SECTION III.

SALTS *both Essential and Fix'd; with the Preparations of* TARTAR.

Sal Essentiale Acetosæ.
Essential Salt of Sorrel.

TAKE any quantity of the Juice of Sorrel, clarified by standing, and evaporate two thirds of it away; strain the remainder through a flannel bag, and again exhale it to a pellicle; then put it into a glass vessel *, and pour a little Oil-Olive upon the top; set the vessel in a cellar, till numerous crystals appear therein; which are to be first gently wash'd with Spring-water, and then dry'd.

* Or rather an unglazed earthen one, that the salt may the sooner shoot and stick to the sides thereof. This is the direction of the learned *Boerhaave*; tho with all the assistances he cou'd invent, he assures us he never finished this process in less than half a year; the *English* and *French* physicians, therefore, seem much happier, if they can perform it in eight or ten days; as the *London Dispensatory*, and *Lemery*'s Chemistry conspire to persuade one. See *Boerhaave*'s *Chemistry*, pag. 34. PRACT. *Pharmacop. Londinens.* under *Salis Essentialis parandi Ratio*, and *Lemery*'s *Chemistry* Chap. XII. of *Vegetables*.

Sal

Sal The Essential Salts of the
Centaurii minoris, Lesser Centory,
Cichorei, Succory,
Euphrasiæ, Eye-bright,
Fumariæ, Fumatory,
Plantaginis, Plantain,
Quercûs, &c. Oak, *&c.*

are obtain'd in the same manner; as are also the Salts of all acid, austere, astringent and very bitter plants, that contain but little Oil.

The Waters of these plants, which are obtainable to no good purpose by distillation, may be made by dissolving a proper proportion of their essential Salt in Spring-water *.

Sal Fixum Absinthii.
Fix'd Salt of Wormwood.

Take any quantity of the Herb Wormwood, either fresh gather'd or gently dry'd, put it into an iron pan, and with a soft fire reduce it to white ashes; of which make a lixivium, with a proper proportion of hot Spring-water; filtre the lixivium, and with a gentle fire, evaporate it to a brown Salt; which by a few repeated solutions, filtrations and coagulations will become pure and white †.

* It is with great pleasure that the reader, thro this whole work, will observe so good an acquaintance with chemistry in the learned compilers; as indeed it were very rash to write a public Dispensatory without it.

† To save trouble and charge, this Salt is prepared by our whole-sale dealers in a much shorter manner from *Cineres Clavellati*.

After

After the same method are obtained,

Sal	The fix'd Salts of
Artemisiæ,	Mugwort.
Cardui Benedicti,	Carduus-Benedictus.
Centaurii minoris,	Centory, the less.
Fabarum stipit.	Bean-Stalks.
Genistæ,	Broom.
Scordii,	Scordium.
Tamarisci, &c.	Tamarisk, *&c.*

Crystalli Tartari.
Crystals of Tartar *.

Take any quantity of white Tartar, reduced to powder, dissolve it in twenty times its own weight of Water, and filtre the solution, whilst it is yet hot, thro Cap-paper, into a wooden vessel; then expose it to the cold air for a night longer, that the crystals may shoot to the sides of the vessel; after which, pouring off the water, let the crystals be taken out and dry'd. There is no difference between this and

Cremor Tartari †.
Cream of Tartar.

Take any quantity of the foregoing filtred solution of Tartar, and boil it over the fire,

* The preparations of Tartar very justly make a part of this Section, as being no other than the essential Salt of a fermented vegetable Juice, or Wine.

† Except in the manner of preparation; which seems to have given it the name of Cream of Tartar.

till

till a thick skin appears on the surface, which is to be taken off with a perforated wooden ladle; then boil it till a new skin arises, and take this off as the former, and continue to do thus till all the water is wasted in this manner; and at length dry what was so skim'd off, in the Sun.

Sal Tartari.
Salt of Tartar.

Take any quantity of white Tartar, wrap it up in moisten'd Cap-paper, and calcine it in a reverberating Furnace till it becomes very white; then dissolve it in hot water, filtre the solution, and exhale it, in a glass vessel, or one of glazed earth, till it becomes as white as snow, and perfectly dry; keeping it continually stirring with an iron ladle towards the end of the operation; to prevent its sticking to the bottom of the vessel.

This Salt is also prepared from Tartar, and half its weight of Nitre, reduced to powder; the mixture being deflagrated in a crucible, and calcined in a strong fire, for an hour; and afterwards depurated by solution, filtration and evaporation *.

* As the most approved chemical authors declare they find no difference between the fix'd Salts of vegetable substances; there can be no great harm, if the trading chemists make use of the cheapest subject they can procure for the making of what is called Salt of Tartar.

If the Salt of Tartar be required ſtronger, let the white Salt be fuſed with a very violent fire, in a crucible, and reverberated, for ſome hours; till it turns of a greeniſh or blue colour.

Liquamen Tartar, vulgò Oleum Tartari per deliquium dictum.

Liquor of Tartar, commonly called Oil of Tartar per deliquium.

Take any quantity of Salt of Tartar, put it into a flat glaſs veſſel, and expoſe it to the air of a moiſt place for ſome days, ſo as that it may diſſolve into a liquor, which is either to be filtred, or freed from its fæces, by inclining the veſſel.

The higher this Salt is calcined, the eaſier it reſolves *.

Tartarum Vitriolatum.

Tartar of Vitriol.

Take any quantity of Oil of Tartar *per deliquium*, put it into a capacious glaſs veſſel, and add thereto, drop by drop, a ſufficient quantity of rectified Oil of Vitriol; that is, ſo much as will put a ſtop to all farther ef-

* As more ſtrongly attracting the moiſture of the air; which appears to be a much better menſtruum for this purpoſe than bare common water, as containing many more active parts than that.

ferveſcence;

ferveſcence; then evaporate the mixture, with a gentle heat, till it grows dry *.

If the *white Præcipitate* made in this operation be diſſolved in hot water, then filtred and evaporated to a pellicle, it will ſhoot into cryſtals.

Tartarus Solubilis.
Soluble Tartar.

Take any quantity of the Cryſtals of Tartar, and diſſolve them in ten times their own weight of hot Spring-water; add to the ſolution, drop by drop, a ſufficient quantity of Oil of Tartar *per deliquium*; that is, ſo much as ſtops all farther effervescence: whilſt the liquor remains hot, let it be filtred; and evaporated, in an earthen veſſel, till it grows dry, or only till a skin appears on the ſurface, ſo as that the Salt may be reduced to cryſtals †.

Sapo Tartareus.
Soap of Tartar.

Take any quantity of Salt of Tartar, thoroughly calcined; and, whilſt it yet remains

* The *Caput Mortuum* of the *Spiritus Nitri fortis*, made with Oil of vitriol, and ſometimes called by the name of *Sal Enixum Paracelſi*, is no bad ſubſtitute for this preparation; and accordingly is often ſold for the thing it ſelf.

† For more particular directions and informations relating to this proceſs, ſee *Boerhaave's New Method of Chemiſtry*, pag. 181—183. PRACT.

hot,

hot, reduce it to powder, put it into a wide glaſs veſſel, and immediately pour thereon twice its weight of Oil of Turpentine; and let them ſtand together in a cellar for ſome weeks, till the Oil ſhall have entred the Salt; then by degrees add more Oil, till at length the Salt ſhall have imbibed thrice its own quantity thereof; and they both together incorporate into a Soap, which they will do in the ſpace of a month or two, provided the matter be daily kept ſtirring.

The operation will be finiſh'd the ſooner, if the containing veſſel be faſten'd to the ſails of a wind-mill, or any other machine that has a ſwift circular motion *.

Lapis Septicus, ſeu Cauterium Potentiale. *Potential Cautery.*

Take of Pot-aſhes and Quick-lime, each a like quantity, and a ſufficient quantity of Spring-water; let them ſtand together, for ſome days, in a veſſel of glaſs or glazed earth, then filtre the liquor, and evaporate it till it acquires the hardneſs of a ſtone †.

* There are ſeveral particular circumſtances to be carefully obſerv'd in the conduct of this proceſs; and upon which its ſucceſs depends. See *Boerhaave*'s *Chemiſtry*, pag. 178—180. PRACT.

† See *Boerhaave*'s *Chemiſtry*, pag. 50. PRACT.