications of the *'Vend  
Porto* are distributed, it, by its Pressure and Distention, excises  
Spasrns, accompanied with violent Symptoms; , so,also; in  
Women-, when the Blood, becoming stagnant, isinof steely  
'conveyed through the Uterus, it regurgitates to the principal  
Parts of the Body, such is the Stoniach, and especially the Ini.  
testines, - Head, and Thorax; where, according to the Diversity  
of the Parts, it injutes their Functions, and induces various and  
Violent Symptoms; Hence the most skilful and sagacious Phy-  
sicians, in in Disorders peculiar to Women, have f particular  
Regard to the Uterus, the State of the’ Menses,)and the Cir-  
’culation of the Blood through the'Vessels ofthe Matrix;  
-whereas those Physicians proceed in a preposterous Method,  
who prescribe various Remedies, in order to remove the Sym-

ptomir; whilst,'at the same uniei-theymierfohis thSeanseiand-  
Origin whence they pwceeded.Yf—i'i. ..

We now coihe io consider the Consent between **the** Uterus  
and 'the *Intestinsrm .'Pettarn,* 'and hiemorrheithtl Veins.- With  
respeol, then, in-rhe Sympathy between the Uterus and he-  
morrhoidal" Veins, wh Inuit inlce .notioniofafi.anatomical.Error  
common to those who:greatlv"extof Haanorrsiages .and-the b,e.  
inorrhoidaLDischargery whilst th'ev .imagine, that the internal  
hiemorrboidal Veins, which are .Ramifications of *ilumriVena  
'Portae,* distribute. Binncsitioto the Uterus; and especially to the  
Vagina; *whesmajSiltpriantius, sup Differ\*, dr Vena* Ported-has  
clearly demonstrated, that onlssthe externulhiemorthoidal Veins  
fend to the Matrix and Vagini an incredible Nernbepof fihell  
Branches ,connectsd with the internal HjeTorrhoidals by a mu-  
tual Anastomosis: When this-Connexion oftheu Vessels is  
known, it is easy to render a Reason why, io plethoric Women,  
the Blond reeks -a Pasiage nor only *from the Uterus, hut,* also,  
sometimes, from the Vciai.'of the Anus : And when the Pas-  
sage this Way is precluded, the stagnant Blond nor only pro-  
duces'TmnosirS, called the bIinif fstemonhoids, btle/also, Iasi  
"a Foundation for, more Disorders;, such'as impressive fixed  
Pains irr *leusOs Sacrums'aAn* rdthiir Symptoms'semilipt to those  
who -labour tinder *i-* Supprestion ofthe Handorrhoidtio st is,  
Slfo, ‘ certain, that in old Women; .who haver no longer their  
menstrual Evacedtioai;there'oftemiarrses; rsriUt-anctiaemor-  
thoidal Discharge, yes, arleinspan Effo r t of‘NariireShat'way,  
accompanied with the sryerssDrforders risuany accompanying a  
Suppression os the Haininrrbciddur Tt is, miso; owing to this ,  
Connexion of theVessels/thati-inthe fiistfiDrys after Deli-  
very, knotty Protuberances of thethernorthoidaI Veins fre-  
quently arise sin the 'Anus;4nd:eicite an iineofe.Heat; and  
these protuberances certainly draw their Origin froin the strong  
EstortSof the Patient, forcing a' large Quantity of Blood Io the  
Uterus and its. Vessels. .

'' The Consent between the'Vagina:andT5rtffmAuni *ISyctiirst,* is  
'sufficiently' ubvious froni -this;'that their Membranes are so  
closely ctiocedfed, and adhering to'each other, that thrycan  
‘hardly, by'the inost'eautioiss Hand; be separated; without,Di-  
laceration, -This is the Reason why *uAeenefrius, at* Symptom  
fernillar to those labouring under a Dysentery, edsiry dsspofes rhe  
Vagina to -fall down, and often proves the Cause of. Abortion.  
Hence rS'is that acrid Suppositories; especially fuch as are pre-  
pared of drastic Purgatives, ’ coninbute much 'to’Abothron r and  
that Chislers, prepared of uterine; nervous; and genrly-stimu-  
sating-Medicines, are veryessieagnidsaindinamellingMdled7 of  
grumous Blood, from‘the Uterus., ary allo; irr recalling- the  
Menfes; of Lochis, when suppreired;/ I shall riobr ndjoinjome  
Rules arid Caiitions, highly: jise'fui in Practiced :~Lt.—  
- IvTsegiiamt Women; when- plethoric; are byriothrfigbetter  
fortified 'against' Diseases,) and the Foetus'preservedfoaindtionil  
vigorous, than fiy Venesection,7 about the third, fevefitsi; band  
.ninth Months,.'' ' ‘--dur s .μα.ι ’’

aiItis durheror to imaginethat1 Venesection in ^lieTosirss  
iptejosiicial rd\_pregnant iWonien, because it procaresAiiortjonf

^^Venesection” is ’often ‘ined' with great'Benefit,- **wherf the**Patrctie rs ’afflictsd with Tains of the Rack, hysteric Symptoms,  
inrSctstsc Ptiosv ;. ψ ; . “ ”ς:" -: c.:an - ε-

- 4. Venesedfion in *i* SbpncesEori'ofthe tectiia; oP when the  
Purples remain in the'inrdrriid Berts of the Body; Oftedwevenis  
theDangerof.speedy Deathi;. - j - 'i 'I"

‘ 4 The Suppression and Diminution ofthe Mimses often arise  
frontioPlethora; which IjYemoyed by Venefectiwi iced’that,  
dinmediardlYijteedi,- thedinlse heedniev stronger; osied her Blood  
is more freely conveyed througssthe Uterus. - ? ’*" f.*

*6s* Whens *i-*eominuas or' intermittent Feverferpo either a  
preghane or ’Cl.iid-iherWgnindf-^nrfectioniiamiryrryrgndi.  
cial, but ofred'highly necessary.-

7. It is eegiedient,' in the first-Days- after Labcurf1 am eithibit  
the *Pilula scalscamnea,* by rhe Ufe of which’ theLoched-Dild  
'charge is not only-promoredxyhisry' also, rdiny^SStilessctiBedied  
during the time'of Gestation, ard'evactiated hy"Stool.’ *sey . :*

8.'preparations.of'Raisins,.Minna,.Rhuherhisanil Tartar,  
are more prdherso’r pregiinrstWomen nianincher.juoiikeied'-' .

4’ In order to r emov^’Shis^S- tfleamlyIrstnceioni df Curb  
is, gnirestprdtileTone *ofithe’ssreriis,* anireducedthc Merilon,  
arid Motioivof the; Blood through’ the“Mai?od ; haturul  
herte.;'!” ψ/ ? 5--i *cc* .’..orqrfirdcz.vn-r i...

' Io? Almost’sill’ Diseafefsarising.fromia DiloniieroTihelhis.  
rhe, ifitiopablikeither ofiso;Alleviation-, or a CureYredoire Vtr-  
nesectionXgently-thativethrfseiijic Pills, Iraths,: odth'ngturalimd  
artificial, duly-prepared:**Chery**beSted 'gentle Ahtisquiinodics,  
Carminatives, and'the Usoof" tetnperate minemi Wafers? po

II . *Peruvian , Cask,* in Conjunction with other στὴρθρ **Re-**medies, especially, Poinde? of 'Chamomile.flowerS, if:exhibited  
prudently;’andat a propedtinje; inIniennittentio istiorprejo-  
dicial- to ' pregnant' Women-,- het- proves' a. most saf-tary **Re-**medy.

I 2. Obstinate Disorders arising from a Fault of the Uterus,  
often require external Applications, suchasFumigations, Injec-  
tions, uterine Clysters, Fomentations, Epithems, and Baths,t hat  
the Virtues os Medicines may be the sooner conveyed to the Part  
affected. . . : '

I 3. Pregnant and Child-hed Women ought to he Very care-  
ful with respect to their Diet, Reinmen, and Method or Lise.

14. Pregnant and Child-hed Women ought carefully to  
avoid external Cold, and internal Refrigeration, by means of  
purgative Medicines, and all astringent Acids; nor Ought they  
to use too large Quantities os Aliments. But as Rest os Body  
is friendly to Child-bed Women, so it is prejudicial to such as  
are pregnant, who ought for that Reason to use proper Ex-  
ercise. .

**OT AN INFLAMMATION OF THE UTERUS...**

The peculiar Fabric of the *Uterus,* the surprising Elasticity  
of the Fibres of its whole Substance, the Numher os its Blood-  
vessels, and their winding serpentine Direction, the glandulous  
and nervous Texture, together with the exquisite Sensation of  
the Neck, and internal Orifice of the Uterus, are Circum-  
stances which render it subject to Various Disorders, especially  
acute and dangerous Inflammations, together with Abscesses,  
and malignant Ulcers arising thence. Besides, hecause, not so  
much on account of the Communication and Sensibility os the  
Nerves, as the intercepted Motion os the Blond through the  
fibrous and Vascular Compages of the Uterus, its Motion in  
the other Parts Os the Body, is, also, greatiy disturbed and  
perverted, hence there is a great Consent hetween the Uterus  
and the more noble Parts os the Body, fuch as the Head, the  
Breast, the Praecordia, the Stomach, and whole nervous  
System ; so that when the Uterus is disordered, or inflamed,  
violent Symptoms happen in the adjacent and remote Parts of  
the Body.

Among the other Disorders incident to the Uterus,.an In-  
flammation frequently happens, and may he known from the  
Heat and fixed Pain in the Groins, accompanied with an acute  
.Fever, a Pain os the Loins, and lower . Part of the Belly, an  
Inflation of the Abdomen, a Stimulus to discharge the Urine  
and Excrements, an Heat and Difficulty of Urine, together  
with other Violent Symptoms in the Praecordia, Head, and  
Breast. Though the Moderns take little Notice of this Dis-  
order, yet some of the Antients were very full and accurate  
.in describing it f Thus, *Artius* speaks of ’It in the sol-  
lowing Manner: " An Inflammation of the' Uterus may  
." he produced by various Causes, inch as Blows, Suppressions  
." of the Menses, external Cold, Inflations, Abortions, and  
hard Labours. An Inflammation of the Uterus is succeeded  
by an acute Fever, a Pain of the Head, and its Tendons,  
" a Pain in the Bottoms of the Eyes, and in the Joints of the -  
"Atna and Fingers, a Detraction and Declination of the  
" Node, a Disorder of the Stomach in consequence of its  
".Consent with the Uterus, a Contraction of the Mouth of  
" the Utenrs, and a small and dense Pulses If thewhole  
so Uterus is inflamed, there is a Violent pulsatory Motion in  
"all its Parts. If its posterior Parts are only inflamed, there  
." is a Pain about the Loins, and the Faeces are retained On ac-  
" count of the Compression of the Intestinum Rectum. If  
" on the contrary, its anterior Parts are inflamed, there is a  
" Pain about the Groin, a Strangury, and difficult Discharge  
" of the Urine,, arising from « Compression of the Bladder.  
" When the Sides Of the Uterus are inflamed, the Groins are  
" rendered tense, and the Thighs and Legs oppressed. When  
" Its Bottom is inflamed, there is a Pain and Tumor princi-  
." pally about.the Navel. When its Neck, or inner Orifice  
An is inflamed, there is a Pain in the superior Part, of the Ab-  
" domed, and, upon introducing the Finger into the Vagina,  
" the Mouth of the Uterus appears hard, and makes a const-  
" derableResistance.” ss -Y .

An Inflammation os the Uterus may he justly divided into  
flight or superficial, and Violent or profound; the former fre-  
quently happens to Childbed Women, is easily produced, and  
. most frequently succeeds the Milk Fever. This Species admits  
.of a Cure, if prudently treated, land is easily resolved in a few  
Days. But the Violent, or profound Inflammation of the Ute-  
rus, which is accompanied with an intense Fever, and a Train  
of terrible Symptoms, whose Vehemence does not remit, often  
proves mortal on the seventh, ninim or eleventh Day, elpeci-  
ally when the White Purples supervene, which are always **a**had Sign, fince they derive their Origin from **a** Corrupted, pu-  
trid, and vapeseent Blood and Serum lodged in the Uterus, and  
**are** even a Proof, that the Uterus is already corrupted and  
.sphacelated. .........

. The material proximate Cause of an Inflammation of the  
ZU terns is an unequal Circulation of tho Blond through the  
.uterine Velinis ; for when the small Vefibis arc obstructed, con-

tracted, and spasmodically constricted,, the Blood is with a  
greater Impetuosity and Swiftness convey'd through the adja-  
cent Vessels, and then lateral Ramifications, otherwise not  
susceptible of Blood. Hence arise a Tumor, Redness, and  
Heat, together with a Pressure of the nervous Coat os the  
Uterus. The Uterus' is disposed to Inflammations by Blows,  
Contusions, external Wounds, a Plethora, a Cacochymy, a  
Suppression of the Menses, or Lochia, a copious Defluxion of  
Blood to the Uterus, a difficult Labour, the Passions of the  
Mind, especially Anger, and Frights, excessive Vomiting, or  
strong Efforts to it. Refrigeration of the lower Part of the Ab-  
domen after violent Exercise in plethoric Habits, the drinking  
cold Liquors, especially during the menstrual, haemorrholdal,  
or Lochial Discharges. Convulsive Colics, also, and Violent'  
spasmodic, and hysteric Affections, produce Inflammations of  
the Uterus.

Inflammations of the Uterus are never more incident to Wo-  
men, than when they are in Child-hed; for, after the Birth,  
the Uterus freed from its Load, by its elastic Force is again re-  
duced to a smaller Space, and gradually contracts itself Hence  
the dilated Vessels of the Uterus are contracted, the Blond  
Contained in them is expressed from their open Mouths, before  
continuous with the Secundines, and evacuated under the Name  
os *Lochia,* to the great Benefit os the Patient. But at, the  
same time, this Contraction of the Vestels directs the Motion  
and Course os the Blood. elsewhere, that is, from the Uterus  
and inferior Parts, to the superior Parts and Breasts ; and this  
generally happens about the third Day, with a considerable fe-  
brile Commotion, generally called the *Milk Fever.* Is, there-  
fore, the Lochial Discharge is prevented by spasmodic Strictures  
of the Uterus, it not only excites a dangerous and inflammatory  
Stagnation in the Uterus itself, but, also, increases this usual  
Conveyance of the Blood from the inferior to the superior  
Parts, both with respect to its Vehemence and Quantity. In  
this Case the spasmodic Strictures of the Abdomen are Violent,  
the Discharge of the Blood, or mucid Humour from the Ute-  
rus is stops, the Patient becomes costive, the Feet are rendered  
cold, there is a Stimulus to discharge the Urine, which is eva-  
cuated with Pain ; the Countenance becomes red and tumid  
the Eyes sparkle, certain Drops sometimes sail from the No-  
strils, the Mind is restless, the.Sleep either none at all, or dis-  
turbed with frightful Dreams'; and at last these Violent Sym-  
ptoms, a difficult Respiration, Deliqinuums, Convulsions, and  
'a phrenitie Delirium, often suddenly put an end to the Patient'S  
Lise.

These Circumstances are accurately described by *Hippo-  
crates,* in *Lib. i. de Morb. Mulier,* in the following Man-  
ner: " Iff says he, the Uterus os the Child-bed Woman is  
" inflamed, the Abdomen hecomeS hot and large, there is a  
" Suffocation about the Praecordia; and when the Lochia are  
" retained in consequence of Cold, the Uterus is distended.''  
And in *Lib.* 2. *de Morb. Mulier,* he tells us, " That if an ery-  
" sipelas happens in the Uterus, the Breast is affected by it,  
the Abdomen hecomeS tumid and Cold, the Patient is seized  
" with a violent Fever and Rigor, breathes thick, and is sub-  
Ejected to Deliquiums and Weakness, a Pain of the whole  
" Body, Dejectedness and Inconstancy of Mind. The Disorder  
" ascends from the inferior Part of the Abdomen to the Loins,  
" Back, Praecordia, Breast, Neck, Head, and Stomach, so  
" that the Patient seems deads" But Tis certain from Expe-  
Iience, that pregnant Women of tender and delicate Habits,  
prone to Violent Commotions of Mind, subject to spasmodic \*  
and flatulent Disorders, afflicted with an irregular State os the  
Menses, or'with Costiveness after Labour, easily fall into a Sup-  
pression osthrf Lochia, accompanied with a dangerous and acute  
/uterine Fever. Sometimes, also, an Inflammation os the Ute-  
rus arises from a Retention of the Whole, or some Part, of the  
Secundines j" for when 'the Secundines are retained, the Exclu-  
sion of the Blond from the Uterus is not only prevented, but,  
also, the succeeding Putrefaction excites a Fever, or renders it  
'worse,'if already formed.- ss .

' Now,as in all Inflammations the stagnant Horn our, if not dis-  
cussed, putrefies, and degenerates either into a sphacelous, or  
ulcerous Corruption ; To the same,'also, happens in Inflarnmar.  
tions of the Uterus. An Inflammation os the Uterus, which  
degenerates into a Sphacelus, .is soon mortal, and is most inci-  
dent to'Cbikl-bed Women, in whom, when dissected, the  
Uterus 'and: Vagina are generally found hard, and of a darky  
brown Colour.' But -an Inflammation of the Uterus, which  
terminates in a Suppuration, or Ulceration, is of a more chro-  
nical Nature, and happens principally out of a State of Child-  
hed. This suppuratory Inflammation os the Utenrs is princie  
pally incident to Women of sanguine,foft,and spongious Habits,  
especially is they have been afflicted with a bloody Fluor Albus,,  
.and have ptit an unseasonable Stop to it by Astringents. IY  
is, also, frequently incident to those Women whose Blood is gross

and impure, who useinsalutary Aliments,fweet Summer Fruits,  
and Sweet-meats, who expose their inferior Parts to the Cold,es.  
pecially when the Body is over-heated,who are afflicted with Sor-  
row, who are prevented from satisfying their Inclinations to Ve-  
nereal Commerce by Enjoythchtjwho neglect usualVenesectinnS,  
or who being old,lead a quiet and melancholy Lise. And in such  
Women the Inflammation happens more frequently in the Neck  
and internal Orifice, which consists os nervous Fibres spirally  
interwoven, than in the Bottom, of.the Uterus; Tor which  
Reason there is in intense and chiming Pain inthe.Pubes, ac-  
companied with a difficult Discharge of Urine, The Signs os  
an Abscess'of The Uterus are by *Hippioorates, su Libscy. de  
Morb. Muller,* enumerated in the following Manner" If,  
" says he, the Uterus is ulcerated. Blood and Pus are dis-  
" charged, a fetid Smell of the Parts arises, an acute Pain  
" seiZes the Loins, Groin, and. lower Part of; the Abdomen.  
" The Pain ascends upwards to the soft Parts of .the Sides,  
" the Ribs, the Scapuhe,. and.sometimes to. the Clavicles.  
" The Patientis seized with a Violent Head-ach, and Deliri-  
" um : Bur, in Process oTTime, she hecoinas tumid.,, weak,  
" subject Io DeliquiuinS,' flight ’Fevers, and Refrigerations ;  
" but her Legs aremoreconsqdorabsy swelled than the other Parts  
" osher Body; This. Disorder, succeeds Abortion, if the cor-  
" rupted and putrefied HomoinsJeft behind are not duly eva-  
" cuared, Jind the whole Body, is excessively hoe. st is, also,  
" brought'on by uterine Fluxes, the Matter of which is os an  
"'acrid or.bilious Quality. " 'But sor the most part, an Ulcer  
of the Uterus degenerates into a Gangrene and Sphacelus, and  
by that means proves mortal. It sometimes, however, happens,  
that an‘Apostem formed in the Uterus, breaks internally, and  
a white fetid Sanies is copionfly discharged, by which means  
the Patientis preserved. See *Forestus, Lib.* 28. *Obs.* 4.4.

If the exterior Part of the Uterus is inflamed by external  
Cold, the inflammation easily degenerates into aScirrhus, which  
becoming ulcerated, is justly called a *Cancerof the Uterus,* and  
is incurable. - Tt,' also, frequently happens, that the Glands  
about rhe Neck of the Uterus, and especially its internal Ori-  
fice, are changed into a. Scirrhus, which at last, degenerates  
into an ulcerous Inflammation, which, like in ulcerated Can-  
cer, is, also, incurable. . Though the Moderns have taken lit-  
tle Notice of this Disorder,, yet I have frequently seen Instances  
of it, and found it accompanied with the fame Symptoms, ex-  
actly enumerated *lsyAetius,Tetrabib.* 4. *Serm.* 4. .6.94. in the fol-  
lowing manner: iC Cancers.in theUterusare sometimes with,and  
u sometimes without, an Ulceration; an hard, unequal, pro-  
" ininentTuinor, of a disagreeable, red, and sometimes sub--  
" livid Colour, is sound .about the Mouth of the Uterus.  
" There is a Violent Pain in the Groins, superior Part of the  
" Abdomen, and Loins, whilst the Parts, originally affected,  
" can hardly/bear to be touched, or treated in the different  
" Manners necessary sor a Cure. But is the Cancer is of the  
" exulcerated Kind, besides Pains, Hardness and Tumor, cor-  
" roded and unequal Ulcers appear, winch have generally  
" sordid, tumid, and whitish Lips, and are covered with un-  
" seemly Crusts. But the Ulcers which seem most pure, ap-  
" pear feculent, livid, red, and bloody. From such Ulcers.  
" there is continually discharged, a thin, aqueous, black, or yel-,  
" low fetid Sanies, and sometimes Blood, accompanied with the  
" other Signs os an inflamed Uterus." This Disorder, acchrd-  
ing to*Hippocrates,* is incurable; but it is to he mitigated by  
Insessions prepared with Fenugreek and Mallows, and by Ca-  
taplasms of a like Nature. . ῖ ...

*The* **C U R E. ’ . J '' -**

As an Inflammation of the Uterus is never more frequent  
than in Child-bed Women, and after Abortion, and is brought  
son either by the' unikilfnl Management .of Midwives in diffi-  
cult Labours, and their too. rougbr handling the- Mother, or  
by the Violent Efforts during Labour, which force the Blood,  
especially os the impure Kind, to the Uterus,: or by an Ob-  
struction os the Lochia, by means os Pains, hysteric Spasms,.  
a Fright, or Refrigeration, it is necessary, thotsq for the Pur-  
poses of Prevention, and Cure,. that the Physician should be  
.well acquainted with all these Causes. Buy because it is far-  
.more easy to Prevent this Disorder when approaching, than to  
cure it when present, the Physician ought, by all.means,  
to use his utmost Endeavours to put a timely Stop to it, and.  
prevent its Approach if possible. . . .

. Without considering those Disorders oftheDterus, which  
are brought on by external, and Violent Causes, we shall only  
observe, that nothing more frequently occurs in Practice, than  
an inflammatory FeVer of the Uterus aster labour, on account  
of a too scanty, or totally supprefled Discharge os the Lochia.’  
Hence the Physician is in Ebe first Days aster Delivery, to take  
care that the Lochia be duly evaouated ; for which Purpose he  
is to direct his principal Intentions to the Removal of those

Causes which obstruct the Lochia] Flux. NOw It is sufficiently  
certam, that during a long and violent Labour, there is *so* vio-  
lent a Commotion and Exagitation both of the scdid and  
fluid Parts, that from the Quickness of the Pulso, the Heat of  
the whole Body, the .Thirst, and inquietude, we may justly-  
conclude that a Fever is present, during which febrile Ci,m-  
motion, little or none os the putrid and bloody Recrements is  
evacuated from the-Uterus.Hence, after the Labour, the  
Physician is to use hin Endeavours.to compose and mitigate tim  
impetuous Commotion of. the Parts.... This .Intention is best  
answered by keeping the Patient in a-State of Rest, the Use of  
a temperate diaphoretic Regimen, and the Exhibition of dilu-  
ent and gently cooling Medicines. But because during La-  
bour, which is oolypersormed by spasmodic and convulsiveStrie-  
tares arising from the spinal Marrow, the Spasms, and painful  
Strictures, are by Consent, convey'd to the Intestines ; and  
hecause these stricturesremain-some time aster the Labour, and  
in consequence of the Tame Consent, by constricting the mus-  
culas and nervous Fihres os the LJ terns, obstruct the free Cir-  
culation of the Blood, , here Physician is therefore oaresuhy to  
allay and sooth them; Tor .this Purpose, ....., . ... . :

Take of the Pulvis,Marchioaig, and Cfabs-gyes, each one  
Dram; os diaphoretic Antimony,-half a.Dram.y-and. os

. pure Nitre, fixteim Grains; -Redoce.ro ja. Powder, ;of  
which the fourth Part-is. to he takenior a Dose, adding," is  
the hysteric Spasms are at she.same ,time very violent,, sour  
or six Grains os the Powden.os Castor,. to he taken sir the  
Water.of comuronsihantomiie-floivcrs.diddled with Ale  
prepared of Wheat. , .. Ἀ- -. ... :... ...... J .......

This Intention is, also, answered by the Oil-expressed with-.  
out.Pire, from recent sweet Almonds, , which either- alooeY.or  
mixed with a fourth Part.of Sperma; Ceni,. may he exhibited to  
the Quantity os an Ounce, or half an Ounce, in Prothpre-  
pared-of Pullets,, or in Water-grueL , Externally the. whole  
Abdomenisro, he .anointed with a Limment: thus prepared:

.Take of the - Oils of Dill, Chamomile, and white Lines,  
. each one Ounce ; of the Oil os --Carawaytwo Drains;

or of the Oil os Camphire, one Dram-p Make, into a Li-v  
niment, for anointing the Abdomen; after..the: Use of  
which, apply a warm folded Cloths^ ...J: ......... .j

‘ - \* \*-"\*'♦ . ..- c ***... rsf. st.*** A. . . ... so

When the febrile. Motion isUthua composed, in order, to .pro-  
mote.the.Lochial- Discharge, -there is hardly anymore efficaci-  
ous Medicine, than the Mass of Pills prepared, in .Imitation of  
*Becher's,* of bitter Exteacts, resinous-temperate-..Gums, and  
Aloes duly corrected.. On the second Day, therefore; Aster  
Delivery, let fifteen Grains of this Medicine,: in theTorm-of  
Pills, other Circumstances being alike, -be exhibited . in.The  
Morning or Evening, and continued for five or eight Days, ac-  
cording as the Circumstances os the-Patient require.; .This- is '  
an Highly mild and proper Evacuant-;-ΓθΓ by-corroborating the  
Tone os the Intestines and Uterus, which is weakened thyche  
excessive Dissension, and. at the fame time, by gently .stimu-  
lating, it frees the Abdomen and Intestines from siord es,-  
and the Uterus from stagnant and corrupted Blood, by which--  
means, it excellently prevents the Inflammation, the Fever, and  
other Violent Symptoms arising from, a Retention of Iheyecre-  
mentitious SordeSt -This Medicine is, also,-of lingular life  
when the Secundinos, or any Part, of them,., or any other fo-  
reign Substance, is to. he expelled from the Uterus.. . .. '.'.

But if the Intentions of thoPhysiaian are not answered by  
these means; if a continual Fever- preys.-upon the-Patient.; if  
her Abdomen is distended with Flatulences 4 is the Lochia are  
retain'd, and violent Spaims - Conveyed to the superior Parts,  
another Method is,ro he used-;- for the Redundance of Blood  
accumulated during Gestation, is *to.*.he diminished thy Vene-  
section, not in the Arm, but in the Foot ; for Spasms often  
arise from an excessive Distension of theWeflels, and the Coffin-  
tity of the superfluous Blood by distending..the Compages of the ,  
Uterus, diminishes and prevents its systaltic and and expulsive  
Pouter. Hence Venesection is of the greatest Importance to  
promote the Lochial Discharge,.and prevent.Inflammations.  
As io *France* Venesection is -more osten used for this Purpose  
than in ought, so in *Germany* it is totally rejected ; so that many  
din os an inflammatory Fever Of the Uterus, who might have  
been preserved by seasonable Venesection.. .. -

„ Besides Venesection, when an inflammatory FeVer is already  
present, the stagnant Blood-is to he put jp Motion, the thick  
Humours rendered Auxile, and the Stagnation discussed; Ilr  
order to obtain this End, -

Take of the Waters of Chervil, Carduus Benedictus, Socr-  
dium. Elder-flowers, *Egyptian* Thorn-flowers, and di-.  
stilled Vinegar, each one Ounce and an half; of Crabs-

**eyes,** one Drain and an half; of diaphoretic Antimony,  
or Beaoardic Mineral, half a Dram ; of the Spiritus Ni-  
tri Dulcis, or the Anodyne Mineral Liquor, twenty  
. Drops; and of the Syrup of CarduuS Benedictus, two

Drams: Make into a Mixture; of which let the Patient  
take two or three Spoonfuis every two Hours.

For ordinary Drink let her use weak Broth prepared with  
Fowls, the Roots of Vipers-grass, and Succory, together with  
the Shavings of Hartshorn, adding at Pleasure the Juice of  
Oranges. It is, also, expedient now-and-then to exhibit  
an Infusion prepared os the Herbs Pauis Betony, Scabious,  
Sow-thistle, the Flowers of Clary, and common Chamomile,  
together with the Seeds os Fennel ; nor are we to omit the  
temperating and resolvent Powders prepared of Crabs-eyes, a  
Solution os CrabS-eyes, Nitre, and Sal Polychrestus. Pow-  
ders of this Kind are commodious, interposed with *Pecheofs*Pilis, or others like them, in order to promote the Lochial  
Discharge, and derive the impetus of the Blood from the Head.  
Clysters are, also, to he used, and may consist either of sweet  
Whey, or .Decoctions of the Flowers *of* common Chamomile,  
the Herbs Mugwort, Sage, Clary, and *French* Mercury, with  
an Addition of Honey, Nitre, and the Fat of Hens.

When out of a State of Child-bed, in Women of impure  
Habits, Various Causes Concur to produce an Inflammation,  
not so much in the Bottom as in the Neck of the Uterus and  
Vagina, besides the internal Remedies already mentioned, ex-  
ternal Medicines are, also, to he used, such aS EpithemS ap-  
plied to the Region of the Pubes, uterine Injections prepared  
of proper Ingredients, Pessaries, and. On account of the Vi-  
cinity of the Parts, Suppositories introduced into the Anus.  
An Epithem may he prepared thus

Take os the Aqua Sclopetaria, four Ounces; of the Essence  
of Saffron, and camphorated Spirit of Wine, each two  
Ounces ; and of Nitre dissolved in Elder-flower Water,  
One Dram ; and, according as Circumstances require, let  
these be mixed with Vinegar of Rue, or of Scordium,  
and applied with several Folds os Linen Cloth.

For an Injection I commend either Womens, or Astes Milk  
boiled with Elder, flowers. Myrrh, and Saffron, adding 2 littie  
Nitre. The most uneasy Symptom of this Disorder, which is  
a Tenesmus, is, besides by emollient Insessions, excellentiy alle-  
viated by Oil Of sweet Almonds, or a Mucilage of the Seeds  
of Flea-bane, or Fenugreek; two Ounces of which, with  
an Addition Os twelve Grams of the Extract of Saffron may  
he injected into the Anus ; and all these Remedies are useful  
when the Inflammation has degenerated into a Suppuration.

It, also, frequently happens, that when a long-continued  
*Fluor Albas,* especially os the bloody Kind, is ill treated, or  
preposterousty stops, the Uterus is affected with a Tumor, Pain,  
and inflammatory 'Fever, which sometimes terminates in **a**Suppuration. In this Case the Cure is highly difficult and per-  
plexed, especially when the Matter flows not from the external  
Glands, but the internal Substance of the Uterus. When this  
Disorder is chronical, I know nothing more efficacious than  
the mild *Emps.en* and *Caroline* Waters, which not only effectu-  
ally dissolve the stagnant Humours, but, also, corroborate the  
Part affected. But the Patient is to abstain from astringent  
Baths, and from the stronger *Caroline* Waters, which on **ac-**count of their calcarinus and Chalybeate Earth, are of an  
astringent and repellent Nature. But Insessions prepared of  
uterine and aromatic Herbs, boiled in sweet Water, are Very  
beneficial. When the Veffeis are thus relaxed, and the Hu-  
mours diluted, we may with Advantage exhibit the *Pilulae  
Becheriana,* which are the most considerable of all the ute-  
fine Specifies. Nor is *Hippocrates's* Method of curing an Ulcer  
in the Uterus to be rejected, which in *Lib.* I. *de Morb.  
Mulier,* he gives us in the following manner: " When  
" this Disorder happens, bathe the Patient in large Quantities  
" of warm Water, and apply tepid Substances to the Part  
" affected. But if Pains possess the superior Parts, the whole  
" Body is to be fomented, and a purgative Potion exhibited;  
" and, if boiled Whey Can he bad, let the Patient drink it for  
" five Days: But is Whey cannot he had, let her drink boiled  
" Asses Milk for three or four Days. Aster the Use of the  
" Whey or Milk, let her drink Water, and use proper Ah-  
" ments, such as tender and recent Mutton, the Flesh os Fowis,  
" Beet, and Gourds; but she is carefully to abstain from all fa-  
" line, acrid, and Sea Substances, as, also, from the Flesh of  
" Goats. " And certainly Whey, and Affes Milk, are highly  
beneficial, not cmly in obtunding the Acrimony of the Hu-  
mours, but, also, in correcting the hectic Heats, with which  
Patients labouring under thiS Disorder, are greatiy afflicted.

An Inflammation of the UteruS induced by an external  
Cause, and accompanied with a Fever, a Pain of the Groins,  
a difficult Discharge of Urine, and Spasms in remote Parts,

calls for Venesection, not only in due time, but, alfo, repeal  
ed first in the Arm, and then in the Foot. In this Species os  
Inflammation, it is, also, requisite the Body should he rendered  
soluble by Clysters, which in all Disorders os the Uterus, are  
of singular Use. Externally we are to apply a Plaister pre-  
pared os Melilot, two Ounces; Sperma Cetr, half an Ounce;  
Gum Ammoniac, two Drams; Saffron, one Dram; and  
Camphire half a Dram ; not omitting the internal Exhibition  
of mild, diaphoretic, and discutient Medicines.

Since many Child-hed Women die of an uterine Fever, espe-  
Cially if they contain a large Quantity of gross impure Blood,  
hence it is certainly of great Importance, in order to prevent  
these . Capital Disorders, for pregnant Women, partly by a  
salutary Regimen, and partly by proper Remedies, to preserve  
both their Solids and Fluids in a due Temperature, Quantity,  
and equilibrium of Motion ; for such as is the Nature of **the**Patients, even of Child-bed Women, such iS the Struggle of  
Nature against the Disease, and such is the Cure, in which  
Nature does more than Art. In order therefore to prevent this  
terrible Disorder, it is necessary that Women, during Gesta-  
tion, should consult their Health both by seasonable Venesec-  
tions, and proper Laxatives, especially Preparations of Rhu-  
barb. They ought, also, to use a moderate Diet os a laudable  
Kind, preserve a due Tranquility of Mind, and drink diluting  
Potions, which have a Tendency to support and promote Per-  
spiration. Besides, as Inflammations of the Uterus in Child-  
bed Women, especially those of sanguine Constitutions, and  
those whe in the last Months have neglected Venesection, *fre-  
quently* proceed from het and spirituous Liquors, aromatic  
Wines, and such as are impregnated with Saffron, both Nurses  
and Patients are to he serioufly advised to abstain from these  
Liquors, which exagitate the Blood, and rather by Venesection,  
and the Use of Baths, for two or three Weeks hesore the La-  
bour, to procure a free Circulation of the Blood through **the**Uterus, and.its easy Discharge after Delivery.

In no Disorder are Commotions of Mind, especially by  
Frights and Anges, so-prejudicial as in Inflammations os the  
Uterus. Nor is Refrigeration of the Abdomen and Groins in  
any Case, so hurtful, as aster Abortion and Delivery ; for Child-  
bed Women, on account of the Solution of Continuity in  
their Fibres, the Dilaceration of the Veffeis, and tlie extrava-  
sation *of* the Humours, are to be Considered as Persons severely  
wounded. But it is sufficiently known how easily these Causes  
may induce an Inflammation of the wounded Part, and confer  
quently of the Uterus. Hence, not only Child-bed Women,  
but, also, those who labour under any Disorder of the Uterus,  
are to he carefully advised to abstain from such hot and spiritu-  
ous Liquors.

In order to promote the suppressed Lochial Discharge, **we**are never to exhibit drastic Emmenagogues, such as Prepara-  
tions of Saffron, Myrrh, Amber, Aloes, or hot Aromatics, or  
saline stimulating Medicines, much less, if immediately aster  
their Labour, there is. still an impetus of the Motions; sor  
these rather increase the Fever, heighten the Spasms, condense  
the Blood in the UteruS, by carrying off its moist Parts, which  
renders it unfit for Evacuation, and dry and obstruct the  
Emunctories more than they were hesore. But, when the  
Spasms begin to be relaxed, the Pains to remit, and the Porea-  
to become open, then moderate Emmenagogues, and such  
Medicines as restore the Tone os the Parts, are to be exhibited.  
The best os this Kind are. Solutions os Amber, Myrrh, Rhu-  
barb; and Saffron, not with Spirit os Wine, but with an aque-  
ous and lixivious Menstruum ; as, also, Baum-water, or gently  
spirituous Water os Mugwort, such aS chat which is distilled  
with Ale prepared of Wheat, exhibited frequently, though in  
small Doses. . ♦ .

Venesection [s, also, one of the most considerable Remedies  
sor recalling the Lochial Discharge; nor, if it is indicated, **let**the Physician be terrified from ordering it by the Violence of  
the Symptoms, or eyen when the Purples appear **See** PUR-  
PURA. . But when provident Nature by profuse Sweats, or  
Stools, in. some measure, makes Amends for the Cessation or  
scanty Discharge of the Lochia, we are to abstain from such  
Medicines as excite the lochial Evacuation.

When a Viscid, yellow, and bloody Humour is evacuated,  
it is a pretty sure Sign, that the Substance of the Uterus is in-  
Jured, and that an Inflammation and Ulceration are approach-  
ing. In order, therefore, to prevent an Inflammation, or re-  
move it when already present, frequent Purgings with Rhubarb,  
Tamarinds, and Manna, are both safe and necessary, in order  
to divert the peccant Humours from the Uterus. This Prac.\*  
tice is of such Importance to the Cure, that *Forestus,* in *Lib.*29. *Oast* 48. telis us, that he cured a Woman os Distinction  
os an Ulcer in the UteruS, by giving her every fourth Day,  
five Ounces of a Decoction osSena,Epithymum,red Roses,and  
*Indian* Myrobalans, edulcorated with Sugar, ordering her at  
the same time, to have abstergent Decoctions injected into the

Uterus. If an Ulcer os. the Uterus is curable, aster the Use os  
gentle Purgatives sor some Days, a Decoctinn os Sanders, Ma-  
such-tree. Sarsaparilla, Mins, Epithymum, Liquorice-root, and  
Rose-wood, thank for twenty-five Days, with a sudorific Regi-  
men, is of considerable Service. She *Syluaticus, Cent.* 4.  
*DbetSa - .. .*

When an Ulcer of the Uterus resembles the Nature Of an  
ulcerated Cancer, a putrid Sanies, together with corrupted  
Shreds of the Uterus, are evacuated with a setid Smell, intense  
.Pain, and a Train of Violent Symptoms; and, in this Case, the  
Disorder is generally incurable; demulcent and lenitive Medi-  
cines are, however, only to be used. If any H0pe of a Cure  
still remains, I recommend the drinking of Milk, especially that  
of Astes; as, also, the Use of temperate mineral Waters;  
such as the *Seltcran* Springs, and those of *EVildungen*; inter-  
posing, Morning and Evening, a Bath of sweet Water with  
Bran, in which the Patient is to fit for an Hour, or longer.  
No acrid, hot, and stimulating Medicines, are to be exhibited  
internally. In Abscesses, and Ulcers of the Uterus, we are,  
also, cautiousty to use Astringents and Repellents, fince by these  
a Scirrhus is. easily induced, injections of Goats Milk, Saf-  
fron, and Elder-flower-water, produce excellent Effects. *Hipo  
- pocrates* recommends the Use *os* Cabbage; but the Juice Of red

Beets, frequentiy injected warm, is hetter.

- An exulcerated Cancer .Of the Uterus is frequentiy accom-  
panied with an intense Pain, which destroys the Strength, and  
totally prevents Sleep. This Pain is best allayed by Anodynes ;  
inch as the Extracts of Saffron and Poppies, the *Pilula de Sty-  
race,* the *Pilula de Cynoglesse,* the *Pilulae Wildeganfti,* the *Pi~.  
lulae MatthaduraDdL* the *Pilula Starlcii. Riverius,* in *Prax.  
Cap.* IO. speaks in the following manner: " All theseThings  
." are sometimes insufficient to allay the intense Pain, which,  
" on certain Occasions, absolutely deprives the Patient of Rest  
" and Sleep. Hence we are frequently obliged to have Re-  
" course to Narcotics, which, in this Disorder, are not hurtful,  
" on account of the intense Heat of the Humours: And I my-  
" self knew a Woman labouring under a Cancer of the Breast,  
" who, for sour Months, daily took two or three Grains of  
*\*" Laudanum,* from winch she obtained great Relief/’ *Pre.,  
deric Hoffman.* s'

UTRICARIA. The Name of a Plant which grows at the  
Cape of *Good Hope,* to which I find no medicinal Virtues  
ascribed. *Rail Hist. Plant. .*

UTRICULUS. The Uterus is sometimes thus call'd.

UTRIFORMIS ABSCESSUS. The same as OEDEMo-

**SARCOMA.\* .**

UTRUS. A Name for the *Is.atis,* Woad. *Marcellus Em-  
- piricus, C.'zet ' - ; . .*

UTY *Brasuiensibus.* The Name of a Tree which grows in  
*Brasil,* of no Ufe in Medicine. *Raii Hist. Plant.*

UVA CRISPA. See GROSsULARIA.

UVA GRUiNA. Offic. *Vitis Idaa palustris Virginiana,  
fructu maiore,* Raii Hist. I. 685. *Vitis Idaea palustris Americana,  
. oblengis splendentibus foliis, fructu grandiore; rubro, pluribus in-  
tus acinis referto.* Pluk. Almag. 392. Phytog. Tab. 32O. f. 6.  
CRANE-BERRIES. . . - ‘

They are imported from *New England,* and are supposed m  
be excellent against the Scurvy: They are, also, of some Culi-  
- nary Service, among us.

UvA **MARINA.** A Narnesor the Ἐμὲνίἀτσ; *maritima i ma.,  
for’,* and for the *Ephedra ; maritima-, minor. .. :*

**UvA PASSA MAJOR. SeeVITIs.  
ς UvA PASsA MINOR. SeeVITIs.’  
- UVA URSI.** 0 ᾶ

The Characters are; ' i - ' .

The Calyx is Very small, and, aS it were, denticulated j the  
Flower is monopetalous, and Pitcher-shaped; and the Ovary in  
vthe Centre of the Calyx becomes a spherical Berry, containing  
a Multitude of oblong Seeds. - *s'*

*Bocrhaave* mentions but one Sort of *Uva Ursis* which is;-  
Uva Urst. *Tourn. Inst.Styp. Boerh. Ind. A.* 2. 21'9. *Vitis Idaeas*Offic. *Vitis Idaea foliis carnosa et. velat punctatis, sive Idaea  
Radix Dioscoridis.* C. B. P. .470. Raii Hist. 2. 1489. *Radix  
Idaea putata, et Uva Ursi.* J.B. 1.523. *Vaccinia Ursi, sive Uva  
Ursi apud Clusium.* Ger. I23O. Emac. I4I6. SPANISH  
. WHORTLES. ' ~

They grow in *Spain, Italy,* and other southern Countries;  
. and are said, by *Dioscorides,* to he good for excessive Flukes of  
. the Belly, Menses, and all Kinds *of Haemorrhages. Date.*

UVAE FABRILES, in *Caelius Aurelianus,* imports Grapes  
.. dry'd in the Smoke of a Smith's Shop.

UVATIO. A Disorder of the Eye, the same as *Staphy-  
loma..* See OcULUs. .

UVEA TUNICA. The uveous Coat of the Eyea See  
’OcULUs. .

UVIFERA ARBOR TABACENSIS. *De Laet:* The  
Name of a Tree, the Wood Of which is red, the Leaves round.

and the Fruit like Grapes; of a very grateful Tast- ..st gi-0,^  
principally on the Sea Coasts. *Raii Hisp. Plant. . '*

VULCANUS. . Fire. ἐν. E

VULNERARIA. Bee AsTRINOERTrA,  
VULNERARIA *l .... .. -*

The Characters are ;

The Calyx is tubulated, and swelling; the Pod τε short, sell  
of a roundish Seed, and concealedin the membranaceous Calyk  
Of the Flower. ......

*Bocrhaave* mentions sour Sorts Of *ViAneraria,* which are;

I. Vulneraria rustica. SeeANTHYLLIs LEGUMINosA. -

2. Vulneraria rustica flore albo. T. 39 s,

3. Vulneraria; flore purpurascente. T. agi. *Anthyllis, legists,  
-minofa hirsuta hcrba, flore suave rubente.* M. Η. 2. ISI.

4. Vulneraria; pentaphyllos. T.. 39I. *Anthyllis leguminos.a,  
iota affinis, major, His.pakiaa vesicaria.* M. Η. 2. I8I. *Lotus pen..  
iaphyllos vesicaria.* C. B. 332. *Trifolium Halicacabum sive vesi-  
carium.* J. B. 2. I7. 36I. *Boerh. Ind. alt. Piant.*

It is called *Vulneraria,* from its Excellence in vulnerary Uses,  
for the Decoction of it, or the Herb itself, bruised and applied,  
deterges Wounds, prevents thein Suppuration, and closes their  
Lips.' *Hist. Plant, adscript. Bocrhaau. .*

VULNUS. A Wound..

- \ . . . .

A Wound is a recent and bloody Solution of the Union os  
a *soft* Part,by a hard and sharp Body in Motion,press'd against  
it. Or resisting it.

In this Aphorism we have an accurate Definition of a Wound, X  
which is, that it is a Solution of Cohesion in the Parts : But,  
in order to give it the Denomination of a Wound, it must be  
recent; by which Circumstance it is distinguished from an Ul-  
cer/in which there- is a Solution of Cohesion in Parts before  
cohering. By *Hippocrates,* however, as in *Lib. de Capii. Viel-  
nerila. Cap. sy.* Ulcers and Wounds (ἐλκος καἰ τρῶμα) aresome-  
times used prorniscuousty, and that in the same Chapter. It is,  
also, added, in. the Definition, that it is a bloody -Solution of  
Continuity:Tor if the Wound iS.so small that no red Blood is  
discharged, it hardly deserves Consideration, fince the Skin can  
scarcely be pricked with the Point of a Pin, without producing  
an Effusion of some Blood. It is, also, added, that it is a So-  
lution of Continuity in a soft Part, in order to distinguish it  
from a Separation or Division in the Bones, by Fracture or Fis-  
sure. And, lastly, in order to distinguish it from a:Contusion,  
it is added, that the Solution of Continuity is mastethycan hard  
and sharp Body, which; in a final! Surface, impresses ita-Motion  
On any Part os the. Body : But an hard and sharp Body cannot  
separate the Cohesion of the Parts, unless, hy Motion, or Pres-  
sure, it is apply'd to the cohering Parts, or unless the Parts of  
the Body are moved or pressed to the hard and sharp; and at the  
same time resisting Body: For it is, sufficiently obvious, that the  
Effect must be the same, whether the Lancet is 'apply'd to the  
Arm, or the Arm to the Lancet. -

Therefore the sensible Cause of a Wound is, the Hard- '  
.. ness. Sharpness, and Motion, or Resistance of the wounding

Instrument. - si

These Things are sufficiently obvious \* For, unless the wound-  
- Ing Instrument was hard, it could not overcome the Force by  
which the Parts mutually cohere; and unless it was sharp, it  
- would make a Contusion; instead of a Wound,

The Subject is any soft Part ; and. therefore, consequently,  
the Texture of the sanguiferous, serous; lymphatic,...adipose;  
nervous, membranous, and tendinous Vessels, and the Ca-  
rials formed of them. . ’. ’ . ..,; -so. .

It is obvious, from the Definition; that the Subject of a  
Wound is a soft Part; but modern Anatomy evinces, that the  
- soft PartsOf the human Body are a mere Congeries or Texture  
of Veffeis: Hence there can be no Wound without a. Division  
of many Veffeis, and that os different Series: For no sangui-  
' serous Artery can be divided, without the Veflhiraimost of all

Kinds,being injur’d; for the Coats os this Artery consist os other  
smaller Veffels, whose Coats -are, also, made up of-other still

- smaller Veffeis, and fooh, till weanive at the smallest. Hence;  
- by a simple Wound of a sanguiferous Artery, the serous -and  
lymphatic Vessels are wounded, as, also, the Folhchles which  
yield that lubricating Substance; with which the internal Sides

\_ of the larger Arteries appear anointed: The.Membranes, also,  
-and mufcular Fibres; constituting the muscuiarCoat of the Ar-  
tery, are wounded. ..

Hence it is obvious, tbaf, by d Very flight Wound; all the  
. Parts, enumerated in this Aphorism, may he wounded; -

In .this Subject the Cause, already mentioned, produces a .  
Separation of the Coherent Farts, and an Effusion of the con-

’ tain'd Liquid; - \* ... ......soi

,5inroe, therefore, there can he no Separation of Cohesion in  
**a** Tost Part, without many Medels heing wounded, it is sufficiently  
obvious, that every Wound must produce a double Effect ; for  
it separates the solid Parts hesore mutually cohering, and then  
it brings from the wounded Vessels char Fluid winch was in  
them at the Moment they were wounded; as, also, that which  
by the Laws of Circulation, must soon he conveyed to the  
: wounded Part through the divided Veffeis. But since it is ob-  
vious, from the preceding Aphorism, that all Kinds of Vessels  
may he injured hy a Wound; so it evidently appears, that **all**Kinds os Fluids may be discharged from the wounded Veffeis.

' Hence those Actions are injured, which depend' upon the .  
Cohesion of the Parts, and a determined Circulation of  
LiquidsthroughcheVessels..

The entire human Body consists of Solids and Fluids. No  
Wound can be conceived, which does nob destroy the Co-  
.hesion of the solid Parts, and interrupt the Circulation of the  
Mumonrs through the divined Vessels: But ail the Functions  
Os the human Body depend on the Soundness of the solid Parts,  
and the due Motion of the Fluids through the Veffeis. Hence  
there can be no Wound hut whet injures,at least,someFunctions.  
Thus, that the Fingers of the Hand may he moved at Pleasure,  
**' the** *Musculas Profandus,* and *Sublimis,* by which this Motion is  
.performed, must he sound; now if by a Wound the Tendons  
of these Muscles are divided, the Motion .depending on the  
Soundness of these Parts is of course destroyed. .

In Physiology it is shewn, that, among other Things requisite  
**to** the Action of any Muscle, it is necessary there should be a

\*. free influx of the Spirits through the Nerves: Now if the  
. Nerve distributed to the Muscle should be divided, the usual In-  
. flux of the nervous Fluid into the Muscle is hindered, and its  
Action destroyed.

Those Wounds, therefore, are mortal, which are inflicted  
in those Parts whose Cohesion is infeparablefrom Life. k

A mortal Wound is such as produces Death as its necessary  
Effect; hut Death is present,when the influx of the Blood into  
the Heart, and its Expulsion from it, are hindered: But that  
these two Effects may be produced, the Soundness os many other  
Parts is requisite. Every Wound, therefore, which destroys  
the Things requisite to the free Influx os the Blond into the  
. Heart, ...audits Expulsion from it, must, of its own Nature, he  
. mortals; The Characteristics of mortal Wounds, and in what  
. Parts they are afflicted, shall be hereafter specified.

Some of these Wounds induce inevitable Death.

All those Wounds which by their Effects induce Death, agree  
. . in this, that they destroy the Reception of the Blood into the  
Heart, and its Expulsion thence: But there is, however, a con-  
siderable Difference between mortal Wounds.; for some are ine-  
vitably mortal; so that though the Wounds are accurately un-  
derstood, and the Parts wounded thoroughly known, no'At-  
tempts *of Art* hitherto known, can prevent Death from succeed-  
ing them, as the Effect does its Cause: Thus, sor Instance, if  
by a two-edged Sword, thrust into a Manis Thorax, a large  
Wound is made in that Part of the Aorta where it emerges from  
the Pericardium, all the Blood discharged from the.Lefr Ven-  
tricle os the Heart will flow through this Wound, and either he  
\* accumulated in the Cavity of the Thorax, or flow through **the**external Wound, but can never return through the Veins to the  
\* RightVentridle of tbe Heart; whence inevitable Death ensues.

Nor can this be by any Art prevented ; for therein no Accefs to  
- the Hand for applying Ligature, or Suture: And though this  
could be done, winch, however,, is impossible, the Aorta being  
. ay'd, the Lest Ventricle of the Heart could not empty itself.

Hence rhe Circulation os the Blood, on which Life depends,  
. would be suffocated.

; : But if after the Aorta is divided into two Branches distri-  
buted to each Thigh and Leg, it is wounded in any of these  
Branches, the Wound will, indeed, os itself, be mortal, hecause  
all the Blood will be discharged from this divided Artety ; but  
‘ yet it. will not .he inevitably mortal, because, by means of a  
.Tourniquet, or Bandage, the Artery may be so compressed,as to  
emit no Blood, after which, st may he *tfld.*

In the Reports given in by Physicians to Judges, these Cis-  
. -cninstances ought carefully to he adverted to, and distinguish’d.

Others, if leftto themselves, are mortal ; but, by the Help..  
Of Art, may he so. amended, as to remove the Danger of  
Death. /" ' - ' - - ’ ' ’ :

All the large Arteries distributed through the Limbs may, if;  
wounded, discharge the Blood in such a manner, aS to prove

mortal: Hence a Wound in fuch an Artery is, indeed, mortal;  
but, hy Art, may he hindered from producing Death, as its Con-  
isequence. Hence it is obvious, that Physicians and Surgeons,  
who treat Wounds, and make Reports concerninn them to  
Judges, ought to know the Directions and Distributions of the  
larger Veffeis, and those Parts in which they may he most Com-  
modiousiy compressed, in order to prevent Death from the sub-  
sequent Haemorrhage.

. . Yet, through Neglect, or Error, WoundS, in themselves  
. ’ not mortal, may he rendered so.

This most frequentiy happens to those who least deserve it ;  
that is, to Soldiers in the Field os Battie. Many wounded  
Men have died of Haemorrhages, which might have been stopt  
by a skilful Surgeon. Many have, also, dy’d hy an Extrava-  
sation of Blood under the Cranium, who might have heen pre-  
served by a seasonable Use of the Trepan. A strong Contu-  
. sion of the external Integuments of the Cranium, accompanied  
with a Very small Wound, has, when neglected, often produc'd  
the most terrible Symptoms, and eVen Death ; all which might  
.have been prevented, if a proper Method of Cure had been pur-  
sued. Numberless Instances of this occur in practical Authors.

Not only Neglect, but, also. Errors in Practice, often ren-  
der WoundS, of themselves not mortal, fatal to the Patient.  
Persons rarely die os Haemorrhages, unless the large Arteries  
aye divided; but those who suffer a great Loss of Blood, fall  
.into a Deliquium, and then the Haemorrhage stops : If they  
.are thus left half dead, as it were, in a moderately hot Place,  
.give them only small Quantities of Flesh-broths, at different  
times ; and by this means drooping Life may be supported, till  
Ihe divided Vessel contracts itself, and is oven often consolidated.  
Thus many have been preserved, whose Death seem'd unavoid-  
able.

But those who endeavour to recover those who have fallen  
-into Deliquiums, in consequence of Violent Haemorrhages by  
spirituous Liquors, do not restore the lost Quantity os Fluids,  
hut increase the Action os the Vessels upon the Liquids; by  
which means another Loss os Blond is produced, and the Cause  
Os Death augmented. Many, aster Engagements, being lest  
sor whole Days among the Carcases os the Slain, with almost ’  
their , whole Blood exhausted, have, however, afterwards **re-**vived.

. Some Chymists inform us, that Arsenic, fixed with Nitre, is  
an excellent Remedy for stopping Haemorrhages; but the Ap- '  
plication os such a Virulent and poisonous Remedy to a crude  
-Wound, is highly dangerous; since the smallest Portion os is,  
received into the Veins, aster Violent Convulsions, might prove  
.-.mortal, i. '

Hence when, by public Authority, the Carcases of wounded  
Persons are inspected, it ought first to be enquired whether the  
Wound jo such aS that Death must necessarily ensue ; Or whe-  
ther by Surgery, as now known. Death might have been pre-  
vented ; and then, whether the Death, succeeding the Wound,  
is to he ascribed to that Wound, or to other Causes.

‘.so The Effects of Wounds are Various according to the Vari-  
.. ety of Actions exercised, .whilst.the wounded Part was entire ;

and hence Various Appellations of WoundS arise, which are  
- readily distinguished by the Physician who is acquainted with

those Actions during Health.

AS many different Parts of thethuman Body as may he hurt  
by a Wound, so many distinct Functions may be injured, the  
Soundness of which depended on the Cohesion of the Parts di-  
. aided by the Wound : But the Person who, from the high Im-  
provements. of Anatomy, .and Physiology, knows the Various  
Uses os the several Parts of the Body, can, from a Knowledge  
os the Part wounded, determine the Injury which must succeed  
the Wound.) Thus, when the Tendon os a Muscle is divided,  
it is obvious, that the Action of .such a Muscle which depended '  
on the Soundness of the Tendon, must be destroyed*: Hence* it  
IS obvious, that there is a great Variety of Wounds, as to the  
Effects they produce in different Parts of the Body.

Nor is there a less Variety of Names, Forms, and Effects,  
in WoundS arising from the Diversity os the wounding Cause,  
\_ with respect to its Figure, and Methodos acting, whether  
. by Puncture, Cutting, Striking, or Agitation ; as, also, with  
respect to the Force with which it is applied, its Removal  
from the Wound, its remaining in it, and its poisonous In-  
' section. . \

In .this Aphorisms are considered the Diversities of Wounds,  
fo sar aS they depend on the wounding Instrument.

*- As 'Jor\_ the Figure*; if 'the Instrument he of a conical acute  
**Figure, there** will he a Puncture, which .soon closes. in which

Cafe, it is difficult to "know the Deepness os the Wound: But  
**is** the Instrument is os the Figure os an acute Wedge, a Seis-  
sure will be produced.

*\_ Ac for its Method of acting, whether by Puncture, or Cut'.,  
ting ,* from these Circumstances arise a great Variety os Wounds ;  
for, by Puncture, a narrow, though often a deeply-penetrating  
Wound, is .produced; Whereas, when an instrument, os the  
Form os an acute Wedge, is drawn through the soft Parts, then  
long tho’ less deep Wounds are form'd.

*. As for Striking* ; in this Case the wounding Instrument pene-  
trates-with tho greater Force, and is driven the deeper; and,  
Unless it is very sharp, it may, at the same time, make a Con-  
tusion.

*As for Agitation* ; it is to be observed, that, when a Wound  
is inflicted with a full\*extended Arm, the Sword often passes  
without doing any great Harm between Parts a Wound in which  
would be very, dangerous ; but if the Sword, remaining in the  
Wound, is agitated and twisted about in is, far more Parts are  
injur'd; but this is to be learned from the Figure os the Wound:  
For is the Bulk of the Wound, corresponds to that of the  
.wounding Instrument, it has only been inflicted with a direct  
Thrust: But if, with a broad Sword, the Wound is made  
round, it is a Sign, that the Sword has been twisted about in  
It. - . . Λ

r. . *As for the Force of impinging,* according to the different De-  
grees os Impetuosity with which the wounding Instrument is  
apply'd to the Body; the Wound will penetrate more or less  
deep. ......

*As for removing the Instrument from the Wound, or leaving it  
insit,* in the most Violent Wounds it is sometimes expedient to  
. leave the Instrument in the Wound, fince the Parts wounded  
often fo embrace the Instrument, aS to prevent an Haemorrhage,  
which, when the Instrument is withdrawn, often proves in-  
stantly mortal. By this means. Life is at least preserved for  
some time. Thus *Virgil,* in.his *AEniid, Lib.* Io. when repre-  
sensing the Death of *Pallas* by *Turnus,* expresses himself in the  
following beautiful manner:

*Idle rapit calidum frustra de vulnere telum.  
Una eadernque via sunguifque antrnusique sequuntur.*

When the implacable *Achilles* is, in the 2 2d Book of *Horner\*s  
Iliad,* represented aS having plunged a Spear in the Neck of  
*Hictor,* he is said to leave the Instrument in the Wound, that  
he might have an Opportunity os infulting him in-the Agonies  
of Death; but Hictor expired aS .soon as the Spear was with-  
drawn.

This Diversity of Wounds principally happens from this :Cause; when the Instrument is barb'd, or hook'd, so that it  
cannot be extracted without great Laceration.

*As for the poisonous Infection*; surprifing Experiments eVince,  
that there are some Substances, which, tho’ they may be safely  
swallowed, yet prove infallibly and suddenly mortal, whenap-  
ply'd to Wounds. In the Bites of Vipers; the venomous Juice,  
convey'd into the Wound by the Teeth of the Animal, infal-  
libly kills Men, larger Animals, Hens, and Pigeons. When,  
at the Desire of the great Duke of *Tuscany,* Men os Learning  
were inquiring into the Nature of the Venom of the Viper,  
,and with the Ahtients and some of the Moderns, asserted that  
it was lodged in the Bile of the Animal, a hold Viper-  
catcher convinced them of their Mistake ; for he courageoufly  
drank the Bile, mix'd with half a Glass os cold Water, and  
sustain'd no Injury by doing so: Nor did the Viper's Gash exhi-  
, hited to Various Species of Animals, do them any Harm ; nor,  
when dropt into a recent Wound, did it produce any bad Ef-  
sects. ' *Franc. Redi Observat. de Vipcris. . -*

Others think it more probable, that the Poison of Vipers is  
lodg'd in. the *Loculi,* or Bags, adjacent to their Teeth; in  
which there is a Liquor, in Colour and Taste resembling Oil of  
Almonds ; and, when the Viper bites, the Jaws being com-  
pressed, this Liquor is necessarily infused into the Wound. But  
tho' the Poison, convey'd into the Wound by the Viper's Bite,  
produced such terrible Effects, the fame Viper-catcher who  
drank the Bile, did not hesitate to drink the Liquor expressed  
from the *Loculi* of an angry Vihes, and all the Foam and Sa-  
liva in its Mouth, after having diluted them in Wine, without  
sustaining any Injury. Neither did this Liquor and Foam  
produce, any bad Effects, when exhibited to other Animals.  
*Rhede. ‘*

The Spears of the Inhabitants of *Bantam,* which, by a Very  
flight Wound, prove mortal, when infused in Wine, or any  
other Liquor, for many Days, conveyed no malignant or poi-  
sonous Quality to the Liquor in which they had so long re-  
mained. *Redi.*

When the Valiant *Cato* led his Army thro' the parched *Libyan*Deserts, his thirsty Soldiers would not venture to drink of a cer-  
tain Fountain, on account *Os* **the** great Number of Serpents it

contain’d; but their sagacious General persuaded them to drink  
boldly, and encouraged them, by his own Example, to do so;  
*Lucan. Pharsul. Lib. g. . -*

If a Thread, wet with Oil of Tobacco, is, by means os a  
Needle, pasted thro' any .Part of a live Animal, fuch an Ani-  
mal soon dies. - In this manner was a Viper killed, in loss than  
half a quarter os an Hour, by *Redi*; who, nevertheless, sound;  
that the same Degrees of Malignity were not in the Oiis obi.  
tamed from all the Species os Tobacco.

When, therefore, there are anomalous Symptoms, which we  
cannot suspect to arise from the Wound, as their Couse, we  
are then to consider whether they arise from the Venomous In-  
section of the wounding Instrument.

All these again vary; with respect to the Difference of the  
Part receiving the Wound, as to its Hardness, Softness, Con-  
nexion. Situation, Effect, contain'd Liquid, and Altera-  
tion. .

In the two preceding Aphorisms are enumerated the Diver-  
sities of Wounds, as far aS they depend on the Functions injur'd  
by the Wound; as, also, those Differences which depend on  
the Diversity of the wounding Cause: But ‘in this are "con-  
sidered thofe Varieties os Wounds which arise from the different  
Natures of the wounded Parts. -

*As for the Hardnese or Softnes.s of the Part*; a wounding In-  
strument will, with a small Force, penetrate the soft Integu-  
ments of the Abdomen; but it will require a far stronger Im-  
petus, or Application, to divide the Cranium.

*Astasur the Connexion of the wounded Pant with others* ; when  
the Tendon of a Muscle is divided, the Motion os that part to .  
which it was naturally united, is lost; and this is accounted the  
Effect of the Wound. When a small Artery, remainingin  
the Socket after the Extirpation of a Tooth, discharges so much  
Blood as almost to prove mortal, this does not happen because  
so small an arterial Ramification is hurt, but because, being fix'd  
to the bony Surface of the Socket, it cannot contract itself,  
and by that means be closed. When, in the Flexure os the  
Cubit, by rash and unikilful Venesection, the *Aponeurosis’* ari-  
sing from the tendinous Part of the Biceps Muscle is hurt, the  
terrible Symptoms which ensue do not depend upon such a flight  
Wound, but upon the Connexion os that tendinous expardion  
with other Parts. \_ z

*As for the Situation of the Pant* ; if only a small Ramifica-  
tion of the intercostal Arteries is so wounded, that the *Pleura*being, at the same time, perforated, the Blood stows into rhe  
Cayity of the Breast, the Lungs may, by the Corruption of  
ὅ the extravasated Blood, be inflamed and suppurated, and a mor-  
tal Con sumption brought on, only because that Artery is so situa-  
ted as that it can discharge Blood into the Cavity os the Breast;  
For, in other Parts of the Body, larger arterial Ramifications  
may be cut without Danger. A Wound in the internal Part  
os the Thigh is, on account of the large Vessels situated there,»  
sar more dangerous than an equal Wound in its external.

*As for the Effect*; many Parts of the human Body are os'  
such a Nature, that, when they are injured by a Wound;  
or any other Cause, the Functions of other Parts are, also;  
disturbed; but Anatomista have not as yet sound a Reason  
why, when the former are hurt, the Actions of the latter .  
should be disorder'd. Thus, for Instance; after several Fits of  
the Colic, or Iliac Passion; there arises, in the *Colica Pictar  
num,* a Palsy of the Arms, and srequentiy, if the Disorder  
proceeds, a true *Marasenus os* the superior Limbs. But no  
one, from the known Structure of the Parts, can account  
Tor such a Phenomenon. In the *Memoires de sc Acad. des.*

*Sciences, ΓAn. ιηζη.* we are inform'd, that, after Wounds of  
the Abdomen, in which some Nerves of the Mesenteay were  
cut, the Patient was subjected to intolerable Pains, and died j  
but, upon opening the Body, neither the large Vessels were  
found cut, nor any of the Viscera wounded : Upon cutting in  
a Dog the intercostal Nerve, and the eighth Pair, which, in  
that Animal, are included in one Vagina, or Covering, it ap-  
peared, that the Dog'S Eye, on the same Side, was darkened;  
hecame less, and was inflamed ; and, by repeated Experiments,’  
it was evinced, that the Eyes are always sensibly changed, by  
that means. But this could not be accounted for from the  
Structure of the Parts, tho' it was confirmed by the Effects fuc—'  
ceeding the Wound. Hence it is obvious, that there is a great  
Diversity of Wounds arising from the Effects which are observ’d  
to be produc'd by the wounded Part in other Parts os the Body;  
But an Observation of the Fact often informs uS of such Events;  
when, from the known Structure of the Parts, we could not have  
demonstrated, that such Phenomena were to be apprehended.

*As for the Liquide contained in the Part vbounded y* if the \*  
Gall-bladder, being wounded, discharges the Bile into the CaA  
Vity os the Abdomen, this Bile, becoming putrid, will. soon

produce terrible Symptoms. If the Ureters-should he cut, the  
Unne discharged from the Wound, will be accumulated in the  
Abdomen, and becoming corrupted may render all the. abdo-  
minal Viscera putrid.

*As for a Change or Alt creation in the Appearance of ihe.Parts ,*' the Parts of the Body hurt by a Wound may, more or less,  
. so degenerate from their natural Conformation, and by that  
means have their external Appearance surprisingly, chang'd.

When the Muscles of one of the Sides os the Face become  
paralytic, there is a surprising Distortion on the opposite Side ;  
because the Muscles, destitute os the .^Equilibrium of their an-  
ft agonist Muscles, retract the Parts os the Pace. It is suffici-  
entiy obvious, that the like Effect may be produced by Wounds,  
when some Muscles of the Face, or other Parts, are hurt ; or  
when the Nerves, distributed to these Muscles are cut or di-  
rided.

As it is necessary to be acquainted with the Origin of this  
Multiplicity, so a subtile Distinction of Names is of no great  
. .Use. -

It is not to be doubted, but Physicians and Surgeons, who  
undertake the Cure of Wounds, ought carefully to attend to  
what has been said in the three preceding Aphorisms ; for upon  
these depend the Diagnostics and Prognostics os Wounds,which  
can be placed on no sure Foundation but that of4 Kinowledge  
os the Structure and Use of the Parts: For when we know the  
wounding Instrument, together with the Manner and Force  
with which it was applied, when we consider the Nature, of the  
Part wounded, and, know its natural Uses injured by the  
Wound, we foresee what is to he dreaded, and understand how  
far Art can remove the Misfortunes which have already hap-  
pened, or prevent such aS are to be expected. But it seems diffi-  
cult by Various Names so to specify the numerous Diversities of  
Wounds, that the Word affixed to each shall convey a distinct  
Idea of it to the Mind; and still more difficult so to impress these  
Ideas and Words in the Memory, aS that they may be,os Use.  
Thus *Pare,* that he might give the Differences os Wounds, has  
' prefixed a whole Table to his Treatise on Wounds : But a Per-  
son who attentively considers, will easily see that these are not of  
great Use; and that the general Knowledge of those Things  
on which the so great Diversity os Wounds depends, is suffi-  
cient.

-Is, in an healthy and robust Body, a Wound is made in a  
.Visible Place, not irrigated by any large Artery, and not too  
’ tendinous, the following Phenomena arise, provided the Ori-  
fice of the Wound is defended from the Cold, from Air, and  
.' Exsiccation.

. That something certain may be established, with respect to’  
the Cure os Wounds, it is necessary to premise those Pheno-  
mena, which are observed to happen from the time in which  
the Wound was inflicted, till It is perfectly consolidated; and,  
when these are pointed out, in the Order in which they succeed  
each other, they afford an evident Knowledge of the Method  
used by Nature in restoring Parts separated by a Wound, to  
their former Cohesion.

In order, therefore,Io avoid all Error and Confusion, we  
shall only here consider a Wound. alone, and suppose the Body  
of the wounded Person in perfect Health in every other re-  
fpect ; otherwise the Phenomena observed would not. be justly  
ascribed to the Wound alone, but might, in some measure, de-  
pend upon a Disease accompanying the Wound ; for quite other  
Changes appear in a Wound when rhe Body of the Patient  
labours under a scorbutic. Venereal, or rachitic Cacochymy t.  
Besides, the Body is supposed robust; for in weak Habits the  
languid Circulation conveys the Humours to the Wound with  
a smaller Impetus: Hence, io such a Patient, the Pain, Heat,  
and Tension, are far less about the Lips of the Wound, than  
they are in an equal Wound inflicted on a strong, robust, and  
Vigorous Person.

Besides, all these Things ought to he obvious to the Senses:  
Hence, in the external Parts of the Body, the Phenomena of  
Wounds are principally observable; "and from a Sight of these  
we learn what happens in the internal Parts of the Body, when  
wounded. For this Reason st is, also, supposed, that no large  
arterial Vessel is wounded ; for in this Cose, the Violent Effu-  
fion os Blond would hinder all the Phenomena from heing ac-  
'.curately viewed.

It is, also, added, that a Wound ought not to he in a ten-  
dinous Place ; for if the Tendon of any Muscle is wounded,  
and not entirely cut thro', the Muscle affixed to such a Tendon  
may, by drawing the wounded Tendon, produce terrible Sym-  
ptoms, which do not so much depend on the Wound, as on the  
Muscle drawing the wounded Tendon. But we shall hereafter

describe those Symptoms which arise from a Division of large  
Arteries or Tendons by means of a Wound.

Besides, an Admission of the Ain, especially when Cold, fur-  
prisingly ehenges the wounded Parts, and injures and dries the  
render Vessels. Thus if, by a Wound, the *Cranium* isdenudated,  
and the Bone exposed to the free Air for a considerable time,  
such a Wound will hardly be cured till therein a Separation of  
the bony *Lamina,* by Exfoliation. But this Circumstance does  
not depend upon the Wound: For *if* the denudated Bone had  
.been immediately defended from the Air, shch an Exfoliation  
would not have happened. '. .

Under these Conditions,, then, are. enumerated, .the Pheno-  
mena proper to Wounds alone, in the following Numbers so

*-' s.* The Parts between which the wounding.Cause is.'for-  
ced, recede by degrees more and. more from each other,. tho'  
the Cause. is removed, unless the Puncture in Very small.

AS soon as the wounding Instrument has divided the Cohesion  
of the Parts, the Distance of the.Parts separated is equal to.the  
Thickness of the Instrument: Hence, when the public Exe-  
cutioner, with a sharp Razor, flits the Face of Malefactors,  
there only appears, at first, a red Line; but, gradually, the Lips  
of the Wound recede from each other, so aS frequentiy, in .a  
few Hours, to. he theBreadth of a geometrical Line distant from  
each other :;For that Force by.which the solid Parts cohere,  
proceeding. to act, retracts the divided Lips; because in the  
'Place where the Wound is, the Cohesion of the Partsis de-  
stroyed. *l '*

*As for the Smalnes.s of the Punctura*whilst a.wounding in-  
strument by Puncture makes a small Wound, as .soon as it has  
penetrated the Skin, and wounded the subjacent *Trnica Cellu-  
loso,* unless the Patient's Body is much extenuated, .the Wound  
appears Very inconsiderable, or none at all; because the *Tunica  
Cellulose,* by .the Pressure of the Skin, in the adjacent Parts,  
immediately rises in theWound,and closes it. Hence, when cor-  
pulent Persons are blooded, the Discharge Of the.Blood is often  
suddenly stopt by the Fat obstructing the Orifice os the Skim

2. At first the Blood .flows from ,a Wound .with Impetuo-  
sity, but, by degrees, stops fpontaneousty.

If a great Artery is not wounded, nor such a .one as, ‘.heing  
affixed to a Bone, cannot retract,.and close jtsels, the first Mo-  
ment the Wound is received, the divided Vesteis discharge the  
Blood with impetuosity; but soon aster, .their Orifices being  
by their own Elasticity contracted, and concealed within the  
Lips os the Wound, the Haemorrhage is quickly diminish'd,  
and at last ceases fpontaneousty. This evidently appears in  
Cutting for the Stone; in which Operation, when by a pretty  
large Wound the Skin and subjacent Parts are divided, an  
Ounce or two of Blood are discharged ; but unless, by some  
unlucky Accident, a large Aftery is wounded, the Haemorrhage,  
which would otherwise greatiy disturb the Operation, soon after  
ceases almost totally; for almost all the Blood evacuated from  
the Wound is discharged from the Arteries; for pretty large  
Veins, when divided, discharge but a small Quantity of Blood,  
unless there is some Obstacle placed between the Heart and the  
Wound, inflicted in the Vein: But the Arteries, by their Elas-.  
ticity, easily contract themselves; by which means, the Blond is  
soon stopt.

3. Then a sanguineous Crust is formed in the Cavity of  
the Wound.

Since, then, as we have now observed, arterial Blood is al-  
most only discharged from a Wound; and since such'Blood,  
when extraVasated, in the soundest and most robust Person, is  
naturally soon coagulated; hence, as soon as the Impetus of the  
discharged Blood begins to cease, .such a *Coagulum* of the Blood  
is formed, generally called a *Thrombus,* or bloody Eschar,.  
which adhering to the Lips of the Wound, perfectly covers its  
whole Surface. Thus Wounds are covered and defended by  
the exquisite and salutary Effort of Nature; and under this Co-  
Vering, the Parts separated by the Wound are gradually conso-  
lidated And because this *Thrombus* is, by the Heat of the Body,  
and the contiguous Air, more and more dried, there is a pretty  
hard Covering thus formed, which after the Cure of the Wound  
fpontaneousty salis off.

An A diluted redish thin Liquor flows from it.

When this *Thrombus* hegins to be formed, or when it is re-  
moved, after its Formation, .Blood is not generally discharged,  
but only a thin Liquor tinged with a faint-red Colour, and re-  
semblinig the Washings os new-killed Flesh. Tins seems to

happen because the Vessels destined for the Conveyance os **the  
red** Blood heing divided, but gradually contracting, their **Ori-**sices discharge but littie red Blood, whilst a greater Quantity Of  
a thinner Fluid, which is not red, is evacuated from them.

5. Then the Lips of the Wound begin to be red, preter-  
naturally hot, painful, tumid, and retorted, whilst the Bot-  
.. tom of the Wound becomes tumid and prominent. But  
- especially the Fat rises into the Aperture of the Wound, and  
there soon degenerates.

. When the divided Veffeis by their proper Elasticity contract  
their Orifices, and are almost entirely closed, the Humours  
which used to flow through those Veffeis, are stopt: Hence  
there arises an Obstruction about the Lips of the Wound, and  
the Impetus of the succeeding vital Humours forcing the Fluids  
into the obstructed Veffeis, dilates them near the obstructed  
Place; and hence arises a true Inflammation. For this Reason  
on the second and third Day the Lips of the Wound become  
**red,** whilst greater Heat and Tumor, the Concomitants of .an  
Inflammation, appear. And if all these Symptoms are mode-  
rate, they prognosticate nothing bad, since they naturally hap-  
pen in all Wounds. This is theReason why a recent Wound  
is hardly accompanied with any Pain, but especially on the  
third Day, or sometimes sooner, an Inflammation arising, and  
the wounded Parts hecoming tumid, a Very considerable Pain is  
often perceived in the Wound. .

Hence *Hippocrates,* in *Epidem. Lih.* 2. telis us, " That  
" when severe Wounds are .inflicted, if a Tumor does not  
" succeed, it is a Very bad Sign." The fame is affirmed in  
.ἀρἐν-66. and 67. *Sect. tsp* where he Observes, "That soft  
" Tumors are good, but such as are crude, bad.'\* For if no  
Tumor arises about the Lips of the Wound, it denotes that  
the vital Force is defective, and if the Tumor is excessive, the  
violent Inflammation lays a Foundation for dreading a bad  
Event.

T he same Author, in his Treatise *de Fracturis,* not only ob-  
serves, but lays it down as one of the most important Rules  
in Surgery, " That on the third and fourth Days, Wounds  
" are by no means to be disturbed ; and that we are at this  
" time to abstain from all Searches by the Probe, and from  
" every thing which is capable os irritating Wounds; for in  
" general, most Wounds take a considerable Turn, and grow  
- " troublesome on the third or fourth Day.''

- For the like Reason, in the same Treatise, he adVifeS, that  
when a fractured Bone sticks through the Skin, it is to be re-  
duced on the same or following Day ; but not on the third,  
and by no means on the fourth and fifth.

Thus *Simeon, Rud Levi,* the crafty Sons of *Jucob,* in order  
to revenge the Affront given them by *Sechem* the Son *CAHamor,*' in deflowering their Suter *Dinah,* persuaded the the unwary  
*Hamorites* to submit to Circumcision ; and on the third Day,  
- their Wounds being so excessively painful, that they could make  
no Resistance, they flew them all both with Ease and impu-  
nity.

*Assor the Retorsion of the Lips of the Wound, and the tumid.  
prominent State of its Bottom :* The Membrana Adiposa subja-  
cent to the Skin is easily distended, and rendered tumid, as is  
obvious in fat and dropsical Persons, and in an Emphysema,  
in which the Air entering the Membrana Adiposa, produces so  
surprising Expansions thereof. But theSkin covering the Mem-  
brana Adiposa, confines1 it Very strongly; hence, when the  
Skin is divided by a Wound, the Lips os this Wound gradually  
recede from each other ; and the Membrana Adiposa, which in  
the Place of the Wound is free from the equable Pressure of the  
Skin, soon rises and swells. Hence the Skin being on both  
Side# retracted from the protuberant Membrana Adtdosa, the  
Lips of the Wound are retorted, and, in its Bottom, a tumid  
Prominence appears.- But if the impetus of the Fluids distend-  
ing the Vessels remains the fame, whilst the Causes resisting  
this Distension are lessened, the Largeness of the Veffeis will  
he augmented. When, therefore, the Resistance of the Skin  
in a Wound is removed, the Membrana Adiposa rising in the  
Wound, will be more dilated, and grow out into what the  
Surgeons call *fungous Flesch,* and consequently degenerate Very  
soon.

6. And, at the same time, a flight Fever, accompanied  
with Thirst and Heat, is excited.

This only happens when the Wound is considerably large ;  
for in a small Wound these Symptoms are not generally ob-  
served ; sor as soon as the Symptoms enumerated in the pre-  
ceding Number, arise, a greater Heat is excited, not only in  
the Wound, but, also, in the whole Body, the Pulse becomes  
quicker, the Patient is afflicted with Inquietudes, and turbu-

lent Dreams; - his Thirst is, also, increased, and his Urine  
more red than hesore. But all these Symptom, last aS.long as  
the Tumor, Pain, Heat, and Retortion of the Lips os the  
Wound are present; and when these cease, the other terminate.  
Such a flight Fever happening to wounded Persons in this Stage  
of their Misfortune, is so far from heing injurious, that it is be- -  
neficial, smce by its means the Pus is formed, after winch it  
generally ceases. In cutting sor the Stone, the Extirpation of  
a Breast, or other Wounds of a like Nature, the Presence of  
such a Fever at the time specified, is always a good Sign.

Hence *Hippocrates,* in *Apia. isp. Sect.* 2. observes, " *that  
te during the* Generation of Pus, Pains, and Fevers more  
. Ci readily happen, than when it is formed."

But here we only speak os such a Fever aS at this time arises  
from the Wound as its Cause; for a Fever may happen to  
wounded Persons from Various other Causes : Thus in large  
Wounds a cop ions Pus already formed, and in some measure  
resorb'd by the bibulous Veins, often induces an hectic Fever,  
which preys upon the Body.

7. Hence about the third or fourth Day, sooner Or later,  
a tenacious, white, pinguious, equal Liquor, called *Pus, is*formed in the Wound.

When a Wound is inflicted, the Blood is immediately dis-  
charged; and afterwards, when the divided Vessels are more  
constricted, a redish Ichor. Then arises an Inflammation of  
the Wound with the Symptoms described. Then begins to ap-  
pear in the Wound an unctuous Liquor, almost os the .Consist-  
ence of fresh Cream, somewhat yellowish, entirely equable,  
without Smell, and of a mild Taste, almost like that of Chyle :  
This Liquor is called *Pus,* which if laudable, has all the now  
enumerated Qualifications. But such a Pus is never formed  
unless the Wound is covered; but a Pus of this Kind sis gene-  
rated under a Thrombus arising in the Wound, or a Piaister  
covering it. Hence PnS is not formed in the Vessels, hut in  
the Wound, by the extraVasated Humours cherished and-  
changed by the Heat os the Body ; for is all the Pus in a  
Wound is wiped away with soft Lint, about an Hour aster  
the Surface of the Wound will every-where appear moist with  
a thin Liquor, which is not PuS. But is sor twenty-four Hours  
the Wound is covered with a Piaister, the PuS will appear upon  
removing this Piaister. Hence Pus is formed out of the V ese  
fels; hut the Matter os winch it is formed, is conveyed thro\*  
the Veffeis.

But Pus thus formed in a Wound produces happy Effects j  
for Nature uses this Method to disengage and separate from the \*  
live and sound Parts such aS are mangled and half lacerated,  
and the inflamed Extremities of the Veffeis, together with the  
insarcted Liquids lodged in the Lips and Bottom of the Wound.  
Besides under this Pus, when formed, all the lost .Parts grow  
up afresh.

*Hippocrates,* who strictly followed Nature, in the Beginning  
of his Treatise *de Ulcer ibus,* telis us, that recent Wounds  
[ελκεα νεότρωτα, which Words -seem rather applicable to  
Wounds than Ulcers.] and the Parts adjacent to them were not  
inflamed, if a Suppuration was speedily brought on. He after-  
wards adds,. that a Wound inflicted with an acute Instrument,  
may be cured without a Suppuration ; but that contused .and  
mangled Flesh became putrid, and being converted into Pus,  
was consumed, after which new Flesh must necessarily be gc-  
Derated. . -

in the same Place he tells us, that Wounds are inflamed .  
when they tend to a Suppuration ; but they suppurate by such  
a Chanae and Heat of the Blood, as renders then Pus putrid.  
But by Putrefaction, he does not here seem to mean a malignant  
and scaly putrid Degeneracy of the Humours, but only that  
Change of their State by which they are transformed into Pus,  
aS is obvious to every one whe reads the Passage attentively.

Hence laudable Pus is by Surgeons reekoned the best of  
Signs. And *Galen,* in *Corn. Aph.* 22. *Sees.* 5. does not hesi-  
tate to affirm, " that no bad Accident can happen to an Ulcer  
" which generates Pus;'' sor Pusis formed whilst laudable Hu-,  
mours are with a due Motion conveyed to the Wound ; hence  
it has as its first Cause, the Actions os remaining Health ; sor in  
a cacochymic Body good Pus is rarely formed in a Wound,  
hut an Ichor, which greatly degenerates from the Conditions of  
laudable Pus. Hence in such Patients, Wonnds though flight,  
are net to be cured without the greatest Difficulty. For this  
Reason the antient *Greek* Physicians called such Bodies δὑσίλκεα,  
that is. Bodies in which Wounds were not eared without great  
Difficulty. And *Hippocrates, in Aph.* 8. *Sect. 6.* tells us,  
« that Ulcers arising, in the Bodies of dropsical Patients are  
" not easily cured. " If, in consequence os a Violent Fever,,  
the Humours are moved with a great Impetus, the Wound  
appears dry without any Pus: If, on the contrary, the Strength

of Nature is languid, there is, also, a Defect of Pus. For this  
Reason *Hippocuates,* in *Prognost.* reckons the Dryness of an  
Ulcer among the Signs of approaching Death.

8. At this time the Redness, Heat, Tumor, Pain, Re-  
torsion of the Lips, and Fever, cease, or are diminished\*.

For all thefe Symptoms only arise, because the divided Vef-  
seis in the Lips of the Wound being contracted by their Elasti-  
city, deny a free Paisage to the Fluids convey'd to them.  
Hence arises a true Inflammation which brings on Redness,  
Pain, and Heat in the Part. The Membrana Adiposa in the  
mean time, free from the equable Pressure of the Skin, receives -  
into its dilated Vessels foreign Humours, by which means it  
becomes tumid in the Bottom of the Wound, and retorts its  
Lips. But a Suppuration separates the obstructed Extremities  
of the Vessels, together with the stagnant Fluids lodged there.  
Hence, when Pus is formed, and the obstructedVeffeis are again  
rendered pervious, a free Circulation of theHumours thro' them is  
restored. All theseSymptoms, therefore, arifingfrom an Inflam-  
mation of the Lips and Bottom of the Wound,'are necestarily  
much diminished, or totally removed, by the Formation of Pus.

This Stage of a Wound is by Surgeons generally called the  
*Tome of Digestion*and when they fee the tumid Parts subside,  
they generally say, that *the Pus fuses, and dosselves all the  
Farce.*

9. And the Cavity os the Wound, from the Bottom to  
- the Top, from the Circumference to the Centre, is gradually  
filled with a new red live Matter called *Flejh,* whilst **the**Margins, becoming white, bluish, soft, and equal, are  
united.

When after a laudable Digestion, all the Parts which could  
not be reduced to their requiiite Soundness, are separated from  
the live Vessels, then the Wound is said to be *pure*; and its  
whole Surface appears every-where equably moist and perspira- ’  
ble, whilst there is no Roughness nor Dryness either in the LipS  
or Bottom os the Wound. Then hegins that Stage of **the**Wound in which it is consolidated; sor under the Pus, which  
is a natural and mild Balsam, we daily observe the Bottom of  
the Wound to rise gradually, and a new Matter to proceed  
equably from the Circumference to the Centre. And when  
this Matter is Viewed with Microscopes, it appears to be the  
tender and pulpous Extremities of Vessels. This is by Surgeons  
called *Incarnation r* not that muscular Flesh properly so called,  
is regenerated in this manner, but it has become customary to  
call this red and live Matter daily increased in a pure Wound,  
*Flejh.* This appears beautifully in Wounds with Loss of Sub-  
stance, whilst, for Instance, by the Stroke of a Sword, the Skin,  
with a Parthos the subjacent Membrana Adiposa, is carried off;  
for in this Case there naturally appears, first, in the Bottom of  
the Wound, a Congeries of sprouting Vessels; then **the like**Vessels are protruded from the Margins, and concurring and  
uniting with the others rising from the Bottom, by an admira-  
ble Artifice of Nature, restore the lost Substance; for in this  
Case, Art does nothing but remove Impediments, and prevent  
the Access os the Air, by covering the Wound; the natural  
Fabric of the Body performs all the rest. That thefe things  
happen in this manner is sufficiently certain ; but by whet Laws  
or Mechanism they are brought about, is hitherto unknown.  
*Galen,* in *Method. Medend. Lib.* 3. *Cap.* 3. beautifully ex-  
presses this in the following manner: " With respect to the  
" Generation of Flesh, it is to he observed, that the Matter  
" of it is laudable Blood ; but the Artist, or Author, of its  
- " Formation, [δημιουργὸς τε καὶ τεχνίτηςτ Nature." in this  
Passage he treats of the Meshed in winch an hollow Ulcer  
ought to be cured. The Antients were, however, ignorant of  
the admirable Structure of the minute Vessels of which our  
Bodies are composed. And the Moderns far more skilled in  
' Anatomy, cannot help admiring how the elongated Mouths  
Of the divided Vessels in the Wound, should concur, unite,  
and be concreted with the adjacent Vesteis, and that in such  
**a** manner, that Arteries are united to Arteries, Veins to Veins,  
and Nerves to Nerves; so that **a** Substance exactly like that  
which was lost, is formed in the Wound. This peculiar Pro-  
petty of the human Body is loudly expressive of the infinite  
Wisdom of its all-powersnl CREATOR. ’

\_\_ Whilst these thing happen in an hollow Wound, the Mar-  
gins which were hesore red and tumid, hegin to subside in an  
equable manner , they acquire a bluish Pearl-like Colour ; and  
thus the first Rudiments of the Cicatrix are formed about **the**Margins, and are gradually increased toward the Centre, till the  
Wound is equably closed.

io. Lastly, the Wound becomes dry, and is covered with  
**a** Cicatrix.

When all the lost Parts are restored, and the Parts divided by  
the Wound, united, the Wound appears dry, though before  
a certain Moisture was observed all over its Surface.

If a large Quantity of Substance is not lost, nor by an eXa  
cessive Suppuration much of the Membrana Adiposa and Skin  
Consumed, all the Pans are so consolidated, that there hardly  
appears any Difference between the Place os rhe Wound, and  
the adjacent Skin, in which Case it hardly deserves the Name  
of a Cicatrix. But where a large Portion os the Skin is taken  
away, or much of the subjacent Membrana Adiposa consumed  
by the Suppuration, then the Place of the.Wound will appear  
more white, solid, and often more depressed, than the adja-  
cent Skin. In this Case it is called a *Cicatrix,* which is always  
less perspirable, tho' more smooth and shining, than the other'  
Parts of the Surface of the Body. This is in a particular man-  
ner obvious after the Extirpation of a Breast or large Steatoma,  
where a considerable Portion of the Skin iS removed; for in  
this Cafe the Cicatrix formed, or Surface of the Wound is  
smooth, shining, unmoveable, and adhering to the subjacent  
Parts. ' ι .

Thus we have described the History of Wounds in a found  
Body, and enumerated all the Phenomena, which from Expe-  
rience we find to happen in a Wound.from its first Infliction  
to its entire Consolidation. Hence we may deduce the best  
Method in which Wounds ought to be cured, which is, by  
imitating Nature's Method, which consists in removing fuoh  
things as are hurtful, and supplying such as are defective. But  
it is to be observed, that we here speak os Wounds in wluch  
neither a large Artery, nor an highly tendinous Part, are  
wounded. We must, therefore, next consider, what Changes  
of Phaenomena happen to a simple Wound, if such ParrS  
should be wounded.

It an Artery, not too large, nor too near the Heart, is cut  
quite through transVerfly, the divided Pans retiring, and  
hiding themselves in the neighbouring solid Parts, by means  
of this Contraction, stop the Efflux *os* Blood; and the  
other Phenomena proceed as before described.

Whilst the Blood, by the Force of the Heart, is thrown into  
**the** Arteries which. always become narrower, by acting on  
their Sides it removes them from the Axis of the Canal, and  
consequentiy increases the Capacity of the Arteries. But all  
other Circumstances being alike, it dilates the Arteries the more  
the greater Resistance there is about their Extremities. Hence  
an Artery when tied becomes Very tumid hetween the Liga-  
ture and the Heart. But this Dilatation is resisted by the  
muscular and orbicular Fibres of the Arteries with a considerable  
Force, by which they are again contracted into tlieir former  
Dimension, as soon as the impelling Force of the Heart ceafes.  
.When, therefore, an Artery divided by a Wound discharges  
- Blood *from* its open Orifice, the Resistance of the Blood im.1pelled from the Heart is diminished, and consequently **the**Cause of the Dilatation of the Artery is lessened. The Force,  
therefore, of the orbicular Fibres prevails, by which in every  
Moment **the** Artery is more contracted, and thus gradually **the**. Orifice of the divided Artery is closed, if it is not excessively  
large. Besides, the longitudinal Fibres being by the same Causes  
more contracted, diminish the Length of the Artery': Hence  
anArtery, entirely divided, shrinks back, and, lodging itfels be-  
tween the adjacent solid Parts, is by their Bulk and Weight more  
compressed and contracted. If a considerable Quantity of  
. Blood is discharged from a Wound, the Strength being impair-  
nd, and the Impetus os the impelled Blonde diminished, the  
Contraction of the divided Artery is augmented. When **a**great Toe was cut off by one Stroke of a Chiflel, I saw two  
Arteries project, perhaps the Length of a geometrical Line  
beyond the Surface of the Wound ; but when they had for **a**few Minutes discharged the .Blood freely, they began to he re-  
tracted, **the** Haemorrhage was lessened, and two Days aster  
when the Dressing was removed, no Blood was discharged,  
the Mouths of the divided Arteries heing closed up. But if  
an Artery’, which is either Very large, or Very near the Hears,  
is divided, the Contraction os such-an Artery is not able to re-  
fist the Blood impelled with so great a Force ; hence the Haer-  
morrhage proves mortal; for the smaller the Artery is, and the  
farther distant from the Heart, the Impetus of tbeBlood im-  
pelled from the Heart is the more retarded, hecause the Re-  
sistance it meets with is greater. .'

If an Artery is wounded transverfly, and not cut quite  
through, the Wound enlarges by a Retraction os the divided  
Fibres; hence a pepetual Haemorrhage; and when that  
ceases, an Aneurism, from the Tenuity of the Cicatrix  
yielding to the Force os the circulating Fluid.

In this Case, for the Reasons already specified, a Wound  
inflicted on an Artery is, in consequence os the Recession of  
of the divided Parts, more enlarged. But because some Parts

as yet cohere, the Extremities of the Artery Cannot shrink  
back and ledge themselves in the adjacent Parts ; nor can the  
orbicular Fibres he so contracted as to close the Wound of the  
Artery. Since, therefore, in this Part there is no Resistance,  
and a considerable one in the other entire Vesteis, such a Wound  
will continue to discharge Blood till the Patient dies, or falls into  
a Deliquium. But it more frequently happens, that the Blond is  
discharged not in such a Degree as to prove mortal, but only to  
induce a great Weakness. Then there begin to grow gradu-  
ally on the Part of the wounded Artery, as it were, the Ru-  
diments os a Cicatrix, which are able to check the Effusion.  
os the Blood moved by so weak a Force os the Heart : But  
afterwards the Strength os the Patient becoming greater, this  
Part remaining weaker than the other Parts of the Artery, is  
more dilated, and hecomeS protuberant. This is called an  
*Aneurysm,* or a *Dilatation of the Artery,* becaufe the Artery  
in that Place no longer remains an equable conical Canal, but  
is distended into a Sack; for as the Largeness of Arteries de-  
pends on two Causes, that is, the Force with which the Blood  
propelled from the Heart endeavours ro dilate the Arteries, and  
the Resistance of the Sides of the Arteries, and consequently as  
the Largeness of Arteries is in a Ratio compounded os the di-  
rect Ratio of the Impetus of the impelled Blood, and an inverse  
Ratio of the Resistance of their Sides, it is sufficiently obvious  
than when an Artery is rendered weaker-in any Part, it must  
of course be more distended there. But because by fuch a Diss,  
tention, such a Part will be still more weakened, the Reason  
is obvious why such large aneurysmatical Tumors, of which we  
have many Instances in practical Authors, are often formed.

If a largeArtery is wounded, and cut quite through, a  
' perpetual Haemorrhage will arise, till Fainting, or Death, is  
induced. The Parts below the Wound grow tabid, and are  
consumed by a putrid hut flow Gangrene, or else drying, are  
entirely contracted.

' In this Case the Blood is discharged with a full Stream, tho'  
not with an equable Celerity, but, as it were, by Starts, some-  
. times with a small, and immediately after with a greater  
Force ; hecaufe at the time the Arteries are in their Diastole,  
the Force of the Heart alone urging the Blood, then expels it  
through the open Artery. But a great Part of the Impetus  
convey'd from the Blood to the Heart, is spent in dilating the  
Arteries. Hence only in the time of the Diastole os the Arte-  
ries, the Blood is propelled with that Excess, by which the  
Force of- the Heart surpasses the Resistance of the Sides of  
the Arteries. But whilst, when the Action of the Heart  
ceafes the Arteries are compressed, the Blood moves with  
a far greater Celerity through them, and when evacuated  
from the Body, is of a scarlet Colour. From these two Signs  
we know, that the Blood is discharged from an Artery, and  
not from a V inn. But a large V ein, except in highly plethoric.  
Patients, when wounded, discharges but a small Quantity of  
Blood, which is always blackish, and less red than arterial  
Blood. Is the Artery wounded is large, and Very near the

- Heart, the Death os the Patient soon ensues, the whole Blood  
heing in a short time expelled from the Wound. But the Esth-  
fton often only brings on a Deliquium ; and if in this Case, -  
the Patients ate not invigorated by Wine, or Cordials, but  
lest, as it were, half dead, there is some Hope, that during  
the Continuance os such a weak aud languid Life, the divided  
Artery may be contracted and consolidated. *Boerhaave,* in his  
Prelections, used to give his Auditors a Very memorable In-  
stance os this Kind, which he himself saw. .

A Countryman over his Bottle was wounded with a Knife.  
under the Axilla; and the axillaryArtery being divided, the Blond  
was discharged with a Violent Force : Soon after the-Patient  
sailing down was thought to be dead, and was laid out as  
such. Next Day when the Persons appointed by public Au-  
thority to examine WoundS, and give in their Report to the  
proper Judges with respect to their mortal Nature, came to  
him, they sound some Warmth about his Thorax, without  
any other Signs os Lise. They deferred examining his Wound  
for some Hours, during which the Patient began gradually to  
. recover, tho' every one imagined that he would soon die. But  
contrary to all Expectation he totally recovered, after con-  
tinuing a long time in such a weak and languid Condition;  
only the Arm of that Side remained all his Life dry, and with-  
out Juice, almost like a Mummy. If, therefore, in an Artery  
fo large and so near the Heart a Consolidation could be oh-  
tained, it is obvious, that we are not to despair in the most  
dangerous Wounds of Arteries, and, perhaps, in such Patients,  
if weak and languid Life was not augmented by stimulating,  
vinous and cordial Substances, more would be preserved than.  
really are. '

If a large Artery, running to the inferior Parts, is divided,  
and if the Ramifications of no other Artery are distributed to

these Parts, the total Influx of the vital Fluid into them most  
necessarily be destroyed : This in succeeded by a Morrisiration  
of those Parts, which in this Case may happen in a double  
manner; for either the Fluids contained in the interior Parte,  
heing no longer propelled by the Impetus of the arterial Blood,  
hecome stagnant and corrupted ; in which Case a putrid, tho'  
flow Gangrene happens, because all the vital Impetus which  
moves the live Parts to these gangrenous Crusts, and confequentiy  
soon makes the Disorder spread, is here wanting: Or the Hu-  
mours left in the inferior Parts, after the Division of a large  
Artery, by the proper Contraction of the Vessels, and Action  
of the adjacent Muscles, pass into the Veins, and return to  
the Heart ; from which, however, nothing can he conveyed  
to these Parts. Hence the Veffeis of these Parts heing totally .  
destitute of Fluids, collapse, and grow together. And aS the  
most Part of the Bulk of the human Body depends upon Hu-  
mours, so the Bulk of those Parts is surprisingly diminished,  
whilst they are .dried and totally contracted, as appears in the  
Instances last-mentioned. -

’ Those Nerves which are large and tense, when cur quite  
through, recede, and hide themselves, draw and extend  
their small Branches situated a littie above the Wound,.  
exdte Pain and Obstruction in the neighbouring Nerves j  
but to the Parts below the Wound, cause a-Stupor,

- mobility. Emaciation, or a Gangrene.

We shall now consider those Phenomena which appear when  
large Nerves are wounded j for no Wound can injure the Skin  
without dividing numberless nervous Fibrils ; but of these we  
do not treat, for we consider here only the large Nerves as they  
are demonstrated by Anatomists, and which are so many Con-  
geries of other Nerves contained in a common Covering.

*As for the Recession or Shrinking of the Ncrves*; that which  
in large Nerves may properly he called a *Nerve,* and which  
arises from the tender Pulp of the Brain does not seem possessed  
of such a Degree of Strength, as that when divided to be by  
its Elasticity capable of receding or shrinking back. But the  
Nerves which arise from the Medulla Oblongata, and Spinal  
Marrow, and, which at their Origins, are highly soft, are  
covered with tough Coats, that they may he safely convey'd to  
these Parts of the Body on which they are to persom their  
Offices. On these Coats depend the Strength and Elasticity  
of the Nerves. Hence small nervous Fibrils make a considerable  
Resistance to the Knife in dissecting Carcases. And unless it  
was, so, the Demonstration of the Nerves, especially where they  
are divided into small Ramifications, would be absolutely im-  
possible. When, therefore, a large Nerve is divided, the se-  
parated Extremities, by the contractile Force Of the Coats co-  
vering the Nerves, and of the Veffeis distributed through these  
Coats, recede from each other, and conceal themselves under  
the adjacent Parts. But the larger a Nerve is, other Circum-  
stances heing alike, the thicker its Coats are; and as the small  
nervous Congeries, which united form the large Nerve, are,  
also, covered with their proper Coats, hence large Nerves  
when divided are retracted with great Force.

*As for their drawing and extending their small Branches a  
little above the Wound* 5 the Nerves, as well as the Arteries and  
Veins, are divided into Ramifications; but the Ramifications  
arising from the Arteries and Veins, every-where communi-  
cate with the Cavity of the Trunk whence they arise. Hence  
the Fluids are by a Continuity of Motion convey'd from the  
Trunk into the Ramifications. But it is otherwise in large  
Nerves, which send off smaller Nerves like Ramifications from  
them; for such a large Nerve contains numberless smaller  
Congeries of Nerves wrapt up ina common Covering, and thesis  
smaller Congeries consist of others still smaller. Nor have  
the Dexterity and Industry of the most curious Anatomists  
been hitherto able to find an End of this Division. But from  
a large Nerve in its Course, are every-where distributed such  
Congeries of Nerves, which are called *Rartisications of the large  
Nerve,* not hecause they are by a Continuation of Substance  
propagated from it, aS in the Arteries and Veins, but because  
being hesore united with other similar Congeries, they constituted  
the Bulk of the large Nerve; but now going off from it, they  
run to their proper Pisces in order to perform their Offices.  
All the Nerves, therefore, which like Ramifications are de-  
rived from the large Nerve, are such-as they are in that Place  
where the large Nerve arises from the Medulla Oblongata, or  
Spinal Marrow. But in the Arteries and Veins, the Ratnifi-  
cations take their Origins from that Part in which they run off  
from the Trunk of the greater Veffeis.

When, therefore, a large nervous Trunk is divided, it by  
receding will, at the same time, draw with it the small Rami-  
fications arising from is, a little above the Part where the  
Wound is inflicted. Hence by this Violent Distraction os the  
nervous Fibres, intolerable Pains of the adjacent Parts to which

these Ramffications run, aro produced; and hence there is  
often a more intense Pain in the adjacent, than in the wound-  
ed, Part. But that by such a simple Dishaction of the ner-  
vous Fibres, intolerable Pain may he produced, is certain from  
numberless Observations. When a Phlegmon distending the  
Membrana Adiposa, is suppurating, it elevates the Skin, and  
distracts its Fibres with an intense Pain. But when the Pus is  
formed, and an Incision made in the Skin with a Lancet, the.  
Pain forthwith ceaIes, whilst the distending Pus is- discharged.

- An intense Pain is, also, produced by an inflammatory Tumor  
elevating the tense and nervous Membrane of the Auditory  
Passage. And in a Lues Venerea, a Tumor sometimes arising  
in the Substance os the Bone, distracts the Periosteum, and  
produces a Pain so intense, that the Patients are ready to lay  
violent Hands on themselves.

Besides, the Coats which coVer the large Nerves, and the. '  
Ramifications running off from them, consist of numberless  
' small Veffeis, as is certain from anatomical Injections. The  
nervous Ramifications cannot, therefore, be distracted by the  
divided Trunk receding, but the Coats with which they are  
covered must, also, be distracted, and consequently the Vessels  
constituting these Coats, must he elongated. But it is certain  
that every Cause which distracts and lengthens Veffeis, dimi-  
nishes their Capacity. Hence may arise an Obstruction, and all  
its Effects. E . .δ᾽ /

*As for the Stupor of the Part below the Wound*; quite differ-  
ent Actions of the Nerves are observed in the human Body ;  
tor some give a Power of Sensation to the Parts to which they  
are distributed; others produce muscular Motion, whilst the  
Nutrition of the Parts and Life itself seem to depend on  
others. That these different Actions are performed by different  
Nerves, is sufficiently evinced by whet happens in Diseases;  
for often Palsies of particular Parts are formed, and sometimes  
an Hemiplegia, in which one Side of the Body becomes inca-  
pable of Motion, and is entirely deprived of Voluntary muscu-  
lar Action, whilst the Sensation, Heat, and Nutrition Of the  
Part affected remains. In this Case there is considerable Hope  
of a Cure. . Sometimes together with a Power os Motion, Sen-  
sation is lost, and such a Stupor produced in the Part affected,  
that it appears no longer to belong to the Body, whilst the..  
' Patient perceives Obstacles acting on such a Part, as if he only  
touched them with a stretched-out Stick. This is a worse  
State os the Disorder. But when there is a Sense of Cold in  
a paralytic Part, and its muscular Substance begins to decrease,  
the Disorder is generally incurable, aS is certain from many  
Examples of Palsies succeeding the Colica Pictonum. Tho'  
the Nerves subservient to so many different Functions, have  
distinct Origins in the Brain, yet being collected into large ner-  
vous Congeries, they are distributed to the several Parts. When  
such Nerves are, therefore, entirely divided, all the Functions  
depending on the Soundness of such Nerves are abolished.  
Hence arise the Stupor and want of Sensation in the Parts be-  
low the Wound, as, also, their Extenuation, and Privation of  
Motion, unless Ramifications rising from the Trunk above the  
Wound are distributed to the inferior Parts, or other nervous  
Trunks send off Ramifications to them. -

The Reason will, perhaps, appear less evident, why a Gan-  
, grene of the Parts below theWound often succeeds a total Dial-  
fion os a large Nerve. But a Gangrene is such aDisorderofa soft  
Part, aS aster the Cessation os the influx of the Vital Fluid into  
the Arteries, and its Efflux through the Veins, tends to a Mor-  
tification. If, therefore, a Gangrene succeeds the. Division *os*a large Nerve, this Vital Influx and Efflux of the Humours  
must have ceased ; the Arteries, however, and Veins, are en-  
tire, and the Humours moving m them laudable, .whilst the  
Nerves are only divided. But if it is considered, that the Mo-  
tion os the Fluids through the Arteries depends on two Causes,  
that is, the Force of the Heart, and the Action of the Arte-  
ries, and is.it is at the some time observed, that the Force of  
the Heart is. in a great measure spent in dilating the Arteries,  
and that consequently the principal Cause of the Motion Of the  
Fluids through the Arteries is their own Contraction, which  
partly depends on their Elasticity, but more especially on the  
muscular Force of the orbicular Fibres, by which the dilated  
Arteries are contracted, and propel their contained Fluids, and  
as it is certain from Physiology, that the Action of a Muscle  
requires the Soundness of the Nerve convey'd to that Muscle,  
and that the nervous Trunks send off Branches to the adjacent  
Arteries, it will appear, that when the Nerve is destroy'd, the  
muscular Force os the Artery is, also, lost, by which it pro-  
pel'd its contained Fluid: There will, therefore, only remain  
the Elasticity os the Artery, and the Impetus communicated  
by the Heart. But in the Veins the Blond moves with that  
Motion which it has whilst it passes from the Arteries into the  
V eins. It is, also, assisted by the Motion of the adjacent  
Muscles, which becoming turgid when they act, press the adja-  
cent Veins, and by that means promote the Motion of the Venous

Blood. But when the Nerves are divided, the inferior Muscles  
remain paralytic, and no Power of Action remains in them.  
When, therefore, the Impetus of the Blood convey'd from  
the Arteries into the Veins, is diminished, and the Action os  
the Muscles, adjacent to the Veins, defective, the Blood in the  
Veins hegins to move stowly, to be accumulated, and hecome  
stagnant. And thus a greater Resistance arises to the Arteries,  
whose Action was before weakened. Hence at last the Vital  
Motion of the Fluids through the Arteries and Veins is suffo-  
cated in the Parts helow such a Wound, that is, a Gangrene is  
formed.

Thus appears the Reason Of those Disorders which are ob-  
served to succeed the Division of large Nerves. But medicinal  
Observations evince, that after Tuch Wounds, Gangrenes are  
formed in the inferior Parts.

Nerves which are tense. Or tendinous, *is pricked, or.*out half through, excite Pains; sometimes at fust obtuse,  
and sometimes acute ; first in the wounded Place, afterwards  
in all the annexed and adjacent Nerves. Hence Heats, Tu-  
mors, a Redness extending pretty far round the Wound,  
. Fevers, Deliria, Spasms, Inflammation, on Aperture of the:  
inflamed Part, accompanied .with an Evacuation os an acrid,  
thin, and often a Very copious Serum : After these. Insen-  
Ability, Rigidity, Exsiccation, Immobility, or Gangrene,  
.and Death: And-indeed all these Symptoms are the more  
... Violent, .the more strongly the Nerve is stretched above the  
firm Parts, or more strongly affixed to them, as, also, the '  
more tough and tenacious the Coverings of the Nerve are.

These are the calamitous Cases in which from a flight  
Wound so terrible Symptoms often arise.. It sometimes hap-  
pens that in opening a Vein os the Arm, the Tendon of the  
BicepsMuscle is injur'd, or, which happens more frequently, the  
broad Aponeurosis, which arises from that Tendon, and covers  
the Muscles os the Cubit. At this Very Moment an intole-  
rable Pain is often perceived, which the Patient expresses with  
miserable Shrieking.

Sometimes, in the Beginning of such a Disorder, there is  
only felt an obtuse Pain, which a few Hours after is greatly  
increased, and affects the whole Arm as far as the Humerus.  
Sometimes, also, the subaxillary Glands become pretty soon  
tumid, andtnflamed. The Patients often complain that they  
perceive in the Wound itself, as it were, a live Fire burning  
the Parts. On the Skin appear oblong red Spots, which are  
always a bad Sign. In a malignant *Paronychia,* where the  
Tendons of the Flexor Muscles of the Finger are affected, a  
red Zone running longitudinally according to the Direction of  
the Muscles which hend the Fingers, through the Skin of the  
Cubit, is by the skilful Surgeons looked upon as a Very bad  
Sign: In the soundest Man, an acute FeVer is often excited ;  
and the Brain being disturbed partly by the FeVer, and partly  
by the Vehemence of the Pain, Deliriums, Convulsions, and  
sometimes Death, ensue.

But. tho' Death does not always succeed such Wounds of the  
Nerves, yet terrible Misfortunes are produced by them ; for  
the whole Part becomes greatiy tumid and inflamed, and an  
incredible Quantity of thin Liquor is continually discharged  
either from Blisters raised on the Epidermis, or from the Wound  
itself; but because the Patients perceive a burning Pain, they  
accuse the Acrimony of the Humour discharged, which, how-  
ever, when tasted, is found to have no great Degree of Acri-  
mony. Sometimes a Gangrene preys upon the whole Mem-  
brana Adiposa; and in this Case a mild Suppuration never hap-  
. pens, but finuous Collections of ichorous Matter' consume all  
the Fat lodged in the Interstices Of the Muscles, and the pingue-  
dinous Coats of the Tendons are destroy'd ; hence afterwards  
the Skin adhering to the Muscles, and the Tendons and Mus-  
cles for want of the Membrana Cellulosa being concreted with  
the adjacent Parts, a Rigidity and Immobility of the Part are  
brought on, and the Use of the whole Member is lost. When  
by a violent Gangrene, or Suppuration, the Coats of the Nerves  
in which the Membrana Cellulosa is also sound, are destroyed,  
the Use of these Nerves is lost, and an Insensibility, and Ex.  
tenuation of the Parts brought on. In the. soundest Consti-  
tutions, surprifing Degeneracies of theHumours, excessive Pains,  
and a Loss of the Use of the Parts, are often induced by  
the (lightest Puncture, or Wound, of a Nerve.

It is, also, to he observed, that all these Symptoms are the  
more Violent, the more tense the wounded Nerve is. Hence  
arises the Danger of Punctures about the lost Phalanxes of rhe  
Fingers, where the strongest Tendons are inserted, and in the  
Palm of the Hand, where the tendinous Expansion of the  
Musculus Palmaris forms the tense and tendinous Part of thePalm. Besides, this Malignity is increased, if the nervous  
Paris wounded are covered with thick Coats, aS is obvious in  
the most dangerous Species of Paronychia, where the Tendon

inserted in the last Phalanx .of the Finger, being hurt by a  
Puncture, or inflamed by any other Cause, produces the most  
intense Pains, a Phrenitis, Convulsions, a Syncope, and often  
sudden Death; or, if the Patient surviveS this, after Violent  
Agonies, the last Phalanx of the Finger becomes mortified, and  
finis off: And a Clinching of the Hand, winch cannot by.  
any Art be removed during the Patient's whele Life, shews  
the dire Remains of the Disorder. The Reason of so great  
a Malignity depends almost essirely-on this, that the Tendons  
bending the Phalanxes of the Fingers are surrounded with a  
surprising Ligament almost of a cartilaginous Hardness ; for if  
in the Beginning of such a Disorder, a skilful Surgeon, by a  
held Incision, divides all the Parts to the Bone, and by that  
means cuts the Ligament surrounding the Membranes, the  
Pain is forthwith lessened, and all these terrible Symptoms are  
prevented. ......

The same Symptoms, with very little Alteration, happen,  
when Tendons are differently wounded, and these are ex-  
tremely Violent. -

. The Tendon of a Muscle, when examined, may be divided  
into as many Fibrils as the Muscle itself. . Between these Fi-  
brils are lodged numberless small Veffeis, as is evident from  
anatomical Injections. But these Fibriis of the Tendons seem  
to be only Continuations of the muscular Fibres, which seem  
to derive their Origin from the Nerves which enter the Muscles.  
Hence it is not to be wondered at, that the Tendons, which  
are, as it were, the Offspring of the Nerves, should, when-  
wounded, suffer the same Misfortunes with the Nerves. But  
as in a large Nerve there are found Vessels of all Kinds, and  
the cellular Membrane separating the nervous Fibres from each  
other, so the same is observed in Tendons. But because the  
Tendons are only subservient to the Motion os the Parts, and  
sincebe, sides, the Nerves contribute to Sensation and Nutrition  
in many Parts of the Body, hence all the same Misfortunes do  
not happen to the Tendons when wounded, as happen to the  
Nerves.- But in both Cases, there are many Phenomena m.  
Common ; which, however, are observed to be generally more  
violent in the Tendons than in the Nerves.

Nerves, when entirely divided, unless their small Ramifica-  
tions a little above the Wound are distracted by the Recession  
of the divided Trunk, do not create much Pain. But all the  
Uses which the inserior Parts received by these Nerves are de-  
stroyed. Thus, also, when a Tendon is entirely divided, the  
Motion of the Part which depended on the Integrity of that  
Tendon, is destroyed ; but there is often no more Pain  
than that which accompanies a simple Wound, nor do any.  
more Violent Symptoms succeed. This I saw in a Man in  
whom the Tendons which erect the Fingers, were cut with a  
Knife, in the *Mem. de llAcad. Royale des Sciences An.* 1722.  
there is a memorable Case which confirms this. A nimble  
Dancer endeavouring by a great Leap to raise his Body, broke  
the *Tende Achillis* in both Legs, the Skin remaining entire.  
There were three Fingers-breadths hetween the Extremities os  
the Tendons. By a proper Ligature the Patient was restored to  
his natural State ; lior at the time *os* the Rupture, nor during  
the whole Course of the Disease, did he feel any Pain.

In another Man, the Skin remaining entire, that Part Of the  
same Tendon which arises from the Gastrocnemii Muscles, was  
broken, whilst that Part of the Tendon, which derives its Ori-  
gin from the *Museulus Soleus,* lying under the *Gastrocnemius,*remained entire. In that Case, there was an intense Pain, with  
a strong Inflammation and Tumor os the Part. Henceit appears,  
that far worse Symptoms are produced when a Tendon is half  
divided, than when it is totally divided.

But violent Symptoms are produced by the. flightestWounds  
os the Tendons, and by only gently touching a Tendon divest-  
ed os its Coat, the whole nervous System is in a Moment dis-j  
turbed ; which is surprifing, since the Tendons when covered ’  
with their Coats, especially with that pinguedinous Membrane  
which by its soft Oildubricates them, and renders their Action  
quick, may, without any great Pain, not only be strongly  
drawn, bus, also, stitched together; sor it is sufficiently known  
In Surgery, that the Extremities of divided Tendons are seized  
with Forceps, drawn together, retained in Contact by passing  
a Thread through them, and thus happily cured, whilst the Part  
affected is so disposed, aS that the Muscles whose Tendons  
are cut remain flaccid. But when a Tendon divested of  
its Coats is but gently touched, terrible Symptoms are pro-  
duced.

. There is no Remedy more efficacious for preventing or mi-  
tigating the Violent Symptoms arising from Punctures of the  
Nerves and Tendons, than black *Peruvian* Balsam gentiy  
warmed, and dropt into the Wound ; then by the Application  
of a warm Spatula it is to be made to penetrate and diffuse  
itself through all the Parts of the Wound. Afterwards, the

whole Limb is to he wrapt up in soft Cataplasms, or Fomenta-. .  
tions, or continually anointed with mild oleous Substances. If  
the Wound is so small as not to admit *atit. Peruvian* Rodsani  
easily, it is to he a little dilated.

The Application of warm Oil is of great Use where the  
whole nervous System is irritated, and Convulsions dreaded, as  
we learn from *Galen’s* own Case, as recorded by himself, in  
*Comment,* i. On *Hippocrates de Articulis.*

And the Membranes of the Tendons and Nerves, which  
.are frequentiy propagated to the adjacent Parts, are affected  
with the same Diseases. .

All Membranes, when wounded, do not produce such vio-,  
lent Symptoms, but only, such as are highly tense. The ten-  
dinous Membrane produced from the Fascia Lata, and the like  
Aponeurosis arismg from the Glutaeus Musculus, and surround-  
ing the strongest Muscles of the Thigh, when hurt by a flight  
Puncture, are seized with intolerable Pain. The same hap-:pens in the Aponeurosis of the Musculus Biceps, which is some-  
times hurt in taking Blood from the Arm. If the tense Membrane  
covering the Auditory Passage is distracted by an inflammatory'  
Tumor, an intolerable Pain arises, and a Delirium and often  
Death succeed, as *Hippocrates* telis us in his *Prognost.* and *Coacar'  
Pranotiones.* But Wounds are to he most dreaded in those  
Membranes which are either Productions of the Tendons, or  
are possessed of an exquisite Sensation, and Capacity of Irritation  
on account of the great Number of "Nerves dispersed through,  
their Substance. Thus the Periosteum, when wounded, some-  
times Produces the most exquisite Pain.

A Knowledge of the Laws of Circulation, and a Const-  
deration of the adjacent Parts, will teach us in whet man-  
ner the lymphatic, adipose. Venous Vessels, and the Vesiculas,  
or small Cisterns, suffer in Wounds.

*As for the lymphatic Vessels*; the Vessels by Anatomists de-  
monstrated under the Name of *Lymphatics,* are all of the Ve-  
nous Kind, as is obvious from the Motion of the Fluids throd  
those Vessels from the Ramifications into the Trunks, as, also,  
.from the Valves,' which *Ruys.ch'sQ* evidently demonstrated  
in his *Dilucidatio Vitlvularum,* to *Blisssius,* who denied that the  
Valves in these Veffeis were ever demonstrated. These lym-  
phatic Venous Vessels, when wounded, produce no great Harm ,  
for considerable sanguineous Veins, when wounded, discharge  
no great Quantity of Blood. But to these lymphatic Veins,  
correspond similar lymphatic Arteries, which, when wounded  
and not entirely divided, may produce a perpetual and uneasy  
Effusion os Lymph in Wounds. But that there are number-  
less such Veffeis in the Body may be Concluded from anatomi-  
cal Injections made into the Arteries; for in. this Case those  
Vessels, in which there naturally appeared no red Binod, are  
filled with a coloured Matter.. *Ruyseh* so filled the Ten-  
dons and Ligaments, that they became quite red ; there were,  
therefore, in these Parts many such Vessels, which during Life  
were filled with a thin Liquor, whose Colour was not percep-.  
tible: Perhaps, for this Reason, a Discharge of such Lymph  
is so frequently observed in Wounds inflicted about the Joints ;  
and Surgeons Often find large Quantities of this Lymph flowing  
both from Ulcers and Wounds about the Joints. ' .

*As for the adipose Vessels* ; that the Fat of the human Body  
may he mixed with the Blood, and with it move through the  
Veffeis, is sufficiently certain; for in sat Persons labouring  
under an acute Fever we observe, that in a few Days the Fat  
is surprifingly diminished ; and in such Diseases, oleous Drops  
have appeared in the Blood taken from the Veins. When  
*Malpighi,* as he telis us; in *Tr. de Omento, Pinguedine, et Adsu  
posts Ductibus,* observed oleous Streaks growing to the Trunk  
or the Vena Portae in Frogs, upon compressing them, he saw.  
plainly Drops .of Oil in the Trunk of the Vena Poron carried **to**the Liver along with the Blood. There seems, therefore, to be no  
Doubt concerning this. But it is a Doubt, whether such a pin-  
guious Oil is by a continual Motion conveyed in proper Veffeis  
like the Other Humours, or whether it remains collected in small  
'Celis, which by their recipient Orifices are united with the Ar-  
teries, whence this Oil is secreted, and which by their emittent  
Orifices communicate with adjacent similar Celis, as, also, with  
the Veins, which again receive and mix with the other Humours  
this Fat, secreted from the Arteries, and deposited in Cells;  
*Malpighi,* in the Work last quoted, seems to think that there  
are such pinguedinous Vessels, which by a continual Course  
convey this Oil, without the Interposition of any Cells: But  
in his posthumous Works he telis us, that the Fat is pre-  
served, and accumulated in proper Cells, as in so many pecu-  
liar Laboratories; but that he durst not assert the Existence of  
adipose Vesseis, tho' he had been Very accurate in searching for  
them. But whether the Fat is lodged in such Celis mutually

^orfirnuntcating with each other, or whether there are such  
Pinguedinous Vessels, when either are wounded, their Contents .  
will he discharged, become corrupted, and capable os produ-  
cing many Mnsertunes. *Ruyfch, as* he tells us, in *Epost A  
Anat. ad Boerh.* upon opening the Abdomen os an Horse  
which died after hard Running, sound its whole Cavity full of  
a thin diluted Oil. It is certain, that the Fat is highly lax,  
easily protuberates into a Wound, and produces fungous Flush,  
especially is sat Parts, when wounded, are treated with too  
emollient Applications.

*Ac for the venous Vessels* ; provided these are not Very large,  
they are not, when wounded, productive of very dangerous  
Symptoms; sor a Violent Haemorrhage rarely happens from  
them, except in plethoric Patients, in whom it is not prejudicial,.  
since it diminishes the Redundance of the Blood. But the ad-  
jacent Veins mutually joined by frequent Anastomoses, easily  
supply the Defect of the wounded Vein. But it is to he ob-  
served, that when a considerable Vein is known to be wounded,  
it is dangerous to apply thofe acrid Styptics which are sometimes  
used for stopping Haemorrhages from Wounds, such as Vitriol,  
Alum, and Alcohol; for it is to he seared, lest these being re-  
ceived into the open Wound of the Vein, should enter **the**Blond, and produce Coagulations therein, which heing conveyed tthrough the Vein, which becomes continually broader, to the-  
- Right Ventricle Of the Heart, and thence impelled into the

Pulmonary Artery, may produce the most terrible Disorders.

*As for the Vistedes*; these are all glandular Follicules, in which  
**the** Humour secreted from the Blond by the Arteries,\* is col-  
lected into a membranaceous Cavity, and thence discharged  
through a proper Emissary for particular Purposes. When  
these Vesicles are wounded,, it is obvious their Use must be lost.  
But ofhow great Importance this Loss is, is Only to be known  
from a Knowledge of the Use of those Parts. Thus, when  
the Vesiculae Seminales are wounded, it is obvious the whole  
Business of Generation must be disturbed.

If a Wound lies exposed to View, its Presence and Nature  
is discoverable,

**I.** By the Sense, after wiping away the Impediments which  
hinder the Sight of it, and stopping the Flux of Blood.

**2.** By an anatomical Knowledge of the adjacent Parts.

Great Caution is requisite in a Physician or Surgeon called to  
a wounded Person, lest they should pass a Judgment Of the  
Wound before they have carefully examined it; for whatever  
they rashly pronounce on such an Occasion may, perhaps, he  
afterward related to the Judges. Is the unlucky Event should  
prove that the Wound was dangerous, though at first Sight  
they pronounced it but flight and inconsiderable, those who  
plead the Cause of the Guilty afterwards, brand the Character  
both of the Physician and Surgeon, as if the Misfortunes suc-  
ceeding the Wound ought to be imputed to their\* Want of  
Skill. Prudent Surgeons generally ash the Physician present,  
whet he thinks of the Wound, and of the effects to he dread-  
ed from it, by which means they save their Reputation. It is  
therefore proper, that all Physicians should embrace every Op-  
portunity of seeing Wounds, and severe Operations, that thus  
they may gradually accustom themselves to look upon the Ca-  
lamities of Mankind with Intrepidity. *Hippocrates,* in *T.r. de  
Flatibus,* tells us, "That the Physician should look upon dan-  
" gerous Wounds, handle such as are disagreeable, and by the  
" Calamities of others endeavour to prevent his own Miseries;  
" for by Art the Sick are freed from the greatest Misfortunes,  
" Diseases, Pains, Sorrow, and Death." These Misfortunes  
are alleviated by the salutary Art ; but it Often happens, that  
Physicians who are well acquainted with the Fabric of the Body,  
are by the Sight of the Wound, the Cries of the By-standerS,  
and the Complaints of the Patient, so disturbed, as to pass a  
quite different Judgment from whet they would have done, if  
they had considered all Circumstances with a calm and sedate  
Mind. :

' A Wound is not therefore to be examined precipitately, but  
with the greatest Attention os Mind ; for at the first Dressing  
-the Surgeon may safely do that which afterwards cannot he com-  
inodiousty done ., since on the succeeding Days the Wound often  
becomes so tumid, painful, and inflamed, that it cannot bear  
the Scrutiny os the Probe without great Pain and Irritation.

\* Is a Wound is inflicted on a Part os the Body exposed to  
.View, all Impediments which hinder the distinct Examination  
of the Wound are tc, he removed from it. Tepid Water with  
Hones, Wine, and a litfie Sea Salt, is to he used for washing  
the Wound, by which means the Thromboses os concreted  
Blood areTemoved, and che whole Surface of the Wound is dis-  
♦overed. But so long as the Blood flows impetuoufly from the  
Wound, there is such an inundation, that nothing can he dis-  
stinctly observed, For this Reason the Haemorahage is to be  
.stops, which in the Limbs is easily done by compressing the

Trunks of **the** Vessels by a proper Ligature; and in other Parts  
of rhe Body,.unless Very large Vessels are wounded, the ssa-  
morrhage may be stopt with warm Alcohol of Wine.

AS sor an anotamical Knowledge of the adjacent Parts, no-  
thing certain can he determined without it; for the Inspection  
of a Wound may discover its Largeness, Deepness, and Di-  
rection ; but a Knowledge of the Parts adjacent to theWound,  
is only to be obtained from Anatomy. *Eustachiurs* Tables, in  
which the Situation of the large Arteries, Veins, and .Nerves,  
as, also, the Origins and Courses os the Muscles, are so ao-  
curately marked, may he of great Use for this Purpose, that .  
thus, knowing the Place os the Wound, we may he able to  
determine what Parts of the Body are wounded, and what  
Injury is to be dreaded from the Wound.

The Presence and Nature of a Wound, which is not exposed.  
to View, is discovered,

**- i.** By Anatomy; by the Situation of the Person-when  
" wounded ; and the Manner and Force of the Stroke.

2. By an Impediment to the Action of a particular Part,  
. subsequent to the Wound.

3. By the Humours discharged from the Wound, either. .  
within or out of the Body.

4. By the Affections which are consequent to the Wound,  
; as Pain, Hiccup, Spasms, Tumor, *etc.*

The Knowledge of a Wound is far more difficult where the  
Whole of it cannot be Viewed by the Eye. The Entry of the  
wounding Instrument into the external Integuments is seen, but\*  
how sar it has penetrated, cannot often be discovered. It will,  
however, be of great Use to the Surgeon carefully to attend to -  
the following Circumstances:

I. By Anatomy we know what Parts are situated in the.  
Place wounded ; but the Situation of the Patient at the time  
he received the Wound, and of the wounding Person when he  
inflicted it, will demonstrate the Way in which the wounding  
Instrument penetrated into the internal Parts of the Body. If  
the wounding Instrument can be had. It may sometimes be  
known, from the Largeness of the Wound in the Integuments  
hew deep it has been driven. All these things ought to he  
carefully inquired into, both from the Patient, and from those  
who were present when the Wound was inflicted. Thus, for .  
Instance, if a Sword is passed in a perpendicular Direction  
between the sixth and seventh true Ribs, it will penetrate into  
the Cavity of the Abdomen : But if a Man receives a Wound  
with his Body reclined backwards, whilst the Sword is pasted  
from the inferior Parts upwards, it may penetrate into the Ca-.  
Vity of the Thorax. But if when the Body is inclined for-.  
wards, a Sword enters the same Part, it may pass through the  
whole Abdomen, eVen to the Pelvis. Thus, also, a Wound  
inflicted on the Side may run a great Way under the integuments,  
and above the Rins, especially in fat Persons, without pene-  
trating into the Cavity of the Thorax. When we examine  
into the Deepness of a Wound by means *os* the Probe, it is  
of great Importance to know the Situation os the Patient when  
the Wound was received, and to place him in that Very same  
Situation; for unless this is done, it often happens, chat the  
Membrana Adiposa stops up the Wound. Thus, inVenesection,  
especially in sat Persons, it often happens, that at first the  
Blood flows out with a full Stream, but immediately stops upon  
the smallest Change of Situation in the Arm, because the hat  
subjacent to the Skin interposes itself between the Orifice in  
the Skin, and that in the Vein.

2. As we know from Physiology the things requisite to the..  
Soundness of the particular Functions of the Body, so we easily  
see from the Action either hindered, or totally abolished after  
theWound, whether some or all of the Requisites necessary  
for that Action are destroy'd by the Wound. Thus if a Wound  
penetrating into the Cavity of the Abdomen is immediately  
succeeded by an excessive Languor of the vital Actions, if the  
Heart palpitates quickly, if the Pulse is quick and unequal, the  
Face and Lips pale, and the Extremities cold, we conclude,  
that in consequence os a Division of some large Vessels, a con-  
siderable Quantity of Blond is discharged into the Cavity of the  
Abdomen. If a Wound inflicted in the Neck is without a con-  
siderable Haemorrhage succeeded by the like Symptoms, it is to  
be dreaded, lest the Nerves situated here, and running through  
the vital Viscera, are wounded. If aster a Wound os the Head  
the same Symptoms happen, it is thought that the Cerebellum  
is wounded, or compressed by the extraVasated Humours. When  
Wounds of the Head are succeeded by an Abolition os all the  
animal Functions, the same Misfortunes are thought to have  
befallen the Brain itself If. aster a Wound of the Back the  
inferior Parts are deprived of Sensation and Motion, we con-  
clude that the Spinal Marrow is wounded. The same holds  
true with respect to the other Actions of the Body.

3. If aster a Wound of the Thorax a red frothy Bleed is  
either discharged from the Wound, or Vomited up, we know  
that the Vesseis os the Lungs are divided. Is from a Wound  
in the Abdomen Chyle is discharg'd; a Wound os the small In-  
testine is denoted ; but is the Faeces, aWoundos the large In-  
testines is indicated. Is Blood is discharg'd by the urinary Pas-  
sages, we know that the Kidneys, Ureters, or Bladder, are  
wounded. ‘

4. A Pain suddenly succeeding a Wound, denotes that the  
Nerves, Tendons, or tendinous or nervous Membranes, are  
wounded ; but an Hiccough, and Spasms, may be produced by  
Wounds inflicted in different Parts. After excessive Haemor-  
rhages, an Hiccough, and Convulsions, often arise; and are, by  
*Hippocrates,* in *Coac. Pranot. et Aphor.* in such a Case, pro-  
nounced Very bad Symptoms. *Hippocrates* condemns an Hic-  
cough arifing from the Iliac Passion. Hence it is Very probable,  
that this Disorder may be consequent toWounds of the Intestines.  
An Hiccough, also, succeeds Wounds os the Diaphragm, *Oeso-  
phagus,* Stomach, and Head : Hence this Symptom, when con-  
sider'd alone, always shews the malignant effect of the Wound,  
tho'.it does not always infallibly indicate the Part wounded.

Sudden Tumors, succeeding Wounds, either shew that the  
Humours are extravasated, and collected in preternatural Parts;  
or that the Ain has enter'd into the Cavities os the Body, thro'  
the Wound, and is surprifingly dilated by the Heat. We have  
consider'd those surprising Tumors succeeding Wounds os the  
Breast, whilst the Air entering the *Membrana Adiposo,* distends  
the whole external Surface os the Body in an incredible manner,  
tinder the Article THORAX. 1 .

From a Knowledge os whet has been said, the Event of  
Wounds may he prognosticated. As,

I. The Death or the Life os the Person wounded.

2. The possible, impossible, entire, or partial Cure.

3. The easy, difficult, long, or short Cure.

4. The Effects os the Wound remaining aster the Cure is  
perform’d, as Consumption, Insensibility, Immobility, De-  
formity, *etc.* χ

- When, by the Assistance afforded by the modern Improve-  
ments in Surgery, and .a due Examination of all the Circum- ’  
stances mention'd in the two preceding Aphorisms, we find the  
Diagnostic os a Wound, which teaches us the Part wounded,  
and the Actions os the Body, either abolish'd, or hinder'd by it,  
we may then foretel the Eventos the Wound.; and those Sym-  
ptoms which may proceed from the Wound, as then Cause,  
will become obvious. This is call’d the Prognostic of Wounds ,  
Tn determining which, great Caution is necessary: For, as  
***Celsus,*** in *Lib.* 5. *Cap.* 26. informs us, "It is the Part of a  
" prudent Surgeon not to meddle with a Patient who cannot  
be preserv'd, lest he-should be thought tohaVe destroys him  
" who fell the Victim of his own Disorder. But where there  
. " is great Dread, without absolute Despair; he is to acquaint

the Friends of-the Patient with the Difficulty of the Case,  
" lest, failing os Success, he should be thought either deceitful,  
" or ignorant. But as these are the Measures taken by prudent  
" Surgeons, so Quacks give out, that flight Cases are of the last  
" Importance,that their Cures may appear the more surprising."

But it is to he observ’d, that there are some Cases, in which  
' the most skilful Anatomists may be deceiv'd, in determining the  
Parts injur'd by a Wound: For the Situations of the internal  
Viscera have frequentiy been found Very different from those  
which they commonly obtain. For Instances of this Kind, see  
*Journal des Squivans, Janvier Act. Lipstens. An.* I69o.  
.and *Carol. Drelincurt. Upuseul.*

In these Instances such Phenomena happen'd in sound Per-  
sons, and the Change of Situation in the Viscera obtain'd from  
the Very Beginning os their Lives. But it is, also, certain, from  
Experience, that the Situation of the Viscera is frequentiy  
- chang’d by Diseases. Thus, in *Mem. de st Academic jsteyale des  
Sciences, Pan.* 17I6. we are told, that, in a certain Woman,  
the Situation of the Stomach,as,also,of the other abdominal Vis-  
cera, was found surprifingly chang'd by frequent Vomitings.  
. It is highly probable, that such Changes in the Situation of the  
. Viscera are Very frequent: For in those Carcases, says *Fans,  
suocitm,* which I have either dissected myself, or seen dis-  
sected by others, many such Changes were observable. Thus I  
have seen The Spleen sallen down into the Pelvis, the Bottom of  
the Stomach reaching below the Navel; that Part of the *In-  
testinum Colon,* which lies below the Stomach, so sar distant from  
it, aS to he lodg'd below the Navel, and form an Arch, the con-  
vex Part of which lay towards the Pelvis, and the concave to-  
wards the Stomach.

Now the Errors which must necessarily happen hence in the  
Prognostic os Wounds, seem hardly to be avoidable, fince these  
Things can neither be predicted, nor known, by anySigns.

Besides, the particular Idiosyncrasy of the Person wounded  
may greatly change the Effects of the Wound. Thus some are

so saint-hearted, as to sail into a *Deliquiam,* upon seeing the  
Blond flow from the Wound even of another Person. Hence  
*Hippocrates, in Prorrhetic. Lib. Q..* telis us, " That there are  
" many Wounds inflicted, in Places which are not dangerous,  
" whilst, at the same time, the Wound itself is so painful, that  
" the Patient IS depriv'd of a free Respiration; whereas others,  
" where there was no Danger, have, on account of the Excess  
" of Pain, breath'd freely, but been seiz'd with a *Delirium,*" and dy'd feverish : For whoever have Bedies prone to Fevers,  
" or Minds easily subject to Commotions, fussier such Missor-  
" tunes. But the Surgeon is neither to be surpris'd, nor afraid,  
" at these Things; considering that both the Souls and Bedies  
" of People differ widely from each other, and are of great  
" Efficacy in Wounds and Diseases."

By means of .these Cautions we are to determine the Pro-  
gnostic of Wounds; in which we are to examine,

I. Whether the Wound is such as to produce infallible Death  
as its physical Effect ; or whether, after the Wound, Lise may  
he preserved,

2. *With respect to the possible, impossible, entire, or partial  
Cure b* a Wound is said to he cured, when the Parts separated  
from their natural Cohesion'by the wounding Cause, are again  
concreted, and united. Thus, is the Finger is transverfly cut,  
in such a manner aS only to cohere by a small Portion os .the  
Skin, the Cure of such a Wound cannot be promised. The  
Patient may, indeed, he preserved, tho' without this Part of  
his Body: Besides, it often happens, that, aster the Cure of  
the Wound, all the Uses are not restored to the wounded Part,  
which it had in its natural State ; in which Cafe there is not a  
total, but a partial Cure. Thus if a considerable Nerve is' to-  
tally divided by a wounding Cause, there will never be a total  
Cure of such a Wound ; sor all those Functions which depended  
On the Soundness *of* such a Nerve, will ever after he abolish'd.

3. *With respect to the ease, difficult, long, or short Cure i*unless these Things are mentioned at the Beginning, the  
Blame os a difficult, or long-protracted Cure, will be often  
thrown on the Physician, or Surgeon. A Cure is said to be ’  
easy, which is performed without great Pain to the Patient, or  
Trouble to the Surgeon. When the Tendon Of the Muscle  
which erects the Thumb, being divided, shrinks back under the  
integuments, such a Wound cannot be cured, and the natural  
Use of the Part restored, unless the Wound is dilated, the Ex-  
tremities of the divided Tendon laid hold of with Forceps,  
brought into Contact, and retained in that State by proper Sue-  
ture ; but these Things cannot.be done without Difficulty and  
Pain: Prudence requires, that these Things should not always  
be revealed to the Patient, but rather indicated to his Friends,  
lest the Misfortunes of a tedious Cure should he afterwards im-  
puted to the Physician, or Surgeon.

Thus when a Wound with considerable Loss os Substance  
is inflicted, whilst a large Portion of the Skin and *Membrana  
Adiposa* is removed by the Edge of the Sword, a considerable  
Space of Time is required-for the Restitution of what was lost;  
Is a simple Division os the Skin and *Membrana Adiposa* is only  
made by the wounding Instrument, when the Lips of such a  
Wound are duly united,-it will be pretty soon consolidated, pro-  
. Vided the Body, of the Patient is sound; but if he labours under  
a considerable Cacochymy, the Cure will he far longer, and  
more difficult. These Things ought to be determined in mak-  
ing the Prognostics of Wounds, because many are of Opinion,  
that. Surgeons, from a sordid View to Gain, protract the Cure of  
Wounds sar longer than is necessary: But no honest Surgeon  
will eVer be guilty of such a Piece of Wickedness.

4.. *As to the Effects of the Wound remaining after th'd Cure is  
‘ perform?d, as Consumption, Insensibility, Immobility, ’ Deformity,*&c.; these Things are, also, to he carefully attended to: In  
Wounds which are not mortal. Judges generally proportion the  
Punishment of the Inflictos to the Injury winch the Patient sus-  
Tains from the Wound inflicted: Hence the Advocates for the  
Offender usually employ all cheis Cunning and Oratory in  
charging the Symptoms subsequent to the Wound, upon the  
Physician or Surgeon to whose Care it was committed. For  
this Reason, at the first Dressing, from an anatomical Knowd  
\_ ledge *os the Part* in which the Wound is inflicted, and from the  
Functions injured after the Wound, those Misfortunes ought to  
be indicated; which will follow the Wound, tho' ever so well  
cured ; Or, if this cannot be Certainly determined, a Caution ig  
to be given with respect to the particular Misfortunes to be  
dreaded after the Cure of the Wound: For in no Cases are  
Surgeons more injurioufly treated than in these ; since after  
the Wound is cured, if the Motion of the Part is lost, they  
generally tell who cured the Wound, and not who inflicted it;  
ungenerously saying on the former that Blame, which is the just  
Portion of the latter. When the only Artery which is distri-  
buted to a Part is divided, . we foretel that an Atrophy of the  
Part will succeed the Cure : If a large Nerve, distributed to a  
Part, is destroyed, we prognosticate the Insensibility, and often

the Immobility, Os the Part. If a Wound cannot he cured tin  
after a long and Violent Suppuration, when, for Instance, the  
Parts os a wounded Bono ought to be gradually separated, the  
*Membrana Aclipofa* being thus consumed, we prognosticate that

- - there will be a deep and unseemly Cicatrix.

Unavoidable Death, arifipg from a Wound, may proceed -  
‘ from five Effects ; so that the following Wounds will neces-  
sarily prove mortal.

In this Aphorism are enumerated those Wounds which ne-  
cessarily, and, in Spite of the highest Art hitherto known, re- .  
. move that Condition of the Body which is absolutely requisite,  
. that the Commerce between the Body and Mind may conti-  
nue, or be restored, and not necessarily he destroy'd. But from  
Physiology it is absolutely certain, that the muscular Action of  
the Heartjthe Reception of theBlood into the Heart,and the Ex-  
pulsion of the received Blood from it,are indispensably necessary.  
Hence,inN° I. are enumerated thoseWoundS,which hinder the  
Influx os the nervous Fluid requisite for the muscularAction of the .  
Heart. In N^ 2. those Wounds are enumerated,which,in conse-  
quence os a Division of the Cavities of the Heart, hinder any  
Blood from being contained in it. in N° 3. are enumerated those  
Wounds, which, in consequence of the Dilatation os the Ori-  
. frees os the wounded Vessels, hinder the discharged Blond from  
returning to the Heart. But as in an human Creature, after it  
is brought - into the World, the Right Ventricle of the Heart  
cannot evacuate the Blood contained in its Cavity, except thro'  
. rhe Lungs, and as to this their Dilatation by Respiration is  
requisite, for this Reason, in N° 4. are enumerated those  
.Wounds which totally destroy Respiration. Then, lastly, since,  
.by an inevitable Effect of Life and Health, many both of the  
. solid and fluid.Parts are daily lost, hence it is requisite, that, in  
: order to preserve Life, as many Parts of the same Kind should  
- be perpetually restored both to. the Solids and Fluids, as were  
Tost by the’ Energy and Activity of Lise. - But the Loss of all  
: these is restored by the Aliments eaten, and by the natural  
. Actions changed into a Substance similar both to the solid and  
fluid Parts of the human Body. For this Reason, in N° 5. are  
- enumerated those Wounds winch destroy the Soundness of those

Parts absolutely requisite to. this Work.

, To- these five Heads we may therefore reduce all mortal  
’.Wounds.

First, Those which intercept the Influx of the nervouSPluid  
' into the Heart, from the *Cerebellum-,* such as Wounds of the

*Cerebellum,* or Brain, so deep aS greatly to injure *thts Medulla  
Oblongata*; or when the Texture of the Vessels within  
the *Cranium* is so dissolv'd, as to admit of an Extravasation  
of their Contents, which destroy Lise by Pressure or Putre-  
faction, and which cannot be come at by means of the Tre-  
pan, by reason of the Condition of the Place ; as it happens  
in Wounds of the inferior Part of the Orbit of the Eye, the  
temporal Bones, the *Os Ptbrnoides,* and the Basis of the  
*Cranium,* those which deeply injure the spinal Marrow ; or

\* which divide the cardiac Nerves.

As the Heart is a true Muscle, so its Action requires all those  
.Things, which from Experience we know to he necestary for  
the Action of the other Muscles os the Body. -But it is cer-  
1 tain from Experiments,, that the Influx of the Spirits thro’ the  
. Nerves into a Muscle, is requisite to its Action; the same will,  
. therefore, obtain in the Heart: It is, also, certain from medi-  
cinal Observations, that when by Violent external Causes, the  
. Blood is so extravasated within the *Cranium* as to compress the  
whole Brain, all the Sensations and Motions depending on the  
. .Will are totally abolished ; whereas-the Action of the Heart in  
the Beginning of such a Disorder, is rather increased, as is oh-  
, vious trom the Strength and Celerity of the Pulse in apoplectic  
- : Patients.’ But it iS known from Anatomy, that the *Cerebellum*~ is very safely defended, smce it Hes under the Brain, and being  
- covered with the *Dura Mater,* cannot be so easily compressed  
. by the extravasated Humours, as the Brain itself. But when the  
: same Causes continuing or increased begin to compress the Or-  
*rebellttm,* which heing of a more solid Contexture, therefore  
. snore resists compressing Causes,- then the Action of the Heart  
: ceases, and Lise is destroyed. Hence we know that the *Cere..  
- bellum* communicates, thro' the Nerves, the Spirits requisite for  
the muscular Motion of the Heart. Wounds, therefore, which  
. greatly hurt,. or totally destroy, the *Cerebellum,* are justly ac-  
ι counted mortal. This is consumed by Experiments made on  
live Animals. Thus *Perrault,* in his *Mechanique des Animate\*,  
Partie* 3. *Cap. y.* informs us, that, when the Brain of a large  
Dog was cut like Chequer-work, almost for an entire Hour, he  
diec the very Moment his *Cerebellum* was wounded. *Raymund  
Vieussens,* in his *Neurographia Univers.alis, Lib.* I. *Cap.* 2o.  
tells us, " That when, after opening the superior Purr os a  
" Dog’s Head, -the *.Cerebellum* is cut into Pieces, and taken  
. " Out os the *Cranium,* the Animal dies almost forthwith, tho’

" the Brain, and Trunk of the *Medulla Oblongata,* are by no  
" means hurt.” The same Experiment was made bv *Bhordus,*in young Puppies, whose *Craniums* were aS yet soft,' and their  
Sutures gaping, hy driving a Knife into the *Cerebellum,* upon  
which he saw them expire, aster flight Concussions of the "ex-  
ternal Parts; but upon removing the *Cranium,* it appeared,  
that the Instrument, in one os the Animals, had perforated al-  
most the whole Compages os the *Cerebellum* ; whereas, in the  
other, it had only penetrated its medullary *Nucleus.*

Nor is it any Objection against the mortal Nature of Wounds  
of the *Cerebellum,* that *lseepfer,* in *T.r. de Cicuta Aquatica  
Historia et Noxee,* in Puppies whose Heads were cut off, saw  
the alternate Systole and Diastoleos the Heart remain sor so-  
veral Hours : For here we treat of the durable Action of Lise,  
and not concerning that surprising Property of the Heart, by  
which, when taken out of the Body, it continues its Motion  
aster Death: For *Wepfer* by no means intended to deduce  
from his Experiments any thing contrary to this Doctrine, as  
he himself affirms.

But since it is certain, from Anatomy, that no Nerve is de-  
rived from the *Cerebellum,* but that the whole medullary Sub-  
stance of the *Cerebellum* being collected, \* goes off into the *Me-  
dulla Oblongata,* from which the Nerves afterwards arise, it is  
sufficiently obvious, that considerable Woundi of *this Medulla  
Oblongata* must necessarily prove mortal. Now if we consider  
that the *Cerebellum* and *Medulla Oblongata* are so safely lodged  
that they cannot be wounded without a considerable Wound of  
the Brain itself, and of the large Vessels and Muscles, the mor-  
tal Nature of Wounds of these Parts will be still more obvious.

But Wounds of the Brain itself, tho' pretty large, are not  
always mortal; as is obvious, from many Observations specified  
under the Article CAPUT.

When sanguiferous arterial Vessels, or large Venous Vessels,  
are by any Cause ruptured, they discharge thein contained  
Blood, as, also, that which by the continual Force os the  
Heart, would have flowed thro’ the Vessels, if sound. But the  
hard Bone of the *Cranium* cannot yield, and naturally the Brain  
exactly fills the Cavity os the *Cranium*; for which Reason,. the  
extravasated Blood must necessarily compress all the Parts con-  
tamed in the Cavity of the *Cranium.* Hence, immediately  
’'aster an Extravasation of Humours within the *Cranium,* the  
‘ Functions of the Brain begin to he abolished, and afterwards the  
same Cause continuing to act, the *Cerebellum* and *Medulla Ob-  
longata* are compressed, and Lise by that means is destroy'd. If  
'the Blood extravasated from the ruptured Veffeis, is not in so  
large a Quantity, as by its Compression to remove the Action of  
the Brain, *Cerebellum,* and *Medulla Oblongata,* it may yet \_  
prove prejudicial in another manner: For the Humours os the  
human Body when extravasated, are by a spontaneous Dege-  
neracy corrupted, tho' more slowly where all Access of the  
' Air is denied ; but at last becoming putrid, and acrid, they  
bring on inflammations and Suppurations of the Brain, by  
- which they consume and destroy its tender Fabric. Hence, .in  
’ practical Authors, many Observations prove, that Wounds and

Contusions of the Head, which were thought Very inconsidera-  
ble, have after a pretty long time brought on sudden Death.  
In Carcases there has appeared a large Quantity of ichorous or  
purulent Matter, and often a considerable Consumption of the  
Brain, by this means. Instances of this Kind may he seen in  
*Bonetusts Sepulchretum Anatomicum. .*

in such Cases, therefore, the principal Hope os Cure is pla-  
ced in the Operation of the Trepan, inorder to procure a free  
’ Discharge to the Humors; but if such is tho Condition of the  
' wounded Part, that this Operation cannot be performed in It,  
inevitable Death will follow J But the Places in which this Ope-  
ration cannot be performed, are, principally, these following:

*The inferior Parts of the Orbit of the Eye*; that is, that Part  
'os the Orbit of the Eye which constitutes the greatest Part of  
the Bottom os the *Cranium,* and which’lies below the *Cranium, '*' but constitutes the superior *Lacunar* of the Orbitos the Eye;  
' for this Part of the Orbit is formed by the *Lamella* of theses

*Frontis,* which in a prepared *Cranium* is pellucid, and hardly  
' so thick as the Nail os one’s Finger: But this *Lamella,* On  
which the anterior Parts of the Brain, together with pretty large  
Blood-vessels, lie, is, on account of its Thinness, perforated by  
a flight Wound, in which Case the extravasated Blood is lodg'd  
under the Brain, in the very Basis of the *Cranium* ; for which  
Reason it cannot be evacuated by the Trepan. Hence .it  
appears how dangerous Wounds, inflicted in this Part, are. .  
*Ruyseh,* in *Observat. Anatom. Chirurg. Concur. Observat.* 54.  
gives us an Account of a Man, who was, with the Extremity of  
a Stick which was not Very sharp, wounded in the Orbit of  
the Left Eye ; and tho' the Wound appeared inconsiderable to  
those who had the Care of is, yet the Patient soon after died.  
And when, thy public Authority, the Cause of his Death was  
enquired into, the *Cranium* being divided with a Saw, the  
Wound appear'd to have penetrated pretty deep into theBraim

*As for the inferior Parts of the temporal Bores* 5 the Pits dp-  
pearing in prepared Sculls, and excavated by the Pulsation of  
the Arteries os the *Dura Mater,* demonstrate, that considerable  
Arteries are distributed about rhe Temples: When, therefore,  
these are wounded, the' extravasated Blood tends directly  
downwards to the Basis of the *Cranium* ; and, on account of .  
the large temporal Muscles situated here, there is no Place sor  
the Trepan: All the Misfortunes are, therefore, to be dreaded,  
which are to be expected from an Extravasation of Humors  
- producing unhappy Effects, either by their Compression, or  
Corruption. .

*: As for the inferior Part of the* Os Ethmoides ; perhaps, at  
first, this Bone may seem to he so safely lodged, chat it cannot  
he easily wounded: But if, when rhe Head is reclined back-  
wards, a sharp-pointed Sword .is driven up the Nostriis, it may  
easily penetrate as far as that Bone. Besides, if in the lateral

' Part of the Orbit of the Eye towards the Nose, a Wound is  
- inflicted, it may by a gentle Force perforate that *Lamella* of  
' the *Os Ethmoides,* which constitutes a Part os the Orbit os the  
Eye, and is called the *0s Planum,* and thus pass into the Ca-  
vity of the *Cranium. . Bonetus,* in *Sepulchret. Anatom,* gives us  
- an Instance os a Student os Law,, who receiving a Prick of a  
\* Sword below the Orbit of the Left Eye, died apoplectic twenty-  
. four Hours after. Upon laying open the *Cranium,* it appeared  
that the Wound had penetrated thro' the Orbit of the Eye and  
the *Os Ethmoides* near the *Coista Galli,* into the Right Ven-  
Iricle of the Brain. The Basis of the Brain and Region of  
the *Cerebellum* were, also, full of Blood.. It is sufficientiy  
obvious, that there were no Hopes of a Cure in fuch a Caso.

Other Wounds, penetrating into the Basis of the *Craniums,*prove infallibly mortal, sor the same Reasons. , \_ .

*As to Wounds of the spinal Marrow,* after nine Pairs of  
Nerves have arose from the *Medulla Oblongata* within the  
*Cranium,* all the rest of the medullary Substance of the Brain  
and *Cerebellum,* collected into one Trunk, and desended by the  
*Fertebra,* is stretched Out to the *Os Sacrum.* /From this spinal  
Marrow all the Members helow the Head, and many of **the***Viscera,* receive a great Part of their Nerves r If, therefore, **a**considerable Wound is inflicted in the superior Part of the spi-  
- nal Marrow, its medullary Substance is destroy'd, and all the  
Action of the Brain and *Cerebellum* on the inferior Parts is re-  
mov'd, so far as it depends on the Soundness of these medullary  
Fibres: For the eighth Pair of Nerves called the *Par Vagum,*and the intercostal Nerves arising higher from the *Medulla Ob-  
longata* within the Cavity os the *Cranium,* are distributed to  
-many of the vital *Viscera.* Hence such, a Wound is not sue.,  
ceeded by immediate Deash, tho’ Patients wounded in this  
-manner all die sooner or later, .'according as the spinal Marrow  
is wounded deeper, or nearer its Origin. The Reason of this is  
sufficiently obvious; for the whole *Cerebrum* and *Cerebellum,*by their Fabric, secrete from the arterial Blood that highly-  
subtile Fluid, which, being thus secreted, is conveyed to all  
the Parts of the Body thro' the medullary Fibres, and the  
.Nerves consisting of those Fibres collected together. Whilst,  
therefore, so long, as the Quantity os theDiquid conveyed to the  
sound secreting Organ is the samesso great a .Number os Vessels,  
which ought to contain and convey the secreted Liquor to its pro-  
per Places,is destroylujit follows,that the Function of the secreting  
.Organ must first be disturb'd, and then destroy'd: Besides, large  
Blood-veffelS are at the same time generally hurt. Hence the ex-  
travasated Humors easily reascend into the Cavity of the Brain,  
aster the Cavity formed by the *Vintebrcgulet* first full. But that such  
WoundS are mortal, is certain, from practical Observations.  
Thus *Bonetus, in Sepulchret. Tom.* 3. tells us of a Countryman  
who sailing from a Tree had the second *Vertebra* os the -Neck  
-luxated near the *Atlas,'* as afterwards appear'd in the Carcase.  
-He liv’d sor some Days in this manner,and then died: But-others  
’ subjected to-the like Misfortune, have died in a Very short time.-  
*' Sennertus,* in *Tom.* 3. *Lib. 5. Part An Cap. 2.* informs ns,  
" That he knew a certain Butcher, who, when intending to  
" kill Oxen, did not strike them in the usual manner, with an  
\*\* Ax in the Forehead, but thrust-a small Knife into that Part  
" of the spinal Marrow where the Head is Joined to the *Vir-  
" tebra of* the Neck; by which means the Animal immedi-  
" ately dropt .down, as it were, apoplectic." *Galen,* also,  
observes, that Bulls in which the spinal Marrow is divided  
hard by the first *Vertebra* of the Neck, immediately fall down,  
and lose both Voice and Respiration. . .

in Puppies, the like Experiment was attended with the same  
Success\*. . . . t ...

*Hippocrates,* in *Lib.* I. *de Morbis,* pronounces Wounds of  
the spinal Marrow mortal; and in *Prorrhet. Lib.* 2. *Cap. it.*. he tells us, " That if the spinal Marrow is disordered, either  
de by a Fall, by any other Cause, or spontaneoufly, the Patient  
" loses the Use of his Limbs, in such a manner, as not to per-  
." ceive when they are touched r Nor, in the Beginning of **the**" Disorder, does he discharge his Excrementsand Urine, un-

less with Difficulty: But when the Disease is of long ssarrd-  
" ing, both Excrements and Urinearo evacuated spontaheoutlv.,  
" but the Patient dies soon after this." Jn chia Place it is he’  
vious, that *Hippocrates* treats of a Wound in rhe inferior Part-  
os the spinal hdarrow; notwithstanding which, he pronounced  
it mortal. But that some have escap'd, or, at least, led a Very  
miserable Life for a long time after the spinal Marrow has been  
compressed by a Luxation of the *Vertebra* about the Loins, is  
certain from *Hildanus,* in *Observat. Chirurg. Cent.* 5.

But I know of no Instance in which any one has survived 4  
Wound of the superior Part of the spinal Marrow.

*With respect to a Division of the cardiac Nerves*; thro' these  
is Convey'd that fine Fluid separated, by the Fabric of the *Cere-  
bellum,* from the purest arterial Blood, and winch is requisite to  
the muscular Motion of the Heart.

In the *Pericardium* the Heart remains free, and adhering to  
no Parts except the Vessels, which either enter or run out  
from the Heart. Now all these Veffeis with which the Heart  
is connected in the *Pericardium,* are free, moveable, and ad-  
hering to no adjacent Parts: The Nerves, therefore, which en-  
ter the Heart, must be convey'd to rt along with the Veffeis  
with which it is annex'd; for the Heart adheres to no other  
Part in the *Pericardium :* Hence the Nerves distributed to the  
Heart do not remain free, as one might possibly conjecture  
'from anatomical Tables, but are applied to the Veins which  
convey the Blood into the Cavities of the Heart, and to the  
Arteries which receive the Blood expelled from the Heart-  
Physiology, from this surprising Position os the Nerves running  
to the Heart, explains its Systole and Diastole, whilst the fame  
Cause which produces the Motion os the Heart, the Moment  
aster, by the necessary Fabric os the Parts, destroys it. Hence,  
in one Moment of Lise, the Heart is, as it were, contracted hy  
a Violent Spasm, and the next Moment becomes perfectly pa-  
ralytic. .

Hence it is obvious, that near the Heart the cardiac Nerves  
cannot be wounded, without wounding the large Vessels about  
the Heart; in which Case, inevitable Death will follow the  
Wound. But here we only consider simple Wounds of the  
-Nerves of the Heart.. But anatomical Observations inform us,  
that all the Nerves which are distributed to the Heart arise from  
the eighth Pair, the intercostal Nerves, or from the recurrent  
Nerves: But the Trunks os these Nerves may, in their Course;  
he wounded, and thus the Effects which these Nerves perform  
to the Heart, may be abolished. .

*Willis, inAnatome Cerebri,* tells us, that, upon dividing the  
Skin in the Throat of a live Dog, he applied a tight Ligature  
to both Trunks of the *Par Fagum* ; after which, the Animal  
immediately became torpid, and swefl'd, and suffer’d convulsive  
Motions, accompanied with a great Tremor about the *Hypo-  
chondria.* This Symptom soon ceasing, the Creature lay, as it  
were, at the Point of Death, vomiting up its Aliments ; hut it  
liv'd after these Nerves were entirely divided for several Days,  
till it was almost destroy'd for Hunger. .

But, upon opening its Body, the Blood coagulated within the  
-Ventricles os the Heart,, and in .the large Vessels, was found  
formed into grumous Concretions. In Animals, however,  
which perish by Hunger, such Coagulations of Blood are not  
found. The Caufe why the Life of this Animal was fo long  
protracted, was -by *Willis* deduced from the small Ramifica-  
tions of the recurrent and intercostal Nerves distributed to the  
Heart. .......... - ... .. . ...

*Lower,* in *T.r. de Corde,* tells ns, that upon making **the**same Experiment, he observ'd, that the Heart began immedi-  
ately to tremble and palpitate; and thus fora Day or two the  
Animal protracts a miserable Lise, with a trembling Heart, and  
Sighs sent-fromthis Breast: But so intense is the Pain of the  
Animal, that he cannot be confined, without very strong Ropes.  
But *Ehrnius,.* in his *Circulus Anatomicoephysiologicus,* affirms,  
that an Animal which he treated in this manner expir'd in a  
Moment, by the Constriction of the Cords. *Vieussens,* in his  
*Neurographia,* tells us, that the Nerves of the eighth Pair, and  
those constituting the intercostal Pair, being transverfly cut  
about the Neck, the Animal is forthwith seiz'd with a Lan-  
guor, which is the Forerunner of approaching Death He suf-  
fers tremulous Motions, his Strength gradually sails, and,-in  
about twenty-four: Hours he is deprived os Life. I made the  
same Experiment on a Dog, tying on each Side of the Neck,  
the eighth and-intercostal Pairs: The Dog howl'd no more,  
but with a Violent Effort utter’d a kind of obscure Noise r At  
certain intervals he was seized with an intolerable Madness,  
biting every thing which came in his Way with incredible Rage ;  
but before he was seiz'd with the Paroxyfm of his Madness,  
the Point os his Nose began to be surprisingly corrugated. He.  
liv’d in this Condition from Six in the Afternoon tin Eleven at  
Night but I sound him dead next Morning.

From all these Circumstances it is obvious, that a Division of  
the cardiac Nerves in Animals, is succeeded by Death sooner

cr inter; and that the Animal almost immediately labours under,  
as it were, the Agonies of Death; which happens from the  
Liability of the Heart any longer to expel the Blood contain’d  
in its Cavities. But we observe that, in some Diseases, Pa-  
\* tients remain in fuch Agonies for two Days, or longer, he-  
cause the Blood cannot he forced thro' the obstructed Arteries.  
The same seems, also, to have happen'd in these Animals,  
which aster these Nerves were ty'd Or divided, protracted their  
Lives for a considerable time : Perhaps, also, other small Nerves  
distributed thro’ the Substance of. the Heart, so long sustain'd its  
vital Motion. Thus in *Hist, de ΐAcademic des Sciences, An.*1734. we are told; that there was found a Ramification of a  
considerable Nerve, arising from the semilunar gangliform Plexus  
of *Vieussens.sueai* the large mesenteric PlexuS,ascending from the  
Abdomen to the Breast, and inserted into the Right Auricle  
and Basis of the Heart. Perhaps, alfo, the surprifing Property  
of the Heart, by which, when divided from all the Vessels, it  
continues its Motion, might continue Life aster the cardiac  
Nerves were destroy'd.

Thus it is known from Experiments, what happens in Brutes  
In Consequence of a Division of the Cardiac Nerves; but in  
Men it rarely happens that the Trunks of the eighth Pain, or  
of the intercostal Nerves, are wounded, but, at the same time,  
the Soundness of the adjacent Vessel’s is destroy'd, the wound-  
ing of which alone proves mortal: For the Trunks of the Ca-  
rotids, and the large jugular Veins in the Neck, lie above these  
Nerves 5 and, hehind, the lateral Processes of the *Fertebra* hin-  
der them from being easily wounded. Nor do *Ϊ* remember,  
says *Fan Swieten,* to have found, either among physicians, or  
Surgeons, a fingle Instance, in which the Cardiac Nerves alone  
were wounded.

Secondly, Such as cause an Effusion of Blood from the  
wounded Cavities of the Heart; for which Reason deep  
Wounds penetrating its Cavities, are mortal. y ,

As the Heart is a Mufcle continually mov’d, and whose  
Farts so conspire, and are united, that, one cannot want the  
Assistance of the other; and as it is the Fountain of Lise,  
whence all the animal Functions flow; so many of the antient  
*- Greeks* and *Arabians* affirm'd, that Wounds of the Heart pro-  
ved soon and infallibly mortal: But they seem to have asserted  
this rather from Theory, than from Experience.

There are some surprising Relations found in Authors,  
which, if true, would prove that Animals have liv'd without  
the Heart. Thus *Pliny* the Second, in *Lib.* 1I. Cap. 37. telis  
us, that the first Day *Censor the Dictator* made a Procession in  
his purple Robes, and sat in a golden Chair, he twice found  
the Heart wanting in the Animals he sacrificed. *Plutarch,*alfo, and *Suetonius,* in their Lives of *Cafar,* affirm, that the  
Heart of the Sacrifice did not appear to him; which was look'd  
upon as a bad Omen; because an Animal cannot naturally sub-  
fist without an Heart. But the Haruspices often boldly im-  
posed on the Credulity of the Multitude, that they might at  
Pleasure decree whet was to be done. Hence these Testimo-  
Dies are Very suspicions j since they are so directly repugnant to  
the known Oeconomy os Animals»

- Tor it is hardly Credible, that the Heart was ever wanting in  
an human Creature, or in any other Animal, tho' the Incan-  
tious might he deceiv'd by the great Variety os the Situation,  
Figure, and Bulk, os the Heart,, sometimes brought on by Dis-  
eases, aS is certain; from practical Observations.

- The celebrated *Bocrhaave,* in the Year I720. had a surprifing  
Observation communicated to him by a skilful Anatomist in  
*Edinburgh,* which proves that there may exist in Nature, such  
Monsters as perplex the Knowledge os the Use of the Parts.  
This skilful Anatomist when carefully searching for the seminal  
Vessels, in a large, , five, and robust Rat, found the Right Kid-  
ney double; but, upon opening the Membrane which cover'd  
it, the genuine Right Kidney appear'd ; but the other Body,  
which he. took for a Kidney, .and which was included in its  
proper Covering, was of such a Bulk and Figure aS the Heart  
of that Animal usually has, with its Base towards the superior,  
and its Apex towards the inferior Parts. This Heart when  
carefully.examined had two Ventricles, divided by a kind of  
Partition ; there was, also, a Lest Auricle, Valves, and fleshy  
Columns ; but there were not the least Traces of the Right  
Auricle, the *Pena Cava,* the pulmonary VeinS and Arteries,  
nor the Aorta. Upon opening-the Thorax, neither *Pericar-  
dium,* nor Heart, appear’d ; hut from the *Fertebrae* of the Tho-  
rax, in the middle Space between the two Lobes of the Lungs,  
arose the Right Auricle, from winch the pulmonary Arteries  
were distributed. The Vessels which return the Blood from  
the Lungs were united into one Trunk, forming the Aorta,  
which was afterwards distributed in the usual manner. The  
Animal was adult, and all the otlrer *Viscera* form'd in the na-  
tural manner: There was, indeed, an Heart, furnish’d with

the usual Parts, but deviatiHg from the natural Situation, and  
useless. Without the Action os the Hears, therefore, this  
Animal not only liv'd, but was sound, and agile.

It is suffici entry certain, from Experience, that some Ani-  
mass have lived for some time after their Hearts have been cut  
out. *Galen,* in *Lib.* 2. *de Placetis Hippo oral, et Platon. Cap.*An telis us, that, in Sacrifices, the Victims, after their Hearts  
are taken out and laid on the Altar, respire, hellow strongly,  
and even run till they die, by the Effusion of Blood. *siesta-  
. lius,* also, informs us, that he has seen Dogs, and especially Cats,  
after their Therax was laid open, and all the Veffeis os the Heart  
were constricted by a Ligature passed about the Base Of the  
Heart, and the Heart itself was cut out helow the Ligature,  
run a considerable Way, when the Cords, with which they were  
ty'd, were loosed. After the .Hearts were taken out os Pup-  
pies cut from the Uterus of a live Bitch, their Life remain’d .  
for a Quarter of an Hour with a sensible Motion of their Mem-  
here, and a certain whizaing Noise. It is, also, certain, from  
Zoology, that Worms and other Animals of a similar Species,  
have liv'd for a long time aster their Hearts have been cut out,  
and after such Animals are divided into Parts, each Segment re-  
tains Life for a considerable time. But from the Observations  
Of *Mulpighi* and *Lewenhoeck* it is Certain, that Animals have,  
in their original State, liv’d the Life of Worms. Hence,  
perhaps, so long as these Animals remain in the Uterus, they  
retain something *of* their antient Tenacity, or Toughness of  
Life. *Boyle* in his Treatise *de Utilitate Philosophice Expoci.,  
mentalis,* telis us, that a Frog, after its Heart was cut out,  
leap'd about, swam when put into Water, and with Agility  
Jumping out of the Vessel full of Water, continued to leap about  
the Room for an Hour, and more.

lord *Ferulam,* in *Hist. Vita et Mortis,* telis us, that a cer-  
tain Man, after the Executioner had cut out his Heart and  
held it in his Hand, was heard to utter three or four Words of  
Prayers but that Author informs us, that the Criminalis Friends  
had given the Executioner a Reward for executing his Office  
quickly, .and freeing the Malefactor from the jacking Pains he .  
would have otherwise been subjected to. Hence it is not Very  
surprising, that, fince the preternatural Cold a littie constricted,  
the divided Veffeis, find since in these last Moments of Life,  
the Disposition of all the animal Organs was Very intense, some  
Pressure of the Blond should as yet act for a few Moments on  
the Brain, by which Pressure On the Organs thus disposed, du-  
ring that last Effort, the Criminal's Speech continued for a short  
time; especially if we consider,that the Lungs, after the Aper-  
ture of the Therax, heing collapsed and every-where con-  
tracted by a preternatural cold Air, expel'd their contain'd  
Ain with a pretty strong Force. This Instance is not, there-  
fore, repugnant to the Necessity of the Heart: But in the Ex-  
periment of *Viselius,* where all the Veffeis were ty'd, the Con-  
tractile Arteries, their Elashcity being contracted by the cold  
Air, might force the Blood thro’ the Brain and *Cerebellum,* and.  
Consequently, continue Life for a considerable time. .

, The Experiments made on Frogs, Vipers, and Tortoises,  
which evince that these Animals may live a considerable time  
after their Heart is taken out, demonstrate, that the manner of  
Life in Animais cannot be limited by Very general Rules, but '  
that it is different in different Animals. So that it is not eafy  
to give a general History of Life, since we Can Only draw our  
Observations from Experiments made.

But no certain Observations have evinced that the Heart was  
ever wanting in human Creatures, or that they have, for a Con-  
siderable time, furviV'd the total Destruction of its Fabric:  
Hence the Reason is obvious, why considerable Wounds of the  
Heart are justly look'd upon as mortal. It is, however, cer-.  
tain, that all Wounds of the Heart are not mortal; and that  
they differ much from each other, according to the different  
Parts of the Heart in which they are inflicted.

For if, by a Wound, the Trunk os the coronary Vein or Ar-  
tery, in the Base of. the Heart, is divided, a speedy Death must  
inevitably follows hecanse, by a great Impetus, which is the  
strong Contraction Of the Aorta, the Blood, which soon returns  
by the Veins, is, thro\* the coronary Artery, transpress'd thro\*  
the muscular Substance of the Heart; for ar every Contraction.  
of the Heart, the whole Heart hecomes pale, because all the  
Blond is expressed : But the Moment after, when the Heart is  
in its Diastole, all the Veffeis, running thro' its Substance, are  
**fin'd. ’ E**

But if a Wound, has penetrated into the Right Ventriose of  
the Heart, the Blood will be discharg'd into the *Pericardium,.*partiy from the wounded Veffeis of the Substance of the Heart,.  
and partiy from the Cavity of the Heart ; and from the *Perir  
eardrum* it will he discharg'd into the Cavity of the Thorax, or  
Tow from the external Wound: Such a Wound will he dilated,  
when the Heart is full; for at the time the Heart is constrict-  
ed, the wounded Parts rather accede to each other: Nos, at  
that time, will there he a great Effusion of Blond, When the

Blood, however, is discharg'd, the Strength will he impair'd,  
tho' the Action of the Heart and Lise still remain : But when  
the greatest Weakness is present, the Heart is almost at rest: Is,  
at this .time, there is no muscular Motion, the Venous Blood  
will flow into the Heart with a calm Motion, and in a small  
Quantity. And if, in this Case, the Patient abstains from such  
Things as, by Nutrition, suddenly augment the Quantity os the  
Blood, and from Cordials which, by their stimulating Quality,  
always augment the Motion os the Fluids, it seems possible to  
preserve Lise, and restare Health. For unless the Master was  
confirm'd by practical Observations, in wounded Persons, and  
Women who have suffer'd Abortion, no one could believe with  
how small a Quantity of Blood, and how flow a Degree of its  
Circulation, a Man can live. Thus when, by a violent Hae-  
morrhage, the Quantity of Blood is greatly diminish’d, and the  
Strength impair’d, the Wound inflicted is hardly any more di-  
lated, the Rudiments of a Concretion begin to he form'd, and  
gradually perfected, provided, by an increas'd Quantity and  
Motion of the Blond, those Parts are not broken which had  
begun to be concreted.

Besides, in Wounds of the Right Ventricle of the Heart it is  
to he observ'd, that the Lungs continue to act, and, by their  
Dilatation, prepare an easy Way for the Blood forced from the  
Right Ventricle of the Heart. Hence, in the time of the Sy-  
stole, on account of the free Passage thro' the Lungs, such a  
Quantity of Blood will not be express'd thro' the Wound.  
Hence arises a greater Opportunity os consolidating the  
Wound.

But Wounds of the Left Ventricle of the Heart seem to he  
far more dangerous ; sor is the Lest Ventricle os the Heart is  
wounded, and not entirely perforated, such a Wound must ne-  
cessarily he dilacerated, since the Lest Ventricle of the Heart,  
by its strong muscular Force,in which it far surpasses the Right,  
presses its contain’d Blood into the Aorta, which makes a con-  
siderable Resistance, and dilates not only that, but all its Rami-  
fications, throghout the whole Body: hor the Fibres ofthe Left  
Ventricle os the Heart, being then distracted by the contain'd  
and resisting Blood, the Wound will be increas'd, till, pene-  
trating into the Cavity os the Heart, it prepares a more easy  
Discharge for the Blood than thro' the Aorta, where there is a  
considerable Resistance : Or, is any Consolidation is begun here,  
it is to be fear'd, lest the Part being preternaturally weak,  
should be extended into an aneurysmatic Tumor, and the Action  
of the Heart he, by that means, disturb'd; fo that Lifemayindeed  
he protracted, tho' with a Train of Miseries, winch can only  
he terminated by Death.

But if the Lest Ventricle of the Heart is perforated with a  
large Wound, a speedy Death infallibly ensues: But in ail Pro-  
bability, that Wound would, of all others, prove most suddenly  
mortal, which should divide the Beginning of the Aorta imme-  
diately above its Valves. But when the Lest Ventricle of the  
Heart is. perforated, the Valves of the Aorta sustain the Blood  
contain’d in the Arteries. Hence the whole arterial System re-  
mains full, after which, the Arteries, being contracted, propel  
the Blood; and thus Lise may be sustain'd, for some time.

Medicinal. Observations have evinced, that, aster Wounds of  
**the** Heart, Men have liv'd for a considerable time, eipecially  
when only the Right Ventricle is perforated : Besides, some Ob-  
serrations evince, that a Consolidation os Wounds of the Heart  
is possible; Instances of which are found in *Thom. Barthal.  
Hist. Anatom, rarior. Cent. i. Hist.yy. Schenckius, Obfcrvat.  
Med. rarior. Pare, Libs* **Io.** *Cap.* **32.** *Act. Leips.. An.* **I705.**and *Miseel lap. Cur. Dec.* **2.** *An.* 6.

From all the Instances recorded in **these** Authors, **we** may  
conclude, that though Wounds of the Heart] are always dan-  
gerous, yet they are not at all Times suddenly and infallibly  
mortal : It is, also, certain, that **we** ought not to despair in **the**most desperate Wounds, since,' whilst a weak and languid Life  
is only sustain'd, such Consolidations of Wounds frequently hap-  
pen, as could not have been expected.

Thirdly, Those Wounds which derive the Blond from the  
. Heart, Brain, and *Cerebellum,* either into some Cavity of the

Body, or out of theBody, and which cannot hecur’d*on* account  
os the Situation of the Pisces ; such as large WousdS of **the**Lungs, Liver, Spleen, Kidneys, Pancreas, Mesentery, Sto-  
mach, Intestines, Uterus in pregnant Women, Bladder about  
its large Arteries, the Aorta, Carotid, Vertebral, and the  
like Arteries and Veins.

In the preceding Numbers of this Aphorism we have shewn,  
that those Wounds are mortal which destroy the Fabric of the  
*Cerebellum,* or which, by wounding the *Medulla Oblongata,* Or  
the spinal Marrow near its Origin, or the cardinc Nerves, hin-  
der the Vital Influx of the Spirits secreted from the Blood by the  
Fabric of the *Cerebellum* into the Heart, and other Parts of the  
Body, from performing the Functions requisite for Life ; But

that these vitalrSpirits may he separated by thfc Fabric os the *Ce-  
rebellum,* it is requisite that the Binod .should, by the muscular  
Force of the Heart, he forced into the Arteries. Hence deep  
Wounds, penetrating into the Cavities of the Heart, are judg'd  
mortal. The whole Action of the Heart consists in receiving  
the Blond convey'd thro' the Veins, and propelling it into the „  
Arteries, after it is receiv'd: All Wounds, therefore, which so  
injure the Vessels which convey the Blood to the Heart, or re-  
ceive the Blond expel'd from the Heart, in such a manner that  
the Blood stows out os the Body thro' the open Wound, or is  
extravasated and accumulated in the Cavities of the Body, with-  
out returning again to the Heart prevent it from heing convey'd  
in a due Quantity, and with a proper Impetus, thro' the Arteries  
of the Brain: Hence all the Functions os the Brain and *Cerebellum*must necessarily be disturb'd, and at last totally abolish'd. Nor  
is it of any Importance, whether the Vessels are wounded in their  
Course, hefore they are dispers’d thro' the V iscera, whose Fabric  
they constitute; or whether they are wounded in the Viscera  
with the like Effect, that is, such a considerable Effusion os the  
Vital Blood as injures the Action of the Heart and *Cerebellum.*All the Wounds, therefore, of the Viscera, and Vessels enu-  
m era ted in this Aphorism, are not absolutely mortal, unless un-  
der this Limitation: Besides, it is requisite that the Condition os.  
the Wound made be such, that the Effusion os the Blood c annot  
he stop'd by Ligature, or the other Assistances of Art. Among  
the Wounds of this Kind are reckon’d, first,

**LARGE WOUNDS OF THE LUNGS.**

The Right Ventricle of the Heart receives all the Blond os  
the Body convey'd thro' the Veins, and propels it thro' the  
Lungs into the Left Ventricle : When,, therefore, a large  
Wound is made in the Lungs, the Blood forc’d from the adja-  
cent Heart will be discharg'd from the divided Vessels, and, con-  
feqoehtly, will not return to the Left Ventricle of the Heart, ' \*  
but flow thro' the Wound made; or passing into the aereal Cai  
Vity of the Lungs, it will be Vomited up copiously ; or, being  
extravasated into the Cavity of the Breast, it will hinder the *free  
Expansion* of the Lungs. Hence the mortal Effects of such  
Wounds are sufficiently obvious.

Medicinal Observations sufficiently evince the fatal Eventsof  
Wounds of the Lungs; Instances of which may be seen in  
*Eohnius de Renunciatione Vitlnerum.* in practical Authors, In-  
stances, also, occur, in which Wounds of the Lungs have been  
cur'd ; but these Wounds have either been very flight, or such  
as that the Surgeon's Hand could have Access to them. .See  
*Hildanus, Cent. 7.. Obs. 37..* and *Cent.* **I.** *Obs.* 46. It is, also,  
to be dreaded, that even flight Wounds os the Lungs may dege-  
nerate into Ulcers, which afterwards waste the Patient, bya flow  
Consumption. An instance of this occurs in *Forestus, Obs.  
Chirurg. Lib.* 6. *Obs.* 4.

*Ac for large Wounds of the Liver*; the collected Venous Blood  
of the abdominal Viscera jo, by means of the *Pena Ponta,* con- -  
Vey'd thro' the Liver, and the Trunk of the *Pena Cava Ascen-  
dent* is inserted into the Liver, the.Whole of which appears soft,  
and resembles a Sponge full os Blood. The hepatic Arteries, .  
indeed, when compar'd with the great Bulk os the Liver, are ,  
Very small; hut considerable Ramifications of the *Vena Ported*are distributed thro' the Liver. Hence it appears, that Wounds  
of the Liver are always Very dangerous, and, if considerable  
Ramifications of the Vessels, distributed thro' the Lives, are\*  
wounded, always mortal, and that, for the most Part, Very  
suddenly; because a large Quantity of Blond is discharg'd into  
the Cavity of the Abdomen, and thro’ the Wound. lienee  
*Deliquiums* and Death soon succeed. See *Hippocrat. Epidem.  
J.* But it is sufficiently obvious, that those Wounds os the  
Liver are most dangerous, which are inflicted about the *Porta,*which are, for that Reason, pronounced incurable, by *Crises, .  
in Lib. ζ. Cap.* 26. But the Wounds made in the thick Pare  
of the Liver he asserts to be cured with Difficulty, though  
they are not absolutely incurable. *Hildanus,* in *Cent.* 2.

Si- gives us a memorable Instance of the Cure os a Wound  
in the Liver; but, from the Description that Author gives, if  
appears, that the Wound did not penetrate to the large Ramifi-  
cations of the hepatic Vessels. The' flight Wounds os the Liver  
are not forthwith mortal, yet they generally prove fatal at last.  
See *Tulpius, Observat. Medic. Lib. st.. Cap.* 26.

*Ac for large Wounds of the Spleen* ; tho' *Democritus,* in *E pisit,  
ad Hippocrat. de Natur. Haman,* affirm’d, that the Spleen,,  
which lies opposite to the Liver, was not only an useless, but,  
also, an hurtful Parr of the Body ; tho', by Experiments made  
on live Animals, it is certain, that the Spleen may be cut our,  
without destroying Life, or even greatly disturbing Health;  
and tho' Mr.. *Boyle,* in his Treatise of the Usefulness os experi-  
mental Philosophy, tells us, that tluis has been done in Men ; yet  
the Blood-Veffeis of the Spleen are so large, and so near the Heart,  
that mortal Haemorrhages are justly to he dreaded aster Wounds  
of the Spleen : Instances in which Wounds of this Organ have

quent Anastomoses, Join'd to similar Vessels rising upwards front  
the Bottom of the Stomach. Hence, when a considerable Ra-  
mification is divided, the Blood contain'd in all the other Veffeis  
of the Stomach, will easily stow thro' the wounded Vestel. In  
practical Authors there are many instances of Death succeeding  
Wounds of the Stomach; a memorable one os which accent-  
panied with an excessive Haemorrhage, is sound in *Bonetus, Se-  
pulchretum Anatomicum, Tom.* 3.

But the Intestines annex'd to the Mesentery, by its means  
receive their VeflelS, which being applied on both Sides to  
the intestinal Canal, are, in that Part of the Intestines which is  
opposite to the Mesentery, mutually join'd, by Anastomoses.  
Wounds, therefore. Of the Intestines, especially about the Me-  
sentery, may divide pretty large Trunks os Vessels; by which  
means, large Effusions os Blood into the Cavity of the Abdomen,  
and Death, will happen. See *Bonetus Sepulchretum Anatomicum,  
Tom.* 3.

The Danger of Wounds in the large Veffeis of the Stomach  
and Intestines, is - much augmented by the continual peristaltic  
Motion of these Viscera; in consequence of which, such Wounds  
are never in a State of Rest: Perhaps, also, the l.ke Misfor-  
tunes are produc'd by Wounds of the Nerves dispers’d thro’ **the**Stomach, with those succeeding Wounds of the Mesentery."

In practical Authors, however, there are frequent Instances  
of Wounds of the Stomach and Intestines cur'd; so that all such  
Wounds are not to be look'd upon as mortal.

*As for Wounds of the Uterus in pregnant lfaomen*; the Uterus,  
after a Woman has conceiv'd, and the impregnated Egg, by its  
increas’d Bulk, begins to fill the Cavity os the Uteru?, is ex-  
tended every Way, and in the like Proportion ; all its Vessels'  
are every way enlarg’d, and receive a greater Quantity of Hu-  
mours. Hence the Uterus os a pregnant Woman is almost as  
thick as the Uterus, when contracted, in a Woman not preg-  
nant;- and yet it is distended to an incredible Bulk, by the Di-  
latation and Repletion of its Veffeis. Hence *Hippocrates, in  
Lib. de Mulicr.Morb. Lib.* I. *Cap.* 23. tells us, " That when a

Woman is pregnant, the Blood is gradually convey'd from  
" the whole Body to theUterus, and enlarges it.'' And hence he  
deduces the Reason why the Colour of pregnant Women is de-  
prav'd ; which is, that the pure Blood is daily convey'd from the  
Body of the Mother to that of the Foetus. Hence it appears, that  
Wounds of the Uterus, when impregnated, are Very dangerous;  
hecause its Vessels are distended by so large a Quantity os Blood.  
And this Danger is increas'd by the Foetus, which, distending  
the Uterus, hinders it from contracting itself, and its Vessels.  
But if, immediately after a Wound inflicted in the UteruS, the  
Foetus was suddenly excluded, there would be some Hopes that,  
in consequence os the Contraction of the Uterus, the Hremor-  
rhage might he stop'd, and the Wound consolidated ; as it actu-  
ally happens in the Caesarean Operation. Instances of this may  
be seen in *Act. Lips. An.* 1S93. and *Host, de l’Acad. Royal, des  
Sciences, An.* I73I. '

*As for Wounds of the Bladder, about its larger Arteries, tho’  
Hippocrates,* in his *T.r. de Morbis, Lib.* I. *Cap.* 3. condemn'd  
Wounds of the Bladder as mortal, and affirms, that they could  
not he consolidated ; yet it is certain, from frequent and unde-  
niable Experiments, that, in Cutting for the Stone, Wounds of  
the Bladder are happily and successfully cur'd : Yet there is a  
Danger, lest the large Vessels running thro\* the Bladder, heing  
divided, produce an excessive Haemorrhage. For the Veffeis  
arising from the large adjacent Trunks of the Iliac Arteries dis-  
charge the Blood with a Violent Impetus. The Origin and  
Course os these Vessels are sound in *Eustachiussitab.* XII. *Fig.* r-  
This Danger is increas'd, because in those afflicted with tle  
Stone, the Bladder is often thicker, and its Vessels more dilated,,  
than in a natural State: But when thefe Vessels are divided, the  
Bladder, so long aS the Stone remains in its Cavity, cannot to-  
tally contract itself; for which Reason they continue to dis-  
charge the Blood. But when the Stone is extracted, the Blad-  
der contracted, and the Urine freely discharg'd thro’ the Wound,  
the divided Vessels may be again clos’d.

*Ac for Wounds of the Aorta,* the Bleed returning from the  
Lungs to the Left Ventricle os the Heart, is all forc’d into the  
largest arterial Vessel of the whole Body, which is call'd the  
*Aorta,* which being incurvated, tends downwards, and beingin-  
cumhent on the Spine, and declining a littie to the Lest Side, as  
far as *rht Os Sacrum,* is there divided into ttvo equal Ramifica-  
tions call’d the Iliac Arteries. During the whole of its Course  
from the Heart to the Part where it is divined, it retains sthe  
Name of the *Aorta’.* Now it is sufficiently obvious, that when  
the Aorta itself is wounded, there are no Hopes os a Cure left,  
since, with a direct Impetus, it receives all the Blood from **the**Left Ventricle of the Heart, and there is no Access to the Hands  
of the Surgeon ; for it lies conceal'd in the internal Parts of **the**Body incumbent on the *Viricbra :* But such a Wound will  
prove the sooner mortal, the nearer it is to ths Heart. ,

proV'd mortal, maybe seen in *Tulpius, Obs. Medic. Lib.2. Cap.*29. and *Bohntus, de Renunciations Vidnerum.*

- But flight Wounds of the Spleen, as well as of the Liver, are  
not always absolutely mortal, tho' it is highly probable that they  
are always very dangerous.

*As for large Wounds of the Kidneys’, Colsus, inLib.S. Cap.*26. affirms, that Patients, who have their Kidneys wounded,  
cannot be preserv'd. The Person who considers the Largeness  
os the emulgent Arteries, will easily believe that a mortal Hae-  
morrhage may ensue, if the large Ramifications os these Ar-  
teries are divided, either in the Substance of the Kidneys, Or at  
their Ingress into the Kidneys: And is, at the same time, the  
*Pcritonaurn* is wounded, the Blood will be discharg'd into the  
Cavity of the Abdomen ; but if a Wound, inflicted in the po-  
sterior Part of the Body, wounds the Kidneys, whilst the *Peri-  
tonaeum* remains enure, there will he a great Effusion of Blood  
into the pinguedinous Coat lodg'd in the Interstices of the. Mus-  
cles : Nor can the Blond flow so freely from the Wound in the  
Kidneys; nor is this Doctrine destroy'd by that Passage of *Hip-  
pocrates, de Intern, Affection. Cap.* i5. where he orders Section  
for the Stone in the Kidneys, in the following manner: " When  
" the Pain is excessive, wash the Part aggriev'd with a large  
tc Quantity of warm Water, and apply tepid Fomentations;  
" but when it becomes tumid, and protuberant, make an Inci-  
fion hard by the Kidney [κατὰ τὸν νεφρὸν], and, having ex-  
" tracted the PuS, carry off the Sand by diuretic Medicines.’\*  
For it is sufficiently obvious, that, in this Passage, he does not  
mean that an Incision should he made in the Kidney, and the  
Sand evacuated by that means.

That all Wounds of the Kidneys, however, are not mortal,  
may be seen in *Forestus, Lib.* 25. *Obs.* 20.

*As for large Wounds of the Pancreas*; if the Trunks, or large  
Ramifications of the Vesteis running thro' the Pancreas, are  
- divided, the Blond heing discharg'd into the Cavity of the Ab-  
domen, and becoming afterwards corrupted, the Effect of such  
a Wound may be Death : But as the Pancreas lies under the  
Stomach, it can rarely be wounded, but the Wound must, at  
the same time, pass thro' some of the other Viscera.

*Ac for large Wounds of theMes.entcry* ; how large the Blood-  
vesteis, running thro' the Mesentery, are, and in what Order  
they are placed, *Eustachiusati Tab.* XXVIL *Fig.* 2, and 3. has  
beautifully demonstrated. Besides Considerable Ramifications of  
the *Vina Portae* and *Pena Cava,* large arterial Trunks, that is,  
the superior and inferior mesenteric Arteries, are, also, con-  
vey'd thro' the Mesentery. When, therefore, these Vessels  
are divided, by a wounding Cause, a mortal Haemorrhage may  
ensue, and the Cavity of the Abdomen be fill'd with the extra-  
vasated Blond. An Instance of this is found in *Bohnius, de Re-  
nunciatione Vidnerurn t Ruys.ch,* also, in *Adverser. Anatom.  
Decad.* 2. NQ 4. tells us, that Death follow'd a Rupture of the  
Veffeis of the *Omentum,* whilst the whole Cavity of the Abdo-  
men was fill'd with the Haemorrhage There is still another  
Danger attending Wounds of the Mesentery, which seems first  
to have been adverted to by *Ruys.ch:* For that Anatomist,  
heing for more than fifty Years employ'd, in *Amsterdam,* in in-  
specting the Bodies of those who were taken off by a violent  
Death, in order to make a Report to the Judges, with respect  
to the Condition of the Wounds, says, that he has frequently  
observ'd, that Wounds of the Mesentery prov'd mortal in two  
or three Days after the Patients had been rack'd with the most  
exquisite Pains: But, upon a careful Inspection, it was certains  
that no other Part, of any Moment, was wounded. Besides,  
when Poulterers castrate Capons, if they fee the Mesentery  
wounded, in the Operation, they immediately kill the Animal;  
because they know, from Experience, that it will soon die by  
inch a Wound. The mortal Effect of such Wounds seems to  
depend on the wounding of the Nerves of the Mesentery.  
How great influence the Nerves, dispers'd thro' the abdominal  
Viscera, have on the vital Functions of the human Body, is suf-  
ficiently obvious, from medicinal Observations in incarcerated  
Hernias, and Interceptions of the Intestines.

Perhaps something like this is hinted at by *Hippocrates,* in his  
*- Coaca Pranociones,* when he tells us, " That those whose inte-  
" rior Nerves, whether small or large, are wounded, die, if the  
" Wound is transverse, and large; the' some escape, when it is  
\*\* small, and strait." *Cornarius,* instead of όι ἐςτὰ ἐντὸς, reads  
όι «ς τὰ έντερα; which Reading approaches near to this Opi-  
nion.

*\* As for large Wounds of the Stomach and Intestines*; we here  
consider such Wounds os these Parts as may, by a Rupture of  
their Blood-vestels, prove mortal, in consequence of the Effusion  
of Blood. For those Misfortunes, which succeed an Evacuation  
of the Contents of the Stomach and Intestines thro' the Wound,  
ase treatedof under the ArticleABnoMEN. TheStomach, then,  
is surrounded by pretty large Veffeis, which, about both its Ori-  
fices, descend towards its Bottom, and are, in their Course, by fre-

**I**

*As for Wounds of the Carotids\* these* **Arteries** arise from  
the Curvature of the Aorta, which draws its Origin from the  
Lest Ventricle of the Heart. This isat least the Case with the  
Lest Carotid Artery, though for the most part, the Right arises  
from the Subclavian Artery of the same Side. These two Ar-  
teries on each Side of the Afpera Arteria, run down to the  
Larynx, where each of them is divided into two Ramifications,  
one of which lying principally towards the external Parts of the  
Head, is called the *external Carotid,* and the other winch enters  
the Cranium, and is distributed through the Brain, is called **the***internal Carotid.* Through their whole Course from thein Ori-  
gin Out of the Aorta, or Subclavian Artery, to that Place  
where they are divided into two Ramifications, they are called  
simply the *Carotide.* In Mankind these Arteries are almost  
Rs large aS the littie Finger : Hence a large Haemorrhage must  
necessarily happen when they are wounded, fince heing so  
near the Hears, they receive the Blood propel'd from it with  
a great Impetus. It is true the Carotids, during this whole  
Course, are so near the external integuments of the Body, that  
their Pulsation in the Neck may he easily perceived by the Fin-  
ger. Besides, it is probable, that a Ligature may he safely ap-  
plied to one of the Carotids, fince a sufficient Quantity of  
Blood may be conveyed to the Head, bv the means os the  
other, and the vertebral Arteries. In a I5og whofe recurrent  
Nerves I had cut off eight Days before, I tied both Carotids,  
nor could I observe any Inconvenience produced by that means ;  
for eight Days after I found the Animal brhk and lively. Then  
**I** tied the Jugular Veins without any observable Disadvantage  
to the Animal, and four Days after found him entirely in  
Health. But examining **the** Ligatures applied to the Carotids,  
**I** found them firm, and a thick compact Thrombus lodged  
hetween the Ligature and the Heart. Upon laying open the  
Brain I found no Change in it, but its Bulk appeared rather  
increased than diminished. \*

But is we consider the Difficulties which Occur when the  
Carotid Artery is divided in a Man, it will appear, that such a  
Wound is justly to be called *mortal',* for an excessive Haemor-  
rhage may in a few Minutes put an End to the Patient’s Life.  
But that such a Patient should be preserved, it would he requi-  
site that a ikilful Surgeon should be present the Moment the  
i Wound is inflicted, in order tocompress with his Fingers, against  
the resisting Afpera Arteria, both Extremities of the divided  
Carotid. Ligatures ought, also, to be applied to the Limbs,  
that thus the Veins being compressed, a smaller Quantity of  
Blood may return to the Heart, by which means the Impetus  
os the discharged Blood must be lessened. After these Measures  
are taken, both Extremities of the divided Carotid, are to be  
found out and tied ; for it is not sufficient to tie that Part of  
the Artery which is next to the Heart, fince the Blood would  
continue to flow through the other Extremity of the divided  
Artery, because the Carotids under the Basis of the Brain, are  
joined with each other, and with the Vertebral Arteries by  
pretty large Ramifications. From all these Circustances it is  
obvious, that one Surgeon, tho' ever so dexterous, is not sus-  
ficient for Wounds os this Kind; but that two at least are ab-  
solutely requisite. Besides it is not probable, that the Extremi-  
ties of the divided Artery can he sound, without rendering the  
. Wound larger by a Division of the Integuments. Hence the  
subsequent Death of the Patient would be imputed to the Sur-  
geon,. though he had acted with ever so much Care and Skill  
in the Discharge of his Office : But if the Patient should lose  
so much Blood, that falling into a Deliquium the Haemorrhage  
should cease, such a Method may he tried.

*As for Wounds of the Vertebral Arteries* ; the Vertebral Ar-  
teries arismg from the Subclavian Arteries run on both Sides  
through the Perforations of the transverse Processes of the Ver-  
tebrae of the Neck towards the Cranium, in this Course they  
‘ send off small Ramifications through the Joinings of the Ver-  
tebrae to the Spinal Marrow, and its Coverings; as, also, to  
the adjacent Muscles. When, therefore, these Arteries are  
divided, they cannot easily retract themselves and close their  
Orifices ; and, as by their Ramifications sent off under **the**Basis of the Cranium, they communicate with the internal  
Carotids, hence the Blood convey'd through the Carotids,  
may be discharged from these Arteries when wounded. Hence  
it is obvious, that Wounds of them are exceedingly dangerous.  
In this Cafe there is no Opportttrtiay of tying these Arteries  
when wounded, fince their divided Extremities are concealed  
within these bony Perforations. The only Hope would he, if  
tile Patient being extremely weakened by an Haemorrhage, and  
a languid Lise still remaining, the Extremities of the divided  
- Artery could be consolidated by a small Quantity’ of mild and  
proper Aliment, without the Exhibition os Cardises. But  
that this is not absolutely impossible, is certain, from the Cures  
. produced in Wounds of the Heart, and from a memorable-  
sustance, in which the Patient lived aster the Division of the  
Subaxillary Artery.

Now It is sufficiently obvious, that the same Danger **asterft**Wounds *of other* large Arteries, such as the Emnlgeots ot  
IliacS, for Instance.

It is, also, certain, that Wounds os the large Veins are  
mortal, sor the same Causes 7 but as most of the Veins lying  
near the Surface of rhe Body, may be more easily compressed,  
and as the Velocity of the Blood is not so great in the Veins,  
as in the Arteries, hence it is obvious, that all other Circum-  
stances bring considered. Wounds os the Veins are not so dan.,  
gerous as those of the Arteries.

4thly,ThoseWoundS which absolutely prevent Respiration i  
Such as a Division of the Larynx, with a Retraction os the di-  
vided Parts; large Wounds of the Bronchia, broad Wounds  
which perforate both Cavities of the Thorax, and admit’ the  
external Air, and Wounds which penetrate the Diapbragm  
on both Sides of the. Mediastinum, or which affect its ner-  
vous Parts.

In a Man, after it is brought into the World, that  
the Blood may pass from the Right to the Left Ventricle  
of the Heart, it is requisite that the Lungs dilated by the in-  
spired Air, should make way for the Blood forced from the  
Right Ventricle through the Pulmonary Artery, into the Pul-  
monary Veins, and thence into the Lest Ventricle of **the**Heart. Respiration is therefore fo necessary to Lise, that if it  
is destroyed but *for R* few Minutes, Life ceases. But in order  
to Respiration it is necessary the Air should freely- enter and  
expand the Lungs. All Wounds, therefore, which hinder **the**Ingress of the Ain into the Lungs, or their Dilatation by the  
Air are mortal: Of this Kind are the following:  
*. A Division of the Larynx accompanied with a Retraction of  
the divided Parts i* The Aspect Arteria consisting of cartilagi- ‘  
nous Segments, being always open, and never capable of col-  
lapsing, nor of being easily compressed, preserves a free Pas-  
sage for the Air into the Lungs. When, therefore, a Wound  
so- divides this aerial Pipe, that the inferior divided Extremity  
shrinks back and conceals itself in **the** adjacent Parts in such a  
manner as not to admit the Air, the Patient's Lise’ is gone. .  
But if notwithstanding a very large Wound, a free Passage is  
preserved for the Air into the Lungs, such a Wound will not  
be mortal, as we find from incontestable Proofs. Frequent  
Instances occur to Physicians and Surgeons, in which Persons  
wearied of Life, have laid violent Hands on themselves in fuch  
a manner as to divide the Afpera Arteria, *Rs,* also, of Persons  
who have suffered that Misfortune by Robbers, who have never-  
theless been afterwards totally cured. Instances of this Kind tare sound in *Tulpius, Observat. Med. Lib.* I. *Cap.* 5o. *Thom.  
Bartholin. Histor. Med. Cent. esc Hist.* 89. and *Parc* in *Lib.* Io.  
Cap. 3I.

*As for large Wounds of the Bronchia* ; after the Afpera Ar-  
teria descends through the anterior Part of the Neck into the  
Thorax, about that Part where the Aorta, arising from the  
Heart, is incurvated, it is divided into two Ramifications, each  
of which is distributed to the Lobe of the Lungs on its respec-  
tive Side. Then these Ramifications losing the Name os the  
*As.pcra Arteria,* are called the *Bronchia*., and the Subdivisions  
ot these Ramifications made in tho Lungs, also, retain that.  
Name. Since, then, the Office of the Aspera Arteria, and  
Bronchia, is to distribute the inspired Air through the aerial  
Cavities os the Lungs, the Air making its Way through large  
Wounds of these will be accumulated in the Cavity of the  
Thorax, and this Air being expanded thy the Heat of the Place,  
will compress the Lungs, and by that means hinder the Whole os  
their- Action. Hence ensue Suffocation and Death; especially  
if the Bronchia on both Sides are so wounded ; for in this  
Case Respiration is totally destroyed. Hence *Hippocrates,* in  
*Coac. Pranot. 5Co.* telis us, " That the Patient dies, who  
" having large Wounds so inflicted in the Afpera Arteria and  
" Lungs, that in consequence os the Wound os the Lungs, less  
" Breath is discharged by the Mouth titan by the Woand. ”  
But the Danger of such Wounds is increased, because the Bron-  
. chia hardly fern capable of being hurt without dividing the

Blood-VeffelS accompanying the bronchial Ramifications.

*As for broad Wounds penetrating into both Cavities of the  
Thorax, and making lfo'ay for an Admistione of the Air .* so long  
as the Lungs are every-where contained in the Thorax exactly  
closed, they are always more distended than if they were every-  
where exposed to the freeAir; for in this last Cafe they collapse,  
and are contracted into a smaller Space, especially by the con-  
tractile Action of the muscular Fibres, which connect ths Seg-  
ments of the-Bronchia with-'each- other ; *for* in a natural  
State there is no Air between the Pleura and the Lungs j but  
a free Access of that Fluid into the Longs is lest through the  
Glottis. Hence tbe Lungs are more distended by^the Air  
which enters by the Aperture of the Glottis, then they are

vompreffed by the external **Ain** acting on **the** Ribs and Dia-  
phragm, hecause the arched Figure os the Ribs, and the Con-  
ncction of the Diaphragm with the Ribs and Vertebrae, hinder  
the external Air from pressing the Diaphragm too far into the -  
Cavity of the Breast, that thus there might he a proper Ba-  
lance or Equilibrium, between the external Air, and that con-  
tained in the Lungs. This is the Reason why the Lungs al-  
ways remain contiguous to the Pleura, even after Death, so  
long as the Thorax remains entire and close, as is sufficientiy  
obvious, when, without wounding the Pleura, the intercostal  
Muscles are cautiously separated; for in this Case the Lungs  
appear contiguous to the Pleura, which on account of itSThin-.  
ness, is generally pellucid: Bin when the Pleura is perforated,  
and the Air admitted into the Cavity of the Breast, the Lungs '  
collapse, are immediately contracted into a smaller Space, and  
recede from the Contiguity of the Pleura. The Diaphragm  
before concave towards the Abdomen, highly tense, and thrust  
into the Cavity of the Breast, immediately becomes flaccid,  
and finks downwards. From these things it is sufficiently ob-  
vious, that in a natural State the Lungs are eVery-where con-  
tiguous to the Pleura, and that no Air is lodged between **the**Convex Surface of the Lungs, and the Cavity of the Pleurai  
Whilst therefore by Muscles subservient to that Purpose, **the**Ribs are elevated, and separated from each other, the Dia-  
phragm contracted, and rendered plain, and oonsequentiy the  
.Cavity of the Thorax enlarged, there would he a Space free  
from Air between the Pleura and the Surface of the Lungs.  
But the Air entering freely through the Glottis, so distends  
the Lungs, when the Breast is dilated, that they always remain  
contiguous to the Pleura, and thus Inspiration is performed. But  
when, in consequence os a Perforation of the Cavity os the  
Thorax, there is a free Access of the Air into that Cavity, **the**Pressure of the Air, which entered by the Glottis, is balanced ;  
hence the Lungs will not be distended, but by their proper  
Contractility take up a smaller Space than before. Is this  
happens in both Cavities of the Breast at one time, both the  
collapsed Lobes of the Lungs cannot be dilated by the inspired  
Air ; hence the Right Ventricle os the Heart cannot force its

. Blood through the collapsed Lungs. Thus the Motion of **the**Heart will soon be suffocated, and Life, which depends upon  
it, destroy’d.

This Doctrine has heen sufficientiy confirmed by numberless  
Experiments upon Dogs, and other Animals, made both by  
the Antients and the Moderns; particularly if the Orifices *os* the

' Wounds were larger than the Aperture of the *Glottis* .♦ Though  
in case of smaller Wounds penetrating both Sides of the Thorax,  
Animals have been known to live some time. ι I

*As for llPounds penetrating the Diaphragm on both Sides of  
the Mediastinum* ; the Pleura lines both Cavities of the Thorax,  
hut in such a manner, that each Cavity has its proper Mem-  
brane. The Cavities of the Thorax may therefore he con-  
ceived to be formed by the two Pleuras, resembling hollow  
Bladders, adjacent to each other, and adhering in the Place of  
Contact. The Duplicature os these two Membranes is called  
the *Mediastinum,* which divides the Cavity of the Thorax into  
two, but in fuch a manner, that the anterior Pan inclines to  
the Lest; sor which Reason the Right Cavity of the Breast is  
larger than that of the Left, as is shewn in *Mernoires de sc Acad.  
Rayale des Sciences, Γ An.* I7I5. Since therefore the Mediasti-  
num is not a simple Membrane, but formed of the two Bags

\* os the Pleura adhering to each other, *Galen, in Tr.de Anat.  
Admin. Lib. J. Cap.* 2. when describing the Membrane lining  
the Thorax, justly enough asserts, that of it are formed the  
Membranes dividing the Thorax [ὑμὲννες διαφράσττοντες τὸν  
ύώρακα]. Now if a Wound is inflicted in the Diaphagm on each  
Side os the Mediastinum, the Air may by these Apertures enter  
the Cavity of the Thorax, and by that means hinder the Ex-  
pansion of the Lungs, as we have already observed with respect  
to Wounds penetrating both Cavities of the Thorax.

But if we consider that the Liver and Spleen are situated  
near the Diaphragm, it is sufficiently obvious, that the Dia-  
phragm can hardly he hurt in two distinct Places, without these  
Viscera heing wounded. Hence Death succeeding such aWound,  
' cannot be ascribed alone to the Admission of the Air into the

Cavities of the Thorax; for besides, these Viscera being pres-  
sed upon by the Action of the Diaphragm and abdominal Mus-  
cles, will block up the free Passage made to the Air by these  
Wounds. But such Wounds must farther be very large; hence  
such a Case seems rarely or never to happen.

*As fap iViunds dividing the nervous Pant of the Diaphragm ,*the Middle of the Diaphragm iS called its *tendinous Centre,*which is a pretty broad tendinous Space, or Aponeurosis, in  
which all the fleshy Fibres of the Diaphragm meet. It was  
formerly called the *nervous Part ofthe Diaphragms* because the  
Antients called Tendons *Herves.* It was for a long time be-  
lieved, that by the Action of the stefny Fibres of the Dia-  
phragm, this tendinous Centre was every.where drawn down-  
wards, and consequently that if aWound should he inflicted

in this Part, every time the Diaphragm acts, the half-lacerated  
Fibres would be distracted, the Wound be augmented, and the  
Pain become so intolerable as to produce Convulsions and Death.  
But the celebrated M. *Senac,* in *Mem. de Γ Acad. Royale des  
Sciences, ΓAn.* I724. has demonstrated, .that the Middle tendi-  
nous Part of theDiaphragm, on which the Heart included in its  
Pericardium is incumbent, does not descend in Inspiration, fince  
the Motion and Situation of these would by this means he greatly  
disturbed, because the Pericardium with a pretty broad Surface  
adheres to this tendinous Part of the Diaphragm. This is, also,  
proved by the Structure of the Diaphragm, and its Connection  
with other Parts.

Wounds of the Diaphragm are succeeded by another Mii- \*  
fortune no less fatal, though not productive os so sadden Death,  
after the Patient has suffered the most exquisite Torments.  
And this happens when the Parts contained in the Cavity of  
the Abdomen are, by the Action of the Diaphragm and abdo-  
minal Muscles, forced into the Wound of the Diaphragm, di-  
late it, pass into the Cavities of the Breast, and thus by come  
pressing the Lungs, and disturbing the Motion os the Heart,  
prove mortal sooner or later, aster intolerable Agonies. In-  
stances of this are found in *Pare, Lib. IQ. Cap.* 32. and in  
*Sennertus, Lib.* 2. *Part.* 2. *Cap.* I 3.

Hence appears the great Danger os Wounds of the Abdo-  
men. *Hollerius,* however, in *Comment,* in *Aph..* I8. *Sect. 6.  
Hippocrat.* telis us, that, in dissecting the Body os a Person who  
had heen hanged, he saw a Wound in the fleshy Part of rhe  
Diaphragm, covered with a Cicatrix.

Fifthly, Thofe Wounds which prevent the Motion of **the .**Chyle into the Heart, such as a Division of the Oesophagus,  
- large Wounds of the Stomach, or small Intestines, an entire

Division of the superior Intestines, and a Wound of **the**Thoracic Duct, or Receptacle of the Chyle.

In this Number are enumerated the Wounds of those Parts  
whose Soundness is requisite to swallow and digest the Aliments,  
and convey the Chyle prepared from them into the Mass of  
Blood, in order to restore those Parts which are daily lost by  
the Action os Lise and Health.

*As for a Division of the Oesophagus* ; an entire Division of  
the- Oesophagus destroys all Passage of the Aliments to the  
Stomach ; for that Wounds not entirely dividing the Oesopha\*  
gus, have frequently been cured, is certain from various Ob-  
senrations in practical Authors. See *Schenckias, Observ. Meds  
Lib.* 3. *Obs.* 6. and *Bohnius de Renunciatione Vulnerum.* But  
when the Oesophagus, together with the Aspera Arteria, is  
totally divided. *Pare,* in *Lib.* Io. *Cap.* 3I. tells us, that the  
Extremity of the divided Oesophagus is so retracted to the Sto-  
mach, that it cannot be united with the other Extremity, tho’  
in one Instance he by Suture so united the Wound of **the**Aspera Arteria, as to restore the Speech of the Patient, that  
he might discover the Person who wounded him; but he died  
on the fourth Day aster. Another instance of the same Kind  
is found in the same Place. But as the Oesophagus is covered  
with the Aspera Arteria, is incumbent on the Bodies of the  
Vertebrae, and has very large Vessels adjacent *to* its Sides, it is  
rarely wounded alone ; for which Reason it is probable, that  
the Wounds of the adjacent Parts may in like manner prove  
the Cause os Death. To this Purpose *Boerhaave* gives us a  
memorable History in his *Atrocis nec descripti prius Morbi  
Historia. . .*

*As for large fPounds of the Stomach* ; all the Aliments and  
Drink swallowed are received into the Cavity of the Stomach,  
by whose Fabric, the Affusion of the Humours, and their Con-  
tinuance there, they are so changed, that being thence con-  
vey’d through the intestinal Tube, they afford a Matter, which  
heing resorbed into the small Venous Ducts, mixed with the  
Blood, and further elaborated, may restore what is lost from the  
Body by the Actions of Lise. Is, therefore, a large Wound is  
inflicted in the Stomach, its Contents will fall through the  
Wound out of the Body, or into the Cavity of the Abdomen;  
and thus all Nutrition will necessarily be destroy'd. Besides,  
Wounds of the Stomach are dangerous, because its Substance  
is full of fo many Arteries, Veins, and Nerves. But when  
Persons die of Wounds of the Stomach, soon after the Recep-  
tion *os* the Wound, we cannot ascribe the succeeding Death *to  
the* Defect of Nutrition, but to the Wound made in the Sub-  
stance of the Stomach. Two Instances of this Kind are found in  
*Bohnius de Renun. Vicln.* in which Death succeeded two Days  
after the Wounds were inflicted. But when Wounds of the Sto-  
mach prove mortal, because the Stomach cannot contain the Ali-  
ments taken, a flower Death ensues, and the Patient gradually  
wastes away for want os Nourishment. It has, also, sometimes  
happened, that such Wounds degenerating into fistulous Ulcere,  
have remained open for several Years, whilst the Patiant could  
at Pleasure let his Aliments and Drink our at this Aperture,  
or retain them in it by closing the Wound thy means of an ex-1ternal Apparatus, Two Instances of this Kind are found in

*Schenchius, in Observationibus Medicinalibus rarioribus.* In the  
*Philosophical Transactions,* No. 420. there are tuo remark-  
able Instances of perfect Cures produced in such Wounds of **the**Stomach, and which seem to evince, that all Wounds os the  
Stomach, even though large, are not absolutely mortal, when  
the Hands of the Surgeon can have Access to the Wound in  
order, to unite it by Suture. Good Hopes may he entertained  
with respect to the Cure of small Wounds os the Stomach,  
provided it is not distended with Aliments or Drink ; *for* in  
this Case the Stomach remaining contracted, its Wounds may  
.he consolidated. .

*As for entire Divisions of thefmall andsuperior Intestines* ; fuch  
Wounds seem to he absolutely mortal ; for the Extremity of  
the divided Intestine will dischargesthe Chyle into the Cavity  
of the Abdomen.; and when this Chyle is corrupted, it will  
consume all the Viscera contained in the Abdomen, and hence  
certain Death ensues. But is either by Chance or Art, the  
Extremity of the divided Intestine grows to the external Mar-  
gin os the Integuments,, a Way will be made, .through which  
by the peristaltic Motion os the Stomach and Intestines, all the  
Contents of the Intestine will be eliminated from the Body ;  
for the Chyleconvey’d from the Stomach thro' so large aPortionof  
the intestinal Tube, and its Gyrations and Windings, is by that  
means hindered from going out of the Body, hesore all that  
Part of it which is subservient to the Nutrition of the Body is  
resorbed by the Mouths *of* the lacteal and meseraic Vessel,. If  
then the small Intestines are entirely divided in the superior  
Part, that is, where they are pretty near the Pylorus, the Body  
will necessarily be deprived of Nourishment, and the Patient  
will die of a flow Consumption, is the Contents are discharged  
through the Wounds of the Integuments ; hut if, falling into  
the Cavity of tbe Abdomen, they are there accumulated, they  
are there corrupted, and accelerate the Death os the Patient.

But Wounds both os the large and small Intestines in Parts  
more remote from the Stomach, aS, also, such Wounds as do  
not entirely divide the Intestinal Tube, are always dangerous,  
though not absolutely mortal. Of this a memorable Instance  
is sound in *Mem. de ΓAcad. Royale des Sciences, ΓAn.* I7O5.  
And in the *PhilofephicalTranfactions*abridged, *Tom.* 5. we have  
. an Account os a large Dog, in which the small Intestine was  
longitudinally-divided, and upon replacing the Intestine with-  
out Suture, the Wound os the Abdomen- was stitched up, and  
the Animal cured without any bad Symptom.

Various Observations os this Kind occur in practical Au-  
thors. It is, also, certain from many Instances, that Persons  
have survived total Divisions both of the small and Lrge In-  
Iestines, when the Extremity of the divided Intestine was fixed  
to the external Wound, in order to procure a Discharge sor the  
Faeces. But in this Cose it is requisite the Length os the In-  
testine from the Stomach to tlie Part where it is divided, should  
’ be such, aS that the Chyle prepared from the Aliments, and  
resorbed by the Lacteal and Meseraic Vessels, may be sufficient  
for the Nourishment os the Body.

*As for Wo tends of the Thoracic Duct, or Receptacle of the  
Chyle ,* all the Chyle resorbed by the lacteal Vessels from the  
. Intestines, and a large Quantity of Lymph convey'd through  
the Lymphatic Veins, meet in this common Chanel. \_ .When  
this, therefore, is wounded,and discharges its contained Liquors,  
all those Effects cease which depend on a Mixture of the Chyle  
with the Blood sor the farther Perfection of the Actions of the  
Vessels and Viscera, that is. Nutrition is destroy'd. It is true  
that the Orifices of the Meseraic Veins eVery-where open into  
the Intestines, resorb the thinnest. Part of the Chyle and con-  
vey it directly to the Liver ; but the white chylous Juice is only  
received by the Lacteals, and Life seems incapable of be-  
ing sustained, if only the Meseraic Veins absorbed ’the thinnest  
Part, since by this .means the Admission os the *Chyle,* properly  
so called, into the Mass of Blood, would bethindered. ’ *Lovjer,*In his Treatise *de Corde,* has by’ beautiful Experiments demon-  
strated, that no Chyle is resorhed by the Meseraic Veins. And  
when the Entrance os the Chyle into the Blood is hindered, it  
is certain that Lise cannot he long sustained.

It rarely happens in Mankind, that the Thoracic Duct  
alone is wounded; sot it lies generally on the Middle of the  
Bodies os the Vertebrae, in the middle Space between the  
*Vena sine Pari* on the Right Side, and *Aorta Deseendens* on  
the Left; so that the Aorta, for the.most part, lies upon it;  
then rising higher, it runs upon the Bodies of the Vertebra,  
under theOesophagusjand under theArch of*rraeVena sine Pari ;*thence above the Bodies os the .Vertebrae, it inclines to the  
Left, proceeds under the Lest Carotid, as far as the Middle of  
the last Vertebra of the Neck, and there being bent in the Form  
os an Arch, it tends downwards to the Left, and is ter-  
minated in the Left Suhelavian Vein. During the Whole,  
therefore, os this Course, it is safely lodged, and adjacent to  
large Veffeis, so that it can hardly be wounded without other  
Parts, the Wounds of which may be productive os Death.

*Bonetusu in Sepulchres. Anatom. Lib.* 4. has a remarkable InA  
stance, in which from the succeeding Symptoms, the Thoracic  
Duct seems to have heen wounded, tho’ from the lon2 time chg  
Patient lived, it seems not to have been totally divided.

" Wounds in their own Nature mortal, but curable bv Art..  
*\* a ae*are.

First, Wounds of any of the Contents of the Cranium,  
which are capable os heing relieved by the Trepan.

' In this Paragraph are considered those Wounds which prove  
infallibly mortal is lest to themfelves ; but whose Effect, winch  
is Death, may be prevented by proper Measures.

- The Wounds of this Kind first specified, are those of the  
Encephalus, by which is meant every thing contained in the  
Cavity of the Cranium. Now it is certain from Anatomy and  
Physiology, that the Cavity of the Cranium is naturally ex-  
actly full. When therefore, by a Change of Figure in the  
Cranium, its Cavity is lessened ; or when by a Rupture of the  
Vessels, the extravasated Humours are collected under the on-  
tire Cranium, the soft Fabric of the Encephalus'is necessarily  
compressed, all the Functions depending on it are injured, and  
at last totally destroyed.

Is, therefore, the Cranium pressed inward, or the extrava-  
sated Humours by their Quantity compress the Brain ; or if **the**Juices hecoming corrupted by their Continuance there, by their  
Acrimony corrode that tender Pulp on which Lise and Health  
depend. Death will be the effect of such a Wound; But is the  
extravasated Humours are lodged in fuch a Part of the Cranium,  
that they can be removed by an Aperture made with the Tre-  
pan, it easily appears that the Patient may be preserved. See  
**CAPUT.**

Two things are, therefore, requisite in fuch a Wound;  
which are, that the evident Cause os Death is sound to be  
the extravasated Humour compressing the Brain ; and that this  
Humour is lodged in such a Place,that it may be safely eliminated.

Secondly, Wounds os large Arteries or Veins, in Parts to  
which the Hands of the Surgeon cannot have Access. z

It is absolutely necessary a Surgeon should know the Course  
of the large Arteries and Veins, especially in the Limbs; sor  
large Trunks os Vessels wounded in the Cavities os the Body,  
will not admit his Hand. It is in a particular manner requisite,  
he should know those Parts os the Limbs where the large Ar-  
teries and Veins are so naked as to he easily compressed. Or  
this Kind in the superior Limbs, are the subaxillary Parts, and  
the anterior and superior Part of the Os Humeri, where the  
large Trunk of the Artery maybe compressed almost to the  
naked Bone, and by that means Haemorrhages from Wounds in-  
flicted in the inferior Parts are easily stout. In the inferior Limbs,  
similar Places are found in the interior and anterior mid-  
die Parts of the Thigh, as, also, under the Hams. ‘ In .all  
these Places, Compresses strongly applied with a *Tourniquet,*so compress the Trunks ofthe Vessels aS to hinder' all Passage  
of the Blood. Thus mortal Haemorrhages are prevented, and  
an Opportunity given the Surgeon, alter the Suppression of  
the Blood, and the Dilatation os the Wound,, is necessary, to  
find the wounded Artery, and apply proper Medicines, orDi-  
gattire, as he thinks fit. Hence, at present, no Wound of ,  
the Limbs seems absolutely mortal in consequence *of an Hae-  
morrhage,* which may be checked by a Compression os the ar-  
terial Trunks, especially in the subaxillary Parts, and in the  
Groins. And is the wounded Artery is lodged so deep, that  
it cannot be tied, , the Amputation os the Limb is the only re-  
maining Method to be taken for the Preservation os the Pa-  
tient. But when Surgeons are ignorant os the Course of the  
large Veffeis, they by Ligatures, and absorbent styptic Powders,  
such as *Gypsum,* hinder the Blood discharged from the wound-  
ed Vessel, from flowing through the Aperture of the Wound.  
And this Blood filling the whole Membrana Adiposa, and after-  
wards becoming corrupted, preys on all the Parts with a terrible  
Putrefaction, of which there are many melancholy Instances.

Thirdly, Wounds of the Viscera, to which the Surgeons  
Hands, and proper Medicines,can reach. .' Ἀ \_

' ‘Unless it were certain from Experience, no one could he-  
lieve that Parts, even of the vital Viscera laid bare by aWoinim  
may he cut off, lest afterwards becoming corrupted, they should  
prove mortal. *Celsus,* in *Lib.. 5. Cap.* 26. telis us, " That  
"if any Part of the Liver, or Lungs hangs out, it in m he  
out off. " There is a memorable Instance of thin Kinchre-  
corded in *Tulp. Obs. Med. Lib. st. Obs.* I7. :

Fourthly, Such Wounds as are sataj thro’ a Discharge of the  
Fluids, into those Cavities whence they may be taken with-

out Danger of Life, as it happens in some Wounds of the  
Thorax, Abdomen, Ureters, Bladder, and intestines.

Many Wounds prove mortal, not so much on account of the  
large Quantity of the extravasated Blood, as because that  
Fluid brooming corrupted by Time, and the Heat of the Part,  
by its putrid Quality corrupts and wastes the Viscera on which  
It acts. Thus, for Instance, when the Thorax is wounded,  
after a copious Haemorrhage the Patient sails into a Deliquium,  
the divided Veffeis contract themselves, and the Discharge of  
the Blood ceases. The Blood, however, remains in the Ca-  
vity os the Thorax, where hecoming corrupted, and corroding  
-the adjacent Lungs, it destroys the Patient by a flow Consump-  
tion. The same holds true in the Cavity of the Abdomen.  
But the Paracentesis may be instituted both in the Thorax and  
Abdomen; and thus the extravasated Blood maybe eliminated,and  
all these Misfortunes prevented. But is a Wound is so inflicted in  
the Ureters, or Bottom os the Bladder, that the Urine stows  
into the Cavity os the Abdomen, it is sufficiently obvious, that  
in this Cofe, the Urine naturally disposed to Putrefaction, will  
far sooner become putrid, by which means all the Contents of  
the Abdomen will be greatiy injured. But by perforating the Ab-  
domeninll the Fluids collected in it may be evacuated ; and by in-  
troducing a flexible Catheter into the Bladder, the Urine may be  
hindered from collecting itself in the Bladder, and distending it;  
hence the Bladder remaining always contracted, the Wound in-  
fiicted, will be the more easily consolidated. But if the Ureter  
is divided jaster evacuating the Urine discharged into the Cavity  
of the Abdomen, a dry Diet is to be used; in which Case there  
are great Hopes, that the Extremity of the divided Ureter may  
he consolidated. The Use os the Kidney will indeed be de-  
stroy'd by this means; but it is certain from many Observations,  
that the other Kidney may supply its Office, and that the Pa-  
tient may enjoy perfect Health ; for when the Cavity of one of  
the Ureters is obstructed by a Stone impacted in it, the Patient  
has often survived a great while, the other Kidney remaining  
found, and in that Case having its Bulk, generally, greatiy in-  
creased.

We know that the Urine flows from the Wound into the  
Cavity of the Abdomen, when, little or no Urine is discharged,  
and the Abdomen is daily more and more distended by a Tu-  
mor.

The same, also, holds true in some Wounds of the In-  
testines.

A Wound of itself not mortal, maybe prognosticated mor-  
tal, by these Causes :

\* First, By neglecting to purge off the discharged Pus, from  
which a purulent Tabes arises; or the extravasated Blood,  
which hence become putrefied.

Under this’Class are comprehended such Wounds as are in-  
flicted in thofe Parts, the Soundness of which may he removed  
without destroying Life, though fitch Wounds are sometimes suc-  
ceeded by Death, not arising from theWotmd as theCause, but  
because by the Carelesness os the.Patient, the Error of the Phy-  
sician, some other Disease not arising from the Wound, or a  
Peculiarity of Constitution; such a Change is induced, as that  
the Functions requisite to Lise are abolished. These Changes  
are produced by the four following things:

A Neglect to purge off the discharged Pus,, from which  
arises a purulent Tabes. ‘ ..sued

From what is already said, it is obvious, that in every con-  
stderable Wound, Pus is not only formed, but is even requi-  
site to a Separation os those things which would hinder the  
Consolidation of the Wound. Now if the Condition of the  
Wound is such, that the Pus formed in the Wound, falis into  
she Cavities os the Body, or, being too long lest in the Surface  
of the Wound, is attenuated and resorbed by the open Orifices  
os the Veins, in this Case the whole Mass of Blood may he  
infected by a purulent Cacochymy, whence arise an hectic Fe-  
ver, and a flow Consumption; now if it appears, that Pus  
lodged in any Cavity of the Body, might have been safely eva-  
cuated, or that the Resorption os the Pus; might have been  
prevented by a proper Depuration of the Wound, it is obvious,  
that the Death succeeding it is not to be ascribed to the Wound  
'as its Cause, but to the Omission of purging off the extravasated  
Pus. When, .aster the Amputation of large Limbs, broad  
Wounds daily collect a large Quantity of Pus, a great Diffi-  
teultv frequently happens in the Cure; for is often in a Day  
the Wound is cleansed, and the Pus wiped away, the Consoli-  
dation os the Wound is by that means prevented, and it de-  
generates into the Nature, as it were, os a Fontanel, and dis-  
charges an incredible Quantity os Fluids. Thus the Patients  
are wasted away by a true Consumption, while there is Ito

Fault either in the Fluids or Solids of the Body, because by the  
too great Formation of Pus, so much of the Nourishment of  
the Body is lost, that all the Parts are consumed. But is **the**Wound remains long covered, the Pus being, by its Continu-  
ance, and the Heat os the Place, attenuated and rendered  
more acrid, is resorbed by the open Mouths of the Veins, by  
which means it is mixed with the Blood, and induces a puru-  
lent Cacochymy and Consumption; os, being by a Tranfla-  
tion conveyed to some os the more noble Viscera, proves mor-  
tal ; many Instances of which occur in Practice.

*As for the Evacuation of the extravasated and putrefied  
Blood-, Hippocrates,* in *Aph.* 20. *Sect.* 6. affirms, " That  
" Blood preternaturally discharged into the Abdomen, must  
" necessarily be suppurated.” *Galen,* in his Comment on  
this Place, tells us, that some instead os ἐς τήν κοιλίην, read  
ἐς κοιλίηγ, without the Article, by which an Effusion of Blond  
into any Cavity os the Body is denoted; and he adds, that  
this Opinion is confirmed by the Addition of the Word *pre-  
ternatural.* Then the Sense of this Aphorism is, that Blond  
discharged from its natural Place into any Cavity os the Body,  
must necessarily be converted into Pus. *Galen,* in the same  
Place, tells uS, that by Suppuration is meant every Corrup-  
tion os Blood, but not a Conversion into *Pus,* properly so  
called. Isa free Access is given to the Ain, Blood discharged  
into any Cavity of the Body, is pretty soon putrefied, and proves  
mortal by corrupting the adjacent Viscera, or by being resorbed  
and destroying the tender Vessels of the Viscera by its putrid  
Acrimony. But if no Access is given to the Air, it may re-  
main for a long time without Corruption, and sometimes bring  
gradually attenuated, be again resorbed without any Harm, as  
it srequentiy happens aster Violent Contusions, when the Blood  
extravasated under the entire Skin, often remains for a Month  
and more, but afterwards gradually disappears without any farther  
Injury. When, therefore. Blood being discharged into the Ca-  
Vities of the Body, and a free Access given to the Ain, Death  
ensues, and in the Carcase it is not sound, that the Wound is  
in its own Nature mortal, the Death os the Patient is to be  
ascribed to this Cause, if the extravasated Blood could have  
heen safely evacuated by Art.

Secondly, By any Fault committed with respectto the Six  
Non-Naturals.

It is certain from Pathology, that the Non-naturalS are  
divided into six Classes, Air, Meat, Drink, Rest, Retention,  
and Excretion, Sleep and Watching. They are thus called,  
because by the Use or Abuse os them, they are either natural  
Benefits, or preternatural Evils. The prudent Physician di-  
rects all these in a proper manner, and orders the Patient to  
abstain from such things aS are injurious, and injoins the Ufe os  
such things as are beneficial. Now, if by the Carelesness of  
the Physician, or the Obstinacy of the Patient, Faults are com-  
minted in the Use of the Six Non-Naturals, a Wound os itself  
not mortal, may be so changed as to bring on Death. In-  
stances os this are sound in. *Pare, Lib. IQ. Cap.* I4. *Hildan.  
'Obs. Chirurg. Cent.* I. *Obs.* 2O. *ibid. Obs. isu* and *ibid.  
Ubf.* 25.' .

'Thirdly,' By a Neglect or error os the Surgeon.

It is certain from many Observations, and confirmed by daily  
Experience, that Contusions and flightWounds os theHead,when  
negligently treatedjhave produced terribleSymptoms,and Death.  
Many dseof Haemorrhagesjwho might have been preserved *if* the  
Trunks os the Arteries had,by proper Ligature,been compress'd in  
Those PartS,where theyore almost naked. In Baltics many os the  
Wounded die only because the Surgeons cannot take sufficient  
Care os *so* large a Number. The Death os wounded Persons  
is, also, frequently owing to the Error os Surgeons. Instances  
of which are sound in *Pare, Lib.* Io. *Cap.* 32. *Hildan. Obs.  
’Chirurg: Cents* 6. *Obs.* 8o. and *Hippocrates Epidem. Lib.* 5.  
*No.* 22..

. Fourthly, By the Constitution os the Patient whether na-  
tural, morbid, manifest from the History os the particular Pa-  
tient ; or sometimes so singularjthat it can only be discover'd by  
this Effect. And this Constitution os the Patient is always to he  
’ had a due Regard to by the Physician in his Report tothe Judges.

It is os great Importance, in making Reports with respect to  
Wounds, to have a due Regard to the Temperainent of the  
Patient, which, however, is often totally overlooked. In many  
Places, Physicians and Surgeons are, by public Authority, ap-  
pointed to inspect the Bodies of those who are killed, and  
make a Report of what they have seen to the Judges. But  
they often do not consult the Physician or Surgeon, who be-  
fore attended the wounded Person, in order to know his Tem-

pesament, previous Diseases, and the Symptoms subsequent to  
the Wound. But all these Things seem highly necessary, in  
order to make a faithful Report concerning the Wound : For -  
some Persons have nervous Systems so capable of being irritated,  
that they are by the flighted Cause seized with Spasms,a *Tetanus,*or other like Misfortunes : Others,when they see the Blond flow.  
ing from another Person's Wound,sall into a *Deliquium.* Nowit  
is probable, that in such Persons, Violent Symptoms, and even  
Death, may be produced by a flight Wound; but whetherIhe  
succeeding Death is to be ascribed to such a Wound alone, as its  
Causedin hard to determine. Besides, in fome Patients, towards  
the End of Lise, hardly any Blood remains in the Body. Thus .  
in phthisical Patients, aster Death only a few Ounces of Blood  
are sometimes found ; Now if from such a Patient, by a flight  
Wound, the small Quantity os Blood should he evacuated, in-  
fallible Death will ensue; but that Death will not depend on the  
.Wound alone. It is sufficiently known, that the *Lues Vinerea,*and a malignant Scurvy, so corrode the Substance os the hardest  
Bones of the Body, that heing rendered entirely carious, they  
may he broken hy the smallest Force.. Is therefore, in such a  
Case, a Fracture of the *Cranium,* by a gentie Pressure, should  
he productive of Death, this Effect will not depend on the  
wounding Cause alone ; but these, and other Circumstances of  
a like Nature, may be known from the Things observed in the  
Patientis Body before the Wound was inflicted. Perhaps there -  
may be other Things latent, of which there never appeared any  
Sign, and which only discover themselves by the infliction os  
the Wound; For when we consider whet has been observed in  
the Bodies of Persons who have died suddenly, we find that  
Death has often been instantaneousiy produced by the most la-  
tent Causes; whereas before Death nothing of any Moment ap-  
peared injur'd. Now if in such a Person a Wound is inflicted a  
littie before Death, the succeeding Death, which depends on a  
quite different Cause, would be unjustly ascribed to the Wound.  
Thus *Valerius Maximus, Lib.p. Cap.* I 2. tells us, ." That in  
" the End os Lise, which is exposed to Various and occult  
" Causes, some Things are frequently, tho' undeservedly, cal-  
" led mortal; since they rather happen at the time os Death,  
" than bring it on." Hence in such Cases it ought to be re-  
Stied to the Judges, that the Wound was found such, that the

eath succeeding it did not seem to be ascribed to the Wound  
as its Cause. T hus Physicians and Surgeons discharge their Of-  
fices faithfully, and the rest belongs to the Judges.

Upon this Doctrine depends the Report concerningWounds,  
and a Determination of the Time in which they may prove  
mortal. - -

ί Judges, hesore passing Sentence on Murderers, generally order  
Physicians and Surgeons to examine: the Body of the Person  
killed, in order ro discover whether his Death was caused by  
the Wound: These Physicians and Surgeons accurately observe  
what Parts os the Body they find hurt by the Wound ; and  
then by a common Consultation conclude whether the Wound  
was absolutely mortal ; or whether, tho' mortal of itself. Death  
might have been prevented by Art; or whether the Wound has  
injured those Parts, the Soundness of which was not absolutely  
necessary to Life, and yet Death ensued, either from a peculiar  
Temperament os the wounded Person, or from the Carelessness  
or Neglect os those who had the Management os him. All these  
Circumstances are related to the Judges, and this is call'd giving  
a Report concerning Wounds, *Renunciatio Vulnerum.* Hence  
it appears, how great Caution is necessary, finoe unskilful Sur-  
geons, when -examining a Carcase, rather make than inspect  
Wounds. We ought, as much aS possible, to inquire into the  
Figure and Bulk os the wounding Instrument, the Situation of  
the wounded Person, and of him who gave it, at the Time it  
was inflicted ; and into all the Symptoms which happened be-  
tween the Reception os it and the Death of the Patient.

Besides, all those Things are to be consider'd which happen'd  
to the Patient, or were applied aster the Wound was inflicted;  
then, by a prudent and cautious Incision, we are to investigate  
how far, and thro’ what Parts the wounding Instrument pasted:  
Thus from a Knowledge os the Use os the Parts wounded, we  
conclude whether the succeeding Death ought to be ascribed to  
the Wound inflicted, aS its Cause, or not.

But it seems not to be easily determin'd towhat Space of  
Time the Mortality os Wounds is to be limited. Many are of  
Opinion, that if the wounded Person survives nine Days, the  
succeeding Death is not to be ascrib'd to the Wound ; and that  
if the Person dies before that Time, then the Wound inflicted is  
necessarily and absolutely to he accounted mortal: But a large  
Artery, divided either in the Arm or Leg, may, in a few Hours,  
or even sooner, put an End to a Person's Life, tho' this Wound  
was not absolutely mortal, bur might have been cur'd by Art.  
Thus, also, extravasated Blood in the *Cranium,* if lodg'd in a  
Part from which it could not be extracted by Art, whilst its

Quantity is fo small that, by Compression, it does not immense  
ately disturb the whole Use of the Brain, may there remain sor  
several Weeks, hecome gradually corrupted, and at inst, by cor-  
roding the *Ccrebrum,Ccrebellum.ye:CA Medulla Oblongata,ptciduCae*Death; and such a Wound is justly to be reported as mortal,  
tho' the Person has surviv'd it so long. If the small intestines  
are totally divided near the *Pylorus,* Life mav be protracted for\*  
several Days, till, thro' a Defect os Nutrition, the Patient is  
gradually wasted away, and yet such a Wound is absolutely  
mortal. Hence it is obvious, that nothing certain can he de-  
termin'd with respect to the Mortality of Wounds, from the  
. Time intervening between the Infliction of the Wound, and  
the Death of the Patient.

From the History of WoundS, also, already given, the Pre-  
diction of other Events which are to be soretold,will he easy.  
In treating of the Prognostics ofWounds, we have deter-  
min'd those Things which, from a Knowledge of the.Wound,  
might he foreseen, as its Consequences; we have, also, treated \*  
of the Lise or Death of the wounded Person: The otherThingS  
relating to the possible or impossible, the easy or difficult Cure,  
and the Effects remaining aster the Cure of the Wound, are evi-  
dently deduc'd from a perfect Knowledge of its Nature. For  
when we know from Anatomy, and the Doctrine of the Use os  
the Parts, what Parts are wounded, and whet Functions are  
abolish'd or deprav'd, we may determine whether the Cure is  
possible or impossible, easy or difficult; or whether, aster the  
Cure os the Wound, any of the Functions wilIremaininjurdth.  
Thus, for Instance, if a Wound is inflicted on the Back of the  
Hand, the Physician, from Anatomy, knows that the Tendons  
of the Muscles which extend the Fingers are plac'd here; he  
therefore orders the Patient to stretch out his Fingers ; and is he  
perceives that he is absolutely incapable of erecting his fore Fin-  
ger, he concludes that the Tendon, compos'd of the united  
Tendons of the common extensor Muscle, and that of the *Muse  
culus Indicator,* is divided: But if it is possible that the Extremi-  
ties of the divided Tendon can be brought into.Contact, and  
united, he may promise a perfect, tho' a difficult. Cure. But if  
this cannot he done, he may safely predict, that, after the Cure  
os the Wound, the Erection of the sore Finger will be always  
abolish'd, and never capable os being restor'd, in predicting  
Things os thistNature, both Physician and Surgeon ought to be  
Very cautious ; hecause all the Misfortunes which remain aster  
the Cure of.the Wound, will he ascrib'd to them, unless they  
have foretold that such Misfortunes will certainly happen, or, at  
least, are to he dreaded.

The Cause of the several Phenomena appearing when a  
Wound is inflicted in a visible Part os a sound and robust  
Body, is sufficiently obvious, to any one-acquainted with the  
- Vital and animal Actions ; and all these Symptoms have been  
alreadyaccounted sor.

The exterior Coats of the Arteries, when prick\*d, cut,  
bruis'd, broken, distracted, or corroded, whilst the internal  
Coat remains entire, are dilated, by the Impetus of the  
Blood, and form a Bag, or Sack, which often increases to the  
Bulk of an Egg, acquires callous Sides, has a Pulsation, is of  
a bright-red Colour, disappears -upon Compression, but returns  
to its former State when that Compression is remov'd, en-  
larges its Artery, and by its Compression lessens the adjacent  
Vessels: This is call'd a true Aneurysm, the Causes, Signs,  
and Effects of which, are easily seen. An Aneurysm of the  
Heart, its Origin, Signs, and Effect, are hence to be account-  
ed for, and understood. . -

We have already’ observ'd what Misfortunes follow when an  
Artery is entirely divided, or when a Wound penetrates into the  
Cavity of an Artery, so as not entirely to divide it: But in this  
Apherifin are consider'd those Misfortunes which are to be  
dreaded when Arteries are so wounded, that the Wound doeS  
-not penetrate their Cavities, but only divides their external  
Coats. For it is certain, from -Anatomy, that the Arteries,  
especially of the larger Kind, have pretty thick Coats, the eX- \*  
terior of which generally arises from the common Membrane,  
which fines- that Cavity of the Body thro' which the Artery  
pastes. Under this exterior Coat lies a thin cellular Coat, thro’  
which run many Vessels subservient to the Nutrition of the ar-  
teries ; under this lies the glandular Coat, which, perhaps, is no  
'more than a Part os the former; And under the glandular lies  
the muscular Coat, which is thick, strong, separable into several  
Laminae, and consisting of orbicular Fibres ; and the last Coat,  
constituting the internal Cavity of the Artery, is thin, and com-  
pos'd of longitudinal Fibres.

Whilst the Blood is, by the Action of the Heart, continually  
forc'd into the full Arteries, they are Observ’d to he manifestly  
and equally dilated thro' all their Circumserences; the.Strength

of the Coats compofing the Arteries resists their too great Di-  
latation ; and when the Action of the Heart ceases, by **the**Strength, especially of their orbicular Fibres, they are again .  
contracted into their former Dimensions. Now is by the Sepa-  
ration of Cohesion, especially in the orbicular Fibres of any  
Part of an Artery (sor Wounds of the external and cellular  
Coats are less dangerous) the Strength of the Sides is diminish'd,  
whilst the distending Cause remains, it will forthwith dilate the  
Artery more in that Pars, change its equable conical Figure,  
and expand the weaken’d Part into a Sack; and this is call'd **a**true Aneurysm, which properly signifies no more than the Di-  
latation of an Artery.

The Cause, therefore, os an Aneurysm is, every thing which  
lessens the Cohesion of the Coats in any Part of an Artery ;  
and it is certain, from frequent Observation, that this principally  
-happens when Arteries are prick'd or cut; For in Venesection  
it frequently happens, that a Ramification of an adjacent Artery  
is wounded by the Point of the Lancet, a sew Days after a  
Tumor hegins to arise, which raises the Skin, haS a manifest  
Pulsation, and is daily enlarg'd, unless it is in the Beginning  
Check'd by the Application os Compress and Bandage.

*As for Contusions of the Arteries*; it has been frequently ob-  
serv'd, that Violent Contusions of an Artery have produc'd an  
Aneurysm ; and a memorable Instance of thia is found in *Lan..  
Fist, de Motu Cordis et Ancuryfmalibns:* And I myself, says  
*Vanfwicten,* saw a remarkable Example of the fame Kind.

*v As for Distractions os. the Arteries.,* in practical Authors many  
Instances occur, in which, aster Violent Efforts, lifting too heavy  
Burdens, excessive Sneexing or Coughing, the distracted Arte-  
ries have degenerated into Aneurysms. Of this an Instance is  
found in *Hist, de l\* Acad. Royal, des Sciences, I An. ιγοο.* It is,  
also, observable, that those Horses which are forc’d to strain  
hard in drawing great Weights up ascending Ground, have  
Aneurysms, and varicose Tumors, in the Veins of their posterior  
Legs. The like Misfortune is, also, sometimes observ'd, in  
Porters.

*As for Corrosions of the Artcries*; it is certain, that in some  
Diseases the Humours may so degenerate, that, hecoming highly  
acrid, they corrode the hardest Parts of the Body ; by the Scurvy  
the hardest Teeth are consum'd, and a *Lues Vencrea* renders **the**largest and strongest Bones in the Body carious. A Virulent  
.Cancer, by its dire Contagion, consumes all the adjacent Parts.  
Thus in a Scurvy we often see, that when the Vesseis are cor-  
roded, the extravasated Blood under the Integuments produces  
livid Spots, and mortal Haemorrhages have been sometimes ob-  
serv'd to proceed from the same Cause. Hence we may easily  
Conceive hew the Coats os the large Arteries may he so cor-  
roded as to he extended into an aneurysmatic Sack. Two In-  
stances of this Kind are sound in *Lancisi de Motu Cordic et  
Aneurysmatibus. ......*

By whatever of these Causes any Part of an Artery is weak-  
en'd, it will in that Place yield more, and be expanded by the  
distending Blood: And as at every Pulsation os the Heart the  
distending Cause is afresh applied to the weaken'd Part of the  
Artery, the Capacity of the Aneurysm will he gradually in-  
creas’d. Hen.e Aneurysms are sometimes expanded, to.an in-  
credible Bulk, especially if they happen in the large Trunks of  
Arteries. A memorable Instance of this we have in *Ruys.ehii  
Observat. Anatom. Chirurg. Cent. Observat.* 38. In the largest  
Aneurysms it frequently appears, that the Membranes of the ex-  
Tended Sack are very thick ; whereas they might be suppos'd to  
he render'd thinner, on account os their Distraction. But this  
seems to happen because the Blood accumulated in such dilated  
Sacks, is concreted into polypous Masses, which heing applied  
to the dilated Coat of the Artery, may greatiy increase its  
Thickness.

We now come to inquire by whet Signs an Aneurysm may  
be known, and distinguish'd from other Tumors; since it is cer-  
tain from several Observations, that Very Ikilsul Surgeons in  
other Respects, have in this committed egregious Blunders, and  
by imprudently opening the Aneurysm, kill'd, instead of curing  
the Patient. An Aneurysm is, therefore, known to he present  
when the Causes already specify'd have preceded, and a Tumor  
. arises in that Part where, from Anatomy, we know that a large  
\_ Artery is situated; when a manifest Pulsation is perceiv'd in such  
a Tumor; and when, by a gentle Pressure, it disappears, or is  
. - greatly diminish'd, but immediately returns to its former Bulk  
when the Pressure is remov'd. But it is to be observ'd, that  
the Colour os the Skin in rarely chang'd by an Aneurysm, un-  
less it is of long standing, or Very large ; sor then the Skin he-  
ing corroded or attenuated by the Distraction, its Colour ap-  
pears red : Besides, in a small and beginning Aneurysm there is  
always a Pulsation; whereas when it has grown to a greater  
Bulk, the Pulsation is often not perceiv'd, partly because **the**. Coats os the Aneurysm are become thicker, and partly hecause  
the Impetus of the Blood propel’d from the Heart cannot act so  
strongly on the Aneurysm, when large, as to elevate it at each

Pulfation of the Heart. But when an Aneurysm is compress'd,  
especially is it is large, and near the Heart, unless the Com- .  
pression is made gently and gradually, there is great Danger lest  
the Patient should be suddenly suffocated, whilst the concreted  
Blood express'd from the Cavity of the Aneurysm *so* resists the  
Blood forc'd from the Heart thro' the Artery, that the Motion  
Of the Heart is suddenly suffocated. Nor is a large Aneuryfm,  
when compress'd by the Hand, to he all at once set ar Liberty  
from the Compression, but gradually; otherwise the Patient  
sails into a *Deliquium* ; hecause the Blond suddenly rushes into  
this empty Sack. For this Reason, upon compressing a large  
Aneurysm, the Patient immediately complains of an intolerable  
Oppression about his Breast. But when an Aneurysm happens  
in the internal Parts, it is not to be known without great Dissi-  
culty : But if the known Causes hive preceded ; if an unusual  
Pulsation is perceiv'd by the Patient; if the Motion of the  
Heart is disturb'd, and almost suffocated by an increas'd Velo-  
city os the Blood arising from muscular Motion, or any other  
Cause, it is highly probable that there is an Aneurysm in the in-  
ternal Parts.

The Misfortunes produc'd by an Aneuryfm depend on this,  
that it, by its Bulk, compresses the adjacent Parts, and by that  
means disturbs and hinders their Action; that it changes the Ca-  
Vity of the Artery, and destroys the equable Circulation of the  
Blood thro' it; by which means the Action of the Heart is at  
last greatly hinder'd. Hence it is obvious, that very Various  
Disorders may he produc'd by an Aneurysm ; but that all **the**Misfortunes arising from it are the worse, the larger, and **the**nearer the Heart it is.

Another Source of the Misfortunes arising from an Aneurysm  
depends on this, that the Fluid contain'd in the aneurysmatic  
Sack begins gradually to degenerate : For in a large Aneurysm  
the Blood is almost at Rest, or at least moves Very flowlv; hence  
the Blond has less Attrition and Heat, by which means it ac-  
quires a Disposition to that Degeneracy which happens from a  
' Diminution of Motion and Heat; for polypose Concretions  
begin to be produc'd ; and, when thefe are once form'd, they  
have a Power of associating to themselves similar Parts os the  
affluent Blond, by which means the former Mass is augmented,  
as is observ'd under the Article FIBRA: Hence in large Aneu-  
rysms, when dissected. Very often much Blood is not sound, but  
**a** surprising polypose Texture form'd of stagnant Blood, which  
by the Application of its own Substance so strengthens rhe weak  
Part of the Artery, that it does not soon break, but the Patient  
often lives a great while: At last the concreted Blond, together  
with the Blood stagnant between the *Lamina* of the polypose  
Substance, begins to be corrupted, and to acquire so remarkably  
**a** resolvent Acrimony,aS totally to consume the adjacent Vesseis,  
Membranes, Cartilages, and even the hardest Bones. Practical  
Authors abound with Observations of this Kind. But whilst  
the Blood continually acts on that corrupted Substance lodg'd in  
the Sack of the expanded Aneurysm, a putrid Cacochymy he-  
gins to be form'd ; and hence an hectic Fever, gradually con-  
fuming the Body, arises. That large Aneurysms have termi-  
nated in this manner, is certain from Experience, unless by a  
Suffocation of the Circulation, or a Rupture os theAneurvsm,  
the Patients died before the Contents of the Sack acquir'd such  
. a Degree of Malignity.

Therein Danger os instantaneous Death from the Rupture of  
such an Aneurysm; for by this means the Patients die in a Mo-  
. ment, when they least expect it. Of this there is a memorable  
Instance in *Mem. de ll Acad, des Sciences, st An.* I 733.

**1** When an Aneurysm happens in the internal Parts of the Body,  
there is but small Hope os a Cure ; all that can he done is, by  
weakening Lise by means of Venesections, and a flender Diet,  
to diminish the Impetus and Velocity of the Circulation ; For  
thus the Increase os the Aneurysm is aS much aS possible pre-  
vented. The greatest Rest both of Body and Mind, are, also,  
to be order'd, for the same Purpose. When there is Access to  
the Hands, is the Aneurysm has not already grown to a great  
Bulk, something may be hop'd from a prudent Compression ;  
in which it is to be observ'd, that it is at the same time greatiy  
expedient, gentiy to compress the Artery above the Aneurysm :  
Thus the Impetus of the Blood thro' the Artery is diminish'd,  
and when the Aneurysm is compress'd the Blood will not so  
easily regurgitate to the Heart. When nothing is to be expected  
from Compression, or when it has been us'd in vain, the Extirt.  
pation of the Aneurysm is the only Method remaining, which

. may be happily instituted, as we learn from Experience. *Rjeysch,  
. in Obs. Anatom. Chirurg. Concur. Obs.* 2. gives us an Instance  
of this Kind, in which the Event was happy, tho' the Arm was  
already seiz'd with a Gangrene.

To this we may, also, refer an Aneurysm of the Heart, to-  
' gether with its Origin, Signs, and Effects. An Aneurysm of  
the Heart is a preternatural Dilatation of its Cavities. This  
‘ Disorder frequently occurs in Practice, tho' it has’ not hitherto  
been Very accurately describ'd. We may easily conceive, that

all those Misfortunes may happen to the Heart, which produce  
Aneurysms of the Arteries when their exterior Coats are de-  
stroy'd or weaken'd by Wounds, Contusions, Distractions, or  
Corrosions. For Observations made on Carcases evince; that  
Wounds have penetrated to the Heart; and that Inflammations,  
Suppurations, and Erosions, have been’ found in it. A me-  
morable Instance of this occurs in *Act. Phys. Med. Tom.* 2. But  
besides these Causes, other Circumstances occur, from winch a  
preternatural Dilatation of the Heart frequently arises: ForThe  
Action of the Heart consists in forcing the Blond receiv'd from  
the Veins into its Cavities, into the Arteries; so that, by every  
Contraction os the Heart, its Cavities are totally evacuated:  
The Force of the Heart must,thererore,surpass the Resistance of  
the Arteries. But if this Resistance is so far increas'd as to sur-  
mount the Force of the Heart, that Organ cannot be totally  
evacuated ; but the Blood being gradually accumulated in its Ca-  
vities, will dilate them. In the Heart is observ'd a surprising  
Property, by which, even aster Death, it is excited to Contra-  
ction, by forcing Air, or tepid Water, thro' the Veins into its  
Cavities : Hence, when the Blood is not totally expel’d from its  
Cavities, the irritated Heart is frequentiy contracted, so as to  
expel its Contents, as appears evidently at the Point of Death,  
when the Heart is no longer able to expel the Blood into the Ar-  
teries: For then the Heart palpitates Very quickly, till, heing  
overcome by an invincible Obstacle, it at last ceases totally;  
but whilst the Heart endeavours, by its strong and frequentiy- ‘  
repeated Efforts, to overcome the Resistance of the Arteries,  
the Fibres constituting the Sides of the Cavities of the Heart are  
strongly distracted, whilst the Fluid contain'd in the Cavities of  
the Heart, not capable of being express'd, is compress'd., and  
makes aS great a Resistance aS the hardest Body. Hence **the**Cohesion of the too much distracted Fibres of the Heart is  
weaken'd, and consequently the Dilatation os its Cavities is aug-  
mented. .

Hence it is obvious that flight Causes are sufficient to render  
the Heart aneurysmatical: For whilst the Force of the Heart is  
able to surmount the Resistance of the Arteries, its Cavities re-  
main in their natural Dimensions; but as soon as the Resistance  
of the Arteries begins to prevail over this Force of the Heart,  
its Cavities will begin to be dilated.

This Dilatation may happen either in the Right Cavity alone,  
when the free Circulation os the Blood thro' the pulmonary Ar-  
tery is hinder'd; or it may happen in the Left Cavity of the  
Heart, when there is any Impediment in the Aorta ; or when  
both these concur, a Dilatation will happen in both Cavities of  
the Heart. But it is to be observ'd, that an Impediment in the  
pulmonary Artery may produce a preternatural Distention of the  
Right Cavity of the Heart, whilst the Left Cavity retains its pro-  
per Dimeniton; but when the Left Ventricle is not able to ex-  
pel its Blood, the pulmonary Veins cannot empty themselves  
into it: Hence neither can the pulmonary Arteries convey their  
Blood to the pulmonary Veins; by which means the Resistance  
to the Right Ventricle will be increas'd, so that it may be di-  
lated by the same Causes. .The Right Ventricle, which is far  
weaker than the Left, more easily yields to distending Causes:  
Hence all other Circumstances being alike, it will be more fre-  
quently distended, and dilated to a larger Capacity.

‘ Many Observations evince, that in Carcases the Heart has  
been found thus dilated, memorable Instances of which occur in  
the *Medical Essays, Vol.* II. *Hist, de stAcad: des Sciences sc An.*I735. *Lancist de Subitaneis Mortibus.*

Every thing therefore which increases the Resistance to the  
Blood forc'd from the Cavities of the Heart may produce a pre-  
ternatural Dilatation of it; too great a Quantity of Humours  
in plethoric Persons, an Increase of the Circulation in acute  
Diseases, an Obstruction of the Blood thro' the Extremities of  
the Arteries by an inflammatory, atrabiliarious,or polypose Con-  
dition, Faults of the Arteries, by which the Blood cannot pass  
freely thro’ them, such as their excessive Callosity, their Dege-  
neracy into a cartilaginous, or eVena bony Substance, and Aneu-  
rysms of them, are the principal Causes why the Cavities of the  
Heart are distended beyond their natural Dimensions. It, also,  
happens, tho' rarely, that Air contain’d in the Cavities of the  
Heart surprisingly distends them. An Instance of this is found  
in *Ruyseh. Epist. Problem.* 16.' In this Case perhaps the Blood,  
by an intensely quick animal Motion, or by Diseases, sends off  
its contain’d Air, which being collected in the larger Cavities,  
and rarely'd by Heat, distends all the Parts. -

That this Misfortune is present, or at least to be dreaded,  
may be known,1 if continual Palpitations of the Heart are pre-  
sent ; if the Signs evince that the Lungs are so obstructed as not  
to allow a free Passage for the Blood ; if the Pulse is Very hard  
and full, with an intolerable Anxiety upon an Increase of Mo-  
tion ; then we justly conclude that such an Obstacle is lodg'd in  
the Aorta.

Then the Circulation is surprisingly disturb'd, and so various  
**and** astonishing Phenomena appear, as seem to surpass **the Laws**

**of** Natnfe , the Pulse is in every respect unequal, sometime-  
defective, and immediately after strong and brisk ., Respiration  
hecomes highly difficult, and Convulsions are often produc'd,  
whilst the Heart is at Rest, and immediately aster contracted by  
a Violent Spasm ; thus for a Moment the Motion of the Blood  
thro\* the Arteries of the Brain ceases, and immediately after is  
mov'd with the greatest Velocity; by which means the Secretion  
and Motion of the Spirits are greatly disturb'd; all the Senses,both  
external and internal, are often disturb'd; there is an intolerable  
Anxiety; and there is a Violent Struggle hetweenLife and Death,,  
till the latter puts an End to the Patient’s Misery.

Hence it appears why, after a long-continu’d Asthma, and  
Violent inflammatory Diseases of the Breast, such terrible Dis-  
orders often remain.

When this Disorder is once form’d, no Recovery can be  
hop'd for, since a Weakness of the Heart heing at the same  
time produc'd, the Difficulty of removing the Obstacle is in-  
creas'd : Hence the terrible Disease is augmented, together with  
all its Symptoms, especially if Life is pretty vigorous.

. The Whole of what can be done by Art is, for some time to  
prevent the Increase of the Disorder, and by that means render  
Lise more tolerable than it would otherwise be : This is done  
by keeping the Patient so easy and quiet, that the Motion *os* the  
Heart may not be greater than is absolutely necessary to the  
Continuation of Lise. Hence great Rest, both of Body and  
Mind, is requisite; great Quantities of thin Fluids ought, also,,  
to be drank, the best of which are Whey, Milk, and Water,  
edulcorated with Honey, and Spaw-waterS mix'd with Milk ;  
but the Aliments ought to be mild, thin, and exhibited in small  
Quantities at proper Intervals, that only a small Quantity of  
mild Chyle may he mix’d with the Blood. All stimulating Sub-  
stances are, also, to be carefully avoided, and such Medicines  
used aS. dilute the Blood, open the Vessels, and lubricate the v  
Passages; that there may be a quick and expeditious Circulation  
of the diluted Humours through the lubricated and opened .  
Vessels.

*Is* by the same Causes an Artery wounded in the like man-  
ner, remains infirm after the Cure, the same Misfortunes  
happen.

When in the most violent Diseases, and obstinate chronical  
Pains, especially of the Hcad, Surgeons openche temporal Ar-  
tery, they are always careful, after a proper Quantity of Blood  
is discharged, so to secure the Wound os the Artery, by a Plate-  
of Metal, or something of a like Nature, that the Force os  
the Blood distending the Artery at each Pulsation of the Heart,  
may not extend, the Rudiments of the beginning Cicatrix be-  
yond the equable Dimension of the Artery, and produce an -  
Aneurysm: And if this Compression of the wounded Artery is  
neglected, such a Misfortune will almost always happen. This  
is frequentiy observed when unluckily in the Flexure of the  
Cubit, the adjacent Artery is Opened with the Vein, and the  
Wound not secured by a proper Pressure; which is, also, far  
more difficultly obtained here than in the Temples, where the  
wounded Artery may be fo pressed to the herd Cranium, that no.  
Dread of a future Aneurysm remains. Hence in this Place,,  
especially, we may safely inssitute Arteriotomy, which is per-  
heps too.much abstain'd srom by Physicians,tho’ it may be safely .  
perform'd by a lkilsul Surgeon; and,as *Severinusscle Efsicac. Me-  
dic. Lib. I. Part 2.* evinces, has often removed Disorders, after  
all other Means have been tried in Vain.

When from the same Causes all the Coats of the Artery  
are destroyed together, and the Artery pours out its Fluids  
into the adjacent distended Parts, from whence it can find no  
Passage, there is formed a Collection of extravafated Blood,  
which is perpetually increased, and without any determinate  
Measure. This Tumor is soft, has scarcely any Pulsation, is  
livid, does not disappear by Compression, soon putrefies, and  
by that means causes a Gangrene of the neighbouring Parts.  
Tins is a spurious Aneurysm, the Cause, Signs, and Effects,  
Of which, are known by this Description.

If an Artery is so wounded that the Cohesion os its Sides,  
being destroy'd, the Blood contain'd in its Cavity may be diss  
charg’d, whilst this Blond is pent up by the entire Skin, or Far,  
or Blond coagulated in the Wound ; it will make a Way sor it-  
self in the *Membrana Adiposa,* which it will fill, and often  
raise to a large Tumor: For the distending Mass will be in-  
creased by the Blood continually flowing from the ruptured Ar-  
tery, till the Skin can yield no farther, or the adjacent Parts  
hinder the 'farther Collectinn of ths Blood in tho *Membrana.  
Adiposo,* or a Thrombus of coagulated Blood cluses up the Aper-  
ture of the wounded Artery. After Violent Contusions, such  
large Tumors often arise, and are of a livid, and often of a  
totally black Colour, in Consequence os the extravafated and

coagulated Blood appearing through rhe Skirt.' In scorbutic Pa-  
yients, aster the Veffels are corroded, the like Misfortunes often  
happen; but as this generally happens in the smaller Arteries,  
the Part is not raised to a very great Tuinos, but flat black Spots  
are form'd. That enormous Tumors are, however, sometime\*  
produced by this Cause, is certain from an Instance recorded  
in *Severinus de Efficac. Med. Lib. I . Part. 2..* which Observa-  
tion evinces how large a Quantity of Blood may he collected in  
the *Membrana Adepofa,* and how long it may remain without  
Corruption after it is extravasated, provided a free Access is not  
given to the Air. ‘ . - - -

Because such .4 Tumor has some Signs in commonwith a true  
\_'Aneurysm, Surgeons have given it the same Appellation, shod  
for the sake os Distinction they have given it the Epithet of  
spurious;' sor in a true Aneurysm the Coats of the Artery, tho'  
weakened, remain coherent, and hinder the Discharge of the  
Blood*, but* in a spurious Aneuryfm the ruptured Coats afford a  
free Passage for the Blood. The Antients used a less ambiguous  
Word, and called such a Disorder *Ecchymosu,* which, according  
to *Galen,* in *Method. Medend. Lib.* 4. *Cap.* I. generally happens  
with a Contusion and Rupture of the Veffeis; tho'he, also,  
tells us, that it sometimes happens from an Anastomosis, a  
Transudation, or a Corrosion. Small Tumors, arising from ex-  
travasated Blood under the entire Skin; are still so called by Sur-  
geons : And if from the Laceration of a large Artery a const-  
derable Tumor is produced, especially if any Pulsation is per-  
.CeiVed in it, it is generally called a spurious Aneurysm.

So far aS I know, no mention is made of an Aneurysm in  
*Hippocrates*; and that Definition of an Aneurysm given by  
*.Galen,* in7r. *de Tumoribus prater Naturam, Cap.* Ii. seems ra-  
ther to agree with what we call a spurious Aneurysm. For he  
' telis us, " That the Disorder of an opened Artery is called an  
" Aneurysm. This happens when the Artery, being wounded,  
'" the adjacent Skin is brought to a Cicatrix, whilst the Wound  
" of the Artery is neither united, covered with a Cicatrix, nor  
" stop’d by Flesh.” But the Signs by which he distinguishes  
this Disorder from other preternatural Tumors,rather agree with  
a true Aneurysm. For he adds, " Disorders of this Kind are  
" known by the Pulsations of the Arteries; and when they are  
" Compressed, the whole Tumor disappears, the Substance pro-  
'" during it returning into the Arteries; and this Substance is a  
" thin yellow Blood mixed with a large Quantity of sine Spi-  
14 fits. But this Blood is much hotter than that contained in  
" the Veins, and when the Aneurysm is wounded, bursts out  
" with such Violence, that it can hardly he stops,’\*

T he Cause, therefore, of a spurious Aneurysm, may he every  
thing which destroys the Continuity of the Sides of an Artery,  
whilst the Skin remains entire; or in case there is a Wound,  
whilst the Aperture of the Skin is so closed up as to hinder the  
free evacuation of the extravasated Blond : Hence, heing con-  
gested in the *Tunica Collulosu,* it distends the Part by a Tu-  
mor. . .

- It is of great Importance to distinguish hetween a spurious and  
- - a true Aneurysm. Hence their respective Signs ought to he ac-  
curately known. We know that a spurious Aneurysm is pre-  
sent, from the preceding Causes, especially Violent Contusions,  
because the Tumor increases sar more quickly In a spurious than  
in a true Aneurysm. Besides, the Tumor is not circumscri-  
bed by Very distinct Limits, hecause it is every-where dispersed  
thro' the *Tunica Collulosu*; but in a true Aneurysm the Cir-  
'cumserence of the Tumor is limited by the dilated Coats of the  
Artery r Add, that a true Aneurysm, at least in the Beginning,  
before it grows to a great Bulk, has a manifest Pulsation cor-  
responding to that of the Arteries; whereas a spurious Aneurysm  
has not so manifest a Pulsation, tho' this Sign is sometimes fal-  
lacious, as is obvious in the Instance referred to in *Severinus.*A true Aneurysm, unless Very large, totally disappears when  
pressed, hecause the Blood is forced into the Cavity os the Ar-  
tery ; but this does not happen in a spurious Aneurysm, which  
when pressed, yields indeed, but the Tumor is then augmented  
in the adjacent Parts, in a true Aneurysm, at least in the Be-  
ginning, the Colour of the Skin is rarely or eVer changed ;  
whereas in a spurious Aneurysm, the Blood extravasated under  
the Skin tinges it with a preternatural Colour.

\*; The principal Effects of a spurious Aneurysm are, that the  
extravasated Blood, by its Bulk, hinders the Action of the ad-  
jacent Parts, and at last, by its Continuance, becoming cor-  
rupted, may acquire such an Acrimony aS may produce the most  
violent Inflammations, Gangrenes, and Corrosions. But if the  
Access of the Air is hindered, the extravasated Blond may re-  
main long incorrupted, especially if antiseptic Fomentations are  
applied. For the Cure of this, and other Disorders os a like  
Nature, see **CONTUSIo. -**

Other Effects of a large wounded Artery are easily under-  
stood, from Physiology; as, aiso, the Phenomena of a Nerve  
wounded.’ t . .

AH these are hesore explained.

But that the Cause may appear plain of those surprising  
- Effects which arise from a Puncture, or partial Division of  
the Nerves; the following Considerations, from Anatomy  
. and Theory, are to he adverted to.

Nothing is more surprising in medicinal Observations, than  
th ♦ in the soundest Person the gentle Puncture of a Nerve so  
disturbs all the Parts of the Body, that nothing os his former  
Health remains: For intense Pain, an acute Fever, *Deliriums,*violent Convulsions, Inflammations and Suppurations, a Gan-  
grene, and sometimes Death, succeed a Very flight Wound of  
the Nerves: Besides, it is certain from Experience, that Very  
inconsiderable Changes induced on the Nerves, sometimes sur-  
prisingly disturb all the Actions of the Body.

Thus tickling the Soais of the Feet produces great Changes  
in the Body ; sor almost all the Muscles and Tendons os the  
Body are forthwith agitated. Laughter is forcibly extorted, and  
the Strength immediately destroyed. There have, also, been  
Instances in which Convulsions and Death have been produced  
by so flight a Cause, and eVen a feigned Attempt to produce this  
uneasy Titillation has produced the like Phenomena, in Persons  
who have before experienced It. The simple Agitation of a  
Feather in the Nares or Fauces, the Crawling os Worms in the  
Stomach, or the Fluctuation of Phlegm, thereby inducing a  
flight mechanical Change on the Nerves dispersed thro' these  
Parts, greatiy disturb the whole Body.

Tho' from the hitherto known Structure of the human Body  
the surprising Effects arismg from a Change of the Nerves in the  
human Body cannot he accounted for; yet from such a Kinow-  
ledge we acquire great Light in those Disorders which succeed  
Wounds of the Nerves. Hence we are from Anatomy and  
Theory to consider the following Things:

Every Visible Nerve is a Congeries of smaller Nerves mu-  
tually connected by extremely fine Membranes, Arteries,  
and Veins, with interwoven Lymphatics, and then all co-  
. Vered with a Common Membrane. ..

Thro' all these Vessels composing a NerVe, their proper  
Liquid,stows perpetually from the *Hentt,Cerebrum,Cereaellum,*and *Medulla Spinalis.* **These Vefleis have** always a consider-  
able contractile Force.

*Ac for visible Nerves*; we have only treated of such as can  
he Viewed by the Eye: For, aS is already observed. Anatomists  
have found that these may be separated intoother smaller Nerves,  
which are still so many Congeries of Nerves as yet smaller.'  
*Lewenboeck, in Torn.* 3. *Epist.* 36. informs us, that he sound **a**Nerve no larger than an Hog’S Bristle to consist os at least thirty  
Other Nerves, each of which was covered with its proper Mem-  
brane: He afterwards observed the same thing in sar smaller.  
Nerves. He, farther, observed minute and tender Blood-Vessels  
running hetween these nervous Fibriis. Anatomical Injections,,  
especially in young Carcases, sufficiently evince, that a large  
Number of Vessels run thro' the Substance of the Nerves ; all  
Visible Nerves, therefore, deriveche smallest Part of their Bulk  
from the nervous Substance properly so called, which draws its  
Origin from the medullary Substance of the *Ccrebrum* and *Cerar  
bellum,* collected into the *Medulla Oblongaturifoguls* spinal Marrows  
Slender Coats covering the small Fibrils, connectingMembranes;,  
and Vessels of all Kinds dispersed thro' them, constitute the  
principal Part of every Visible Nerve: Thus these inconceivably  
tender Veffeis are defended, and safely conveyed to those Parts  
of the Body, where,laying aside their thicker Coats, they ought  
to perform the Functions of Nerves. The optic Nerve, fur-  
nished with Coats from both Membranes of the Brain, in its  
Course appears tough and firm ; but when, laying aside its Coats  
in the Bottom of the Eyes, it is expanded on the Retina, it is  
so soft, that unless it was sustained by the equable Pressure of  
the circumambient Liquid, it would sail into a kind of shape-  
less Mucus. But it is certain, from anatomical Injections, that  
numberless arterial Veffeis run thro’ the Middle of the Retina-

All the Veffeis which constitute a Visible Nerve, receive pro-  
portional Liquids propel'd by the Force os the Heart and Ar-  
teries ; nor are we to doubt the Existence of those small Veffeis  
which constitute the Coats covering the nervous Fibrils, since  
anatomical Injections evince, that arterial Ramifications convey  
the impell'd Fluids thither. But that the Nerves themselves,  
properly so call'd, are pervious, and that thereJs a perpetual  
Motion of «.subfile Liquid thro' them, cannot be demonstrated  
to the Senses: But if we consider that the medullary Substance’  
of the *Cerebrum* and *Cerebellum,* which is all continuous to  
- the cortical and vascular Substances, is spent in constituting  
**the** nervous Fibriis, and as continuous to them ; that so  
**large A** Quantity Of the purest arterial Blood , is convey'd to

the Brain, that when the medullary Substance of the *Cerebrum*and *Cerebellum* is either destroy’d or compress’d, the whole  
Function of the Nerves arising thence is abolish’d ; that when  
the Nerves are ty’d in their Course, all thein Action is destroy’d  
under the Ligature, but remains enure above it, it will be suffi-  
ciently obvious that the nervous Fibrils receive an highly subtile  
Fluid secreted by the Fabric of the *Cerebrum* and *Cerebellum,2sA  
cawtey* it, during the Whole of Lise, thro’ hinhly-distinci Ca-  
nils, to all the Parts of the Bodythat the different Operations  
of Sensation and Motion may be perform’d.

Every wounded Nerve, therefore, fuffers, not only as it is a  
Nerve, but, also, because it contains all Kinds of Vefleis, the  
Soundness of which, and their Action depending upon it, is in-  
jur’d by the Wound,

But becaufe in their Origin from the medullary Substance of  
the Brain, the nervous Fibriis, being distincti are in their Course  
cover’d with their proper Membranes, and thus remain separated  
from their adjacent Fibrils; and as the whole Congeries of  
Nerves constituting the visible Nerve is covet'd with a pretty  
thick Coat; the Reafon is obvious, why every vssihleNerve ap-  
pears tough and hard, the’ that which is properly call’d a Nerve  
arises from the foft Pulp of the Brain. The whole Contractility,  
therefore, of a visible Nerve, by which its divided Extremities  
retire from each other, depends on the Coats covering the ner-  
vous Fibrils, and the Veffeis dispersed thro’ them.

When therefore the Parts of a Nerve are intirely cut thro\*  
and divided, they recede from the Place of the Wound,  
towards the fix’d Parts to which they are connectsd, and bide  
themselves in the surrounding Solids, by which they are com-  
pressed ; and by this means their own Orifices, and thofe of  
" their Vessels,are dosed ; fo that no other Damage happens,he-  
sides what is already mention’d.

If such a Nerve as is describ’d in the preceding Aphoristn is  
intirely divided, the Coats covering all the. Fibrils, as, also, the  
Covering surrounding the Whole of them, collected together by  
their Elasticity and Connection with the other Parts, are re-  
traced on both Sides: But as considerable Arteries, when di-  
vided and retracted, are by the Pressure of the adjacent Parts,  
under which they are lodg’d, and their own Contractility, so  
closed up, as to discharge no Blood, it is sufficiently obvious,  
that the tender nervous Veffeis, and those distributed thro’ thein  
Coats, are forthwith clofed, and can no longer transmit the  
Humours convey’d to them. All the Functions, therefore,which  
depend on the Soundness of these Vessels, will he destroy’d, and  
the Symptoms before-enumerated will happen.

If a Nerve is cut, or prick’d, in such a manner that some  
of the fmall Fibres are' dissolv’d which compose the large  
Nerve when united, the dissolv’d Parts receding, will draw  
the smallest Fibres which connectsd the small Nerves to each  
other, and to the Veffeis; from whence there will arise *a* per-  
petual and slow Laceration, and therefore a very great, acute,  
and continual Pain: But the Parts still cctietiog, wist alone  
sustain the Force which the entire Nerve sustain’d before.  
' They will therefore he more distractsd and lacerated, and  
Consequently afflicted with'a more acute Pain. By these  
Distraction they will, also, he so compressed, as to prevent  
the Circulation of their Fluid. When the one Part divided,  
Xod the other cohering, arc thus assedted, the intermediate  
Veffeis are compressed ; hence the Blood, Lymph, and Spi-  
rits. are compressed, ailed upon, and accumulated; for which  
Reason there is an Inflammation produc'd by the Blood,  
Lymph, and Spirits, about the Parts.

Hence the adjacent Nerves and Tendons, together with  
thein Coats, as, also, the Mufcles and Veffeis, are stretch’d,  
constrictsd, and convulsed ; by which means the Membranes  
of the *Cerebrum,Cerebellum,*and fpinal Marrow,are contracted  
and vellicated, and the Action of the Brain is disturb’d.

Henee naturally follows a Series of all the Phenomena be-  
fore enumerated. -

' If a visible Nene, consisting *of many small* Nerves, cover'd  
with their proper Coats, and inclosed in a common Membrane,  
is so woundedjthat forne of thesis nervous Fibriis, by their Union  
- constitutiog the large Nerve, are divided, whilst others remain  
entire, all those Functions will he destroys which depended on  
the Soundness of thofe Fibrils, whose Cohesion is now abolish’d.  
Besides, as has heen already observ’d, there separated Extremi-  
ties of the Fibrils will more recede from each other r But this  
cannot heppen without a Distraction and Laceration of the flen-  
der Membranes connecting the nervous Fibres mutually applied  
to each other, and thus an acute and continual Pain will be prof  
duc’d. But the Fibriis left inure, will now alone sustain all that  
Force which hefore they here united, whilst by the various  
Actions of the Muscles, the Flexions and Extensions of the

Joints, and the Pullatioris of the Arteries, the Situation of the  
Parts is chang’d ; They will, thereforethe necessarily more dri.  
tracked; whence an intense Pain will, also, he produold. For  
if we soppofe an intire Nerve to consist of an hundred nervous  
Fibrils collectsd into one Congeries, and that by a W ound fifty  
of these are divided, the remaining entire fifty will he more than  
doubly distractsd by the same Causes; because half os thfe  
Cohesion, by which they resisted the distracting Causes, is re-  
moved : It is shewn under the Article OBsTRUcTIo,thatevery  
-Cause which distracts and lengthens the Vessels, lessons their  
Capacities, and may consequently produce an Obstruction ;  
whence numberless Misfortunes may arise. Thus we hegin to  
perceive whaI.Missortunes arise from Nerves wounded, but not  
intirely divided ; for the divided Parts receding on both Sides,  
will contraci the Orifices of the divided Vessels, and hinder the  
free Passage of the Humours thio’ them. The Fibrils, as yet  
cohering, are less able to resist the distracting Causes; hence they  
will he elongated, and lessen the Diameters of their Vessels  
By this means the free Circulation of the Humours thio’ those  
Vessels will be hinder’d ; and by the Impetus of the succeeding  
vital Fluid on the obstructed Places, an Inflammation will be pro-  
due’s, not only in the large Blood-vessels, but the fame may.  
also, heppen in the other decreasing Series of Veffeis, as far as  
those of the smallest, that is, the nervous Kind. What enor-  
mous Symptoms may happen from this, is evinc’d by the Gout,  
the Rheumatism, and arthiiuc Pains; in which Disorders an  
Inflammation of the tender Vessels produces the most racking  
Tortures: But an Inflammation once form’d,may be succeeded  
by all its different Terminations,which are very various,according  
aS the Inflammatinn is in larger or smaller Veffeis. After a  
Phlegmon, a mild Suppuration happens: An exulcerated Erysi-  
pelas in the fmall Vessels,discharges a thin ichorous Fluid; A true  
Rheumatism never suppurates; and a Gout lodg’d in the most  
subtile nervous Vessels,consumes the most solid Parts into a kind  
of Calx. Hence numherless other Misfortunes may arise.

*As for the adjacent Nerves*; such is the Frame of the humari  
-Body, that when one small Nerve is wounded, the adjacent  
Parts, and sometimes those considerably distant, are affectsd.  
When the external hard Crust of a Tooth, being divided or cor-  
Iupted, lays bare the tender nervous Fibrils dispersed thro’ the  
Substance of the Tooth, the Access of the cold Air alone af-  
flicts with an intolerable Pain, not only the affeoled Tooth, but,  
also, the whole Side of the Head in which it is fix’d: So that  
the adjacent Parts are frequently raised to a considerable Turnori  
But when the pain’d Nerve is destroy’d, by the Application of  
Alcohol, or the Extirpation of the Tooth, all the Pain ceases.  
In *Hildanus,* and other practical Authors, there are various In-  
stances in which the flight Punctiireof a Nerve or Tendon, has  
not only immediately affectsd all the adjacent Parts, but, also,  
so far disturb’d all the Functsons of the Body, as sometimes to  
induce Death. But whether the Propagation of a Disorder in  
one Nerve to all the adjacent Nerves, and to the Brain, happens  
by a Continuation of toe Membranes covering the Nerves, and ’  
which arc esteem’d Productions of the Meninges ; or whether it  
happens from the Irritation of the nervous Substance, properly so  
call’d, and which arises from the medullary Substance of the  
Brain, we shall not here dispute; It is sufficient for our Pur-  
pose, that, after Wounds of the Nerves, these Misfortunes  
ensue, and perhaps both these Causes may concur to their Pra-  
duction. Thus the Membrane lining the Pelvis of the Kidney,  
is, by a contiouid Course, convey’d to the Ureters, Bladder;  
and *Urethra .,* and when a sharp Stone, lodg’d in the narrow  
Part of the Pelvis, vellicares this internal Membrane, a Pain,  
and troublesome Strangury, are often perceiv’d in the Extre-  
mity of the *Urethra.* When, in Venesection, the tendinous  
Membrane covering the Mufcles of the *Humerus* and *Cubitus, is*wounded by the Point of the Lancet, soon aster Pain, Inflam-  
mation, and other terrible Symptoms, are produc’d throughout  
this whole Membrane.

He who compares the Phenomena before-men ston’d with  
what has heen said in this and the two preceding Aphorisms,  
will easily see why so many, and so terrible Disorders, are pro-  
duc’d by Wounds *of* the Nerves.

. .. Hence, also, we understand what Sort of Punfiinre, Lace-  
ratinn, or Wound of a Nerve, is so dangerous, and why j  
as, also, why the fame Things happen, with refpeci to Ten-  
dons, Membranes, and many Kinds of Vessels.

The more tense the Nerve is. and the sewer Fibres of the  
wounded Nerve remain entire, the greater their Distradtion wist  
he, the more violent Symptoms will be produc’d, and the more  
intense Pain will he present: But such terrible Disorders do not .  
accompany a Nervc.whicti is by no means tcnse,and which is en-  
tirely divided. But that the like Misfortunes should happen to the  
Membranes,is not surprising,since they have many Nerves difper-  
fed thro’ thein Substance; as,-also, to the Tendons, whictictieing

Continuations of the muscular Fibres, and consequently seem **to**arise from the Nerves, as has heen already observ'd. The same  
will, also, happen in the Veffeis form'd of a Convolution of the  
Membranes; thro’ which, also, are disseminated the Nerves sub-  
servient to Sensation, Motion, and Nutrition.

Having already treated of the Definition, Causes, Effects,  
Diagnostics, Prognostics, and. other-Circumstances, of a simple  
TVound ; it now remains that we consider its general Cure.

In order, then, to the healing of a Wound, it is necessary.  
First, To take away whatever heing left there, hinders its  
Union, whether it proceeds from the Liquidsand Solids cor-  
. rupted, from the wounding instrument, or. any other Cause. -

Secondly,. To.supply what is lost by a Regeneration os what  
is taken away.. - . .

Thirdly, To unite the separated Parts, and keep them in

. . Union. ......... -

Fourthly, To form a Cicatrix as like as possible to the na-  
**tural** Skin. ‘ . 1 .

A Cure is such a Change ofalivingBndy,as removes that Con-  
dition which is call'd a Disease, and restores that the Removal  
of which produc'd the Disease.. But.a Wound is a recent and  
bloody Solution of Continuity in soft Parts, made by an hard  
and sharp Body. The Cure, therefore, ‘of.aiWound, is the Re-  
stitution os the natural Cohesion of the Parts separated by the  
wounding Cause. Now whether there is a simple Division os  
Parts, hesore cohering;. or whether there is a great Loss of Sub-  
stance, made by the wounding Cause, theremaining Lise in the  
Patient, by an inimitable Artifice, unites what is separated, and  
restores what is lost. Physicians and Surgeons remove whatever  
**.can** hinder this salutary Effort os Nature, and supply what  
can assist it ; and this is all. that Art can do.. Let those who  
think they can do more, attempt the. Consolidation of the  
flighted Wound in a Carcase; let them apply the most cele-  
brated Vulnerary Balsams, and cherish the Part with an Heat  
equal to that os a sound Body; and still the Event will evince,  
that the Nature of a created Body is alone sufficient fora Cure,  
and that, without that Nature, nothing can be produc'd by Art.  
In the following Numbers are recounted all those Things  
which are always requisite to the Cure of Wounds.

I. Every thing lodg'd in a Wound of a Nature foreign to the  
.Parts of the human Body, can never adhere to them, and will,  
so long as it remains there, always hinder the Union os the se-  
parated Parts. When the elevated Skin is divided hy the Lan-  
cet, and a Ball of pure Gold put into the Wound, its Lips will  
never unite ; but, for many Years, there will remain an Ulcer,  
daily discharging Pus : But if that foreign Body is remov'd, its  
Lips, unless hecome quite callous by their continual Attrition  
with the hard Body, will in a few Days be consolidated. It is  
no matter whether that foreign Body is a Part of the wounding  
Instrument, or something else,which has penetrated the Wound  
along with it; or whether the extravasated Humours, or solid  
Parts, are so chang'd by the wounding Cause, as to lose those  
Properties requisite to their being again united to the live Parts.

- In Battles, Balis' discharg’d, from Guns, when they penetrate  
the Cloths, often carry into the Wounds large Portions of the  
Cloths.; by which means, the Consolidation of such Wounds is  
often protracted for several Months, and often for several Years'.  
A memorable Instance of this occurs in *Memoires de st Acad.  
Royale des Sciences, An. tsppse.* It is therefore obvious, that  
such Things are, if possible, tohe remov'd. ss.

2. Is a Wound is accompanied with great Loss os Substance,  
the Lips cannot he united and consolidatedstill the lost Substance  
is restor'd by a new Regeneration; for they are, as yet,, too far  
distant from each other: .And tho' they should he forcibly  
brought into Contact by Suture, or. adhesive Plaisters; yet under  
the united Lips there would still remain a Cavity, In which the  
extravasated Humours would be collected; and form afinnous  
Ulcer. .... .. *A ..* ........ Ψ -

3. The Parts os the Body between which the wounding  
Cause is forced, oradually .recede more. and. more from each  
other ; but that a Wound may be cur'd. It is requisite the sepa-  
rated Parts should he again render'd contiguous- Here Art as-  
sists Nature, by uniting th esie para ted Parts, and so fortifying  
them, that they may rem ain in that State., ..; -- )

4. But this cannot often be done when a strong Suppuration  
has consum'd a large Portion of the *Membrana Adipose, or*when a considerable Quantity of the Skin is carried off by the  
Wound: For, in this Case, the Cicatrix.br always more solid,  
fmooth, and shining, than the adjacent Skin... - -----

These are the general Intentions to be pursued in the Cure os  
all Wounds; and how these Intentions may he obtain'd, shall be  
hereafter specified. .... .. .. - -- -

Impacted Fragments of Metals,. Stones,. Wood, Glass,  
Balis discharg'd from Guns, Thrombuses of Blued, morti-

fied’ Flesh or Membranes, and broken Bones, are first os all  
**to he** remov'd, if they are discover’d.

Such Cases frequently occur in modem Battles, when warlike  
Machines, loaded with Various Fragments os Stones and Mc-  
tals, are exploded upon the Enemy, and render the Cure os the  
Wounds highly difficult: All these,’ if lest in a Wound, when  
the Wound hegins to swell, and he inflam'd, contuse the Parts  
they touch, render them callous, augment the Inflammation,  
and at last .make them degenerate into ’fistulous Ulcers, not **m**be cur'd unless they are extracted by Art, or discharg'd by a  
Suppuration excited in the adjacent Parts.The same. Caution  
is to be observ'd, if Thrombuses of concreted Blood,.or solid  
Parts *of the* Body, cut off, and remaining free from all Con-  
nection with the live Parts, are lodg'd in the Wound s. But if  
the Fragment of a Bone as yet coheres with the live Parts, there  
is some Hope that it may be again united with thensa But it is  
to be always observ'd, that if the Extraction os?such foreign  
Bodies, lodg'd in a Wound, cannot.he made, without the Dread  
of more terrible Misfortunes, then they are.ratherIo.he.left,  
and their Separation committed to Nature. ss susi

. But how we may determine whether they are to. he remov'd,  
or left, wili be shewn in the next Aphorism. ί ' sc.

Weare to judge whether any Body is to helest, .or taken  
away, by considering The Nature os the Wound, os the  
wounded Part, os tbe impacted Matter, the Strength of the  
Patiens, and the Symptoms that will follow. „ " \ ss ..

In Wounds, especially those os a dangerous Kind, great  
Caution is requisite, in determining whether foreign Bodies,  
lodg’d in the Wound; are to be remov'd, or lefts If after a due/  
Consideration of all Circumstances,, it appears that the Patient  
will, by an Extraction of such Bodies, live more commodioufly,  
or longer,-then they are certainly to be remov’dr. But if from  
Anatomy, and the Functions injur'd, the Condition of the  
Wound appears such, that certain and sudden Death is justly to  
be dreaded, they are to be left, lest the succeeding Death of the  
Patient should be imputed to the Physician or Surgeon : For it  
is prudent not to meddle with Patients whose Cases are abso-  
lutely desperate. Is the wounded Part cannot be reach’d with  
Instruments, in order to the Extraction os foreign Bodies lodg'd  
in it, such Bodies are, in like manner, to be left.. Thus, for  
Instance, foreign Bodies lodg'd about highly-tendinous Places,  
large Nerves, or the Brain itself, cannot be remov'd .without  
the greatest Danger. But some Bodies, according to the dif-  
ferent Matter of which they consist, may he more.safely, left in.  
Wounds, than others. Thus numberless Observations evince,  
that leaden Balls have without any inconvenience been lodg'd for  
many Years in the Body, and afterwards often made surprising  
Ways for their own Discharge.. But is they had heen made os  
Iton, or Copper, becoming corrupted by the Rust, they would  
have far more irritated the Parts they touch'd. We ought, also,  
to have a due Regard to the Strength of the Patient: h or if the  
Weakness of his Pulse,, the Coldness of his Extremities; and  
the cadaverous Paleness of his Countenance, evince that his  
vital Strength is already much impair'd, we ought in Prudence  
to abstain from searching the Wound with chirurgical Instru-  
ments: For surprising Instances evince, that foreign Bedies lest  
in Wounds have afterwards fpontaneoufly discharg'd themselves,  
tho' they could not before be extracted without the greatest  
Danger. A memorable Instance of this occurs in *Journal des  
Scavans, P.An:* 1735. *Avril.* Many other’Observations occur  
in. .practical Authors, which sufficiently prove that it is some-  
times expedient to leave foreign Bodies in Wounds, since they  
will afterwards be excluded by the Assistance of Nature stone;

.. .. From whatthas been said we may determine the Instru-  
ment, and Manner by which such, foreign Bodies are to he  
remov'd....;-". :

We must first examine whether by the Wound made, a Part  
Of the wounding Instrument lest may be extracted, without a  
- Dilaceration of the Parts Or whether the.Wound ought to be  
-- dilated ; or whether the Body may .he more commodioufly ex-  
tracted, by makings fresh Wound in the opposite,or any other  
Part. - -Thus feather'd Darts cannot be extracted from the  
Wound they make, without a great Dilaceration os the adjacent  
Parts : Hence, in such a Cafe, the Wound is rather to he di-  
. lated, or, if it Is possible; the Dart in to be protruded thro' **the**- opposite Part; after making a .newWound. Forceps,, of va-  
rious Bulks and - Figures, - are' describ’d, by chirurgicalAuthors,  
- for extracting foreign Bodies from Wounds ; but they are not  
- all at once, and with a greatImpetus, to he extracted; since.it  
is more expedient,.after the Dart is laai hold.os by the Forceps,  
gently to agitiite it, in order to know whether issany Part iris  
so fix’d,\_ that it cannot be extracted, without a great Dilace-

ration: For in this Case It is rather to he left. But fince in  
Battles Gunpowder has been used, the Balis discharg'd from  
Guns could not he commodioufly extracted by the Surgeon's  
Forceps; hence they invented other Machines, especially a spi-  
ral Perforator, so conceal'd in a hollow Pipe, that it might he  
safely passed to the Bottom of the Wound, till it reach'd the Ball  
there lodg\*d ; then, by gently twisting about the Perforator,  
they so fix it in the soft Lead, as to extract it.

**♦**

After a Wound is depurated in this manner, if any thing is  
taken away from the Body, it ought to be restor'd, by a Re-  
' generation of Matter similar to that which was lest. This

Comes to pass.

First, If the arterial, lymphatic, and nervous small Veffeis,  
are in such a Condition, as to receive and transmit their own  
laudable Liquids. And,

Secondly, If this laudable natural Liquid is carried into  
these Veffeis in a fit Quantity, an^ with a proper Impetus.

After all foreign Bodies are remov'd from a Wound, we are  
to consider whether the Wound is such, that only a simple Di-  
vision of Parts, hesore cohering, is made by the wounding In-  
Rrument ; or whether some Part of the Substance of the Body  
Is carried off by the wounding Causes, in the former Cafe no-  
thing more is requisite, but an Union os the separated Parts ;  
but in the latter it is necessary there should he a Regeneration  
of the lost Substance. The' it is commonly believ'd that Parts  
of the Body cut off will no more grow to the Parts to which  
they before adher'd, tho'applied to them, yet some Observa-  
tions evince, that this is not always to be despair'd of Instances  
os this are found in *Garengeosis Operat, de Chirurgie, Tom.* 3.

Observations of this kind prove the Possibility os *T.aliacottus\*s*Method of restoring some lost Parts of the Body; such aS Noses,  
Ears, and Lips. An Instance of this kind is given by *Parc, in  
Lib.* 23. *Cap.* 2. and another by *Hildanus, Centur.* 3. *Obs.-sit.*

But such Instances rarely occur; when, however, some Part  
of the Substance of the Body is carried away by a Wound, the  
adjacent Veffeis, being lengthen’d, by a surprifing Artifice of  
Nature, again form or restore that which was lost. But that this  
may be done, two Things are requisite:

I. By the inevitable effect of Life and Health, some Parts  
of the Body are necessarily lost, and these are restor'd by the  
Aliments converted into our Nature by the Action of the Vef-  
feis and Viscera. There is therefore in a sound Body, such a  
Property, as enables it, from the ingested Aliments, to supply as  
much as was lost, and of the same Qualities: But all this is  
perform'd by the vital Motion of laudable Humours thro' Ves-  
seis that are sound, and proportion'd to the Liquids. It is there-  
fore requisite the Vessels should have these Conditions, by which  
they may receive, convey, and return such Liquids, as in Health  
flow'd thro' these Vessels. Hence if,’by too strong Compres-  
sion, or powerful Desiccatives, the Vettels are too much con-  
tracted, the Surface *οί* the Wound will hecome dry, and in-  
flam'd ; nor can the Veffeis transmit those Fluids which, in  
Health, mov’d thro' them. If, on the contrary, the Wound  
is treated with too emollient Substances, the relax'd Veffeis will  
yield to 'the impel’d Fluids, and consequently be dilated so as to  
admit Humours which ought not naturally to he in them ; and  
the Vessels, thus expanded beyond these natural Capacity, thy  
their contain'd Fluids, will form fungous Flesh, which will al-  
ways retard the Cure of Wounds. The happy Restitution,  
therefore, of the Substance lost by a Wound, so far as it respects  
the Vessels, depends upon procuring a due Strength to those  
Veffeis, so that they may neither too greatly resist, nor too ea-  
sily yield to the impel'd Fluids. But as, inorder to restore the  
lost Substance, all the Veffeis, constituting the Surface of a  
Wound, must be elongated; hence it will he expedient the  
Parts should he kept a little more soft and relax'd, than in a na-  
tural State. When a Surgeon daily Views “the Surface of a  
Wound, he may see whether a greater or smaller Degree of  
Softness is requisite to the Regeneration of what is lost: For is  
the Surface of the Wound appears dry, and of a deep-red Co-  
sour; and if a little Pus is generated, he immediately knows  
that the Vessels in the Surface of the Wound too strongly resist  
the impel’d Liquids, so as not to transmit them : But if, in every  
Point of the Wound, an equable Humidity, and moderate Heat,  
appear; if the Bottom of the Wound begins daily to he equally  
elevated, and its Sides equally extended to the Centre, he suffi-  
ciently perceives that the Vesseis have a due Degree of Laxity,  
so that they may yield to, and he elongated by the impal'd Flu-  
ids. But if a Wound is overflow'd with too much Humidity,  
and its Sides and Bottom are suddenly and unequally raised, we  
conclude, that the Veffeis are too much relax'd. Hence Me-  
dicines opposite to this hecome necessary.

These are the Things to he observ'd in a Wound, with **re-.**spect to the Veffeis, in order -to-the Regeneration of lost Sub-

stance : We shall now consider what is requisite in the Fluids,  
in order to produce the same Effect.

2. The Substance lost by the Wound is to he regenerated ;  
but this Substance consists of Fluids and Solitis, or containing  
Veffeis, and contain'd Fluids: There must, therefore, be con-  
vey'd to the Part of the Wound a Matter in which are lodg'd  
**the** Parts requisite to the Regeneration of the lost Substance.  
But a natural and laudable Liquid, according to the Laws of  
Health, mov'd thro' the Vessels, contains in itself all the Pam  
requisite sor this Purpose; for by its means are daily restor'd,  
both in the Solids and Fluids, the Parts lost from the Body by .  
the Actions of Health; sor Aliments do not nourish till they are  
by the Fabric of the Body chang'd intora Quality like that os  
the human Fluids, and, losing their own Nature, assume that of  
the Body. It is therefore requisite that so much Health should  
remain as insufficient, from the Aliments taken, to produce  
landable and natural Humours. Hence the Reason is obvious,  
why the Restitution of lost Substance is highly difficult, and  
often absolutely impossible, in cacochymic Habits, but very easy  
in good Constitutions: It is, also, requisite there should be a  
due Quantity of this good and natural Liquid, so aS equably to  
fill all the Veffeis. Hence appears the Reason why the Cure is  
difficult in Patients who, by an Haemorrhage, have lost a large  
Quantity os laudable Fluids; and this Difficulty is still aug-  
mented, because it is principally by the due Quantity of laud\*  
able Humours that the crude Aliments are chang'd into our  
Nature, and mix'd with the good Juices. Nor are these Cir-  
cumstances alone sufficient ; but it is, also, requisite, that the  
natural Liquids should be, with a proper Impetus of Motion,  
convey'd thro' theVefleis: Fur when this Motion is languid.  
Nutrition is defective, or at least depray'd; as evidently ap-  
pears in weak Habits. When the Fluids are with too great **a**Velocity, carried thro'the Vessels, the Body is destroy'd, but  
not recruited ; as appears in Animals fatigued by too hard La-  
hour, and in those Diseases where the Velocity of the Circula-  
tion is too great.

All that Art can do is, to render the Vesteis such as they were  
in Health, and procure a Circulation os laudable Fluids thro\*  
them with a due Force: The rest will be perfected by Nature,  
who is generally sufficient sor her own Purposes.

By this means there will be an Impletion, Humectation, -  
Extension, Elongation, ofthe wounded, retracted, obturated,  
compress'd ,and almost juiceless Canals; an Implication of them  
with the adjacent Vessels; an Application to otherS,which are  
near them ; and this is brought about by the Assistance of the  
reticular *Plexuses*; and at last,by the Help of a good Fluid,  
Conglutination is accomplish'd.

. It is already demonstrated, that Arteries, even of a considera-  
ble Bulk, when divided, are gradually contracted, and closed up; .  
and that, in consequence of this Circumstance, unless they are -  
Very large, the Haemorrhage stops spontaneoufly: It is therefore  
sufficiently evident, that when smallVeffeis are divided, they are  
closed by the same Causes,and the Effusion of the Humours is,by  
that means hinder'd. Hence, by the Action of the Fluids on1the obstructed Orifices of these Vessels, are produc'd an Inflam-  
mation, and flight Fevers; by which the Humours, heing forc'd  
with a considerable Force into the constricted Extremities of  
the Veffeis, protrude, elongate, and open them; or, by a be-  
nign Suppuration, separate from the live Parts the totally dry  
and mortified Extremities *of* the Vessels. But thefe Vessels no  
longer confin'd by the Skin, are,, by the Force of the Liquid  
mov’d thro' them, gradually extended"and elongated, and their  
Mouths, heing open'd, they discharge their Liquids into theCa-  
vity of the Wound: Hence the whole Surface of the Wound  
appears moist with Pus, and rough, as it were, with small *Pa-  
pillae,* which are gradually more and more elevated, and are only  
the pulpous Extremities of the protuberating Veffeis ; and when  
this happens equably in all the Circumference of the Wound,  
the Mouths of the growing Vessels mutually meet each other,  
are applied and united, and thus the lost Substance is restored.  
If, after the Wound isclean,the mucous Congeries of the grow-  
ing Veffeis is daily deterg’d by the Surgeon, that which ought  
to restore the lost Substances is destroy'd; hence the Cure is  
retarded, and the Surface of the Wound degenerates into theNature of a sordid Ulcer. The Whole, therefore, that Art can  
do, in order to the Regeneration of lose Substance, consists in  
procuring to the Vessels, and the Liquids mov'd thro’ them,  
those Qualities which are requisite to perfect Health; and rake-  
ing care that the impetus of the Fluidsmov'd thred the Vessels,  
he neither too. strong, nor too languid- : All the re\* in perform'd  
by Nature, aS is already observ'd.

But this Conglutination seems to happen by the Application  
of a\* new- Sub stance, and not by the Interposition of. a soldering.  
Juice, which, like Glue, unites the dividethExtremities of the

Vessels. For we observe, that if the Vessels free from the  
Skin and *Epidcrmis* are contiguous, they forthwith grow to-  
gether. Thus the Edges of the Eyelids, if excoriated, have in  
one Night's time been found to grow so ftrongly together, that  
there has been a Necessity for dividing them with a Lancet. The  
Fingers, also, when lest contiguous, after the *Epidermis* has  
been destroy'd by Gunpowder, have grown Very firmly to each  
other ; fo great is the Tendency of the open Extremities of the  
Vessels to unite with others like themselves.

And whilst these are with an equal Force happening from  
every Point, especially of the Bottom and. Sides, the Cavity  
of the Wound, from every Part to the Centre, is fill'd with  
solid and liquid Matter, like those which were loft.

If all the Extremities of the Vessels in the Bottom and Sides  
of the Wound are equably open'd, the Motion of the Humours  
thro' the Vessels will act equally on all the Parts : Hence, if  
there is not a greater Resistance in one Part than in another,  
There will in every Point he an equable Elongation of the Ves-  
. fels; but if there is a greater Relaxation in one Part, than in  
.those adjacent, the Vessels will be there more distended, and  
elongated: Thus there will he form’d a fungous Excrescence,  
which, by compressing the adjacent Veffeis, will hinder the  
equable Consolidation of the Wound. But whilst, from allthe  
. Circumference of the Cavity of the Wound, the lengthen'd  
Veffeis meet each other, and are united, such a Structure of the  
.Veffeis is restor’d, as regenerates the lost Substance. But tho'  
we cannot affirm, that this regenerated Substance is precisely the  
same with that which was lost, yet it is certain, from all the  
-Phenomena, that it is highly similar to it; since Experiments  
evince, that not only large Blood-vessels, but, also, those of the  
.small perspiratory kind, are thus regenerated; For if the mu-  
xous Congeries of growing Vessels in the Cavity of the Wound  
Is rudely touch'd with a linen Cloth, red Blood is discharg'd ;  
and if that Congeries is but gentiy touch'd, a thin Fluid is eva-  
cuated. Is a polish'd Plate of Metal, or a Looking-glass, is  
applied, there will he form'd on the smooth Surfaces of these  
Bodies a moist Spot, which will soon disappear, without leaving  
any Sordes; a. sure Proof that there is such a Congeries of  
Veffeis,which contain and emit a subtile exhaling Fluid. Hence  
we may, with a great deal of Probability, conclude, that fince  
in the regenerated Substance there are Blood-Vessels, and small  
exhaling Vessels; there are, also, intermediate Series of de-  
creasing Vessels to be found in it.

. But this Regeneration of lost Substance in the human Body  
has its proper Limits; for no one ever saw so much as the least  
Articulation of the Finger restor'd after it was cut off The  
Veffeis, indeed, on the Surface of the Wound, are fo concreted,  
as to form a Cicatrix; but the Part remains defective during  
the whole Remainder of the Patientis Lise. Hence the lost Sub-  
stance of the human Body seems possible to he regenerated,  
when, from all the Circumference of the Wound, the elon-  
gated Veffeis can concur and unite in its Centre. But when,  
by a simple Elongation of the Vesieis remaining in the maim'd  
Part, so many organical Parts are to be restor'd, after they are  
Cut off. Nature proves defective, and, by a good Cicatrix, se-  
cures the Part. Philosophers are, however, justly surprised that  
an Advantage denied to the human Species should be granted to  
some other Animals. Thus the celebrated *Reaumur, in Mem.  
de rAcadcmie des Sciences,* An. 17 I 2. has shewn, that the  
Claws of Crabs and Crayfish, when totally separated from their  
Bodies, may grow again, and that oftener than once: Nor has  
it, as yet, been evinc'd by Experiments, whether, in thefe Ani-  
mals, the Power of producing new Members can be exhausted.  
Thus we see, that, in physical Affairs, particular Observations  
teach uS a great many Things ; but that general Conclusions,  
deduc'd from a few known Observations, often prove falla-  
cious.

Therefore to this End is requir'd first a proper Diet; that  
the Chyle, Serum of the Blood, and nutritious Matter,  
. may be mild, glutinous, not easily putrefying, but of easy  
. Digestion and Assimilation. Farinaceous Decoctions, either  
crude or fermented. Emulsions, Milk, Broths, ripe Fruits  
boil’d, and mild Pot-herbs, are particularly proper, if given  
. in small Quantities, and often repeated; above all Things  
taking. care to guard against Repletion, Hunger, and  
Thirst. . \_

The Parts of the lost substance regenerated are restor’d by  
the Fluids convey'd to rhe Wound ; but the Liquids stowing  
thro' the Veffeis are either crude, in consequence of the Ali-  
ments noy being totally chang'd into our Nature; or.fuch as,  
by the Action of the Vessells and Viscera, having lost their.own  
Natures have assum'd all the Properties os our Fluids,.. The

Chyle, by the Chylopoeetic Organs form'd from' the Aliments,  
is for many Hours convey'd thro’ the Veffeis along with the  
Blood, aS is obvious, from the Experiments os Mr. *Lower.*Hence such a crude chylous Juice is, together with the other  
Humours, convey'd to the wounded Part, and that in a greater  
Quantity than to the other Parts of the Body ; because there is  
less Resistance in the wounded Part. Hence it has been ob-  
serv'd, in large Wounds, that almost the whole nutritious Mat-  
ter has heen discharg'd from them, irlo consequence of which,  
the Body, depriv'd of its daily Recruits, has wasted away of a  
. stow Consumption. Unless, therefore, by a proper Diet, mild  
Chyle is produc'd, the Wound- will, by the acrid Chyle, be  
daily irritated, and cur'd with great Difficulty. But we here  
speak of considerable WoundS; for flight Wounds do not require  
so great Caution : Besides, the open Orifices os the Veffeis dis-  
charge into the Cavity of the Wound a large Quantity os aLi-  
quid, which, aster its thinner Part is resorb’d, or. dissipated, is  
converted into PuS.i Is, therefore, the Chyle convey'd hither  
with the Blood, consists of such Parts aS naturally incline too  
much to a putrid Degeneration, the extravasated Humours will  
.by their Stagnation, and the Heat of the Place, degenerate into  
a putrid ichorous Matter, but will not be chang'd into laudable  
Pus : Such Things are, therefore, to he avoided. ’But since Rest  
is necessary to wounded Patients, and fince, at the same time,  
.as is shewn under the Article FiRRA, muscular Motion, and  
Exercise of Body, contribute much to the Assimilation of the  
crude Aliments to our Nature; hence it is obvious, that we  
.ought not to exhibit to such Patients Aliments of hard Di-  
gestion, but such as may be easily digested and assimilated ;  
otherwise^ large Quantity of crude, and Very littie concocted.  
Juice is convey'd to the Wound. But the Regeneration os lost  
Substance in a Wound can only he obtain'd from such Humours  
as are concocted, and converted into our Nature..

We shall now enumerate the Aliments which, by their mild  
Quality, and easy Assimilation, are principally subservient to  
this Intention.. Oats, then. Barley, Buck-wheat, and Rice,  
boil’d with Water, or the Broth of Flesh, yield such a mild and  
easily-digested Nourishment; nor do.they putrefy. From the  
Meals of these, excellent Aliments are, also, prepar'd, by a  
gentie Fermentation, by which means the farinaceous Lentor  
is taken away. Hence well-fermented Bread, especially Bis-  
cuit, and weak Flesh-broths without any Fat, are of singular  
Service in Cases of this Nature. . Emulsions of soft farinaceous  
Seeds, prepar'd by Trituration with Water, have almost the  
Nature of Chyle. Milk,, diluted with an equal Quantity of  
Water in the Winter-time, but in the Summer mix'd with  
more Water, may he used for common Drink: Milk, also,  
gentiy boil'd with farinaceous Substances, yields a mild Ali-  
mens. Ripe Summer Fruits, by their grateful Taste, and mild .  
cooling Quality, are of singular Service; but they are to be  
gently boil'd, in order to remove all their flatulent Qualities.  
All soft Pot-herbs, such as Lettuce, Endive, Spinage, Skirret,  
Vipers-grass, Carrots, GoatS-beard, and Parfneps, boil'd in  
Broth, are excellent.

But tho' all these Things are salutary, they may, neverthe-  
less, prove noxious, if exhibited in too large a Cat anti ty: For  
hy this means the Body os the Patient will be oppressed, a large  
Quantity of crude Chyle will he mix'd with the Blood, and the  
Condition of the Wound chang'd. But if the Quantity os the  
Aliments to be taken is so divided, that some of it may be  
taken every two Hours, it will easily be assimilated, and the  
Humours convey'd to the Wound, will always have nearly the  
same Properties: But when the Patients take a large Quantity  
of Aliments only twice a Day, the Blood, loaded with a large  
.Quantity -of crude Chyle, will at one time be convey'd to the  
Wound ; but at another time the Blood, when the Chyle is sub-  
du'd, will have another Quality: So that, by this alternate Vi-  
cissitude, the Condition of the Wound will be disturb'd. Hun-  
ger is equally to be avoided with excessive Repletion, for Hun-  
‘ ger denotes that the Body requires fresh Supplies: And all the

Humours, unless qualified by a fresh mild Chyle, will become  
more acrid, and half putrid. For the acrid and putrid Urine,  
and the cadaverous Breath of Persons who have suffer’d Hunger  
for a long-time, sufficiently evince this Degeneracy of the Hu-  
mours... But we ought, in a particular manner, to take care  
that-the Patients should not be afflicted with Thirst; for Thirst  
denotes the Dryness of the Body, or a Stagnation of the Flu-  
ids, or something of an acrimonious Nature min’d with them :  
But all these are highly prejudicial to a Wound, since, in order  
to the Restitution of the lost Substance, an equable Humidity,  
in every Point of the Wound, and a free Circulation, and mild  
Quality of the Fluids,, are absolutely requisite. Hence moist  
Aliments, and the liberal Use of mild Liquors, are requir’d :  
For, by this means, the whole Body will be moisten'd in all its  
Parts,:the Fluids will he more diluted, and capable of a freer  
Circulation; and the acrimonious Particles, winch would other-

wise prove injurious,' heing diluted by the large Quantity of  
Drink, will be eliminated hy Sweat, or Urine.

A Consideration of the Temperament of the Patient, the  
Seafon of the Year, the usual Way of Living, and the Na-  
tore of the concomitant Disease, will direct us in the Choice  
and Preparation of these Things, that they may be useful to  
the Patient.

All the Directions laid down, with respect to the Diet, vary  
according to the different Constitutions of the Patients, so that  
no general Rule can he given: When, in the time of War,  
large Numbers of wounded Men are in the Hospitals, many of  
them die, who might otherwise have been.preserv’d, only he-  
cause the same Aliments are given to all; for the Whole that is  
requisite here is, that the remaining Health be preserv'd in the  
wounded Person, or restor'd, if it is defective. But every Per-  
son has a kind of Health peculiar to himself; hence,tho' differ-  
ent Persons may have their Solids and Fluids composed of highly  
different Parts, yet they may both be sound; This is call'd  
the constitutional Sanity; to which we are, therefore,  
carefully to advert. For Physicians, by their proper Signs,  
distinguish the hot and the cold, the moist and the dry, the bi-  
lious, the sanguine, the phlegmatic, and. the atrabiliarious Con-  
. stitutions; and observe, that Various, and eVen opposite. Ali-  
ments are proper for Persons of different Habits: So that each  
may preserve a perfect Health. Thus, for instance, when‘the  
Constitution os the wounded Person is known to he aqueous,  
and cold, thin diluting Drinks are to be avoided, and corrobo-  
rating and rousmg Substances exhibited: But is-the Humours  
are thick and compact, the solid Parts tense and firm, .the Con-  
s stitution is said to he hot and dry ; and then .these Things are  
beneficial, which would have been hurtful in the other Case.  
*Hippocrates, in T.r. de sulubri Victus Ratione,* telis us, that  
" Those who are of a fleshy soft Habit of Body,and of a red-  
" ish Colour, ought for a great Part of the Year to use a dry  
" Diet; for their Constitution is moist: But such as are of  
" hard flender Constitutions, or of a yellowish or. blackish Co-  
" lour, ought to use moist Aliments for a considerable time ;  
cc because their Constitutions are dry.''

- But the Various Seasons os the Year require a different kind  
os Lise in the same Person: For, during the Summer Heats,  
Degeneracies of the Humours quickly happen ;. but in the Cold  
Of the Winter they are brought on more slowly: For the Flesh  
Of Animals can, in the Winter Cold, be preserv'd for several  
. Weeks without Corruption; whereas the same Flesh would

have been wasted to a putrid Gore, in a sew Days, during the  
Heat os the Summer. Hence the sagacious Antients carefully  
distinguish'd the Various Methods of Lise, according to the Va-  
rious Seasons of the Year. Thus in the Winter they recom-  
mended liberal Eating, generous Liquors, but in a small  
Quantity, eating sew Pot-herbs, and only such as were of an  
heating and drying Nature, and all roasted Aliments : But in  
the Summer they recommended a large Quantity of thin Drink,  
bod'd Aliments, and a large Quantity of Pot .herbs. In the  
Spring they order'd the Quantity os Drink to be gradually in-  
creased, but to be more diluted ; instead of roasted Meat, they  
substituted that which was boil’d : They, also, gradually lessen'd  
the Quantity of the Aliments, lest a great Change should be  
suddenly induc'd on the Body ;. and thus they proceeded to their  
Summer Diet. Then, in the Autumn, they increased their Ali-  
ments, and diminish'd their Drink, tho' they order'd it to be  
more generous, till at last they came gradually to their Winter  
1 Diet. But as Battles generally happen in the Summer-time,  
and Flesh-broths are then only given to the wounded Persons,  
they are often In a very languishing Condition, and earnestly  
desire acidulated Drinks, and' ripe Fruits, winch, however,  
they are often forbid.

Besides, the Various Ages of Patients indicate different Regi-  
mens, wish respect to Diet.

Custom, also, which justly deserves to be call'd a second  
Nature, is, in this Cafe, to be consider'd. If the hardy  
Ploughman, accustom'd to live on coarse Bread, and salted or  
smok’d Flesh, in order the better to sustain his daily Fatigues,  
is wounded, and constrain’d to live on Flesh-broths alone, his  
..Strength will be soon impair'd. Hence more solid Aliments  
’ safely may, and even ought to he exhibited to such a Patient.

Thus *Hippocrates,* in *Aphor.* 5o. *Sect. tz.* telis us,’ " That  
" Things we have been long accustom'd to, the’ worse, are  
" usually less troublesome, than those Things we are not  
. " accustom’d to." The same Author, also, in his Treatise  
*de Victu Acutorum,* telis us, .that . People easily bear Aliments  
they have been accustom'd to, tho' they are not naturally good ;  
whereas they ill bear thofe Aliments they have not been ac-  
. custom'd to, tho' they are not of themselves bad. He, also,  
asserts the same concerning Drink. Hence the prudent Phy-  
sician ought to make a due Allowance for the Custom of the

Patient, tho' in so doing he should run counter to ths general  
Rules of his Profession.

*Ac for the Nature of the concomitant Disease*; we have hi-  
therto treated of the Methods to he pursu'd, when a healthy  
Person is wounded: But is there is a considerable Cacochymy  
before the Infliction of the Wound, such a Regimen, with re-  
fpect to Diet, ought to he order'd, as is most contrary to that  
Degeneracy, of the Humours which is to he dreaded from the  
Disease, or the Cacochymy accompanying the Wound. If, sor  
Instance, a putrid scorbutic Cacochymy is present; or if, by a  
Violent Fever, all the Parts tend to a Putrefaction; we usescarcely any thing her Preparations of Milk, Oats, Rice, and  
acefcent Summer Fruits.: But we ought carefully to abstain from  
Eggs, Flesh, and Broths prepar'd of them. Is a languid mucous .  
Sordes is lodg'd in rho whole Body, the languid Strength os the  
Patient is to he excited ,by roasted Flesh,Wine,and Aromatics.

From all these, accurately known, and .mutually compar'd,  
we conclude what Meats and Drinks are to be exhibited, and in  
whet manner they are to be prepar'd. For a great Diversity of  
the same Aliment arises from the different Method os its Pre-  
paration. Recent Veal, when boil'd, yields a Broth which  
may he exhibited even when there is some Dread of a putrid  
Degeneracy in the Humours, especially if it is mix'd with a  
small Quantity of Lemon-juice; but if the same Flesh, lest sor  
some Days in the open Air, is boil'd; it yields a Broth which  
becomes putrid much sooner: But when Veal is roasted, it is  
still more disposed to Putrefaction; because its Salts and Oiis  
are render'd .more acrid by the Fire. Crude farinaceous. Sub-  
stances are hurtful to People of phlegmatic Constitutions, but  
they may he used when fermented.. The same holds true with  
respect to many other Preparations of Aliments.

Whatever is acrid, or too much augments the Impetus of  
the Blood, is to be carefully avoided ; sor which Reason,  
saline, aromatic, and acid Substances, together with acrid  
Pot-herbs, and Wine, are bad for Wounds. .

So mild and henign is the Disposition of our Humours in  
Health, that the Blood itself, and all the Liquors secreted from  
it, except the Bile and Urine (which, however, owe their Acri-  
mony chiefly to Rest and Stagnation), that,instil'd into the Eye,  
they excite no Pain : Wherefore, since the Loss of Substance,  
which we suffer in Wounds, is to be regenerated and recruited  
by Supplies from these Humours convey'd to the Part affected ;  
it seems highly to deserve our Care, that nothing acrid or stimu-  
lating, or that is easily susceptible of an acrimonious Quality,  
be receiv’d into the Body: For acrid.Things are noxious to  
Wounds, by irritating the crude Parts, and, by their *Stimulus,*exciting a greater Motion in the Humours, and so increasing the  
*Impetus* of the Vital Liquid upon those extremely tender Vessels  
which repullulate in the Wound ; whence they often degenerate  
into a fungous Flesh j or an Inflammation, excited by that In-  
crease of Motion, renders the Superficies of the Wound im-l  
perspirable, by obstructing the Capillaries, whence the Cure is  
further retarded : For whatever is thus affected, must again be  
separated by undergoing a Suppuration.

All Stimulants, therefore, by whatever Title recommended,  
are in their own Nature prejudicial to Wounds, the Body , of  
the wounded Person being supposed to he in Health. But is, for  
Instance, the Patient at the same time labour'd under a putrid  
Cacochymy, an Ingestion os Acids would be os Service, instead  
os heing detrimental. But we would not be understood as is a  
few Grains os Salt, or some Drops os Juice os Lemon, added  
to Broths, would hurt the Patient j for.the Addition of fo small  
a Quantity might be useful, by way of Precaution, against a  
Degeneracy os these Liquors towards a Putrefaction ; and can  
by no means prove Stimulants os the Vital Forces: For if some  
such thing was not mix'd with the Broths, the Patient would in  
a short time abhor them.

The Use of Wine is disapprov'd, for the same Reasons, unless  
where Custom, or a Languor, demand the contrary .. For  
Multitudes indulge thernfelves every Day in drinking Wine, and  
other spirituous Liquors; -and if they should he compel'd to  
abstain from them, would immediately languish, and be disturb’d  
in all the Functions of their Body; ‘ For such Subjects, there-  
fore, a moderate Quantity of Wine, either pure, or diluted,  
as Custom, or the Measure of Strength, shall seem to require,  
cannot but he proper.

Meats, also, subject to Putrefaction, Broths too thick, with  
alcalescent Herbs, as Radishes, Cresses, Cabbage,and the like,  
are improper, and prejudicial, ‘si ’

We are not only to attend to the Nature of Aliments at the  
time of their Ingestion, but to the.Mutations to which they are  
subjected by the Heat of the Body during their Residence in the  
internal Pares. For, as we before observ'd, the nutritious Hu-  
mours, . which-are generated of the Aliments, will he convey'd

the Wound, and there he partly discharg'd thro\* the open  
Orifices of the Veffeis, into itS Cavity t If these Aliments,  
therefore, are in their own Nature Very subject to Putrefaction,  
tt is to be fear'd that the Humours which rake them Course to  
the Wound will he converted not into good and laudable Pus,  
but into a putrid Ichor; And fince Fish, especially Sea-fish,  
will very soon putrefy, nor can he kept unless season'd with  
much Salt ; for this Reason they are forbidden. .Thick Flesh\*  
broths. Jellies prepar’d of Shavings of Hartshorn, or Scrapings  
of Ivory, will, within the Space of four-and. twenty Hours, in  
Summer-time, dissolve into a putrid kind of Liquament. **To**this it may be added, that such thick Broths oppress the Sto-  
mach, and **are** not easily digested. It is a Property in **some**Plants, after a spontaneous Putrefaction, not to become ace-  
scent, as do Multitudes os others, but to be resolv'd into a fetid,  
volatile, pinguious Alcali. *In some* Plants there is an acrid,  
alcaline. Volatile Salt, to be found even before Putrefaction ; as  
In Radishes, Mustard, Cresses, and the like; which are all  
hurtful to Wounds ; because they are too much inclin'd to pu-  
trefy, and irritate the Part'with their acrid *Stimulus.* But **the**greatest Danger is from those which are subject to putrefy ; he-  
cause all Our Humours have a natural Tendency to a putrid De-  
generacy. But thofe Vegetables which in their own Nature are  
acescent, resist the spontaneous Degeneracy of our Humours;  
whereas the former conspire with it, and promote it. See **the**Catalogue of alcalescent Plants,which are injurious in this Case,  
under the Article **ALCALI.**

Foods difficult to be converted into Chyle and Blond, as  
. are those harden'd by Salt, Smoak, or the Air, or abounding  
with Fat, as Bacon,fat Fishes, aS, alfo, Geefe, Ducks, and the  
like Birds, which feed on Fish; with Viscid Aliments, as  
gross, leguminous, crude, farinaceous Foods, and Eggs, are  
bed Aliments. ' -

They who daily exercise their Bodies with hard Labour, seed  
heartily on the hardest Meats, and Very well digest them, but  
care not *for* lighter Food, which, indeed, would not supply the  
Strength necessary for sustaining the Body under so much Toil  
and Fatigue as they are oblig’d to undergo. But they who lead  
an idle Lise, find themselves Very much disorder’d after eating  
Meats os hard Digestion; whence it may be taken sor a gene-  
ral Rule of Diet, with respect to Persons in Health, that *the  
harder the Labour, the harder must be the Fond.* For hard  
Meats, which are not easily converted into good Chyle, add  
Weight and Inertness to a Body at Rest: And since Rest is ne-  
cessary in Wounds, sirch Foods will not, in that Circumstance,  
admit of a.good Digestion, and due Assimilation, which latter is  
absolutely requir'd, in order to the Regeneration and Restora-  
tion os the lost Substance in the Wound. But here some Al-  
lowance is always to be made for Custom, fince they whe have  
all their Lise-time been accustom'd to such hard Meatsv Cannot,  
without Difficulty, he brought to live on lighter Foods.

The Flesh of Animals and Fishes, harden'd with Salt, or in  
the Smoak, or dried in the Air, are sar more difficult to he  
converted into good Chyle and Blond, than is they were fresh  
and new; but sat Things are most prejudicial in this Cose, as  
heing always Very difficult of Digestion, and heing long retain'd  
in the Body, contract a Very bad sort of rancid Acrimony. If a  
weak Person eats plentifully of Bacon at Dinner, he will be sub-  
ject, in the Evening, to Eructations of a fat Oil, which burns .  
the Fauces, and, being thrown into the Fire, kindles up a  
Flame; so long is this pinguious Substance retain'd in the Sto-  
mach undigested; and, tho' fluid, is not transmitted thro' **the***Pylorus.* The same is true os sat Fishes, as Eels, Salmon, and  
Others, and particularly of the Livers of Fishes; in which there  
is such a Redundance of Oil, that it may he expressed pure:  
And tho’ this mild kind os Oil be extremely grateful to the Pa-  
late, it is Very speedily converted into a Very noxious rancid Mat-  
ter. Hence a skilful Surgeon will know whether his Patient has  
indulg'd himself in such Food, by an immediate Alteration in  
the Wound sor the worse: For the oleous Particles, being con-  
vey'd to .the Wound, there obstruct the Capillaries, and, heing  
render'd more acrid by Settlement and Heat, excite an inflam-  
mation difficult to he resolv'd. And because this oily Matter  
very much abounds in many Fishes, whose external Superficies  
is defended by its Transudation, and their Bedies secur'd from  
Diffluence and Maceration in the Water in which they live 5  
hence Birds which feed on Fish are difficult of Digestion. For  
tho' Aliments receiv'd are, by the natural Functions, converted  
into the Nature of the Receiver, yet there often remains some-  
thing of its former Qualities; whence we observe such different  
Tastes in the Flesh of Animals, according to the Variety of  
Foods in which they live. Ducks, Geese, and the like Birds,  
if they live only on Fishes, their Flesh will have the nidorous  
and ungrateful Smell of Fish; and tame Hares, fed upon Cab-  
bage-leaves, will have an abominable Fcetor at the Table : The  
Patiens, therefore, is directed to abstain from such Foods.

Again ; all the grosser Kinds of leguminous Foods, or Pulse,  
and crude, farinaceous Vegetables,generate a viscid Chyle,whese  
Viscidness, by hard Labour and Exercise, may he subdu'd ; but  
in Persons at Rest is productive of numerous Disorders.

And, in the last Place, Eggs, tho' justly recommended as an  
Aliment proper for restoring weak Bodies, if they are recent,  
and diluted in Broths, and especially their Whites; yet as they  
are subject to Putrefaction, are, in such Cases, sparingly to be  
used ; hut if they are harden’d, by Boiling, they are observ'd to  
be difficult enough of Concoction.

To the due Cure of Wounds are conducive fuch Medicines  
as remove the Impediments to Consolidation, and are generally  
exhibited in the Form of a Decoction. These Medicines are  
various, according to the Variety of the impediments winch  
are to he remov’d ; for none will suit all Cases.

We have hitherto treated os such things as are to be observed  
in a Regimen of Diet for Wounds, to t he end that good Li-  
quids, being convey'd through found Veffeis to the wounded  
Parts, may procure a Restoration of the lost Substance. But  
the wounded Person was there supposed to be healthful in other  
respects; and, therefore, if there he either in the Body of the  
Person affected, or in the wounded Part itself, any corporeal  
Circumstance winch proves an Obstacle to a Regeneration of  
**the** lost Substance, it is to he removed. Inquiry, therefore, is  
to he made about this Impediment, whether it be seated in the  
Fluids or Solids, or in both; whether it lies in the Wound it-  
self, or in such things as are convey'd to the Wound by means  
os the Circulation ; or, whether the Humours by too impetu-  
ous, or too remiss a Conflux to the Part, disturb or hinder a  
Regeneration. Since, therefore, the Nature os such an Im-  
pediment may he so Various, and eVen so sar, that the Consoli-  
dation of a Wound may be impeded by opposite Causes, it  
plainly appears, that there can he no fuch thing as an universal  
Remedy, and that they are vain Boasters who pretend to it.  
*Helmont,* under a false Persuasion that Pus was generated in a  
Wound by an Acid,would have every Vulnerary Potion contain  
an occult Alcali, and that of the Volatile Kind. *Blas huma-  
num, No. 53.* Others cry up their own Nostrums; and hence  
it is that we are over-stocklol with such a Variety of celebrated  
Formulae of Vuinerary Decoctions. But let there be only **a**just Motion of gond and laudable Fluids through the Vessels to  
**the** Wound, and the thing is done which was required. The  
Art of Medicine, therefore, can do no more than remove or  
Correct an Impediment,when it is known, by proper Remedies :  
And this is the full Extent os its Power ; all the rest of the  
Work is perform'd by Nature. But those Vulnerary Remedies  
**were** generally prepared in the Form of Decoctions, because by  
this means the Virtue of the Medicines diluted with-Water  
might convenientiy mix with the Blood, and be equally distri-  
buted through the whole Body. The various Sorts of Medi- ’  
cines required in these Decoctinns are comprised under the fol-  
lowing Heads:

*}*

For this Reason they are chosen, as the Nature of the  
Case requires, out of Attenuants, InspisiantS, MitigantS, or  
Stimulants, such as are endued with a singular- Virtue of  
correcting **the** contrary Quality, Aperitives, Laxatives,  
and Astringente, and Consequently oftentimes out os Oppo-  
sites.

*Attenuants t* If it appears by Observation of Signs, that the  
Impediment to the Cure depends on too great a Spissitude of  
the Humours, which incommodes their Course through the  
Veffeis, it is plain, that the proper Vulneraries in this Case, are  
all such Remedies as divide and attenuate the Humours to such  
a Degree as to facilitate their Passage through thefe Vessels, in  
which, by the Laws os Health, they are to flow. It has been  
demonstrated under the ArticleOnsTRUcTIO,that this Immea-  
bility, or Incapacity of Circulation of the Fluids, may proceed  
from Various Causes, for which several Remedies are recom-  
mended under the fame Article, by which these Causes may be  
removed or corrected. Hence again arises a' vast Variety of  
vulnerary Medicines with regard only to their Wav of Action  
by Attenuation. For quite other Remedies are required sor at-  
tenuating an inflammatory Spissitude, than what are adapted to  
an atrabilious Tenacity, or cold glutinous Lentor of the Hu-  
mours, by which thev are incapacitated for Circulation. The  
following Vuinerary Decoction and Drink are of an attenuating  
Virtue: .

Take of the Leaves of Spurge-laurel, Male Speedwell, Rue,  
each one Handful and an half; Root of Avens, one Ounce;  
Flowers of the Lesser Centaury, two Pugiis: Boil them  
in three Pints of Water, and with it mix Salt of Carduns  
Benedictus, one Dram; Syrup of the Five opening Roots

three Ounces. , The Dose is four Ounces, four times in  
a Day, warm.

*Infpistsiantssp* In too great a Thinness, or aqueous Languor of  
the Fluids, inspissating Remedies take pisce. But this Thin-  
ness of the Humours is either attended with an Acrimony, aS  
it often happens in the Scurvy, where the thin and acrid Blood is  
frequently extravasated from the Capillary Vessels, and forms  
scorbutic Ecchymoses, [See EcCiiYMosIs.] and in this Case  
very soft and glutinous Inviscants are required; or else this Te-  
nuity and Incompactness of the Humours is owing so the  
Weakness of the Vessels, and their not acting with sufficient  
Force upon the contained Fluids; and then the proper Reme-  
dies are all such Vulnerary Inspistants as augment the Force of  
the Vessels; and of these we have treated under the Article  
**FIBRA.** And hence it appears, also, that opposite Remedies  
are recommended under the same Head, *Ins.pijs.ants* ; for such  
Medicines as are proper in the former Case, would be Very pre-  
judicial in this last. The following is a vuinerary inspissating  
Drink:. - .' smsi:' ' ς . :

Take ofOrpine, *Consolida, major et minor.* Mallow, Pellitory  
. of the Wall, each one Handful: Boil them in three Pints

Of Water, and mix with it two Ounces of Syrup of Marsh-  
mallows. The Dose is four Ounces warm four times in  
a Day. - - ’ \*' ’ '

*Metigants.2* These are such Remedies as by their soft and  
particularly oily Particles, involve and. obtund all the acrid  
Corpuscles in such a manner as to render them unactive.  
Hence the Medicines here meant, are not such as are in-  
dued with a singular Quality opposite to a certain kind of  
Acrimony, but such as by a soft Viscidity’ obvolve, or envelope  
and mitigate all manner of acrid Particles. Such especially are  
all those Remedies which the Shops call *Emollients,* which miti-  
gate the Acrimony *of* the Fluids, and sosten and lubricate the.  
folid Parts of the Body, E’

A Vulnerary mitigating Drink : I . Λ .

. Take of -Seeds of White Poppies bruised, three Ounces 7  
Flowers of Mullein, two Ounces; Leaves os Bugle, two  
Handfuls; Root of Scorzonera, two Ounces; Root of  
Liquorice, an Ounce : Boil them in three Pints ofWater.  
The Dose is four Ounces warm four times in a Day.ssssT

*Exciting Remedies, or Stimulants.}* When the Vital Forces''  
are in a languishing State, and a Coldness, inertness. Paleness, -  
and a mucous State of the Humours are predominant, without r  
Signs of an attending Acrimony, then all such Medicines as by '  
a grateful aromatic Stimulus increase and quicken a languishing -  
Motion, are proper to be advised ; of which Nature are Aroma- -  
tics. Wine, and the like.’ *s si si '*

♦A vuinerary stimulating Drink :‘

Take Roots of Masterwort, and Swallow-wort, each ope  
. Ounce; Leaves of Rue, Scordi urn,, each one Handful ;

t .. Seeds of Burdock bruised, ten Drams ; Seeds of Carda-..  
mom bruised, sour Drams ; Flowers of Lavender, and  
the Lesser. Centaury, each two OuncesBoil in three

. Pints of Water, and exhibit four Ounces warm four times  
aDby. ... . .τ.,.ῖ.ᾶτ

*‘. Such as are endued with d singular Virtue of correcting a con-  
trary Fsualitys\* This Disorder must first he known and disco-  
vered, before we can fix on an opposite Remedy endued with;  
this singular Property ; and the Fault here must he either in the.  
Solids or Fluids, or in both. As to the Solids, the Disorder  
may consist in their too great or little Cohesion; for Remedies'  
in these Cases, consult the Article **FIBRA.' ss**

\* Vuinerary Drinks endued with a singular Virtue os cor-,  
rectingthein opposite Quality: : ’ τοῦ scsisisi

. i. .For a Corrective of a glutinous Quality, see" the Alon  
tenuating Drink prescribed above\*. δ᾽ . ’.

.4. For a peccant Acid : ' - *- si - - - si fisc -i s '* “ 4 ’ 7

Take of Mustard-seed, half an Ounce; Root of wild Radish,  
Leaves of Hedge-mustard, and Cresses, each two Ounces r  
Give them a flight Boiling in two Pints of Water, cover-  
ing the Vestel. The Dose is two Ounces four times in a  
Day.

3. ForanAlcali:

. Take of the Root of sharp-pointed Dock, two Ounces,  
Leaves of Sorrel, two Handfuls; Root of Wood-sorrel,

one Ounce; Flowers of Borage, twelve Drams : Boil .

. them slightly in two Pints ofWater, and exhibit as the  
preceding. . .

An For a peccant oleous Quality :

Take of Tamarinds; two Ounces; Crystal of Tartar, six  
Drains ; Roots of Grass, five Ounces : Boil in two Pinta  
ofWater, and with the strained Liquor mix two Ounces  
of Rob of Elder ; exhibit as before.

*Aperiiivesf Bv* thisName are called all those Remedies winch  
promote a free Circulation through all the Vessels; for which  
Purpose are required a due Mobility of the Fluids, and a just  
Aperture of the Veffeis. Medicines for these Effects are, also,.  
Various, as they are adapted cither to the Diseases of the Solids  
or the Fluids, which obstruct the free Passage of-the Humours  
through theVeffth. - . .. \ . .. . '

*' Laxatives, Astringents*.] Either of these will be found necei-  
sary with regard to the undue Measure os Strength or Weakness  
in the solid Parts. . *-. .r*

From the Premises it appears, that there is uro such thing as  
a general Remedy, which is os Virtue sufficient for removing  
all these Impediments; but that there are particular Medicines  
accommodated to each Case.

\_ In our Choice of these Medicines we are directed by the  
Nature Of the Disease, and the general Titles os the Medi-  
cines, under the two foregoing Aphorisms. J

When we are acquainted with the Age, Sex, Temperament,  
and Way of Life, of the Patient or wounded Person, and the  
Diseases which may have preceded, or now attend the Wound,  
we thence furnish ourselves with Indications of what ought to -  
he done, and by whatRemedies. To illustrate the Matter by an  
Example: If a Person os a close Contexture of the Solids, and  
an atrabilious Tenacity of Blood, happens to be wounded, the  
Wound will be dry, and not discharge good Pus; and'is it be  
in the Summersseason, the Patient Very het and thirsty, and  
makes but little Urine, and that high-coloured, and os a  
rank Smell, in that Case Decoctions ofAvens, Borage, Bugloss,  
and the like remarkably mollifying and demulcent Herbs in  
Whey, or dure Water, with an Addition of Syrup of Violets,  
Juice of Lemons, Rob of Elder, or the like, drank in good  
Quantities, with an Application of warm Cloths dipt in the  
like emollient Decoctions to the wounded Part, will in a short  
time change the State of the Wound, the Dryness will he cor-  
rected, the diluted Humours will take their free Course thro'  
the relaxed Veffeis, and the Wound will be happily cicatrized.  
But If another Person, happens to he wounded in the Winter-  
time, who is of a pale and cold Complexion, and appears all  
oyer bloated from a lax Contexture of the Solids, and a mucous  
Coldness and Inactivity of the Humours, and has besides lived  
an idle Life,, his Wound will appear pale, cold, and somewhat  
swelled, and will continue in the same State without much Al-  
teration. If the Patient in this Case he treated in the same-Manner as the other wounded Person, he would become much  
worse, both as th his Wound, and the Condition of his  
whole Body- ’ But if, on the contrary, yon treat him with  
Infusions, or small Decoctions of the Roots of Avens,  
Masterwort, Elecampane, Angelica, ContrayerVa, *Virginian*Snakeweed, and the like, with a moderate Addition os Wine;  
he will in a few Hours begin to be heated, and to sweat ; and  
the Colour of ins Wound will be changed from pale to red,  
and a new Life, as it were, will return into the flaccid Parts;  
the loshSubstance will he regenerated, and the Wound will be  
consolidated. If the wounded Person be very hot and feverish,  
after Venesection, administered. Decoctions of Tamarinds, Sor-  
rel, and the like, .will be of Service. But where we cannot.  
attain to so clear a Knowledge of the latent Impediment, and  
the Vital Forces are in a pretty firm State, and capable of put-  
ting in Monon a large Quantity of such Decoctions, in this  
Case we exhibit Decoctions os *China* Root, Sarsaparilla, Scorzo-'  
nera, Skirrets, and the like; sor these are Remedies which di-  
lute, attenuate, dissolve without Violence, relax and open rhe  
Veffeis, and by that means cause a just and equable Circulation,.  
and a plentiful Elimination, by way of Urine and Sweat, of  
many Corpuscles, which by their Stay would be very injurious  
to the Body ; this is all that can be done in the present Circum-  
stances ’ ’ ’ .

A dry and moderately warm Temperature of the Ain, free  
froth putrid Exhalations, and frequently renewed,\* is always  
. best for Wounds.

. When Multitudes of wounded Persons lie sick together in  
Hospitals,- in one Room, the Air is filled with, putrid Exhala-'

Mons, whence the Sick are very much incommoded, and many  
of tl.em die, who miglit otherwise haveheen saved ; for which  
Reason those Places ought srequentiy to be aired by opening **the**Windows, that fresh Air may he admitted, and the putrid  
lsopours dissipated. Suffumigations are much recommended for  
tins Purpose; but fresh Air is more comfortable *ttf* the Patients.  
Bu t a Want os frosh Air is "most of all prejudicial in Wounds  
os the Head, as we are taught by Observation. -Moreover such  
a Temperature os the Air is required, as is qualified sor cheat-  
ing ar.d resreflring the Patient by its mfld, and, as it were. Ver-  
nal Warmth. For a cold Air is always hurtful to Wounds ;  
for the Parts which are stripy os their Integuments by theWound,  
' are immedately sensible of the Cold, to which they are unac-  
customed, and are Very much incommoded by it. Hence it is  
.'that we are told by *Hippocrates, spAph.* 20. that " Cold is

Ci biting to Ulcers, hardens the Skin, excites Pain without  
" Suppuration, and produces Blacknesses, feverish Rigors, Con-  
Ci vulsions, and a Tetanos.” But besides a Warmth, a Dry-  
ness os the Air is, also, required, fince an hot and moist Air is  
-very much disposed to Putrefaction; sor in such a Season the  
Flesh os flaughtered Beasts is soon corrupted, and dissolves into  
a putrid Sanies. We know indeed how to procure a Tempera-  
ture of the Air by artificial Means, in what manner we please,  
according to the Exigencies of the wounded Patients; for by  
kindling a good Fire, particularly of aromatic Woods, we di-  
' minish the Cold of the Air, and correct its Humidity. If the  
Season be too hot and dry, by sprinkling the Floor several times  
in a Day with cold Water, or strewing the same with the green  
and flourishing Branches of the Elder, Lime, or Willow-  
trees, dipt in Water, we can procure a very grateful Refrige-  
ration os the Ait. Such a Temperature of the Air, as the  
present Exigence requires, is demonstrated by the Thermometer  
and Hygrometer. . .

The Belly is to he kept soluble by the Use of Emollients,  
Laxatives, and Eccoprotics.

We speak not here of such Medicines as cause an Evacuation -  
os the Belly or Intestines in a violent manner, for this is not  
the thing here required; but the Intention to be answered is,  
that the Patient may go to Stool without much forcing and  
straining himself.. For we see Persons who discharge thein hard  
Faeces with great Difficulty, hold their Breath with strong  
Efforts, and have their Faces strained and red, and sometimes  
even livid. By such Efforts an Haemorrhage may possibly return  
' to the Wound, and those Parts which began to unite in a Coa-  
lition be again dilacerated, especially if the Wound be inflicted  
on the Parts near the Anus. Hence it is prudently ordered,  
that such Patients as on account of extracting the Stone, or for  
. a Fistula in Ano, are to have a Wound inflicted on those Parts,  
should, some Days before the Operation, have thein large In-  
testines evacuated by some gentle Cathartin and Clysters, so  
that no Faeces may remain ; after which, for some time, they  
are allowed nothing but Broth os Flesh, sufficient to sustain Life,  
but scarce leaving any Faeces in the intestines; so that after the  
Operation is performed, they can live sor a long time commo-  
dioufly enough without going to Stool. Hence we are told by  
*Hippocrates, Lib.* i. *de Morb.* that Costiveness in bad for a .

. wounded Person.

The Belly is evacuated without much Straining, if the Faeces  
be soft, and the intestinal Tube sufficientiy lubricous to admit an  
easy Descent of the Faeces. Hence it is, that, in lean and slen-  
der Bodies, the Belly is often costive ; for in suchSubjects every  
tlting that is soluble in the Faeces is exhausted by the strong  
' Force os the Intestines, whence they become, very dry, com-  
pact, and hard ; and at the same time the Intestines, for want  
os being sufficiently lin'd with a soft smectic Matter, afford but  
a difficult Passage for the Faeces. For this Reason, Very sat  
Broths, Very soft Greens, emollient Decoctions, and mild ex-  
proffed Oiis, by mollifying the Faeces, and lubricating the Pas-  
sages, will answer tins Intention. The like Substances in-  
jected in Form os Clysters have the same Effect, and are of  
particular Service in Adhesions of the hard Pieces to the last  
Intestines, or near the *Anus*; for, in that Case, they give imme-  
diate Relief: Whereas other Exhibitions require a longer Time  
for their Conveyance to the affected Places. And it is often to.  
he sear'd, that a sudden *Tenesmus,* or Desire of going to Stool,  
being excited, the wounded Person will beobliged to strain hard,  
and make strong EffbrtS for the Excretion of the indurated  
Faeces.

**EMOLLIENT REMEDIES,** *for the Purpose aforesaid, are,*I. Pat Broths, of fresh or unsalted Bees.

2. Mollifying Greens boiled in Broth, a Catalogue of which  
. you have under the Article **FIBRA.**

3. Emollient and moistening Drinks and Clysters, specified  
under the aforesaid Article. ' . .

4. Oiis, especially such as are expressed and recent, particu-  
larly Oil of sweet Almonds, and Oil of Olives.

Laxatives are almost the same as Emollients.

Aster the Exhibition of thefe emollient and lubricatingssub-  
stances, or, as it is often practised, in Conjunction with them,  
are given such Things as, by their gentle *Stimulus,* promote the  
Excretion os the abdominal Faeces, without disturbing the  
Body, or rendering the Excrements liquid : For after taking  
Purgatives, the Belly is always observed to he bound. But such  
Medicines as are for our Purpose, are called *Ecceprotica* [see that  
Article], Eccoprotics, because they only expel the gross Faeces  
contained in the Intestines.

ECCOPROTICS *are,*

I. Ripe, Summer, acido-dulcid, pulpons, and succulent  
Fruits; particularly Winter-cherries, Berries of Elder  
and Dwarf-elder, Figs, all Sorts of Garden-cherries,  
Cloudberries, Berries os the Stone-bramble, Strawberries,  
Jujubes, Apricots and Peaches Of the common Sort, white  
- and blue Garden-plums, Damask Prunes, common

Prunes, Prunellas, and red Plums, white, black, and red  
Currants, Blackberries, white and red Raspberries, Se-  
hestens. Tamarinds, all Kinds of Grapes, Craneberries,  
and Goosherries. . -

2. The recent Juices and Musts of these Fruits.

.3. Cassia, two Ounces; Manna, two Ounces; Tamarinds,  
two Ounces; Pulp of Tamarinds, two Ounces; Juice of  
pale Roses, one Ounce; rosated Aloes, fix Grains; Rai-  
sins, four Ounces; Galbanum, half a Scruple; Roots of  
Polypody of the Oak, an Ounce and an half; Rhubarb,  
a Scruple and an half; Infusion of Rhubarb, one Dram ;

- Syrup of Marshmallows, three Ounces ; Syrup os Succory  
with Rhubarb, one Ounce and an half; Syrup of Fumi-  
tory, two Ounces; solutive Syrup of Roses, one Ounce  
and an half; simple Syrup of Violets, two Ounces; sim-  
- ple Honey diluted in Water, two Ounces ; *Pilulae ssus.fi,*fix Drams.

Whether the Remedies above-mentioned are really *Ecceprar.  
tics,* that is, EVacuators merely of the abdominal Faeces, in the  
strict Senfe of the Word, seems a Question; *for* all of them,  
exhibited in a large Dose, purge the Fluids by Stool. Thus **the**recent Juices of Summer Fruits, and the Musts made of them,  
Manna, Cassia, Honey, Tamarinds, taken in large Quantities,  
or repeated Doses, not only cause a Discharge of the abdominal  
Fasces,. or Contents of the Intestines, but most effectually safe  
the Humours, and evacuate them by Stool; and such Medicines  
are properly called *Cathartics.* The antient Physicians made **a**just Distinction in this Cafe ; *set Asclepiades* was of Opinion,.  
that *Cathartics* caused a Colliquation of the Body [συιτακειν τβ  
σῶμα], and then evacuated the colliquated Matter, which '  
existed not before. *Galen, de. Natural. Fac. Lib. Cap.*I3. *AutiThesselus,* as appears from his own Words cited  
by *Galen, Lib. aducrs.us Julian. Cap.* 8. concludes, that Matter  
was converted into Corruption by the purging Medicine, and  
then excreted either upwards by Vomit, or downwards by  
Stool; and proves the same by an Instance of an Athleta,  
of a good Habit of Body, in which all things were dis-  
posed according to Nature; and yet, after a Cathartic exhibited, -  
the same Person voided very corrupt Matter by Stool, which  
doubtless in so sound and .robust a Body, did not exist before.  
*Galen,* who believed that Cathartics attracted things in the same  
State as they were pre-existent in the Body, is Very earnest in  
his Invectives against this Opinion; but his Arguments seem  
not satisfactory. .Certain it is, that Scammony, given to **the**soundest Person, fuses the Blood into a putrid Water, which is  
evacuated by Stool; and the whole Body may he quite emaciated -  
by its repeated Use; so that the Paleness, the collapsed Veffeis,  
and the Decay of Strength, are a sufficient Proof, that there  
was no Evacuation of corrupt Matter which was pre-existent,  
but that the good Iinmours were corrupted thy the Virulent  
Force of the Medicine, and discharged from the Body.

Since, therefore, all those Medicines which have theName of  
*Eccoprotics,* when given in large Quantities, have a cathartic  
Virtue; and fince-NumherS of Cathartics, exhibited in small  
Doses, only irritate,-by a gentie Stimulus, in such a manner  
as to procure an Expulsion of the Faeces contained in the In-  
testines alone, it appears, that this Effect may he obtained, if -  
both the one and the other be exhibited only in small Doses, so  
as to Cause no great Disturbance in the Body, nor induce **any**considerable Alteration in the Humours, but only keep **the**. Belly in a soluble State, which is the sole Intention to be an-  
swered in this Case.

*Hippocrates,* also, carefully distinguished an Evacuation of  
the .faeces alone'from Purgation in his Book os *Prognostics,*where, after he had treatedsof the Matter discharged by Spis,

he says, " For whatever in these Places cease not upon Expecto-  
« ration, nor a Discharge Of the abdominal Faeces, [προσ τήν  
" τῆς κοιλίης ἐκκοπρωσιν] nor Phlebotomy, .nor Diet, nor Pur-  
" gations [φαρμακείας], will he sure to excite a Suppuration." -

Sleep is to be procured by Anodynes, moist Fond, and

‘ Narcotics..

Nature has but one Way to repair the Waste, or Defect,, of  
that Very subtile Fluid, I mean the Spirits, and that is, by main-  
taining only a vital Motion during a total Cessation of animal  
Motion, or, in other Words, by a quiet Sleep. When a Per-  
son is fatigued with hard Labour, or spent with Meditation,  
and makes a Repast on very wholsome Food, unless at the  
same time he refreshes his Body with gentie Sleep, he.will find  
himfels oppressed with a Dulness os Spirits, and an Heaviness  
os Body. But aster a goed and quiet Rest by Sleep, what an  
Agility of Body, and what a Serenity os Mind, immediately  
succeeds l and whet, a Clearness and Perspicuity of Thought  
and Apprehension does the Student experience, when he ad-  
dresses himself to his Morning Meditations, after a full and  
quiet Night's Sleep l Hence, though by an Ingestion of Meat  
and Drink, we are able so restore whet, by the established Laws  
of Lise and Health, is daily lost from the Body, yet Sleep is the .  
principal Time for the Accomplishment of this End, and for  
rendering the Aliment fit to succeed in the Room of the lost  
- Substance. For a stronger Respiration’with a more potent and  
equable Action of the Heart and Arteries in the time ofSleep,  
perfects and disposes all the Humours in such a manner as to render  
them extremely well qualified for restoring what was lost, whilst  
' the changing, applying, and consolidating Causes, act with so  
great Liberty. This was perhaps meant by *Hippocrates, de  
Insomniis,* where he says, "For the Soul is waking, and  
" since it is employed in ministering Supplies to the Body, has

no Leisure for itself, but furnishes Recruits for every Part of  
" the Body, particularly the Senses of Seeing, Hearing, Feel-  
" ing; forWalking,Acting, and all bodily Motions are accom-  
" panied with Cogitation ; but is not employ'd about itself.  
" And when the Body is at Rest, the Soul is in Motion.; and

extending itself into the several Parts of the Body, has the  
" Government os them as of its own House, and discharges  
" itself all the Actions of the Body." Hence it appears  
how pernicious long Watching is to wounded Persons, and  
how necessary Sleep is to the Regeneration of the lost Substance,  
and the Consolidation os the Wound. If Sleep, therefore, he  
wanting, it is to be procured by means of Anodynes which re-  
move rain; for Watchings, especially in wounded Persons,  
proceed from Molestation by Pain, though anxious Cares, or  
Violent Passions os the Mind, may produce the fame Effect.  
But Remedies which remove Pain operate three differentWays;  
Tor they act either by removing the corporeal Cause winch  
makes such an Alteration in the Body, as to occasion in the  
Mind that troublesome Perception called Palm; or by effecting  
such a Deposition in thePart of the Body to which the dolorific  
Cause is apply'd, that it can either not at all, or but weak-  
ly he affected by it; or, in the last'place, though the Cause  
os the Pain be not removed, and the Condition of the Part  
affected remains unaltered, they operate, however, by taking off  
the Sense of the Pain. Thus, for Instance, when a Part un-  
der an Inflammation is pained, the Couse of the Pain is an  
. inflammatory Blood, which, on account of .its Denfeness, is  
' incapacitated for. Circulation, - and sticks in the Vessels, and  
by the impetus of the Vital Liquid presses with great  
Force upon the obstructed Vessels. Every thing, therefore,  
which is capable of rendering the impacted Blond moveable in  
such a manner as that it may flow with a free Current through  
the obstructed Vessels, will remove the Pain by removing the  
Cause. ' But if by an Application of Very foft Cataplasms, or  
Fomentations, the solid Parts are relaxedTo such a Degree, as  
' easily to give Way to the distending Causes without Danger of a

Rupture, though there remains the ..same inflammatory Dense-  
nefs of the Blood, and the same protrusive Impetus of **the**Vital Liquid, yet the Pain will either cease, or at least he Very  
much diminished. And, in the last Case, when neither of **the**former Effects is produced, but the Cause cf the Pain remains,  
and the Condition of the Part affected continues the same, yet  
let there be exhibited a Grain or two of Opium to a Patient  
not accustomed to it, and all Sense of the Pain willcease, tho'  
the exciting Cause continues to act. Hence all Remedies which  
one or other of these three Ways are the Means Of removing  
Pain, ought to he called *Anodynes.* But established Customhas  
now \_ appropriated that Name to fuch Medicines as either re-  
move the Cause of Pain, or cause such an Alteration in the  
pained Part that it shall not bo affected, or at least in a Very  
flight measure, by the same Cause. Andas sor those .Remedies

which only takeaway the Sense of Pain., without affecting any  
Mutation either in the Cause of the Paln, or In the Part ajo  
fected, they are called *Narcotics,* that is, *Stupofartives.* In former  
times, however, stupefactive Remedies were called *Anodynes ;*for *Caelius Aurelianus,* treating of the Tooth-ach, says, that  
" Many of the antient Physicians at the time of the Paroxysm,  
" prescribed the Application of such Medicines as the *Greeks*" called *Anodynes,* and which we may call *Removers ofthe Pain,*“ which, as they are to be used in the Night-time, remove the  
" Sense of Paln, but not the Pain itself. ° And *Celsus,* in  
Lib. 5. *Cap.* 25. telis us, that ic Those Medicines are called  
*" Anodynes,* which, by Sleep, alleviate Pain; but that it is  
" wrong eVer to use such Medicines, unless absolute Neces-  
" fity calis for it. " #

Besides, the Causes of Pain in a Wound are, the Distraction  
of the Parts as yet cohering, whilst the Lips of the Wound are’  
retracted ; the Tension of the nervous Fibres from a Retrac-  
tion of large divided Trunks, which, also, draw the small la-  
teral Nerves; or, a Distraction of the Fibres which remain  
entire, when tense Nerves are half divided or punctured: An  
inflammatory Tumor of the Bottom and Lips of the Wounds,  
and the Acrimony of the Humours discharged into the Cavity  
of the Wound, and irritating the raw Parts, Anodynes, there\*  
fore, are all those Medicines which by diluting, relaxing, moist-  
ening, correcting, or obtunding Acrimony, and resolving  
distending Tumors, remove the Cause of the Pain; or so  
change the Part affected, as that it is not by the Cause of the  
Fain so stimulated, aS to excite in the Mind the ungrateful  
Perception called *Pain.*

ANODYNES *are,*

I. Diluents.

2. Laxatives. -

3. Moistening Substances; for all which, see FI ER A. 1  
am Correctors os Acrimony.

5. Such as resolve distending Tumors. .See FIERAs,

*As for a moistening Diet-,* all sarinaceous Seeds bruised may,  
by a strong Pressure, yield a large Quantity of Oil; and the  
same Seeds, when triturated with Water, yield Emulsions, in  
which the mild Quality of the Oil remains, without any Dread  
of a rancid Corruption. From these, therefore, or Decoctions  
of such farinaceous Seeds with Water, Milk, or Broth, we  
have a moistening Diet in which Water predominates, but so  
adheres to the farinaceous Lentor of the Seeds, that it does not  
easily flip out of the Body, but remains long in it. SuchTood,  
long persisted in, alleviates the most obstinate Pains, by relax-  
ing all the Solids, and rendering the Quality of all the Humours  
mild.

*As for Narcotics* ; if the Pain neither remits, nor yields to  
the preceding Medicines, or is so intense that it cannot he herns  
without great Injury, till the Cause of the Pain is remov'd ; then  
there are such Medicines as, without removing the Canse os the  
Pain, destroy the Sense of it in the Mind For the highest  
'Cause of Pain may he lodg'd in the Body, without any Sense of  
Pain in the Mind ; as is obvious in apoplectic Patients, who are  
not sensible of the Application of live Fire to any Part os their  
-Bodies. There are many Substances of a narcotic Quality,  
such as Henbane, Nightshade, Dutroy, and many others;  
but the Use of all these is suspected, especially if exhibited in-  
ternally because they greatly disturb the Operations of **the**Mind. The Use of Poppies is, by numberless Experiments,  
found io he, far safer. As the *European* Poppies are of small  
Efficacy, a pretty large Dose os them must be exhibited. The  
Juice of the *Astatic* Poppy, known in the Shops by the Name  
of *Opium,* if exhibited prudently, and in a due Quantity, ex-  
cellently sooths Pain; which, however, if its Cause is not re-  
mov'd, will return a sew Hours after, when the Efficacy of the  
Medicine ceases. *Galen,* io *Method. Medend. Lib. 12. Cap. %.*tells us, that *Opium* proves hurtful; by its cold Intemperature.  
Many others have embraced the fame Opinion, and for that  
Reason have either used it with great Terror, mixing it with the  
hottest Substances, in order to correct this formidable Cold-  
ness, or absolutely condemn’d it as a deleterious Substance.  
The Person who has once tasted the hot Bitterness of *Opium,*wist easily helieve that a cold Quality is unjustly ascrib’d to  
*Opium,* but this excellent Medicine has long been branded with  
this Mark of Insamy , so that many Physicians have not only  
rejected, but-eVen abhorred the Use of it. A great Part os the  
Fame and Reputation *Paracelsus* acquir'd was owing to the  
surprising Cures he perform’d by his *Laudanum.* The Inhabit-  
ants of *Asia,* especially such, of them as are by their Religion  
debarred from the Use of Wine, daily uso lame Quantities of  
*Opium,* without any Injury : They, also, who most condemn  
*Opium,* use it, without any Dread, in’the grand officinal Com-  
positions, as the *Theriaca,* Mithridate, and *Philordum,* in all

Of which there is a large Quantity of *Opium:* Others, with a  
sordid View to Interest, secretly give *Opium* disguised with other  
Medicines, that they may seem, by other *Arcanums,* to do that  
which is owing to *Opium* alone. *It* is true, most Physicians  
were once of Opinion, that the medicinal Efficacy of Mithri-  
date, the *Theriaca,* and other Compositions of a like Nature,  
did not depend on the concurring Force of all the ingredients,  
but that, from a certain Union of them all, a new and highly-  
efficacious Medicine was produced :. For which Reason, they  
recommended old *Thcrlaca,* and preferred it to that which was  
newly prepared. Tho' this Opinion seems pretty, specious, yet  
any Person, who considers the Matter, will easily perceive,, that  
there is an hot Quality in these grand Compositions, but that  
their principal Virtues depend upon *Opium.* The Mithridate of  
*Damocraies,* older than any of the rest, consisted of so many  
different Ingredients, that *Pliny, in Lib.* 29. *Cap.* I. said,  
" Some os the Gods must have been Author of such a Fraud, .  
" since the Craft of Man could never have invented such a  
Ci Medicine, which discovers a ridiculous Ostentation of Art,  
" and a monstrous Pretence to Science." . But *Andromachus,*who liv'd under *Nero,* and was one of his principal Physicians, .  
retain'd most of the Ingredients in the Mithridate of *Damo-  
crates,* and added some others, especially the Flesh of Vipers,  
and thus made a new Antidote, which, from that Circum-  
stance, he call'd *Theriaca.* He wrote, a small *Greek* Poem, de-  
dicated to *Nero,* in which he gives a Description of his *Theriaca,*which he calls γαλήνη, that is. *Tranquil.* Nor is this to be  
wonder'd at ; for the cunning *Andromachus* added a third Part  
Inore of *Opium* to his *Theriaca i* So that the Mithridate of *Da.,  
rnocrates* began to lose its Credit, and the *Theriaca* alone was  
highly extol’d, and has ever fince retain’d its Reputation t A  
fuse Proof that *Opium* was not only daily used, but, also, pro-  
duc'd salutary Effects, even in the Times when it was Con-  
demn'd almost by all Physicians.

All the officinal Preparations from the Flowers, Leaves, and  
Juice of the Poppy, may be so exhibited, as only.gently to oh-  
tund the Senses, os, by a larger Dose, to induce a profound  
Bleep, or, by an unikilsuI Use of them, a mortal Apoplexy. .  
It often happens, that a small Dose of them alleviates Pain  
without inducing Sleep, but a gentie Ease of Body and Mind  
is produced, which cannot be describ'd, even by those who  
have experienc’d it. But this Medicine, tho\* exhibited in the  
same Quantity, does not produce the same Effects on all Pa-  
rents. - Whilst, therefore, a Physician is ignorant of the .par-  
ticular Constitution of the Patient, it is expedient to dissolve 2  
few Grains of *Opium* in some proper Vehicle, and give it in  
Spoonfuls every Quarter of an Hour, till the Sense of Pain is .  
alleviated: But the same Quantity of- *Opium* exhibited all ar  
once, produces a greater Effect than when it is given in separate  
Dopes. They who have often used this Remedy, are no longer  
reliev'd by it, unless its Quantity is gradually augmented t-And  
it is certain, from undeniable Observations, that by gradually  
augmenting the Dose, some Persons have, without any Injury,  
daily taken incredible Quantities of *Opium.* Narcotics aro  
always attended with this Disadvantage, that they render the  
Patient costive; but this Symptom is easily remov’d by a gentle -  
Clyster: Such Medicines, however, externally applied to the  
Part affected, afford great Relies. Hence Cataplasms and Fo-  
mentations of emollient Herbs, with the Addition of the Leaves  
of Henbane and Garden-poppies, are of great Use.

Narcotics are such Medicines as blunt the Quickness of the  
Senses; and are either,

I. The most mild Paregorics; such as the bruised Seeds of  
white Poppies, two Ounces;

The Syrup of white Poppy-heads, one Ounce and an half;  
The Syrup of *Diacodium,* one Ounce and an half; and  
The Syrup of wild Poppy-flowers, three Ounces:

' Os all which Various safe Medicines may be prepar'd. Thus,

*.. For a mild Draught.*

Take of the distilled Water of wild Poppy-flowers, three  
Ounces; of the distilled Water of Bean-flowers, one  
Ounce; os the distilled Waters of Peony and Elder-  
flowers, each one Ounce and an half; of the distilled  
Water of the Flowers of the Lime-tree, one Ounce ; and  
Of the Syrup of wild Poppy-flowers, one Ounce and an  
half: Mix for a Draught.

*The fame, somewhat more* hypnotic.

To the former Mixturo, instead of the Syrup of wild Poppy-  
flowers, add the fame Quantity of the Syrup of *Diacodium,*Or of the Syrup of white Poppy-heads.

A mild Emulsion may be prepared thus.

Take of sweetAlmonds, Pine-kernels, and the Seeds of white  
Poppies, each one Ounce; and of the distilled Water of

wild Poppy-flowers, a sufficient Quantity: Make into an  
Emulsion; with ten Ounces Of which mix one Ounce of  
the Syrup of wild Poppy-flowers. \_

*The some, a little more* paregoric.

To the former Emulsion add, instead of the Syrup of wild  
Poppy-fiowers, the same Quantity of the Syrup of *Diu-  
codium,* or of the Syrup of white Poppy-heads. Os,

2. Stronger Narcotics: Thus,

For PILLs. 6

Take of the purest *Opium,* two Grains: Make into three  
Pills; of which let the Patient take one for a Dose, taking  
a second an Hour after, if the first produces no Effect;

. and the third after that, if the two first prove ineffectual.

*For a* POWDER. \*

Take of the purest *Opium,* a little dry, two Grains; and of  
red Coral, and Pearl-fugar, each half a Dram r Mix inm  
a Powder, to be divided into three Doses; to be exhibited  
in the same manner with the preceding Pilis.

*For a* PRESERVE.

Take of the preceding Powder of *Opium,* one Dose; and of .  
Marmalade of Quinces, one Dram: Make into a Bolus;  
to be used and repeated in the fame .manner with the  
preceding Preparation. . \*

For DROPS.

Take Of the best *Opium* dried, one Dram ; and of rectified  
Spirit of Wine, one Ounce ; Make into a Tincture; the

. Dose of which may be thirty Drops, in two Ounces of  
distilled Baum-water, and half an Ounce of the Syrup of  
.wildPoppy-flowers. Or,

Take of *Opium,* a little dried, one Dram; and of the Spirit  
Of Vinegar, one Ounce: Make into a Tincture; the  
Dose *os* which may be thirty Drops, in two Ounces of the  
distilled Water of wild Poppy-flowers, and half an Ounce  
Of the Syrup of wild Poppy-flowers. - ε

*‘ .A hot* MIXTURE.

Take of the Tincture of *Opium,* prepar'd with rectified Spirit  
; of Wine, seventy Drops; of the Symp of white Poppies,  
. fix Drams ; and of the distilled Waters of Citron and  
Orange-peel, and Cinnamon, each two Ounces: Make  
into a Mixture; of which' let the Patient take one Spoon-  
. ful every Half-hour, till the Pain is allay'd,

*A cold* MIXTURE. ‘

Take of the Tincture of *Opium,* prepar'd with Spirit of Vi-  
negar, eighty Drops; of the Syrup of Mulberries, six  
. Drams; and of the distilled Waters of Borage, and wild  
Poppies, each three Ounces: Make into a Mixture; to  
be used, in the same manner with the former. / \_

An Emulsion may he prepared thus: .

Take of the bruised. Seeds of white Poppies, two Ounces:  
With Barley-water reduce to an Emulsion; with ten  
Ounces of which mix of the Syrup of *Diacode urn,* one  
Ounce and an half; of the Tincture of *Opium* prepared  
with rectified Spirit of W ine, twenty Drops; os distifled  
. Ctnnamon-water, two Drams ; and of distilled Citron- .  
peel-water, ten Drams: Of this Preparation let the Pa-  
tient take an Ounce and an half every Half-hour, till the  
Pain begins to be alleviated.

An Epithem may he prepared thus. \*

Take of the Tincture of *Opium,* prepared with Spirit of  
Vinegar, three Drams; of the distilled Waters of Elder

- and Rose-flowers, each three Ounces; of the Vinegars of  
Elder and of Roses, each half an Ounce : Mix all together;  
to be applied with Cloths to both Temples.

It is of great Senrice, in Cases of this Nature, so to apply  
Demulcents to the Part affected, as to remove the Cause which  
deprives the Patient *os* Sleep, which is the Pain in the Part  
affected. This Intention is answered by the following Prepa-  
rations, applied tepid, and preserved in tho same state css Te-  
pidity, till the Pain is alleviated. A Cataplasm may be prepar'd  
thus: .

Take of the recent Leaves of Garden-poppies, one Hand-  
sol; of the recent Leaves of black Henbane, half an Hand-  
ful 5 and of the recent Leaves of Marshmallows, four

Handfuls : Boil in new Milk, and towards the End add of  
the Meal os Linseed, one Ounce; and of the recent ex-  
pressed Oil of Linseed, two Ounces: Make into a Ca-  
taplasm. .

A Fomentation may be thus prepar’d:

Take of the thin expressed Juice from the preceding Cata-  
plasm, three Pints: With which mix half a Dram of pure  
*Opium, for* a Fomentation.

The Patient'S Mind is to he kept serene, Venery is to he  
avoided, and Rest enjoin'd.

As Violent Commotions of Mind are capable of inducing  
strange Changes on the Body, and disturbing all its Functions,  
they must always prove hurtful to wounded Patients: But a  
calm Serenity os Mind, undisturb'd either by the Consciousness  
of Guilt, or the Dread of Want, and supported by the chear-  
ing Hopes of future Prosperity, is. of great Service to wounded  
Persons: An Excess of Joy is equally prejudicial with other  
Commotions of Mind. ‘ *Sanctocius,* and others who have wrote  
on the statical Part of Medicine, have observ'd, that Chearsul-  
ness renders the Body highly perspirable, and sensibly lighter than  
at otherTimes : But this denotes a free Circulation thro' all the  
Vesseis, land an expeditious Exercise of all the Functions, that  
is, perfect Healths Y

*Venery is to be avoided*; nothing more throws the nervous  
System into Commotions, than the Use of Venery: Hence it is,  
by the unanimous Consent of Physicians, accounted prejudicial  
to wounded Patients; and the fatal Event has’been prov'd, by  
melancholy Instances. Hence,in the Diet of wounded Persons,  
all those Things are to he avoided ,which may stimulate to Ve-  
nery; such as Oysters, Crabs, and Lobsters.

That Rest is absolutely necessary to wounded Persons, is sussi-  
erently obvious: For by Motion those tender Vessels which are  
regenerated in the Wound, under the Appearance of a soft *Mu-  
cus,* are destroy’d.

There are two Circumstances requisite to the Regeneration  
os lost Substance in a Wound ; that is, that a laudable Fluid  
should, in a due Quantity, and with a proper *Impetus,* he con-  
vey'd to the Wound; and that the Vessels, receiving the Hu-  
Inours convey'd to it, should only receive and transmit such  
Liquids as, in a. State of Health, ought to be convey'd throd  
them. Hitherto we have treated principally os those Things  
which ought to be observ'd in the Diet, and the Use os Reme-  
dies, that a good Disposition os the Fluids, convey'd to the  
Wound, may be produc'd. We now come to treat os that  
Disposition os the transmitting Vessels in a Wound, which is  
requisite to the Restitution os the lost Substance, and the Union  
os the separated Parts.

That the Canals may be kept in a due Condition, and **the.**Fluids in the Wound preserv'd from corrupting, and by that  
means hindering the Actions above-mentioned, the Part is to

‘ be defended from the Air, theWound is to be fomented with  
mild balsamic Vulneraries, fill'd with Lint sor the sake of an  
equable Compression, and treated with such Medicines as are  
friendly to the Nerves.

. After the Infliction of a Wound, the Extremities of the di-  
vided Vessels are retracted, lessen'd, and resist the Fluids forc'd  
thro’ them Then an inflammation begins to he form'd in the  
Bottom and Lips of the Wound ; this is succeeded by a Gene-  
ration of Pus ; and whilst this happens, the Extremities os the  
open Vesseis are gradually protruded from the Bottom os the  
Wound upwards, and from all its Circumference towards the  
Centre; and these Extremities resemble a tender *Mucus,* of  
which is regenerated the Substance lost in the Wound. It is  
therefore obvious, that, to this Purpose, it is requisite these  
pulpous Vessels should retain a due Softness; and that the Hu-  
mours, discharg'd from the Vesseis into the Cavity of the  
Wound, should be of a mild Quality.' For if, by a spontaneous  
Degeneracy, they should acquire an Acrimony, the pulpous  
Substance growing again, will he destroy'd. Both Intentions  
are in some measure answer’d by preventing a free Accessos the  
Air: For it is certain, from Experience, that the Parts of Ani-  
mals may, for a Very long time,, be preserv'd from Corruption,  
is they are carefully kept from all Access of the Air; whereas  
they often become putrid in a sew Days, when exposed to the  
free Air. *Boyle,* in his Treatise of the Usefulness of Experimen-  
tal Philosophy, telis us, that theroastedFlesh osGoats and Fowls,  
cut in small Pieces, immersed in melted Butter, and kept in a  
close Vessel, were preserv'd free from Corruption, and retain'd  
their natural Taste for above fix Months, in a Ship returning  
from the *East-Indies,* tho' the Ain was intensely hot. Besides,  
the Air, acting freely on a Wound, dries and destroys the ten-

der Extremities of the growing Vessels; so that thesis, becom-  
ing mortified. *Sordes* are produc'd in a Wound, before pure ;  
and these *Sordes*.must he separated, before a Consolidation can  
happen. For this Reason, many have imagin’d that something  
of a poisonous Quality was lodg'd in the Air, when they saw  
that so great Changes were produc'd in Wounds by ita free  
Access to them. P or this Reason, also, the most skilful Sur-  
geons Order Wounds to be dressed as seldom as possible.

The whose Surface of the Wound ought, therefore, to he fo  
cover'd, as to be defended from the Air: This is best done by  
Vuinerary Balsams, especially of the native kind; which, by  
their thick Unctuosity, adhere to the Parts, and contain in them-  
selves a mild Aromatic, and at the same time an Acid, which .  
resists Putrefaction, but which is, however, so sheath'd up in **a**pinguious Substance, as not to prove prejudicial by its Acri-  
mony . For by a chymical Analysis all native Balsams yield an  
acid Liquor, and a fragrant, thin, aromatic Oil; whilst a tough  
Refin remains in the Bottom of the Vessel. When these native  
Balsams, gently warm'd, that they may spread equably, are in a  
small Quantity appliedto the Surface of a Wound, they cover  
the tender Vessels, prevent the Access of the Air, hinder the  
drying of the Parts, and preserve the extravasated Humours  
from- Putrefaction. Hence it is obvious, that only a small  
Quantity of these Balsams is requisite; and that these Surgeons  
act preposteroufly, who incumber WoundS with too large **a**Quantity of them: For they are heterogeneous Bodies in a  
Wound, which, by the Interposition of their Bulk, hinder the  
Concretion of the Parts. Most native and artificial Balsams act  
almost in the same manner. :

The mild Vulnerary Balsams for pure Wounds, are,

I. The native Balsams of *Capita* and *Gilead,* Liquidamber,  
that os *Mecha, Opobalfam,* the Palm Balsam, those *css. Peru*and *Tolu,* .and that *of* Turpentine.

**2.** Simple artificial Balsams, such as rectified Oil of Wax,  
the thick Oiis of Turpentine, Linseed, St. John'S-wort, Roses,  
Nightshade; sweet-scented Trefoil, and fresh Butter.

3. Artificial compound Balsams. Thus, .

Take Of the Flowers of Sulphur, four Drams ; and of **the**'Oil *of Linseed, or* Olives, four Ounces: Boil over **a gentie**Fire, till the Sulphur is totally distblv'd. , -

Take of the hest *Gum Elemi,* cut small, one Part: Dissolve  
Over a gentle Fire,, and add an equal Quantity of pure  
native *Venice* Turpentine.: Pass the Solution thro' A linen  
Cloth, and add two Parts of the Marrow of Bees, boil'd,  
and separated from its Membranes. This, like the *Lini..*

*Ί ' mentum Arceei,* is an universal Balsam.

**✓**

. Take of the Wood of Ted Sanders, one Pound; and of com-  
mon Water, four Pints: Boil sor two Hours; strain and  
-inspissate to the Consistence of a thick Extract, with which  
mix two Drams of Dragon's-blood reduc'd to a fine Pow-  
der. Mix a little of tins with the preceding Balfam, till  
it acquires an agreeable red Colour; and this is the red  
Balsam.

Take of the Oil of Olives, one Pound and an half; and of  
the Wood of red Sanders, half an Ounce: Boil gently, .  
till the Oil is of a deep red Colour j then strain it boiling-  
hot thro' a linen Cloth, and dissolve in it Of yellow Wax,  
One Pound ; and of the best Turpentine, one Pound and  
an half. This resembles the Balsam of *Lucatellus,* and is  
render'd still better by the Addition of One Ounce Of *Per  
ruuian* Balsam.. . ...... . :

All these are to be dropt warm into the Wound, which is toXbe cover'd with a Pledget dipt in the Balsam; and the Dressing;  
are to be renew’d every twenty-four Hours.

We are, also, to consider, that the equable Covering os the  
Skin is wanting in the Wound: Hence the pulpons growing .  
Vesseis, cover'd with a soft Balsam, and fomented with a moist  
Warmth, will easily yield to the distending Liquids, will the  
augmented in all them Dimensions, and, being dilated, will ad-  
mit foreign Humours. Hence the whole Surface os the Wound  
will degenerate into a flocculent Substance call’d fungous Fiesta  
This will be prevented, if such a Degree of Pressure is applied  
to the Wound as is sufficient to supply the Defect of tho Skin  
which before compressed it: This may be done by filling the  
Cavity of theWound with soft and dry Lint, slightly anointed  
with a mild Balsam, in that Part, where it touches the Surface  
of the Wound; then let the Lint be so secur'd, by a Plaistac or  
Bandage, aS by a gentle Pressure to prevent the excessive Di-  
latation of the Vessels; guarding, at the same time, against too  
strong a Pressure, which might destroy the tender Vessels, or  
suffocate the Motion of the Vital Humours thro' the Parts. Bv

fuch a gentle Pressure the *Membrana Adipose,* every-where in  
the adjacent Parts confin'd by the Skin, is hinder’d from fifing  
in the Wound, where it would degenerate Very soon.

Plaisters are os Use to retain these Things in Wounds,-and  
are hardly of any other Service than that produc'd by their  
safe tenacious Quality. ’ -

This will not easily he believtd by those Surgeons who gene-  
rally ascrihe the happy Cure of Wounds to their Plaisters; and  
in this Case almost every one pretends to an *Arcanum* of his  
own: But if the before-enumerated Conditions of a Wound  
ate present, it is cur'd, whatever Piaister is applied, provided it  
contains nothing in itself which may prove hurtful by disturbing  
rhe begun Work of Nature, or by removing the Conditions  
requisite to the Regeneration of the lost Substance, by its ex-  
cessive *Stimulus,* or any other Cause. That it is so, is obvious,  
from this, that al tho' every Surgeon has his favourite Piaister,  
known only to himself, yet they are all equally successful in  
their Cures, if the other Remedies have heen in the same man-  
ner applied to the Wound. It is true, Plaisters, applied to the'  
Skin, may, hesides their requisite Tenacity, contain such Ingre-  
dients, as being mov'd, and render'd active by the Heat of the  
Body, may insinuate themselves into the bibulous Vessels, and  
by that means considerably affect not only the Part to which  
they are applied, but, also, the whole Body.. Such as blistering  
Plaisters, mercurial Plaisters, and many others. Put such Plai-  
stars we do not here consider, since, in this Cafe, it is only re-  
quisite the Dressings applied to the Wound should be retain'd in  
their Place; for which intention Tenacity alone is suffici-  
**enti** Hence Plaisters, prepar'd of Lead, or its Various Calxes,  
boil’d in Oil to a due Degree of Tenacity, are of great Use ;

**1** because they are easily borne by those whose Skins are inflam'd  
hy the Application of almost any pinguious Substance. Such are  
the red Lead Plaister, *Diapalma* Plainer, the *Emplastrum Dia-  
pompholygos,* the Ceruss Plaister, the red defensive Plaister of  
*Vigo,* and many others, which in this Case produce the same  
Effect. .

- The red defensive Plaister is prepar'd thus:

Take of the Oil of Roses, and white Wax, each six Ounces;  
Of *Armenian* Bole, and Dragon'S Blood, each an Ounce  
and an half; and Of the Powder ofred Roses, half an  
Ounce: Mix all together over a Fire, and agitate till.  
Cold.

The same End is, also, answer’d by the *Emplastrum Defen.,  
sivurn Coeruleum,* and the red Lead Plaister.

The Fluids convey'd to the Wound, and extravasated in  
it; the half-mortified Fibres, and the obstructed and tumefied  
Vessels, produce in the Wound PuS, Ichor, Sordes, and fun-  
gous Flesh. -

At the renewing of each Dressing, the Wound is to he care-  
fully view'd, in order to observe whether there is any Change  
induc'd on its Surface, which may hinder the Regeneration of  
.the lost Substance, and the Consolidation of the Wound: For  
if all the Parts are red, clean, and equably moist, we know  
that theVeffeis and Humours have the due Conditions requisite  
' to the Cure : But if the Wound is dry, or sordid, we certainly  
know, that it cannot be consolidated till these Sordes are re-  
-mov'd, and the Humours equably convey'd thro' the Veffeis in  
every Point of the Surface of the Wound. But thefe Impedi-  
ments to the Consolidation arise either from the extravasated  
Fluids degenerating into a foreign Nature, or from an. Obstru-  
ction and Tumefaction of the Vessels, or from both these Causes  
together : For many Parts in a Wound may be partially di-  
Tided, and yet adhere to the sound Parts, tho’ they are totally  
depriv'd of the Vital Influx of the Fluids. Hence they are mor-  
tified, 'and ought to be separated from the found Parts; .sor **so**long aS they remain there, they, like an heterogeneous Body,  
hinder the Consolidation of the Wound: But after the Orifices  
of the Vessels, on the Surface of a Wound, begin to discharge  
\* their Humours, these collected Humours, by then Stagnation,  
the Heat of the Place, and the Dissipation of their thinner  
Parts, are chang'd into a mild unctuous Liquid call'd Pus;  
which, tho’ always a good Sign, as we have already observ'd,  
. may yet prove hurtful, when too long left in the Wound ; for  
then it is corrupted, and becomes acrid : But if the Surface os  
the Wound is moist with a thin Ichor, but not with a laudable  
Pus, there will never he a good Consolidation so long as this  
Symptom is present. But this is understood, if such a thin Sa-  
nies appears in the Wound after it has heen cover'd with a pro-  
per Dressing for twelve Hours, or more : For if, an Hour after  
all the Pus is remov'd, the Wound is uncover'd, no PuS will  
appear, but a sar thinner Liquid; winch, however, when left

there, will he converted into Put. But by Ichor we here mean  
that thin Liquid, generally of an acrid Quality, which, by its  
Continuance in the Wound, will never he converted into a laud- -  
able Pus, but always hecome more and-more acrid. But such  
an Ichor is either form'd from an Extravasation of fuch Fluids  
as cannot be converted into laudable Pus; or from Pus too long  
left in the. Wound : For in this Case it is again attenuated, and  
becomes acrid. For when a suppurated Part os the Body is,  
**at** a proper time, laid open with a Lancet, a laudable and thick  
Pus is discharg'd : But if such a Part remains too long hesore  
it is open’d, the contain'd Pus is again attenuated, and, upon  
opening the Place, a thin Sanies is discharg’d, instead of a laud-  
able Pus.

*Sordes* are form'd in a Wound, either by the half-divided  
Parts, or the mortified Parts, aS yet not separated from such aS  
are found, or by the Vessels dilated and distended with a stag-\*  
nant Liquor; in which Case, the Surface of the Wound does  
not appear pure and red, but white, almost like Bacon. And  
unless these *Sordes* are separated from the live subjacent Parts,  
they are chang'd into a yellow, and sometimes a brown Colour,  
and denote the worse Degeneracy, themore their Colour re-  
cedes from white, and inclines to brown.

Fungous Flesh is principally form'd, when the Surface of the  
. Wound is not compressed with a Force equal to that with which  
the entire Skin compresses the adjacent Parts: Hence the *Mem-  
brana Adipose* rising, swells, and soon degenerates into fungous  
Flesh, aS is already observ'd; arid especially if, by a Fever, the  
*Impetus,* and Velocity of the Circulation, are increased: For,  
in this Case, the dilated Veffeis rise, if not prevented by a due  
Compression. For we see that almost every Part of the Body,  
when the equable Pressure upon it is remov'd, rises into a Pro-  
tuberance, which makes less Resistance than the Part in its na- i  
tural State did. Thus in Wounds of the Head, or after the  
Application of the Trepan, when a Part of the *Cranium* is re-  
mov'd, and at the same time the *Dura Matcr* divided, the Sub-  
stance of the Brain rises in surprising *Funguses. " Is* the Inte-  
guments of the Abdomen are divided by a Wound, and the  
*Peritoneum* at the same time is left entire, unless the Part is se-  
cur'd by a proper Bandage, soon aster the Contents of the Ab-  
domen, being pressed into the less-resisting Place, and the *Peri-  
toneum* being dilated, will produce an *Hernia,* The Origin,  
therefore, os fungous Flesh, in a Wound, is the natural Corle  
sequence of the Diminution of the equable Compression.'

So long as all these are present in a Wound, they will hinder  
its Consolidation; for they are heterogeneous, and consequently  
ought to be remov'd: And how this is done, is shewn in **the**next Aphorism.

. ’ ✓

These Things are generally remov'd by the Help *os* Di-  
gestures. Abstergents, Corrosives, Exsiccants, and often by  
.Compression.

When skilful Surgeons see the Surface of a Wound so dege-  
Derating that it is not every-where red and moist, but white,  
yellow, or brown *Sordes* appear, they know that the best Bal-  
sams are not sufficient: Nature, indeed, alone, by a benign  
Suppuration, endeavours to separate these corrupted Parts; but  
the subjacent live Vessels, incumber'd with these adhering  
*Sordes,.* are .not able easily to remove them : Hence these half-  
mortified Parts, adhering long to them, are corrupted, and de-  
generate into a worse Quality : Then they apply such Remedies  
as mollify these sordid Parts, but at the same time resolve them  
by their saponaceous Quality, and by their gentle *Stimulus* irri-  
tate the subjacent live Parts, that there may be a more easy Se-  
paration *os* those *Sordes* from the Vital Veffeis to which they ad-  
here. These are call'd Digestives, a chirurgica! Word, taken  
from the Digestion of the Stomach. Por this Purpose, Sur-  
geons take any native Balsam, such as Turpentine, for Instance;  
this they triturate with the Yolk of an Egg, so as to subdue  
the oleous Tenacity of the Balsam to such a Degree, that it may  
be diluted in Water; then they add a certain Quantity of Ho-  
ney, which, by its saponaceous Quality, divides and resolves  
Concretions. Such a Medicine, laid upon a Pledget, they apply  
to the sordid Surface ofthe Wound’: The *Sordes,* thus soften'd  
and resolv’d by the saponaceous Quality of the Medicine, are,  
by the Formation of a laudable Pus, separated from the found  
Parts, and the Wound is render'd Tn re. *Hippocrates, in  
Tract, de Affectionibus,* beautifully represents the Use of such  
Medicines in impure Wounds, in the following manner: ." Pin-  
" guious Substances are ‘improper for Parts that are either in-  
" flam'd, sordid, or inclining to Putrefaction ; sor cooling Me- ’  
" dicines are adapted to inflam'd Parts; and for such as are sor-  
" did, and inclining to Putrefaction, acrid Remedies, which  
" cleanse by exciting a certain *Stimulus,* are most conducive."  
And in his Treatise *de Locis in Himine,* he informs us,  
that the laudable Humours convey'd through the Vessels to the  
Wound, remove the *Sordes,* soften'd, and render'd capable os a -

more easy Separation by such Medicines: His Wordsare, "If an  
" Ulcer is to he clos'd or filled, theParts are to he rendered tumid;  
" for the Flesh regenerated by the nutritive Juices in Con-  
" junction with the Assistance of Nature, propeis and forces  
" out that fordid Flesh, which by the Medicine was disposed  
" for a Separation."

- A Digestive may be thus prepared:

Take os Native Turpentine,.one Ounce; and one Yolk  
os an Egg; Mix intimately; and' then incorporate with

: half an Ounce os Honey of Roses. "

*As for Abstergents*; these are fomewhat more acrid than Di-  
gestives, Is, therefore, to Digestives we add a little Aloes,  
Myrrh, and *Venice* Soap, we have an Abftergent, which only  
differs in Degree from a Digestive, fince it is somewhat more,  
stimulating.

*As flor Corrosives* ; these are sar more acrid than the preceding  
Medicines, and mortify the Parts they touch, since they induce  
a Cruft on the Surface of the Wound to which they are ap-  
.. Plied ; and under this Crust the Vital Vessels by their Motion,  
. and the Fluids conveyed to them, gradually separate and expel  
the mortified Parts, All these Medicines, indeed, totally deprive  
the Sordes, adhering to the live Vessels, os a Vital Influx of the  
‘Fluids ; but by this means alone we can never obtain a Sepa-  
ration of the mortified Part, which Nature alone produces by  
a benign Suppuration. But Corrosives are of this Use, that in  
a Moment, and, aS it were, by a single Touch, they prevent  
the Influx of the Humours into the obstructed and dilated Ves-  
sels which produce the Sordes in Wounds, and which obstinate-  
ly resist the Efficacy os milder Abstergents. Hence they induce  
a kind os gangrenous Crust on the Surface of the Wound, to  
which Crust the softest Digestives are now-and-then to be ap-  
plied, that the Efchars formed by the Corrosives, heing softened  
by their means, may, by the Action of the live subjacent Vei-  
seis, he separated from the sound Parts to which they adhere;  
and thus the Surface of the Wound be rendered pure. Hence  
it is obvious, that the prudent and rare Use of Corrosives is  
requisite, unless after the Eschars are fallen off, the Wound  
. still appears impure. Those Surgeons are, therefore, in the  
Wrong, who believe that a Wound can he cleansed by Cor-  
rosives alone, since they only hinder the Increase of the Sordes,  
by converting them into a mortified Eschar, which ought after-  
wards to be softened and separated by a Suppuration. Besides,  
by a too frequent Application of Corrosives, the pure and live  
Parts are affected in the same manner, by which means the  
Sordes are increased, not diminished. *Galen,* in *Methode  
Medend. Lib.* 3. *Cap.* 6. furnishes us with a beautiful Instance  
of this Kind.

Corrosives are divided into various Classes, acording to their  
different Degrees of Acrimony. Those are most efficacious  
winch consist of an highly strong Acid united with a metallsc  
Glebe. Among these the most useful is the Lunar Caustic ;  
for it consists of an highly concentrated Spirit of Nitre, and  
the purest Silver mutually united ; and as this Corrosive is os a  
solid Consistence, and may be moulded into any Form, it may  
the applied more safely than almost any other Corrosive ; for  
other Corrosives applied to a Wound act equally on all Its Sur-  
faces ; but this may be applied to each Point in st, and by a mo-  
mentaneous Touch produces an Eschar. Hence the Effect of  
this Corrosive is greater or less, according as it is applied for a  
longer or shorter time ; and as often all the Parts of the Sur-  
face of a Wound are not covered with equally thick Sordes;  
hence they do not require.an equally strong Action of a Corro-  
sive. And this Caution is best of all observed by the Applica-  
' tion of the Lunar Caustic.

First, The mildest Corrosives are burnt Alum, the Ashes.  
of green Wood bums, *Mercurius Dulcis,* white precipitate

' Mercury, and White Vitriol.

Secondly, Stronger Corrosives are red precipitate Mercury,  
Colcothar of Vitriol, and *Vigo}3* Troches of red Lead. And

Thirdly, The strongest Corrosives are Butter of Antimo-  
ny, the *Lapis Infernalis,* corrosive Sublimate Mercury, Oil of  
Tartar *per Deliquium,* and Oil of Vitriol. ' The stronger  
Corrosives are, the more prudently they ought to he used.

The following may serve as a Formula :

Take ofAloes, and Myrrh, each one Dram; of the Salt of  
Tartar, two Drams; and of common Water, two Ounces:  
Mix and boil them to an Elixir.

But the Eschars formed by Corrosives, are to he softened by  
the Application of the mildest Remedies, that they may he  
soon separated from the subjacent live Parts; and when they  
are fallen off, it appears, whether the repeated Use of Cor-

rofives is necessary,' or whether the Wound may he Tendered  
Pure, by mild Digestives, and Abstergents.

*As for Exsiccant Medicines*; when a Wound is moistened  
with a large Quantity of too thin an Humous, then fuch Me-  
dicines as absorb the Liquids, and corroborate the Vessels, are  
highly heneficial. Of this Kind are the earthy bibulous Sub-  
stances reduced to an impalpable Powder, lest by the Rough-  
nessof their Parts, they should irritate the raw.Wound, such  
as the Ashes of burned Bones, Mastich, Olibanum, and Sar-  
.cocolla, which not only absorb the Fluids, but, also, corro-  
-borate the Veffeis. . . . -

An Exsiccant may be prepared thus: . . ,

Take of Verdegrife, five Ounces; of Crude Alum, one  
. .. Ounces; of strong Vinegar, seven Ounces ; and of pure

Honey, fourteen Ounces a Boil up into an Ointment.

The following Substances are, also, exsiccant: Alum gently  
. calcined. Quick-lime-water, Blond-stone, Mastich, Dragon's-  
blood, and Gum Sarcocol.

*As for Compression ,* this Method is principally expedient when  
Bordes are formed by the dilated Vessels degenerating into a fun-  
gous Excrescence : for after such a spongious Flesh js destroy'd  
by Corrosives, a similar Excrescence will soon , be produced  
.afresh,. unless the Luxuriancy of the Parts, is prevented by **a**-due-Compression, as is obvious from rhe so frequent Regenera-  
tion of fungous Excrescences of rhe Brain. For this Reason,  
jkjlsnl Surgeons often sill the Wound with nothing but dry  
Lint, .which they secure by a. moderately tight Bandage; or  
.they sometimes, also, use a thick Pledget, one Side os which  
js applied to the Surface of the Wound, whilst the superior  
Part, heing covered with some Vuinerary Balsam, prevents the  
Access of the Air. .

These things are to'be used till a white, mild, Viscid,’  
... smooth, equal, and inodorous Pus is formed ; under which  
: the Sordes are absterged, the contused and tumid Parts  
-- consumed, and those corrupted by the Ain separated, the

Cavities filled, and the divided Parts conglqtinated. \_

. All the Medicines, mentioned above may check the Vef-  
seis when too easily distended, and convert the half-morti-  
died Parts, together with a Part of the live Vesteis, into a  
gangrenous Eschar; but they cannot'separate' this Crust  
from the subjacent live Parts; for this Nature alone per-  
forms by means of a Suppuration; nor is there any other  
Way in whinh.it can be done. But the Sign of a Suppuration  
is the Generation os Pus, aS is already observed. When, there.-  
fore, a laudable Pus appears in a Wound, we know that the  
-Veffeis are so disposed aS to transmit their proper Fluids, and  
chat these Fluids have the Properties requisite to Health. Wezhave already spoke of the things requisite, that .the HumourS  
conveyed to the Wound, should be of a laudable Kind. But..  
here we only treat of these Impediments which arelodged in

- the Wound itself, and hinder the Regeneration os the lost  
Substance, and the due Consolidation of the separated Parts ; .

*. for* so long as these Sordes are lodged in the Wound, they will  
hinder the Cure as much as any other foreign Body would.  
But when by proper Medicines laudable Pus is formed in a  
Wound, we know, that by this means all that may he separated  
from the live Veflels .whichcould hinder the Cure ofcheWound.  
But this Pus ought not only, to have the Conditions here speei-  
Tied, but ought to be of the same Kind, and in an equal Quan-  
tity in every Point of the Surface of the Wound ; sor it osted  
happens, that the whole Surface os the .Wound is not covered  
with Sordes, but only a certain Part of it. . In this Case the  
pure Parts will yield a landable Pus, and theothers will discharge  
a Liquid of a different Quality. The Pus will not, therefore,  
be every where of the same Kind, but Various in different Parts  
of the Wound. ' And in this Case, the sordid Places alone re-  
quine the Application ofthe Medicines specified above, but which  
are improper for the pure and live Parts of the Wound.

Under this Pus, whatever half-lacerated Substance adheres to  
the live Parts, and all the Extremities ofthe obstructed Veffeis,  
together with the obstructing Matter, are difengaged and sepa-  
rated, and the pervious Veffeis freely transmit the Humours.  
.Henceall the Tumor of the Lips of the Wound arismg from  
an Obstruction of the free Circulation of the Humours, hegins  
to disappear; the Parts that were contused, or corrupted by the  
Admission of the Air, separate ; the tender Vessels, covered  
with a laudable Pus, as with a mild and natural Balsam, are  
elongated, meet those adjacent to them, are united with them,  
.and form a new Texture of Veffeis, by which the lost Sub-  
stance is regenerated in the Wound, and the separated Parts  
united.-

**The Whole, therefore, that Art can do, is to remove the**

Impediments which hinder the Generation of a laudable PuS  
in the Wound, and Nature alone is sufficient for the rest.

Then such things aS generate Flesh, are to he applied,  
which are mild Digestives.

These Remedies are by Surgeons called *Sarcotics,* though,  
strictly speaking, there is only one *Sarcotic,* which is Nature  
herself, restoring the lost Substance under the mild PuS.. This,  
as is already Observed, is heautisully described by *Galen,* when  
he says, that the Matter os the Flesh to be generated is lauda-  
ble Blond ; and that the Producer or Author of such Flesh is  
Nature. All other Remedies, to which an incarning Quality  
isascrihed, only remove Impediments, and afford Assistance,;  
and they are none else than such as by a due Pressure confine  
the Vessels, and procure the same Disposition of them, which  
they generally have in a State of Health. These Effects they  
produce by preventing the Access os the Air, by cherishing the  
Parts, and so confining the extraVasated Humours, that they  
may by a due Continuance he converted into laudable Pus.

For a Wound, when pure, is injured by the Application of  
every acrid Substance, since by this means the tender Vessels  
beginning to grow, are destroyed ; and when these are morti-  
fied, new Sordes are produced from them, which must be again  
separated.' Hence, in this Case, mild Vuinerary Balsams are  
only proper: But we know, that the Cure of a pure Wound  
proceeds well if there is a reddish Colour in the Wound ; for  
too red a Colour denotes an inflammation ; if there is a due  
Quantity of laudable Pus;, if the Bottom and Lips of the  
Wound grow equably ; if nothing is raised above the. equable  
Surface; if the Lips of the Wound are not higher than the ad-  
jacent Skin, but appear equal and not corroded; and, if in the  
Lips of the Wound a pale-bluish Colour hegins to appear,  
which indicates that a Cicatrix is forming.

Sarcotic, or incanting Medicines, are the vuinerary Balsams.

Take of yellow Wax, black Pitch, and common Rosm,  
each half a Pound ; and of Linseed-oil, two Pounds:  
Mix all duly together. This is the Basilicon, or Tetra-  
pharmacum : Or, - . .

Take of yellow Wax, six Ounces; of the Oil of the Flow-  
ers of St. John's-wort obtained hy Infusion, two Pounds  
and an half 7 to which, when fused over a. gentie Fire,  
add of dried Refin of the Pine triturated, and os the best  
common Colophony, each one Ounce and an half; when  
they are melted, take them off the Fire, and straining  
them through a Linen Cloth, add two Ounces of the best  
*. Venice* Turpentine, stirring them with a Stick. When  
they begin to thicken, sprinkle into them of the best  
Mastich, and Olibanum, each one Ounce; and of Saf-  
\* fron finely triturated, one Dram. This is the *Unguentum*

*..Aureum. 1 \**

But if when those things are done which answer the first  
Intention, it appears, that none of the Substance of the  
Body is taken away, the Lips are to be united in such a  
.manner, that the Parts naturally united, may again he ap-  
k plied to .each other, and retained in that Situation..

The general Intentions to he pursued in the Cure of every  
Wound are already enumerated, and it has been observed, that  
all heterogeneous Bodies, whether left in rhe Wound by the  
wounding instrument, or form’d by a Corruption of the Fluids  
or Solids, ought to be removed, hecause they hinder the Union  
of the separated Parts. It has, also, been shewn how, by  
what means, .and with what Cautions, these foreign Bodies  
ought to he removed. If, therefore, after these Measures are  
taken, it appears, that some of the Substance Of the Parts is  
lost, that is first to be restored,, before there can be an Union  
of the separated Parts. And how this Restitution of the lost  
Substance is to be Obtain'd, has, been, also, shewn. But if  
there is only a simple Division of Parts before cohering, made  
by the wounding Cause, without any Loss of Substance, or any  
foreign Body left hetween the separated Parts, the Intention of  
Cure is, of all others, the most simple;. and that is,, so to  
apply the spontaneously receding Lips of the Wound to each  
, other, and to retain them in that Situation, that there may be  
such a Situation of all the Parts, as there was before the Di-  
vision. The Union of the Parts thus disposed, is Very soon  
performed by Nature, alone, eVen in the largest Wounds, if  
the now mentioned Conditions are present. In this Case, the  
best Vuinerary Balsams interposed hetween the. Lips of the  
Wound, are injurious, because thevarijheterogeneouSSubstances,  
which can IieVer.unite with the Parss of the Body. Bur the  
Application of the Parts separated, to each other, is only requi-  
site, without the Interposition of any other Remedy,

How easily wounded Parts grow, not only, io those with  
which they were naturally united, but, also, to those with  
which they never before cohered, may be seen in some memo- .  
rable Instances recorded by *Hildanus, Cent.* 6. *Obs. J. Schenc-  
Hus, Observ. Medicin. Lib.* 6. *Osts.* 23. and *Celsus, Lib. 5.  
Cap.* 28. ‘ If, therefore, this Concretion is so easy in Parts  
which never before naturally cohered, it is much more to be  
expected, when Parts before united again hecome contiguous.

The first of these is done, 1

First, By procuring to the Part the same Situation it had  
whilst in a State os Rest, before it was wounded.

Secondly, By a gentie and equable Compression" os the'  
Parts to each other, that they may be eontiguouS to each  
. Other in every Part *os* their Surface, and remain at Rest.

I. It is of great Use to know the Situation of the Parts in a  
. Man at Rest, and especially in an healthy Man when steeping;  
sor then all Voluntary Motion ceases, and the Parts of the Body  
left to themselves, are disposed in their-most natural Situation.  
It will then appear, that no Articulation, of the Body is extend-  
ed, but that they are all gently bended; sor in a sound Person,  
when steeping, the Fingers are never extended, nor are the  
Legs ever stretched out in a strait Line with the Os Femoris,  
but all the Articulations' are gentiy hended. The same holas  
true with respect to the rest; for the Muscles which hend  
the Articulations, are generally found stronger than the Exten-  
sors ; for which Reason the Articulations, when at Rest, always  
appear gentiy inflected. This, also, appears in a perfect Palsy,’  
in which Case all voluntary Motion ceases ; for if the whole  
Arm is paralytic, the Fingers are always found inflected, and  
remain in that Condition; so that aster the Palsey is cured, it  
in often impossible to extend the Fingers, because the Ligaments  
Of the Articulations are become rigid, and the Flexor Muscles  
not elongated sor so long a time, are by their proper Contrac-  
tility shortened. Hence the Extensors of the Fingers cannot '  
surmount these Obstacles. *Hippocrates,* who carefully observ’d  
the natural State *os* the Parts of the Body, in order to know  
how far in Diseases it receded from it, and to distinguish their Vari-  
Ous Degrees os Violence, has in his *Prognostics,* when treating  
os she Manner in which the Patient lies, beautifully taken  
notice of this in- the following manner: " The Patient should  
"he sound by the Physician lying on his Right or Lest Side,  
" with his Arms, Legs, and Neck, a little inflected, and his  
" whole Body moist; *sor in* this manner many sound and  
", healthy Persons he. \*\* When this is neglected in the Cure  
Of Wounds, the Parts often grow together in another Situation  
. than they had naturally. Or an unseemly Deformity arises froth  
the distracted Parts, or the natural Motion of the Parts is often  
much depraved. A memorable Instance of this is found in *Hil-  
danus, Cent.* I. *Observ. Chirurg. Obs.* 83.

In the first Dressing of a Wound this is carefully to he at-  
tended to; for the raw Parts, when united, are soon conglo-  
Iinated. Hence the Error committed cannot be corrected,  
without a cruel Division of the concreted Parts.

2. The Parts of the Body separated by a Wound, by their  
proper Contractility, gradually recede more and more from each  
other, as is already observed. But that they may be again ag-  
glutinated, it is requisite they should .remain in Contact. Hence  
by an artificial Pressure, that Force is to be surmounted, by  
. which they, endeavour to recede from each other. But It is in  
a particular manner to he observed, that this Union os the Parts  
Ought to be made in the whole Surface of the Wound ; for if  
the Lips of a deep Wound are contiguous, whilst the subja- '  
cent Parts are at a Distance from each other, there will remain  
in the Wound a Cavity, in which the extraVasated Humours  
will he collected, and make theWound degenerate into a sinuous  
Ulcer. This is performed by the Application of Compresses,  
and a proper Bandage, so compressing the adjacent Parts, that  
the Lips of the Wound may be contiguous in the Bottom, as  
well as in the Skin itself. But it is requisite this Compression  
should be moderate, lest there should he too great an Angusta-  
tion of the Vesseis in the compressed Parts, by winch means an  
Inflammation, and all its Consequences, may be produced. It  
is, also, requisite there should be a perfect Rest os the wounded  
Part. Hence the wounded Limb is to he secured in such a manner  
as that it may be immoveable; for often during Sleep, or thro'  
the Carelesness of the Patient, the Motion of the wounded  
Member changes the Situation of the Parts, by which means  
the Lips of the Wound are separated, and the concreted Parts  
dilacerated. Hence the happy Event of the Cure is destroyed.

The Parts-are retained in Union, .

First, By adhesive indented Plaisters, with Loops or Eyes  
at. their Extremities,, applied on both Sides 0f the Wound,

' and drawn together by Threads ; these are used in long flans-  
verse Wounds of the Skin, and the more lax Parts.

According to the Diversity of Wounds, Various Methods are  
requisite to keep the contiguous Parts in a due Union, and this  
is done,  
: I. By whet Surgeons call the *dry Suture,* in order to distin-  
guish it from Sutures made, by the Needle; they take some ad-  
hesive Plaister, capable of adhering strongly to the sound Skin.  
For this Purpose they use common Glue, Ifing-glass, or any  
other Substance of a proper Tenacity. This they spread upon  
strong Linen Cloths which will not easily yield; these, when  
gentiy warm’d, that they may adhere the more strongly, they  
apply on both Sides at some Distance from the Lips of the  
Wound. Then at Pleasure they draw together these Plaisters  
by Threads affixed to them, and the Skin adhering to these  
Plaifters, is on both Sides so drawn together, that the Lips of  
the Wound may become contiguous;. and as these Plaifters do  
not coVer theWound, the Surgeon can commodioufly see whe-  
ther the united Lips oftheWound have their natural Situation;  
and if they deviate from it, this Deviation may he easily cor-  
rected . As the Bulk of WoundS Varies, so a different Numher  
and Figure of these Plaifters are requisite. In small WoundS,  
whose Lips are at a small Distance from each other, such digi-  
tated Piasters are sufficient without Loops. But in large  
WoundS, whose Lips recede much from each other, it is safer  
to apply Plaisters which may be drawn together by Cords fixed  
in their Loops. See *Tab.* XXV. with the Explications ; and  
the Article SUTURA.

But it is sufficiently obvious, that only the Skin is drawn to-,  
gether by these Plaisters, whilst, if the Wound is deep, the sub-  
jacent Fat being highly moveable and lax, will not follow the  
Skin. Hence such Planters are generally only of Use, where  
the Skin alone is divided, and the Parts being sufficiently lax,  
**can** easily follow it. Hence they are principally of Use in flight  
Wounds of the Face, and Integuments of the Head ; as, also,  
in flight Wounds of any other Parts of the Body.

When the Lips of the Wound are united by an adhesive  
Plaister, we must apply a Pledget dipt in some Vulnerary Bal-’  
firn, in order to prevent the Access of the Air. And leaving  
the Plaifters on, we are daily to View the external Surface of the.  
Wound, in order to discover whether every thing is right.

Adhesive Plaifters may be thus prepared:

Take of the Diapalma Plaister, a sufficient Quantity; and  
a littie OliVe-ofl: Dissolve together for a Plaister.

Os,

Take of common Pitch, **a** sufficient Quantity: Spread on a  
Linen Cloth, and apply. .

Secondly, The Parts are retained in Contact by Bandages,  
and the Application of Compresses, that the divided Parts  
heing equably applied to each other, may remain in that  
State, and be united, winch is easily obtained by a proper  
Method of Compression. And this Method is proper in lon-  
gitudinal W ounds. - . #

Superficial Wounds- do not require this, but Only deep  
Wounds, jn which it is requisite, that the Parts in the Bottom  
os the Wound should be as contiguous as the external Surface,.  
hesore a good Cure can be obtained. In the right Application  
os these,. the Skill and Dexterity of the Surgeon are principally  
known. Bandages rolled round any Part, equably compress  
the Surface thereof But by the Application of Compresses,  
the Compression *of the* Bandage, though remaining the same,  
may act more upon some Places than others. By this means  
we can determine and regulate the Degree of Compression,  
so aS that all the Points of the Surface os the Wound may  
hecome contiguous. But it is sufficientiy obvious, that  
this Method is of no Use, unless the Parts adjacent to the  
Wound are soft, and consequentiy capable of yielding : If, for  
Instance, a deep Wound is longitudinally inflicted in the Thigh, .  
by the Application of Compresses to both Sides, and the Use ’  
os a proper Bandage, the soft Parts may he equably compressed,.  
fo that the divided Parts in the whole Surface of the Wound  
may again he rendered contiguous. In other less fleshy Places,  
this is not so easily obtained. But in such Places rarely WoundS  
happen so deep as to require this. *Hippocrates,* in his Treatise .  
*de Medici Osticina,* when treating of the Various Uses of Dres-  
sings, seems to point at this Method in the following manner:  
" But when any Parts are divided, they are to he contracted,  
‘c but the Contraction is to he made at a certain Distance from  
" the Lips of the Wound, and'the Compression is to he made  
" gradually, at first Very small, then greater, and its greatest

" Degree is to he terminated by the mutual Contact Us the  
. " Parts divided. \*’.

Though this Method is, of all others, inost successfully used  
in longitudinal Wounds, yet it may, also, he sometimes used  
to Advantage in transverse Wounds os the Parts. A memorable  
Instance of this is found *irs.Mem.de st Acad, des Sciences, P An.*

Thirdly, The Parts are retained in Contact by Sutures  
made with Needles os Steel, which in small Wounds may  
be strait, but in large WoundS crooked, with a sharp Point,  
and waxed Thread in their Eyes. These, Needles are to be  
introduced at a sufficient Distance from theWound-, and are to  
pass to its Bottom in such a manner, thatthe Point may emerge  
at an equal Distance on the Opposite Lip of the Wounds  
Then taking the Needle quite through, the Thread is to be  
so drawn as to retain the Lips 4.f the Wound in Contact ;  
and after the Application of a flight Compress, a Knot is to  
be tied on it. This Method is ro he repeated as often aS the  
Length of the Wound requires, beginning either at the  
Middle, or one of the Ends of: the Wound. Then the Lips  
are to be anointed with some proper Balsam, and applying  
flight Compresses over the Knots, the Whole is to be cover-  
ed-with a Plaister. ‘ ' - -

This Union of the Parts separated by a Wound, is called  
the *bloody,* or *true Suture,* since the Conjunction of the Pares  
by adhesive Plaisters hardly deserves the Name of a *Sutures*In this Case it is particularly requisite, that the Union should  
he made with aS littie Pain, and Irritation os the Parts, aS. pose  
fibly may be; for when such an Operation is roughly perform-  
ed, it is often succeeded by a violent Inflammation, which hin^  
derS the Union of the Parts brought into Contact. For this  
Purpose, pretty strong Steel Needles are requisite, though not  
too brittle, lest they should break. A conical Figure in these  
Needles would be prejudicial, because the oradually augmented  
Thickness would make them pass with Difficulty through the  
Parts. Hence fuch are used, whose anterior Part , heing pris-  
matical with sharp Edges, easily pastes through the Flesh, and  
makes Way for the rest os the Needle which is conical or cylin-  
driest. In Wounds winch are not deep, strait Needles of this.  
Kind are sufficient; but in deep Wounds, crooked ones are.  
necessary, that being protruded to the Bottom of the Wound;  
the Points may the more easily emerge. A different Curvature  
of these Needles is. requisite, according to the different Deep-  
nesses Wounds; Unless the Eyes of these Needles had ori  
each Side a. Groove for containing the Thread, whilst the  
Needle was drawing through their Eyes, theThreads protubera-  
ting on each Side could not follow, without a Dilaceration of  
the Parts. The Thread is to be waxed, that it may easily pass  
through the Parts, and not imbibe the Humours ; sor tumefied  
Threads would compress the Parts through which they pass;  
Besides, the Humours resorb'd by the Thread, becoming acrid  
by their Continuance, and the Heat of the Place, may irritate  
the Parts.- The Needle with a Thread in it is to be entered at.  
a sufficient Distance from theWound, lest there should after-’  
wards hen Dilaceration of the Parts, if it was entered too near  
the Wound. These Needles ought, to he thrust to the Bottom  
of the Wound, and then protruded upwards, that they may  
again emerge at an equal Distance on rhe opposite Side of the \_  
Wound; for unless they penetrate to the Bottom os the Wound,  
the superior Parts will be brought together, whilst the inferior',  
will remain at a Distance,' and form a Cavity in which the ex-  
travasated Humours being Corrupted by their Stagnation, will  
of the pure Wound form a fistulous Ulcer. Hence the Parts  
united must again be divided. ‘

When the Threads are pasted through, by a gentle Com-,  
preffion of the Hands, by which, as *Celsus, in Lib.* 5. *Cap.* 26.  
expresses it, " the Skin, as it were, spontaneoufly follows its  
" Guide;" the Lips of the Wound are to he rendered consign-  
ous, and retained in that Union by drawing the Threads toge-  
then Butin orderroavoid Pain, and .the Dilaceration os the Parts'  
as much as possible, Compresses, especially of waxed.Linen,-  
lest by imbibing the Humours they should prove injurious, are to  
he applied before the Knots are tied. According as the Length  
of the Wound is greater, or its Figure more or less angular; '  
more or fewer of such Sutures are required ; for if the Stitches;.  
as *Celsius* in the Place before quoted, informs us, " are at too  
" great a Distance from each other, they do not retain the  
" Parts in Contact; but if they are too near each other, they  
" exalte an intense Pain, because the oftener the Needle passes  
" through the Parts, the more of them are galled by the  
" Thread, and the greater Inflammations arise, especially in  
" the Summer. \*\* A Pledger dipt in a mild Vulnerary Balsam  
is laid upon the Wound. "Then by a proper Bandage, or the  
Application of a Plaister, the whele Apparatus is retained in -  
its due Situation, \* ,.

. If a Violent Inflammation, or an intense Pain, do .not arise,  
the Wound is to he left in this Sithation for two or three Days;  
then removing the Bandage, or Plaister, we are to observe,  
whether from the Smell any Corruption is formed by the extra-  
vafated Humours, and if it is so, the Pledget is to he cautioufly  
removed, and another dipt in the like Balsam applied; or a sew  
Drops of the Balsam may he dropt upon the old Pledget, so that  
it may he still lest on the Wound. When it appears, that the  
Lips of the Wound are grown-sufficiently firmly together, the  
Threads are gently and prudently to be drawn, inorder to  
know, whether they may he commodioufly taken out ; and  
this, sor the most part, is very easily done; and the small  
Wounds left are soon filled up. -  
- But if a Violent Inflammation, and intense Pain, and an ex-  
cessive Tension of the Parts succeed the Suture, it is better to  
ent it again, and cure-the Wound without Suture 7 for unless  
this is done, a Trim of terrible Symptoms will succeed ; and  
when it is too late, force the Surgeon to do that, which if it  
had been seasonably done, might have proved more heneficial.

The Various Rinds of Sutures, and the different Methods os  
performing them, are described by the Authors who have wrote  
-oil chirurgical Operations, and under the Article SUT URA.

These Sutures are proper in Wounds that are rederttand  
- not bloody; but, however, without any Violent Haemor-  
. rhage; in simple Wounds, without any Contusion, or

Fracture of the Bones; full, that is, without any Loss of  
Substance, transverse, oblique, or angular Wounds,

But they are prejudicial in Wounds attended with any con-  
siderable Haemorrhage, old, sessions, purulent, sordid, con-  
tused Wounds, those with Loss of Substance, such as are co-  
vered with Crusts, such as are dangerous in consequence of  
a Wound os some large Veffeis, such as are Very deep, such  
as are greatiy inflamed, such as are poisoned, and such as  
are indicted th Parts which necessarily move.

- In this Aphorism is determined for what WqnridS Sutures  
are beneficial, and for what they are prejudicial.

*They are proper, then, for decent blendy lsiounds*: For if the  
Wound has been inflicted for some tithe, and especially if there  
has heen a free Access of the Air to it, the Extremities of the  
Vessels in the Surface of the Wound will he mortified. Hence  
they must he separated from the live Parts by a Suppuration,  
nor Can they grow together; so that it would be to Ro Purpose  
to make an Union by Suture.

*They are proper in Wounds not accompanied with great Hog-  
rnorrhages :* Because the extravasated Blood will distract the  
Lips brought together by Suture; hence a Dilaceration, Pain,  
' an Inflammation, and all its Consequences, will he produced..

*They are proper in simple Wounds z* That is. Wounds in which  
there is no Contusion, Or at least a Very inconsiderable One.  
Hence *Hippocrates, in Tract, de Ulcocibus,* informs us, that  
Wounds made with a sharp Instrument may he cured without  
Suppuration; but if a Contusion is present, they are to he so  
treated as to bring on a Suppuration as soon as possible; for it  
is necessary the contused .Flesh should become putrid, and be  
Converted into Pus.

*They are proper in full Wounds :* That is. Wounds isr which  
there is only a Division of the Cohesion without any Loss of  
Substance; for if any Part is taken away by the Wound, the  
separated Parts Cannot he rendered contiguous without distract-  
ing them from these natural Situation. Hence such a violent  
drawing together *os* the Parts will always he succeeded by an  
unseemly Cicatrix, and an Injury Of the Functions.

*They are proper in pure Wounds:* That is, Wounds in which  
nothing of an heterogeneous Nature is left by the wounding  
Cause, in which there are neither Shades, Ammons Concretions  
of Blood, nor fungous Flesh; for all these must he separated  
arid eliminated from the Wound before a Consolidation can he  
expected.

*Sutures are, also, proper in transiverse, oblique, and angular  
Wounds i* Because in these Cases, neither adhesive Plasters, nor  
artificial Application of Bandages and Compresses, are sufficient  
to render the Parts contiguous, and retain them in Union.

*. But Sutures are prejudicial in Wounds tuhere there is a large  
- Haemorrhage t* Unskilful Surgeons, whilst without any Distinc-  
tion they unite all Wounds by Suture, often do. a great deal  
of Harm; for what Advantage is it to unite separated Parts,  
when after they are united, they cannot grow together ; or  
when the extravasated Humours, retained by the Lips of the  
Wound, must afterwards be evacuated by cutting the Suture ?-  
**A** shameful Instance os this Kind is given by *Pare,* in *Lib.* IO.  
*Cap.* 32. Unless, therefore, the whole Surface of the Wound  
is pure and sound, and no Substance lost. Sutures will always  
Be injurious. Besides, if a Wound is inflicted, in **a Part of**

the Body, through which large Blood-Vefleis or considerable  
Nerves run, nobody will dare to force a Needle deep into fuch  
a Part, except one, who heing ignorant of Anatomy, is not  
apprised of the Danger. There is the same Danger when the  
Wound is too deep, because the Needle may easily hurt the  
Tendons, and membranous Parts ; and when these are injured,  
violent Symptoms generally succeed. Besides, when a Wound  
is Very dry, the divided Parts cannot he so brought together, as  
to be contiguous in all the Points of their Surface, unless the  
Threads passed through the Parts, are strongly draw'd together.  
Hence a Dilaceration, and Violent Inflammation,- are greatiy  
to he dreaded. If an Inflammation has seized the wounded  
Part, and if it is roughly treated by Suture, the inflammation  
wist frequently he so increased as to bring on a Gangrene, and  
the obstructed Extremities Of the inflamed Veffeis, together  
wi th the obstructing Matter, must, by a mild Suppuration, he  
resolved and separated, hesore the Surface Of the Wound can  
he pure and fit *for* Union.

. Is the wounding Instrument is infected with Poison, so as  
th produce, anomalous, malignant, and Virulent Symptoms, un-  
less a particular Antidote, capable of destroying the Force of  
the Poison, is known, the whole Hope ossa Cure consists in  
increasing the Affiux of the Humours to the wounded Part by  
Suction, or the Application of Cupping-glasses, and thus eli-  
minating the Virulent Matter; or by the actual Cautery, the in-  
fected Part is in a Moment to he destroyed, lest the Infection ‘  
should he communicated to the rest of the Body. It is, there-  
*sore,* sufficiently obvious, that Suture retains the virulent Mat-  
ter of the Wound, which ought to have been expelled with all  
possible Expedition,

. It is, also, sufficientlyevident, that an absolute Rest os the  
Parts, united by Suture, is requisite; for if these Parts are moved,  
the same will happen as if theTbreads passed thro'them were con-  
tinuaily drawn. Hence a perpetual Irritation, Pain, Inflamma-  
tion, and all their Consequences, will happen. We can check  
all those Motions winch depend on the Will; but those Motions  
which are absolutely necessary to the Continuation of Life, will  
always Continue; and this is the Reason, why Wounds os the -  
Thorax do not admit of Suture, especially jf they are inflicted  
on the Convex Surface of the Ribs; for at every Inspiration the  
Breast heing dilated, the united Parts will he distracted with the  
most intense Pam. For this Reason, also, when Surgeons by  
Suture unite Wounds of the Abdomen, lest the Viscera should  
he expressed through the Wound, they fo secure the Abdomen

- by Swaths, that the Patient respires almost without moving it.  
The Rashness, therefore, and Imprudence of those Surgeons,  
who indiscriminately stitch up every Wound like a Piece of  
torn Cloth, are greatiy to he condemned.

Fourthly, The Parts are retained in Contact by a Needle  
passed through the Lips of the Wound, and a Thread so  
wrapt about it as to hinder them from receding from each  
other, but keep them united. This Method is proper in  
large and gaping Wounds of the pendulous Parts of the  
Body,

. The former Suture was performed by Thread pasted through  
the Holes made by the Needle, and then bringing the Lips of  
the Wound together by a drawing of the Threads, But in this  
Method, the Needle is not taken out of the Parts perforated,  
but left in them, and then a Thread is on both Sides so wrapt  
about, that the Lips of the Wound perforated by the Needle,  
and brought together, may remain contiguous. This Method  
was principally used in the Cure of the Hare-lip, that is, when  
that Part of the superior Lip,, which is under the Nose, is di-  
vided. But afterwards Surgeons, with great Success, Ventured  
to unite large and gaping Wounds os the pendulous Parts of  
the Body by the same Suture: But hecause in the Hare-lip **the**Parts are divided from the Birth os the Patient, hence the Cai-  
lous Surface is on both Sides cut off with a Pair of Scissius, **and**in the superior Angle a flight Wound is, also, made with the  
SCiffars, that the Parts to he united may acquire the Nature of  
**a** fresh Wound ; for if any thing of a callous Nature is lest,  
there will never he a laudable Uninn of the Parts there. Then  
when the Lips os theWound are duly applied to each other, the  
Needle is entered at the Distanceof sour Lines from theWound,.  
and forced thro' the Middle of the Substance os the Lips, till on  
the opposite Sine the Needle ernergesat the likeDistance from the  
Wound. Thusthe Needle is lest in theWound, and the Parc are  
retained in Union, by wrapping a Thread cross-ways about it.  
According to the different Largeness of Wounds, more or  
fewer of these Needles are used, that in every Point the sepa-  
rated Parts may be rendered perfectly contiguous. But lest **the**sharp Points of the Needles left tin the Wound should hurt **the**Patient, they are to he cut off by the ScissixrS, and small Pieces  
ofSpongeare to be laid under the Extremities of the Needles, he-

jgause these accommodate themselves far better to the Figure of  
the Parts than Compresses. But that such Needles may be passed  
.through the Parts expeditioufly, and without Vacillation, they  
are fixed in an Handle, because by the Fingers' of the Surgeon  
alone they cannot he so furely convey'd throught the Parts.

' Besides, in order to avoid those Misfortunes which might arise  
from the sharp Extremities of the Needles remaining, (for hard  
Steel cannot he cut by Scistars without great Force, so that by  
this Concussion the Situatinn of the united Parts may be changed)  
Surgeons use Steel Needles, but whose posterior Parts are made  
of pure Silver: Then passing the Needles through the Parts,  
they leave the Silver Part in the Wound, cutting off the Steel  
Part, together with a certain Portion of the Silver which is cut  
with a far less Force than Steel. The fame Operation is, also,  
excellently performed by pretty large Steel Needles, which can  
he firmly held by the Fingers alone, and whose cloven-Tops  
contain Silver Pins blunt at both Ends, which are left in the  
Wound, and secured by Threads passed about them. See Gin-  
*rengeot. Traite des Operations de Chrirurgie, Tom.* 3.

When the united Parts are firmly grown together, these Pins  
are to he taken out, and the Wounds left by them are easily  
consolidated. /

The last Intention is answered by taking care, that the  
Parts correspond to each other just in the manner they did in  
) Health; and that they are thus retained in siIch a manner as  
not to he too much pressed, nor too much relaxed, by avoid-  
ing all burning, styptic, and astringent Applications, but  
especially by taking care, that the Pressure he equal on all  
the Parts of the Wound.

All these Ends are obtained by doing as is above directed, and  
then applying mild desiccative Medicines; and, lastly, by  
washing the Cicatrix with spirituous Liquors.

.We have already enumerated the four general Intentions of  
Cure in Wounds; and having considered the first three, **we**now come to treat of the fourth and last, which is, after having  
restored the lost Substance, and united the Parts separated by **the**wounding Cause, to induce a. Cicatrix aS like to the natural  
Skin aS possible; for if there is only a simple Division of the  
Parts made by a very sharp Instrument, and the divided Parts '  
are immediately united in then natural Situation, they will **so**grow together, as that no Mark of the inflicted Wound will he  
lest; and in this Case the Wound is cured without a Cicatrix j  
for a Cicatrix after a perfect Cure of a Wound, is that Mark  
by which the Part of the Integument where the Wound was,  
is distinguished from the adjacent Skin The most perfect Cure,  
therefore, of a Wound is, when no Mark os it remains.  
But when this cannot be obtained, the Beauty of the Cure con-  
sists in rendering this Mark aS like as possible to the adjacent  
Skin ; for when by the wounding Cause, or a Suppuration sue-  
Ceeding the Wound, any Part of the Substance of the Body is  
lost, something new will he generated in its stead, and this new  
Substance will never have absolutely the fame Qualities with  
that which was lost. Hence it may he distinguished from the  
adjacent Parts.

The Beauty of a Cicatrix depends principally on **the three**- following Circumstances: .

**I.** If the Cure is such, that the united Parts **are in the same**Situation they had before the Wound was inflicted.

2. If the Cicatrix does not rife beyond the equable Surface of  
the adjacent Skin. And,

**3.** If the Cicatrix is not hollow.

. The first is obtain'd by taking care that the Laps of **the**Wound, by means of adhesive Planters, Suture, or proper  
Bandage, may correspond to each other aS in Health, The se-  
cond is obtain'd, if, by a moderate Pressure, the Defect of **the**Confining Skin is supplied, lest the **Veffeis, depriv'd of this Co-**vering, being distended by their Liquids, should rise above **the**equable Surface of the Skin ; for when this is neglected, or **the**Wound treated with very emollient Medicines,a Ridge is form'd,  
and an unseemly Cicatrix produc'd. And the third is obtain'd  
by procuring a laudable Restitution of the lost Substance. An  
hollow Cicatrix generally happens, because the Pressure os the  
adjacent Skin forces the *Memheana Adipofa* into the Place os the  
Wound, and makes it rife, which there degenerating into  
*Sordes,* and fungous. Flesh, is by a Suppuration consumed, so as  
not to grow again. Hence the soft Fat, winch ought to sup..  
port the Skin, heing destroy'd, the Cicatrix will remain depressed  
and hollow.. Hence it is obvious, that a deep and hollow Ci-  
catrix cannot, often, be prevented, when, for Instance, **the Fat**is destroy'd by the wounding Instrument, or a Violent Suppura-  
tion. Thus *Hippocrates, in Aph.* **45.** *Sect.* **6.** telis us, **" That**" if Wounds continue a Year, or longer. Abscesses will neces-  
4‘ sarily happen in the Bone, and caute deep and hollow Scars,”  
And in *T.r. de Ulceribus, Cap.* 4. he telis ns, " That if a Part  
" of the Bone is remov'd, either by Burning, Cutting, or any  
**. " other Method, the Cicatrices of such Wounds will he hoi-**

" low.\*\* It is sufficiently known, what deep and unseemly  
Cicatrices remain after the *Membrana Adipose* is confirm'd by ‘  
venereal Ulcers.

. Hence the Reafon appears, why, if the Surgeon intends to  
form a beautiful Cicatrix, he ought to avoid burning, styptic,  
and astringent Medicines: For by means of all these the live  
Veffeis are either destroy'd, or so constricted, as not to transmit  
the Fluids; but a Suppuration coming on, the mortified or ob-  
structed Extremities of the Veffeis must be separated. Hence  
there will he a Loss of Substance, a Consumption of the Far,  
and consequently a proportionably hollow Cicatrix. Hence it is,  
also, obvious, how much the Beauty of the Cicatrix is assisted  
by an equable Pressure, which prevents the rising of the too  
much distended Veffeis. r

The Signs of a beginning Cicatrix are these following: The  
Margins of the Wound or Ulcer, about to he consolidated;  
begin to appear more white and solid, and this Whiteness is  
gradually convey'd from all the Circumference to the Centre i  
In the mean time, in the open Surface of the Wound a like  
Whiteness begins to appear here-and-there; and if this Surface  
equably meets the Edges of the Lips, a laudable Cicatrix is  
form’d : A pure Wound, also, hefore moist in every Point os  
its Surface, hecomes dry in those Places where the white Rudi-  
ments of the Cicatrix appear. Hence thofe cicatrizing or epu-  
lotic Medicines are always most commended, which are gently ’  
drying and corroborating. Hence Plaisters prepar'd of Lead, or  
Its Calxes, and the fine Powders of Colophony, *Olibanum,* and  
*Sarcocolla,* are generally with Success applied to Wounds or Ul-  
cere tending to a Cicatrix.

Cicatrizing and epulotic Medicines are thefe following ; the  
red desiccative Ointment, the *Unguentum Diapompholygor,* the  
*Unguentum Calcis,* the *Unguentum Nutritum,* the white Oint-  
ment of Roses, the *Emplastrum Alburn Coctum,* the *Emplastrum  
de Lapide Calarninari,* or the grey Plaisters, the *Emplastrum de  
Menio Rubrum,* the *Sparadrapurn* of *Gualtherus,* Colophony  
from boil'd Turpentine, and reduc'd to Powder; Frankincense,  
*Olibanum,* and Mastich.

Hence we may perceive the Vanity, and foolish Boasting, os  
thofe who pretend, that, by their *Arcanums,* they can cure all  
Kinds of Wounds, without leaving a Cicatrix. Prudent and  
skilful Surgeons, after a large Loss of Substance; or a long Sups  
puration, will never foretel that the Cicatrix will he beautiful;  
and of this the Patient ought always to he admonish'd, lest he  
should ascribe the Deformity of the Part to the Carelessness of  
his Surgeon.

It is, also, expedient, now-and-then to foment the Cicafrik  
with the Spirit of Rosemary, the *Spiritus Matricalis,* or some  
other of a like Nature ; for all these spirituous Liquors have a  
Power of rendering the Flesh of Animals firmer: For the Part  
of the Cicatrix remains weak, being only cover'd with a thin  
Pellicule; so that it is more easily hurt than the adjacent  
Parts. - Hence it is often expedient,that the Part, after its Con-  
solidation, 'should for a considerable time be cover'd with a mild  
lead Plaister, or a Piece of soft Alum Leather; lest, by the  
Attrition of the Cloths, or the Injuries of the Air, the Wound  
should again break out. '

**HAEMORRHAGE CONSIDERS AS A SYMPTOM OFW0UNIjSi**

If a large Quantity of Blond stows front a Wound, by  
**the** Causes already specified; it is.to he stops.

First, By the actual Cautery.

Secondly,. By Corrosives. \*  
Thirdly, By Astringents,  
Fourthly, By tying up the Artery.

Fifthly, By cutting quite thro', or entirely dividing **.the**wounded Artery. And,

Sixthly, By Bandage, and pyramidal Compresses.

Having consider'd the Things belonging to the general Cure  
of Wounds, we shall now treat of some Symptoms incident to  
them, which are often so violent, aS greatiy to endanger the Lise  
of the Patient. Hence it is requisite these Symptoms should be  
remov'd,’ or at least greatiy diminish'd, before the Cure can be  
attempted. The principal Symptoms of this kind are. Haemor-  
rhages, Pain, and Convulsions.

A large and impetuous Discharge of Blood from a Wound,  
always denotes that largeVeffeis, containing red Blood, are'  
wounded, and especially arterial Veffeis: Because Veins, unless  
large, or render'd tumid by the Application of a ligature, rarely  
discharge much Blond, and never with so great an *Impetus* as  
that which flows from the Arteries. If there is so great a Loss  
of Blood, that satai Effects are justly to he dreaded from it ;  
and if there is no Hope that by a Debilitation of the Viral Force,  
or the Contraction of the Artery, it will spontaneousty stops  
then we are to have recourse to the Methods known in Surgery’,  
in order to stop the Eruption of the Blood. But most of the  
**Means which cheek the** Effusion of **the** Blood, retard the Cure.

Os the Wound : For the Extremities of the Veffeis, heing de-  
stray'd by **the** actual Cautery, Corrosives, Ligatures, or Com-  
pressions, must be separated, before **the** Consolidation of the  
Wound can be obtain’d.

Various Means are used for stopping Haemorrhages ; but all  
os them act either by constricting the Orifice os the divided  
Vessel, or by coagulating the Blood in the Extremity of the  
Veffeis, or by producing both these Effects at once..

I. The most instantaneous Method os stopping Haemorrhages  
is reckon'd that of touching the Vessel, discharging the Blood,  
with **a** red-het Iron, sor, by this means, the Blood is forthwith  
burnt into a thick Mass, no longer capable of Resolution: So  
that it closes up the Orifices of the open Vessel. The Vestel  
itself is, at the same time, shrivel’d up, and constricted, by the  
Action os the Fire; by the Concurrence of which two Effects,  
the Blood is stopt. This Method was inng used by Surgeons;  
for which Reason, in the Amputation os Limbs, and in other  
'Operations where a great Haemorrhage was dreaded, they bad  
always actual Cauteries, os various Figures and Sizes, in Rea-  
diness ; that, by their Application, they might stop the Blood.

Thus, by the later *Greeks* and *Arabians,* by *Paulus AEgineta,  
Avicenna,* and others. Haemorrhages were suppress'd. by the  
actual Cautery, aster the Amputation os Limbs. *Guido de Cau-  
li a co,* and aster him some others, used boiling Oil sor the same  
Purpose. *Vis.alius,* in *Chirurg. Mag. Lib.* 5. *Cap.* I 2. in  
the Amputation os Limbs, orders the Flesh to he cut with a  
red-hot Knife, that by this means the Haemorrhage may he  
stopt. But this Method is attended with so many Disadvantages,  
that it is scarcely ever used ; for it is a difficult Matter to procure  
a due Degree os Heat to the Iron ; since, if it is too hot, that  
which is burnt is often carried off with it; and is it is not fuffi-  
ciently hot, the Haemorrhage is not stopt by it. Besides, actual  
Cauteries produce intense Pain, a Violent Inflammation, and all  
its Consequences; and all that which is destroy'd by the Burn-  
ing, must afterwards, by a Suppuration, recede, and be separated  
from the live Parts. Hence there is great Danger, lest, the Es-  
char sailing off in a few Days, the Haemorrhage should return ;  
in which Case, it is stopt with greater Difficulty than at first:  
For the cauterized Vessel, when the Eschar is fallen off, will he  
shorter; for which Reason it cannot at all, or at least without  
the greatest Difficulty, be laid hold of, and ty'd. Hence **the**cruel Application os the Cautery must he again repeated, whilst  
the same Danger remains, lest the Haemorrhage return, after the  
new Eschar is fallen off. Hence, after skilful Surgeons knew  
how to stop Haemorrhages by a Compression or Ligature of the  
Vessels, the actual Cautery was more rarely used. And *Galen*himself condemns the Use of EscharoticS, as unsafe in stopping  
Effusions of Blood. For in *Method. Medend. Lib. ζ. Cap. An  
he* tells us, " That as much of the Part as is burnt into **a**

Crust, so much of the natural Flesh is lost and remov'd  
" when the Crust falls off: For which Reason the. Wound  
" appears naked, and without Flesh ; and in many, aster the  
" Separation of the Eschar, a Profusion of Blood has happen'd,  
" which could not be suppress'd without great Difficulty."  
Hence *Galen* is against the Use of Efcharotics, except in the  
greatest Necessity ; and he affirm'd, that they were principally  
useful where the Haemorrhage proceeds from the Corrosion of  
the Vessels, by a putrid Blood: For, by this means, the Blood  
is stopt, and the spreading Putrefaction forthwith destroy'd, by  
the Action of the Fire.

2. The Application of live Fire, by means of hot Irons, or  
**the Use** of boiling Oil, were call'd, simply. Cauteries, or actual  
Cauteries ; but these are some highly acrid Remedies winch de-  
stroy the Parts to which they are applied, and burn them into  
Eschars, in the same manner as the Application os Fire does :  
These, from the Similarity of their Effects,- were, also, call'd  
Cauteries; but because they did not.actually contain Fire, they  
were distinguish'd from the others by the Epithet potential:  
They are, also, call'd Corrosives, because, by corroding, they  
consume and destroy the Parts to which they are applied ; but  
the Eschers,: form’d by these, must, also, be separated, and fall  
**off:** Hence arises the same Danger os a fresh Haemorrhage as if  
actual Cauteries had been applied. Besides, as all Corrosives  
are highly acrid, they often greatiy irritate the adjacent nervous  
**or** tendinous Parts, whence it is certain Violent Symptoms **some-**times arise. The most celebrated Remedy of the Antients, *for*this Purpose, was, *Cyprian* Vitriol, form'd into a small Ball, or  
reduc’d into 2 sino Powder, laid upon Lint, and applied to **the**Orifice of the divided Vestel*: The* Blood, almost by the single  
Touch of this Vitriol, is coagulated into a *Thrombus,* which,  
like a Covering, closeS up the divided Vestel, constricts it, and;  
burns its extremity into an Eschar ; but a Ball of Vitriol can-  
not remain applied to the Orifice of the Vestel, unless secured  
by a proper Bandage, which alone might prove sufficient.

Corrosives are, white Vitriol, the *Lapis Infernalis,* **and Oil  
os** Vitriol.

Under the Article FiBRA, Astringents, so sar aS **they**strengthen the Cohesion of the solid Fibres of the Body, are  
consider'd ; but here we only treat os the Use os Astringents in  
stopping Haemorrhages : This Effect, then, they produce, either  
by constricting the Orifice os the divided Vessel; or by coagu-  
lating the Blood as it flows out, so as to close up the Orifice of  
the Vessel; or by producing both these Effects at once t Be-  
sides, there are, also, other Remedies, winch, tho' they do not  
in a great measure coagulate the Blood, nor constrict the Veffeis,  
yet stop the Haemorrhage, and in this respect only deserve the  
Name os Astringents. Such are Volatile Mill-dust, the Powder  
**of** Plaister of *Paris,* and other bibulous Bodies, which absorb  
every Liquid they touch, and, with it, grow into a pretty hard  
Mass, which is capable of closing the divided Vessel, and stop-  
ping the Haemorrhage. But if large Arteries are divided, these  
Powders will be carried off by the *Impetus os* the discharg'd  
Blood; so that they are not much to be trusted to. Hence,  
aster the Amputation of large Memhers, when Surgeons applied  
these bibulous Substances to the Surface of the Wound, both  
Night and Day a Servant was order'd to press the whole *Appa-  
ratus* with'his Hand, that they might remain firmly applied.  
Hence it is obvious, that little is to be expected from these bi-  
bulous Substances, unless they are secur'd and assisted by a proper  
Compression. \*

Among the Remedies which act by coagulating the Blond, or  
Constricting the Veffeis, the most celebrated is *Alcohol,* espe-  
cially when warm, which in a Moment converts the *Serum* of  
the Blood, notwithstanding its Fluidity, into a scissile Mass,  
and at the same time strongly contracts the solid Parts of the  
Body. Hence the soft Parts of Animals, preserv’d in *Alcohel,*hecome hard, and are diminish'd in Balk: By both these Ef-  
sects *Alcohol* may effectually stop Haemorrhages. But the Ex-  
tremity of the divided Vessel, being, by the Application of the  
*Alcohol,* contracted and indurated, will afterwards be separated ;  
and the *Thrombus* of Blood, harden'd by the *Alcohol,* wilt either  
be remov'd spontaneoufly, or protruded by the *Impetus* of the  
Blood acting upon it. Hence the Haemorrhage will return,  
unless, by a proper Bandage and Compression, the *Thrombus,*form'd by the *Alcohol,* is retain'd in the Orifice of the divided  
Vessel. Besides, by the Heat os the Body, the Volatile *Alcohol*is immediately dissipated: Hence its Action is only momenta-  
neons, unless it is continually applied afresh, and its too sudden  
Exhalation prevented, by the Application of a Bladder anointed  
with Oils It is therefore obvious, that the Use of *Alcohol*is not safe without a proper Compression. *Vanfweiten* gives  
a memorable Instance, in which the Blood stowing from a very  
small Artery could not he stopt by *Alcohol.* Hence it is obvious,  
that if Haemorrhages from small Arteries cannot sometimes he  
stopt by *Alcohol,* it may, also, often prove fallacious, in Cases  
where large Arteries are divided.

Oil of Turpentine, unless hot, scarcely stops Haemorrhages.  
The soft Parts of Animals, immersed in this Oil, become hard,  
tho' flowly ; but Oils require a far greater Degree of Heat, be-  
fore they boil, than Water: Hence warm Oil os Turpentine,  
by burning the Solids, and coagulating the Blood, may stop an  
Haemorrhage; in which Case, it will act like an actual Can-  
tery, which is already described. But highly strong and acrid  
fossil Acids, fuch as the Spirits of Nitre and Sulphur, are Cor-  
rofiVes, of the Use of which we have already treated. But the  
other mild Astringents, such aS Dragon’S-blood, the Bark and  
Flowers of Pomgranates, and others os a like Nature, seem  
not to be so efficacious, that much Good can he expected from  
them alone, in stopping Haemorrhages. Hence, also, it appears,  
what Judgment we are to form os the many styptic *Arcanums*το much extol'd by many Surgeons. Small Arteries, and even  
fuch as are considerably large, when entirely divided, close spon-  
taneoufly, especially when the Vital Principle is weaken'd by **a**liberal Haemorrhage. Many of these boasted Specifics were  
acrid Corrosives, and others of them milder Corrosives, which  
were, by Bandage, pressed to the wounded Vessel: Hence **the**Blood was often stopt rather by the Compression alone, than by  
the Application of the Remedy. Whilst *Petit,* as he telis us in  
*Mem. de ΓAcad, des Sciences, PAn. lyzS.* about the End of the  
last Century, made many Experiments, with respect to these  
*Arcanums,* he found, that flight Haemorrhages might sometimes  
be stopt by them; but that, in the Amputation of Limbs, they  
did not produce the desir'd Effect. Hence it is obvious, that  
those who boast of fuch *Arcanums,* are not rashly to be trusted.

\* Astringents are,

I. Those Substances which contract the Veffeis, such aS *Al-  
cohol,* Spirit of Turpentine, recent Juice of unripe Quinces,  
Dragon's-blood, Puff-ball, and *Crocus* of *Mars.*

2. Those Substances which coagulate the Bloed ; such as ***AL.****cohole* Spirit of Nitre, Spirit os Sulphur, calcin’d Vitriol, Su-  
gar of Lead, **the** Bark and Flowers of Pomgranates **and the'**Blood-stone.

.4. If the Surgeon's Hand can have Access to the divided Ar-  
jury, so as that it may be ty'd, the Haemorrhage will soon he  
stops, by the Application of a Ligature. This Method was  
commended by *Galen:* For, in *Method. Medend. Lib. 5. Cap.*:3. after having enumerated Various Methods of stopping Hae-  
morrhages from Wounds, he adds, " Another Method of clo-  
An fing the Extremities os the Vesseis is, by applying a Ligature  
-" to them, or by compressing and constricting them with the  
" Fingers.” But he seems to have used this Method only in  
.Wounds : For, so far aS I remember, he has not describ'd the  
Amputation of sphacelated Limbs. In Amputations of the large  
Limbs, where Violent Haemorrhages are dreaded from a Division  
**. of** large Arteries, *Celsus, in Lib.* 6. *Cap. ult.* makes no men-  
-fion of the Ligature of the Vessels; tho', in *Lib.* 5. *Cap. 26.*-when describing theCtire of Haemorrhages from large Wounds,  
.he tells us,, that when all other means have been tried in Vain,  
the Veins, discharging the Blood, are to he laid hold of, and  
p- about the Part where the Wound is made, so ty'd in two  
An Places,that they may unite,and have their Orifices closed up.”  
-After *Galen,* all Physicians and Surgeons stopt the Haemor-  
.rhages, succeeding Amputations, with Caustics; and *Vifalius,  
-in Chirurg. Magn. Lib.s. Cap.* I2. when describing this Ope-  
. ration, orders the Flesh to he cut to the Bone with an ignited  
.Razor, and the large Vefleis to he afterwards burnt with ignited  
-Irons. AS *Pare* abhor'd this cruel Method, and observ'd that  
many, on whom it was practised, died, and that only a few  
. escaped, after the most intense Pain, he was the first, as he in-  
forms us, in *Lib.ilt. Cap.* 35. who ty'd the Vesseis affer Ain-  
. putations, drawing them out with a Forceps, and with a double  
. Thread tying them together with a Portion of the adjacent  
Flesh: But if the Ligature flipping off, the Haemorrhage'**re-**.turn'd, he with a Needle perforated the fleshy Parts adjacent to  
the divided Vestel, and, by drawing the Thread upon a Coin-  
-press applied; he closed she Orifice of the divided Vessel, as he  
r tells us in the same Book, *Cap.* 33; Afterwards, almost all  
Surgeons, neglecting actual and potential Cauteries, used Liga-  
.tures, which they applied two Ways; for they either drew out  
the Extremity *of* the divided Artery with a Forceps, and ty'd it  
by passing a Thread about it ; but if the Thread was too tightly  
. applied, it often gradually cut the Artery; in consequence os  
which, the ty'd Extremity fell off too soon, and the Haemor-  
rhage not only return'd, but was more dangerous than before;  
-because the Vessel, being render'd shorter, could not be fo easily  
closed by a new Ligature: Hence *Dionis,* in this *Cours P Ope-  
. rations de Chirurgie, Demonstrat, cy.* after the Thread is-pasted  
: about, and a Knot ty'd on it, orders, that one End of the  
-Thread should, by a Needle, be passed thro' the Substanceof  
- the Vessel, in order to hinder the Ligature -from falling off too  
Toon. But this Method, as being too difficult, was afterwards  
-rejected. But if a.shghtLigature is applied to a naked Artery,  
the Blood,. continually acting on the Part- ty'd, protrudes the  
Ligature, and makes it-. Jall off: So that *ParPs* Method pre-  
. vail'd, which is, tying the Artery together with a Part of the  
adjacent Flesh ; for thus the Extremity of the Artery is excel-  
.lently closed ; nor is thereany Danger *os the Ligature's* flipping  
**. off** so easily.. It will he .sufficiently ohvioUs,Ihatstying the  
- Vesseis is preferable to burning them, if we consider she follow-  
ing Circumstances :: Whilst by live Fine, or potential Caustics,  
.theExtremity of the Vestel is burnt, and the Blood in it coagu-  
. lated, the burnt Parts produce an Escher, which covers the Ori-  
-isice of the divided Vessel; to this Covering there Adheres a  
*-Thrombus* of coagulated Blood, which fills the Cavity of the  
-divided Artery ; and when the Eschar salis off, the *Thrombus*alone, lodg'd in the Cavity of the Vestel, sustains the *Impetus*of the impel'd Blond: But the Extremity of the Vestel, being  
open by the Separation of the Eschar, - will easily transmit the  
*Thrombus,* which will therefore he expel'd, and make a free  
passage for the Eruption of the Blood: But whilst the Vessel is  
closed by Ligature, its Sides will be brought together, and hence  
the *Thrombus* beyond the Ligature will touch it with a narrow  
.Apex,- whilst its broader Basis will block up. the Cavity of the  
. Vessel.. Aster, therefore, by a Suppuration, the Part ty’d, to-  
gether with the Tbread, salis off, tho' the Artery is not, as yet,  
totally consolidated, yet the *Thrombus,* heing broader at its Base,  
cannot be transprefled thro' the narrow Extremity of the con-  
tracted Artery: Perhaps the narrower Part of the *Thrombus*may come out, but its larger Part will close up the Vestel, and  
stop the Haemorrhage. Mr. *Petit,* in *Mem. de ΓAcad, des Sci-  
ences, ΓAn.* I73I. has beautifully explain'd this, and illustrated  
it by the Addition of a Figure of the *Thrombus.*

This Method is, therefore, far more safe than any of the rest,  
tho' it is not absolutely free from Disadvantages; for it is often  
succeeded by an intense Pain, and Violent Inflammation, whilst  
the Arteries are ty'djtogether with the adjacent Flesh, especially  
if the divided Nerves areat the same time comprehended within  
the Ligature, Hence convulsive Motions often happen in the

Pars, by which the Ligature may he destroy'd, and theH&fiort  
rhage return.

5. The entire Division of the Artery is principally useful  
. when the wounded Artery; heing neither too large, nor too near  
the Heart, is only partially divided ; for, in thisTCase, tho He-  
morrhage will proceed, because the Fibres being retracted by  
their own Elasticity, the Wound os the Artery will be enlarg’d :  
But if such an Artery is entirely divided, we have already shewn,  
that its Extremities recede, and are conceal’d finder the adja-  
cent Parts, where, by their own Contractility, and the Pressere  
of the contiguous Solids, they' are entirely closed, and the Hae-  
morrhage is, by that means, stopt. When, therefore, the Blood  
continually flows in a small Quantity from a Wound, the Plate  
of the Wound whence the Haemorrhage seems to proceed is to be  
scarified with a Knife, in order to make a. total Division of the  
woundedArtery. *Galenati T.r. de Curandi Rdtiarte per Vinasectic-  
nem,Cap. ult.* tells us,that he used this Method with Success, “ in.  
“2 Man who by aWound in the *Malleolus* had the Artery wound-  
" ed, in such a manner;thet the Hxmorrhage did not cease, till  
" 6in/e«,being call'd,inadea total Division of the Artery.'' He  
‘afterwards adds,that theWound was cur'd without an *Aneuryfm,*which is greatly to be dreaded in fuch aWound os an Artery.whilst  
.the weak Cicati ix is,by the Blood; extended into a dilated Sack.

But it easily appears, that such an entire Division is not safe,  
unless the Artery is small, and not near the Heart: For, in this  
Dase, the Haemorrhage would not cease, tho' the Artery was  
entirely divided; but the divided Vessel must be closed up by a  
Ligature, or some other Method.

It has happen'd, that an Artery wounded, and not entirely  
divided, has been so secur'd by Compression, that the Blood bra  
stopt; but, in this Cafe, To strong a Compression of the Artery  
is not always requisite, as entirely to abolish its Cavity: Such a  
Compression is sufficient, as hinders the free Efflux of the Blond  
from the Wound of the Artery, and retains the bloody *Throm-  
bus* hetween the Lips of the Wound, which is the principal Im-'  
pediment to the Discharge of the Blood j and which, afterwards,  
growing firmly to the Margins os the Wounthrestores the Sound-  
ness Of the wounded Part. An Instance of this is found in *Mem.  
-dell Acad, des Sciences, st An. 1735.*

6. Compression Of the divided Vessel is, of all others, the  
best, and most natural Method, of stopping Haemorrhages, and  
that which all Men fpontaneousty use when they fee the Blood  
'stowing fronTa Wound, that is, by compressing the wounded  
Part with their Fingers.' Burthis Compression may act either  
.perpendicularly on the open Surface of the divided Vessel, or it  
may be applied to the Sides of The Vessel, and thus render them  
-contiguous to each other; In the former Case the Efflux *of* the  
: Blood is hinder'd; but as the *Thrombus,* form'd by the coagu-  
dated Blood ,is osthe same Bulk with the Orifice ofthe Wound,  
swhenthe ConIpression.iSTemov'dyitis easily expel'd,bytheTin-  
*petus* of the Blood acting Upon it.. -Hence, in tinis Case, the  
.Pressure ought Jo act upon the divided.Vessel till *ffiC Thrombus*: os coagulated Blood, re concreted with the Sides of the Vessel,  
which does not happen soon j But such a Compression, when  
'strong, and long applied, may produce many bad Symptoms ;

an inflammation, for Instance; and all its Consequences. 1

But if the compressing Cause acts on the lateral Part of **the**divided Vessel, its Sides will come together, and; being render’d  
contiguous, will grow together in a pretty broad Surface : And  
aS the *Thrombus* of coagulated Blood; lodg'd behind the com-  
press'd Part, is almost cylindrical, it cannot be forc'd out by the  
Sides of the Vessel, tho' a perfect Union is not, as yet, form'd.  
It is therefore sufficiently obvious, how much This Method is  
preferable to all others: For if the Aperture of the Vessel is  
' only closed, che Haemorrhage ceases. But this is excellently  
obtain'd by such a Compression, and the contiguous Sides of the  
Vessel will soon grow together, without any Necessity sor a St-  
paration of the mortified Parts, which must happen after the  
Application of actual and potential Caustics, and eVen after the  
Ligature of the Vefleis I Besides, when the Veffel is ty'd, there  
is only an Uninn os its Sides in a small Surface; where the  
Thread is plac’d: But, by a lateral Pressure, the Sides of **the**flatten'd Vessel are united in a greater Surface; sor which Rea-  
son they will adhere more firmly, and make a stronger Resist-  
ance to the Action of the Blood attempting its Discharge;

\* But the Parts never sooner and better grow to each other, then  
when they are divined by a recent Wound ; for, in this Case;  
only the Union of the Parts is requisite, and Nature performs  
the reft. But this is most perfectly obtain'd by this Method;  
whilst to the raw Wound, not irritated by Corrosives or Liga-  
tures, such a Compression is applied in those Parts where large  
Vessels are divided.

But that the Haemorrhage may be happily stops, and the  
Wound at the same time cur’d, it is principally requisite, that  
**the** Pressure should act only on the Sides of the divided Vessel,  
but not on the reft of che Surface of the Wound.- HenceSur-

geons prepare a small Ball of Paper, long chew'd hetween the  
Teeth, or of Lint, which they apply to the Part of the Wound  
which ought to he compress'd; upon this they lay one some-  
whet larger, and over it one still larger, and so On, till the  
*Apparatus* is so prominent, that, by a Bandage, it may he com-  
modioufly press’d .to the divided Vestel; for thus an inverted  
Pyramid, as it were, is form'd, whose Apex, being applied to  
the.Side of the Vessel, only communicates the Prenhre of **the**Bandage applied, to that Part of theWound where it is requi-  
site. *Petit,* in *Mem. de ΓAcad, des Sciences, An. sspysu.* has  
describ'd and represented, by a Table, a beautiful Instrument, by  
the Application os which, the divided Vessel might be safely  
compress'd, and the Trunk os the Artery above the Wound  
contracted at Pleasure: The Compression, also, os the divided  
Vessel, may be augmented or diminish'd, at Pleasure, by the  
Use of the same Instrument, the Sureness, Safety, and Use of  
which, he has there consum’d, by a memorable Example. See  
**TORCULAR.**

It is therefore obvious, that an artificial Compression of the  
Vessel stops the most dangerous Haemorrhage, when other Re-  
medies have been try'd to no Purpose; and that this alone is suf-  
ficient, in all Cases; whereas **the** other Remedies are only use-  
ful in particular Circumstances. But this Compression acts best,  
if, being apply'd to the Side of the divided Vessel, it compresses  
its open Orifice, tho' in the most difficult Coses a perpendicular  
Pressure on the Surface of the divided Vessel has sometimes hap-  
pily stopt Haemorrhages ; a memorable Instance os which is  
sound in *Mem. de llAcadl. des Sciences, ΓAn. sypsu.* It some-  
times, also, happens, in the Amputation Os a Leg, that **the**Artery winch perforates the superior and posterior Part os the  
*Os Tobies,* and sometimes runs an Inch thro'the Substance of  
the Bone, being divided, continues perpetually to discharge the  
Blood, if, being lodg'd in that bony Canal, it is by the Saw  
divided with the Bone. It is sufficientiy obvious, that in this  
.Case a Ligature can be of no use: And in the last-quoted Part  
of the *Mem. de st Acad, des Sciences,* we have an Instance, in  
.which Compression alone, by Lint apply'd to the Orifice of **the**divided Vessel, remov'd so dangerous a Symptom.

But in Cases os this kind a stronger Compression is requisite,  
than if, by lateral Compression, the Sides of the flatten'd Veffels  
were render'd contiguous ; hecause the Largeness of the divided  
Vessel remains always the same. Hence the *Thrombus* of con-  
creted Blood,clofing up the divided Vessel, may he easily-expel’d,  
unless it in retain'd by a strong Compression. -

In this Case Revulsion is of no Service, unless the wounded  
Arteries are small, and there is a *Plethora.* The same is true  
with respect to Aliments, Drink, and internal Medicines:  
What has been said of an Haemorrhage, may he apply'd to a  
Flux of Ichor; the' the greatest Help we have, in tins Case,  
is from the .thicker Balsams.

*In this Case Revulsion is of no Service. Galen,* in *Method.  
Medend. Lib. 5. Cap. 3.* when laying down the Method of  
stopping Blood discharg’d from Wounds, telis us, that this is  
done " thyclofing up that which is divided, and by deriving and  
" tranflating what was carried thro' it, to some other Part." But  
as he was ignorant of the modern Doctrine of the Circulation Of  
the Blood,it is not to be wonder'd at,if he embrac'd theOpinion,  
that Revellents may be of great Use in stopping Haemorrhages  
from Wounds. Bur if a large Artery is divided, Venesection in  
another Part of the Body will be os no Use, since the Blond  
will certainly flow thro' the openWound of the Artery, till the  
. Patient dies, or, at least, salis into a *Deliquium.* I saw, says  
*Vansuieiten,* an Instance, in which repeated Venesection could  
not stop .rhe Haemorrhage arising from the drawing of a Tooth»  
It can therefore be of no Use when a large Artery is divided,  
. since it cannot prevent the Efflux of the Blood from so small an  
Artery; nor can any Good be expected from other Revellents,  
which act by any Friction or Irritation of the Parts distant from  
the Wound, since they are rather injurious, because they increase  
the Motion first in the Part, and then in the whole Body.

But where there is a.large Quantity of Blood, and when that  
Quantity is not sufficiently diminish'd by the Haemorrhage, Ve-  
nesection may be beneficial, where the wounded Veffeis are  
small; that the Quantity and *Impetus* of the Blood being di-  
minish'd, the wounded Veffeis, when not too much distended,  
may contract themselves.

*Ac for Aliments and Drink*; when an Haemorrhage is stopt  
by the Remedies specified in the preceding Aphorism, we ought  
always carefully to avoid such Aliments and Drinks which can  
suddenly too much increase the Quantity and *Impetus* of the  
Blood till the wounded Vessel is sufficientiy consolidated : And  
' in this Respect a proper Regimen with regard to Diet, is of  
great Importance. But it is sufficientiy obvious, that nothing  
**can** be expected from it, in order to stop the Haemorrhage ; *for  
an. excessive* **Loss** *of* Blond requires a present Remedy: And

tho’ it should be granted, that Meat and Drink could contri-  
bute any thing to tins Effect, yet too great a Time is requir'd,  
hesore the Chyle, produc'd from the Aliments, can come to the  
Wound. The same holds true with respect to Medicines taken  
internally, which are, by some, salfly said to he efficacious in  
stopping Haemorrhages: For it appears, from what has been  
said, that the strongest Astringents cannot so stop a dangerous  
Haemorrhage, that they may he safely trusted to, even tho' ap-  
plied in large Quantities to the divided Vessel. Nothing is,  
therefore, to he expected from them whilst, heing taken inter-  
nally, mix'd with the Blood, and chang'd by the Force os the  
Body, they are, by the Action os the Circulation, convey'd, in  
a small Quantity, to the wounded Part: For, in this Case, they  
will pass thro' the open Orifice of the Wound, along with the  
Blood. Besides, all the Remedies capable of stopping an Hae-  
morrhage, produce their Effect by constricting the Vessel, or by  
Coagulating the Blood, *or by* doing both these at once. . If,  
therefore, these Remedies, when mix’d with the Blood, and  
flowing thro' the Wound, had such a Quality, they would prove  
mortal, by constricting the minute Vessels of the Lungs, or coa- .  
gulating the Blood, and so hindering its Passage thro' the Lungs,,  
hesore they could come to the wounded Part. When small di-  
vided Arteries, by their proper Contractility, and a Diminution  
of the *Impetus* os the Blond, in consequence of the Loss os it,  
are spontaneousiy closed, as is already observ'd, then the stop-  
ing of the Haemorrhage, which is owing to quite different  
Causes, is ascrib'd to the Use of such Remedies, many of which  
are greatiy extol'd, and may he safely exhibited, fince they nei-  
ther do Harm, nor Good, No prudent Surgeon will, however.  
Confide in them, and, neglecting more efficacious Remedies,  
expose his Patient to the greatest Danger.

*Ac for a Discharge of Ichor y it* sometimes happens that  
Wounds, -eVen of a flight kind, are accompanied with a ter-  
rible copious Discharge of thin Lymph, the’large arterial lym-  
phatic Veffeis heing probably wounded; fince it is hardly to he  
supposed that the Venous lymphatic Veffeis, being divided, could  
discharge so largest Quantity Os Lymph; because the sangui-  
serous Veins, when wounded, unless they are Very large, dis-  
charge but a Very small Quantity of Blood, unless a Ligature,  
or some other Obstacle, is plac'd hetween the Heart and **the**Wound. But we Ought carefully to distinguish that Flux of  
Ichor which arises from Wounds os the lymphatic Vessels, from  
that which-succeedS Punctures of Nerves and Tendons, or Vio-  
lent Inflammations: For, aS we have already observ'd, far other  
Remedies are requisite in the latter, from those proper in the  
former Case. Here we only treat of that Flux os Ichor winch  
arises from Wounds os the Veffeis; in which Case, the Rente-  
dies proper for stopping Haemorrhages, may he beneficial. We  
have already observ'd, that an artificial Compression of the Ves-  
sel was the safest, and most efficacious Method os stopping Ηεε-  
- rnorrhages, eVen of the most Violent kind. It is, also, certain  
from Experience, that the same Method may remove a Flux of  
**.Ichor:** Of this **we** have **a** memorable Instance in *Ruys.ch.0b~  
serv. Anatom. Chirurg. Centur. Obs.* 4I. But when- a Flux of  
. Ichor succeeds the Puncture of a. Nerve, such a Compression  
.would soon make the inflam'd Parts pass into a Gangrene. Ex-  
juellent Effects are, also, produc'd by the native Balsams, espe-  
cially of the thicker kind, which,thy thein oleous Lentor, are  
Capable of clofing up the Wound Of sucha Vessel, and are ob-  
serv'd to be friendly and salutary to the wounded Parts, tho' they  
are only used in Punctures of the:Nerves and Tendons: And  
when these are applied pretty warm to the Wound, aS they ge-  
nerally are, perhaps the tender Veffeis, by the greater Heat, con-  
tract and close themselves. - ’.

**' : PAIN CONSIDER'D AS Α SYMPTOM** *OR WouuDs. so*

It any nervous Fibre, arising from the Brain, is so extended  
as to threaten its Dissolution, the Idea of Pain is produc'd. -

Pain is a Perception, in the Mind, of something which pro-  
duces Uneasiness, and to which we have naturally fuch an Aver-  
sion, that, with our utmost Efforts, and eVen without the Con-  
currence of our Will, we mechanically attempt the Removal of  
that which we helieVe to be the Cause of the ungrateful Per-  
ception : For a sound Person has a Power which he can by no  
means remove from himself, of perceiving, certain Ideas, on ac-  
count of a Change induc'd on some Nerves. If an ignited Iron,  
is apply'd to any Part of the Body of a Philosopher, wrapt up in  
the most profound and abstruse Meditations, the Train os his  
Thoughts is immediately chang'd, and that ungrateful Percep-  
tion, call'd Pain, forthwith excited in his Mind. But it is im-  
possible, by Words, to explain whet that Perception in the Mind  
is, fince it is only known to him who endures the Pain ; fed  
there is not form'd in the Mind a Representation of any Object  
different from rhe Thought os the Pain, bur there is a perceiv-  
ing Power present: For no one, when in Pain, imagines tirat

there is without himself any external Object similar to that Pain  
which he seeis; but all affirm, that they themselves are in  
Pain.

The Idea of Pain, properly speaking, leaves in the Mind no  
Remembrance of itself; for the Person who is in Pain, and is  
next Moment freed from it, is sensible, indeed, that the Cause  
os Pain was present; but he has no longer an Idea of Pain, nor  
can he, by any means, excite it in his Mind, without the Pre-  
sence of a fresh Cause of Pain, which, first changing his Body,  
may induce a proportionable Change on the Ideas of his Mind.

But what that Change of the Body is, and irr what Parts it  
happens, from which the Idea of Pain arises in the Mind, we  
may know from Experiments: For it is demonstrable, that only  
the Nerves arising from the Brain are capable os being so as-.  
fected, aS to excite tho Idea of Pain in the Mind: For if a  
Nerve, winch is alone distributed to any Part of the Body, is  
destroy'd, such a Part may he cut, or burnt, without exciting  
the Idea os Pain in the Mind, tho' all the other Parts remain  
sound f But all the Nerves in the Body arise either from the Air-  
*dulla Oblongata,* which contains the medullary Substance os the  
*Cerebrum* and *Cerebellum. ;* or *from the* spinal Marrow, which is  
a Continuation of the *Medulla Oblongata,* and, besides, contains,  
a medullary Substance, arising from its own cortical Part: Yet.  
that Affections of those Nerves only, which arise from the me-  
dtdlary Substance of the *Cerebrum,* are capable os exciting the .  
Ideas os Pain in the Mind, is obvious from this, that in all those.  
Disorders in which the Action of the *Cerebrum,* by means of the  
Nerves, is remov’d, no Pain is felt. Persons excessively drunk,;  
er perfectly apoplectic, in consequence of .the Humours extra-.  
Vasated in the Brain, have no Sense os Pain, tho’ live Fire is  
apply'd to the Parts of the Body; the same, also, frequentiy  
happens to Patients under excessive epileptic Fits: Hence it apo’  
pears, that a Change of those Nerves alone which arise from the.  
Brain, is capable of exciting the Idea Of Pain in the Mind L  
But this Change of the Nerves arising from the Brain, which  
is capable of exciting the Idea of Pain, seems to he such a Dis-,  
position of them as if long continu’d, or render'd Very intense,.  
would produce a Solution os Continuity in these Nerves: For  
if the healthiest Person, who has no Pain in any Part of his  
Body, and has no Fault either in his Solids or Fluids, is prick'd:  
under the Nail of the Pinger or Toe, with the smallest Pin, an.  
excessive Pain, capable os rendering the Patient convulsive, im-  
mediately arises, only from such a mechanical Change of the.  
nervous *Papillae :* Nor is it os any Importance what, the Cause  
is, or how it acts ; for, provided .it so disposes such a nervous  
Fibre arising *from* the Brain, that it is Very near to a Rupture,.

. without breaking (for when the.Nerve is destroy’d, the Pain  
ceases), that ungrateful perception call'd Pain will be excited in:  
the Mind ;. . ν .. Λ \_ . αίχ

But that the chang'd Condition os the Nerve may produce:  
the Idea of Pain in the Mind, it is requisite the Action of this  
Nerve on the Brain, and os the Brain on it, should remain free?  
and uninterrupted by any Obstacle: For if the Nerve, in. its  
Course, is ty'.d, thss its Extremity should he distracted, lace-  
rated, or cut, the Sense of Pain will not he excited in the Mind. ‘  
The fame will happen, if, whilst the. Nerve remains free in all.  
its .Course, the Functions of the Brain are injur'd : Hence it is-  
obvious, that,.by this Change of theNerve, something is chang'd ,  
in the Brain ; and that, from this Change in thrf Brain, the Idea.:  
of Pain arises in the Mind. It therefore seems highly probable, ;  
that the Idea of Pain may sometimes arise in the Mind, tho'no.  
Change happens in the Nerves; that is, when the Brain,from  
any other Cause,receives such a Change as it would have receiv'd,  
. if a nervous Fibre, in any Part of the Body, had heen so disc:  
pos’d, as to be in Danger of a Dissolution. \_ This is confirm'd  
by practical Obseryat ions , for it frequently happens, that those  
who, by the Calamities of War, or other Misfortunes, lose them  
Legs, complain of a Pain In the Toes of the Leg they have  
lost: And in some it has been observ'd, that a Sense of such a.  
Pain was the Sign of imminent Convulsions; the Brain,which is  
the Origin os all the Nerves, being chang’d. Nor does this hap-  
pen only soon aster the Amputation, but a longrime after. See  
*Miseellani Curios. Decurso i. An.* 2. and *Hildan. Obs. Chirurgi  
Cent.* 3. *Obs.* I 5. Whilst, therefore, in some Persons, the.  
Brain, which is subservient to Sensation and Motion, and from  
which all the Nerves arise, is more easily affected than mothers,  
the former will be obnoxious to many Disorders and Pains,  
which they ascribe to external Causes, but which really derive  
their Origin from the too easy Mobility os the common Sensory.

Hence, when *Sydenham,* as he telis us, in *Dessert. Epistolar.*perceiv'd that Venesection, Purging, and some other Measures,  
were os no U se in those surprifing Disorders which proceed  
from a disturb’d Motion of the Spirits, he concluded, " That as  
" the exterior Portion of a Man'S Body consisted of Parts ob-.  
ic vious to the Senses ; so, without doubt, his interior Frame is  
" to be consider'd as consisting of a due Series, and, as it were,  
" habric of Spirits.” Butthis interior Frame, being intimately

“ join'd, and, as it were, united with the Constitution of the  
" Body, is more easily or difficultly chang'd from in. proper  
" State, according to the greater or less Strength of theoon-  
" stituent Principles we receive from Nature." Hence, in  
such Disorders, when Pains,in Various Parts of the BodV, re-  
sembled the most different Distempers, he justly accus'd tho Ir-  
regularity, and inordinate Motion, of the animal Spirits alone,  
and apply'd the Whole of his Care and Skill only to sooth and  
regulate them; by which means, he knew, from Experience,  
all the Pains, and Variety of Symptoms, which in this Dis-  
ease imitated the most different Distempers,were mitigated. This  
is sufficiently confirm'd by this, that, in delicate Constitutions,  
Perturbations of Mind alone are able to produce a Train of  
terrible Symptoms, tho', immediately before, no manner of  
Change was discover'd in the Solids and Fluids. . .

It, therefore, we should suppose that all the perceiving Points  
in the Body remain, and that all the not-perceiving Points were  
abolish'd, we should have an Idea of that interior Frame men-  
tion'd by *Sydenham* ; but, by this means, a great many Parts of  
the Body would he taken away. The whole Heart, so much  
agitated and inflam'd in the most acute Distempers, is not itself  
sensible of Pain, but an uneasy Sense of Anxiety arises; the  
whole Lungs are often consum'd by a purulent *Tabes,* without  
any Pain: The same, alfo, happens to the Kidneys, tho', at  
the same time, the *Peluis,* and interior Membrane of the Ure-  
ters, when indispos'd, are subject to intense Pains. The whole  
Liver is sometimes consum'd by an Abscess, without any Pain;  
but if the exterior Membrane of the Liver is affected, an intense  
Pain is present. ....

The Idea/ therefore, of Pain, in the Mind, follows such a  
Disposition of a nervous Fibre in the Body, aS endangers its Dis-  
solution ; tho', at the same time, it seems highly probable, that  
the Idea os Pain may he excited, tho' no Change happens to .the  
Nerves, but only to the Brain, from which thefeNerves derive  
their Origin. Nor does this appear only in those Nerves which,  
as st were, guard the. Body, and, heing dispers'd every-where,  
warn the Person ro remove or avoid, every thing, which, being'  
about to act, or,at,present acting, would destroy the Part: -But  
we, also, observe, that the fame infallibly happens in other  
Nerves, from a Change of which, the most distinct Ideas arise  
in the Mindsand such .as are equally lively with any others, tho\*  
no external Object has acted on the Organs of Sense, , but a  
Change is only induc'd in the common Sensory by Diseases.  
Thus phrenetic Patients see strange Objects, and frequentiy hear  
terrible Noises, tho': there is no external Object to excite these  
Ideas,, by inducing a Change of the Nerves. The same happens  
sh melancholic *Deliriums,* and maniacal Ravings.

τ The Pain is the more intense, the nearer the Fibre is to a.  
ε Rupture; and the. gentier, the nearer ir is to its natural.  
^Tension, h. r. . ' Y : i εἴ- .mi...

Since, from the Definition of Pain, it is obvious, that Pain is  
perceiv'd when a nervous Fibre is so dilpos’d as to he in Danger  
of a Dissolution; it naturally follows, that the Pain is the more,  
intense, the more the Cause, exciting it, distracts the Fibres.;;  
provided the Cohesion, as yet, remains: For when the Cohesion  
is destroy'd, the Pain ceases; and, on the contrary, the fess the-  
Distraction of the Nerve is, the less will the Sense of Pain be.  
This is obvious, in the Racks us'd by Judges, in order to extort.  
*from* Malefactors a Confession of their Crimes: For, hanging  
the Person up by the Hands, they apply to his Feet Weights,,  
which are gradually increas'd: Hence, by the greater Distraction:  
of the Parts, the Pain is gradually increas'd, to the greatest De-  
gree , but as soon as these Weights are remov'd, the Pain is di-  
minish’d. Many Nerves, in the human Body, are so lax, that  
they bear Extension without any Pain; but when the Nerves,  
dispers'd thro' the *Periosteum,* are stretch'd upon the Bones,’ the  
smallest Increase oPTension produces the most intolerable Pains-  
Hence arife those excessive Pains, whilst, in a *Lucs Virserea,*bony Tumors distend andoilacerate the incumbent *Periosteum.*Hence arises the Severity of that sort of Torment us'd by Exe-  
cutioners, when, by a Screw, they force the *Pcries.cum* on the  
Spine of the *Tilda,* to the hard Bone, gradually augmenting the  
Pressure. For the same Reason, the most intense Pains happen  
in the smallest Nerves: For the largest Nerves have but a small  
Part os their Bulk which may he call’d truly nervous. Hence  
it may easily happen, that such large Nenes may be distended  
without a Distraction in their nervous Fibrils, but only in the  
callous Coats covering those Fibrils, Put when a'Nerve is small  
and tense, and especially when it is destitute of such Coats, an  
intense Pain is produc’d in it by the (lightest Cause. This is  
obvious in the Tooth-ach, when the adamantine Crust os the  
Tooth, being corroded, and the minute Nerves dispers'd thro’  
the internal Substance os the Tooth, destitute os then-Coats,  
are, by the. Action of the Air, seiz'd with intolerable Pain,  
which cannot he allay'd till the affected Nerve is destroy'd, by

inn increas’d Distraction, the Application of proper Remedies, or  
the Drawing of the. Tooth.

Hence it is obvious, that the greatest Degree of Pain, in **the**. same Part, is but short ; but a less Degree may continue longs  
- and be increas'd, or remit.

Since Pain supposes such a Condition of a NerVeas endangers  
its Rupture, that is, a Solution of its Continuity; and since  
the Pain is the more intense, the nearer the nervous Fibre is to  
a Rupture ; it is obvious, that the greatest Pain is then present,  
when the nervous Fibre is breaking ; but when it is broken, all  
the Pain ceases, winch before arose from the too great DistraK  
ction of this Fibre. The greatest Pain, therefore, denoting  
that the nervous Fibre will soon break, will he short; hecause,  
when the Fibre is broken, it ceases. Thus, when a Wound is  
inflicted with a sharp Razor, a short and momentaneous Pain is  
only produc'd ; and, in the Gout, the Violence of the Paroxysm  
is observ'd to end the sooner, the more intense the Pain is;  
when a Tooth becoming carious, the Nerves dispers'd thro\* its  
Substance are divested of their Coats, sometimes, by Suction,-fuch Nerves are distracted, and such an intense Pain is produc'd,  
that the most robust Man cannot bear it, even for a few Mo-  
ments.. But when the nervous Fibrils are broken, the Pain soon  
ceases. The Drawing of a Tooth is attended with great Pain,  
which immediately ceases, after the Operation is oyer: The  
highest Pain will therefore soon destroy the affected Nerve, or  
so affect the Brain, as that all Perception of Pain ceases: On  
which Occasion, a Syncope, or an Abolition os all Vital Motion;  
generally happens. Nor can the most racking Pains proceed  
any farther; sor Persons in. such a Condition, like a Carcase,  
seel no more. Thus it is certain,' from many Experiments, that  
Malefactors, condemn'd to the Rack, become immediately, as it  
were, dead; and are no longer sensible-of the most exquisite  
Torments/.. - - " *- '.l- ' :*

It seems to be repugnant with this Circumstance, that violent  
Tooth-achs torment People for several Days, or even Weeks ’.  
But the Reason os this is, that the small Nerve which enters the  
Tooth, and is divided into minute Fibriis, is distributed thro'  
all its Points: Hence the, by the greatest Pain, one such Fibril,  
is destroy'd, the Misfortune proceeding to the others may long;  
protract the excessive Torments. - ' l. ’

- But as a milder Pain fupposes-a smaller Tension of the affected  
Nerve,-and Consequently less Danger of a Rupture, it is suffi-  
ciently obvious, that such a Pain may be long protracted S And  
as between the natural'Tensionof a Nerve,andthe greatest Dis-  
traction, next to a Rupture, numherless intermediate Degrees  
may be conceiv'd, it appears, that such Pains may Continue  
long without the Destrnction.of'the affected Nerve, and he in-  
creas'd or diminish'd according- to the greater or less Degree of  
Distraction. But these Pains, which happen in Parts of the  
Body pretty near the Heart, and are accompanied with a Violent  
Fever, soon cease; the affected Part being destroy'd: Butin  
Parts remote from the Heart, and free from a great Agitation  
of the Humours, long-continu'd, and Often returning Pains,  
may happen, without a sudden Destruction of the affected Parts.  
A violent and inflammatory Iliac Passion often takes off the  
strongest Man, in a few Houts: But the Gout, by repeated Pa-  
roxysms, often racks the Patient for twenty Years, before It-  
destroys the affected Nerves; in which Cole, the Pain in the  
Extremities is diminish'd, or ceases: But the Matter which be-  
fore prey'd upon the Limbs, is convey'd to the internal Parts,  
and produces the most terrible Misfortunes.

The Cause, therefore, of Pain, is every thing capable of  
producing such an Extension or Disposition os a Nerve.

Under the general Name os the Cause of Pain is compre-  
hended every thing which so distracts or disposes a Nerve, before  
not affected with Pain, as that it is in Danger of a Rupture :  
Nor is it of any importance, whether this is done by Pressure,  
Distraction, or Corrosion; since the Effect will always be the  
. fame; that is, the Idea of Pain will be excited in the Mind.

With respect to Intensity, or Duration, there may be a Differ-  
ence between the Pains excited by different Causes, but in other  
respects the effect will be the same.

Hence it is obvious, that a great Variety of Causes may **ex-**cite Pain in the healthiest Body : But that the latent Cause of  
Pain maybe regularly trac'd by the Physician, and, when known,  
remov'd, we ought to reduce the hitherto-known Causes of  
Pain to certain Classes; which is done in the next Aphorism.

' To this, then, belong.

First, The Force os natural Contraction sustain'd hy **fewer**Fibres, whilst some are divided.

Secondly, Whatever, by over-filling a Vestel, form'd of **a**Contexture *of nervous* Fibres, distends it. To this belong an

Obstruction, a *Plethora,* a redundant Cacochyiny; and an In-  
Crease of the circulatory Motion.

Thirdly, Whatever distracts the nervous Fibres; as Luxa-  
ti mis, Tumors, and external Force. And,

Fourthly, Whatever wounds, or corrodes.

I. This is already treated of,when,speaking of the worst Spe-  
cies of *Paronychia,* in which this happens, when the Tendon of  
the Flexors of the Finger heing affected, an intense Pain is pro-  
duc'd : For the Bone of the last Phalanx of the Finger often  
fidis off, after the Patient has suffer'd the most racking Pain:  
But hefore the Bone can fall ofls, the Tendon affix'd to it must  
he separated from it, which is not done all at once, but by **a**flow Distraction ; for no Parts of the Body, so small aS the Fin-  
gers, have so strong Muscles affix'd to them: And, in this Dis-  
order, those Muscles being contracted, the Fingers always ap-  
pear bended. When, therefore, the Tendon begins to be se-  
parated from this small Bone, the remaining Fibres sustain the  
whole Force of the contracted Muscle; and are, by allow, but  
continual Laceration, torn from the Bone to which they adhere;.  
Hence an intense Pain often so disturbs the whole Brain, that ’  
an acute *Phrenitis,* Convulsions; and often Death, succeed.  
No Degree of Patience is able to support those Torments, by  
which the Parts are gradually torn from the live Bones. A  
singular Instance of this we have in the Conduct of *Philotas,*mention'd by *Sluintus Curtius, in Lib.* 6. *Cap.* II;

2. It is shewnjunder the Article FIBRA,that the large Vessels  
consist of Membranes which contain Vessels of all Kinds, even  
the least in the Body, fuch as the Nerves: Every thing, there-  
fore, which distends the Sides of the large Vessels, will, by a  
Parity *os* Reason, distract the Nerves dispers'd thro' them:  
But from fuch a Distraction, as is before observ'd, arises the Idea  
Of Pain in the Mind. It may be doubted, whether all theVes-  
seis in the Body have in their Membranes perceiving Nerves ;  
fince, as we have already observ'd, many os the *Viscera,* which  
are, from Anatomy, known to consist of a Congeries os Vessels,  
are, however, often gradually consum'd and destroy'd, almost  
without Pain. Hence this will only be true so sar as the Mem-  
branes, constituting the Vessels, have Nerves arifing from the  
Brain, and subservient to Sensation, distributed thro' their Sab.  
stance: But that this happens in many Vessels, is obvious; he-  
Cause no Point in the Surface of the Body can be wounded by  
the Point of the smallest Pin, without a Discharge of the con-  
min'd Humours from the wounded Vessels, and a Perception of  
Pain: The principal Causes which distend the Vessels furnish'd  
with nervous and perceiving Fibres, are these following:  
*. Obstruction:* This always supposes a Blocking-up os the Canal  
thro\* which the Fluids ought to he convey'd by the vital Mo-  
tion : Hence it necessarily follows, that the Fluids convey'd to  
the obstructed Place of the Vessel, and not able to make their  
Way thro' it, must dilate, attenuate, and at last resolve or open  
the.Sidesof the Vessel, as is shewn under the Article OBsTRU-  
CTIO. It is therefore obvious, that the nervous Fibres consti-  
tuting the.SideS of the obstructed Vessels, becoming highly tense,  
and at last breaking, may excite the Idea of Pain, which will  
have Various Degrees of-Intensity, according to the different  
Degrees of Distraction.- - When, in a Pleurisy, the Arteries,:obstructed by the stagnant Blond lodg'd in the intercostal Parts;  
are distended by the succeeding Blood, an intolerable Pain is  
produc'd, and is always the more intense, the greater the *Im-  
petus* in with winch the Blood acts on the obstructed Parts.  
Hence; when this *Impetus* is lessen'd by Venesection, the Pain  
either, ceases, or is diminish'd. Hence Obstruction, properly  
speaking, is non the Cause os Pain; but the succeeding Blood,-  
by dilating the obstructedVestel, excites the Pam.

ς *As for a* Plethora; it is shewn, under the Article PL **ET HORA,.**that a Redundance of laudable Blood not only distends the Ves-  
seis, but may, also, produce a Rupture in them: Hence all the  
Degrees os Pain which can arise from a preternatural Tension,  
or a Rupture of the Vessels, are excited by this Cause alone.  
This is sussicientiy evinc'd by violent Head-achs arising from Re-  
pletion alone, and winch are happily cur’d by Venesection.  
Women, also, before their excessive Plenitude is remov'd by the  
menstrual Discharge, from this Cause perceive Pains in Various  
Parts of their Bodies; which, however, are happily remov'd,  
when the redundant Blond is evacuated thro' the dilated Vessels  
of the Uterus.

*. As for a redundant Cacochymy*; every Degeneracy of the Hu-  
mours from the Conditions requisite for HealthjiS comprehended  
under inis Name : Now too great a Distention of the Vessels  
may be produc'd by a Congestion *of* other Humours, aS well as  
by a Redundance of laudable Blood: Hence, also. Pain will be  
excited, in consequence os the Distraction of those nervous Pi-  
bres which constitute the Membranes of the Veffch. Here we  
do not treat of that Acrimony which degenerating Fluids maV  
acquire, and by which they rnay exoite Pain, bvscorroding he  
irritating the Parts. When a stagnant aqueous *'Colluvies,* con.

gested in the *Mendrrana Adipose, in an Anasarca* of the Legs,  
the Pain arises from this Cause alone.

*Ac for an Increase of the Circulation* ; it is shewn, under the  
Article SANGUIS, that an Increase of the Circulation alone, by  
an Augmentation os the Heat, produces a greater Rarefaction  
of the Fluids r Hence follows a greater Distention of the Ves..  
seis; and the thicker Parts of the Fluids, entering the dilated  
Veffeis, produce Obstructions, Distractions, and Inflammations.  
But all these cannot happen without a Distraction, and Dilace-  
ration of the nervous Fibres dispers'd thro' the Membranes of  
the Veffeis: Hence it is sufficiently obvious, that Pain is ex-  
cited by that means. In Fevers, by an' increas’d Motion of the  
Blood alone, a Pain os the Head and Limbs may be produc'd,  
which again ceases when the Fever is.diminish’d, or remov'd.

Every thing which forcibly distracts the Parts of the Body,  
diminishes their Cohesion, and may, consequently, induce a So-  
lution of Continuity, if this Distraction is continu'd, or aug-  
mented : But, according to the Definition of Pain, fuch a Con-  
dition of a Nerve as threatens the Solution of its Continuity,  
excites the Idea os Pain in the Mind: A Distraction, therefore,  
os the Parts furnish’d with nervous Fibres, by whatever Couse,  
will produce Pain. Hence when Bones, luxated from tho Ca-  
vities which naturally contain'd them, distract the Ligaments  
, securing the Articulation, an intense Pain is produc’d, which,  
upon the Reduction of the Bone, immediately ceases, unless  
the Ligaments distracted by the Luxation, or the adjacent com-  
press'd Parts, are already inflam’d: A sufficient Proof, that the  
Pain, happening aster a Luxation, arises only from this Distra-  
ction of the Ligaments. Hence *Hippocrates*, in *T.r. de Arti-  
culis, Text.2g.* telis us, that they who have the *Humerus* luxa-  
**ted** and reduc'd without Pain, or any inflammation os the ad-  
jacent Parts, and for that Reason are negligent, ought to take  
great care that the reduc'd Bono do not again flip nut. Forwhich Reason he orders Physicians to warn them of this ; be-  
cause, in such Coses, the Luxation returns far more easily than  
if the Parts were inflam'd.

- Hence it is obvious, that the Effect will be the same if a Tu-  
mor, form'd by whatever Cause, distracts the Parts :. For in an  
inflammatory Gout, and some other Disorders, fuch as a *Spina  
Vcntosu,.* or an *Exostosis,* a Distraction of the Nerves dispers’d  
thro’ the Ligaments of the Joints produces exquisite Pain.  
How great Pain may be excited by external distracting Force, is  
obvious, from the Method of racking Malefactors; in which,  
by the Application of Weights, or the Use of PulleyS, the Parts  
of the Body are distended.

Every Wound, as is obvious, from its Definition, is the So-  
lution of Continuity in a soft Part ; but when the wounding  
Instrument divides Parts before united, that Condition os a  
Nerve is produc'd by which its Diflolution is threaten’d : Pain  
Is therefore excited ; but it is only momentary, if the Parts are  
divided by a quick Action of the Instrument ; yet there is Pain  
at the Moment the Wound is inflicted: But the Pain which  
arises some time aster the Wound is inflicted, depends on the  
Distraction of the Parts, in consequence of the Recession os the  
Lips os the Wound from each other. Hence this Pain succeeds  
the Wound inflicted, but does not arise from the Wound aS its  
immediate Cause, but from the Change induc'd on theWound  
from the Contractility of the Parts: For a .Nerve, next to Rup-  
ture, produces the Idea of Pain in the Mind ; but when the  
Nerve is totally divided, the Pain ceases. Hence, when a  
Wound is making. Pain is produc'd; but when it is made, it  
ceases.

. All Corrosives, apply'd to the Body, and render'd active by  
.the Heat thereof (fince, except Fire alone, they hardly act upon  
a Carcase) divide and destroy the Parts, by ndmherless minute  
Wounds. Hence, as is evident, a pretty intense and long-  
continu'd Pain is produc'd.

Hence the Various Causes of Pain in aWound are known.

- If the things hitherto taken notice of are apply'd to a  
Wound, it appears, that a great Numher and Variety of Causes,  
exciting Pain in a Wound, may happen: For the wounding In-  
strument, at the time theWound is inflicting, is theCauseof Pain.  
The Parts of the wounding Instrument, left in theWound, may  
produce Pain: The Lips of theWound, recedingfrom each other,  
half-divided Nerves, and large.Nerves divined, retracted, and dis-  
tracting the small Ramifications above theWound, may excite  
the most intense Pain. When the Lips os the Wound are after-  
wards inflam'd, render'd tumid, and retorted, and, at the same  
time, the Celerity os the Circulation is increas’dby a flightFever,  
new Causes os Pain are present. When the Humours, dis-  
charg'd into the Cavity os the Wound, acquire an acrid Qua-  
lity, they excite Pain, by corroding and Irritating the Parts:  
.The same Effect will, also, he produc'd, by the Application os  
acrid Substances, os whatever, kind. When, by a Suppuration,  
**the** obstructed Extremities' os the Vessels are gradually sepa-

rated from the live Parts, Pain is, in like manner, produc’d,  
but ceases when the Pus is form'd: All these Things are to he  
carefully distinguish'd, that, knowing the Causes of stain in a  
Wound, we may apply proper Remedies.

«Hence, also, wk understand the Effects of a Wound ;  
which are. Inquietude, Jactation, Watching, Fever, Heat,  
Thirst, Dryness, Convulsions,, and Gangrene.

When Pain is present in the Body, its Effects succeed, which  
are principally observ'd to he these following i

*Inquietude and Jactation:* When we perceive Ideas, there  
.arises in the Mind a certain Change, which is .either grateful,  
or disagreeable, or, sometimes, rather totally Void both of Plea-  
sure and Pain: Thus, when a .Person thinks that a Circle is di-  
Vided into two equal Parts by its Diameter, the Idea affords  
neither Pleasure nor Palo ; but if the Hand, when Cold, is put  
near a moderate Fire, all say that this is pleasant; and if live  
, Fire is appsy'd to the Hand, all will affirm, that this is displeasing.  
In what manner this happens, perhaps, cannot he explain'd, tho\*  
every one finds such ThingS in himself. But the Sense os Plea-  
sure and Pain, which accompanies the perceiv'd Idea, produces  
some Effects in us which the strongest efforts os Reason cannot  
Overcome, whatever arrogant Philosophers have asserted to the  
contrary.- For the Will endeavours by all means to retain the  
grateful Sensation present to the Mind, and to destroy the un-  
grateful one ; and then succeed mechanical Motions not deter-  
. min'd by the previou fly-con scions Mind, but truly necessary and  
physical, by which we endeavour to remove or avoid that which  
excited the ungrateful Perception in the Mind. Thisjsa.cer-  
tain Ingredient in the human Nature, of which it cannot direst  
itself Is a Philosopher, involv'd in profound Meditations, re-  
ceives a Prick of a Pin in his Finger, he will immediately draw  
back his Hand, tho' there is notin his Mind any Consciousness  
os that Motion excited : Hence the Sense of Pain, like a faith-  
ful Guardian, advises us, as it were, to remove that which  
would destroy the Body. Thus we see that Men in Pain, by a  
Various Position of the Parts of their Bodies, and often by a  
continual Agitation, endeavour to find such a Situation as may  
remove, or at least diminish the Sense of Pain. Hence arises  
the Inquietude and Jactation in. excessive Pains: But when, by  
the least Motion, the Pain is increased, the Patients remain im-  
moveable, as is obvious, in the most racking Gouts, and Rheu-  
matisms. I *A .. / ' . - . ..*

*As for Watchengs\* when an .healthy Person has all his Senses  
lock'd up by a natural Sleep, he is rouz'd and awak'd by all  
those Things, which strongly affect the Organs of Sensation: .  
Much more, therefore, will Sleep, when not present; he pre-  
Vented by Pain, which so efficacioufly affects the Brain. For  
this Reason, the antient Physicians, in lethargic Disorders, pull'd  
the Hairs from, the Nostrils, lash'd the Limbs with Nettles, and  
- apply'd acrid Substances to the Parts os the Body; that, being  
rouz'd by the Sense of Pain, the excessive Drowsiness might be  
remov’d, - . .

*.. - A. for a Fever*this almost always succeeds excessive Pains,  
even in those Diseases which naturally have no Tendency to a  
Fever; such as a Gout, and *Lues Penerea t.* For when such an  
intense Pain racks the Patient, some Degree-os a Fever is gene-  
rally present. ν

Hence *Hippocrates,* in many.Passages, acknowledges Pain to.  
be among the Causes of Fevers: For in *Preenot. Coac.* No 75.  
he tells us, " That from violent Pains arise long-continu’d Fe-  
" Vers.'' And in Ne 3I. *ibid,* and in *Lib.* I. *Prorrhet.* he in-  
forms us, " That, malignant Fevers arise from Pains of the Hy-  
*" pochondeia”* When the Articulation os *the.Humerus* flips  
: towards the posterior Parts, he tells us, that it is intensely pain-  
-ful, and excites the most Violent Fevers. And.in his *Tr. de  
Fractwris* he informs us, " That unless any luxated Articula-  
:." tion is speedily reduc'd, aFever .will, in the healthiest Person,  
" he produc'd by the Pain." . -. -

Since, therefore, a Fever almost always succeeds an intense  
Pain, we may easily understand how Heat is the effect of an  
- increased Circulation by the Fever ; and Dryness, the Effectos  
- a Dissipation of the Fluids by a brisker Circulation, may arise  
. from Pain: But when Dryness and preternatural Heat are pre-  
sent in the Body,- Thirst always forces the Patient to alleviate  
these Symptoms by copious Drinking..

*As for Convulsions y these* principally happen in .those, the  
-Whole of whose nervous Systems is highly delicate, and fus.  
. Ceptible of the smallest Impressions : Hence Infants are so often  
.subject to Convulsions, on account *os* Gripes in the intestines,  
arising from an Acid. - . .

*Ac for a Gangrene*; this is. fuch an Affection of a soft Part,  
aS, in consequence of an Abolition of the Vital influx and Es-  
: flux of the Humours, tends to a Mortification. Hence, with  
respect to a Nerve in great Pain,. a Gangrene is such a State of  
that Nerve, by which it tends to a Mortification, fince it will

soon he totally ruptured in consequence of its violent Distrac-  
tion. When a violent Pleurisy, accompanied with intente  
Pain, is not suddenly relieved, or when Respiration is by the  
Violence of the Pain so hindered, that the Patent is in Danger  
of heing suffocated, livid Spots appearing on the Part assectsd,  
denote a mortal Gangrene. In an inflammatory Iliac Passion,  
after the most intense Pains, a Gangrene in a few Hours arises,  
upon which the Pain ceases, but Death foon succeeds, in a  
malignant Paronychia, within a few Hours, the Part is often  
sffefted with so intolerable Pain, that the corrupted foft Parts  
are dissolved into a gangrenous Gore, and the Bone of the  
affeited Finger falls off mortified. But a Gangrene principally  
succceds Pain, when an inflammation and violent Fever are  
present at the same time, sor then, by the increased Impetus  
of the Circulation, the Parts are quickly destroy’d.

In this Case the Difference of Anodynes is to be estimated  
and determined by the Diversity of the Causes producing Pain.

There is only one proximate Cause of Pain, and that is such  
a Disposition of a nervous Fibre arising from the Brain as  
threatens its Dissolution. Every thing, therefore, which re-  
moves such a Disposition of the nervous Fibre, will be a Re-  
medy for the Pain ; But because fuch a Condition of the Nerve  
may depend on a great many different Causes, hence a pro-  
portionable Variety of Anodynes is requisite, since distinct Re-  
.medies must he applied for removing each particular Cause,  
Hence it is necessary, that the particular Cause of the Pain  
should be known hesore we can determine what will weaken or  
remove this Caufe. We have already enumerated the Causes of  
Pain, and reduced them to distinct Classes; and the following  
Aphorism proposes the Remedies fluted to these Causes.

The Cause of Pain is, therefore, taken away,  
I. By relaxing the distended Fibre.

2. By resolving whatever is concreted.

3. By diminishing the Motion of the Fluids, and lessening  
the distending Matter.

4. By removing the unequal and violent Traction.

5. By correcting the present Acrimony. ,

6. By difcuffing it; and,

- 7. By removing that which dissolves the Fibres.

I. Such a Distraction alone as is ready to produce a Rupture,  
excites Pain: Now if we can by anyArt manage things in such  
a manner as that the Fibre may be distracied without Danger  
of a Rupture, the Pain ceases, tho’ the Cause distracting the  
nervous Fibre continues to acts If we attempt to break a Piece  
of dry and rigid Wood it breaks., but if it is macerated in  
Water, it may be bent. Thus a green fallow Twig may be  
twisted without breaking; but when dry, an Attempt to bend  
it, breaksit. Hence in Disorders, accompanied with the most in-  
tense Pain, such Remedies have in all Ages been ufed as relax’d  
the solid Parts of the Body. In the Iliac Passion, *Hippocrates*. ordered the Body to be fomented arid anointed with Oil. In a  
Pleurisy he commanded the affected Side to be covered with the  
most soft and tepid Substances, injoining at the fame time, the  
internalUse of things of a like Nature. *Galen,* as is already ob-  
served, on hirnfelf allay’d the most intenfePain, and prevented the  
Convulsions to be dreaded from it, by continually applying warm  
Oil to tbe Part affectsd. Whilst a Phlegmon, by an inflam-  
matory Tumor of tbe fubjaccnt Membrana Adiposa, distends  
the Skin, and by a Distraction ofthe cutaneous Fibres produces  
Pain, tho’ fuch a Tumor being entirely irresolvable, lands to a  
Suppuration, and consequently the distending Caufe not Only  
remains, but is rather increased, yet if Cataplafms of the most  
emollient Substances are continually applied, the Pain will be  
mitigated, since the nervous Fibres are so relaxed, that they  
may be distracted, without Danger of a Rupture. A large  
Quantity of any soft expressed Oil taken internally, greatly  
.’ alleviates iliac, colical, and nephritic Pains. The Steam of  
tepid Water affords great Relief to Parts affected with  
the greatest Pain. When by the Punolure of a Nerve im-  
mense Pains are produced, skilful Surgeons continually fo-  
ment the Parts affeSed, with the most emollient Substances.  
Hence they affirm, that emollient and relaxing Medicines are  
an universal Remedy against Pains, because they remove the  
proximate Caufe of Pain which is the Danger of Rupture in  
the nervous Fibre; whilst other Remedies ait only on the re-  
mote Causes of the Pain. And the’ we should be ignorant of  
the particular Cause so disposing the nervous Fibres as to pro-  
duce a Sense of Pain, yet those Medicines may always he used  
with Safety and Advantage; for they have this good Property,  
that they are sufficient for removing many of the remote Causes  
of Pain, without augmenting thofe which they cannot remove ;  
for the Vessels bring relaxed, the distending stagnant Fluid

passes more easily through them, and at the same time, ell  
Acrimony is corrected by such Medicines. But every thing  
which augments the Strength and Contractility of the Parts of  
the Bedy, whilst the Cause distending the Fibres remains **the**same, will increase the Pain. Thus a Pleurisy is observed to  
be far more violent in robust Persons accustomed to Exercise,  
than in Patients of weak and lax Constitutions, in whom, also,  
luxated Bones are far more easily reduced than in Persons *of  
firm* Habits; for in some, the Elongation of the Ligaments is  
fo easy, that the Reduction may be made without Pam.  
When Executioners, in racking Malesactiws, forcibly distrait  
all the Parts of the Body, they greatly increase the Pain **hy**sprinkling cold Water upon them. When, therefore, the  
Efficacy of emollient and relaxing Substances can reach **the**Part affectsd, it will never fall to produce an Effeci: If, for  
Instance, the nervous Fibril in the middle Substance of a  
Tooth is pain’d by too great a Tension, that Pain must neces-  
sarily be allay’d by relaxing Medicines. The fame holds true,  
when from a Disorder of the Marrow of a Bone intolerable  
Pains arise; as, also, when in a malignant Paronychia, the  
Cause of the Disorder is lodged under the cartilaginous Part  
which covers theTendons of the Flexor Muscles of the Fingas.  
It may, also, sometimes happen, that tho’ the Pain is very in-  
tense, yet other Symptoms prohibit the Use of retaking and  
emollient Medicines. Thus, for Instance, if from a latent **or**exulcerated Cancer, an intense Pain should arise, Emollients  
would prove hurtful, because they would greatly increase the  
Putrefaction, and fungous Excrefcence of the Cancer. But  
almost in all other Cases, relaxing Medicines are universally  
ufed for alleviating Pains.

2. When a Stone impaired in the Ureters produces Pain, the  
Persons who could dissolve that calculous Concretion would re-  
move the Pain. All those things which are capable of resolv-  
ing Blood concreted by an inflammatory Density, will alleviate  
pleuritic Pains. The same bolds true in all other Casts, where  
an obstructing Matter stuffing the Vessels, ,or Tumors arising  
from a Concretion of congested Matter, press or distend the  
adjacent Parts. Under the Article OBSTRUCTIO, areconsi-  
dered the various Manners in which the Molecules of the bu-  
man Fluids before separate, may become concreted; and under  
that Article are, also, specified the Remedies capable of dividing  
these Concretions. Hence the Nature of the Concretions  
ought .to he investigated from what has been said, before we  
can find a Remedy, which, by resolving that Concretion, will  
remove the Pain arising from it.

3. All Pain supposes a remainingPrinciple ofLife; and ifit arises  
from a stagnant Humour distending the obstructed Vessels, it  
will be the more intense the more brisk the Circulation of the  
Blond is. Hence in a Pleurisy when a violent Fever is present,  
an intense Pain is produced, because the Humours are irnpe-  
tuoufly forced on the obstructed Part, and by dilating the Ves-  
sels, forcibly distrait the nervous Fibres constituting the Tex-  
tore of these Vessels. Every thing, therefore, which dimi-  
nishes the Impetus and Velocity of the Circulation of the Hu-  
mouts, will alleviate the Pain, as is certain from daily Experi- '  
ence; for Venesection till the Patient falls into a Deliquium,  
forthwith either removes, or at least greatly abates, she most  
acute pleuritic Pains. Hence the antient Physicians in the most  
violent Pains, recommended Venesection till a Deliquium was  
brought on. And *Galen,* in *Comment.* I, in *Aphor.* telis ns,  
that he removed a long and fixed Pain in that Part of himself  
where the Liver is joined to the Diaphragm, by opening the  
Artery between theTbumb and sore Finger of bis Right Hand,  
and permitting the Blood to flow till it stopt spontaneously.  
For the same Reason, theAntients, as we find from *Cap.* 23.  
- of the last quoted Work, recommended great Rest in the most  
acute Diseases, which are generally accompanied with an in-  
tense Pain of the Head. Nor in such Cafes is Venesection only  
useful, becaufe by weakening Life it diminishes the Motion of  
the Blond, but, also, because by means thereof the Quantity of  
the distending Humours is lessened. In plethoric Patients in-  
tense Head-achs are frequently present, tho\* the excessive Mo-  
tion of the Blond is cheeked, and almost suffocated by the Re-  
inundance of the Humours to be moved. But as foon as he a  
spontaneous Haemorrhage from the Nose, or a liberal Venesec-  
tion, the Redundance of the Blood is diminished, the Pain  
forthwith ceases, because the Matter which distends the too  
full Veins is removed.

But a Diminution of the Motion of the Blond is not only be-  
neficial in those Cases, wherean excessive Velocity of the Circula-  
tion, or too great a Distension of the Veffeis produce Pain, or  
augment it when produc’d byanv other Cause; butitis, also, highly  
beneficial in alleviating thofe Pains which arise from an acrimo-  
nious Quality of the Humours; for acrid Substances rendered  
active by the Circulation *of* the Blond and Heat of the Body,  
may produce bad Effects: But in a Carcase where there is no

Motion, except only the common Heat of the Atmosphere, they  
produce scarcely any effect. Thus *Hilmont* and *Petit* inform  
us, that Cantharides applied to a Carcase, produce no Effect.  
And in *Mem. de ll Acad. Royale des Sciences sc An. typsu.* we are  
told, that a potential Caustic applied to the Skin os a Carcase  
produced little or no Effect in fifteen Hours ; but when the Part  
to which it was applied was cherished by warm Linen Cloths,  
it destroy’d the Skin, and a Part of the subjacent Fat. It is  
observable, that those Diseases in winch the Pain arises from an  
Acrimony of the degenerating Humours, are always rendered  
worse by an increase of the Circulation, or an Augmentation  
of the Heat, which succeeds that of the Circulation. The  
nocturnal Pains, which so severely afflict those labouring under  
a *Lues Vencrea,* are by the Heat of the Bed so increased, that  
the miserable Patients are forced every Night to get out of Bed  
in order to cool their Bodies, and by that means alleviate their  
Pain. When an acute Fever seizes a Person labouring under a  
malignant Scurvy, the Pains are greatiy increased, and some-  
times the Vessels being suddenly burst by the augmented Impe-  
tus of the acrid Humours, the Blood is discharged every-where.  
Thus, in *Mem. de ΓAcad. Royale des Sciences st An.* I 699. we  
have an Instance of a malignant Scurvy greatiy increased by the  
Heat of the Air. The same is evinced by many other Obser-  
vations.

In what Manner, and by whet Means the Motion of the  
Fluids tino' the Vessels may be diminished, is shewn under the  
- Article **SANGUIS ;** but the distending Matter can only he re-  
moved by Evacuants.

4. When by a Luxation the Bone flips out of the Cavity ofits  
Articulation, it distracts the Ligaments, and presses upon the  
adjacent Parts. Hence arises Pain, which soon ceases, or at  
least is greatly diminished, as soon as the Bone is replaced ; for  
some Degree of Pain osrcin remains aster the Reduction, in  
consequence of the Ligaments ; sor which Reason they are fre-  
quently inflamed. The same holds true, when the tendinous  
Parts half-torn, and continually elongated by an unequal Trac-  
tion excite an intense Pain ; for is, in that Case, by a proper  
Situation of the Part affected, and a due Application os Com-  
press and Bandage, this unequal Traction is hindered, the Pain  
ceases. This is evinced by a memorable Cose related in *Mem.  
de st Acad. Royale des Sciences st An.* I728.1 But is the distract-  
ing Force cannot be removed, when, sor instance, the luxated  
Bone cannot be reduced on account of the Tumor, and Violent  
Inflammation, then emollient and relaxing Substances are alone  
proper, since by their means the Fibres may be elongated with-  
out Danger of a Rupture.

5. When without a too great Motion of the Humours, any  
Signs of an excessive, Distension of the Parts by a Concretion  
or Accumulation of the Fluids, or without any external di-  
stracting Force, a Pain arises, then we begin to think of the  
Acrimony of the Humours, which is often said to produce that  
.Pain which arises from other Causes. For a great Degree of  
Acrimony is Very rarely found in the Blood, since the tender  
Vessels os the Brain would soon he destroy'd if the acrid Hu-  
mours passed through them. Hence acrid Humours are scarcely  
ever found, except in the *Primae Vice,* or when stagnant or ex-  
travasated Humours lodged in any Part of the Body become  
acrid, either from their own Nature, or a particular Caco-  
chyiny, as in a *Lues Venerea,* and Scurvy. Hence such an  
Acrimony of the Humours in particular Parts' is’ always bad.  
If it is, therefore, certain, that Acrimony is the Cause of the  
Pain, it is sufficiently obvious, that the Pain is removed or  
mitigated by correcting that Acrimony. But this is done either  
by a specific Medicine opposite to the known Acrimony ;  
when, for Instance, an acrimonious Acid is enervated, and  
rendered mild by terrestrial Absorbents, or by alcaline Salts ;  
or the same End is obtained by the general Remedies against  
Acrimony of all Kinds, such aS diluent, obtunding, and in-  
viscating Substances, by which all Acrimony is subdued and  
Corrected.

6. When in a malignant *Lues Venerea* the Bones are affected,  
intolerable Pains arise from a flow Corrosion and Tumor of  
the affected Bones distending the highly sensible Periostium:  
But when in such Cases the Body is silled with a large Quantity  
os the Decoction of Guaiacum, and a Sweat excited by kindled  
Spirit of Wine, that Decoction is convey'd thro' all the Ves-  
sels, the latent Poison is deterged and carried out of the Body,  
and the Pain either greatiy alleviated, or totally removed. The  
same will happen when there is a considerable Cacochymy of  
the acrid scorbutic Kind ; for Instance, in the Body of a  
.wounded Person: For in that Case, the Humours convey'd to  
the Wound, soon acquiring a greater Degree of Acrimony, may  
excite Pain. This acrid and irritating Matter is washed away  
and corrected by highly soft andgentiy diaphoretic Medicines,  
such as all the Vulnerary Decoctions exhibited in large Quan-  
tities.

7. So long as the Remains of the wounding Instrument,.

the Fragments of the wounded Bone, or any other Sub..  
stances, which can by their acute Figure and Rigidity injure  
the Parts, remain in the Wound so long, the Finn will con-  
tinue, especially because the Parts perpetually irritated hecome  
inflamed and tumid. Hence the Parts pressed to this foreign  
Body left in the Wound are more lacerated, till it is extracted  
by chirurgical Instruments, or expelled by a due Suppuration.  
But in whet Manner, and with what Cautions such Bedies  
should he removed from Wounds, has been already specified.

The Sense of Pain is taken away whilst the Cause re-  
mains;

First, by rendering the Nerves insensible by means of  
. Compression, Cutting, or Burning. And,

Secondly, By obtunding'the common Sensory by the Force  
of Narcotics; and by these some, of the effects arifing from  
the Sense os Pain are taken away.

The most perfect Cure of Pain is the Removal of its Cause.  
But sometimes the Causes even of the greatest Pains are latens,  
and when they are known they cannot often he removed. But  
the ungrateful Sense of Pain requires an Alleviation, fince by  
its Effects such as RestlefnesS, Watchings, and Fevers, the  
Body will be so changed that terrible Misfortunes may succeed.  
In this Case, the only remaining Method to be taken is to re-  
move the Sense of Pain, tho' its Cause remains. But the Sense  
of Pain is produced when there is a free Commerce hetween  
the Brain and the affected Nerve, and when the Functions of  
the Brain remain entire : All things, therefore, which destroy  
the Sense without removing the Cause of Pain, act either on  
the affected Nerve, or on the Brain itself.

I. It is certain from Experience, that when a Nerve which  
alone runs to any Part of the Body is destroyed, all Sense of  
Pain in that Part is abolished, as has already been observed ;  
for the Change produced in the Extremity of the Nerve, so  
affecting the common Sensory, that an Idea of Pain arises in  
the Mind, is by the Soundness of the affected Nerve convey'd  
to the Brain. Every thing, therefore, which destroys the  
Soundness of the Nerve between the Brain and that Part of  
the Body to which the Cause exciting Pain is applied, will re-  
move all Sense os Pain, tho' the Cause of that Pain not only  
remains, but, also, continues to act with the greatest Violence.  
They who in consequence os a Luxation of the Spine os the  
Back, have the spinal Marrow compress'd, feel no Pain from  
the Application of live Fire to their Legs. Nor is it of any  
Importance, whether by a violent Compression the Commerce  
is hindered hetween the Brain and the compressed Part of the  
.Nerve, or whether by Cutting or Burning, the Continuity  
of the Nerve is destroy'd. When in the Amputation osLimbs  
the Vessels are by a tight Ligature compressed, in order to stop  
the Haemorrhage, there arises at the same time such a Stupor  
and Insensibility os the Parts from a Compression os the Nerves,  
as greatly diminishes the Pain of the Operation. A certain  
Empiric of *Amsterdam* cured the Tooth-ach by twisting the  
Patient's Hairs about his Fingers, and then by a strong Pressure  
of his Thumb helow the Lobe of the Ear, contufing the NerVe  
lodged there, which distributes Ramifications to the supe-  
rior Jaw. The same Effect was produced by compressing the  
NerVe which on both Sides enters the inferior Jaw, under the  
first *Dens Molaris.* The most Violent Tooth-ach is allayed by  
all those things which destroy the pain'd NerVe in the Tooth.  
Hence, if by a Corrosion of the Tooth, free Access may he  
had to the NerVe, they burn it with an Iron Probe red-hot,  
which affords present Relies, provided the Heat of the ignited  
Iron reaches the pain'd Nerve. This Method was commended  
by *Hippocrates,* who in *Tract, de Assectirtibus,* tells ns,  
♦\*. That in a Tooth-ach, if the Tooth is corroded and loose,  
" it is to he drawn ; but if it is neither corroded nor loose, it  
" is to be burned.'' Others with a similar Effect, put highly acrid  
distilled Oils, such as those of Cloves, and Origanum, into the  
hollow Tooth, which by their hot Quality immediately destroy  
the NerVe they touch. In many other Pains which obstinately  
resisted the Efficacy of other Medicines, *Hippocrates* used live  
Fine, or Scarifications, by both winch means he removed  
the Sense of Pain, by destroying the Nerves. Thus, in  
*Tract, de Affectionibus,* after recommending many Remedies  
against Hean-achs, he adds, " But if the Disorder of the  
" Head is so violent and long-continued, that it cannot be re-  
" moved by purging the Head, the Patient's Head must either  
" be scarified, or the Veins in its Circumference must he  
" burned, fince there is ΠΟ Hope of Relief from any other Re-  
" medy. " And in his *Tr. de Loess in Homine,* he tells  
us, "That in Head-achs we are to use Venesection; but  
if the Pain does not cease, shut continues for a considerable  
" time, we are to burn the Veins in the Head, by which

" means the Patient will recover. '\* In several other Passages  
he gives the same Directions with respect to the Cure of an  
Head-ach. In *T.r. de Affectionibus,* in a Violent ischiadic  
Pain, he orders " the Part affected, where-ever it is, to  
" he softened by Baths, Fomentations and Liniments, the  
" Body to he rendered soluble, and a Purge to be exhibited  
" after the Pain is alleviated; aster which the Patient is to  
" drink Asses Milk. But if the Pain seizes one Part, fixes in  
" it, and cannot be removed by Medicines, it is to he burned  
" whatever Part it is. ” In *Tr. de Internis Affectionibus,*when treating of the fame Disorder, he telis us, that if  
aster the Use of various Remedies, the Pain is not alleviated,  
the Part where-ever it is, is to have many deep Crusts burned  
upon it, in the bony Parts by Fungi, but in the fleshy Parts  
by ignited Iron. The same Directions are, also, given in *Aph.*59. and 6o. of *Sect.* 6. and in other Passages of his Works.

Hence, *\uAsia,* the *Moxa* is greatlyused for removing arthritic  
Pains, and even the Gout; whilst the Inhabitants take the old  
Leaves of a sort ofMugwort triturated, and freed from all their  
hard and fibrous Parts; and having thus reduced them to a soft  
kind os’Down, they make them up into pyramidal Bedies, the  
Base of which they apply to the Part affected. Then kind-  
ling the Apex or Top of the Pyramid, the Fire gradually de-  
scends and burns the Part ; this is so mild a Cure, that *Kemp-  
ferus,* in *Amcenitat. Exotic:* tells us, he has an hundred times  
. seen Children submit to it without shrieking, or testifying the  
least Sign os Pain. Hence, in *Asia,* rhe Use of the *Moxa* is  
fo frequent, that every six Months, for the sake of Health,  
many submit to have some Parts of their Bodies burned by it;  
and even those who are confined to perpetual Imprisonment,  
are permitted to come abroad, in order to enjoy that AdVan-  
tage. - .

But because in consequence of the Destruction of the Nerve,  
all the Functions depending on its Soundness, are abolished, so  
this-Method *os* alleviating Pain is not used, except when the  
Pain is Very intense, and the Medicines specified above have  
heen used in Vain, or when the Condition of the Part affected  
. is such, that these Remedies cannot be so applied, as by thein  
Efficacy to remove or correct the Cause of the Pain.

- I. When the Cause os the Pain cannot he removed, or when  
it is of no Importance, or absolutely impossible to destroy the  
pained Nerve, without injuring the Soundness of which it can-  
not without great Loss or Danger be remov'd, then the only  
Method remaining is so to change the common Sensory, as to  
render it insensible os Pain ; for that the Cause of the highest  
Pain may be in the Body, without any Sense of Pain, even  
tho' the Soundness of the Nerves remains, is obvious from apo-  
plectic Patients, and Persons excessively drunk, who are entirely  
deprived of all Sensation. Now there are in Nature Medicines,  
which, for a certain time, remove the Sense of Pain in the  
Mind, tho' they by no means take away or correct the Causes  
of that Pain. These, from the Stupor they induce, are call'd  
*Narcotics,* which we have already treated or. The principal of  
.these is Opium, which by a surprising Quality removes the  
Sense of Pain, whilst it remains in the Stomach; for a Grain  
ar two of Opium, when swallowed, by its resinous Tenacity,  
which renders it difficult to be dissolved, remains long in the  
Stomach, and generally for eight Hours at least, allays the  
Sense of Pain; and which is surprising, a Pill of undiffolved  
Opium is srequentiy Vomited up next Morning. Hence it does  
-not seem to act, because being dissolved and mixed with the  
Humours, it is, by the Laws of the Circulation, convey'd to the  
Brain; but because it remains applied to the internal Surface  
of the Stomach, and induces such a Change on the Nerves  
dispersed there, as is able to obtnnd the sensitive or perceiving  
. Power of the Brain; *for* the great Influence of the Nerves  
dispersed through the Fabric os the Stomach, on the common  
Sensory, is sufficientiy evinced from many Diseases in which the  
- Functions of the Brain are greatly disturb'd, tho' the material  
Cause os all these Symptoms is only lodged in the Stomach.  
Corrupted Bile lodged in the Stomach, excites Violent Head-  
ache, Vertigos, and Deliriums; but when that sordid Matter  
is carried off by Vomits, all these Symptoms cease. This is  
confirmed by many Poisons, which even when they remain in  
the Stomach, induce surprising Changes on the Body ; but as  
soon as they are removed from it, all the Symptoms produced  
by it cease. This is consumed by *Wepser,* in *Cicut. Aquat:  
Histor, et Noxa,* where he gives us the History of two Boys,  
and six Giris, who oat the *Cicuta Aquatica.*

It Is, therefore, highly probable, that Opium lodged in the  
Stomach may, only by its touching the Nerves there, produce  
such a Change Jn rhe common Sensory, aS that tho’ the Cause  
os Pain, and the Soundness of the Nerves remain, yet the Idea  
os Pain is not excited in che Mind. And Heaven, whose De-  
signs are always pregnant with Compassion to the wretched  
otate os Mortals, seems to have granted us these Remedies, in  
order to allay for a time these intolerable Pains, whose Causes Can-

not he removed, or at least weaken'd, except in a long time.  
Hence *Sydenham,* heing convinced by many Experiments, conclu-  
ded, that without Opiates, Medicine would he very imperfect;  
and adds, that the most celebrated Preparations of Opium neither  
increased itsVirtues, nor corrected that Malignity, ofwhich many  
falfly supposed it to he postefled. Certainly the prudent Exhibi-  
tion of due Doses of Opium produces no bad Eflects, even tho’  
continued for some Months. Hence the learned *Joannes Term-  
tius Lyncaeus,* in his Notes on *Hernand. Rerum Mexican. Nova  
His.pan. Thesuur.* justly affirmed, that as all the inhabitants of  
the eastern and Southern Parts of the World every Day used  
Opium, Thorn-apples, and Bang, with Safety, it was to he  
lamented, that such a Number of Mortals should, through Ig-  
norance os this Remedy, be cut off by Violent and racking  
Pains, who might be preserved, is induced by the universal  
Consent os PhyTrcians, they used it more frequently. And  
though *Pros.pcr Alpinus,* in *Med. Lib.* 4. *Gap.* I: condemns  
Opium as poisonous, yet he is obliged to confess, that the  
*Egyptians,* who used it daily, perceived no Harm from it,  
though some os them gradually increasing the Dose, used three  
Drams of it each Day.. But is such as were long habituated  
to it suddenly gave over the Use os it, they were seized with  
Syncopes, and other Violent Symptoms, till they again used it,  
or drank large Quantities os the most generous *Aretan* Wine  
with Aromatics. ' ι -

It is not to be denied, that the imprudent Use os Opium ex-  
hibited in large Doses, has produced Deliriums, Convulsions,  
and mortal Apoplexies. But many Medicines winch are every  
Day safely exhibited in moderate Doses, prove injurious when  
used to Excess; A memorable Instance of this with respect to  
Opium, is found in *Hist, dell Acad, des Sciences sc Ann.* I 735.  
But though that surpriling Case proves, that a large Quan-  
tity of Opium exhibited to one not accustomed to it, may pro-  
duce numberless terrible Symptoms, and Death ; and even that  
by its poisonous Quality the Fluids of the human Body may  
be corrupted, yet it is certain from numberless Experiments,  
that it is a safe Medicine when prudently used ; for in Diseases  
it is a matter of great Importance to alleviate Pain; and nothing  
prevents the Removal of the known Cause of the Pain by other  
Remedies, whilst by Narcotics the Sense of Pain is obtunded.  
But it is carefully to be remembered, that though there is then .  
no Sense of Pain, yet the Cause of Pain continues to destroy  
the Body. For when in the most painful inflammatory Disor-  
ders, such as a Pleurisy for Instance, the Pain is soothed by  
Narcotics, a Violent Inflammation proceeding to -destroy the  
affected Veffeis, produces a Gangrene, and the Patient awaking  
out of his Sleep often dies suddenly .. Such fatal Events, are  
then ascribed to the Remedies, whereas they are onlv owing  
to this, that the Physician hearing no more of the Patientis  
Complaints, falfly imagines, that the Disease is become  
milder, though it continues with equal, and sometimes, per-  
haps, with greater Violence, after the Exhibition of such Me-  
dicines ; for when by a Suppression of all animal Motion a  
profound Sleep is induced, the vital Motions are augmented.  
But in inflammatory Disorders there is too great a Velocity of  
the Circulation. Hence in these the Use of Narcotics seems  
never to be safe, unless by Venesection, and other liberal Eva-  
cuations, the excessive Force os the Disease is preVioudy broken.  
*Sydenham,* in *Fehr. Contin. Ann.* 1661. carefully gives the same  
Caution, though from Experience he had learn’d the salutary  
Effects os Narcotics in many Diseases, and used them boldly.  
In what Manner, and with what Cautions, Narcotics are he  
exhibited, has been already specified. The Remedies adapted  
to this and the preceding Aphorism are before enumerated,  
when treating os the Means of procuring Sleep.

By these Remedies are removed all the Effects produced by  
the Sense of Pain, such as Restlesness, Jactation, and especially  
Watching: But the Other Effects depending on the Cause of  
Pain, so far as it endeavours to destroy the pain'd Nerves, con-  
tinue, tho' the Sense of Pain is soothed.

**CNVULSIoNS CONSIDER'D AS A SYMPTOM OF WOUNDS.**

A Convulsion is a Violent, unavoidable, and alternately re-  
peated Contraction of a Muscle.

Here we only treat of a Convulsion which arises from a  
Wound as its Cause; for a febrile Convulsion arises from quite  
different Causes, and consequentiy requires a different Cure.

Every Convulsion is an Affection of a Muscle; and when  
the Muscles act, their Tendons are stretched; and since this  
is done alternately, the Tendons are at one time stretched, and  
at another relaxed. Hence, when Physicians, in feeling the  
Pulse, perceive the Tendons, aS it were, to leap, in conse-  
quence of a Convulsion of the Muscles of the Arm, they gene-  
rally call that Symptom a *Subsultus* or *Leaping Os. the Tendons.*But as the Antients included the Tendons under the general

Name os *Nerves,* for the Ligaments and Tendons were by  
them call’d νίῦρα, as well aS the Nerves arising from the Brain  
and Spinal Marrow, as we find from *Galen, de Vsu Part. Lib.*15. *Cap.* I. Hence *Celsus* calls that Disorder, which is at  
present commonly call'd *Convulsions,* a *Distension of the Nerves.*

In every Convulsion there is a Contraction os the Muscle,  
which if it was Voluntary, would not constitute a Disorder.  
Hence it is added in theDefinition, that it is an involuntaryCon-  
tractionofa Muscle. Besides itiS requisite thisContractionshould  
be Violent, otherwise there would he no Difference hetween a  
Convulsion and. a Tremor, in which the Muscles are, without  
the Concurrence of the Will, alternately relaxed and con-  
tracted ; but these Contractions are only weak, whereas in a  
Convulsion they are Violent. It is, also, added in the Defini-  
tion, that this Contraction is alternately repeated, that is,  
ceases for a short time, and then begins again.

But it is to he observed, that if the Cause, whatever it is,  
which produces the involuntary Contraction of the Muscle,  
continues to act without an alternate intermission, then the  
Mufcle remains constantly contracted so long as the Action of  
that Cause continues. That this .Disorder is to he ranked  
among Convulsions, is sufficiently obvious, hecause the same  
occasional Causes at one time produce the alternate involuntary  
Contractions os the Muscles, and at another, their steady,  
though involuntary. Rigidity. This appears in epileptic Pa-,  
tients, in whom, during the Paroxysm, the alternate ConVUl-  
sions are at one tiiine present, and a little after they hecome  
rigid like Statues, almost all the Muscles of the Body, being  
Contracted, whilst soon aster they again fall into the alternate  
Convulsions. What the antient *Greek* Physicians call'd σπασμαι,  
is by the modern Physicians call'd Convulsions. A Tetanus  
. was by .them call'd, that Species of Disorder in which the  
Muscles, being involuntarily contracted, became rigid; which  
Distemper *Celsus,,* in *Lib. 2. Cap.* I. calls a *Rigor y* but gives  
the Name of *Distension os. the Nerves, to* what they call'd  
*Spafmus* ; for the.Naine os *Convulsion* in this Sense, is only  
sound among the modern Physicians; though in *Aretaus de  
Morb. Acut. Lib. 1. Caplsus.* when treating os a Tetanus, . and  
Its Differences, the Word ξυνολκύ. occurs, which is properly  
enough tranflated' Conwiasco in the Version."But.the Author  
seem to have used *Tetanus* and *Spastnus* prom iseuoufly-for. the  
same Disorder, as is. sufficiently obviouS.srom the same Chapter.  
And *Galen,* in *Comments in Sect.. An Aphor.No. spy* .. .tells ns,  
" That a Tetanus is a Convulsion, though theParts'seemnot  
" to he conytilsed, because they are equally. drawn forwards and  
"backwards." ῖ ς ᾶ e 4 ... ς - t Ἀοἐν- .. *t'C.*

' Hence we may eoridlude, that though at present the Word  
*Convulsion* is usedswhen an involuntary Violent and alternately re-  
peated Contraction of a Muscle is present, yet under, its:more  
general Signification, we may, also, include that involuntary  
and violent Contraction os a Muscle which remains .without  
alternate Remissions, flute these Words were formerly.promisa  
cuoufly used, and fince the Disorders often'arise from the same  
Causes, and seize the same Parts, that her the Muscles. »i That  
Species os Convulsion in which the .Muscles remain'd oontract-ι  
ed, they divided jfrtothe Tetanus, in which the Patient was  
strait, but so rigid, That he could nor he bended inany Di-  
section ; ime *Emprosthetonus,* in which the Body heingthend-  
ed forward, remain'd stiff and inflexible in thatPosition.; and:  
the *Opisthotonus,* m which the Body was inourvated backwards  
in the like manner, i' Besides, a*Trip[nils* may he,either uniVer-,  
fa!,\* when all the Muicles os thePody being thus affected the-  
coine rigid rn a Moinehti.or it may be partial, when, sorTnvr  
stance, ' by a spasinod.ic.Contraction oLthe Muscles *of the Jaw,*the Mouth is obstinately closed. . ρ.μχρ-χ . :: *so jet'i* her  
*-s.* The Cause os Convulsions is,-' whatever drives the nenrous  
--.Fluid. with alternate Force into the convulsed Muscles.-sq "  
- An human CreathYe'hasw surprising.Faculty by which itcan  
at Pleasure, by means'osethe Muscles subservient to the Will,.  
excitesa-Motion, sustain and directit, augment and diminish  
it, .suppress it aster it is excited, and again *renew,* it.after st.is  
firppreffed. ‘ And thesesso delicate Motions excited in the Body,  
and which by fo great a mechanical Forne change other-Bodies,  
feem to be hardly corporeal with respect to their Prin curls, and  
are all performed without any Knowledge os the Cause, or In?  
struments requisite to this Purpose ; for the most skilful Anato-  
Inist can perform thefe Motions no hetter than the most igno-  
rantand illiterate Child. But what is most furprifing is, that  
in exciting these Motions; no physical Change appears in the.  
Body, except in the thing changed; and when by the Influence  
of- the-Will such an arbitrary Motion is suppressed, no Mark,  
of so great a Change remains. And all these things -may he.  
done in an almost imperceptible Portion of Time; for whilst,  
one wills to elevate his Arm, it is elevated Inorder to this,,  
as is obvious fromPhysiology, it is only requisite, that there.-  
should he a free Commerce hetween the Brain and Muscles, by  
means of the Nerves convey'd from the medullary Substance os  
the Brain to the Muscles subservient to the Will. Since, there-  
sore, a Convulsion from its Definition is such an alternate Ex-  
citation of Motion, and a Suppression of it when excited ; and  
fince we can at Pleasure imitate such a Convulsion, as Beggars.

feigning epileptic Fits do, it is obvious, that a Convulsion nlay  
he exerted by every Cause, which without a Concurrence of the  
Will,, by means of the Nerves, induces such a Change on the  
Muscles, as a found Person could bring about by theAt? os Voli-  
tion: AndaSweare ignorant os the Manner in which, by thoWill,  
we excite Motion, but only observe the Effect, so we mav he  
equally ignorant of that last Change in the common Sensory, .  
by which a Convulsion is produced. All that Art car, do is, to  
observe those Changes of the Bodywhich are succeeded by fuch  
an involuntary Contraction os the Muscles, and then to remove  
or correct these known Changes, though we by no means’ un-  
derstand in whet manner these Changes os the Body affect the  
common Sensory; or that Part of the Brain where the Muta-  
bility, ofThought is produced by the Change of the Body,'-and  
the Mutability of the Body by the Change of Thought.

But because it is certain from medicinal Observations, that  
many things capable os exciting Convulsions may happen to  
the Body, arid as we only here treat of Convulsions as they sue-  
deed a Wound as their principal Cause, so we are to inquire  
what things there may be in a Wound itself, by'which Con-  
VulsionS have been observed to he excited:. And these are enu-  
merated in the following Aphorism.

' . And, therefore, the Cause of ConVulsions may be inhe-  
rent in theWound itself, whether it be foreign Matter irri-  
tating the Parts, or the Condition of the wounded Nerve, or  
a previous excessive Evacuation ofBloed.

*As for a foreign Matter irritating the Wound* ; if that ten-  
der pnlpous Production of the medullary Substance of the Brain,  
winch constitutes the Substance of a *Nerve,* properly so called,  
and which in .the larger Nerves is fortified thy so many Coats,  
that it may he safely convey'd to the destin'd Parts, is irritated  
by am acrid Substance, or by any other.Body, which by its  
mechanical Figure or Hardness, is capable of injuring or destroy-  
ing that soft Pulp, Convulsions may be produced by that means/  
Now there may be lodged in theWound, Nerves and Tendons  
divided, or so stript of their Coverings, that acrid Substances  
may he easily convey'd to the internal Part of that pulpous Sub-  
stancewhichis so easily irritated : Thus it is certain, that when #naked Nerves are only .touched by Fluids to - which they are  
not naturally accustomed. Violent Pains and'Convulsions are  
produced.. :tWhen by the Caries of a Tooth, the hard Crust  
covering the small Nerves dispersed through its Substance is  
corroded,-the Cold Air acting on these nakedssjerves, a Particle  
of Sugar, or. the softest. Butter touching them, throw the  
Patient into Convulsions, on account : of the. intense Pains  
Thenouchingof a Tendon divested os its Coats, tn a-Moment  
renders.:the Patient rigid, by producing an universal Tetanus,  
as .is already observed; whereas Tendons-covered with their mu-  
cous, or pinguedinous. Coats, may he protracted, elongated,  
or sewed together, without any great Pain.. Since, therefore,  
in . a Wound: these highly sensible Parts are osten rendered  
naked;.alPartos the wounding Instrument, Fragments os the  
Bones, Or.other things of a. like Nature lefrin the Wound,-  
may, :hy.t irrita ting the Parts,, produce the most violent Synt- .  
ptonss.’ The same will happen; from the Humours discharged  
into, the .CaVityof the Wound, and acquirinedan acrid Quality g  
as, also; .from.acrid.Substances applied to the Wound.

*' As for the Condition of the wounded Nerve* ; it is already  
shewn,-that Nerves and Tendons pricked, or half torn, pro-  
duce ConVulsions, and other Violent Symptoms, which is evinced  
by many practical Observationsi . ' - he *'e....*

*— As for 'a previous excessive Evacuation oseBlood*; when' so  
great a Quantity *os* Humours is discharged from the Body, that  
the remaining Part, thytthe Force os the Heart.convey'd thro'  
the Vessels,, is. not .able to fill them equably, the Pressure on  
the Arteries .of theBrainus wanting ; hence the Motion of the  
\* Spirits Ihroughche Nerves os the Brain ceases; - and hence arises'  
aPalsy of.all ishe Muscles, and from a similar State os the *Ceres  
bcllum RDeliquium, so*jthat all. the nervous and.arterial Fluids  
begin to. stop. In the mean rime the Parts being contracted  
by the greater Coin:succeeding n Diminution os the Circular  
tion, conVeythe Venous Blood to the Heart, which, being fill'd,  
contracts itself, and with thegreatest Velocity moves the Blood  
through the empty Arteries, fince nothing resists it when thus  
impal'd."“IdIbis Case,'therefore, the Blood is moved with a  
violent impetus through the Vessels of the Brain. Hence the  
Motion of the Spirits into the'Mirscles hecomes very quick, bur  
ceases immediately, though it will return again when the Hears,  
which is gradually fill'd, contracts itself, in one Moment, then,  
the strongest.Cause os Motion is apply’d to the Muscles, but next  
Moment ceases. Hence arises that alternate, violent, and invo-λ  
luntary Contraction of the Muscles, which wecall *Convulsions.*

This is evinced by what dairy happens in the killing of Ani-  
Inals ; for when by a Division os the Carotid Arteries in Calves,  
Sheep, and Hogs, the Blond flows out with a full Stream,;  
about the ..Death of the Animal the Flux of -Blood begins to  
cease, and only return at certain Intervals for-rhe Reasons now  
alleged;..and.then the Animal is always strongly convulsed till  
it dies.. When by Abortion, or after Labour, Women lose  
large Quantities os Blood from the open Vessels of the Uteres,  
they are often seized with Convulsions, and frequently die sod-

tieedys The same is; also, to he observed, when bjraa inc-  
tessive Punting, too great a Quantity of Humours is carried  
out os the Body. Hence *Hippocrates,* in *Aphor.* 3. *Sect.* 5.  
telis us; " That aster the Loss os much Blond, Convulsions, or  
"an Hiccup, are bad Signs." In *Aphor.* 39. *Sect.* 6. he telis us,  
" That Convulsions proceed both from Repletion and Inani-  
" tion." Thus, also, in *Aphor. 4. Sect.* 5. he affirms," That  
" Convulsions, and an Hiccup, succeed excessive Purging for  
Convulsions arifing aster excessive Evacuations denote, that  
there is fo great an Evacuation of Fluids from the Body, that  
the empty Vessels collapse, and the Blond propel'd from the  
Heart, cannot propagate the Motion it has receiv'd, through  
the full Vesseis, but rushes freely into the empty Vefleis.  
Hence the due and equable Pressure on the Vefleis of the Brain  
on which Lise and Health depend, is wanting. Hence it is  
obvious, how great Danger accompanies Convulsions arifing  
from excessive Inanition. .

Hence, also, the Effect of a Convulsion, which is a Per-  
- turbation os all the Functions,'is known.

. The Effects of Convulsions are not only surprifing, but al-  
most numherless ; for not only all the Solids and Fluids, but,  
also, the Actions depending upon them are disturbed; for  
when by this alternate and Violent Contraction the Muscles  
are at one time rigid, and at another time flaccid, the Motion  
Of the Blood through the Muscles is at one time hindered,  
whilst next Moment it freely passes through the flaccid Muscles  
with the greatest Impetus. The Veins adjacent to the con-  
vulsed Muscles are quickly emptied, in consequence of which,  
the Impetus of the Venous Blood towards the Heart is. accele-  
rated. Hence the equable Reception of the Blood .into **the**Heart, and its Expulsion from it, are greatiy disturhed. **Re-**spiration is, also, surprisingly disturbed, fince it becomes labo-  
rious, and cannot be performed without the greatest Uneasiness.  
Sometimes, also, a Violent Suffocation happens, as *Areteeas de  
Causis et Signis Morb. Acut. Lib. An'Cap.* 6. has observed,  
when describing the Effects of a *Tetanus.* Nor is a less Di-  
sturbance observed in the animal Actions; for those enormous  
Motions of the Muscles are not determined thy the .Will, but  
happen in an .involuntary manner, and often without the Know-  
ledge os the Patient. Often, also, all the external and inter-:  
pal Senses are totally abolished, or surprisingly disordered; inor  
is it to be wondered at, since the Convulsions testify, that **the**Brain, on which Life and Health depend, is affected.- In **the**natural Actions surprising Changes. are, asso; often observed,  
since when theJaw. bones are frequently soconstricted and closed,  
that they Cannot be separated by a Wedge, Deglutition is  
impossible, inflations of .the Stomach and Intestines, often  
distend the Abdomen,, fo that it is.ready to burst. Sometimes  
neither the Fasces nor Urine are discharged, whilst at other  
times, both are evacuated without the Knowledge of the Pa-  
tient. In a word,, every thing in the Body is so surprisingly  
Chang'd by Convulsions, that nothing os the, formet Health re-  
mains, and the miserable Patients are hardly known ‘ by their  
intimate Acquaintances. All these Changes are accurately ob-  
served and described by *Aretaeus,* who in the Passage last quoted,  
concluded, that it was lawful. to wish for the Death of such  
Patients, that their miserable Lives, and excessiveTonnents,  
might end together... : .

. For is such: Patients survive. Violent Symptoms often: remain,  
such as Distortions.of the Limbs,. Distractions ofthe.Muscles,  
and a Destruction of the Functions Of the Brairt. Thus it is  
certain from Experience, that Palsies, Atrophies,and Folly, have  
remained incurable, during Lise,' aster Violent Convulsions, l  
-. Sometimes, also, Convulsions are succeeded byan Abolition  
os all the Vital, animal,-and natural Functions, which is Death.  
*Hippocrates, in Aphor.* 2. *Sect:. 5.* telis us, That iConvul-  
p- lions accompanying a Wound, prove mortalffai/frarieus, in  
the Passage last quoted,. when treating of Convulsions, telis us,  
" That they generally happen on account of Wounds ; when  
" for Instance, Membranes or Muscles, or Nerves, arepunc-  
" tured, in which Case, the Patient .generallyoies; for Con-  
" VulsionS happening after **a** Wound are mortal.''

Convulsions are cured, I. By artificially removing what-  
ever irritates the Parts. 2. By . correcting or dissipating  
the Acrimony. 3. By removing the morbid Condition of the.  
Nerve by proper Remedies, ike By Repletion with some

’ mild, friendly, liquid Aliment, often taken in small Quart-  
. tities. And, 5. By stopping the Haemorrhage.

- Though Authors abound with. antispasmOdic-Remedies, yet  
**every** one must perceive, that as Convulsions arise from so differ-  
ent, and even often, opposite Causes, there can he no uniVer-  
sal Remedy forthem. But after investigating the Cause, **we**must determine the Remedy capable of removing, or weaken-  
jng this known Cause. But a» Convulsions after Wounds arise,  
either from some irritating Matter lodged in. the Wound,  
or from a Puncture or partial Division of theTendons, Mem-  
branes, and Nerves, or lastly, from an excessive Loss os Blood,  
*Go* the whole intention of Cure must he directed, to these three  
Indications. Hence, in the fust and second Numbers fol-  
**sowing, we shall treat of those, means which remove or mi-**

Hgate the irritating Matter. In the third, we shall consider  
these Methods which remove the preternatural Condition of  
the affected Nerve or Tendon. And in the two last Numhers  
we shall specify these Remedies by which a Loss of Blood mav  
he stopt, and that Portion os it which is lost, restored.

. I. *Asfor a Removal of irritating Substances*; isa Thorn is fix’d  
in any nervous Part, under the Nau, for Instance, in such a  
manner as to wound the nervous Papillae, after an intense Pain  
Convulsions frequently arise, which cannot he easily removed  
so longas the Them is lodged there. Hence we are as much  
as is possible, in the first Dressing, to enquire, whether such A  
Substance is lodged in the Wound. But how this is to be done,  
and with what-Cautions such Substances are to he removed, we  
have already specified.. . ’

2. *As flor correcting or dissipating the Acrimony*; Acrimony  
rarely arises in aWound from the Humours convey'd to it, un-  
**less there is a** great Cacochymy in the Body hesore, or large  
Quantities os acrid Aliments have heen eaten.. This sar more  
frequently happens from the imprudent Application os acrid  
Remedies, such as Arsenic, or other corrosive Medicines to **the**wounded nervous or tendinous Parts. But these Applications  
when known, are to be removed or weakened by Medicines,  
which by an opposite Virtue are able to correct the known Acri-  
mony. In this respect nothing universal can be determined, but  
a Remedy suited to each particular Acrimony is to he applied.  
The softest Balsams are, however, beneficial, because they  
hinder the Parts from being corroded by the acrid Substances,  
and at the same time weaken them by sheathing them up in  
their mild Fat as has been already observed. The Medicines he-  
longing Io this Number are sound under the Article A CID A,  
and ALoALIs -

3. *As for a Removal ofthe Condition of the Nerve she proper .  
Remedies* ; the Cause of Convulsions arising from a Wound, is  
frequently inch an Injury done to a Nerve, aS that heing par-  
tially. divided, its remaining entire Fibres are distracted./ Hence  
arise excessive Pain, Convulsions, and the other Symptoms al-  
ready enumerated. -But all these arise from a flow and con-  
tinual Distraction of the nervous Fibres,/which is always ac-  
companied with Pain, as is obvious from the Definition os it  
already given. Those Remedies, therefore, which remove, the  
Pain, will, also, cure the Convulsioris arising from it. But  
these Remedies act either on the Causers the Pain, or render  
the Nerve incapable of Sensation, by destroying the Commerce  
between, it and the Brain ; or lastly, they fo obtnnd the com-  
mon Sensory, aS that- it. cannot perceive that Change of the  
Nerve produced by the Couse exciting the Pain. But that, all  
these things have been with Success used for the Cure of Con-  
vulfions, will be obvious from what folsows,

Or For among the things recommended above for removingPain,  
the most considerable and universally useful, are relaxing and  
emollient Substances, by the Application of which the nervous  
Fibres may be so disposed, aS that they may be distended without  
Dread of a Rupturey and these have in all Ages been used for  
removing Convulsions: Thus sor the Cure os a Tetanus,-ssife  
*pocraiesgulm Tr. de Murb.* recommends warm and fat Broths  
prepared of Fowls, -together with tepid, moist and pingui-  
oils Fomentations, contained in Bladders' and Pottles,' and  
applied every-where, but especially to the Parts affected. , He,  
also, orders the Patient to be liberally-and frequently anoin.se  
ed with- warm Oilsc Andin his *Trsc Nle 'internis Affection.*for the Cure of a Tetanus arising from AWound, he orders  
Unctions with pingttious Substances' before in PiresiFomenx  
rations, Stearns of hot Liquors, Sweats excited by pouring  
warm Water on the Patient, find the drinking of tepid Milk  
and Water, if the Patient can; if not, he ord ein it to he pour'd  
into his Nostriis. Besides, in *Aphor.* 22. *Sect. ξ.* when .men-  
tioning the Use oswarm Substances,, he. says, that they allevi-  
ate Pain, Rigors, Convulsions, and a*Tetanus.* And on the  
other hand, in *Aphor.* 39. of the saiim.Section, he affirms,.thae  
Cold produces Convulsions, 'and a *Tetanus* ; for Heat relaxes  
all Bodies, so that they may he distracted and bended without:  
Danger of breaking ; whereas Cold contracts and renders every  
thing brittle, as is obvious from daily Experiences The same:  
Measures are recommended by *Celsius, in Lib.* 4. Cep.3. who;  
orders Patients thus affected, to bathe in warm Oil, Or. warm-  
Water in which Fenugreek has been boiled, with an Addition  
of a third Part of Oil. *Galen,* when afflicted with a Violent  
Distraction of the Ligaments, freed himself from approaching.  
Convulsions by continually anointing with warm Oil, and per-  
ceived the Convulsions just coming upon him, as soon aS **the**Use of the Oil was intermitted. *Aretaeus, de Curat...Merb.^  
Acut. .Lib.* I. *Cap.* 6.. orders the like Measures to be taken for.  
the Cure of a *Tetanus.* Hence it is obvious, that the antient  
Physicians unanimoufly recommended the most emollient Re-  
medies which fo effectually allay Pain, for the Cure of Con-  
VulsionS.

It is, also, sufficiently obvious, that if a Nerve, the Wound  
of which disturbs the common Sensory, can, without the Dan-  
ger of a greater Eyil, he destroy'd by Compression, Division,  
or Caustics, there is no longer any Dread of Convulsions, be-  
cause the Commerce between the Brain and theaffiected Nerve,  
isremoyed. This is evinced by practical Observations in the Cure

- osa Terrain Species ofEpilepsy, in which there is seis,in aparti-  
codin' Part of the Body, the great Toe, sor Instance (a Case of  
which Kind, says *Fan Snueitrn, I* myself have feen)a certain Ή-  
filiation, as if Ants crept through the Part (See **ALEADARA).**And this titiliary Motion ascends through the Leg, Thigh, and  
Abdomen, to the Praecordia, upon which the Patient salis down  
Convulsed all over his Body. If, when he first perceives the Dis-  
order beginning in his great Toe, he speedily applies a tight  
Ligature helow the Knee, he is freed from the Paroxysm. In  
similar Cafes it is often heneficial to burn deep, by means of a  
Caustic, into the Part where this surprifing Motion first begins,  
in order to destroy the small Nerve, the Disorder Of which is  
capable of disturbing the whole Body in so surprifing a manner.  
Something like this is sound in *Celsius, Lib.* 5. *Cap.* 26. where  
he telis us, " That a Muscle when wounded, is to he divided,  
" because when wounded it proves mortal; but when it is di-  
" Vided, the Disorder of the Part may he cured."

"But those things, which by their narcotic Quality so obtund  
the common Sensory; aS to remove the Sense of Pain, are often  
surprisingly efficacious in checking these convulsive Motions, as  
is often observed; especially in hysteric Convulsions; though  
among the Antients we do not find, that these Remedies were  
frequently used in such Cases. But *Hippocrates,* in *Lib. de  
intern. Affection,* for the Cure of a *Tetanus,* among other Re-  
medies, orders the Head and Body to he anointed with a warm  
Infusion prepared of the Seeds of Henbane and Wine, with the  
Addition of an equal Quantity of Oil.

: 4. *As for a Repletion with seme mild, friendly, liquid Alsu  
went; Hippocrates,* in *Aphcr. 22. Sect.* 2. in the Cure of  
Diseases, lays it down as a general Rule, " That the Diseases  
" arising from Plenitude, are cured by Evacuation, and those  
" proceeding from Inanition, byRepletion." When, therefore,  
in Consequence of a Division os theBlood-Veffeis, therein a great  
Loss of Blond, so that the equable Pressure on the Veffeis os the  
Brain is by that means disturbed, the Convulsions arising thence,  
have an excessive Inanition sor their Cause, so that they will be  
. cured by Repletion. The most celebrated Antispasmodics, such  
as Spirit os Hartshorn, and of Raw Silk, the Tincture and Oil  
**. os** Amber, of Castor, and the finest distil'd aromatic Oiis,  
which in other Cases are *so efficacious in checking the inor-*dinate Motion of the nervous System, are in this Case pre-  
judicial by their Stimulus, by which, augmenting the Motion  
os the Blood, they expel that small Quantity os it which re-  
chains in the Body through the divided Veffeis till the Patient  
dies. The whole Cure consists in distending with a new and  
laudable Liquid the Vessels collapsed, in consequende of too  
great an Inanition. But here therein a considerable Difficulty ;  
sor the Aliments by rhe concurring Action of the Viscera and  
Veffeis, and by their Mixture with a large Quantity of Iauda-  
hie Humours pre-existing in the Body, are assimilated to our  
Natures, and acquire the Properties requisite in human Fluids,  
as is shewn under the Article FIRRA : But aftera great Loss  
os Blood, this Quantity of laudable Humours' is wanting, which  
in a State of Health absorbs that small Quantity' of crude Juice  
convey'd through the Thoracic Duct into the Subclavian Vein.  
By the same Cause, also, the Action of all the Viscera and  
Vessels is weakened. ' Hence the two most efficacious Causes  
which change crude into concocted Juices are wanting, or at  
leash Very languid. All, therefore, that can he done’ with  
Success, is to exhibit such Liquids as are most similar' to **the**Humours in a sound State, such as contain nothing of a stifnu--  
Irting Acrimony, but may be easily borne by a weak Body, and  
subdued by the remaining languid Action of the Viscera and  
Vessels. All those things will, therefore, be- beneficial which  
contain a Nourishment almost like that prepared in a sound  
and robust Body, buteipecially Broths prepared with Flesh, and  
in which theJuices before elaborated in the Body os the Animal  
are dissolved by the boiling Water. And such Broths are still  
better with the Addition of a small Quantity os Citron-juice,'  
which hinders their easy Degeneracy to Putrefaction. For the  
same: Reason a littie Sorrel maybe boiled in them, with the;  
Addition of Rice, Barley,-Oats, and other soft Grains, All  
these are to be exhibited frequently, but in small Quantities, lest  
the weak Body should he overpowered, and that there may  
gradually he such a Repletion as may sustain Life, and at the  
same time keep it so low, that the wounded Vessels may he  
consolidated, without any Dread, lest by a sudden Repletion of  
the Veffeis, or an increased Circulation, those Pans should be'  
again lacerated, which had begum to he united; for unless if  
was confirmed by unexceptionable Facts, it could hardly be he-  
heved, how small a Quantity of Blood is sufficient for the Sup- .  
port os Life. The Propriety of this Method is evinced by its  
happy Success in Women; who, by Abortions, have Tost so  
much Blood as to he seized with Convulsions, and given over  
for irrecoverable.- A memorable Instance of the surprifing Effi-  
cacy of Broth, after a great Loss Of Blond, may he seen in'  
*Lowcr de Corde. ' ' ~*

- j. *As for stopping the Haemorrhage ',* **We** hare already ex'-,  
plained, how an Haemorrhage from a Wound may he stopt and’  
shewn, that many Haemorrhages may be stopt by different Ap-  
plications and Operations. But when the Hand has no Access'  
**to the wounded Veffeis, as, for Instance; when the Veffeis of**

the internal Parm of the Body are wounded, then tight Liam-  
tures applied to the Arms and Thighs, are highly beneficial\*;  
that thus the Veins heing compresses, the easy Rsturn os rhe  
Blond to the Heart from these Parts may be prevented. By  
this means the Haemorrhage is, at least for a time, stopt, and,  
perhaps, an Opportunity given to the wounded Vessels to con-  
tract themselves, and he consolidated. But after the Haemor..  
rhage is stops, these Ligatures are not to he removed all at  
once, but gradually fiackened, lest the Haemorrhage should ram  
turn. If the Patient.-enjoys great Ease both of Body and  
Mind, if Life is kept as low as possible, and the Patient not  
supported by Cordials, there is stili some Hope os a Cute even  
in the most dangerous Cases..

**A** small Tumor, and Inflammation in a Wound, are good ;  
**but** they prove hurtful is too much increased. Baths, and  
Fomentations, together with anodyne and antispasmodic Sub-  
stances, applied to the wounded Parts, and to the Whole of  
the Patiens, are heneficial ; for which see INELAMMATIO.

**It is** already observed, that on the second or third Day **there**appears in the Lips and Bottom os a considerable Wound, a  
greater Heat, Pain, Redness, and Tumor, and that all these  
Symptoms continually happen to a Wound inflicted even in the  
soundest Body. Such a flight inflammation, therefore, which  
is almost always accompanied with a gentle Fever, is never bad ;  
for the divided Extremities of the Vessels being contracted, re-  
sist the impel’d Fluids, Hence arises an Obstruction ; and by  
**the** Force of Nature, accompany’d with a flight Fever, acting  
with a greater Impetus on the obstructed Extremities of **the**Vessels, a gentie Inflammation is produced, which is succeeded  
by a benign Suppuration separating the Extremities os the ob-  
structed Vessels, together with their stagnant Fluids, and re-  
storing a free Circulation of the Humours through the whole  
Sursace of the Wound; by which means a Regeneration of the  
lost Substance, and an Union of the divided Parts are brought  
about. The same Observation is made by *Hippocrates,* who  
pronounces it a bad Sign when Tumors do not appear in large  
Wounds. In another Part he commends laxTumors in aWeund,  
but condemns such as are crude, as being Signs os a greater \*  
Inflammation- *Celsius, in Lip. 5. Cap.* 26. beautifully ex-  
presses this in the following manner: " When a Wound  
or swells too much, it is dangerons; but is it swells not at’  
" all, is still more dangerous. The former is a Sign of  
" a violent Inflammation, and **the** latter of **a** Mortification ;  
so nor isa Fever terrible in a large Wound, when it lasts only  
" whilst the Inflammation is present. But that Fever is dan-  
" gerous which either succeeds a flightWound, lasts beyond the  
". time of the Inflammatinn, or brings on a Delirium. " But  
when by a great Obstruction about the Wound, or an Increase  
of the Circulation by means of a Fever, the Pain, Tumor,  
Redness, and Heat, are greatiy increased, we know from the  
Obstruction of the Phenomena common to all Wounds, that.  
there is a greater Inflammation than is requisite. If, therefore,  
this Inflammation should proceed, it would destroy the Part by  
a gangrenous Corruption.; or at least, a far stronger Suppuration  
would ensue, separating the irresolvable inflamed Parts from the  
other live Parts, which cannot happen without a great loss os  
the Substance of the Body, especially of the *Membrana Cella-  
los.a,* which seems to he the principal Seat os a Suppuration;  
Hence a flow Consolidation of the Wound, an unseemly Ci-:  
catrix, and all the Misfortunes arifing from too great a Con-  
sumption of the Parts by a strong Suppuration, may ensue. It  
is, therefore, requisite ,the too Violent Inflammation should he  
removed by proper Remedies, which -is done by relaxing the  
Vefleis, and resolving the Fluids, which by their inflammatory  
- Tenacity, had become stagnant. Hence Baths, and Fomen-.  
tations prepared os .the most emollient Herbs are of great Use;  
It is, also, carefully to be observed, whether the Cause of the  
Inflammationis lodgedsin the Wound itself, or whether it in  
owing to the Violence of .the Fever, or the inflammatory State  
of the Blond. In the former Cafe, Topics are often sufficients  
but in the latter, an universal Remedy, checking the increased  
Circulation, or resolving, the inflammatory Spissitude, is requiil  
she. With respect-to. such Medicines-see OBSTRUCTIO, and  
**INELAMMATIOi**

Antispasmodics are, *i.-* Laxatives; 2.. Diluents. 3. Re.:  
solvents.. 4. AbsorhentS, such aS CrabS-eyes, Pearls, Ivory;  
Hartshorn, Goat’S-blood, Boar's-tooth, and Elk's-hoof. **See1**AcIDAr And; 5. Opiates, which ate already Considered.

ExtraVasated Blood fallen into any Cavity of the Ijodv;.  
\* should be immediately brought away by a proper Situation of  
the Body ; by suction with a Pipe, if recent, otherwise after  
proper Dilution, by dilating the Aperture of the Wound, or.  
by making a fresh Incision.

Besides those Parts of **the** Body in which **the** Humours **se-**creed from the Blood are accumulated sor their proper Uses,'  
or being collected, are eliminated from Ihe Body, there are  
hardly found any Cavities m the Body: Thus the Cranium,  
Thorax, and Abdomen, are full; sor when Wounds **are**made into the Cavities, their Contents' burst out ins soon aS'  
they can find a Passage. But the Blued flowing from the di-

vidcd Veffeis may so Compress the Parts contained in these Ca-  
vities os the Body, as to possess the Place naturally occupied by  
the Viscera lodged in them. Bleed, therefore, extravafated  
into these Cavities, by its Pressure, injures the Action os **the**Viscera contained in them, and afterwards becoming corrupted,  
it may, by its Acrimony, conode and corrupt every thing it  
touches. Whilst it is, also, attenuated and render'd putrid,  
being resorbed by the bibulous Veins every-where open, hath in  
the external and internal Parts of the Body, it infects the whole  
Mass of Flood with a putrid Taint, and produces the most ter-  
rible Disorders. *Hippocrates,* in *Aphor.* 20. *Sect.* 6. telis us,  
" That if Blood is preternaturally discharged into the Abdomen,  
it naturally .corrupts and suppurates." And *Galen,* in his -  
Comment on this Aphorism, by the Word κοιλίην, understood  
any preternatural Cavity, and tells us, that by **the** Word *Suppu-  
ration,* any Degeneracy of the Blood is here meant. Put; by  
the Word εκπυηθῆναι, is probably meant, not a *Suppuratlen,*properly fo called, but only that the Blood extravafated, and  
contained in a preternatural Cavity, after a Suppuration makes  
a Way for itself through the Parts, tho' the extravafated Blood  
is not converted into *Pus,* properly so call'd. I.

.' Besides these large Cavities of the Body, there is under **the**Skin, and every-where in **the** Intestines *of* the Muscles, **the**cellular or pinguedinous Coat, which being easily dilated,  
yields to the extravafated Blond, and may he distended often to  
an inordinate Bulk, as is obvious in spurious Aneurysms, and  
Sugfllations, aster Violent Contusions. The Blond lodged in  
these preternatural Cavities may, in like manner, by its Pres-  
sure and Corruption, produce many Misfortunes; sor which  
Reason it ought to be soon removed, is it can be commodinufly  
done.. But it is to be observed, thatextravafated Blood may  
sor a long time remain incorrupted, provided the Air has mot  
free Access to it; and that sometimes by **the** Application of di-  
luting and rcfolvent Medicines, it may he fo attenuated aS to  
he resorbed by **the** bibulous Veffeis, and gradually disappear. **See  
CoNTUSIO. . I***c* But when Blond is extravafated into any Cavity ofthe Body,  
and proves injurious by compressing the Parts ; or if its Corrup-  
tion is dreaded, and no Hopes os its Dissipation remain, it is  
then to he evacuated by Art: And this is done -

*- By the Situation of the Body:* Which ought to he such, that  
the extravafated Blond may, by its proper Gravity, he discharg'd  
from the Orifice of the Wound. In order th this, it is of great  
Importance to know the Posture of the Patient when he re-  
ceived the Wound ; and he is then to be placed as nearly as  
possible in the fame Posture, otherwise the *Membrana Adipofa*often so closes up the Wound of the Skin, that no Blood can  
he evacuated. Then let the Orifice of **the** Wound he put in **a**declining Situation, that the Blood may have a free Passage.  
Thus, sor Instance, is there is extravafated Blood in the Ca-  
vity.of the Abdomen, it will be expedient to lie flat on the  
Belly. *Pare* evacuated Blond ledged in the Cavity of **the**Breast, and saved the Patient by ordering him to he with his  
Feet elevated, and his Head low.

*As for Suction with a Pipe*; this is useful when Blood is ex-  
Iravasated into the Cavity of the Abdomen, and especially that  
tof the Breast. In which Cases they take a flexible Pipe of Lead,  
Leather, or Whalebone, with an obtuse Point, lest it should  
njure the Parts. By means of this in traduced into the Cavity  
**os** the Body, the extravafated Blond may he evacuated either by  
Suction, er the Application os a Syringe. But when the Blood  
is collected under the Skin in the Cells os the *Membrana Adi-  
tsofa,* it is sufficiently obvious, that this Method is os no Use:

But unless the extravafated Blood is sufficiently fluid, it can  
neither be evacuated, by Suction, nor the Situation of the Body.  
Is, therefore, the Blood is formed into grumous Concretions,  
it is to be so diluted as that it mayeafily pass through the Orifice  
os the Wound, or the Aperture os the Pipe. In this Case **we**take Water, with an Addition of a proper Quantity os Honey,  
**or** *Fenice* Soap, and a little Sea Salt and Wine, This Liquor  
is to he injected tepid, and shaken gently, or agitated by the  
Motion of Respiration with the concreted Blood, which **It**dilutes and dissolves.. Then by **the** Situation of **the** Body, or  
Suction, the injected Liquor is to he evacuated, and this is to  
**be** repeated till **the injected** Liquor returns pure, and not ting'd  
with any bloody Colour. Thus *Pare,* by a simple Decoction  
os Barley with Honey, brought out the Blood ledged in the  
Cavity os the Breast ; and when next Day he injected an Insu-  
fion os Centaury, Wormwood, and Aloes, in order to cleanse  
**the** Parts the better, he found the Patient complain of a certain  
ungrateful Bitterness and Naufea. But it is sufficiently obvious,  
that these Meafures cannot he taken so long as **there is any**Danger of an Hemorrhage.

The extravafated Blood, when coagulated, is diluted by **these**or other Preparations of 2 like Nature.

Take of common Honey, two Ounces ; of *Fenice* Soap, two  
. Drams; of Sea Sals, four Drams; and os Rain-water,  
twelve Ounces.: Mix all together. Or, —

’ Take of Sal Ammoniac, and Nitre, each three Drams ; of  
the recent Urine of a sound Person, twelve Ounces ; and

- of common Honey, two Ounces: Mix all together; Or,

Take of Aloes dissolved in Water, duly cleansed from its  
- resinous Faeces, and again gently inspissated, sour Drams;

os Sal Ammoniac, two Drams ; of Borax, two Drams ;  
of pureHoney, two Ounces; of Rain-water, nine Ounces;

- and os *French* White Wine, two Ounces: Mix all toge-  
ther. " ..

The prudent Injection of thefe Preparations when tepid, and  
a gentle Conquaisation os them with the stagnant Bloed, dilutes  
it, resolves it, preserves it from Putrefaction, and. prepares it  
for an evacuation. Hence such Preparations are much used,  
when extravasated Blood becomes stagnant or coagulated in **the**large Cavities of the Body.

*As for a Dilatation ofthe Aperture ofthe Wound,, or. a frejb  
Incision-,* if the Wound is too narrow, or is the *Membrana  
Adipofa* forced into its Aperture obstructs its Orifice, then Di-  
latation becomes requisite. It sometimes, also, happens, that  
the Aperture of the Wound is pretty high, and the extravasated  
Blond situated in a Place so far below it, that it cannot he eVa- .  
cuated through the Orifice of the Wound, unless she Posture  
*of* the Body is inverted, winch the Patient cannot bear without  
great Uneasiness. Thus, .when in **a** Wound of **the** superior  
Part of the Thorax, a large Quantity of Blood is from the di-  
vided Vessels discharged into the Cavity of the Thorax, that  
Bloed lodg’d towards the posterior Part of the Thorax, where  
the Diaphragm descending deep, much enlarges its Capacity,  
will remain, nor can it easily be evacuated through the Wound,  
unless the Patient was to stand on his Head. Hence that Bloed.  
is rather to be evacuated by making a new Aperture towards  
the posterior and inserior Part os the Thorax on the affected Side.  
The same'holds true, when by a Wound'inflicted about **the**Loins, "Bloed is lodged in the Cavity of the Abdomen, and this  
Bloed by its Gravity salis to tire anterior and inserior Part,  
of the prominent Abdomen. Hence it will he sar more, easy,  
by the *Paracentesis* perform’d in this Place, to evacuate the  
Blood, than, by a Compression os the Abdomen, and a Change  
os Posture in the Body, to eliminate it thro' the Aperture of  
the Wound i It is, in like manner, requisite,, there should be  
**a** new Aperture of **the** Wound, when Blood, SxtraValated in **the***Memirana Adipofa,* descends inm a sower Part. , . ι ...,

. . Tf the Wound descends among the firm Paris of the Body,  
- way must he made for the *Sordes,* by Pressure,- Lotion, .Li-i  
. gature, and a fresh Aperture, or Dilatation of the Wound. -

It sometimes happens-that the Instrument, when forcibly apy,  
plied, descends pretty deep into the Paris, especially into **the.***\*Membrana Adipofa*; then the Liquids, discharged from the di-:  
Vided Veffeis into the Cavity os the Wound, and the Pus col-,  
lected, will,remain there, and, by their proper Gravity, de-.  
scending into the easily-dilated *Membrana Adiposo,* will augment,  
the Depth os the Wound; nor can they ealdy be discharged  
from the Orifice os the Wound, which is situated higher. The  
collected Matter, also, often makes surprising and sinuous Ways  
for itself thro’ **the** *Membrana Adipofa,* between the Muscles *i.*from which Circumstance there afterwards arises a great Diffi.-.  
culty im the Cure: This is.best discovered, is, by a Syringe,,  
tepid Water is gently injected into the Orifice of the Wound ji  
for the greater or lesser Quantity of the Water injected wissi  
determine the Deepnessesi the Wound, and the Largeness os  
**the** concealed Cavity: For when the Deepness os a Wound, is:  
examined by the Probe, whilst this Operation is rudely per--  
formed, the Probe, passing thro' the *Memloraua Adipofa,* wist  
form a new Cavity: Hence the Cure will afterwards be more  
difficult *i* A memorable Instance of th is. is found *ati Hildanus,  
Observat. Chirurg. Cent. An Obs.* 84. So that it is far safer to inm  
ject Water, provided it is gently done ; for is it should be im-  
jected with Violence, the Water might lacerate *fat Membrana..  
Adipofa,* and form surprsiing *Sinuses. . ' -.*

*' As for Presseure and Ligature-,* when,, by fin Injection of  
tepid Water, or the prudent Introduction os the Probe,: we  
know hew sar the Wound penetrates, we then apply to that  
Place a Compress, which is to be secured by a Bandage ; by  
winch means the collected Humours are hindered from descend-  
ing farther into the Cavity of the Wound; then, at each Dress-  
ing, the Situation of the Compress is to be gradually changed,.  
so as to proceed more and more towards the Aperture of the.  
Wound ; thus ascending flowly from the inserior Parts . The\*  
Orifice os the Wound is, in the mean time, to be kept open,-,  
that the Contents of its Cavity may be discharged ; hence the;Bandage is to be fo ordered, aS only to compress the lower Part,  
of the Wound, but leave its Orifice entirely open, which, for-  
the fame Reason, is never to be closed by a Tent.

*Ac for Lotions,* when the extravasated Humours become  
stagnant Jin the Cavity of the Wound, andremain inng there,  
as they cannot be easily evacuated, on account of the superior  
Situation of the Orifice of the Wound, they are corrupted by  
their Continuance and the Heat of the Place, and may, there-  
fore, acquire a Very malignant Degree of Acrimony. The  
most laudable *Pus,* when long retained in a Wound, hecomeS  
ichorous, thin, and acrid : By this means, the whole Surface of  
the Wound will be so affected, as to become sordid ; hut so  
long as the Surface of .the Wound is not pure, ..there will never

**he an** Union and Consolidation of the Parts, tho’ they **are ran-**dered contiguous, by proper Compression and Ligature. I i is,  
therefore, requisite the Wound should he first depurated by Di-  
gestives ; But these cannot he applied to all the Surface of the  
Wound, unless they are previously so diluted, that, when in-  
jected into the Aperture of the Wound, they may penetrate  
thro' all the Parts of it. ’ The Medicines, therefore, hefore  
recommended for cleansing sordid Wounds, are proper in this  
Case; but they ought to he diluted in Water, or some other  
such Vchicle, that they may be of a duly-penetrating Quality.

- Aloes and Myrrh, mixed with the Yolk os an Egg, together  
with a little *Sal Ammoniac* and Honey, - and then diluted with a  
httie Water, are the best Medicines for answering this Intention. ;

*siAsifer a new Aperture, or Dilatation of the Woundy* after  
shine Days Trial os Compression, and the Application of a Li-'  
gature acting on the Bottom of a deep Wound ; as, also, aster  
injecting depurating Digestives, if the Condition of the Wound  
is not changed for the hetter, we are to think of Other Expe-  
dients. Is the Orifice of the Wound is so small, that the Li-  
quids, collected in the Cavity of the Wound, cannot .he dis.  
charged, then the former is to be dilated: But if the Sithation  
of the Orifice of the Wound is such, that the Liquids con-  
tained in its Cavity can neither, by these proper Gravity, nor a  
Change of the Patient's Posture, he eliminated, then we are to  
think of a new Aperture, thro' which all those Things, which,  
bring left in the Wound, would prove prejudicial, may be com-  
Inodioufly removed; In order to this, the Orifice os the Wound  
is closed with a Tent, To that nothing dan be discharged; then  
**the** congested Humours will he spontaneousty collected in **the**lower . Part of the Wound,, and there form a Tumor, which  
will , indicate the Part" where the new Aperture is to he made.

\* The same may be done, when, by injecting Water, the Bottom  
os the Wound protuherates outwards ; as, also, when a Probe,  
introduced into the Aperture of the Wound, can so reach its  
Bottom, that its Point may be felt by the Surgeon's Finger;  
for then the integuments may he safely cut upon the Point of  
the Probe, in order to make a newAperture: But if the Wound  
descends deep .through thick muscular Parts, though in such **a**manner as that the Bottom os the Wound does, not lie near the  
Skin, but is concealed in the more internal Parts, it is far more  
difficult to make a new Aperture with. Success: In this Case it.  
if.inost expedient, after closing the Aperture of the Wound, to  
apply the most emollient Cataplasms to that Part where **the**Bottom of the Wound is suspected to the, that the external  
Parts, being softened, rnay easily yield to the Liquids collected  
in the Cavity of the Wound; by which means, the Place proper  
sor the Incision will be found. -

.. Dilatation is made by the Knife, Lint, Sponge, Gentian-  
- root, and other such Substances, introduced dry, with a  
’ Thread ty'd to them, which swelling, and absorbing the Hu-  
- mours, by .this means dilate the Wound.

.. The best Dilatation of a Wound is made by the Knife ; the  
Pain is, indeed, intense, when the live Parts are dividing, but  
it soon ceases, whilst the other Things, subservient to the Di-  
latation of a Wound, by a flow Dilaceration, excite a pretty  
acute and long-continued Pain, and, at the same time, contuse  
the Margins of the Wound; and these contused Parts must  
afterwards be separated by a Suppuration: Hence those, who,  
thro' a groundless Dread, will not permit the Incision to **be**made by the Knife, are racked with greater Torments.

But, in order to dilate a Wound without the Knife, they in-  
troduce into its Orifice Lint, or the like dry and bibulous Bo-  
dies, which, by absorbing the Humours convey'd to them, are  
distended; by this means they distract and enlarge the too  
narrow Orifice *of* the Wound. Nor is the Force of bibulous  
Bodies, render'd wet, small, in removing from each other the  
Substances which confine them; for Water has a surprifing Pro-  
petty, known from Fact tho' not easily explain'd, by which it  
distends and enlarges the Bodies into winch it infinuateS itself,  
and that so effectually, that, by this Force alone, inmense  
Weights are rais'd, and the hardest Stones cloven by dry wooden  
Wedges, introduc'd into them, and afterwards moisten'd, as  
the Quarry-diggers generally do in separating from the Rocks  
those enormous Stones from which the Mill-stones are work'd.  
See *Mem. de sc Acad, des Sciences, sc An. ssyls.* and *Boyle, on the  
Uses.ulnes.s of Experimental Philosophy.* N or do we, as yet, know  
**the** Limits of this surprifing Power. It is, however, sufficient  
for our present Purpose to know, that it is capable of surmount-  
ing very great Obstacles. They, therefore, put into the Orifice  
os the Wound dry Lint, wrapt up into a Tent, ora Piece of  
**the** most fungous Gentian-root,or aPiece os compress'dSpunge;  
then, by an adhesive Plaister, or proper Bandage, they so secure  
these, that they cannot flip ous, whilst, by a Resorption of the  
Humours convey'd to them, they begin to swell: Thus the  
whole Force, by which these bibulous Bodies are distended, is  
employ'd in dilating the Wound. But among the various Sub-  
stances us'd sor dilating Wounds in this manner, none can he  
compress'd into so small a Space, and yet afterwards swells so  
much, by the Resorption of the Fluids, as Spunge; for which  
Reason, it is generally preserfd to the others, especially if, by  
**an** artificial Preparation, its Efficacy, for these Purposes, isaug-

Inented. Some use strongly to compress a Bit of Spunas, by  
wrapping a Thread about it, and then introducing it into the  
Orifice of the Wound, in such a manner, that the Knot of rhe  
Thread may remain-without the Wound, and he cut offi with  
Sciffars: But as this cannot be done without Difficulty, the  
Design is far hetter obtain'd, in the following manner r They  
melt Rosin and Wax with a little Oil, in order to make a  
Plaister of a pretty tenacious Consistence; in this Plaister, melted '  
over the Fire, they immerse a pretty large Piece os pure and dry  
Spunge,. which is to he every-where penetrated by the melted  
Plaister; then they place the Spunge between two Piares os  
Iron, moderately warm, and, by the strong Action os a Press,  
express as much of the pinguiouS Substance from it as they pos-  
sibly can, leaving it in the Press till it is totally cold ; then the  
Spunge is compress'd into its smallest Bulk, and is so compact,  
that, like Wood, it maybe cut into any Shape: That Sub-  
stance, os an emplastic Nature, which remains in the Spunge  
aster its strong expression, keeps the dry Parts os tho Spunge  
apply’d to each other, whilst, at the sained time. It does not hinof  
der Water, and all aqueous Fluids, from entering into the bi-  
bulous Spunge, and distending it to its former .Dimensions.  
When, therefore, a Spunge, by strong Pressure reduc'd to the  
narrowest Compass, and introduc’d into the Orifice os a Wound,  
is, by the Humours, distended to the. greatest Dimension which  
it is capable os, it is sufficientiy obvious,.how great a Dictationί  
may be produc'd by this means: Besides, a Spunge, thuspre-τ  
par'd, has this Advantage, that it can be cut into, die Tmalleft.  
Shreds capable of entering-the narrowest .Orifices of Wounds,  
and *Fistulas*; which Advantage cannot be obtain'd by Lint,  
Gentiamroot, or any other Substance us'd for that Purpose.

But to all these Tents, whether os Spunge, or any other  
Substance, a Thread must he ty'd, lest they should flip into the  
wider Cavity of the Wound, and there produce many bad Con-  
sequences ; sorwirhout this Caution,they could not be extracted,  
without great Difficulty. *FaseSwieten. Com. in Bocrh. Aphor.*

*sc-’. .. . Os.* **GUN-SHOT WOUNDS..**

i Gun-shot Wounds are attended with worse Consequences than  
those which are indicted with sharp Instruments, as the. Parts  
are more bruis'd and shatter'd, especially when .the \* Bones,.  
Joints, or some of the principal Members, receive the Shot.

AS Wounds of this kind have generally an Eschar form’d  
upon them, little or no Effusion os Blood at first ensues, unless  
some of the large Veins or Arteries he wounded ; but when,  
aster some Days, the Eschar salis off, a Violent Haemorrhage is  
produc'd, which, without the Assistance os a Surgeon, may oc-  
casion the Death of the Patient. For. the first Days, alfo, little  
or no Matter is discharg’d ; whence it is not surprising, that no-  
Wounds are so subject toTnfiammations, Pains, Gangrenes,  
and Putrefaction, as Gun-shot Wounds.

As these Eschars resemble those produc'd by the Application  
of a red-hot Iron, they were formerly imagin’d to be produc'd  
by the Heat of the Bullet ; but they rather appear to be pro-  
duc'd by the sudden Collision os the Parts: And to this Colli-  
ston may he ascrib'd all those Inconveniences which accompany  
those Wounds. Formerly it was thought that these Wounds  
were poisonous; but this Opinion seems to be ill-grounded, aS  
neither the Powder, nor the Ball, have any poisonous Substance  
in their Composition.

. Gun-shot Wounds are more or less deep . In some themus-  
cular Parts, in others the larger Blood-Vessels, the Bones, or.  
*Viseera,* are wounded. Sometimes the Ball penetrates thro?the Part, and sometimes remains fix'd in it; sometimes Pieces  
of the Cloths, or Wadding, are forc'd into the Wound.

Wounds os this kind, in the *Cranium,* are commonly ex-  
tremely dangerous : For tho' they may appear but flight, and  
the Ball may seem only to have lightly graz’d upon the Part ;  
yet their Consequences are so pernicious, that either the *Cra-  
nium* itfels is fissur'd in several Places, or the internal Blood-.  
Vessels are broke, and the Bleed is discharg'd into the *Sinuses* of  
the Brain. It is sometimes surprising how flight a Wound of  
this kind, will occasion a speedy Death, unless the Blood in the  
*Cranium* he timely evacuated, by the Assistance of the Trepan.  
But these Wounds, in the *Cranium,* are dangerous, in Propbr-’  
tion to their Violence.

Internal Wounds, of this Sort, are difficult to heal; but if  
none of. the larger VeinS or Arteries are lacerated, they may ad-  
mit os a Cure. When the Bones or Joints arc shatter'd by tile  
BalLViolent Inflammations ,a *G3si5yeuC,Sphacelus,Cariesfo.rd in-*curable *Fistulas,* can scarcely be avoided; which either require  
Amputation,or deprive the wounded Part os Sense and Motion.

Is any Part of the Cloths, Linen, Skin, or Wadding, is.  
lodg'd in the Wound, it ought not to be heal’d before the ex-  
traneous Substance he extracted : This Caution must be observ'd  
with regard so carious Bones, and osseous Splinters.

In the Cure os these Wounds, observe the following Rales .:  
I. To extract any foreign Substance lodg’d in the Wound. 2.  
To suppress the Haemorrhage. 3. To promote Suppuration, am  
To fill the Wound with new Flesh. 5. To induce a Cicatrix-  
. AS soon aS the Surgeon is call’d, he should carefully see is he  
can find any extraneous Substance conceal'd in the Wound i  
**if there** is, he should immediately extract it With his Hand, if

possible, or eho with a toothed or hollow Forceps,-or with **a.**two.prong\*d Hook (as represented in *Tab.* XXIV. *Fig. 3s ike 5o*6. SA. If the Substance lodg'd in the Wound he deeply seated,  
the Wound must be search'd with the Prohe, and the Substance  
with all convenient Expedition he extracted ; for this Operation  
is much easier perform'd when the Wound is recent, than when  
it becomes tumefy'd and inflam'd. Another bad Consequence,,  
attending a Delay in this Case, is, that the Balis, finking deep  
under the Muscles, cannot he taken out, and, consequently,  
malignant *Fistulas,* a Stiffness os the Limb, and other had Sym-  
ptoms, are produc'd. In extracting these Balis, the Operator  
must take particular Care,not to break any of the Veins, Arte-  
ries. Nerves, or Tendons, which would occasion very dangerous"  
Consequences; upon which account,he should introduce the For-  
ceps shut, and not open them till the Point touches the Ball.

If the Ball, or other extraneous Body lodg'd in the Wound,  
has sunk deep, or if the Wound be so narrow, that it cannot  
be conveniently extracted, the Orifice must be enlarg'd by In-  
cision, on that Side which may seem most safe and proper:  
But particular Care must be taken, not to wound a Nerve,  
Vein, Artery, Ligament,or Tendon. When an extraneous Sub-  
stance is lodg’d in a Wound of this kind of some Standing, the.  
Orifice of which is contracted, with the Swelling and Inflam-  
mation, this Sort of Incision is often Very beneficial; for it not  
only opens a convenient Passage for discharging the inspissated  
Blood, but, alfo, prevents violent Inflammations, and the like In-  
ConVeniencies. But as two Balls frequently happen to he lodg'd  
in the same Wound, the Burgeon, aster one is extracted, must  
carefully search sor another ; sor as long as any extraneous Sub-  
stance is conceal'd in the Wound, the Cure will he protracted.

In extracting these foreign Substances, the Patient should be  
plac'dIn the fame Posture he was in when the Shot enter'd his  
Body; for, by changing the Posture of the Body, the Shot is  
subject to he lost in the Muscles, Membranes, or Fat, so  
as not to he reach'd by the Probe, or other Instrument: But  
when the Ball has penetrated fo deep, as to be felt by the Fin-  
ger on the opposite Part of the wounded Limb, the Surgeon  
ought to consider, from the Disposition os the wounded Parts,  
whether it he preferable to extract the Ball by the Orifice Os the  
Wound, or by laying the opposite Part of the Member open by  
Incision: But is the Wound can neither be enlarg'd, nor the  
Shot extracted, without endangering **the** Nerves and Arteries, if  
ought to remain in the Wound, till the Pain is abatedssbr till  
the Passage is render'd so easy by Suppuration, that they work  
themselves out. On the other hand, extraneous’ Bodies ought'  
th he extracted, without Delay, when, by their Continuance in ‘  
the Wound, they threaten to raise Convulsions, Pain, and other  
pernicious Symptoms. Is the Ball has penetrated into any of  
the Cavities of the Body, whence it cannot be conveniently or  
safely extracted, the best Method is, to leave it where it is lodg'd,  
and heal the Wound:. In this manner they have long continu'd,  
and often, during Lise, without any Danger, or Inconvenience  
and sometimes they will work themselves into other Parts os **the**Body, whence they may he safely and easily extracted.

When the Shot is lodg’d in the Bones, it ought to he ex-  
tracted in the same manner, with the' notch'd Forceps, or  
Hook: Is that Method proves unsuccessful, it may he brought'  
out with a Screw: But where the Shot is cover'd with much  
Flesh, aS in the Calves of the Legs and Thighs, a peculiar Sort  
os Screw is requir'djlike that delineated in *Tab.* XXIV. *Fig. I.'*But is the Shot is too firmly fix'd to yield to any of these Me-  
thods, it must he suffer'd to remain in the Wound till it is  
loosen’d by Suppurationi Balis lodg'd in the Joints must he  
extracted with the utmost Expedition ; for, in this Cases De-  
lays are extremely dangerous : Nor can violent Pains, Inflam-  
mations, and Caries of the Bones, which generally require Am-  
putation of the Limb, he, without Difficulty, prevented.

When, in a Gun-shot Wound, the Joint or Bone is **ex-**tremely bruised, it is better to remove the Limb immediately  
by Amputation, than to labour long in Vain, to obtain a Cure:  
For aS the natural Form of the Joints can never he restor'd, fo  
the Nerves, Tendons, and Ligaments, which adhere to the shat-  
ter’d Bone, being broken, violent Inflammations, a Gangrene,  
**and** *Sphacelus ,ust* by these means induc’d: But when the Collision  
**of the** Bone is not very Violent, **the** Surgeon should gentiy remove  
any Splinters of the Bone, or extraneous Substance lodgf d in **the**Wound, which may then be cur'd aster the usual Method.

If a large Artery, os the Arms or Legsishould he wounded by  
the Shot,which may appear from the Effusion osBlood,the *Tour-  
niquet* must he immediately apply'd, to stop the Haemorrhage,  
till the Artery can he stitch'd up with a crooked Needle and  
Thread: and this Method I have successfully try'd. But if this  
should he impossible to be perform'd, the Limb must necessarily  
he amputated, taking care, first, to apply the *Tourniquet,* a littie  
above the Wound, in order to stop the Haemorrhage.

The Wound heing cleansed, and the Effusion of Blood  
stopt, is necessary, the first Intention os Cure is, to prevent,  
or, at least, alleviate rhe Swelling and Inflammation : For this.  
Purpose, let the Wound he fill’d with Lint dipt in wann Spirit  
of Wine, and apply Compresses, moisten’d in the same Liquor,  
or in camphorated Spirit of Wine, or in Spirit of Wine diluted  
with lame-water.

The next Intention is, to forward the Suppuration Of the.  
bruised and corrupted Parts ; and, *for* this Purpose, beside, the  
common digestive Ointment made of Turpentine and the Yolk  
of an Egg, the following may he used : .. ζ

. Take of *Unguentum Basilicon,* and *Areausts* Balsam, each ary  
Ounce; Spirit os Wine,.and Oil os Eggs, each a Dram..

Mix, and make them into an Ointment.: . y \_ ....' ...-τε'

Add to these, if the Corruption is Violent,r a little Myrrh, \*  
and Aloes, *Thcriaca, Unguentum Fuscum,* and, in Parts not: versi  
nervous', a littie red Precipitate. si '" ' Y

In- Wounds where the Ball has quite penetrated the Limb,'  
pafs a long, blunt Needle (see *Tab.* XXVI. *Fig.* I.), arnf dwitlis  
a small linen Cord, well moisten'd in the Ointment above-‘  
prescrib'd, thro' the Middle os the Wound, like a Seton; let  
this Cord he drawn backwards and forwards, and kept in Yher  
Wound, till, from its Rednefs, it appears That- the corrupted^  
Parts are thrown off, and that the Wound is ready to heal;'.  
then the Cord may he drawn out.. “ .'.'ss'. .... .-si. si.

You may now proceed to iocarn, and .induce a neat Cicatrice,;with balsamic Medicines, as in other Wounds. Some use here?'  
a Vulnerary Water, call'd,' by the *FrencstaDEau AArgriebnsiade.***See** AoUA SeLOPETARIA. : - ' ‘:ί οὐρ

The concomitant bad Symptoms of Gim-shot Wounds, suchjas the Haemorrhage, Fever, Swelling, Inflammation, Pain, and ’  
Convulsions, may be treated as in other Wounds, unless where'  
the Violence of the Collision and Contusion make them mores'  
subject to Corruption and Putrefaction. If, as it almost always:happens, the Lips of the Wound become thlack, liVid, flaccid,1and fetid. Care must be taken to separate the corrupted Flesh  
from the sound: For this Purpose, apply the *Unguentum AEgypo  
tiacurn,* diluted with Spirit os Wine, or mix'd with an equal  
Quantity of the digestive Ointment; or a littie red Precipitate  
may be added to the digestive Ointment; then put on the Com-  
presses, aster they have’ heen thoroughly moisten'd with warm'  
camphorated Spirit os Wine, mix’d with *Theriaca*; or’ with.  
Lime-water strengthen'd with Spirit of Wine. If the Cor-  
ruption penetrates deep into the Flesh, Scarifications and Inci-  
sions must be made, till the latent corrupted Humours are dis-  
charg'd, and the Applications reach to' the sound Parts: If'  
these Remedies are not effectual, more powerful Medicines must ’  
he ufed sor consuming the Flesh; such as the *Aqua Phagedeniaa,.*made os Lime-water and'Mercury Sublimate; or one Pound'  
os Lime-water mix'd with one Ounce of crude Quicksilver  
dissolv'd 'in two Ounces of *Aqua Forti si'* These Applications  
are, also,' useful, in a Caries os the BoneYbut in Wounds of  
the Joints or Ligaments, as these acrid Applications cannot he  
made with Safety, we must have recourse to Balsamics; such\*  
as the *Eau AArquebufade, Peruvian* Balsam, Tincture of Myrrh  
and Aloes, prepar’d with *Sal Ammoniac,* and Spirit of Wine, .  
Essence os Amber,. Spirit of Mastich, *Hungary* Water, Oil of  
Turpentine diluted with this Water, and the like ; which must  
he in stil’d into the Wound moderately warm.

Internal balsamic Medicines which resist Putrefaction, are, at.  
the same time, not to he neglected: Of this kind are, the *Elixir  
Proprietatis,* the Essence os Myrrh and Aloes, the Essence of  
Amber, *Peruvian* Balsam, and the like; thirty or forty Drops’  
os which may he given to the Patient, for'several Days. If  
the Patient he very weak, let him take some cordial Pilis, with  
the *Consectio Alkermes,* and some cordial Synrp: Proceed in the  
Remainder of the Cure as in other Wounds.

By the Explosion os Guns it often happens, that some Grains'  
of Gunpowder enter the Skin of the Face, and produce un-  
seemly Spots, if they are not timely taken out.. When the'  
Grains do not entirely penetrate the Skin, they may he taken’  
Out with a Forceps, or a Quill shap'd like a Tooth-pick, or an  
iron Instrument in the Form os an Ear-pick; but is they reach  
helow the Skin, before they can he laid held os, the Skin mush  
be laid open with a (lender Knife, or Lancet, and then they  
may be extracted as before: The Operation must he repeated  
till all the Grains are taken out, and Care must be taken, that  
they are not broken in the extraction, otherwise the Spots will.  
Continue. *Hiist. Chirurg. '*

*Mr. Ranby,* in his *Method of treating Gunsshot Wounds AC.Het* us,  
that,in removing the Accidents produc'd by the Ball osaMusijuet  
or Pistol, the first Intention is, if possible, to extract the Ball, or’  
any other extraneous Bedies which may be lodg'd in the wounded  
Part; and whenever Misfortunes os this kind are attended with  
an excessive effusion of Blond, in consequence of the Rupture  
of some considerable arterial Vestel, it is absolutely necestary,.  
with all Expedition, to stop the Haemorrhage, by taking up the'  
Artery with a proper Needle, and so carefully, that the Hold'  
may not prove elusive; because, in Cases of this Nature, no  
Applications, however styptic, are to be depended on.

In order to get at the Ball, or any other foreign Matter in-  
festing the Wound, Searches by the Prohe are to he used aS  
sparingly as possible ; fince it is certain, from Experience, that  
fuch a Practice is highly detrimental to the Patient r And where  
there is an absolute Necessity sor this Method, the Finger is al-  
ways to be preser’d, as the hest, and least dangerous Prohe.

Is the Ball, or any other Substance, is lodg’d near the Ori-  
**sice** of **the** Wound, or is, by the Finger, perceiv'd to he under

**the Skin, the’ at some** Distance from theMouch of **theWoond,**we must, in the former of. these Cases, remove the extraneous  
Matter, with all Expedition; and, in the farter, cut upon it, and  
take it out: But if the Ball, or otherSubstance, should be sunk  
so deep, as to he absolutely beyond’ the Reach of the Finger, it  
is by no means edviseahle to extract it, by forcibly introducing **a**Pain of long Forceps: Since inis certain,.from Experience,that  
such a Practice seldom fails to produce, a Train of terrstjlc Syrn-  
ptoms , and since numberless Instances occur, in which Balis,  
aster having been lodg'd.in the Body for many Years, without in-  
commoding the Patient, have, in Process of nine, work’d their  
Passage to the Surface,.and were, consequently, easily extracted.

As Wounds, made by the Balls of a Museuet,. or Pistol, are  
but small; so it is necelfaryto dilate them, with all Expedition;  
but if they should he inflicted near a Joint;, or in a .very, mem-  
branous or tendinous Parr, the Knife, as well as Forceps; should  
he ufed, with the greatest Caution, .and no largena: Dilatation  
made, than is absolutely requisite for the free Discharge of the  
Matter lodg’d within: For Wounds in the Joints, whether  
produc’d by a Bullet, a cutting Instrument, or any other Cause,  
are .always dangerous. ;And fucin Parts aS are membranous, or  
tendinous, never fall to suffer, by heing exposed to the sensible  
Impressions of the Air. i: , .Α.-.' .υ 4. .‘...I

.. If a Ball has gone entirely thiol: any Part; both Orifices,  
where it can he done with Safety, tate to.be dilated; and both  
carefully kept open, especially thatin the most depending Parti  
Tents are never to he used where, .there is a Possibility of  
avoiding them , light, eafy Dressings, Are always best, and ought  
to he secur’d with a Bandage of thin Flannel, if it. can he .had,  
rm tighter than is necessary to keep them on the Part.. .... .

, W hen the wounded Person has not suffer’d a great Loss of  
illood,;rt is expedient,/unmediately. to take a large .Quantity  
from A Vein open’d in the Arm, mid to repeat Veneseolain the  
second,, and even the third Dav,.if .Circumstances call for it:  
This timely Precaution will prevent a good deal of Pain, and  
Inflammation, promote the Digestion, and contribute to pre-  
vent ainuinerous Train of complicated Symptoms, which other-  
wise .generally interrupt the Cute, rniferably harass the poor  
I.tient, and too often endanger his Liles : .

, During the first, twelve Days after the Reception of-the  
Wound, it . is proper to obferve a cooling Regimen, both with  
respecti'ro,the Medicines prescrib’d, and the Diet requisite for  
the Support of Nature: And as, in Circumstances of this Na-  
tnre; the Body should, by all means, be kept soluble, a Stool  
shouIdinyery Day be,procur’d, either by emollient Clysters, or  
some gentle Laxative taken internally. ....

.. All Applications of an hot and spirituous Nature are remark-  
ably injurious, and productive of such Pain, that the wounded  
Part can by no means bear them. The first Dressingshould  
consist of Lint, either dry, or moisten’d with a little Oil, and,  
secur’d by a very - flight Bandage ; the next should consist of **a**proper Digestive, warm’d, and cover’d with the Bread and Milk  
Poultice, mix’d with a Quantity, of Oil sufficient .to lceep.it'  
moist; and where there is great Tension, and the Wound  
large, a proper Fomentation is to he used : This Course is to  
he continu’d till , the Wound is clean, aster which, it is to he  
heal’d in the ordinary manner : This Method generally promotes,  
a constant and eafy Perspiration, abates the Pain, greatly facili,  
tatev the Digestion,.and removes .all.Apprehensions.of’an ap-  
proaching Inflammation. The Reason why the.Lintshoold he  
moisten’d with Oil is, the great- Ease procur’d to .a contus’d  
Wound from fuch an Application, in comparison of a drying and  
abserbentDressing; which,instead of giving a free Discharge to  
the sanious Blood, and preventing an Inflammation by unloading  
**the** Part, would possibly obstruct the Mouths of the capillary  
yesseis.and hinder Nature from getting rid of that Incumbrance,  
which, it is observable, she to much endeavours to throw off,  
b . When an inflammation seines any Part, in consequence of the  
Lodgment of a Bullet, or any other foreign Body which might  
have been fafely extracted immediately after the Reception of  
the Wound, all Attempts to diflodge fuch extraneous Matter  
must be postpon’d, till the Swelling is, in forne measure, abated,  
and the inflammatory Disposition of the Fibres nearly remov’d ;  
**unless** the Ball,or other offendingMatter,lies at no great Distance  
from the Orifice, and there is, on that Account, a Certainty of  
removing it, without any great Uneasiness to the Patiens.

.. When a Wound is of such a desperate Nature, as to render  
Amputation necessary, which frequently happens when it is  
inflicted in any important joint, it is expedient to perform **the**Operation immediately, and without Delay ; lest, by postponing  
it, an Inflammation, which is reasonably to he dreaded, should  
prevent a Work which ought rarely, to he attempted during the  
Continuance of so unlucky .a Circumstance. The neglecting,  
this favourable Juncture of taking off a Limb, frequently re-  
duces the Patient to *fo* low a State, and subjects-the Blood and  
Juices to fuch-an Alteration, as'jnust unavoidably tender the  
subsequent Operation, if not entirely unsuccessfol, yer, at least,  
exceedingly dubious : And even in Wounds where Amputation  
is not. necessary, it is equally advifeable, not to defer the Mea-  
sures proper to he taken, left, in consequence of the exposing  
the Parrs to **the** Ain, a Series *of very* dangerous Symptoms should  
hebrought on.

Wounds contiguous or adjacent to any considerable *sorters***are** ready to bleed afresh, upon any Motion of the Patient, or  
the Return of a free Circulation of the Bleed into the Pan,  
which was at first obstructed by the Violence of the Injun, done  
it ; and this generally happens when the Eschar begins rd im-  
rate: For this Reason, wh should never attempt atiorcjbje Re-  
moval of the Eschar, bur patiently wait forjts per feci Separa-  
. tion, without heing in the least shock’d-at the Opening of the  
Arteries, which is sound to be almost inevitable; But the Ap-  
proach os this Accident may he frequently predictsa, from the  
Patient’s complaining of an excessive Weight and Fulness os the  
Limb, .which Symptoms are always accompanied tvirh mere or  
less Pulsation ; an infallible Prognostic of rhe Consequences..  
When these Symptoms appear. Bleeding,1 and the ufe of the  
Barit, arc instantly to be order’d, in whatever Part of theBedy  
the Wound is inflictid. S . ' . ' -

I have known, fays dueAhthor, several Instances of Persons  
losing their Lives, from the starting of an Artery, before the  
Surgeon, could come-to their Assistance,- especially where an  
Amputation has preceded; and I dare affirm, the Quantity of  
Blood lost, particularly after an Amputation, has not amounted  
to twelve Ounces; which' I cannot account for otherwise than  
by the Drain which had heen made from the Mars of Blood,  
both hesore and during the Operation: Whence the sodden Dis-  
charge, tho’- of so small a - Portion of Blood,' aster the great  
Quantity before lost, gives a Check to the'Citculation, arid pro-  
duces immediate Death. This Refleitionmight to he a Lesson  
of Instruction to every Practitioner, to be.parstchlatry careful in  
tying the Vessels. .’0" :. i ' - - :

Repeated Blcedingsin the Beginning ire attended with many  
Advantages, since they generally prevent,- and-always lesion any  
feverish Paroxysms,- and-seldom sail to guard against Impostu-  
mations: The Bedy must always be kept in a laxativesitate,  
and when the Patientsis rack’d with Painswe must have imme-  
diate recourse to proper "Preparations of *Opiums :*

Probes, Forceps, Mallets, Chisselstiorid various other instrub  
ments, ought never to he us’d, except in Cases of absoluteNc.1ceffity ; since, without doing any Honour to the Surgeon, they  
not only rack the Patient with Pain, but, also,- expose bis Life  
to Danger. But, for a -farther Confirmation of this, let us sup-  
pose a Ball lodg’d in any Part beyond the Reach of the Finger;  
and entirely out of. the Way of heing'perceiv’d-by the external  
Touch: In such a Case, itmijst evidently appear, upon 'the least  
Reflection, that thrusting first a long Probe in quest of the Buss  
let, and - then a Pair of long Forceps, either with or without  
Teeth, into a Wound of this hind, the’with a kind of Cer.  
tainty, to extrail the foreign Matter, must either contuse, - or  
irritate and. inflame the Parts to a‘ great Degree, and, conse-  
quently, do as much, or, perhaps, more Mischief, than the Ball'  
did at fust by forcing its Passage so far into the Parts -. And’  
should the Forceps lay held os any Nerve, Artery, or even-  
common Membrane of a Muscle, together with the Ball, which,  
in all Probability, must continually happen, very shocking Con-  
sequences must necessarily attend fuch a Practice: Nor would  
Attempts of this kind prove lefs injurious, in Cases where Bul-  
lets arc lodg’d in the Cavities of the Abdomen, or Thorax  
whereas it is certain, from Experience, that Lead may lie for a'  
long time in several Parts of the Body, without producing any  
considerable Pain, ot even Inconveniencies.

Chissels ought, on no Occasions, to be us’d, since they too  
frequently split the Bone up to the next Joint, or shatter it in  
such a manner, that, instead of promoting a Cure, by safely re-  
moving the Part affected, they generally bring on Symptoms  
worse than the original Disorders they were intended to remedy.'  
*A* good Knife is certaioly all that is necessary, for taking off a  
Finger; or should one of the Bones of the *Metacarpus* require  
Amputation, a frnall Spring-saw does the Work, with great Ease  
and Safety. With refpedt to the ufe of the *Peruvian* Bark in  
Gun-shot Wounds, fee the Article Qur.ro UINA.

VULPANSER. Offic. Bellon, des Ovse, I59. *Vulpanser stye  
Cbeualopext* Jons, de Avib. 94. *Ckenqlepex, Vulpanser.* Mer.'  
Pin. Ipo. *Tudor na.* Bellon, des Oyse. I7a. *Tadorna,quihseam  
Vulpanser.* Raii Ornith. 362. *Tadornt Bellcnii, Vulpanser qui-  
bufdam.* Ejusd. Synop. A. 140. THE SHELL-DRAKEl  
BURROUGH-DUCK, or BER-GANDER.

It is observ’d in maritime Places and the Fat, which is the  
Part, used in Medicine, is recommended, by some, agaioft the  
Herpes, and Tumors of the Face. *Dale.* . f

VULPECULA MARINA. The Sea Fox, otherwise cd-  
led, *Simia Marina,* or *Alopecias Oppiani.* This is a very l.tee.  
Fish, of the cetaceous kind, the Fat of which is esteem’d envoi-  
lient, and resolvent. . .

VULPES. Offic. Schrod. 53I2. Aldroy. de Quad. Digits  
I95: Raii Synop. A. I 77. Scinv. Quad, I33. Ind, Med. *sir.  
Jons* de Quad. 92. Charlt. Exer. I;. Gcln. de Quad. Digit.  
966. Mer. Pm. I67. THE FOX. χ

Adapted to medicinal Uses are the *Fat, Lungs, Liver, Gal!,:  
Mat, Skin, Bland, the whole Animal,* and ro *Dung.* The *Fat ’*is of use in Convulsions, Contractions, Tremblings, and the  
like Disorders; also, in-Pains of the Ears, Wounds os rhe  
Head, and an *Alopecia.* The *Lungs* are consolidating, and ahi-  
tergent, and therefore of Efficacy in Diseases of the Lungs,

and fnraitness of the Breast: The *Liver eA* a Fox is of use in  
hepatic and splenetic Cases ; the *Gall* cures a *Pterygium* of the  
eyes ; the *Spleen* removes a Hardness and Tumor of that Part;  
the *Skin,* with the Hair on it, is successfully wrapt aboutfuch  
Limbs as are refrigerated, or infested with arthritic Pains; the  
*Blood,* dry'd and triturated, cures the Stone in the Kidneys and  
Bladder; for which Purpose, it is said to be more effectual if  
taken recent: *The whole Fox,* or its Flesh, burnt,.is com-,  
mended for Disorders of the Breast: The Animal, hell'd in  
Water, or Oil, is a Remedy sor Affections of the Nerves, and  
therefore good in Contractions, and Pains of the Joints; and  
the *Dung,* in the last Place, clears the Skin from Asperities.  
*Dale,* from *Schrodcr. ..*

VULSELLA. The **fame as VOLSEI.LA. .- .**

VULSlO. Thss is sometimes us'd .to express a Convulsion,  
or Spasm. \* ... /

. VULTUR. Ossic. Schroff 5.324. Schw. *A.* 373. ..ΕιιΖ-  
*tur niger.* AldroV. Ornith.35. Gesn. de Aviso 707. Raii Or-  
nith.66. Ejusd. Synop. A. 9.. Jons de Avib. 7. *Vultur nigri-  
cans.* Charlt. Exet. 7I. *Viautour brun.* Bellon. des.Oyfe. 85.  
THEVULTURE. .....i-- .I...-: in. -

The Parts in use are, the *Fleso, Fat, Brain, Gall,* and *Dung.*The *Pless)* is esteem'd effectual in cephalic AffectionS;as the Epi-  
lepsy, *Hemicrania forest* the like; The Decoction of it is said to he  
good sor cutaneous Diseases; and the *Fat* in proper for the NerVeS:  
The *Erain* strengthens weak Heads.; *the Gall* is said to cure the  
Epilepsy, heing taken in Wine ; and *thc.Dung,* by itsnidorous  
Smell, to precipitate the Birth. *Dale from Schrodcr. .st*

VULVA. The Female *Pudendum.*

. VULVARIA.-. A-Name sor the *Chenopodium Foetidum.*..UVULA. SeePALATUM.

*Of an-exeesstue Extension of the* **UVULA. '**

. It sometimes happens, from Various Causes, that the *Uvula*swells, and extends itself to such a Degree, aS to descend al-  
most upon the Larynx, *at Afpera Arteria,' aena,* by that means,  
to cause a Difficulty not only os Respiration, but of Speech, and  
Deglutition. Is the Disorder he recent, and excited by an In-  
fammatinn, as may he known from the Pain attended with a  
Heat and Redness, it will he proper to treat it with Gargari-  
nations and Injections, endu'd with a lenient and resolvent vir-  
tne, such as simple Water min'd with a littie Spirit of Wine,  
or a Decoction os the Funguses of the Elder-tree, Barley-water,  
a Decoction of the Flowers os the *Ligusirumplas* Mallows,mix'd  
with a small Quantity os Nitre, Alum, or *Sal Ammoniac :* With  
these must he used internal, temperating Medicines ; andtf the  
' Inflammation he more violent than ordinary. Blond is to be taken  
away from the Arm or Foot, the Belly is to he evacuated, and  
Clysters are to be administer'd, in order to prevent a Quinsy,  
or Inflammation of the *Fauces,* which may prove of Veryperni-  
cions Consequence: Scarifications, also, are not improper in  
this Case; for I have long fince found them of Service, .when  
try'd upon myself, aS well as others, not only by allaying, but  
preventing an Inflammation os the *Uvula.* If the Swelling of  
the *Uvula* be occasion'd by a pituitous Humour, it is generally  
white, and Void os all Pain and Inflammation. In this Case  
there is nothing hetter than the .use os a Gargarism of warm  
Spirit of Wine, temper'd with a littie Water, or one prepar'd  
os some astringent Decoction, as that os Roses, Flowers os the  
*Ligustrum,* Rinds os Pomgranates, and the like, mix'd with  
a little Spirit of Wine, or Spirit os *Sal Ammoniac :* But if the  
Disorder will not yield to these Remedies, we must take another  
Method for the Cure, or Digestion of the pituitous Matter;  
which is, to take some pounded Ginger, or Pepper, mix'd with  
an equal Quantity of Pomgranate-rinds, in Form of a Powder,  
or made up with Honey, and with a small Spoon, *Tab.* XXIL  
*Fig. N.* apply it to the diseased Part, not neglecting, how-  
ever, the use of internal Medicines, both purgative and di-  
gestive : Sometimes all these means prove os little Effect, and  
the affected *Uvula,* from a Redundance of the pituitous Mat-  
ter, becomes swell'd, and extended to fuch a Degree, as to hang  
down upon the Very *Afpera Artesia,* and, by that means, prove  
a considerable Impediment to Respiration, as well as Speech and  
. Deglutition. In this Case, the Use of Medicines is insignifi-

cant, and there remains no Remedy, but to separate as much of  
the *Uvula as* extends heyond its natural Dimensions. There  
ate several Ways of making this Separation : The first is, by  
Ligature ; and hecaufe this Way os Operation cannot he per-  
sormed merely by the Hand, there is a proper instrument con-  
trived for the Purpose, and represented *Tab.* XLII. *Fig. 6.* .from  
*Hildanus* and *Scultetui.* Here a thick Thread, *A,* is, by help

. of a pretty long Needle, *Fig. y.* drawn thro\* this hollow in-  
strument, so aS to make a Noose within the Ring *B,* thro' this  
Noose so much of the *Uvula* is depressed as is judged to he su-  
perfluous, and ,by drawing the Thread C,it comes under a strong.  
Constriction, or Ligature; This done, the instrument is with-  
drawn, and the Ligature left on the *Uvula,* and is to he strait-  
ened, now-and-then, every Day, till the lower Part of the  
*Uvula* falis off. But this Method, the’ ingenious enough, is  
too flow, and troublesome, as well to .the Patient as the Sur-

geon. A more expeditions Way is, first, to depress the  
Tongue with a flat Prohe, or Spatula, *Tab.* XXII. *Fig. P* or *R,*and then, with longScistars, to cut off the superfluous Part os  
the *Uvulas,* but Care is to he taken, in this Operation, that nd  
more not less of the *Uvula* he separated, than just as much as is  
required S :For if too small A Part he cut off, the Operation is  
both troublesome, and of little use to the Patient: On the Cory\*  
-trary, if too little he left, the Speech is injured. If the Sur-  
geon be notdexterous enough to hold the Spatula right, and, at  
the same time, to manage the Sciffars. as. exactly as he ought, the  
hest; Land , most commodious Method of. Operation, as it is  
esteemed by some, is, what is performed by help of an Instru-  
ment invented by a Peasant os *Norway,* in which Country this  
Disease, it seems, is Very frequent. *Bartholine* and *Scultetui*have giVen.us a prettyaccurate Descriptionos’this instruments  
A Knife, adapted to the Purpose, is fastened to a broad Iron  
Piste, perforated in its sore Part, 'in such a manner, that the  
Knife is impelled by a Spring, and cuts off the superfluous Part  
os the *Uvula.* The famous *Rau* has,. I: think," made some Al-  
terations in this Instrument *fseorTab.* XLII. *-.Fig.* 8.], so aS that  
the Spring iswantingbut theisuzestesheing extended,and depress’d  
through the Perforation *A,* as far as isreqstired, is, with the  
Knife *C,* by strongly depressing the Stick *B,* separated at one  
Stroked. In this Operation .the Instr umentis, by means os the  
Handles *D, D, D,* so held in the Mouth, as to depress the  
Tongue in the most convenient manner, and render the Use  
of a *Speculum Oris* unnecessary.' ' -: *s s* T... . . -

. The superfluous Part of the *Uvula* being thus cut off, it will  
he proper to let the Blood flow for a little while; and then, in  
order to stop the same, and to comfort rhe diseased Pars, it will  
he proper to gargarize with red Wine warm, or with Vinegar,  
or *Oxycras,* also, warm. .. If the Blood he nor, by this means,  
repressed, it is to be stopped, by an Application os burnt Alum,  
with the Spoon, *T.ab.* XXII. *Fig. N.* or, after the manner of  
the .Antients, with an Iron heated, but not to. he Degree of  
Redness, and held to the Place till the Blood stops: But when  
*the Uvula,,* as it sometimes happens, hesides its Intumescence,  
is, at the same time,, infested by some Venereal Con taginn, the  
Surgeon is not to put his whole Confidence in his Dexterity of  
Hand, but .to make use, also,'of proper Medicines, if he hopes  
to make a perfect and effectual Cure. *Hiister, Chirurg.*

UZeG. *Lyceum Indicum credicum Alpino.* Park. *Indicunt  
Alpino putatum.* J.B. *Lycium Indicum alterum.* C. Β.

This is A Shrub rising up with a Multitude os very strain  
Branches, three Cubits and more in Length, winch shoot forth  
firm, numerous, hard, and ligneous Roots, which run ob-  
liquely ; the Branches are furnished with many long and Very  
sharp Spines, some of which are cloathed with Leaves; about  
the Bases os the Spines grow four or more Leaves, of unequal  
Sizes, smaller and renderer than Olive-leaves, and not narrow'd  
into a Point, but rounded like Box-leaves; the Flowers are  
small, and numerous, not hellied, but from a pretty narrow.  
Tube gradually dilating, open at last into a labiated Figure, of  
a pleasant and-smiling Aspect; they have their inner Bosom  
tinctured with yellow, with some purple Spots where the Petals  
part; and in all other Parts have a Mixture of the Colour  
of the Hyacinth with the Violet, but far excel them, both  
in the rich and most grateful Fragrancy of their Smell, *vesun-  
gius.* These Flowers are succeeded by small black Fruit, re-  
sembling that of the *Ebulus,* smooth, and of a bitter and aftrin-  
gent Taste. *Pros.pcr. Alpinus, de Plantis AEgypti.*

Whether the Juice prepared of this Shrub be the *Lyceum In.,  
dicurn* of the Antients, may he more easily guessed, from the  
Characters of the Plant, than the Language or the *Egyptians,  
as Viflingius* observes.

*P. Alpinus* found is upon a Branch of **the** *Nile,* called *Calig,*ten Miles above *Alexandria.*

The Juice brought into *Egypt* from the neighbouring Parts of  
*Arabia* and *Ethiopia,* condensated in Bottles, has manifest Cha-  
racters of the *Lyceum Indicum,* says *Vesungius,* especially when  
it is rightly prepared; but *Alpinus* helieves the *Lyceum* in use  
among the *Egyptians,* and brought from *Arabia,* to he spurious;  
for it is hard, he says, and black on the Outside, like the Juice  
*of Acacia,* and, when broken, is of the Colour of Aloes on the  
Inside; is of a faint, tho' not unpleasant Smell, of a sweetish  
Taste, ashingent, but not at all bitter; viscous, and, when  
handled, sticks to the Fingers: For which Reason, he helieves it  
not to he the true *Lyceum,* especially since it has neither Bitter-  
ness, nor, when kindled in the Fire, yields a redish Spume, aS it  
is recorded by many of the true *Lycium.*

The *Egyptians* use this Juice sor all Sorts of Ulcere, particu-  
larly of the Mouth, Ears, Nostrils, Anus, and Intestines ; aS,  
also, for an HFemoptoe, Dysentery, and Diarrhoea, and for other  
Fluxes of the Belly and *Uterus.* Being anointed on any Part, it  
effectually secures it from a Flux of Humours.

There is, in the *German* Ephemerides, *An.* **I3.** *Obs.* **I.** *p.* q,  
**IO, I I.** a Method os preparing *Lycium Indicum* from a Species  
*of Acacia. Raii Hist. Plant.*

UZIFIR. Cinnabar. *Rulandus. Usisur,* **is the** same.



AA GENBOOM. A Name-for the- *Lipidecar.  
ptdendron, folia saligna late, -caule purpurascente.*

- - -WAGA H. M. A siliqubussinianiTree,-with  
';a tetrapetalous, stellated FIower, and-stat Pods  
spree Inches in length. ' It is very like the *Intstagihat* with-  
nut Spines, and ctimbsabout high Treed’ -The Pods are-two  
Inches in Breadth, thin and very flat, when dried of a reddish  
Colour, and have a Cortex’ of a Stiow-white Colour on the  
Insider \* The Beans are astringent, bitter, round, and sinooth,  
a little flatfish, lying in 'a transverse) Position, with’ respect to  
theTed, and of f green'inclining to a Chesnut Colour.

It is ah Ever-green,, and grows in the thick Woods of *Won.  
rapeuli,* and other Parts' *of Malabar. = - . )*

The Juice of this Tree,together with Lemons, and green  
Tuimeric, boiled for a considerable.Time in Oil of the Cocoal  
Nut, is good to anoint for the Leprosy . it is of great Use *al-  
so* in inveterate Ulcers. *Raii Hist .Plant.* I766.

-'WAMCABEC *Infulae Marognamae* De Laet. The Name  
of a Tree resembling an Apple-tree; The Fruit is yellow ;  
the Kernels are acrimonious, and; therefore, ' not' eatable.  
*Pali Histri Plant'.* " ' "7 ε

- WARICORAMARI FRUCTUS. The Fruit ofthe  
*tVariceramar.* The Name of a Fruit, said to grow, near the  
- River *Arriwasulum* no Use in Medicine.. *-Rail Hist..Plane.*

WARNAS. ‘Vinegar of the Philosophers. *Pidandus.*

t WATTA-TALI. The Name of a Tree which.yrows  
in *Malabar.* The Leaves bruised and insured together with  
greeni Tobacco and Rice, are said to cure inveterate and ver-  
minose Ulcers. Of the same: helled in Water, Bathe are pre;

pared, said-to he gond against chilly Fevers.- Of the Flow,  
and Emit corniced, tied inSt Rag, and holled in Woman  
Milk, an Errhine.is- made, , which is recommended in the  
fane Fevers. *Raii Hisp, Plant.*

WELLIA TAGERA H. M. *A* filiquous’Plant of *Malum  
bar,* with a penta petalous Flower, and long fiat Pods, with  
tranfveise Partitions between the contained Seeds. It grows .  
to the ordinary Heigbth of a Man, wish a Stem as big as a  
Man’s.Arrns and'is transplanted from Woods into Gardens,  
only -on Account of its Beauty ; it is an-Ever-green.

All the Parts of this Plant, the Root excepted, are exhi-  
bited with an- Addition ofCummin, white Sugar; and Milk,  
against a virulent Gonorrhaea. The Leaves boiled in Cows  
Milkeor-ofed in Baths, expel the Gout. -"The Bark triturated  
with Sugarand Water is proper in the Diabetes.The Bark of -  
the Root, and green Saffron mixed with Milk, give Relief,  
under the nodous Gout, called by the *Madabriam, Sonida  
badda. Raii Hist. Plant.* υ, ... ,

- ’WINTERANUS CORTEX. See'CoaTEx WIKTS-  
**B.ANUS. 1 -** / Λ -

W.1SANCK. A Name for the ApocvrsUM SyRjA-

**CUM. ‘ .**

WISMAT; - *Restandus* explains this, *Liprofum, rum.tracta-  
bile, vol rnalleabile, rude stamium.*

- WITTEBOOM. 'The *Dutch* NarQSfor the *Conocarpo-  
dendron, foliis argentcis, sericeis, laiistirnis.*

WURTZII UNGUENTUM FUSCUM.' This is an  
Ointment invented by *Fella Wurtzen,* not unlike the *Umguene  
tumAEgypstacum,* and of-much the same Virtues.



XAGUA MARTYR1S *Nuremberg.* A Kind *A In.  
dian* papyriferous Tree. The Emit is said to, fatten  
Swine.

XALXOCH1LT. A Name for the.GUAjAvA.  
XANTHIUM. See Bardana Minor. ’

XANTHOBALANUS. The fame as CIIRYsoBALA-

NUs. Ν. *Myrepsps,* Sect. I'. C. 349.

XANXUS. A large Sea Shell, found near *Ceylon,* like  
those with which Tritons are painted. It is, like, other Te-  
stacea, alcaline and'absorbent.

XELSES. The Name of a Star in *Paracelsas,* which,  
he says, shines upwards, hut not downwards.

XENEXTON. An Amulet worn at. the Neck as a  
Preservative against the Plague. *'lPdracelsas. '* ltrs, allo,  
wrote *Xeneihton. ' -'so* ῖ , „ ......

XENINEPHIDEL .Certain imaginary Spirits' mentioned  
by the Adepts, said to delight in discovering the .occult Pro-  
perties of Things to Men. .

XENOPHILI ANTIDOTUS. The Name of an An-  
tidote described by *Actius,* Tetrabib. . 3. Senn. 3. C- *igi*

XENOP REPES, Aedpwh. *Hippocrates,* in his Treatise  
of Fractures, uses this Word, to express, unofual, uncommon,  
or foreign.

XERANTHEMUM.

The Characters are ;

The Root is fibrous and annual; the Leaves are some-  
what hoary, refernble those of the Olive-tree, and are disposed  
in alternate Order. The Calyx is squamous, smooth, ssiver-  
colomid,. and consists of a quadruple or quintuple. Series of  
Scales lying' one upon another. The Flowers are dry, con-  
sisting of fiat Brasses», barren, destitute of Ovary or Stamina,  
rigid, cufpidated, with a flofcolous Dish, whole Florets are  
.of the same Composition. The Seeds here a. foliaceous  
Head. . \_

*Bcerhaave* mentions seven Sorts of *Xeranthemum,* which  
are, V- " -

I. Xeranthemum ; store simplici, purpureo, majore. Hi.  
*Li Jacea, Olea folio, capitulis stmplicibus,* C. B. P. 27 a.  
*Ptarmica Aastriaca,* Dnd. p. 7 IO.

2. Xeranthemum; flore pleno, purpureo, maiore. Hi L.

3. Xeranthemum ; -flore simplici; albc-Η. L.

4. Xeranthemum ; flore pleno, albo. Hi L.

5. Xeranthemum; flore simplici, purpureo, . minore, *T.*

499. *Jacta, Oleae folio, minerestore,* C.jB.P. 272.-

6. Xeranthemum; capitulo variegato. *Jacta, folia alea,  
capite variegato.* SheI.

7. Xeranthemum ; flore purpureo, simplici, minimo, se-  
mine maximo. *H. L. Fscr- y.act. Boerh. Ind. Alt. Piant.*

*Xeranthemum* is from ξηρὴς *(Viros)* dry, ’and «τθος *(Anthol)*a Flower, that is to fay; a dry Flower. *Clusais* calls it *Ptar-  
mica,* - not hecaufe it provokes Sneezing, but because it has -  
some finall Resemblance of the *Ptarmica* of *'Dodonaeus.* It is  
commonly called *Immortalis Herba,* the immortal Heth, be-  
cause its Flower may he preserved many Years, as .consisting  
of rigid Bratstere, which found like so many thin Plates of  
Metal. The Virtues of this Plant in Meolcine are unknown.  
*Hist. Plant, ascrept. Boerhaave.*

XERAPH1UM. The Name of a drying Topic described  
by *Aecius.* Tetrubib. 4. Serm. a. C. 13.

XERASIA. ξννρασία, from οἱρὴς, dry. A Species of *Ale.  
picia,* consisting in a Dryness of the. Hairs, for want of due  
Nutriment. '

XERION. ἐνρίον. Ailry Medicine redeced to Powder :  
The fame, as *Catapdscnd. - - ~ .*

XEROCOLLYRIUM. A dry *Collyrium. "*

XEROMYRON. A Composition of dry Aromaticste-  
duced to Powder; called,.however improperly, a dry Oint-  
ment. \_

‘ XEROPHTHALMIA: It is the same as ScLERoSH-  
**THALMIA.**

XEROTRISIA. ῆς,ρῥΐρφα. from giuri, dry, and τρίβω,  
to rub ; a dry Friction.

XESTES. ξίστης. A Sextary.

r xIPHIuM.

The Characters are I \_ '

It has the Emit and Flower of the *Iris,* with a bulbous  
Roon . -

*Boerhaave* mentions eleven Sons of *Sahium,* which are ;

I. Xiphium; Persicum; praecox; flore variegato. T. 363.  
*Ices, bulbofa, Persica,* Parin Paratio I72.

2. Xiphium ; angustifolium ; flore albo; labio inferiori  
\* rictus aureo. *Irio bulbofa* ΙΠ. *sive vcrsicolor.* CluC H. 2II.

3, Xiphium; angustifolium ; flore variegato, petalis repan-  
dis flavis cum macula aurea; petalis incumbentibus pallide  
caerulescentibus, petalis erectis pallide caeruleseentibus cum li-  
turis Violaceis.

4 Xiphium ; angustifolium ; flore ex violaceo-purpureo  
& caeruleo pallescente variegato notata.

5. Xiphium; angustifolium ; flore luteo, inodora T. 364.  
*Iris, bulbofa, lutea.* J. B. 2. 705.

6. Xiphium ; angustifolium, caeruleo-violaceum; non odo-  
rum. *Iris, bulbofa, flore caeruleo et purpureo.* Η. Eysh fiesta  
4. F. Io. Fig. i.

7. Xiphium ; angustifolium; petalis repandis aureis 7. peta-  
lis incumbentibus pallide flavis; bifidis, erectis Vero ex caeru-  
leo & pallido striatis. . . ss.

8. Xiphium; angustifolium ; petalis repandis ex Viridi fer-  
rugineis, petalis incumbentibus Viete caeruleis, bifidis erectis  
vero Violaceis.

9. Xiphium; angustifolium; caeruleo-violaceum ; non O-  
dorum ; majus.

*10.* xiphium ; angustifolium ; petalis repandis albis; ere-  
ctis dilute caeruleis ; incumhentibus pallide aerulescentibus.

II. Xiphium ; angustifolium.; petalis repandis aureis ; in-  
cumbentibus pallide flavis, erectis diluto caeruleis. *Boerh. Ind.  
Alt. Plant.*

The Name is from the *Greek isapr CXiphos)* or ξιφίδιον *scXsu  
phidion)* a small two-edged Sword with a sharp Point, to winch  
its Leaves have a Resemblance; so that the *Greek* Name  
*Xipheum,* is the same in Sense with the *Latin Gladiolus.*

The Plant is os an acrimonious Quality like the *Gladiolus.  
Hist. Plant, afcript. Becrhaaue.*

. XIPHION, is also a Name for the *Gladiolus; floribus uno  
versu dispositis', mayor ;siociscolore purpureo rubente.*

XIPHOEIDeS. ξιφβίιδός. AD Epithet for the Ensiform  
Cartilage of the Sternum. ' . .

XlPHYDRIA. Limpins. OribasiuS, Collect. Medic.  
L. 2. C. 58. mentions them aS the Product of *AEgyfit.*

XIR. Mercury. *Theatrum Chymicum.* Vol 5.

XISINUM. Vinegar. *Rulandus.*

XOCHINACAZTLIS, *feu Flos Auriculae,* Hern. 3o.  
- Raii Hist. 2. I67I. *Fructus oblongus, cineraceus, acidulus,*C. B. P. 4O6. *Orejuelas seu Orichelas,* Hughes. z

It grows in *New Spain,* and the Flower enters the Com-  
position os Chocolate, in order to give it a fine Smell, and  
a pleasant Taste.

The Plant is hot and dry, discusses Flatulences, attenu-  
ates Phlegm, and heats and strengthens a 'weak and cold  
Stomach.

XOCHIOCOTZO QUANHUITD The same as *Lsu  
quidambra.* See AMBRA.

XOCOXOCHITL, *feu Piper Torvafci* Hernandez. A  
Name for the *Cassia Caryephyllata.* See **CARYOPHYLLUS.**

XYLAGIUM. A Name for the *Lignum Sanctum.* See  
**GUA1ACUM. :.**

XYLOALOE. Aloes Word. See **AGALLOCHUM.**

XYLOBALSAMUM. See **BALSAMUM.**

XYLOCASIA. The same as CASIA LIGNEA. See  
**CINNAMONUM.**

XYLOCINNAMOMUM. The Wood of the Cinna-  
mon Tree.

XYLOCOCCA. ξυλώακκα. The internal Grains of the  
Fruit of the Carob Tree. *N. Myrepfus.* Secti I. Co 6.

XYLOCOLLA. The same as **TAUROcoLLA.**

XYLOGUAIACUM. Guaiacum Wood.

XYLOEBENUM. Ebony Wood.

XYLON.

The Characters are;

It has the Leaves of the *Malva or Aleea.* The Flower is  
monopetalous. Bell-shaped, open, multifid, adorned with a  
pyramidal staminous Tuhe. The Fruit is divided into four  
or more Celis, gaping at the Top» and full of Seeds covered  
with Cotton.

*Boerhaave* mentions three Sorts of *Xylon,* which are ;

. i. Xylon ; arboreum. *J. B.* I. 346. *Gessepium, arboreum,  
Gotnems.egiar.* Alp. .Egypt. 2. 38.

This is a shrubby Plant, cultivated in some Gardens in AE-  
*Slept,* and differs from the herbaceous Goflypium only in Tall-  
ness, and the Figures of its Trunk, Branches and Leaves.  
It grows to the Heighth of ten Cubits, and has a hard and  
ligneous Trunk and Branches. The *AEgyptian* Surgeons  
make their Tents of the Cotton which this Tree produces,  
instead of Lins, which is in Ufe among us, for the Cure of  
Wounds and Ulcers, for they ute no Lint : They employ  
it, also, as we do Lint, in stopping an Haemorrhage. They  
also make Very frequent Use os the Mucilage of the Seeds

in all burning Fevers, and Poisons, which threaten an Erosion  
of the Stomach and Intestines, and for Coughs proceeding ’  
from Distillations of acrid and salt Humours. *Prosper Alpinus\_  
de Medicina Aigyptiorum, Fd.* 2. *p.* 38.

2. Xylon ; five Goflypium Herbaceum. See BoMBAX.

3. Xylon; five Goflypium ex Cypro. *Poli. Boerh. Ind.  
alt. Plant.*

It has the Virtues of the *Alcea* and *Althaea.* The Seeds are  
Very serviceable in Diseases of the Breast, and in Vinlent Coughs,  
and promote Expectoration. *Hist. Plant, asiript. Becrhaaue.*

XYLOSTEUM.. . mi s.

The Characters are ;

,, The End of the Pedicle forms a Calyx, consisting of two  
larger and sour shorter Leaves, two of which latter are inter-  
posed, one on each Side, hetween the greater. In this Ca-  
lyx grow two round Ovaries, which have their Apex adorned  
with a quinquesid Calycle, and shoot out from the Centre *os*their Top a long Tuhe furnished with a globous Apex. \_. The  
Flower grows on the Apex os the Ovary within the Calyx;  
and .in monopetalous, oblong, tubulous,- Bell-shaped, quinque-  
fid, expanded, and sumished with five Stamina, which grows  
out of the Inside of the tubulous Part os the Flower. .

*Boerhaave* mentions but one Sort os this Plant, which is ; (*i.* Xylosteum ; Pyrenaicum. T. 6Oq. *Chamacerasus, Py-  
renaica, folio 01ea,fructu gemina, rubro. Grossularia simile.*Schol. Bot. Par ? H. R. D. *Boerh. Ind. alt. Plant.*

It is called *Xylosteum* from ξύλου, *(Xylon)* Wood, and *arise,  
(Osteon)* a Bone, hecaufe its Wood in Whiteness and Hard-  
ness resembles a Bone. *Hist. Plant, afcript. Boerhaave.*

There is no Mention made of its Virtues.

**XYLOSTEUM.** A Name for the *Chamacerasus; Al-  
pinafructu gemino, rubro; duobus punctis nctato,* and also for  
the *Chamacerasus ; dumetorum; fructu gemino, rubro.*

XYMPATHESIS. Sympathy.

XYMPHYSI6. The same as SYMPHYSIS.

. XYNAGOGEES. ξυναγβγέις. The Sphincter Muscles.

XYNCLeRLE. ξυγκληρία», of ξυν, Attice for *ceste,* and  
κόἄρος, a Preposition importing some Tye or Union, State,  
Conditiori, are Concerts or Agreements in Circumstances.  
Thus ξυ/κληρία παθημάτων, 6 *Epfd. Sect.* 7. *Aph.* 2. are Con-  
junctions or Complications of morhous Affections, and here  
spoken of a Cough, in Conjunction with a QIrinfey and Peri-  
pneumony. Others understand by ξυΐκληρίικε, in that Place,  
no more than a fortuitous Concourse of Affections, which hap-  
pened in the same Manner as if they were appointed to meet  
together by the Chance, *n sadqui,* " of a Lot/'  
- XYNERISIS. ξυ,ίρεεσκ, of ξυν for σὑε, and έρετδομαι, to  
establish, fix firmly, to rest upon; is a sum Cohesion  
or Connexion. Thus ξυιέρεισκ όδκταν, 7 *Epid,* is a firm Con-,  
nexion, or whet we call clenching of the Teeth, exprefled  
5 *Epid,* by όδῶίων σέντριψις, *{siyntripsu}* Contrition,. or rather  
Consertion of the Teeth.' The Verb ξυνεριίδομαι is used in **the**same Sense, *Lib.* 2. «dur γυναικ. *Lib. de Morb. Sacro,* and  
ξυνιρείδω in *Coac.* 235. where, for συοιρίζἵιν, I read ξυνερείοἳιν,  
*Foesius.*

XYRIS, *Iris fartidae, spatula foetida,* Ossic. *Spatulaserti~  
da,eplerifque Xyris,* J. B. 2. 73I. *Xyris,* Get. 53..Emac.  
60. Raii Hist 2. I Igo. *Xyris sive spatula foetida.* Park.  
Theat. 256. *Gladiolus scrtidas,* Co B. P. 3o. *Irti silvestris  
quum Xyrim vocant, Raii Synop.* 3. 375. *Iris foetidissima seu  
Xyris,* Tourn. Inst. 360. STINKING GLADDON..

The Root of Gladwyn, 'which is a Species of wild Iris, or  
Flower de Luce, is thick and spreading in the Earth, with  
many Fibres, from which spring many Leaves, longer, nar-  
rower, and sharper pointed than the common Flower de Luce,  
of a Very strong Smell : The Stalk arises from among the  
Middle of the Leaves, 'smooth and round, and bearing two  
or three Flowers on the Tops, included in thin Skins or  
Husks before they are opened, each Flower consisting os nine  
Leaves, whereof the three Falis are os a dull Colour, full  
os Purple Veins ; the Arches are of the same dull Colour,  
and the Uprights are os a whitish Purple towards the Top.  
They are smaller than most other Flower de Luces, and are  
succeeded by large, somewhat triangular Pods, which, when  
ripe, burst open into three Parts, like Pinnies, shewing the  
roundish Seed. It grows in Hedges, Thickets and Bushes,  
particularly by *Jock Straw's Castle* heyond *Isiington,* and in  
the Back Road or Lane which goes from the End os *Newing-  
ton* to *Southgate,* and flowers in *June.* The Root only is  
used, and but seldom.

It is reckoned by some a Specific against the King's Evil  
and scrophulouS Swellings, both given invYardly, and applied  
outwardly. It is said likewise to provoke Urine, and to he  
useful in hysterick Disorders. *Mellen's Bot. Qjs.*

The Root smelis like the *Cotula,* or Buggs, but is endued  
with such Virtue and Acrimony, as to render it, as we are  
assured by *Dioscoridet,* effectual in Wounds of the Head,  
and Fractures, and in drawing out Splinters, 2nd all Kinds of

missile Weapons without Pain. Made into a Composition,  
with a third Pa.t of *Flos Airis,* a fifth Part of the Root of  
Centaury, and with Honey, and applied with Vinegar, it  
cures Tumours and Inflammations. The Root bruised in  
Passam is taken for Convulsions, Ruptures, Sciatica, Stran-  
gnry, and Fluxes. The Weight of three Oboli of the Seed  
taken in Wine, is a most effectual Medicine to provoke U-  
rine ; the same drank in Vinegar, wastes and consumes the  
Spleen.

Tris taken for a Looseness, in the same Manner as *Rha..  
barbarum* and *Afarum,* and cures the Disease by diverting the  
morbific Matter, and discharging it by Urine. It is usual  
with the poorer Sort and Rustics in *Somersetshire,* to take

the Decoction, Or even Infusion of the Root, aster the Mar-  
Her of Iris, for a Purge.

I should he loth, says *Ju Bauhine,* to use fo Very hot a  
Root for all Kinds of Fluxes of the Belly, perhaps its Use  
might he tolerated in a pituitous Flux. The Root taken in-  
wardly is of extraordinary Service in the Scrophula, says Dr.  
*Needhum.*

The Powder of the dry\*d Roots is a very useful Remedy in  
the hysteric Passion, Orthopnoea, and hypochondriac Affecti-  
ons. *D. BatJvle, Raii Hist. Plant.*

XYSMA. ξυνμα. A Strigment : Any Thing scraped off  
from a Body ; from Aw, to scrape.

XYSTER, ξυναίρ. A Lenticular, or Raspatory.

XYSTOS.' ξυνάς. Scrap'd Lint.



ARIN. *Flos AEris. Rulandus.* See .ZEs.

YAWS.

The *Yawsis* a Distemper epidemical, orrather en-  
demical to *Guinea,* and the hotter Climates in *Africa,*seldom sassing to attack each Individual os both Sexes one Time

or other in their Lives, het most commonly in Childhood or  
Youth ; it makes its first Appearance in littie Spots on the Cu-  
tide, level or smooth with the Skin, at first no largerthan the  
Point os a Pin, which increase daily; and hecome protuberant  
-like Pimples ; soon aster the Cuticle frets off, and then, instead  
of finding *Pus* or *Lchor* in this small Tumor, you only find  
'white Sloughs or *Sordes,* under which is a small red *Fungus*growing out os the Cofer, increasing gradually to Very different  
Magnitudes, some less than the smallest Wood-strawberry,  
some as big as a Rhsp.herry, and others eVen exceeding in  
"Bigness the largest Mulberries, which Berries they Very much  
resemble, being-knobbed as they are. While they are coming  
to this Height, the black Nair that grows out os the Parts  
now covered with theyinus, changes - gradually to white ; I  
do not mean appears white by the *lchor* of the *Taws* drying  
upon it, as all the Skin does towards the End of this Distem-  
per, but the Substance of the Hain itself is changed from black  
to a transparent white, like the white Hairs of old Men.

I think it impossible to calculate the exact Time that the  
Distemper requires to go through these different *Stadia t* Some  
Constitutions may he more adapted to produce this nauseous  
Distemper, or to receive it from others by Infection ; nay the  
same Constitution may he apt to receive or produce it at  
sone Time more than at another; and if it is produced by  
external Infection, the Degree and Quantity of Infection may  
hasten or retard the Symptoms. This I know by Experience,  
that Negroes who were lusty, in good Plight, and had full  
Nourishment allowed them, in a Month after discovering the  
white Spots, have had several *Yanus* as big as a Mulberry ;  
and in Negroes that were low in Flesh, and have had but a  
poor scanty Diet, in three Months Time none of the *Yaws*have exceeded a common Straw-berry in Size.

The *Yaws* appear indeterminately on all the Parts of the  
Body, but the most and biggest are generally on the Groins,  
about.the Privities andafrus, in the Armpits and Face. When  
the *Taws* are Very large, they are few in Number, and when  
many in Number, they are small in Sine. All this Time the  
Patient is in good Health, does not lose his Appetite, and  
feems to have no other Uneasiness but what the Nastiness of  
the Sores occasion, for they are not painful except they are  
touched too roughly. This is the natural Appearance of the  
Distemper, when left to itself, and in this State it will continue  
.a long Time, without any sensible Alteration; and what  
might he the Consequence in Time, I cannot pretend th tell  
you, whether it might not consume itself, and cure as soon  
as the peccant Matter is thrown entirely out and exhausted :  
Or, whether these *Funguses* might not turn corrosive Ulcers,  
and at the same Time affect the Bones with *Nodes, Exostoses*' and *Caries,* as it does when the Cure is attempted without  
Success : Or, whether it might not alter the Diameter of all  
or some of the Excretory Ducts of the miliary Glands, and  
.adapt them to excrete a Fluid more viscid than the natural  
Sweat, or insensible Transpiration, which drying on the Skin  
would render the Patient scorbutick or scabby, that is, leprous.  
This I imagine to he the most probable Conjecture, and that  
as soon aS the *Funguses* are dry, the Infection is exhausted.  
This Distemper being infectious, it is the Business of the Ne-  
gro's Master to seek for a Cure, as well for the Sake of  
the Negro affected, as for himself. Family, and other Ne-

groes on the Estate, that have not had It before, who are in  
danger of being infected.

T he *Yaws* do not prove often dangerous, if the Cure is un-  
dertaken skillfully ata proper Time, and the Patient has not  
undergone any Course of Physic for them before ; but if the  
Patient has been once salivated, or taken any Quantity of Mer-  
cury, and the Skin once cleared, and they appear again, they '  
are always difficult to cure, and often incurable; and indeed I  
am of Opinion, that the following Train of terrible Symp-  
toms owe their Original as much to the untimely and unfkil-  
fulUseos the Mercury, as to the Distemper itself I am  
induced to this Belief by these Reasons:

All the Negroes that have had the *Yaws in Africa,* and  
have been cured there, never have them again here, or any  
bad Symptom that seems to proceed from them ; and in the  
Course of nine Years Practice here, I never had any Patient  
that relapsed when I. was first employed, nor ever lost one,  
tho\* I have cured Numhers of both Sexes, and of all Ages.  
Nor is it to he admired that the *Africans* should understand  
their Country Distemper hetter than we *Europeans*; they,  
probably have had above three thousand Years to gain Experi-  
ence of it by Observation, we have not had one hundred  
Years. 2 :

- AS soon as a Negrois perceived to have the *Yaws* coming  
out upon him, he must he removed to a House by himself,  
or, if you cannot he sure whether it is the *Taws Ast* not,  
shut him up seven Days, and look upon him again as the  
fetus are commanded to do with their Lepers, *Levit,* xiii.  
and in that Time you may commonly he certain. As soon  
as you are convinced that the Eruptions are really the *Yaws i*

Take Flowers *os* Sulphur, one Scruple; Camphire diflbl-  
Ved in Spirit os Wine, five Grains ; *Vinice* Treacle  
one Dram, and of Syrup os Saffron a sufficient Quantity  
to make a Bolus, which is to he taken every Night at  
Bed-time.

Repeat this Bolus every Night for two or three Weeks, or  
till the *Yaws* are at their Height, winch is easily discovered  
by their heing at a Stand, neither increasing in Size or.Num-  
her; then is the Time to throw your Patient into a gentie  
Salivation by Calomel, without any further Preparation of the  
Body. Give the Calomel in small Doses at a Time, that it  
may neither Vomit nor purge. I never exceeded five Grains  
at a Time tn Pill or Bolus, and repeated the Dose, once,  
twice. Or thrice a-day, as I found the Patient could bear it,  
and never designedly raised the Salivation to above a Quart  
spitting in twenty four Hours : Very often by the Time you  
have got the Salivation to this Height, all the *Taws* will he  
covered over with a dry scaly Crust or Scab, which in Patients  
that have been full os them, makes a Very terrible Figure.  
These Crusta or Scabs fall off daily in small white Scales, and  
in ten or twelve Days leave the Skin smooth and clean :  
Then I leave off giving any more Calomel, and let the Sali-  
vation go off gradually os itself. After the Salivation, swear  
them twice or thrice in a Frame or Chain with Spirit of  
Wine, and prescrihe the following Electuary:

Take of .Asithiops Mineral, an Ounce and an half. Gum  
Guajacum, half an Ounce ; *Vertice* T rearleand Conserve  
of red Roses, of each one Ounce ; Oil of Sassafras  
twenty Drops; and Syrup of Saffron a sufficient Quan-  
tity to make an Electuary. Let two Drams os this  
Preparation he taken Morning «nd Evening.

I likewise order them to drink the Decoction of Guaiacum  
and S.issairas. fermented with Syrup or Molasses,: sor their  
constant'Dtinlc,- while they take the Electuary, and to the  
continued ε sor a Week or a Fortnight aster the Electuary is  
cone. - .

‘.'Sometimes ifter'all the other *raves* are' fallen css, the rest  
of rhe Skin is olear, and the Salivation is over, there remarns  
one large *yaw,* high knobbed, red mid moist *i* this is- eddur  
rnooly called the *Master raw,* and has" cost many a Negro his  
Life,thy the Practitioners believingichat this required another  
and another: Salivation, io reality this requires no inore then  
being destroyed by a gentle Causticed mr mild: Esehoratic  
about an eiehth or tenth Part’ of an Inch lower then the  
Skin, and then it will cure up as *easy,* and as soon of-any  
other Ulcer of the fame Bigness and Figure. I commonly  
have used red Precipitate and burnt Alum, of each equal  
Parts, for my Efcharotio ; digested with yellow Basilicon one  
. Ounce, and red Precipitate one Dram ; and cicatriced with  
Lint pressed out of Spirit of Wine, and with the Vitriol  
Stone. - '

After the *ratus* are cured, some Patients are afflicted with  
Carbuncles in thcir Feet, which sometimes render them in- ’  
capable of walking, or if they do walk, it is with much  
Pain.

This Distemper feems to he owing intirely to the yawy  
Matter heing confined by the Hardness of the Cuticle in the  
Soles of their Feet, -by contioually walking barefooted Some-  
times the whole Sole of the Foot will he affected, and they  
cannot hear any touching it, and at other Times there is only  
one Spot, no bigger than an *English* Shilling, in Time.the  
Pain brings on an Infiarnmation and Suppuration, and the Pa-  
tient is eaiy; it feems to he cured, and often is fo, by the  
whole γιτωγ *Fungus* heing consumed hy the Suppuration... At  
other Times, in five or six Weeks, as the Skin hardens,  
the Pain, Inflammation, ίσο. begin again, and thus the Sym-  
ptorns go and return for Years, fill cither the *Fungus* is con-  
sumed by the frequent Suppurations, or destroyed by Art.  
The Planters and Negroes try *many Nastrums* for this Malady,  
hut the only effectual Method is by Bathing and Paring to de-  
.stroy the Cuticle, and then procced as in the *blaster sow.*The gentle Efcharoncs are to he preferred, especially.. here,  
and all imaginable Care is to he taken to avoid the. Tendons  
and *Periosteum, -i. ... . ; - . .... .. .....*

In Children under sox or seven Years old, who cannot he  
supposed to have Sense enough to go through a Sallvation, at  
the proper Time of falivaring, I begin to give them a Grain  
or two of Calomel in white Sugar once a-day, once in two  
Days, or once in three Days, so as only to keep their Mouths  
a little sore till the Yaws dry, and falsing off in white Scales,  
leave the Skin clean.. This succeeds always, het requires a  
longer Time than in Adults.

I have thrice had the Mother with her sucking Child un-  
der my Care for the *Yaws;* both Mother and Child were  
full, of them. Two of the Children I cured by curing their  
Mothers, without giving the Children any Medicine hut what  
they received from their Mothers in fucking their Milk j the  
third Child, who was both bigger and older than the sonnet  
two, when his Mother was well, his lbws were dry, and in  
one white Crust or Scab, but did not scale off, -and; I was  
obliged to finish his Cure with three or four final! Dofes-of  
Calomel, and a Course of AEthiops. I have been well in-  
formed, that even in Adults the AEthiops Mineral, given in  
large Doses for three or four Months, will make a perfect  
Cure: I never tried it, because it requires fo long a Time,  
and there is no trusting a Negro to tike his Medicines him-  
self, and the Planters neither care to lose then Labour, nor-to  
take the Trouble of attending them fo long; but! am con-  
vinced it would fuccced with Safety. *l...-*

Some may he surprised, that in my-Mercurial Course for  
this Distemper, I neither prepare the Body with blooding  
and purging hefore the Salivation, nor purge aster it. - As  
to the first, the Distemper is cutaneous, or rather the Skin  
is the natural emunolory by which the peccant Humour is  
.. thrown off in this Disease, by a very extraordinary and pre-  
ternatural Crisis- All that I mean by a preternatural Crisis  
is, that the Cause of this Distemper, like the Small-Pox, can  
never he concoctsd, fo as to go off by any of the natural Se-  
cretions ; and the Funguses here are as natural as the Pustules  
in the Small Pox ; for if you salivate your Patient hefore the  
*Yenvs* are at their Height, the best that you can excedi is their  
appearing again soon aster the Salivation : And what can he  
txpcctsd from Bleeding and Purging, het retarding the Yaws  
incoming out ro their hleight,. and probably carrying off  
, fume Fluids that are absolutely necessary to Nature in her  
Operation, or perhaps intimately mixing the Cause of this  
Distemper with the Fluitis, fo that an intire Separation ean  
never he procured after warm ?

Andae to purging after Salivation, if the morbifick Matter  
is inutclr .exhausted,;iwhat Occasion.is .there for.Purges?  
Can we propose carrying the Matter-loss by the intestines,  
which naturally Teems to,go, css-by the;. Yaws, .thetnselveLL  
Is it net more probable, that Come sinall Particles that are lest  
about the Skin, might be,-.washed off he the natural Perspin  
ration-and. Heat, which .by, purging may again he returned  
to the Blood, and ' create fresh Disorders hb Add to all .-this,  
rhe *Master rovj.* when in full Bloom, is merely topical, and  
easily cured by Topics, thol it contains .infection enough to  
produce the Yaws in'Hundreds by Inoculation.

; The venereal Disease and the *saves,* as tat as *I* have de.  
fcribed the latter, are very distindt Distempers, hut the Syrn-  
ptoins, in consequence of the *raws* ill-cured, coincide fo ex-  
actly with the Symptoms of an inveterate *French* Pox, and too  
promiscuous Copulation os the Negroes renders them fo liable  
to the venereal Taint, that in most Cases it will he very diffi-  
cult, if not impossible, to distinguish them, especially if the  
Patient has had both Distempers at any Tube in bis Line be-  
fore his present Complaints.

( The Symptoms are, violent Pains in the Limbs, even  
ι-noolumal,which with forne are attended with Nodesand Exo-  
stofes, in others with Ulcers, which render rhe Bones carious.  
I shell not pretend to determine which Distemper they helong  
to ; hut I think if a Parient, that never had any Symptoms  
of the venereal Disease, and had the *raws,* was to labour un-  
der thefe Symptoms, I should make no doubt os their pro-  
ceeding from the *Yurus,.* and more so, if these Symptoms  
did: not yield.to the Method of Cure that either palliates or  
cures the Pox, but rather irritates and increases them. I  
, shall give an Observation or two,. where I think the Cain pro.  
ceeded from the lines, and leave you to judge ior.youtseIL .

in the,Year r727 I was desired to look upon ayoung.Ne-  
gro Man, long afflicted with Ulcers in his right Leg-and'  
hoot, occasioned, as was supposed, by the *raws* bring ill-  
cured in his Child-hoed ; he seemed to he healthy in every  
other Respects and had undergone several Salivations and  
Courses of Physic unsuccessfully. I found two of the *meta-  
tarsal* Bones consumed, and the other three carious, the *Os  
Caleis,* and the lower *Epiphyses* of the *Tibia* were likewise ca-  
rious. I told the Lady to whom he belonged, that it was  
not in my Power to serve him; thefe Bones would rot, and  
not exfoliate, and is I proccedcd to Amputation, as they de-  
sired, I either should not he able to cure up the Stump, or  
if I did, he would not long sirrvive it : However, upon  
the continual Entreaties of both the Mistress and Negro, I  
at last condescended to amputate his Leg.

’ I bled and purged him twice or thrice, and made him an  
Issue in the opposite Leg, and one in each Arm. Some  
Days aster they were digested, I took off his Legat the ufual  
Place, and cured the Stump with all the Ease imaginable,  
and he was very glad *to* walk about on his wooden Leg. A-  
bout a Month after the Stump was perfectly cicatrized, he  
was seized with a Fever, and in a few Days aster, with a vi-  
olent Pain and inflammation in his Thigh and Knee of the am-  
rotated Leg , in a Fortnight after the Approach of the Fever,  
found a Fluctuation of Matter in his Ham, and opening it  
by incision, discharged a Pint of Matter at first. As the sin-  
posthume digested, the Fever wore off, and he recovered ; he  
is now alive and in Health, but keeps the Incision still open  
as an Issue.

A young Woman of a good Education came from *England*here, as a School-mistress to a Gentleman’s Daughter ; forne  
time aster,joe married an Overfeer, who gave her the *rasas,*as soon as she perceived the Distemper, heing much frightned,  
she went to a Planter, who used to cure a great many Negroes;  
there was then hut just *Taws* enough to show that. Distemper.  
He immediately shut her up in the Hct-houfe, (as they call it  
here), and that Night anointed her with the mercurial Uncti-  
on, according to *Serjeant Woseman’s* Proportion of the Quick-  
silver. This once anointing threw her into a deep Salivation,  
which lasted between six and seven Weeks Four Weeks of  
that Time sue could nor speak a Word, and the Saliva was  
deeply tinged, with Blood. After the Salivation she seemed  
perfectiy well, foon recovered her Strength, and engaged to  
go to *England* with a Gentleman's Lady as her Chamber-  
maid, and accordingly embarked in *Maj* or *Jure* 1728.

Scrne Weeks after she arrived in *Lindon,* the was at-  
tacked with violent Pains in her Arms and Legs, and applied  
herself to a Surgeon or Apothecary of her Acquaintance,  
who gave her many Medicines to no Purpose; for while the  
was under his Care, an Ulcer broke out in her Leg, and an-  
other in her Arm . Upon this her Money beginning to fast  
short, and thinking she had a better Chance oi gening well  
in a Country where her Distemper was known, than where  
they knew little of ir, (ar least those she applied ro) {he gor  
a Railage to this lstand again.

In *Angast tsolfo,* she Came to me begging my Assistance';  
she was really an Object of Charity, and I promised to give  
her my utmost Endeavours to serve her, without the least  
Prospect os Gain. The .Pains os her Limbs then continued  
severe, and she had five or six Ulcers in different Parts Of  
her Arms and Legs, all covered with an *Fiyperfarcosis.*

I told her she must he Very fincere in answering what Que-  
stions I ashed her; for as her Husband had given her the *Taws,*he might as well have given her the *venereal Difeafe,* and that  
1 should have more Hope of curing her, *if* the present Sym-  
ptoms proceeded from the last, than if they were the Conse-  
quence os the first. She told me she never had any Venereal  
Symptom in her Life, either hesore she had the *Yaws* or since,  
that a few Days before she discovered she had the *Faws,* her  
Huthand left her, and went to Sea, his first Profession ; that  
she had never seen him fince nor conversed criminally with any  
other Man. Her sincere and sensible Way of answering every  
Question I could a(k her, as they occurred to me, and the  
good Character she here among her Acquaintances, as well as  
Its heing her Interest to tell me the Truth, which she might  
without any Shame, convinced me she was fincere, and had  
no Design to deceive me, or ruin herfelfi

I immediately dressed the Ulcers with gentle Efcharotics  
to destroy **the** *Hypcrfarcosis,* and put her into a Course of  
*ssethieps,* with the Decoction os the Woods in. Lime-water,  
and gave her gentie Cathartics twice a Week with *Mer-  
curius Dulcis.* After a Month or six Weeks spent in this Me-  
thod, I found it had no Effect; for after the *Funguses* **were**consumed, the Ulcers seemed to digest a sew Days, and then  
gleeted again, and never in the least contracted. I then threw  
' her into a gentie Salivation with *Calomel,* designing to keep  
her long in it gently ; after she had' spit about a Quart a.day  
for four Weeks, finding it not answer, the Ulcers enlarging,  
**and** the Pains hecoming more Violent, I was resolved to let  
**it** go off: But at Night there fell a great Rain, and the Room  
not being tight in the Roof, was very wet. The next Day  
the Salivation stopt, and she had a Fever for a Fortnight,  
which at length went off, and lest her so weak and emaciated,  
that I was afraid she would die consumptive at last.

I then put her into the Milk-Diet,-, and ordered her a **De-**Coction os *Sarfaparilla* and *China* Roots, to he drunk for her  
Constant Drink,, with one third Milk. . in about eight or ten  
Weeks she recovered her Strength and Flush, and was advised  
\* hy some of her Neigh hours to use a Diet-drink that a certain  
Negro made, which they said had cured Numhers in her  
Case, after all other Means had failed. This **she** used **six**or seven Months, and dressed the Ulcers with Tincture ol  
Myrrh, bathing them every Dressing with warm Lime-water:  
But both they and her pains increased ; the Bones hecaine  
carious ί in every Ulcer, and she lingred under the Distemper  
to the End os the Year I734, andtliedi

. When I come to this Bland, it was the Practice here, as.  
soon as the *Yaws* appeared, to give the Patient 25 Drops of a  
Solution os two Drachms os *Mercur. sublimat, corrosiv. in*eight Ounces of strong Rum in the Moming, drinking warm .  
Water after every Puke, arid they would Vomit and spit all  
. the Forenoon. This Dose they repeated every Moming, in-  
creasing the Quantity five Drops every Dose they took, in A  
few Days they were seemingly well; But I observed that  
most that had been treated aster this manner, either broke out  
again, or in process of Time complained of gnawing Pains in  
their Bones, or were subject to Ulcers in several Parts of their  
Bodies. The Disease at its second Appearance was long .in  
coming to an Height, and required a longer Course, of Mer-  
curyto clear their Skin; and sometimes, aster all, they would  
relapse a third and fourth Time.

Of those Patients that were affected with Ulcers, ! have  
. succeeded with some by Salivation, *and long Courses of the  
AEthieps,* with the Decoction of the Woods in Lime-water,  
many I have heen foiled in, and never heen able to cure, but  
lest them, I think, rather worse than I found them, to linger  
out their Days miserably. Nor dan I pretend to better Suc-  
cess in those that have complained, of Pains in thein Bones,  
they have generally ended in *Nodes, Exostoses,* arid *Caries,*„ and the Bones of the Arms and Legs break without any exter-  
nal Violence.

A Negro Man, called *Amcrica,* helonging to Sir *William  
Stapleton,* aster having had the *Yaws,* complained of Pains in  
his Limbs, and had been useless in the Plantation for nigh  
twenty Years, most of his Bones heing full of *Nodes* or *Exo-  
stoses* and *Caries.* In the Year I733 his *Os humeri* broke in  
the Middle, without any external Accident. I reduced and  
dressed it as a common Fracture. About six Weeks aster,  
when the *Callas* ought to have been grown strong, I found  
the ends *os* the Bones move easily one on another ; and upon  
a gentle Extension of his Arm, the Ends os the Bones were  
a full Inch distant from each other. In about twelve Months  
more the *Os humeri* was consumed entirely within an Inch of  
the *Scapula,* and about the same Distance from the Elbow.  
Soon alter this he died tabid.

It is worth while to compare the Description oftho *Lepra\*  
s.y* among the *Jews in Chap.* xiii. of *Leviticus,* with the Ac-  
count which I have here given of the *Taws* ; the two Di-  
stampers seem to have a great Resemblance to each other. .Ε-  
*dinburgh Med. EJsuys. -*

Upon the Coast of *Antigua,* they have a large turbinatedἐν  
Shell, which they call the *Conch.* This they calcine, and give .  
to the Negroes and others labouring under .the Yaws, aSdin  
said, with great Success, insomuch that they esteem it an al-.  
most infallible Remedy ; but .in must he continued for some ;  
Time. ......

YAYAMA. A Name for the .ευμζΛσι; *aculeatus ; Fructu  
Pyramidicata ; carne aurea. - . '*

YC. Good. *Rulandus. '*

YEAR. A Medicine. *Rulandus.*

YDRARGYROS. Quicksilver. *Rulandus{*YECOTL. The same as **PALMA.PINUS.**Y ELION. A barbarous Word for *Yalos,* Glass.  
YERVA. The same aS **CONTRAYERVA.**

YERVA MORA. The *Spanisu* Name for the *Arbor bae..  
cis.er Canariensis, Syringce ceruleae foliis, purpurantibus vents,  
fructu monopyreno.* The Name of a Plant now very common  
in the *English* Gardens, but of no Use in Medicine.

YeTTUS. The Nameofanopake, hard Stone ofa red  
Colour, used instead of the *Lands Lydius,* or Touch Stone. -

YGROPISSOS. Liquid Pitch. I \*.

YLECH. See ILE.CH. Ἀ

YLEIDOS, orYLIADOS. See **ILIADUs.**

YLIASTER. The fame as Blaster. See ILiADUS.  
ΥΟΜΟ. YO6. or TN. Verdigrise. *Rulandus. si.*YPSILOGLOSSL A Name for the Muscles called *Ba.  
sioglesse. \*

YPSILOIDES OS. The *Os Hiyoidesf \_*

YQUETAIA. A Plant of *Brasil,* as yet but littie known,  
but whose Virtues are highly extolled by a *French* Surgeon  
settied in *Portugal,* who found it in *Brasil.* M. *Marchands.*with the Assistance of Mi *Hamberg,* has made a Discovery,  
that this rare and foreign Plant is every Day trodden under  
our Feet, and is no other than the *Scrophularia aquatica ma-  
yor.* They ascribe to the *Tquetaia* the Property of depriving  
Senna of its ill Taste and Smell without diminishing its Vir-  
tue, which would much facilitate the Use of a Cathartic so  
excellent on other Accounts. And the Very same Property is ‘  
sound to belong to the Species of *Scrophularia* hesore men-  
tioned, hut was unknown hesore it came to he, discovered by"  
the Resemblance os this Plant th the *Yqnetaia.* If this Bra-  
*silian* Plant proves as good as it is said to he for the Pleurisy  
and Apoplexy, possibly *dsC.Scrophularia* may carry on the Re-  
semblance thus far, and come in for an equal Share of the  
same Virtues. M. *Marchand* is persuaded that we bestow not  
enough os our Time in studying the Plants of our own Coun-‘  
try, which are often of as much Value lum Exotics, and that  
the Misfortune they lie Tinder in heing Natives of our sown  
Soil, and growing'among'as, has too much injured them in  
our Esteem; *Hisidire de FAcadedes Sciences tfioi.*

YRCUS. A male Cony, whose Blood is said by the Spa-  
girists to mollisy Glass, and Flints. *Dprinaus. 'Rulandas* calis  
it *Prius. - so . . :*

YRIDES, or YRIDET Orpiment. - *Putandus.*

YRIS.. Iron. *Pulanduso: ..-*YSAMBRA A Species' 'of Poison, prepared in *Spain cA.*

Hellebore ; or Hellebore, itself.

YSIR. The Powder, or Philosophers stone in a dry Form.  
YSOPUS. The Art of Separation in Chyinishy. *Rulandas.*YSPAR. The same aS YsiR. *Pallandas.*

YTZAMOTL. - A Very large *Indian* Tree, from which  
**a** Species of Manna is procured not unlike ours, but some-  
what harder, and more glutinous. *Raii Hist. Plant.*

' YUCCA. ssgniss '

The Characters are;' .....

The. Root is thick, and as it were Iuherous,' and the Pjant  
has the Appearance os a Tree. The Dedyes, resemble-those  
of the Aloe, are rigid, with an aculeated. Apex, narrow and  
long- The Flowers are rnonopetalons,TBen-shaped, divided  
into six Segments, naked,‘edisposed in long Spikes, with a  
single Row, and embracing inh Ovary, which becomes'a tri-  
capsular Fruit, aS in the Aloe. \_ τε

*Boerhaave* mentions her one Sort of *Tusca,* which is ;

Yucca; foliis Aloes, *Co B. P. gi.Eocrh. Ind. A. 2..* I32.

*Yucca,* Offic. *Yuccasieve Yucca Peruviana,* Ger. Emac. I 543.  
Raii Hist. 2. I20i.\_ *TuccAJiveJucca,* Park. Pared. ATA.  
INDIAN BREAD. '

It grows in a/Iwrsmsspontaneeufly, het is cultivated with  
us in Gardens.

It is of no Use in Medicine, and is even said to he poison-  
ous, tho' erroneousty, fince it conduces to the Sustentation of  
Lise, by affording a Sort of eatable Bread prepared of the  
Root reduced to a Flour. And the Root itself may he eaten  
with Safety, and even with Advantage, without any Preparation.

.X Ό 'T'v-

This Plant- is not the same aS’ that of whoso Root they  
make the Bread called *Cajsorvi,* commonly eaten in *America,*aS some have erroneoufly thought. *Raii Hist. Plant.*

'The thick and fleshy Root affords 4 soft Pulp, which some  
condemn as Poison, others affirm to he esculent. Consult  
the Historians. The recent Root eaten is poisonous, but he-  
ing bruised, then dried in the Suny affords a Bread common-  
ly eaten by the *Indians.* The Juice of the Root is so poison-  
ous that - they take Care to convey it deep under Ground,  
that it may not come to the Taste of r Animals,' to which it  
would certainly prove mortal. *Hist. Plant, as.cripo. Boerhaave.*

YXlR.. A good Medicine. - --- ......

YZTACTEX. *Caltcacotlnsieu virga nigra Saxorum.* Here  
nandez. . „ ’ - - --d.s

It has the ’ fibrous Root, of the Asarrim; and the Ffores,  
which appear, a great Part of them, above Ground, uro in  
Taste and Smell not inferior to the Nardus, and far superior  
to the common Valerian. The Leaves are serrated, , hhe  
those of the Nettle, the Stalks Purple, round and smooth,  
and four Cubits in Length, on the Tops os which the Flowers I  
grow, in Tufts, and are of A white Colour, inclining to a  
Purple. : . - ' 6 ' . . ' . ; ” . . .

It grows in rocky Places in *Brasil.* The Taste os this  
Plant: in-exactly like that of Anise. :.-A Pugli ofthe Root-  
bruised, and taken in Water or Wine'provokes Sweat in thofe  
who labour under any Pains, and mitigate the same in a sur-  
prising Manner. *Raii Hist. Plant.* .. .. ί



This Letter formerly stood as a Mark for several  
Sorts of Weights; Sometimes it signified an  
Ounce and half, and Very frequentiy stood for  
the eighth Part of an Ounce, that is, a Dram  
or half a Sicilicus; \* From an ancient Copper-plate it appears  
to be the Character of a *Duella,* or the third Part of an Ounce,

Consisting of eight Scruples. *EJsodius ad Scribonium Largum.*

ZZ. This double Letter among the ancient Physicinns  
used for *Myrrh, aflogin,* hecause ζμύρνη, Znyrnz, was aS much  
as σμάρνη, *Smyrna.* At present by zz is generally understood  
*Zingiber* or ‘ *Tdrrtiber. Gorraeus.*

ZAAR, with the *Arabians Rssu Persians,* signifies Poison,  
whence *Belnaar,* for *Bezoar,* is as much as to say, *the Lord*or *King of Poisons.* Castellus. su' ’ '

ZAARA in *Avicenna,* is a Name for the *Vigilia morbofa,.*or InorbouS Watching. ... - ’ .

ZACCHARUM, used by some for *Saccharum,* as is also  
*Zuccarum,* by *Salmasius de Manna et Saccharo.* . ' "s

ZACCON. Cast.' *Tjaccon Hiericuntea, FoliisOlece,"* Jo Β.  
*Prunus Hiericonthica, Polio angusto Spinosa* C. Bauh.

This is a Species os exotic Plum-tree, growing in the Plain  
*di Jericho,* about the Bigness ofan Orange-tree, with Leave;  
resembling those os an Olive-tree, hut smaller, - narrower,  
shore pointed, and very green. The Flowers ure white, . and  
the Fruit of the Bigness ofa Plums,'round, green at first, but.  
as they *grow* ripe,' yellow, and inclosing a Stone like that of  
aPlurn. From the Fruit they extract an Oil by "Expression, '  
which is good to discuss and resolve cold and Viscous Humours.  
TheTree is called *Zsaccom,* because itgrows near the Churches  
of *Tatcchceus* in the Plains of *fcricho.': Lcrnery des Drogues.*

ZACINTHA.sisq - EE. si' μάμά '

’ The Characters are 4. jo *ssc ~ '* . .. si χ "si

The Calyx is squamous?" Tho Ovary becomes a little stri-  
ated Head, -having, in the Middle an- erect Axis, -in-which  
grow a Multitude of Eggs, which,’ when ripe, sell off with  
their Involucrum or Coves,, and areasso many Capsules, eon-  
taming-small downy SeedS. *’ sis."''A' : ' '* τ

*fro or ha ave* mentions but one Sort os *Zacintha,* 'which is ;.  
‘ "Zacintha '; *safe* Cichoreum Vernicariiim. *Tournt- Inst, '.espis.  
Boerh. Indi Ac* 9o. *'Parle. Theat*ί 779Y *Tsacintha,'Ctchorearn  
verrucariurn, O&c.’' Cichoreum' ^errucarium five scsisiacintha.*Ger. Emac. 289. Rail Hist. .I. 255« *Cichoreurn urirruiarium.  
five 'Latintha, Hier aciis adnumcrandum,* J. B. 2. soI3. etlinin-  
*drilla verrucariafroliis Cichorei Viridioris, Ci* B. Ρ. I30.' dur-  
*hybus sive Enaivia lutea, Vcrrucaria,* Hist. Oxons 3. 53.  
WART SUCCORY. .. \_...E .'.,'su

T It grows Ipontaneoiifly and plentifully in some Parts of *scaly,*htsti's cultivated with us in Gardens,' and flowers Id*June,*The Plant sis diuretick and edulcorating, and allays" the irnmo-  
derate Heat-of the-Blood. *Monet1* It is reported to beof sur-  
prifing Virtue in removing'Warts, whether it be eaten In Sal-  
tads, or the Juice thereof rubbed' on them- Ran *Hist. Plant.* y

ZACYNTHIUS. A patronymic Epithet of liquids Bird-  
mein *Galen, de C. Me G. Lip. es.'Cap.* I3. δ᾽’ ' T

ZADURA.' a barbarous Name, but adopted by

the latter *Greebs,* Tor an exotic Root,?round and sinooth, and  
ofthe Colour of Ginger; it is imported from the *Tndics,* and  
is good against the Pestilence. *Gorrcus.*

ZAFFABeN. ' Putty;\* *'Rulandus.' '*

ZAFFRAMEN. Crocus. *Castellus. .. . ~*. ZAFRAN, ZAFFRAN. Signifies *Crocus* .'principally,  
and next to thatTZkeet *Rulandus'J ohnson. .*

ZAG Co Ferch Lopea. *Saga pogofetta.* Cluf. *Arbor farsu*

*nisicra* Clusi extot. *Arbor vasta in Regno Fans.arso* Polo  
Veneto. -

This is a large Tree, resembling the Palm-tree, and grow- ‘  
ing in the Ifland of *Ternate* near the Equator. At the Top  
it bears a round Head like a Cabbage, in the middle of which  
is a kind of farinaceous Substance, of which, the Inhabitants of-  
the Country make Bread.-

ZAHIR. An Arabic Name in *Avicenna,* for a kind of  
dysenteric Flux from the Intestinum'Rectum, attended with  
a tensive and abrasive- Sensation. - *Castellus si ; '~su susi*

- ZAIBAC, *siiaibach, Zaibar,* Names for Mercury,, or.  
Quicksilver. *Rulandus, Schroder. ‘ -*

ZAIDIR- Copper,, or Verdigrease. *Darn. Rulandus. so*

ZALE. *zkiai, in Mohs.cian de Morb. Mulier.* signifies a  
Storm. . . ;

"ZAMI.E. Are those Nuts of the Pine-tree which have  
loosen'd themselves, and unless they be gather'd will hurt the'  
rest, which are not yet Tully ripe. *Plin. Lisi.* I6. *Cap. ati. -*

ZANDIK. Aqua foliate. *RulandusI A dur .*

ZANTHOXYLUM. See **LIGNUM FLAVUM. ,** *l:*.ZAOCEL.*" Taxus. ^Rulandus.* \* . . i

; ZAPHARA, *Zaffara.* - The mineral Matter of Bismuth,  
whseh helongs to *Smalt* or *Arnansu,* which stains Glass with 4  
bluish "Colour, whence it is used by Potters for the fame  
Purpose. *Caefalpinus* call'd it a Stone, others Earth, and  
some *Lazurius ex Bifmulho. Castellus. ~ .so*

ZAPHlRUS. Corruptly for *Saphirus. ' 'si*

ZAPOTUM, *'Zapifer* Ts a Fruit of *New Spain in A-  
merica,* called by the *Spaniards Zapote bianco, os* the Shape  
and Size of a Quince, of an agreeable Taste, but not whole-  
some, and inclosing a Kernal which is said to be dangerous  
Poison. This Fruit grows on a large Tree called by the  
*Indians Cochitsupotl,* whose Leaves are like these os the  
Orange-tree, disposed by Threes at Intervals, and its Flowers  
Very small, and of a yellow Colour. '

' ZARAS. Gold. ” *Riilandus.* Y si "

ZARUTHAN. A hard and unequal Tumor of the  
Breast attended within Pain which sis'het quite continual,  
and Ya? burning. Heat much ' resembling that’ of a Cancer,  
whence it.is called *a spurious Cancers* The'Cause is supposed  
to he am ichorous, adust and acid Blood. *Castellusi* S

ZARDA.. A Disease in Horses. *Gaselelsus. '* 'si εἴ7

~ YZARIFU. Tin. *'\Rtilandus. \* Y ’ Yss . . .n..\*

ZANNA. ' A Medicinal Earth, sound in. that Part Os

*Armenia* which borders ~ oh \* *Cappadocia, siesta \* dry ing, of. a  
pale Colour, and Vepo easily dissolv'd iike'Calx. Tt.is called  
by Ihe Natives ΖσΓίσίν.' but in *Syria, giiarnacha.* .The  
Mountain whence it is taken is near the City called *Bagauona,*and the Territories ahout it *Agarra.* The Earth itself, with-  
out the Mixtures of any heterogeneous Substance, 'is supposed  
to-thesof'a drying Quality,ί without. Stimulation. But since  
there is no.Bedy perfectly free from Mixture, the Nature of  
what enters its Composition is to be examined, with respect  
to Gravity and Taste. Is there he any Astringency discover’d,  
its Coldness is to be estimated in Proportion to that Astrin-  
gency; if it appears to be acrimonious, its Heat is in Propor-  
tion to\* that Acrimony? With respect to Tightness, and Grlon  
Vity, the first shews a copious Mixture of Air throughout its  
whole Composition ; but the more ponderous it is found, the  
more of pure Earth it contains. Now it is the Property of  
Earth not. to be fused when subjected to the Fire, and to be  
easily dissolved into Clay when it is moistened with Water.  
*Ortbasius, Med. Collect. Lib.*

. ZARNACHA. - See the preceding Word.

r ZARNEG, \_Zar«es, *Zsarnich..* .Orpiment. *Rulandus,*ZARSA PARILLA. See **SARSA.PARILLA. .**

-. ^ZATANEA. . The. Flower of *Agnus Castus*; it is also  
called.ZUCO AJAR. *Rulandus, ... . .*

ZATA-HENDI *Raii.. ..A.* Named for, the *Majorana*; ro-  
*’tundifolia; siutellatu^exotica s z\_*

. ZAUHlRON- Oriental Crocus. - *Rulandus. .*

ZEA SPELTA. /Offic. Zea *sive SpeUa,* L B. 2. 4I2.  
Raii Hist. 2. I242. Ger. 62. Emac. 69.. *Zea dicoccos, five  
Spilta uulgo,* Park. Theat.. Li 22. *Zea dicoccos vei Zea  
mayor, .Co* B. Ρ. 22. Theat. 4I3. SPELT WHEAT.  
*. - 'Zea* is a Sorrsof Wheat with the Husk or Chaff;., so closely  
-adhering to it, as not to he separated by Threshing. They  
will have it called ζεία, Ζρὶιε, or *ζία, Zea, άποτνζήί,* from  
Living, hecause.before the Invention of Wheat, Men lived  
Thereon. The most ancient *Ramans,* .as we are informed by  
*Dionysius Halicarnasseus,* called *Dea .* by the Name 'os *Far,*which,. however, is a Word os am biguous Signification. .  
t *Zea,..* or Spelt, .is not unlike Wheat, with a manifold  
Root, .whence arise numerous, (lender, jointed, firm Stalks,  
higher than those of Barley, but shorter than those of Wheat.  
The Spike, or Ear, which is in Flower about Midsummer, is  
a Palm, or a Palm and half in length, rough, compressed, ge-  
nerally without^ Beard, tho’ sometimes furnished witha longer  
or shorter one, and hearing a double Row of Grains, or the  
Grains so disposed that the Middle os one Grain shall answer  
alternately to the Beginning of another. The Grains are  
closely included in- a manifold Hush, a Pair of Husks being  
Joined to a Pair os Grains, and are longer than those of  
Wheat, of a sharp Back, and a ruflet Colour. The Husk  
pertinacioufly adheres to the Grain,l and will not be separated  
from it by the Stroke of the Flail, by which, says *.Jo Bau-  
hins,* you may distinguish it from thecommon Wheat, which  
.it. otherwise so well resembles, that, when both are stript of.  
'their Coats and Hulks, it will he difficult to know: the one  
'from the other. - ... - *.s...*.suits: :..-o  
h' It. grows in many Parts of *Italy, France* and *Germany,*thriving well-enough-in any Sort of Soil, even tho' more hu-  
mid than ordinary, the? delighting most in a rich and. fat Soil.:  
*clip-Zea* is sown; in -Flower, and reaped at the same Times  
with Wheat. If *Zea* be hulked and cleansed, and afterwards  
dbwn',0it is changed into Wheat on the third. Yeas, if we may  
*ibc]slum&Theophrastus::* And *Pliny,* says,*--o*." .We are told that

*Tiph* heing a degenerate:Kind of Grain,-return .to  
" Wheat, if hushed and sown, tho? not. immediately, baton  
" the third Year.” - - WeSleny not but that it may-sometimes  
happen' *sor Zea* to;pass into Wheat, but see.no Reason why  
fuch. an Effect should, always follow,, when-is is sown decorti-  
cated; let the Authors speak for themselves. . .ἐν t

*The Germans* make Bread of *Spelt,* as white as those of  
’Wheat, but lighter; and less nutritive ; while new it is sweet,  
and easy -of Concoction, but when stale it is not so grateful,  
-and as hesides .dissicidt to he digested. Puddings are prepared  
.of the same with Milk, . Almond Milk, Wine, or Beer and  
.Sugar,-which are good for sounds as wed as.' sick Persons.  
Broth or- Gruel-made ofthe Floucis astringent, and there-  
fore adapted to the same Purposes aS one prepared with Rice,  
being-proper in a Haemoptysis, - Dysentery, Diarrhiea, and the  
like, especially when boiled with the Feet of Calves Or Wea-  
thers ; outwardly, also, it serves the same Intentions. . t .  
' The Antients, we may observe, unanimously condemn  
Bread-made os *’Lea etc Spelt,* whence it is plain, says *Co Bate-  
Chinese* that this Ζεςε-was different from that.-which *Pliny* says,  
-the *Remans* called SeddurssSee ALIozi.J of which was prepa-  
red that excellent Food *Alica. Raii Haste Plant.* p.i242.”  
.'νύ-ZEBD.' Butters *Rulandus. : - .. . ' '*

din Z EBET.. *c* Dung.- *Adem. - . ‘*

ZEC. *Traganthum, us Tragacanthum. Rulandus.* Ψ  
Ἕ ZEDOARIA; v-2ledoasp. ' '-si ':: .. 'su \_

. .We shave-two"Kinds-of this Root, one named *Zedea-  
sriap longa,- Q.* -l&Ther. the - other *lZ.edoar.ia rotunda,* Co B. P.  
rButithey are- both-the- Roots of the same Planbr the Body  
inf-which“is-«round, and the Protuberances, or Ramifica-  
tions, long. ' The- Plant they helong to is a kind-of CoZ-  
*~ chi cum,*'described - by *Herman* in the *Para discus Batavus.*'They are brought from the *East Indies, t&A.* have an aroma-  
'tie, .rathphorared Taste: They are reckoned attenuant, de-  
’tergent, emmenagoguesscarminative, -'anthelmintic, cordial,  
salexipharmic,t-stomachic,- diuretic, Εἰς. The Dose is from  
five Grains to half a Dram in Substance, and it may he used  
:in. Infusion like Tea.Some correct Opium with this Root.

*Simearr Pauli* 'pretends: it- -is the heft Carminative now known,  
and Values it as a grand Specific for Voiding Wind. - *Geoffrey.*

The first Sort isshusdistinguish’d.--- - I

--'ZEDOARIA LONGA. Ossie. C. B. PC 3L Park.  
Theat. I 612; .Rim Hist.-2. I34o.-Zedinnin, Ger. Emac.

1623. *Cedicar ant Gard. var. Ffoesde.sSadeakiaTocilsm.ea  
Camphoram redolens.* Boess [nd. A. 2. r23. *Haronbatia*Herm. Musi ZeyL 50. ZODOARY. *Dale, p. ^.ζί.*

This has a Root two, three or four Inches in Length, and  
aS thick as the little Finger, and ending at both Extre^dties in  
a blunt Point. It is white on the Outside, and within of an  
Ash Colour inclining to brows, of a dense, solid, sat and pom-  
derous Substance, and of a fine Taste and Smell, bitterish,  
moderately acrimonious, with a kind of Heaviness, and emit-  
ting, while pounded or chew'd in.the Mouth, a Fragrance  
highly aromatic, a Very small Portion, of.it sweetening the  
Breath, and penetrating into the Head.

Chase what is large, think, full, and not wrinkled, of **a**sottish. Viscous Substance, resisting in some measure the Teeth,  
on account of its Solidity, remarkably fragrant, and without  
Perforations; the longer to preserve it, it must he kept jn **a**dry Place. It grows spontaneousty in the Woods of *Calecut*and *Cananor* in the Kingdom of *Malabar,* and is supposed to  
he .the *lZaerumbet* of the *Arabians,* the *Crstus Ardaicus* of **the***Anguillara. . . r .., : .so-*

. The Part in use is the Roos, which is tuherous, nodons,  
somewhat compressed, Ash-colourfd on the Outside, of an  
acrid, bitterish, aromatic Taste, and a fragrant Smell.  
. It is heating, drying, inciding, difcussive of Flatulences,  
and Alexipharmic; and is principally used in Pains of the Cho..  
lie, and of the Stomach : It cures the Bites of Venomous Ani-  
mass, stops a Lientry, repreises Vomiting, provokes the  
Menses, and kilis all manner of Timae infesting the Belly.  
*Dale* from *Schroder. .*

The second Sort is thus distinguish'd, u

ZEDOARIA ROTUNDA. Ossie.. Co Β. Ρ.- 3i.-  
Park. Theat. 1612. *Ran Hist.* 2. I34O. *Malankua.*Hors, Mal. II.? i7. Tab. 9. *Colch cum sMylanicum flore violae  
odore, et .colore Ephemcro.. .Herm.* Par.. Bat.. Prodt. 324.  
ROUND ZEDoARX. *Dade,* p. 25 I. . -  
\_ This Species in Weight, Solidity, Colour, Taste and Smell  
is altogether like the *Long Tledoary,* and differs only in its Fi-  
gure, which is globous, an inch in Thickness, Or Diameter,  
with a Superficies. somewhat uneven, and tuberous, with the  
Marks of the Fibres which have been cut off, resembling the  
Bulb of the Arum, and sometimes ending in a short Mucro, or  
Point, at which, while it yet adheres to the Ground, it usual.,  
.ly . shoots forth a Bud.' It grows plentifully in *Java* and  
*Sunda. .*

The *Round Zedaary seems Dpt* to differ from *the Long;*but only in being a distinct Part Of she same Roos, For  
*Co Bauhine* thinks *rtt&t Aviccr.ua* called the. round Part *'Leaoary,*and the. long Appendix *'Lerumbeth,* not knowing from what  
Plant, or in what Countrythe Root was produced; but when  
he happen'd to see it imported into the *Persian Gulf,* some-  
times cut into round, sometimes into oblong Portions, ima-  
-gin'd them to be distinct Species..

The Root cur into Slices, dry’d, and preserved in Sugar,  
is more excellent and commodious sor Use than Ginger. C. B.

It agrees in Virtues .with the *Long Ze deary,* but is seldom  
found in our Shops. *Dale. .*

- Besides the two hesore-mention’d, *Raii* gives us from  
*C. Bauhine* two others, which are, . -

First, *'Zaedoaria tuberoso foris nigricans.* Ci B.

This Sort is of aroundFigure, like the *Aristrolichia rotundas*blackish without, and sometimes, of an .Ash-Colour, and whit-  
ish within, and of the usual Taste os *'Ledoarfo* It is to be  
had, as *Clusius* writes, at some Perfumers at *Antweep,* who  
call it *Blaasc Zeduar:.* Aodur/Joins it with the common *Round  
spLedoary.\* I. . . -..si ίς- . ,.ἱ t

The second is the *’ZAdoardaz.Geidwari Avicenna Garfias*C.B. Y 7 εἴ c. r . -- .ςἐνἈ....Ἕ6-σἄκ -. S t .  
. This is a Root os the Size os an Acorn, almost Os the same  
Figure, and of a sublueid Colour; but it may more properly  
he said to belike the smaller Bulb *Qs.tiae Anthora* or *Asphode-  
lus* ; it is of an Ash-Colour without, and yellowish within,  
ihard and-solid, -and of an acrid and heating Taste.. ..

Gtfraarobserv'ssthisto.he.sold at a great Rate in the neigh-  
shouting Provinces to Girinas, .and. says. It in difficult to .he oh-  
rain'd, unless it he froth some strolling sort of Mountebanks,  
.which *th&-Ltalians* call *jagues).* . The same Author supposes  
*‘Ledoaria* to be a corrupt Word, and that. it ought to he railed  
*Geiduarc so ... :.:i .*

*C. Bauhine tiatiks* that **the** *Arabians* gave the Name of *Ze..*to three sorts Os Plants,? The first was the *Long Ze-s-  
.deary* of the Shops, .which was ihe *TorrumbethecA Avicenna, RA*appears from its Description. The second was what wc call  
the *Xedoaria ratunda.* Or *Round Zedeary,* which is the *Zenan-  
beth primum Scrapiani,* and the *Zedooria Avicerma.* And the  
third is that remarkable Tree on Mount *Libaruts,* with the  
Leaves of the *Salix,* and the Smell *of* the *Lemm.T.rie,* the

*% aruabo* at present unknown m ne unless, perhaps, it he the  
*naJsuiSarorumRausvolsid. . -*

*ZAoaria* was unknown to the. ancient *Greeks;* the more  
dern .as *Artius zrs^Actuarius,Cspi\* it ζαδαρ,(Ζσευστ)ζαδοὐρα, (*Ta dura)*an d Ζαδίρα *seZadercso* borrowing the Name from the *Arabians.*

It has the Leaves of *Zingiber,* or Ginger, but larger, longer  
and broader, and. also the Root of the same Plant; st has  
much the Taste too of Ginger, whence in *Calicut* it is called  
*valid Gingcr,* as we are told by *Garcias.*

They make three Species, which, by some of the most  
skilful Botanists, are supposed to he all Roots of one and. the  
same Plant.

' The Root of *Zedoary* is esteemed hot and dry, fattens the  
Body, and strengthens it when weak, as the *Arabians* say, and  
discusses Flatulences. It takes away- the Smell of Onions,  
Garlick and Wine, is good for the Bitings of venomous Beasta,  
stops a Looseness, resolves Abscesses -of the Uterus, represses  
Vomiting, and is effectual in the Wind-Cholic. The mo-  
dem Physicians use it as a Preservative against pestilential Airs,  
and mix it with a Multitude of Compositions. It is good for  
rhe Stomach in promoting Concoction, and heating that and  
-the other Viscera. The *Germans* prepare a *Vinum Zadorialum,*or Wine of *Zedoary,* for the besore-mentioffd Purposes, by  
bruising *Zedoary,* and hanging it in a Bag in a Vessel full of  
boil’d Must. *Raii Hist. Plant.*

ZEFR. -Pitch. *Rulandus.*

ZEGI, *Zetus, Zezi,* Vitriol. *Idem.*

ZEHERECH. Flowers of Copper, called also *Albas.  
Idem.*

ZEIA, ζεία. See ZEA.

ZEITRABRA, in the Jargon of the Alchymists, signifies  
*fluxile. Rulandus. \* . . -*

ZELOTUM. Mercurius lapideus. *Idem.*

ZELOTYPIA, ξήλωσις. Jealousy, is a Vehement Affection  
of the Mind, in which one of the conjugal Pair suspects the  
other of Adultery, and is here mention'd because it comes  
within the List of morbific Causes. *Castellus. ; . : ...*

-ZELPHO.- See ZENDo.

ZEMA, ζημὲν, fromted, to boil; Broth, Decoction; in  
*French, Bouilon,* is a Term sometimes used for *Decoctum, in  
Apicius de Re Culinaria.* It is also read ζέμα, in *Diofcorides,  
Lib. 6. Cap. J.*

ZEMASARUM, *Cinabrium, uel Cynobrium. -Rulandus.*I suppose he means Cinnabar. *Rulandus. .*

ZEMECH. Lapis Lazuli.' *Idem. .so*

ZENDA. A general Term coin’d by *Paracelsus,* by  
.which he would signify extraneous or equivocal Generations,  
.. effected without a seminal Principle... But *Zerenda, Tarunda,*or *Lcrundis,* signifies such a monstrous Generation of Men in  
particular, as in other Animals, the same is expressed by

*. Lelphi. ‘ .". . - νύ. .. .*

*ZENECHDON,* an *Arabic* Term from *Zenech,* signify-  
-ing in that Language *Arsenic-,* it means the same as *Diarfenicum,*or a Composition of Arsenic. *Blancart.*

ZENEXTON. See XENExToN.

ZeNEXTOR. Mercury. *Paracelsus.*

ZeNGIFUR. The same as *Zernafarurn,* that is, Cinna-  
bat.. *Rulandus.*

ZENICON, ζενικό», the Name of a Poison in use among  
*thcGauls,* called *Celtce.* It had-the Denomination of *Venenum  
Cervarium,* or *DeePs Poison,* and was of so great and speedy  
Efficacy, that as soon aS a Deer, or other Beast, fell down un-  
der a Wound from an Arrow ting'd with this Poison, the  
Hunters were obliged to run immediately, and: cut away the  
Flesh, for the Breadth of a Span, round the wounded Place,  
hesore the Poison could disperse itself, and induce s Putrefac-  
tion. The Antidote to this Poison was said to he the Leaf of  
an Oak, or a Beech, or of the *Laurus Alexandrina. Castellus.*

. ZENITH, hesides its proper Signification, is, in a Very im-  
proper and enigmatical kind of Sense, made to signify the first  
menstrual Efflux. *Castellus.*

ZEOCRITHON. *Bocrh.* A Name for the *Hordeum ,  
distichum; Spica breviore et latiore; Grants confertis.*

- ZEOPYRON, ξίοπυμ», a kind of Com which is a Medium  
between Zea and Wheat, aS the Term imports: It grew in  
*Bithynia,* and. is mentioned by *Galen de Ahn. Fae.* It is also  
a Name for the *Triticum fpica Hordei Londinensibus.*

\_ ZEPHENUM, ZEPHENA, Terms in *Paracelsus* to sig-  
nify the extremity or external Periphery of any Perforation  
of the Ears or Lips. The Contraction of this Periphery into  
- a preternatural kind of Roundness, constitutes the first Sign of  
the Leprosy.: *Castellus.*

ZEPHYRUS. The same- as FAvoNIUS, which see.  
*Zephyrius smuts, in Hartman,* is an expression for a Mole.

ZeNL Vitriol. *Rulandus.gul .*

. ZERlCUM. Arsenic. *Idem. .*

ZERN.A. An ulcerated Impetigo. *Dornausi Ltd send.* We  
meet, also, with *"Lerna* for *Lepra* or *Impetigo,* in Writers os the  
Alchymistic Strain. *Castellus.*

ZEROS. A Name in *Pliny, Lib.* 37. *Cap.* 9. for a pellu-  
cid Gem, resembling another called *Iris,* and haying in Cry-  
stal distinguish'd with black and white Spots.-

ZERTA, the Name of a Fish which lives both in Sea and  
Rivers ; and therefore called by *Gefncr, Capito Anadeomus, he-*cause it pastes out of the Sea into the River *Elb.* st is rec-  
kon'd among Fishes of good Juice. *Castellus.*

ZeRUMBET. Offic- *Garz. Zirrtibcr latifolium Syl-  
vestre,* Herm. Cat. Hort. Lugd. Bat. 636. Prod. Par. Bat.  
386. Comm. Hort. Anast. 37I. I. *Eua,* Hort. Mal. II.  
I3. Tab. 7. *Wdlinghuru,* Herns. Musi Zeylan. 5I. ZERUsI-  
**BETH.** S . - . -

This is set down in the Catalogue of Simples in the Dispen-  
satory; but it is not known what it is, heing never seen in our  
Shops, the round Zedoary heing taken for it. *Herman, in*his *Catalogus Hortens. Lugd. Bat.* gives the Figure of .a *Zin-  
gibcr latifolium Sylvestre,* which he proposes for the *Zerumbet  
os* the *Arabians*; but the Descriptions they give both of this,  
and several other Parts of the *Materia Medica,,* are so short  
and lame, that little is to be learn’d from what they say of  
them. *Miller’s Bot. Os.fi.*

It grows spontaneously in the Kingdom of *Malabar,* and"  
agrees in Virtues with the long Zedoary. *Dale.*

ZeRZERA. The **same aS QUERQUERA or** EPIALOS,  
which see.

ZeSTOLUSIA, ζόςολουσία, from *lscu,* to he of a fervent  
Heat, and υουσις. Washing or Bathing; a Bathing in hotWater,  
as oppos'd to ψυχρολουσία, *(Pfychrolusia)* Cold Bathing. The  
Word occurs in *Galen, Lib. p. de fanit. tuend. Cap.* 8.

ZET.E, with the Antients, were *Faporaries,* or Rooms  
which had a Stove underneath, on whose Floor they diffused  
hot or cold Water,: as the Season requir'd ; and by transmit-  
ting the Vapours through Pipes placed in the Wall, heated or  
cooled the *Zeta* at Pleasure. *Castellus.*

*Zeta,* or *Zetecula,* were also private Rooms in Bathe, and  
Other Edifices, furnished with Beds for the Entertainments of  
Feasting and Gallantry. . . . r. ZEUS. The Name of a Fish, called also *Fabcr. Pliny,*Lib. 9. *Cap.* I8. See.FABER. . ‘ . Ἀ . ῖ sc-.:'  
\ ZIAZAA.. The Name of a Gem, from the Place where  
it is found, of so Various Colours that it cannot be said, to; he  
of any Colour. It is said Io render the Wearer litigious, and  
to excite terrible Visions in Sleep. *Castellus. . :.*

ZIBACH. The same as *Zeibar,* which see.

. ZIBELLINA, *vulgo Sebela, or Zobela*; a kind of Weasel,.  
which we Call *Sable,* whose Skin, is well known to bear a great  
Price. *' '. s:*

ZIBETHUM. . εἴ . γ

The Animal which produces the Civet, is distinguished by  
Authors after the .following Manner.: *Animal Zibethicum,*Offic. Ran, Synop. A. 178. *Animal Zibethi,* Cains de .Ar  
nimal. 43. Aldrov. de Quad. Digit. 340. *Catus Zibethinus,*Schrod. 5. 28o. *Tsibethicum Animal Anuricanum,* Rech, in  
Hern. *Hyaena veterum,* Bellon. Obs. ed. Clus. 94. THE  
**CIVET CAT.**

The Animal which yields Civet, is a kind of wild. Cat,  
-called by the Antients *Hyaena.* There are two kinds 'of it ;  
one that comes from *Holland,* and.another that comes from  
*Guinea,,* which is browner than the formes. When Civet is  
.mix'd , with Muik and Amhergrease, or lower'd by a Mixture of  
any other Powders, it has a Very fine Smell; hut alone, the  
Smell is disagreeable. It is Very littie used in Physic., Some  
rub Children's NaVeis with it, to cure their Colics; and it  
was formerly applied to the Pudenda of Women in Hysteric  
Fits; but this last Practice is not only useless, but hurtfuh  
*Geoffrey.' . ss ..,πὸ.......... . - : .. guletsu*

*Civet* is a sat and unctuous Substance, of the Consistence of  
Honey or Butter, and os a most fragrant and grateful Smell.  
’ It is hot, moist and .anodyne, os frequent Use in the Pain  
of the Colic, and to anoint the Navels os Children for Pains  
in the Belly; it is also applied to the Pudenda, or the Pit of  
- the Navel, in hysteric Fits. *Dale* from *Schroder.*

*Civet* is not the freed, nor Sweat, nor Testicles, nor Scro-  
turn of the Animal call'd the *Civet Cat,* as some would per-  
suade uS, for these have no Smell; but it is a peculiar. Excre-  
mens, secreted by Nature, and collected in some littie Bags of  
a glandulous Substance, which in the Male are seated hetween  
.the Penis and Testicles, in the Female between the UteruS  
and Anus. The best is what comes from *America,* and ia not  
adulterated with Butter; the black imported from *rAnaEast In..  
does* is not good. *Dale.*

ΖΙΒΙΒΙἜ, or *2ibeba,* are a large τ0ΓΓ of Raisins, much  
resembling the Stones os Dates, whence they are also gniled  
*Dactyli* ; they consist os-mUchPuln. hut verv little ΤννύΓΑ ...

ZICCARA. *Guatimalensium. Capote, De Last. -*It is a Fruit resembling a Pine-Nut, and contains twenty,  
. and sometimes thirty Kernels. *Raii Hiss. Plant.*

. ZIGIR, ζίγιρ, in *Dioscorisses, Lib.* I. *Cap.* 7. is an Epithet  
of a kind os aromatic Cassia, of a Purple Colour inclining to  
black, and esteemed of greater Value than ordinary, and more  
fragrant. Some read the Word *Gizir, frsip.* .. , : u

iZIMEX. Verdigrease. *Rulandus. sese*

ZINARIA, is an *Arabic* Term, and Epithet of a. Vicious  
and preternatural kind of Bile, called by the antient Physicians  
*AEruginous.* I ' - .6 ... ... ... .......

zINCHUM. . sofr: etstsmsaet etet'-sc-.

*Zinch,* named. *Tsinchum* Officin. *lLincthum feu MarcasiiA  
pallida Schrcederi, Zinch* Vel *Tutenague* Gailot. is a metallic,  
sulphureous, heavy Substance, resembling Lead in Colour,  
fusible and ductile to a certain. Degree, being Very hard to  
break, inflammable and Volatile. It seems to have heen quite:  
unknown to the Antients, and even the Moderns knew Veryr  
littie.. about its Nature or ..Origin, till *Stahl* explained it in  
his Dissertation *de Mettasturgip.* It . is extracted from the  
Lead-Ore os she Mines of *Gessfelar,* which Qre IS Very- hard'  
to melt, though it appears neither stony nor barren to theTye,.  
hut rich and shining. Three Substances are -separated from st7;  
lead,.-Zinch, and 4 kind of *Cadenia Fornacea,* which heing  
melted with Copper,, makes a Princess or Bath Metal, j  
; The Furnace, in which this Ore is melted, is so disposed aS  
to hayethe Side and; Back Wall of Brick, hut the Poreside is;  
shut by Plates of a .greyish fissile Stone, about a Pinger'S- ;  
breadth.inThicknels, . During the Time os the Fusion, this,  
Foreside being much thiner than the rest, remains considerably,  
coolers; and they increase this Cold by often sprinkling it. with  
Water, and covering it with wet Clothes, λ The Ore, which  
is put jn the Furnace at one Time, is about twelveHours in  
meltingand as sooseas the Fusionis begun. Bellows are set  
a blowing upon it, hy which the Zinch mixed with the Lead  
is driveinin form of Flowers or Vapour againshthe Brick Walls,,  
to syhich.it sticks,, to .about the Thicknesh of a Writing-Pep,  
and ..of .the. Consistence of. Very hard and half-vitrified. Grey-  
Tartars At proper .Intervals of Time, they open .the. Pur-  
tiace, and beat, this: Substance off from.these Walls, because-.  
otherwise, it would in time become so thick as. to. make the  
Capacity-os the Furnace too small for .Use. ἐν. .moo

Off the Front, or stony Part of the Furnace, is. sound noI.  
only a Substance like that just mentioned in Form of. melt-  
ed Stone, hut alsus another resembling malted Metal,- with  
Streaks of a Substance half-burnt, or. reduced to Ashes, run-.  
Hing through it. Therefore at the end. of each Operation, or  
Period of melting, having removed theburning Coals from the)  
Bottom of this Part of the Furnace, thery substitute Others in  
their Room, reduced to small Pieces, and not burning. Than,  
by repeated Strokes of Hammers, they shake the Wall, and  
the Zinch which sticks to it runs down .between the Laminae  
os the half-burnt Substance in form of a melted Metal, emit-  
ting.a white lucid Flame, and jn sew Minutes Time would  
all fly off in a whitish or Ash-coluur’d Vapour, if it were not  
received and extinguished by the Coal-dust placed under it; sor  
as soon aS it mixes therewith, the Flame ceases, and it hardens  
into Metal. When .it is cold, they remove it, separate it  
from the Coals; and having melted it again over such a gentle  
Fine as is sufficient to melt Tin, it is cast into proper Malles  
or Pigs. ? ....

.TheAdvantage to be made of this Metal is very uncertain,  
because sometimes the Workmen lose all their Labour employ-,  
ed about It, either because the Heat has been too great, the  
Bellows have been blown too fiercely, or through some other  
Neglect. ; - ... \_ Ἀ -

That Part which sticks to the Brick-Walis, from whence it  
is broke off at proper Intervals, as has been said, makes the  
Cadinia used inPrinces Metal; but hesore it.is fit for that Use, -  
it is iniked with the Scoriae, and other Refuse of Metals, and  
exposed in Heaps sor a long time in the open Air,, where  
being penetrated to some Degree hy the Air,, or some-  
thing contained in. it, it rarities a little, and swells, and then  
itssecornes’ fit to communicate a Gold Colour to Copper, by  
being melted, with It. This Substance in called, very proper-  
ly, *Cadres a.Fornacea,* by. *Stably for* tho’ its Origin be dif-  
ferent from "that os Tutty, the *Cadmia siornacca os Agricola,*. yet its Nature and Effects are nearly the same, for both equal-  
ly give a yedow Colour to Capper.

The Lead is sound melted ar the Bottom of the Furnace  
and the Workmen are of Opinion, that no Part of the Zinch  
remains in it,, hecause they think she Fine to which the Lead  
continues so.long exposed, jo more than sufficient to evaporate  
all the/Zincin . . ...... -ss ... μα

.. Zinch is *2. Metallic* .Substance, but. sulphureous and. per-  
fectly Volatile. M. *fiosuberg* observed, .long ago, that when,  
thrown into a.red. hotCrueible,it emitted many Fumes, and when  
stirred with an Iron-Rod, it presently rook-. Fire, and a white

shining Flame appeared, like: that which is seen by firing *st*Mixture of Nitre and Sulphur. At the same. Instant, the  
whole Cavity of the Crucible was filled with. Very small,  
white, light, smooth Filaments, like Threads os Cotton, Or  
*of* a Cob-web. If these Filaments he carefully collected, and  
afterwards the remaining Zinch he stirred in the same Manner  
as before, this Operation may he: continued so long till almost  
the whale Substance of the Zinch shall he converted into these  
Filaments or Flowers. By macerating these Flowers in distii-  
led Vinegar,. jM. *Hamberg* prepared an inflammable Oil of Very  
great Suotilty, which he judged to arise from the Zinch ; but I  
should rather think was owing to the distilled Vinegar. The  
whim Flowers taken inwardly are sudorific, and sometimes  
purge both upwards and downwards, heing given from four to  
twelve Grains. Externally applied, then Effects, are. in no.i  
thing different from those os *Pomphelyx* or *Nihel Album* of the  
Shops, They, dry Very powerfully, without Acrimony; and'  
gently astringe and consolidate. They are much recommenced  
*by Barbette-zz* assure Remedy -iman *Ophthalmia,* .and Flux' of  
sharp Lymph, during dissalvedjn Rose-WatEr-; . *fay* another in;  
Fisihres os-the Nipples, being spread on a fine Linnen Rag.;;  
and *\ofsoEmanuef* Aaming,.imNlcers, arising from alongCon-.  
sinemeut in. Bed. They .ure likewise os Service in .drying..  
Ichorous Ulcers . .edi...nstedt! ,» t. ? Z jiestes ’ s

Of Zinch and Copper- malted; together is made-.the finest -  
kind of Princes Metal, sh called from Princes Rupert,, who is:  
said to have invented it. It IS made in.thin Manner-:-; - -

Take of Copper, three Ounces; melt itima CruCible ; and.  
while it remains in Fusion, add-an Ounce anda hall Of Zinch.  
Mix them well, and then immediately remove them from the  
Fire. The Mass, when cold, will he Osa heautisus Gold Co-r  
lour, and in some Degree ductile, .- j Is- ni

The PewtererS use Zinch in whitening and purifying Tin,  
mixing it ln she Proportion of one Io fix hundred. . *Geoffrey.*

ZINDULUS. Ἄ River-Pish, much commended for its-.

Tenderness.and PrialrilitI.Z χ 'r S.-.sto\* . :

ZINETUS. A Species os Mercasite,. much resembling  
*lsussupCp.suPaPacesseussircfodepe.:Lib. p,s sc. ' -*

ZINGAR. . Verdigrise.,- or; Flowers of Copper. *Ru..  
landusgi- r : s. 'γγo :*

-- ZINGs. *Fructus stellatus sive Anisum Indicum.* LB. r,  
586. Rafi Him *2.* 1835. *Anisum Inaicum. spDffiC. Anisum  
stellatum feu sinensis et Philippense.* Cod. Med. -IO., *Anisum  
Indicum stellatum,* Gec Emat.I035; *Anisum peregrinum^*Ca, B. *P.* I.59:;..... *Anisum, jexopicum Philippinarum, infularum.^*Park. Theat.;I569.:{ *Fceniculum.Sinenso,* Pedi Exper. Nas,  
I7 2.': *Cardarnomurn Siberienfe, Patavinorum,*; Hort. Besian.  
*Euonyma ad: Philippinarum Insularum. Anisum spirans, nuculas,  
in capsulis steflisoryniter congestis, proferens.* Plui:. Almag. I4o»;  
INUIAN ANIsE.; /-. 'τ. ,ςχ.,.χ τ. .r : :

? The Kernel of this Fruit,. which .is brought; from the Fo/i  
*Indies,* is.goodTor the Cholic. x . . : . .

‘ ZINCjlssEsy. Offic. *Ttnsibcr, 'Lirtiber.* C. Comm. Plant.  
Usu.92. *'Z.inziber,* Ger. 54. Emac. 6I. *Tdngiber,* Co B.  
F. 35. Theat. 651. Raii. Hist. 2. 13I4 J. B.2. 743.  
*'Lingibcr Orientale,* Park. Theat. I 613. *Agingiber. Indigenis  
Gingipil stamina,* Pison. Mans, Arom. 187.,; *seis: latifolia,  
tuberose, Ndngiber dicta, flore albo.* Hist. Oxon.. 2. 350. *Man-,  
garatia,* PiloIi. 227. *Chilli India Orientalis feu Zingibcr fee.,  
mina.* Hem. -169. *Jnfchi,* Com. Flor. Mal. I48. *Insohi  
vesJnfchi-kua, H.* M. p„ II. 23. GINGER. ; .

This is a yellowish, white,-and siaspsh round Root, some-  
whet knotty and branch'd, of an aromatic Smell, and a Very-  
hot biting.. Taste. - We have two Sorts, white and black.  
The White is the best, being the Root only dryed and clean-  
sed ; the other-is the same scalded, and of .a darker Colour,;  
more shrivel’d, and is less used in Medicines. *Morison,* and »  
*Herman* believed Ginger to he a Species of Iris ; but others, -  
as *Pisco* and *Hernandez,* say it jo a Reed or Cane,, to which,'  
by the Figure os the Leaf, which I have seers, it seems to  
come nearer than to an Iris.. It is brought at present principally  
from *Jamaica,* and the *Carribbee* Islands, though it grows in  
both the *East* and *West Indies.,, .. . -*

Ginger is usedin Food as well as in Physic.. It heats and  
comforts the Stomach, expels Wind, helps Digestion, pre-.  
Vents the Colic, and strengthens the Bowels. It is brought,  
oyer, preserved in Syrup, from the aforesaid Places, which is -  
much better than any preserved here. *MiliePs Bot. Osse*

*'Lingibcr,* by the *Greeks* called took its Name from  
the *Indian sNosd Zengebil,* and has one and the same Narne  
amongail.Botanists. It is described by *Co Bauhine* aS haring a.  
Root which runs three or four Palms deep in the Ground, af-  
ter the Manner of the *Arundo,* and is of an irregular Figure,  
somewhat flat, divined by frequent Joints .into many lateral  
Parts or Branches crewing on all Sides, of the Length of an:  
Inch and haff, or more, and. of the Thickness of a Manin  
Thumb, or less, whitish, or of a light brown on the Outside,  
and *of* a white friable, tender Substance within, interspersed

with Veins, fanning lengthways, of a Taste like Pepper, Very,  
her and-acrimonious, and os an-arrirnatir Smell It has some-  
what os a'ferVid Taste,'when green, as we are assur’d by *A~  
costa,. bsit'is* not so-biting as: when dry; and the more humid  
the-Piacesarein which it grows, the less-Acrimony it retains.  
It has. the Leaves, as *Garcias* writes, of the *Iris Aquatica,* or  
*Gladiolus, uotgrs riye Arunda ; rsuz Acosta* gives itsthe Leaves of  
the *LachrimaJohpe.* Others,’ as*. Lindfcholen* and *saeellius,* make  
it'-nave the Leaves os the *Arundo,* which seems most probable  
to ns,: fined -and *Bodaeusa Stapel,* who saw-the Plant  
when green, dteli-us, that in Stalk and Leaves it has the Ap-  
pearance of an *Aruordo* newly sprung up ; and therefore *Marg.,  
grave aiiisHcrmantlere* seem-to hie the less-exact in their Com-  
parison, when theytnake it resemble *the Iris or Gladiolus.* The  
Stalk is not-of inny considerable Thickness, but rises to the  
Height of a Foot, or wFoot and a half, and isadorn’d with A  
small : Head, resembling in some measure that of *Stachas.  
HirtiandeC's'':'. dur-si’- ~'i. so.* c:.:.. .

s There are two sorts *OF Zingiber,* the Male and the Fe-  
male ; the last- is what we have described, the Male, called by  
the *Mexicans, Anchoas, -* has *iarzyes* which grow mot above  
three’Feet I in Height, and are-rougher and thicker than those  
os the common'-or Female *Zingiber,.* and are distinguish'd by  
One fingle strait Nerve running lengthways, growing on both  
Sides tothe-Stalk without Pedicles, Tingle towards theJBottom,  
but ‘thicker ‘and more frequent towards the Top si rhe Root is  
- also larger-and thicker, and has amore acrid Taste mik’d with

a kind os Bitterness.: *HcrnandsuT.J - sc -- ’' -*

The Roots are of different-Weight and Bigness, but all  
smooth and tuberous, and spreading upon the..Surface of the.  
Ground like those os the young *Arundo.*

It grows in all Parts of *fisc East Indies,,* and is propagated  
from the Root*"ex.* Seed thy way os 'Culture; for what grows  
spontaneousty is of no Value. "It does not seem natural to Ac  
*tncrica,* but was transported srom-the *East Indies,-* or.the *Phi-  
lippine Jflands,* to *Brasil* and *New Spain.* That of *Malabar*inmost esteemed ;1 and-they plant it in a sat, well dung'd and  
manured Soil, setting a Root,-which has one or two Joints, in  
A Pit, and immediately watering sit more or less, according to  
the Dryness of the Ground. The next Year aster planting -  
they take it Up again, and pass it for *Zingiber. \_* The usual  
Season for collecting iris the Beginning of *Junuary,* when the  
Leaves are wither’d. After I these Roots are a little dry’d,  
they Cover them with Mud, Test-being deprived of\*their native  
Humidity, they should he eaten- by the *Teredo,* to which on  
Other Accounts they are Veryobnoxious: But *Linschoten* assures  
us that they Collect the Roots into a Heap of a certain Bulk,  
which they cover with Potters Clay, and carefully secure it  
from all Injuries by Air or .Winds ; and this is the Method by  
which they manage the recent Roots, and defend them from  
the Worms. In the' Spicery Shops we meet with white and  
red Roots, but they are os the same Kind with the others, only  
stained with Oker, or whiten'd with Chalk, to keep them  
from the *Teredos .*

Topreserve the Roots, they first take off the Bark, and  
then put them into Brine or Vinegar, and let them inacerate  
for an HourOr two; after which they expose them to the Sun  
for almost an equal Space os Time, then take them again un-  
der Covert, heaping Clothes upon them, and suffering them to  
lie till all their Humidity be exhaled. If the Roots-are to be  
transported to a distant Place, - they inclose them in Boxes, and  
watering them, cover them ‘at Night with earth, but leave  
them open in'-the-Day-time’. Being thus prepared, they  
season them not only with Sugas, but Brine and Vinegar ;  
after which they have no remarkably hot Taste, nor leave any  
ungrateful Filaments in the Month: But is there be too much  
Cookery used about themjor they passthrough too many Wash-  
ings and Cleansings, they lose not only their hot Taste, but  
Part os their aromatic Acrimony.

*s.* Green *Ginger,* preserved with Sugar, is imported from the  
*East Indies,* and is proper for old Persons, and those of cold  
and phlegmatic Constitutions, especially when it is new; it is  
also good sor Viscid Phlegm in the Lungs.

\* The *Indians* use the Leaves in Broths, Sallads, ond other  
oulinary Preparations; the green Roots cut small with some  
other Herbs, and season’d with Oil, Salt and Vinegar, serve  
them sor a Sailed. New *Ginger* is also an excellent Remedy  
with them against the Cholic, Caeliae Passion, -and Lientery,  
a long Diarrhaea proceeding from ColdjWind and Gripes, and  
other like severe Disorders, as *Pontius,* while in the *Indies,*often happily experienced, as he himself assures us. It ought,  
however, to he administer’d with-proper Cautions, that they  
who abound with hot Bleed, whether sick or sound, should he  
Very sparing in the Use os it, because all *Ginger* kindles a Heat  
in the Blood, and opens the Mouths of the Vestis. *Pise.*

*. Ginger,* as well as Pepper, - is more used in culinary than  
medicinal Preparations ; hecaufe, among all Spices, those two  
only have very -much-*os-*-an acrimonious, and but little os an

aromatic Quality. C. Β. *Galen* infers,, that *Giiygcr* is Hot of  
so fine Parts aS Pepper, because its:Heat, tho' equally strong,  
is not so soon felt, but lasts longer;-' hence‘he concludes.*Gins,  
ger* to he of a grosser, and more humid or aqueous Substance:  
For as in dry Reeds,’ a-Tlame is very soon kindled and on-,  
persed, whereas in moish like green Wood, it is more flow-  
ly kindled, and lasts the longer; so rt-is in Medicines. 7;

*Esioscortiles* says, that *Gingcr* greatly 'loosens the Belly.; but  
this must be understood of the tender and fresh Roots,/which  
contain a considerable -Quantity of Humidities, capable of lu-  
bricating and opening the lower Passage, as we observe, in rhe  
*Iris,* for when they are old, .they are rather drying, and.sand  
the Belly, by promoting:a good Digestion. *’ i.*

*The* Roots are sometimes added- To- Cathartics, th increase  
their Force, tho' heingoxhibited with the more Violent Meci-  
cines of that Kind, They correct "their. Malignity. *.Ginger.*obsterges and dissipates Infractions of'the Stomach and Dungs;  
by consuming -the .superfluous Huinoiir, and comforts and  
strengthens the Brain and Memory : Itisedso' os Service Tn  
Dnlnessof Sight, proceeding from Humidity; it stimulates to:  
Venery, andiniscustes Flatulences. In whatever mannertaken,  
whether fresh or dry, it corroborates-the Stomach, and .pro-  
motes Concoction ; it ischn Ingredient in Antidotes.

ς ZINGIBER FUSCUM. C. IL *ZingiheriSs.pecios* Mechinum  
*dicta. I. B.* This is different from thehonimon Sort, not only  
in being less mature,2-and worse, butas It.ssofa more, compact  
Consistence, harder, and interwovess with sewer 'Fibres', os  
an Ash-Colonr inclining to black, of'a inure acrid Taste,, and  
riotlso subject to be eaten thy *rhe Teredos* this is also preserved,  
and-sold in the Shops, ' ‘ . 'Ἀ' : f' I - ' ~

' 'ZING1BENI AFyINIs CoRTICEsabspANrATO.C.B. *sEingid  
beris Mechini rara Varietas.* J.B. This in aRoot resembling the  
corninon *Taingibprisi gix-Mechinum,* but has a finer Appearance,  
is distinguish’d hy inanTNedes, and jointed almost liketheDo-  
*rmicurn. -* It has a Bark like the *Gingiber,ndA* a Lemon kind of  
Colons, is of the Thickness of a Man'sThumb, and destitute of  
Fibres; it is alfo ponderous and solid, and being broken shews  
white:Veins. The Taste is acrimonious and aromatic; and if  
it-he not- eaten out with Rottenness, much more acrid and  
diyer than that os *Zingiber. Raii Histsi Plants' .” ’:1*

*- Ginger* is good for the Stomach, Thorax, and the other Vise  
cera, restores lost Appetite, and resists the Putrisaction and  
Malignity of the Humors. *Dale.*

- ZINGITES, or Z-INGRITES. -The Name of a fabu-  
lous Stone, of the Colour *os-* Glass, mention’d by *Albertus,  
Magnus,* to which he ascribes many imaginary Virtues, ' as  
that, if worn about the Neck, it curesche *Nyctalops,* .restrains  
Haemorrhages, and prevents Alienation of Mind.

-ZINIAR. Verdigreale. *Rulandussu*

ZINIAT; Fermenti ' *Rulandussi ; :* : \* 1

- -ZINR. See ZINeHUM. ‘ς "so

-ZINZALA. \* A-small Fly, or-Gnat. ::: T.

ZINZlBER. See ZiNGIBER. -

- ZINZIFUR, or ZeNGIFUR.s Cinnabar. *Libjavius. J*ZlNZILLA. The Shingles. si - - ' - : so

ZIRBALIS HERNIA. A Rupture caused by the Descent  
of the *Omentum.* ;-from, -

- ZIRBUS. The *Arabic* Name for the *Omentum.*ZIZANION. ζιζευιον. The same as LoLIUM.  
ZIZERIUM. The Intestines os Fowls of the Gallina-  
ceous Kind. *Apicius..... "*

ZIZIBI, or ZlBEBssi. *Rulandus* uses this Word, aS *Ca-.  
stellus* imagines, to express Raisins of the Sun ; or, perhaps,  
Jujubs. - - '’

’ ZlZIPHA. A Jujnb.

ZIZIPHU6.

*- The* Characters are;

The Leaves are conspicuous for three Nerves or Fibres ;  
the Calyx is monophyllous and quinquefid. The Flower is  
rosaceous, pentapetalous, herbaceous, small, sessile, and almost  
destitute os a Pedicle. The Ovary in the Bottom Of the  
Calyx becomes an-Oval Fruit resembling an Olive, and in-  
cluding under its Pulp a Stone divided into two Cells, each full  
of an oblong Kernel; the Pedicle is short.

*Boerhaave* mentions two Sorts of *Ziziphus,* which are ;

**Ii** Ziziphus, *Tourn. Inst. 62J. Poena. Ind. A.* 2. 245.  
*fusuba.* Offie. *fusube Arabum five Tseixiphus Dodonai.*Ger.-I 318. Emaci I 50 I. *Jusuba may ores oblongae.* Co B.  
P. 446. *iiiziphus five juyuba mayor.* Park. Theat. 250.  
Raii Hist. 2. 1533. -Zherdurus *ruttla.* Jons Dendr. 86. THE  
**JUJUBE TREE. - ’**

- The Jujuhe-Tree has several crooked Branches with small  
whitish Twigs, on which grow winged Leaves made of seve-  
ral Pinnae, growing not directly opposite, with an odd one at-  
the End; they are small, oval; and finely serrated about the  
Edges. Towards the Top of the Twigs, at the setting on  
os the Leaves, grow small, yellowish five-leaved Flowers,  
fallowed by roundish red Fruit, in shape of a small Olwe, of

a pleasant, ’sweat, somewhat clammy Taste, incleding- an  
hard oblong Stone, pointed at both Ends. They grow in *Italy*and *Spain.*

Tujubes are mollifying and pecioral, good for Coughs, Plea-  
riiies, and hot sharp Humours, falling on the Lungs; they  
help the Hear and Sharpness of Urine, and rhe Gravel; hut  
they are now quite out of Use, and arc barely to be met with  
in the Shops. *Millers Bot. Oof*

The *Jujube-Tree* Sowers in *May* and *June,* and the Emits  
are gather’d in Autumn, or later, together with the Sprays;  
and being collected into Bundles, after an Insolation of some  
Days, are hung up at the Roofs of the Houses. Some crop  
the Jujubes, and strewing them on Hurdles, or Matts, expose  
them to the Sun so long as till they grow wrinkled. They  
are fold fresh in great Quantities by the Fruiterers at *Ve.  
nice.*

It is doubted whether thisTree were known to the ancient  
*Greeks, j. Bauchine* fays, he is much inclin’d to think that  
the *Litos* of *Theophrastus,* and the *Oseeo-Lotos* of *Pliny use.* the  
fame with the *Lotos* of *Athenaeus,* and that the *Litas vi Athe-  
naeus* is the *Jusuba.*

The *Serica* in *Galen,* which most fuppofe to be *Jububes,* are  
judg’d by that Author to he of small Efficacy towards the Pre-  
servation of Health, or Cure of Diseases, heing eaten ooly by  
Women and Children who set no Bounds to their Appetite,  
and affording but little Nourishment, the»’ difficult of Concoc-  
tion. By the later *Greeks,* however, and *Arabians,* they have  
been received into the *Materia Medica,* and applied to medici-  
nal Ufes. They are moderately hot and moist, and therefore  
used in Julaps or Decoctions, mitigate the Heat of burning Fe-  
vers, and correct the Acrimony *of* the Blood. They are also  
good for Disorders of the Breast and Lungs, stubborn Coughs,  
Roughness of the Aspera Arteria, and Difficulties of Breathing.  
They are alsio of Service in Diseases of the Kidneys and Blad-  
der, Heat of U rine, and die line Disorders. ' y. *Bauhine*thinks Svrup of *Jugules* proper to Ilo exhibited in ’pulmonic Dis-  
orders proceeding from a cold as well as a het Cause, contrary  
to .Mfrthnilon and whemi whojsidge ircosiymieirtionryinthof.  
Affections of therLungs, for *dates* are sweet andamoderately  
het,.. We are.-.aisered, from-Reaspn. and1' Experience, says.  
*C. Hoffman,* that Yasciam have the Virtue of cooling and; cor- ,  
reeding dint 'unit edrimbniotis Hinnoiirs;“ τ 'ς.\* εἴ'τιῖ δ᾽

ZiaiphusS qien Jut the Americana; spindsas Loti  
*Arboris sollis* facie ; friichis irofundo, parvo;rdhith *Cat.  
Hint. BcumontA. Liguanaria'vulgul JA. su.* 1,ίι4ίἰ' Ihisrse  
*inds Alci Plane p.*

*jujubes* are pectsral and aperient, and enter the Composi-  
tion of psdoral and nephoritic Decoctions; they are compar’d  
with Dates and Figs, *durst. Plant, ascript. Beerhaave.*

Besides the foregoing Species of *jujube. Dak* mentions  
the following;

ZIZYPHA. Offic. *'Zmajphus Cappadocico,* Ger. I300.  
Emac. I49I. *'Zmajphus Cappadecica Olea Bohemica, J.* B. i.  
27. *Olea apivestris folio molli, incans,* C. Β. P. 472. Raii  
, Hist. I576. *Oleaster Cappadecicus,* Park. Theat. I44I. *Ela.  
agnus Orientalis angusti folias, fructu parvs Olivae forms,  
fobdalei,* Tourn. Cor. 54. **WILD JUJUBE.**

This is a Tree of a moderate Bigness, of the Size of the  
*Salix,* according to-Dninhetiomi, with a whitish Bark, which  
is very much wrinkled and thick in the Trunk, hut thinner and  
frnooth on the Branches, and cover’d with a fofr kind of Down.  
The Leaves are foft, and much unlike thofe of the *Xiziphusapit*resemble more thofe of the Salix, or rather are like those of the  
Garden-Olive, sometimes difpofed alternately, sometimes ir-  
regularly, about an inch and half in Length, and near an inch  
in Breadth, or narrower, whitish all over, especially the lower  
Part, furnished with a short and soft Down, moderately ob-  
tufe, and adhering to a short Pedicle. From the Bofom of  
the Leaves proceed the Flowers, which are of a Silver Colour,  
cut into six cuspidated Parts, and fweet-icented, or, as *Clu-  
secs* fays, of a strong tho’ not unpleasant Smell, which affects  
the Head. The Berries are oblong, resembling small Olives,  
or jujubes, white, fungous, and cover’d with a sweet Flesh or

Pulp, which has an Apex like κ Pin," and ineludes a Stone  
containing a hard channel’d Kernel.

It grows in *Syria, Ethiopia,* and on Mount *Libanus,* as  
*Pausdurffius* observed; it allo grows spontaneoufiy in the Woods  
of *Bohemia,* as we are told by *Matthiolas,* and it is found in  
the Hedges, together with the *Ramnus* and *Vitex,* near the  
City of *Guadix,* in the Kingdom of *Granada, in Spain. Clast*It Sowers in the Beginning of Summer, and the Fruit is ripe  
in Autumn.

I doubt not, says *Dalechasapius,* quoted by *J. Bauhirae,* but  
from the Flowers might he distill’d a Water of a very fine  
Smell, and an Oil might he prepared of an exquisite Fragrance ;  
but there are no medicinal Uses mention’d of this Plant. *Bail  
Hist. Plant,* p. 1576.

ZMILACES. A fort of Gem, find, by *Pliny,* L. 37.  
**C.** r O. to be sound in the River *Euphrates.*

ZOARCHIA, or XOARCHIA. The Name of an Anti-  
dote describ’d by As. *Myrepsas,* Sect I. C. 24I.

. ZOEPHILOS. The pompous Name of an Antimonial  
Medicine, invented by *Quercetan,* and describ’d hy *Schroder,*L.3. C. I7.

ZONA. The Shingles. .

ZONITIS. A Name for a Species os *Cadnda,* collectsd  
in Furnaces in the Shape of a Zone, or Girdle.

ZOOMINERALIA. A Name for certain Substances,  
which have the Appearance of an Animal, and Mineral Na-  
ture ; as Pearls, and ail sorts of *Testacea.*

ZOOPHTHALMOS. A Name sor theAEIzooN.

ZOOPHYTON. A Substance which partakes of an Ahi-  
mal and Mineral Nature.

ZOOTOME. The Anatomy of Brutes.

ZOPISSA. Some call the Pitch and Rosin "crap’d off  
Ships by this Name: Some call it *Apschyma..* It is said to have  
a dissipating Virtue, because st has sheen long macerated in Sea-  
'Water. Others jinderstanOy *TApisoa,* the Resin of the Pine-  
Tree. *Diofcorides,* L. I. C. 98.

ZOPYRI ANTILdurTUS.--.TheNome of an Antidote  
descnbedliy *ScrAnnius 'scargrs,squo...suq. Celsas,* I.. 5.  
C.tegi mites Notice edflanothcedAiniaote, given by *Acpyrus*theKingaBewitio, which sifc ike re ileibrlher.

2 ZORABA..irVittiol00^brquiiker.6l0: ἰ -  
f.2GRONlSlOSKnTl.e Name. ofA Gem, saidtohe sotfid

r'~ -ZOSINIS ILLITtO.) TPheJ-NanifejofSh Unguent, re-  
iojninendediagainstT5^impoy.:Ar«amAEgniam, 6. RCYIg.

ZOSTER. The samfelon,^9ii4i»'00no *V.* . 'C VS  
ZOTICUS. A Name given by *'Hartman,* to a Species of

*Calomel.*

ZUB, or ZUBD. Crude Butter. *Ruiandus.*

ZUCCAIA. See Ζατλνεα.

ZUCCARUM. Sugar.

ZUCCHA. The Gourd, or the Pumpion. *Raii Hist. Plant.*ZUITTER, or ZITTER. A Marcasite. *Ruiandus.*ZULAP1UM. AJulap.

ZYGAENA. The Name of a Fish with a monstrous  
Head, describ’d by *Aldrcraandus.*

ZYGIS. A Name for a Species of *Serpyllum.* Raii Hist.  
Plant.

ZYGOMA, or *Os Jugale.* The Name of a Bone of **the**superior Jaw. See **CAPUT.**

ZYGOMATICUS MUSCULUS. The Name of aMusele of the Lip, thus call’d, and which arises fleshy from  
the *Osmali,* near its Conjunction with the long Process of the  
*Os Squamosam,* and is inserted near the Angle of the Lips.  
Its Use, is with its Parmer, to draw both Lips upwards.

ZYMAR, ZYNAR, orZINSER. Verdigrease.

ΖΥΜΕ. zdur. Ferment. Leaven.

ZYMOMA. ζὐμωμα. Ferment; or, fermenting Liquor.

ZYMOSIS, Ζὐμωσις. Fermentation, *bn Hippocrates, Ε-  
pidem. L.* 4. it imports a flatulent or (Edematous Tumor of  
the Liver.

ZYTHOGALA Beer Posset-Drink.

ZYTHOS. ζΐθος. Beer. *Diofcorides, L.* 2. C. Ir9.