
BOOK the Second.

of ROOTS.

P R E F A C E.

I Understand, by the Root, that Part of the Plant which is in the Earth, and which draws in the Nutrition, and communicates it to other Parts produced from thence, as the Stalk, the Leaves, the Seed, &c. The Roots which we commonly sell, are not only many in Number, but very different in Figure and Virtue. Our Herbarists supply us with many Roots, which require no other Preparation than to be clean'd and dry'd, which is sometimes well, and sometimes ill, according to the Capacities of the Herb-Dealers; such as Enula Campana Roots, Marsh-mallows, Lilly Roots, and the like. We have others brought from Foreign Countries, Part of which are very fibrous or stringy, hard and useles, as Turbith, Bastard Turbith, White Dictamny, &c. which are separated from the Root, as is practis'd upon several Roots in France, as Cinquefoil, &c. We have others brought to us cut into Fillets, as Jalap, Mechoacan; in little Bits, as the Lessiv Galingal; in larger Sticks, as Rhubarb, Rhapontick; the entire Root, as Angelica; some adorn'd with their Leaves, as the Virginia Snake-Root; others are brought in long stringy Fibres, as Sarsaparilla: And, last of all, some are wash'd and cleans'd from their outward Skins, as Squills, Florentine Orris, and the like.

There is no less Difficulty in the Knowledge of Roots than of Seeds, as well by reason of their different Kinds, as the many Distinctions which are common among one another. 'Tis for this Reason we ought to be very circumspect in our Choice, and know the main Distinctions of every one, to make an exact Judgment of them, which is difficult to be done without Practice, and where a Man does not make it his continual Business. Those who want Roots, ought not to go about hunting for the best Bargains, but apply themselves to such Merchants in whose Probity they can put their Confidence, tho', upon the whole Matter, the Price is a very considerable thing.

Those Persons who value not their Conscience, make no Scruple at all to sell one Thing for another, and ask as much for an Ounce of what is demanded of them, as they wou'd sell a Pound of the same Drug for; as some People sell Tormentil for Contrayerva. Is it not likewise as profitable to charge the several Sorts of dry'd Drugs at an higher Price, because most Sorts of Roots are subject to be Worm-eaten, as Angelica, the Acorus Verus, &c. and to waste and be spoil'd, as Rhubarb, and the like.

I. Of

I. Of Ipecacuanha, or Ipecacuana.

THE *Ipecacuana*, call'd *Begu-quella*, likewise *Specacuanha Cagofanga*, *Beculo*, *Beloculo*, or the Golden Mine, is a little Root, which the *Dutch* and *Portuguese* bring us from the Coast of *Brazil*, call'd *Rio de Genecyro*, which is a River on the South-side of that Country, where their Golden Mines are, which gives this Name to it. This is gather'd together by those that are condemn'd to the Mines; and that which makes it the scarcer is, that there is not above a dozen Pounds gather'd in a Year, and if they wont exchange that against other Merchandises, it will yet make it much dearer. The *Dutch* and others bring us three sorts of *Ipecacuana*, to wit, the brown, which is the first and best Sort, and consequently the dearest; the second which is grey is less strong than the brown; the third is white, of which I shall speak afterwards.

These Plants call'd *Ipecacuana*, as well the brown as the grey, are of a small Height, partly creeping, partly rising about half a Foot high; the Leaves of them are like those of the *Pellitory* of the Wall, in the Middle of 'em grow white Flowers of five Leaves apiece, supported by little Heads with a sort of brown Berries, which when they are ripe, are of a reddish brown Colour, the Size of a wild Cherry: These Berties contain a white Pulp full of Juice, in which is inclos'd two Seeds hard and yellowish, approaching to the Figure of a *Lentille*.

This Root ought to be chose fresh, new and well fed, hard to be broke, resinous in its Substance, and having a Nerve or Pith in the Middle, but take care that it be not mix'd with the Stalk, and Filaments, or Threads, which those that sell it oftentimes throw amongst it, and which gives it an acid, bitter and disagreeable Taste. Some Friends that I have at *Lisbon*, in *Holland*, and at *Marseilles*, have assured me, that the best *Ipecacuana* is the brown, which is chiefly that which comes from the Gold Mines, and the other two sorts are brought from the lowermost Parts of the Mountains thereabouts and other moist Places.

The Use of the said Root, is for the Cure

of *Dysenteries*; several People will have it that this Root is *Alexiterial*, but notwithstanding that, I would not advite any Body to make use of it that Way, but with great Precautions, this acting with too great Violence when given in Infusion or Substance. The common Dose is about half a Dram to a Dram in Powder, taken in any proper Liquid Morning and Evening: This Dose is too large for most Constitutions, and it will act very well from 20 Grains to 30, plying it with green Tea, sage Tea, or plain Possiet-drink.

Of the White Ipecacuana.

The White *Ipecacuana* differs from the other two, in that the Root is white, and altogether made like the white *Beben*, or the white *Dittamny* Root, and the Leaves resemble those of the round Garden-sorrel. The *Spaniards* and *Portuguese* prefer this white *Ipecacuana* before the two foregoing sorts, especially for their Women with Child, and little Infants, by reason it works with less Violence, and is commonly given in Substance from half a Dram to a Dram, and in Infusion to two Drams.

In the Month of *January* 1690, this was made a Thesis in the Physick Schools of *Paris*, concerning the *Brazil* Root, or *Ipecacuana*; in which Places it was observ'd that the *Americans* had it in very great Esteem, as well because they pretended it was a very powerful Antidote, as because it was very useful for the Cure of many tedious and troublesome Diseases; but, above all, for the Cure of *Dysenteries*, and other Fluxes of the lower Belly.

Some will have it, that Mr. *Helvetius*, a *Dutch* Physician, brought the *Ipecacuana* first into Use among the *French* about Five or Six Years ago; but I can assure you to the contrary, because it is above Twenty Years ago since I saw it at *Paris*; for Proof of which, I remember there was a Quantity in the Shop of Mr. *Clauquenelle*, Apothecary, which fell into the Hands of Mr. *Poulain*, his Son-in-law, who was likewise an Apothecary, and introduc'd it into Practice, by the Direction of *Helvetius*.

The



Ipecacuanha.



Contrayerva.



Asina Snakeroot.



Levantine Rhubarb.

The *Ipecacuanba*, or *Specacuanba*, *Lemery*. is a small Root, of the Thickness of a Quill of a moderate Size, which is brought to us dry from several Parts of *America*. There are three Species or Sorts of it, the Brown, the Grey, and the White. The Brown is the strongest and most valued of all; it is the compactest, crooked, wrinkled in Curles, stringy in the middle, difficult to break, of a smart Taste, and bitter: It grows in *Brazil*, &c. as said before by *Pomet*.

The Root of the Grey *Ipecacuana* differs from the former both in Colour and Virtue, for it has less Efficacy. This is brought from *Peru*, by the Way of *Cadix*, and the *Spaniards* call it *Bexugillo*.

The third or white sort is different from the two others, not only in Colour, but in Figure; for it is neither crooked nor uneven. Some Authors say it is small as *Penny-royal*, and that the Leaf is soft and woolly, and that the Flower is white: Others will have the Leaf like round *Sorrel*. It grows low, and in moist Places. The way to chuse any of the three Kinds, is to take the largest and best grown.

This Root is both Purgative and Astringent; it works upwards and downwards, according as the Humours are more or less soluble; strengthens and corroborates the Fibres of the *Viscera*, by means of its earthy Parts: It is one of the best Remedies, and most certain, for the Cure of the *Dysentery* or *Bloody-Flux*: It stops likewise other Scourings of the Guts, but not with that equal Success. The Dose, beaten into fine Powder, is from 20 to 30 Grains of the Brown, from 30 to 40 Grains of the Grey, and so to a Dram of the White Root. The first who brought this into Use in *France*, was Monsieur *Le Gras*, a Physician, who had made three Voyages to *America* in the Year 1672: It was shown afterwards by the Abbot *Bourdolot*; and, in one of my Courses of Chymistry, I had some given me by a *Druggist*, but without any Knowledge or Instruction into its Qualities at that Time.

2. Of the *Contrayerva* Root.

Pomet. THE *Contrayerva* is the Root of a Plant which has green creeping Leaves, full of little small Fibres round about them, of the

Figure of a Heart, in the Middle of which arises a Stalk wholly naked, about a Finger's Thickness. It is brought to us from *New Spain*.

Chuse such Roots as are fresh, well-fed, adorn'd with long Filaments, or Fibrous Strings, that are knotty and ponderous, of a yellowish Red on the Out-side, and of an Ash-colour'd White within, and a sweet aromack Taste.

It is an *Alexipharmack*, very powerful for resisting several sorts of Poisons, and is therefore call'd by the *Spaniards* *Contrayerva*, which signifies in their Language a Counter-poison.

There grows now in *Peru* a Root very like it, which is call'd *Radix Drakena*, from Sir *Francis Drake*, who brought it first into *England*. But as the Roots of the *Contrayerva* are an Antidote; so, on the other hand, the Leaves are a mortal Poison.

Several People, at this Time, make use of this Root reduc'd to Powder, and mix'd with double the Quantity of Jesuits Powder, or the Bark, to turn off the Fits of an Ague or Intermitting Fever; and others again, mix the same with *Ipecacuana*, to cure a Looseness or *Bloody-Flux*.

We sell the Root of a Plant which grows plentifully throughout all *France*, for white *Contrayerva*: It likewise grows in every Garden, and is known every where by the Name of *Hirundinaria*, or *Celandine* the greater. This is very white and delicious, and is call'd, by every Body in *France*, *White Contrayerva*, because it is pretended this has the same Virtues. There is a Composition of several Drugs in Mr. *Charas*'s Dispensatory, which is call'd the *Contrayerva Stone*, by reason this Root is the Basis of the whole.

Baubin makes the *Contrayerva* a Species of *Cypress*, and calls it *Long Lemery*. *Cypress Sweet Root*. You ought to chuse that which is sound, new, aromack, and sharp in Taste. It is an excellent *Alexipharmick*, resists Poison, and cures the biting of *Vipers*, other *Serpents*, or any venomous Beast; and is good against *Calentures*, *Measles*, *Small-Pox*, *Spotted-Fever*, *Plague*, or any malignant and pestilential Disease. *Schroder* says it is good in the *Plague*, even when the Tokens appear: It resists *Melancholy*, cheers the *Spirits*, and makes the Heart merry.

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It may be given either in Powder. from half a Dram to a Dram, or in any Cordial Draught or Bole.

3. Of Virginia Snake-Root.

Pomet. THIS Snake-Root, which is call'd by some *Dittany*, by others, *Contrayerva* of *Virginia*, &c. is a Plant which grows there, and several other Parts of the *Northern America*, and which is us'd successfully by the *Englifo* against all Sorts of Poisons, and the biting of venomous Creatures; and is also very proper against all Epidemical Diseases. *Monfieur D'Aquin*, first Physician, made choice of this Root, as one of the principal Ingredients in the new Reformation of *Venice-Treacle*, set down in *Monfieur Charas's* Royal Galenical and Chymical *Pharmacopœia*. As to the Goodness of this, you ought to chuse such as is fresh and new, the Root thick and well-fed, of a strong Smell, very much like *Spike* or *Lavender*.

There are several Kinds of this *Lemery*, Root, as the greatest, the less, and the least, together with *Parkinson's Polyrhizos Virginiana*: The least only is that which is sold in our Shops, which is a small fibrous or stringy Root, of a Kind of Ash-Colour, with a spicy or aromatical Smell, and a strong, hot, bitter Taste, and is brought to us from *Virginia*, *Maryland*, *New Jersey*, *Pensylvania*, and *Carolina*; but that which comes from *Carolina*, *St. Augustines*, and other the most Southern Places of the *Floridan* Continent, is much the better, inasmuch as those Climes are hotter: That which is clear in Colour, clean and free from Dust and Sand, and very strong in the Scent, is the best. It is one of the greatest *Alexitericks* in the World: It is known to cure the Biting of the Rattle-Snake upon the Spot, which, without this Remedy, is, for the most part, present Death. The Power, Malignity, and Volatility of the Poison, is not so swift and great, but the Subtilty, piercing Qualities, and *Alexipharmac* Virtues of this Medicine yet exceeds it, disappointing all the ill Effects of the Viperine Poison, if given in due Time. And, without doubt, if it will cure the Biting of the Rattle-Snake, the most malignant and dangerous of all Serpents, it will cure the Bi-

tings of all other Serpents, as well as other poisonous and venomous Beasts whatsoever, and also the Biting of Mad Dogs, and Wounds made with poison'd Atrows, for which Things 'tis to be esteem'd as one of the most valuable Druggs yet discover'd.

It is a known, and often-approv'd Remedy against the Malignity of the *Measles*, *Small-Pox*, *Spotted Fever*, and the very *Plague* it self, as also against all manner of *Burning* and *Pestilential Fevers*, not only preventing the Infection before it has spread it self, but curing the Disease after the Infection has seiz'd; for which Purpose, there is no Vegetable, or any other Remedy that I know of, equal to it, in the whole Course of Medicine. The Experience of this Part of the World may justly recommend the Virtues of this Simple every where, as good against Faintings, Swoonings, Sickness, and all Disaffections from the Heart. It is us'd in a Decoction by the *Indians*. We commonly give it in Powder from Six Grains to a Scruple; in an Infusion as strong as Wine, Brandy, or Water, will extract, from a Spoonful to four, &c.

4. Of the several Sorts of Rhubarb.

THE Rhubarb of the *Levant* is the Root of a Plant, of which I *Pomet.* know not positively the true Place where it grows, any more than the Figure of the Plant: For this Reason I was oblig'd to take the Impression which is represented by *Dodonæus*, it not being possible otherwise to get the true Figure of the Leaves, and the Manner how they are dispos'd. For the Flowers, I have had a good Quantity of them presented to me by a Friend.

Dalechamp, in the 558th Page of his Second Volume of the *History of Plants*, makes a large Discourse of this *Rhubarb*, and of the Place from whence it is brought to us; but he, and other Authors that write about it, speak so variously there is nothing to be depended on: But I shall give you an Account of what was writ to me from *Marseilles* the 25th of July 1692. 'The *Rhubarb* that comes from *Persia*, some say grows there; others will have it that it comes from the Side of *Muscovy*; but the most common
: Opi-

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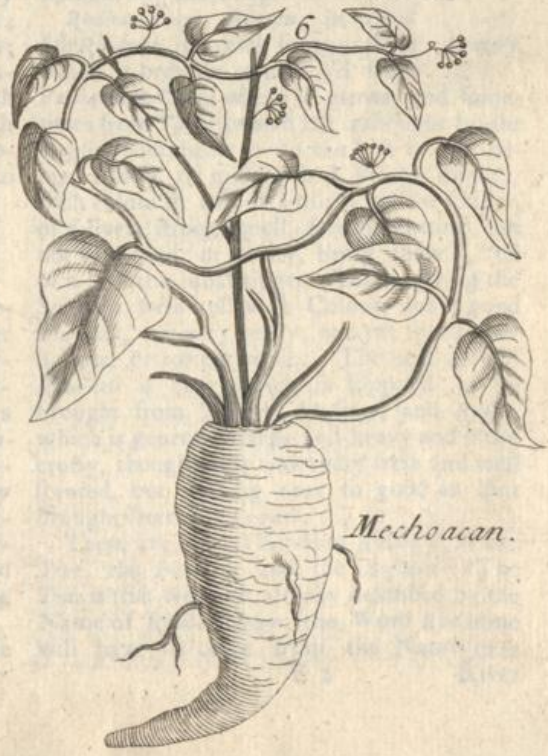
The true Rubarb.



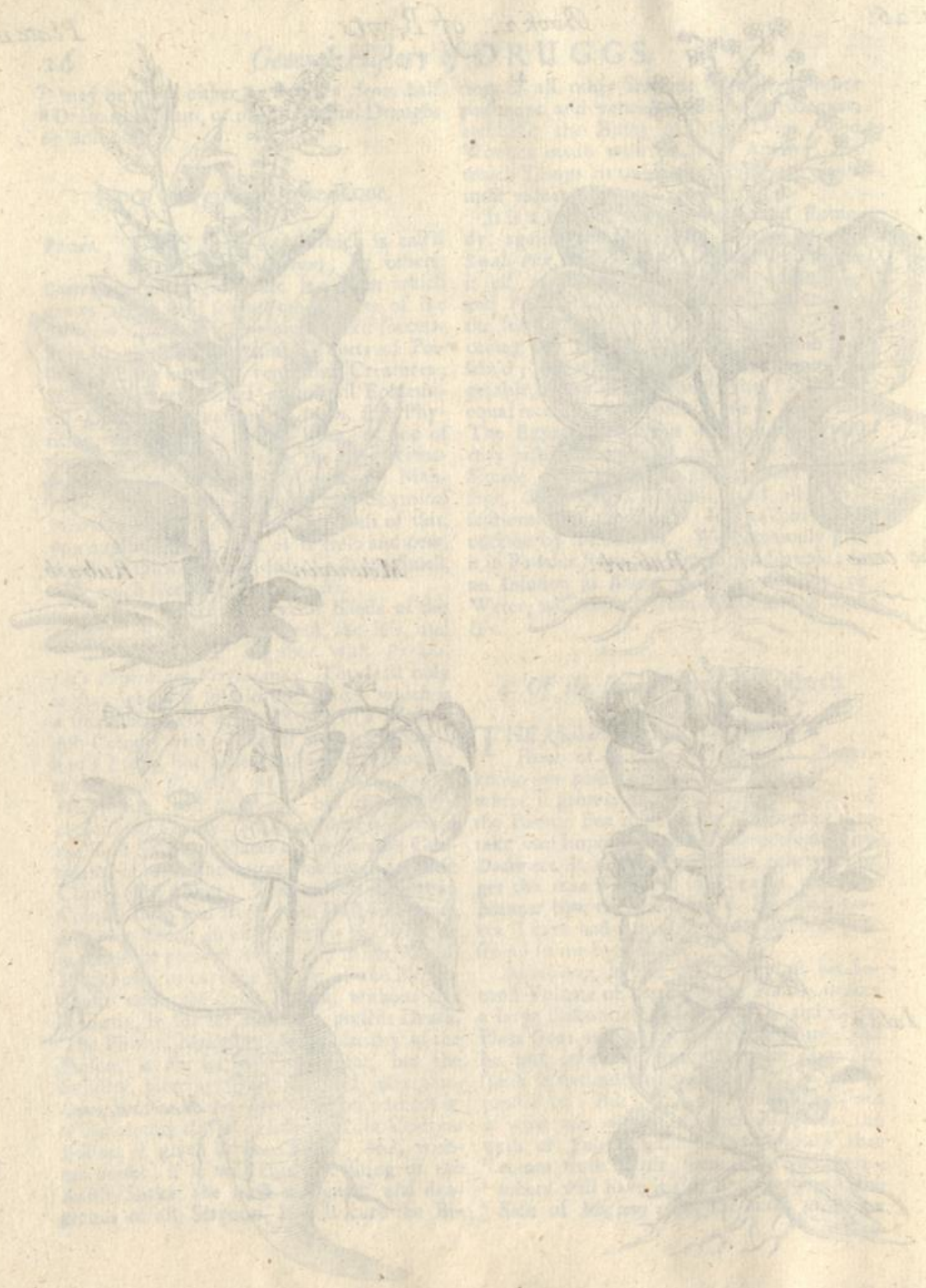
Mountain Rubarb.



Ialap.



Mechoacan.



Opinion is, that it grows in *Persia*. Mr. Tavernier, on the other hand, assures us, in his Book of Travels, that the best *Rhubarb* grows in, and is brought from, the Kingdom of *Boutan*.

This Root, newly drawn from the Earth, is thick, fibrous, blackish on the Out-side, and of a reddish Colour marbled within: It bears large and woolly Leaves, from whence arise little Carnation Flowers, resembling Stars; after which follow the Seed. Chuse your *Rhubarb* new, and that which is in small Pieces sticking together, pretty firm and ponderous, of an astringent Taste, and bitter, the Smell not disgusting, but rather aromarick, and of a yellow Colour, bright on the Out-side, and something darker within; but such as, when infus'd in Water, will produce a Tincture like that of *Saffron*, and, when bruis'd in a Mortar, that the Colour within be of a lively reddish Cast.

Great Virtues are assign'd to this *Rhubarb*, especially for strengthening the Stomach, and purging the Gall with Pleasure, principally if assisted with any other Purgative. It is esteem'd likewise very serviceable for stopping of Bloody-Fluxes, and other Loosenesses, either chew'd in the Mouth, or grossly bruis'd, and infus'd in any proper Vehicle; It is also given to Children to destroy Worms; and, in short, is an admirable kindly and salubrious Medicine, as well in Age as Youth and the full Vigour of Years; in all which Difference of Age or Circumstance, duly proportion'd and apply'd, it works friendly to Nature, and efficacious to the Disease.

Of the American Rhubarb.

Within these few Years we have had several Sorts of *Rhubarbs* introduc'd into our Gardens, which Monsieur de Toisy, Vice-Roy of the Islands, brought from the *West-Indies* into *France*. It is from those Places this *Rhubarb* comes so large, that it approaches nearest to the true *Rhubarb* of *Persia*: And I have been inform'd they draw such a Sort of *Rhubarb* from the Lands lying along the River *Rhone*, near *Lyons*: Several Roots of the same I have seen when cleans'd and dry'd, differing little or nothing from the true *Rhubarb*.

Several Persons take this *Rhubarb* for the

Pontick, by reason of their great Likeness; among others, *Prosper Alpin* brought it from the *Indies* to *Padua*, tho' there is a good deal of Difference. Upon the whole Matter, this *Rhubarb* is commonly in Pieces that are almost round; and, on the contrary, the *Pontick* is in long Pieces. And whereas this Distinction is known but to very few Persons, those who bring this Sort of *Rhubarb*, wou'd impose it for the *Pontick*.

Monks Rhubarb, or that of the Mountains.

The Scarceness of *Pontick Rhubarb* from the *Levant*, hath given leave to some to substitute in its room among those who have not a perfect Knowledge of the other, the Roots of the *Hippolapathum*, or *Bastard Rhubarb*, like the great common round Dock, which many People cultivate in their Gardens; or there's another Kind of *Bastard Rhubarb*, which has great Leaves, but less round. The Difference of these *Rhubarbs* are very considerable, for the *Pontick* from the *Levant* is yellow on the Inside, and streaked with red on the Outside, and the *Bastard Rhubarb* is black and jagged on the Sides, and yellow on the Outside without any Marbling.

Rhabarbarum, *Rheum*, in *English Rhubarb*, is a thick fungous Root *Lemery*, which is brought to us dry'd from *Persia* and *China* where it grows, and sometimes from *Turkey*, which last is thought by the *English Merchants* to be the best of all, being a Sort of middle-siz'd Pieces, smooth, fresh colour'd, and of a mix'd yellow Oaker, of a lively strong Smell, firm in cutting, but not very hard, or crusty, being chew'd, 'tis of a bitterish subastringent Taste, giving the Spittle a fresh yellowish Colour, and a good Flavour, not very heavy, nor yet spongy, or hollow, or rotten within. The next Sort of *Rhubarb* is that which is suppos'd to be brought from *Tartary*, *Muscovy*, and *Russia*, which is generally large and heavy and more crusty, though many times very fresh and well scented, but nothing near so good as that brought from the *Levant*.

There are several Kinds of *Rhubarb*, as the *True*, the *Pontick*, and the *Bastard*: The *True* is that we have already described by the Name of *Rhabarbarum*, the Word *Rba* some will have to come from the Name of a

River in *Pontus* now call'd *Volga*; others from the *Arabian* Word *Raiwand*; others say it came from *Barbarum*, a City of *India*, above the River *Indus*, and that *Rha Indicum* and *Barbaricum* were all one. It is brought from *China* to *Turkey*, and so to *Venice* by Land; this lasts longer than what our Merchants bring by Sea, which corrupts sooner. It is a most admirable Purge, expelling sharp griping clammy and tartarous Humours from the Stomach and Bowels, it cures the Griping of the Guts, Collick and sharp Fluxesto a Miracle, so that it may be allowed to be one of the best Specificks in the World: It cures all sorts of Fluxes whatever by carrying off the Cause, and therefore is good against the bloody Flux, Dropsie, Jaundice, green Sickness, Rickets, Melancholy, and other the like Diseases. It is given in Powder from a Scruple or two to a Dram, and a Dram and half, or in an Infusion from a Dram to two Drams, corrected with Cinnamon, and other Aromaticks, which may be quicken'd with *Scammony*, *Falap*, &c. *Schroder* makes an *Extract* of it with *Endive*, *Succory* or *Agrimony* Water, acuated with some Drops of Oil of *Tartar per Diliquium*. Dose of this from a Scruple to a Dram. Likewise you have a Syrup of *Succory* with *Rhubarb*; *Schroder* says, *Rhubarb* is the most us'd of all Purges, and without Danger in all Ages, it may be safely given to Children and Women with Child, and is best without Correctors, only two or three Drops of any of the Essential Oyls, as *Aniseed*, or the like.

Of Pontick Rhubarb.

Some Authors will have this to be the same with the former, saving only the Climate and Place of Growth, which may something change its Form and Goodness; others will have it to be the longer and slender Part and Branches of the *Indian* Plant, because it is very like in Colour, Form, and Virtue to the true *Rhubarb*, others that it is the same Plant, but growing in *Pontus*, and that this has the longer and lesser Pieces, being not of so solid and firm a Substance as the true, which is bitter in Taste, and of an aromatick Smell, being astringent and corroborating after Purgings. It comes from *Russia* and *Muscovy*, as also from the Straits out of *Pontus* and *Turky*. It

is of a fresh Colour, inclining to yellow and red, but that is the best which comes nearest to the true *Rhubarb*, which is the Mark of Distinction you ought to chuse it by. The Virtues and Preparations are the same as the former, only this will admit of near a double Dose to the other.

Of Bastard Rhubarb.

There are four several Kinds of this; 1st, *Hippoparabum rotundifolium*, or *Bastard Rhubarb*, which is the great common round leafed Dock, whose Root is greater than the *Patience* or *Monks Rhubarb*, and without many Branches or Fibres thereit, yellow on the Out-side, and somewhat a pale yellow within, with some discolour'd Veins therein, like to the true *Rhubarb*, but much less than it, especially when dry, it then quite losing its fresh Colour, which the true always holdeth. 2dly, *Rhabarbarum Monachorum*, *Patientia*, *Monks Rhubarb*, or *Patience*; this is the great Garden Dock, bearing the Name of *Rhubarb* for some purging Quality therein; this Root is long, large and yellow, like the wild Dock, but a little redder, and when dried, shews a lesser Stock of discolour'd Veins than the former.

3dy, *Rhabarbarum Americanum*, or *Rheamericanum*, *West Indian Rhubarb*, this is called by them *Rhubarb*, being very like to the *East Indian* Kind, as 'tis roundish, brownish on the Out-side, and reddish within, which being broke, has some Whiteness mix'd with it, and being chew'd colours the Spittle yellow, like *Saffron*, and is bitterish withal. The *Bastard Rhubarb* has almost worn out the Use of the *Monks Rhubarb*, it is now grown so common and plentiful; and it is indeed much the better of the two, though their Natures and Properties are much the same, the *Bastard Rhubarb* works more effectually, a Decoction thereof, or Infusion in *Vinegar*, eases Pains in the Ear, gargling with it relieves the Tooth-ach, and the internal Use of it is good in the Jaundice, Kings Evil, to provoke Urine, expel Sand and Gravel, open Obstructions of the Spleen and Liver, and cure Fluxes of all sorts. Note, this *Rhubarb* is to be us'd in double the Quantity to the true *Indian*. 4thly, *Rhabarbarum Album*

or *Machoacan*, of which I shall treat in its proper Place.

5. Of Jalap.

Pomet. *Jalap* is the Root of a Plant of four or five Foot high, according to what the *Sieur Rousseau* and *Father Plumier* has said of it: The *Jalap* we now sell is brought to us from *New Spain*, to which *Monsieur Tournefort* has not long since given the Name of *Solanum Mexicanum magno Flore Semine rugoso*, *Jalap exstimatum*, which signifies the *Nightshade* of *America*, with the large Flower, and wrinkled Seed, which is believ'd to be a *Species* of the *Jalap*.

Father Plumier will have the said *Nightshade* to be the *Belle de Nuit*, because it entirely resembles that which we call in Latin *Mirabilis Peruviana*; this Plant is very common in our Gardens, and describ'd by *Mr. Evelyn* by the same Name, and because it only flowers in the Night, it is call'd *Belle de Nuit*, or the *Beaury* of the Night.

The *Jalap* sold in the Shops is brought from the *West Indies*, but great Quantities of it come from the *Maderas*, where it grows very common, without Culture. It is reckon'd an excellent Purger of serous and watry Humours, but must be given with Caution, according to the Age and Strength of the Patient, because it works very vigorously, if given in Substance; the ordinary Dose is from a Scruple to a Dram, but that is too large a Quantity for *English* Constitutions, for if it be good, it will operate sufficiently from half a Scruple to two Scruples, which will answer in the strongest Constitutions.

The Resin or Magistery of *Jalap* is made with Spirit of Wine, and precipitated with Water, from whence proceeds a liquid Resin, white and gluey, almost like Turpentine, which after it is dried in the Shade, looks like common Resin; it has a fine Smell, like *Scammony*, and if rightly prepared, when thoroughly dry, is transparent and so brittle, that it will crumble betwixt the Fingers. This is more valuable than the *Jalap* it self, by reason it is much more efficacious, and can be easier administer'd. The Dose is about five or six Grains either by it self taken in the Yolk of an Egg, or added in Bolus, Pills, or the like, to make other Physick work quick-

er and brisker. After the Resin, you may make an Extract by pouring on fresh Spirits of Wine, which will be of a brown Colour, and of the Consistence of Honey; this has the same Effects with the former, but in a less Degree.

Jalap, Jalapium, Gialapa, Gelemery, lapa, &c. is a grey Root, full of Resin, which is brought from the *West Indies*, cut into thin Slices and dried. The Plant which grows from it when in the Ground, is according to *Father Plumier* and *Monsieur Tournefort* a *Species* of the *Belle de Nuit*, which the latter calls *Jalap officinarum fructu rugoso*, the *Jalap* of the Shops with the wrinkled Fruit. The Stalk grows four or five Foot high; the Leaves are very like those of *Ground Ivy*, but they are not so thick, the Flower is red as Scarlet, and sometimes changes to yellow and white, very agreeable to the Eye. This Flower blows in the Night, and closes again at the Approach of the Sun, and therefore is call'd *Belle de Nuit*, or the *Night Beaury*. Chuse such *Jalap* as is in the thickest Pieces, streak'd with resinous Veins, hard to be broke with the Hands, but easy to pound in the Mortar; of a grey Colour, the Taste a little acrid; it contains a great deal of Oil and Salt in it: Purges all Humours very well, but chiefly the watry, and therefore is useful in Dropties, Gout, Rheumatisms, and for Obstructions. All the Names belonging to this Root are taken from the *Indians*. There are two sorts of this *Jalap*, to wit, a whitish, and a blackish or dark brown, which being broke shines a little; this blackish sort is much to be preferr'd, being resinous, and heavier than the other, the whitish has little Resin in it, and therefore not so good, and still less so, if Worm-eaten. It was unknown to the Ancients, not being long since we had it from the *West Indies*.

6. Of Mechoacan.

Mechoacan, likewise call'd *white Rhubarb*, *Scammony*, or *Briory* of *America*, is a light white Root, as well within as without, which is brought to us but in Pieces, from the Province of *Mechoacan* in *New Spain*, from which the said Root takes its Name. There is likewise a great deal of *Machoacan* according to the *Sieur Rousseau*, in the Island
of

of *St. Domingo*. This Root stands in the Earth, sending forth Stalks that bear thin slender Leaves like a Heart, of a whitish Green, after which grow little Berries, which are green at first, and turn red by Degrees as they ripen. The *Mecboacan* is a winding Creeper, and differs little from *Briony*, only in the Figure of the Leaves and in Taste, for the Root cut and dry'd cannot be distinguish'd from that of the *Briony*, but that the *Mecboacan* is of a Taste and Smell that is almost insipid, whereas the *Briony* has an intolerable Bitterness. We chuse the fairest Pieces of the *Mecboacan* that are white within and without, dry and ponderous, of an almost insipid Taste, and throw aside that which is dirty, lean, thin and parch'd, and take Care there be no *Briony* mix'd among it.

The *Mecboacan* being powder'd fine, is a gentle Purgative, and may be given in double the Quantity to *Falap*, because it acts not with that Violence, and therefore may be administr'd both to Old or Young with Safety in *Cachexia's*, *Scurvies*, *Jaundice* or *Obstructions*, in Powder with any proper Liquor, or infus'd in Wine. It is a good Hydragogue, purging warry Humours from all Parts of the Body, chiefly from the Head, Nerves, Breast, and Lungs; it prevails against *Catarths*, and the *Veneral Disease*, purges Slime from the Stomach, and is good to be given to Children against the *Rickets*, *Kings Evil*, running Scabs, and scald Heads. You may make a compound Extract of it thus, Take *Mecboacan* three Ounces, Ginger two, white Turbith one, Polipody of the Oak half an Ounce, make an Extract with Spirit of Wine, after due Digestion, decant or strain it off clear, and add two Drams of Manna, Spirit of Vitriol five Drops, Oil of Cinamon three, mix and make an Extract, whereof from half a Scruple to a Scruple, is a good Dose.

Of Briony, or the Wild Vine.

The *Briony*, or *Wild Vine*, is a Plant, if it had been sufficiently known, that wou'd have been fruitless to have spoke of; but many Authors make mention of it, as plentiful in every Hedge in the Country, but rarely to be found in our Gardens. The Root of this Plant is so violent, that the Pea-

sants call it the *Mad Nip*; which, if they happen to eat thro' Inadvertence, it makes them frantick, and sometimes they run the Risque of Death it self: But being dry'd, it is of some Use in Physick, especially the great Compositions.

The *Sieur Mulbutin Seville*, one of the most famous Herbarists at *Paris* for many Years, assur'd me that the true *Wild Turnip* was the *Briony*, and that the Seed which was contain'd in the little dry'd Berries, was what was put into the Composition of the *Venice-Treacle*. Some will have it that the *Briony* was an excellent Remedy to cure the Biting of Serpents, and other venemous Creatures. This may be reduc'd into a Flower or Meal, when dry'd, as Almond Powder.

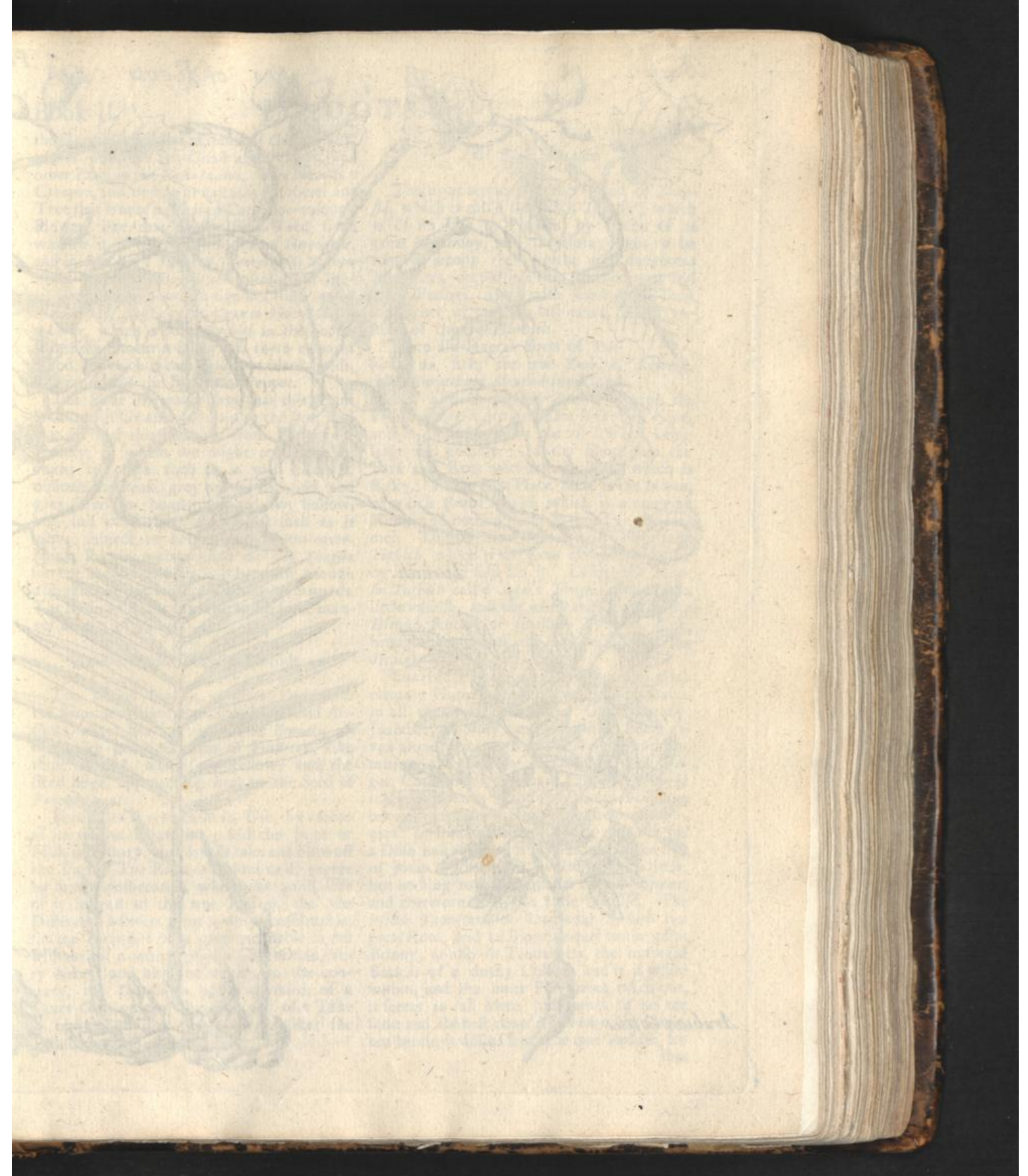
Of Briony, or the Black Vine.

There is yet another kind of *Briony*, call'd the *Black Vine*, which some have given the Name of our *Lady's Seal*. But as we never fell either of these two Sorts of Roots, I did not think it requisite to give you the Figures of them, and make a long Discourse upon them: But I shall inform you that the Root of this *Black Briony*, apply'd fresh upon Contusions or Wounds, stops the Bleeding, and heals the Part; so that it has obtain'd the Name of the *Wound-Root*.

Mecboacan, or *Rhabarbarum Album Indicum*, is a white light Root, *Lemery*, which we have brought to us cut in Pieces, and dry'd, from *New Spain*, and other Parts of *America*. This Plant is a Species of the Winding *Briony*, which *Mr. Tournefort* calls *Brionia Americana repens folio anguloso*, the creeping *Briony* of *America*, with a pointed Leaf, which is large, thin, and whitish. The Flowers produce no Fruit, but some small green Berries, which grow redder as they ripen; they contain in them a sharp pointed Seed, but are of no Use in Physick, nor any other Part but the Root.

7. *Of Turbith.*

THE *Turbith*, which the *Latins* call *Turpetbum*, is the Root of *Pomet*, a Plant creeping the length of other Trees: The Leaves and Flowers of it are like those of *Marsh-mallows*; it runs upon the





Turbith.



Arabian Costus.



Ginger.

the Ground, after the manner of Ground-Ivy, grows near the Sea-Coast about *Surat*, and other Parts in the *East-Indies*. This Plant is a Creeper, and twines or lashes it self round any Tree that is near it; bears a Carnation-colour'd Flower, like that of the Bind-Weed, from whence it is call'd by Mr. *Paul Hermance*, and in Mr. *Ray's History*, *Convolvulus Indicus allatus maximus folio ibisco nonnihil simile Turbith officinarum*; which signifies, the *Indian Bind-Weed*, with great Leaves like *Marsh-mallows*, which is call'd *Turbith* in the Shops. When the Flower is fallen off, there remains a Pod, in which is contain'd four black Seeds, half round, of the Bigness of Pepper.

The *Sieur Hermance* says that this Plant loves moist Ground adjacent to the Sea, and that he had this Account from Persons of Probity, in whom we might confide. We ought to chuse such as is well cleans'd, difficult to break, grey on the Out-side, and greyish within, ponderous, and not hollow, but full of Resin; and reject such as is white, subject to break, and Worm-eaten. Many People mistake, and use the *Thapsia* for the *Turbith*, which will be easily enough distinguish'd by what I shall say afterwards. The Resin of this is made after the same manner as that of *Falap*.

Of the White Thapsia Turbith.

The White *Thapsia*, or Grey *Turbith*, is the Root of a Plant mention'd by several Authors, which has Leaves like the *Fennel*; after which grow Clusters of Flowers, like those of *Dill*, which are yellow, and the Seed large, approaching near to the Seed of *Fennel-Giant*.

This Plant is very little in Use, by reason of its violent Operation; and the Juice or Milk is so sharp, that it will take the Skin off the Face. The Root is seldom us'd, except by some Apothecaries, who make an ill Use of it instead of the true *Turbith*, tho' the Difference betwixt them is very considerable, for the *Turbith* is of a grey inclinable to red without, of a white greyish Cast within, very heavy, and hard to break; on the contrary, the *Thapsia* is light, wrinkled, of a Silver-Grey on the Out-side, and of a Taste so biting and hot, that it will blister the Mouth to touch it when new.

Of Black Thapsia.

There yet remains another Kind of *Thapsia*, which is call'd the Black *Thapsia*; which is of no Use in Physick, by reason of its great Acrimony, and therefore ought to be ranged among the violent and dangerous Medicines, on purpose that Apothecaries, and other Persons, may take Care how they use either of the two last-nam'd Roots instead of the true *Turbith*.

There are several Sorts of *Turbith*; as, first, the true *Turbith*, *Lemery*, call'd *Turpethum Alexandrinum*, and *Verum*, also *Turpethum Arabum*, being the Places where it grows. This is the best Kind, and is brought to us out of *Turkey*, being large and gummy. In the Shops are the Bark and Root without the Pith, which is sticky. In the next Place, there is the *Indian*, of which *Pomet* speaks, which is a creeping Kind, and nothing near so good as the former. Thirdly, the *Pseudo-Turpethum*, or false *Turbith*, which is the Root of *Scammony*, and by some Men sold for it. Lastly, the *Thapsia Turbith* call'd *Radix Thapsie*, which is a little whitish, and not much unlike the white *Dittany* Roots, or smallest *Winter's Bark*, brought to us out of the *East Indies*, and the *Straits*.

The true *Turbith* purges Flegm, and gross clammy Humours, and therefore is profitable in all chronick Diseases, as Gout, Dropsy, Jaundice, Leprosy, and the like: Being given alone, it is apt to cause loathing and vomiting, and therefore is corrected with Ginger, Cardamoms, Grains of Paradise, &c. It is given in Powder from two Scruples to four, but not to Children, or Child-bearing Women: In Infusion from a Dram to three for a Dose and the Extract may be made like that of *Falap*. The *Indian Turbith* purges a little, but nothing to be compar'd to the former, and therefore it is but little in Use. The *Pseudo Turpethum*, or *Scammony Turbith* is a great Root, and in Bigness equal to the great Briony, as also in Tenderness, the outward Bark is of a dusky Colour, and it is white within, and the inner Pith being taken out, it seems in all Mens Judgments to be the same and the best allow'd *Turbith* of the Shops, but herein it differs from the true *Turbith*, for
that

that it is more brittle, and will more easily be broken; the Pith also in this Scammony Root is no less gummy, and full of milky Juice than the true *Tupeth*.

The *Tbapsia Turbith*, or *Radix Tbapsie* is a thick Root, black without, white within, and full of a milky Juice, of a most bitter, sharp and loathsome Taste and Smell, so that it seems to be possess'd of a poisonous Quality: The *French* take this Root for a kind of *Turbith*, calling it *Turpethum Cineritium*, but 'tis said that some of them have now left the Use thereof, for that in purging it mightily hurts the principal Parts, causing often cruel Grippings in the Bowels, with Convulsions, and other ill Symptoms. It grows in *Sicilia*, *Apulia*, and in the Island *Tbapsia*, whence as some think came the Name.

8. Of the Arabian Costus.

Pomer. **T**HE *Arabian Costus* is the Root of a Shrub very like an Elder-tree, which grows plentifully in the happy *Arabia*, from whence it takes its Surname. Chuse the fairest heavy Roots of an Ashen grey without, and inclinable to red within, not easy to break, of a strong Smell, aromatick Taste, together with a little Bitterness. The chief use of this Root at present is in the Composition of *Venice Treacle*, and others of that kind.

There are two sorts of this *Costus*, the sweet and the bitter: the sweet *Costus* is a small Root, very like in Colour, Size, and Figure, to the *Turmeric*; but since this at present is such a Rarity, and so little among us, I shall pass it by, and only speak of the bitter, which is here represented by the Figure.

The latter *Costus*, which some call by the Name of *Costus Indicus*, is a thick Root, very hard, of one Piece, shining, and rather looks like a Piece of solid Oak than a Root. This *Costus* is not so scarce as the other aforementioned; for the Mountaineers furnish us with it from *Italy* and several other Parts. Some will have this *Costus* to be the Costmary of the Garden, which the *Botanists* call *Mentha Hortensis Corymbifera*, which signifies the Garden Mint that bears Clusters on its Tops; others will have it to be *Dittany*, and some

Euula Campana; but in short, this *Costus* grows in several Parts of the World, and in several Parts of the same Country, from whence it receives a different Figure, Colour, and Smell, according to the different sorts of Soil by which it is nourish'd, as we may observe in Corn, Vines, and other Plants, which change their very Taste and Virtue according to the Nature of the Soil in which they are brought up and cultivated, whether moist, dry, rich, barren, mountainous or plain.

Some are of Opinion there are *Lemey*, not two several Species but only one of this *Costus*, the newest being sweet, and is call'd *Costus dulcis*, the same when it grows old, grows bitter, and then is call'd *Costus Amarus*; that which is good, is outwardly of an Ash-colour, inwardly white; and it is fresh, thick, well scented, aromatick in Smell and Taste, and not rotten: It is Stomack, Hepatick, Histerick, Attenuating, Aperitive, and discussing, good against the Colick and Palsy and most Diseases of the Nerves and Womb. Dose in Powder from half a Dram to a Dram, in Tincture from a Dram to two Drams: There is an Electuary made of it call'd *Caryocostinum*, useful for the Intentions aforesaid, and a chemical Oil which is profitable to be given in Clysters, in all uterine Cases.

9. Of Ginger.

Pomer. **G**inger is the Root of a Plant which the *Botanists* call *Arun-do humilis clavata radice acris*, which is to say, the small Club Reed with the sharp Root: It represents in Shape a sort of Foot at the End of every Root, for which Reason the Inhabitants of *St. Christophers*, and the other Leeward Islands have call'd this *Pâte* in *French*, or *Gingembre*, which signifies a Paw or Foot. This produces several Reeds bearing large long green Leaves, and afterwards a reddish Flower, mix'd with a little green, the whole Head of the Flower resembling a Club, from whence it is call'd *Ginger with the Club Flower*.

This Root is brought to us sometimes from the *East Indies*, but that which is cultivated in the *Western Islands* is more us'd, and much

much better, because they dry it with more Care, so that it is not parch'd and wither'd; therefore chuse such as is new, dry, well fed, nor easy to break, of a greyish Colour, resinous within, and of a hot piquant Taste, and reject that which is soft, spongy, white within and without, and that which is subject to be worm-eaten. *Ginger* is very little us'd in Physick, but instead of that, great Quantities of it are us'd by the Hawkers and Chandlers in the Country, who mix it with Pepper; they reduce it to Powder, and then call it *white Spice*, which in *France* serves for several Uses.

Of Candied Ginger.

The *West Indians* candy their *Ginger* when it is taken from the Earth, and likewise they make a Preserve of it green, as the *East Indians* do, from whence we have great Quantities of green *Ginger*: The *English*, *Dutch*, and most of the northern People make use of this to warm the Stomach, as well as to assist Digestion, to correct the Scurvy, or any ill Tastes in the Mouth, to which those Nations are very often subject.

Of Zerumbeth and Zedoary.

These are two Roots of different Colour and Figure, which come notwithstanding from the same Plant, and the Leaves are the very same with that of *Ginger*, for which Reason some call it *wild Ginger*. Both these Roots are brought us from the *East Indies*, and the Isle of *St. Lawrence*, where they grow in abundance.

The *Zerumbeth* is the round Part of the Root which we receive cut in Pieces like *Falap*, grey without, and white within, hard to break, not carious, of a warm aromack Taste. The *Zedoary* is the long Part of the Plant, serving as a Root to the *Zerumbeth*, it is about the Length and Thickness of one's little Finger, of a whitish red Cast without, and white within, well fed, heavy, and not apt to break, without Worm-eating, of a warm, aromack Taste like that of *Rosemary*. The *Zerumbeth* is of little Use in Physick; on the other hand, the *Zedoary* is esteem'd a good Cordial, and of great Efficacy against all Venom and Contagion.

There are two kinds of *Ginger*, the white or meally, and the hard *Lemery*: black, but the first is reckon'd by much the best: It grows both in the *East* and *West Indies*, and is very much cultivated at present in the Isles of the *Antilles*, but the greatest Quantities come from the Leeward Islands, *Barbadoes*, *Nevis*, *St. Christophers*, &c. as likewise from *Jamaica* and other Places thereabouts. We have now little out of the *East Indies*, but what is brought thence in a Confection, call'd *Green Ginger*: It is very warm, attenuating, inciding, aperitive, and highly stomatick and alexipharmack; gives Ease in the Colick, expels Wind, and is an excellent Antiastrum, made into an Electuary with Honey, or its own Syrup: It creates an Appetite, resists Putrefaction, expels the Plague, Poison, and all manner of malignant and pestilential Diseases: It may be used in Powder grated or pounded, from half a Dram to a Dram, or candied to an Ounce. *Green Ginger* which they prepare in *India*, is likewise made in *England* and other Parts after this manner: Let the fresh Root soak two or three Days in warm Water, keeping it in a *Balneo* all that time, so it will grow soft and swell, then boil it up either slit or whole with refin'd Sugar to a Syrup. The *Candied Ginger* is made by steeping the Roots in warm Water, then cutting them into long Pieces, dry them, after which candy them.

A Laxative Confection of *Ginger*, useful for cold Constitutions, to purge off watry and flegmatick Humours is made thus. Take *Ginger* two Drams, *Cinamon*, *Cloves*, of each a Dram, *Nutmeg*, *Saffron*, *Galingal* of each a Scruple, *Turbith* half a Dram, *Diagrydium* three Drams, *Sugar* four Ounces, mix and make a Confect. Dose from two Drams to half an Ounce. Another Confection to revive and fortifie a weak and cold Stomach: Take *Ginger* in Powder six Drams, *Cinamon* two Drams, *Nutmegs*, *Cloves*, *Mace*, *Saffron*, of each a Dram, *Pistachia Nuts* one Ounce, fine *Sugar* a Pound, dissolv'd in *Rose-water*, then mix all, and beat it up to a Consistence, of which take the Quantity of a Walnut twice a Day.

10. Of Florentine Orrice.

Pomet. **F**lorentine Orrice is the Root of a Plant, whose Leaves are long, erect, and of a fine beautiful Green, after which grow white Flowers, as I have been assur'd by Mr. *Morin*, Physician to Madam the Dutchess of *Guise*, a Man of great Probity, and large Experience in Simples.

This Plant is known in *France* by the Name of Blew-flower-flag, Flower *de Lys*, &c. which grows almost every where by the Walls, Water-sides, and in the Gardens, and of which there are several sorts, which several Authors have taken Notice of; as to the Orrice, or in Latin *Iris*; they say there are Flowers of it of various Colours, which resemble in some kind the *Rainbow*, which is call'd *Iris*. Chuse such of this Root as is large, well fed, of a Piece, clean, white within and without, difficult to break, of a sweet Smell like the *Violet*; but cast by such as is bad, being lean, dry, and of no Smell, likewise such as is soft, or Worm-eaten.

The Diers, Perfumers, and Confectioners use this in their several Trades to give a grateful Scent to their several Cloths, Perfumes, Comfits and the like. It has a great many other good Qualities, and is of some small use in Medicine, being employ'd in several Galenical Compositions, and is a mighty Favourite with the Fair Sex. There is a green Colour made of it, to which they give the Name of *Verditer*, which is us'd by the Painters in Miniature. This *Verditer* is made several ways, as is describ'd in a little Treatise of Miniature, which those who desire to make, as well as *Carmine*, and other fine Paints, may have recourse to.

This Orrice call'd *Iris Alba Florentina*, or *Iris major Alba, illyrica vulgo, vel potius Florentina*, is a white Root, the Thickness of a Thumb, oblong, which is brought to us from *Florence*, where it grows without Culture; the Stalk is like that of the Flower de Luce, but the Leaves grow erect, and the Flowers are white. This Root when in the Ground is deck'd with several Fibres, which are cut off with the Our side, which is reddish, and then it is dried.

The *Illyrick* sort of Orrice is reckon'd the best, but the Roots of both are us'd; that brought from *Florence* is plump, round, and of a delicate fragrant Smell like *Raspberries*. It is Pectoral, and very good against Stoppages in the Breast and Lungs, prevails against Coughs, Asthma's, Obstructions of the Terms, Gripings of the Belly, Pain in the Stomach, Wind, stinking Breath. It is us'd outwardly in sweet Powder for the Hair, and in *Damask Powder*, and *Cypress Powder*. It may be given in Powder, Tincture, Extract, Species, or the like Form, from a Dram to two Drams.

11. Of Great Galingal.

THE great or large *Galingal*, which some call amiss the *Acorus verus*, or true *Acorus*, is the Root of a Plant or Reed, whose Leaves are like the Orrice, which grow plentifully in the Isle of *Java* and in *China*. Make choice of the largest, heaviest Root, reddish without, and whitish within, of a warm, piquant Taste, and afterwards a little bitter, but throw away that which is almost insipid, or very old. This Root is of no other Use when dried, than for the Vinegar-makers, who use it instead of the less sort for the making of Vinegar.

Of the Small Galingal.

The *Small Galingal* is a reddish Root within and without, of a piquant Taste, and very aromatick, which comes to us cut in Pieces from the *Indies* and *China*: This Root bears its Branches almost like a Shrub, and the Leaves much resemble those of *Myrtle*. Chuse such Roots as are best fed, of the highest Colour, and when chew'd is of a biting, aromatick Taste, and take care there be no large Pieces mix'd, which is easily known, because the *Small Galingal* is no thicker than a Man's little Finger, of a more lively Colour, and hotter Taste than the larger *Galingal*. The smaller sort is much more used in Physick than the greater, because it abounds with more Virtue.

There are two sorts of *Galingal*, brought to us from the *Indies*; the first is call'd the *Great*, and is

Lemery.
a solid.



Ginger.



Florentine Orrice.



Large Galingal.



Small Galingal.





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a solid, heavy Root, cover'd with a reddish Bark, white within, of an acrid, and something bitter Taste. 'Tis a sort of *Species* of the Reed, the Leaves like *Orrice*, the Flower white without Smell, the Seed small, and the whole of little or no Use in Physick.

The second sort is the little *Galingal*, whose Root is about the Thickness of a Finger, cut in Pieces on purpose to dry, that it may be fitted for Sale; it is hard, reddish without and white within, and of a Taste and Smell much stronger and more aromack than the large *Galingal*. It is Cephalick, Stomack, Neurotick, Histerick, and Antispasmatick, sharp tasted, attenuating, opening, discussive and prevalent against most Diseases of the Head, Brain, Nerves, Womb, Stomach and Bowels. It is good against Megrin, Head-ach, Palfy, Cramps, Convulsions, Obstructions, Colick, Indigestions, want of Appetite, Cachexia, Scurvy, &c. You may use it in Powder, Tincture, Extract, or candied like Ginger. Dose two Drams or half an Ounce.

12. Of Turmerick.

Pomet. *Turmerick*, which some call *Curcuma*, and others *Saffron*, or *Cypress* of *India*, *Malabar*, or *Babylon*, is a Root which is yellow quite thro', and produces very large green Leaves; the said Root sends forth Flowers, which grow like Ears of Corn, as may be seen by the engrav'd Figure which is in Mr. *Hermance's* Book. This little Root is almost like *Ginger*: It is brought to us from several Parts of *India*, by the Company of Merchants trading thither, and likewise great Quantities of it comes from the Isle of *St. Lawrence*.

Chuse your *Turmerick* large, fresh, resinous, hard to break, and rather heavy than such as is worn-out, or inclinable to be rotten: There are a great many Persons about *Paris* who ask for the *Red Turmerick*, as believing there are 2 sorts, when in Reality it is nothing but the Age of it that turns it brown, which when it is powder'd shows more red, according as it is older or newer. This Root is chiefly us'd by the Dyers, Glovers, and Perfumers: The Founders employ it to tinge their Metals, and the Burton-makers to rub their Wood with, when they wou'd make an Imitation

of Gold. The *Indians* use it to tinge and give a yellow Colour to their Bread, or other Things, as we do *Saffron*.

Of Round Cypress.

This *Cypress* commonly call'd *Round Cypress*, or *English*, or *Flemish Cypress*, is a Root full of little Knors or Specks, of a brown Colour without, and gray within, of a little Sharpness in Taste, and almost without Smell when it is newly taken out of the Ground. This Root grows in the Water, and along Banks and River-sides, bearing triangular Stalks, solid, smooth, and full of a thousand long upright Leaves, the Flowers are small, reddish, and come by Ears or Tassels on the Top of the Stalks. Make a Decoction of this Root bruis'd in white Wine, and after it is strain'd, drink the Wine as hot as possible. 'Tis an approv'd Remedy to cure the Colick.

Of Long Cypress.

Long Cypress, call'd by some wild *Galingal*, is a knotty Root, wrapt round with fibrous Strings, not easy to break, of a brown Colour without, and grey within, of a pleasant Scent, especially when fresh, and well dried. This Root grows by Rivulets, and other watry Places, as Ditches and the like; it bears green Leaves which are like those of the Leek; the Stalk and Flower very much resemble the round *Cypress*: It is of some Use in Physick, but much more to the Perfumers and Glovers.

Terra Merita, or the *Curcuma* of *Lemery*, the Shops is a small Root, about the Size of that of *Ginger*, hard, as if it was petrified, yellow without and within; it grows in many Parts of the *East Indies*, from whence it is brought to us dried. The Plant is call'd *Cyperus Indicus*, and *Crocus Indicus* or *Indian Saffron*. The Leaves are like the white *Helibore*, but not so much strip'd, but smooth. The Flower is of a fine beautiful Purple, which is succeeded by a Fruit which is hairy like the *green Chestnut*, and which contains a Seed made round like a Pea, which is very good to eat, when it is boild with Meat. The Root is yellow like *Saffron*, and the *Indians* use it to colour their Rice, and several other

Sorts of Provisions: It contains a good deal of Oil in it, as well as fix'd and essential Salt: This *Turmeric* is aperitive, deterfive, proper to relieve Obstructions of the Liver and Spleen, to provoke Urine, and Womens Courses, and good in the yellow Jaundice, Stone and Gravel, either in Powder or Decoction.

Cyperus, in French *Souchet*, in English *wild Galingal*, is a Plant whereof there are several kinds, but I shall only speak of two; and first of Mr. *Tournefort's Cyperus rotundus vulgaris*, or the common sort, which is call'd the round sort, whose Leaves are long, with the three corner'd Stalk, and Flowers on the Top like a Plume or Nofegay; after the Flowers are gone, on the Head of every Stem, comes a triangular, hard, black Seed: The Root is as thick as an Olive, of an oblong Figure, grey Colour, weak Smell, sweet Taste, and a little astringent.

The second kind is by Mr. *Tournefort* call'd *Cyperus odoratus radice longa, sive Cyperus Officinarum*. The sweet scented *Cyperus* with the long Root, or that of the Shops: It bears Leaves like those of the Reed, and resembles in some manner the Leek, but much longer, much slenderer, much harder; the Stalk grows two Foot high, straight, without Knots, triangular, full of white Pith, bearing on their Tops large reddish Clusters, with a Seed like the former sort, as the Virtues are in like manner: Both long and round being us'd to one and the same End and Intentions; the round is esteem'd the best, but some think the long to be full as good: They cure a stinking Breath being chew'd in the Mouth; boil'd in Oil, and bruis'd, and laid to the Reins or Groin, they provoke Urine; they are stomatick, hepatick, uterine, and nephritick; help a weak Stomach, cause a good Appetite, and Digestion, expel Wind in the Bowels, and corroborate all the internal Parts, may be given in Powder, Tincture or Decoction. Dose from half a Dram to a Dram.

13. Of Spurge.

Pomet. **ESULA**, or *Spurge* is a small red Root, which produces very narrow, green Leaves, full of Milk; this Plant grows every where in France neg-

lected, and the Roots which are sold, come from *Provence* or *Languedoc*. Chuse such as is new, the fairest red Root without and within; which being held in the Mouth, affords a very disagreeable Taste, attended with great Acrimony: This small Root is very little us'd in Physick, but there is an Extract made in all our Dispensatories, which is appropriated to hydropick Cafes.

The *Esula* or *Spurge* is a kind of *Lemery. Tithymal*, or a Plant which bears many Stems of about a Foot high, carrying straight, narrow Leaves, like those of the Pine, fill'd with Milk; the Flowers are small and grassy, the Root little and red; this grows in Fields, Lanes, or Gardens, and abounds with an essential, fix'd, acrid Salt, as well as Oil. 'Tis rarely us'd in Medicine, because it purges violently, except in some desperate Cafes, as Dropsies, Lethargies, Frenfies, &c. There are several sorts of this Plant, all which have the like Qualities, but that which bears Leaves like the Pine is esteem'd the best. It is a sharp, fiery, corroding Medicine, and reckon'd so dangerous as not to be us'd without correcting, which is chiefly done by steeping it in Vinegar, or by adding *Bdellium*, *Tragacanth*, or Mucilage of Fleabane-seed to it. There is the greater and less sort, both which grow in most Parts of *Europe*. They purge Flegm downwards, for which they have been accounted wonderful Secrets in some deplorable and suppos'd incurable Cafes. There is an Extract to be made of it, which some have us'd as a kind of *Panchymaggon*, or general Purger.

Of Cinquefoil, or Fiveleav'd Grass.

The Root aforegoing has given me *Pomet*, an-occasion to mention another Root in Figure and Colour very like the *Spurge*, which the *Greeks* call *Pentaphyllum*, the *Latins* *Quinquefolium*, and we *Cinquefoil*, by reason this small Root produces its Leaves by five and five on a Stem, or Wire, by which they run like Strawberries, and are very common in every Field. The Leaf is more abundantly in use than the Root of this Plant, only that it is us'd in the great *Treacle*.

Cinquefoil is so well known it needs no Description: It grows in sandy *Lemery. Places*, in the Fields and Hedges, and flowers in *May*,

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13



Cinquefoil.

14



Bastard Vine.

14



Tichymal.

15



White Hellebore.



May and June. The Root which is dry, binding, and antifebrifick is us'd in the Shops, and given from a Dram to 2 Drams in Powder, in all Respects just as you give the *Cortex* to cure Quotidian, Tertian and Quartan Agues. It stops Fluxes of the Bowels, Catarrhs, or Defluxions upon the Lungs, Coughs, Colds, Gout, Whites or Gonorrhœa in Men and Women, Sharpness of Urine, &c. An Infusion of it in white Wine, is profitable for the Rickets in Children, Obstructions in young People either of the Spleen, Liver, or Menfes, and to cure the Jaundice. Dose four or six Ounces; it may be likewise taken like an Infusion of the Bark, and to the same Purposes.

14. Of Tithymal.

Pomet. THE *Tithymal*, which the *Latins* call *Thymelea*, because this Plant has small Leaves like *Thyme*, is a light Root, of a different Thickness and Length, reddish without, and whitish within, woody and fibrous; of a sweet Taste in the beginning, but after it has been chew'd in the Mouth a little Time it is caustick, and burns like Fire, especially when it is fresh.

This Plant produces green Leaves, thick and clammy, like those of the Olive, with Fruit of the Size of Pepper, green at first, and of a beautiful red when ripe, which the *Latins* call *Coccus Gnidius*, or *Granum Gnidium*, the *Scarlet Berry*. The whole Plant is very little in use except sometimes that it is applied to the Head, to draw off sharp Humours that fall upon the Eyes, and a little Piece of it put into the Ear, serves for the same purpose; that which comes from *Languedoc* is to be prefer'd to that brought from *Burgundy*.

The *Thymelea foliis lini*, of *Mon-Lemery*, *seur Tournesort*, or *Tithymal* with *Linseed* Leaves, is a little Shrub whose Trunk is not above the Thickness of a Thumb, divided into several Twigs or Branches of about a Foot and a half, with fine small Leaves, like those of *Linseed*, but larger, greener, and more viscous; the Flowers grow on the Tops of the Branches, collected together in several little white Clusters; After that comes a round fleshy Berry, like

that of *Myrtle*, full of Juice, which is red when ripe, and call'd *Granum Gnidium*. This Fruit contains an oblong Seed, cover'd with a black shining Skin, very brittle, having a white Pith, of a hot fiery Taste. The Root is long, thick, hard, woody, grey, or reddish on the Out-side, white within, sweetish at first tasting, but very caustick and biting afterwards, abounding with a great deal of acrid Salt, and fix'd Oil.

Of the Wild, or Bastard Vine.

'Tis but a few Years ago since this Root so nearly resembling that of the *Pomet. Tithymal*, only that it is blacker and harder, was known at *Paris*: The first who introduc'd it there, was *Monsieur Amelot*, Ambassador in *Portugal*, and after him *Mr. Tournesort*, who gave me a Piece, the Figure whereof is here represented, and some Persons have assur'd me that the said Root, as it grows in the Ground, shoots forth Branches charg'd with Leaves, altogether like the Vine which creeps along Walls, and upon Trees.

'Tis upon this Account that the *Portuguese*, who first brought it from *Mexico*, gave it the Name of the *Pareira Brava*, which signifies *Wild, or Bastard Vine*. *Mr. Amelot*, *Mr. Thevard* of the Faculty of Physick, and some others have recommended it as a Specifick for the Cure of the Stone, to be taken in Powder in a Morning fasting in white Wine. For Choice of this, *Mr. Thevard* thinks that of *Mexico*, to be much better than that which comes from *Portugal*: And by a Letter which I receiv'd from *Lisbon* the 16 of *October*, 1692, it is observ'd, that the *Pareira Brava* which comes from the *Indies* and *Brasil*, is a Root as commonly known as the *Ipecacuana*, and almost as much us'd by the Apothecaries of that Country, but the Quantity is not so great: It is sold at ten Testons, which is about five Livers *French* Money a Pound.

15. Of White Hellebore.

WHITE Hellebore, call'd in *Latin Pomet. Veratrum Album*, is a Plant which grows on the Mountains of *Dauphine* and *Burgundy*, whose Root is white, with many long fibrous Strings of the same Colour;

lour, the Leaves of the Plant are large, green at first, and of a yellowish Red afterwards, the Stalks which are hollow, bear a great many little Flowers like Stars. We ought to chuse such Roots as are fairest, full of Filaments, or Fibres, yellow without, and white within, of an acrid, ungrateful Taste; some value those Roots which are freest from Strings, but I cannot be of their Opinion, especially if it be to be reduced into Powder.

Of Black Hellebore.

This is a dark, brown Root, full of small Fibres, black on the Surface, and grey within, from whence arise green Stalks, adorn'd with Leaves of the same Colour, indented and Carnation Flowers like a Rose. Make your Choice as before directed: This is of much greater Use for internal Medicine than the last.

The *Veratrum flore subviridi* of *Tournefort*, or the *White Hellebore* *Lemery*. rises on a Stalk of two or three Foot high, round, straight, hollow, surrounded at the Bottom with abundance of Leaves like *Gentian*, but much larger, more stringy, strip'd and plaited lengthways, soft and a little hairy; the Leaves which arise pretty high on the Stalk, are a great Distance from one another. The Flowers grow on the Top, rang'd like long Ears, of a whitish green Colour, each of which is compos'd of several Leaves, dispos'd like a Rose, from whence a Fruit succeeds, in which are contain'd longish, white Seeds, almost like Corn. The Root is a thick, white Head, furnish'd with a great many long Fibres of the same Colour.

The other sort is the *Black Hellebore*, call'd by Mr. *Tournefort* *Veratrum flore atro rubente*, it differs from the former, in that the Leaves are much narrower, folding about the Stalks, and that the Flowers are of a brown, or dark red Colour. Both one and the other kind grow in mountainous and wild Places, especially in the hot Countries. No Part is us'd in Physick but the Root which is brought dried from *Dauphine* or *Burgundy*; it contains a deal of Volatile Salt, and essential Oil in it.

The *Black* as well as *White Hellebore* purges upwards and downwards, and is said to cure

all Diseases proceeding from Melancholy, as Disaffections from the *Hypochondria* *Elephantiasis*, *Herpes*, *Cancers*, *Quartans*, and all Diseases of the Head and Brain, as *Epilepsies*, *Apoplexies*, *Lethargies* and *Madness*, for which all Authors have held it a *Specifick*: It enters into the Composition of *Mathews* excellent Pill, and may be given in Powder alone to a Scruple: it likewise mixes well with the larger purgative Compositions.

16. Roman Wolfsbane.

THE *Doronicum Romanum* we call *Wolfsbane*, is a little yellow *Pomet*. Root without, and white within, of a sweetish astringent Taste, attended with a little Viscosity: We have this Root brought to us cleans'd from its Strings, from the Mountains of *Switzerland*, *Germany*, *Provence*, and *Languedoc*: This Root when it grows is of the Figure of the Scorpion's Tail, from whence arise large Leaves, something resembling wild Cucumber, or *Plantain*; this is the Reason why it is call'd *Aconitum pardalianches* *Plantaginis Folio*, or *Panthersbane* with the *Plantain*-leaf. Chuse the fairest Root, and not such as is inclinable to be Worm-eaten, well tasted without, and when bruised, of a good white Colour: It is believed that this being chew'd in the Mouth, becomes an Antidote for Men, which on the contrary is a mortal Poison to all Quadrupeds. It is *Cephalick*, *Cordial*, and *Alexipharmick*, resists Poison, is good against the Biting of venomous Creatures, and cures the Palpitation of the Heart.

The *Doronicum Romanum* of *Gesner*, or that which *Tournefort* calls the *Lemery*. *Doronicum radice Scorpii*, the *Wolfsbane* with the *Scorpion* Root, is a Plant which bears large Leaves, Swallow-tail'd, green, woolly, and very like the Cucumber, but much less and softer; the Stalk is above a Foot high, something lanuginous, round, divided at the Top into several small Branches, which bear yellow radiant Flowers, like those of the *Chrysanthemum*, or *Sun-flower*; those are succeeded by little, thin, black Seeds, each one having a spiral head; every Root resembling a Scorpion; this Plant grows on the Mountains of *Switzerland*



Switzerland, near Geneva, and several other Parts of France, Germany, &c. from whence these Roots are brought dried to us. It is a proper Counter-poison, good to fortify the Spirits, and drive away malignant Diseases by Perspiration, and to expel Wind, in hypochondriack, colicky Disaffections.

17. Of the Greater Thora, or Panthers-Bane.

Pomet. THIS is a kind of Plant which grows no where but on the high Mountains, and is called *Aconitum Pardalianches*, seu *Thora major*, *WVolf* or *Panthersbane*; it is a Root divided by Lumps or Clods, like the *Ranunculus*. The Leaves are almost round, closed, indented about, and neatly supported by their Stalks, which are not above seven or eight Fingers Height, branching out to the Tops, and adorn'd with certain yellow Flowers compos'd of four Leaves, by which they produce a small Bud, like the *Ranunculus*, and the Flower brings forth flat Seeds as that does. The Juice of this Plant is used to poison Flesh with, for the Destruction of the Wolf, the Fox, and other ravenous Beasts.

This Plant is called *Thora*, which signifies Corruption, because it is *Lemery.* venomous: According to *Tournefort*, it is the *Ranunculus Cyclaminis Folio, Asphodeli radice*. This is a kind of *Ranunculus*, or a Plant which from the Root produces two or three Leaves that are almost round, like those of the *Cyclamen*, but near as big again, indented on the Sides, fibrous, tied by Stalks, which bear them about half a Foot high or more: The Flowers grow on the Top like a Rose: The Seed is Swallow-tail'd and flat, the Root is like the *Asphodel*, and yields a great deal of acrid, corrosive Salt and Oil.

Of the Anthora, or Healing Wolfsbane.

Pomet. The *Anthora*, according to *Monfieur Tournefort*, is a Plant something scarcer than *Gentian*, and is a Species of the *Aconite*, though this is a Counter-poison to such as eat the Root of the *Aconite*, or deadly *WVolfbane*. It is for this Reason *Baubin*

calls it *Aconitum Salutiferum*, the *Healing Aconite*, or *Anthora*. This is compos'd of two short wedge-like Roots, very bitter, white and fleshy within, but brown on the Out-side, and deck'd with abundance of Fibres. The Stalk arises about two Foot high, surrounded with many long Leaves; the Flowers grow about the Stalk, like an Ear of Corn, they are yellowish, and like a Head cover'd with a Helmet; the Seeds are black, wrinkled, and grow in Sheaths, or membranous Cells, five or six of them join'd together. The Root of this is a good Antidote: The Peasants who gather this on the *Alps* and *Pyrenees*, use it with Success against the Biting of mad Dogs, and to cure the Colick; they take it for a sovereign Remedy for those who have eat the *Thora*, or deadly *Aconite*,

The *Aconitum Salutiferum*, or *Anthora*, quasi *Antithora*, because *Lemery.* this is reckoned a Counterpoison, to that call'd the *Thora*, which is a sort of *Ranunculus*, or *Crowfoot*. This *Anthora* is of the Species of the *Aconite* or deadly *WVolfbane*, as describ'd fully before by *Pomet*. The Root is useful in Physick, as being Alexipharmack, Cardiack, Stomachick, and good against the Wind Colick; it contains a great deal of volatile Salt, and essential Oil.

18. Of Angelica.

Pomet. *Angelica* is a Plant which grows plentifully in *Bohemia*, *Spain*, *Italy*, *France*, *England*, and most Parts of *Europe*; and is so well known, it would be needless to describe the Plant; the Seed is us'd much to make *Angelica Comfits*, and the Stalk makes a very good Sweetmeat candied. The Root is seven or eight Inches long, of an odoriferous Smell, and aromatick Taste, flexible, and if new and fresh, breaks white within: It grows in all our English Gardens, yet notwithstanding some is brought us from *Spain* and *Germany*; sometimes this Root is deceitfully mix'd with *Meum*, or *Spignol*, which break of a brownish yellow within. It is Cordial, Bezoartick, and Alexipharmack, Heats, dries, opens, attenuates, and causes Sweat, resists Poison, and cures the Bitings of venomous Creatures. A Spirit of

it cheers the Heart, and revives the Spirits to a Miracle; the Chymical Oil operates more powerfully than any of the former, to all Intentions; besides which, it provokes the Terms, expels the Birth, resists Poison, helps Suffocation of the Womb, cures Palsies, Apoplexies, Convulsions, Cramps, and Rheumatisms.

This Root whose Plant is so vulgarly known, grows best in a fat Soil, where the Ground is full of Moisture; it is brought ready dried to us from several Parts, but the best is that from *Bohemia*, and then what is brought from *England*; of a sweet Smell, and aromatick Taste, that overcomes the bitter, being loaded with a highly exalted Oil and volatile Salt. It is cordial, stomatick, cephalick, aperitive, sudorifick, vulnerary, resists Poison, is us'd in the Plague and malignant Fevers, and for the Biting of mad Dogs.

19. Of Masterwort.

Pomet. *Imperatoria, Magistrantia*, or *Masterwort* in *Englisch*, is the Root of a Plant which has large, green, indented Leaves, after which grow Clusters of white Flowers, succeeded by a sort of small Seed, which is said to be like the *Sesely* of *Marseilles*. Chuse such Roots as are fair and fresh, hard to break, of a brown Colour outwardly, and greenish within, of a strong Smell, and aromatick Taste: Those that grow in *Auvergn* and other mountainous Parts are prefer'd to those of the Garden. The same Virtues are ascrib'd to this as were to *Angelica*, which gain'd it as some pretend, the Name of *Imperial Wort*, not because of its rare Qualities, so much as because an Emperor was the first who discover'd it.

Master Wort, Imperial Wort, or *Lemery.* the *Imperatoria major* of *Tournefortie*, is a Plant whose Leaves are large, rang'd three and three along the Side of the Stalk, ending in a single Leaf; they are stiff, hard and divided each into three Parts, indented on one Part lightly, on the other deep. They rise among the Branches all along, which mount about two Foot high, dividing themselves into Wings, which carry upon their Tops Clusters of Flowers of five Leaves

form'd into a Rose, succeeded by little Seeds, which are flat and almost oval, little larger than those of Dill; streak'd lightly behind, and of a white Colour. The Root is sometimes of the Thickness of one's Thumb, wrinkled hard, and entangled in Fibres, filled with a white, aromatick Substance, of an acrid piquant Taste, hot in the Mouth, and a little bitter.

This Root being hot and dry, attenuates, opens, digests, strengthens, is sudorifick and alexipharmack, is used against Poisons, malignant and pestilential Diseases; causes Expectoration, cures a stinking Breath; relieves Diseases of the Head, as Vertigoes, Apoplexies, Palsies. A Decoction of it in Wine us'd as a Gargle, cures the Toothach, dries up Rheum and Catarrhs, and is good to bath with in the Gout: A Saline Tincture is much better than the Decoction, to cure the Itch, and dry up scabby and scald Heads: An Ointment made with Hogs Lard and Turpentine, heals old Sores, Ulcers, and all foul leprous or malignant Scabs.

20. Of Gentian.

Gentian is a Plant so called from *Pomet.* King *Gentius*, who first discovered its Virtues. It grows plentifully about *Chabli* in *Burgundy*, and other moist Places in several Parts of *France*, especially about the *Pyrenees* and *Alps*.

The Root which is the only Part of the Plant that is sold, is sometimes as thick as one's Arm, divided into several Roots, of a Thumb, or Finger's Thickness, yellowish, and of an intolerable Bitterness; the Leaves in some manner resemble those of Plantain, and grow two and two upon every Joint of the Stalk; they are smooth, green, pale, and bend to and again at their Tops to one another, by means of the Fibres that assist them underneath. The Stalks are straight, strong, of two or three Foot high, decked with yellow Flowers in *June*, which are disposed in Rings by degrees, in the Junctures or setting together of the Leaves. Each Flower is of a Piece, divided into five Parts, very strait, and sharp pointed: The Tract which is in the middle produces a Capsula, in which is enclosed several round Seeds, but very flat, which are ripe in *July*.

Chuse



Angelica.



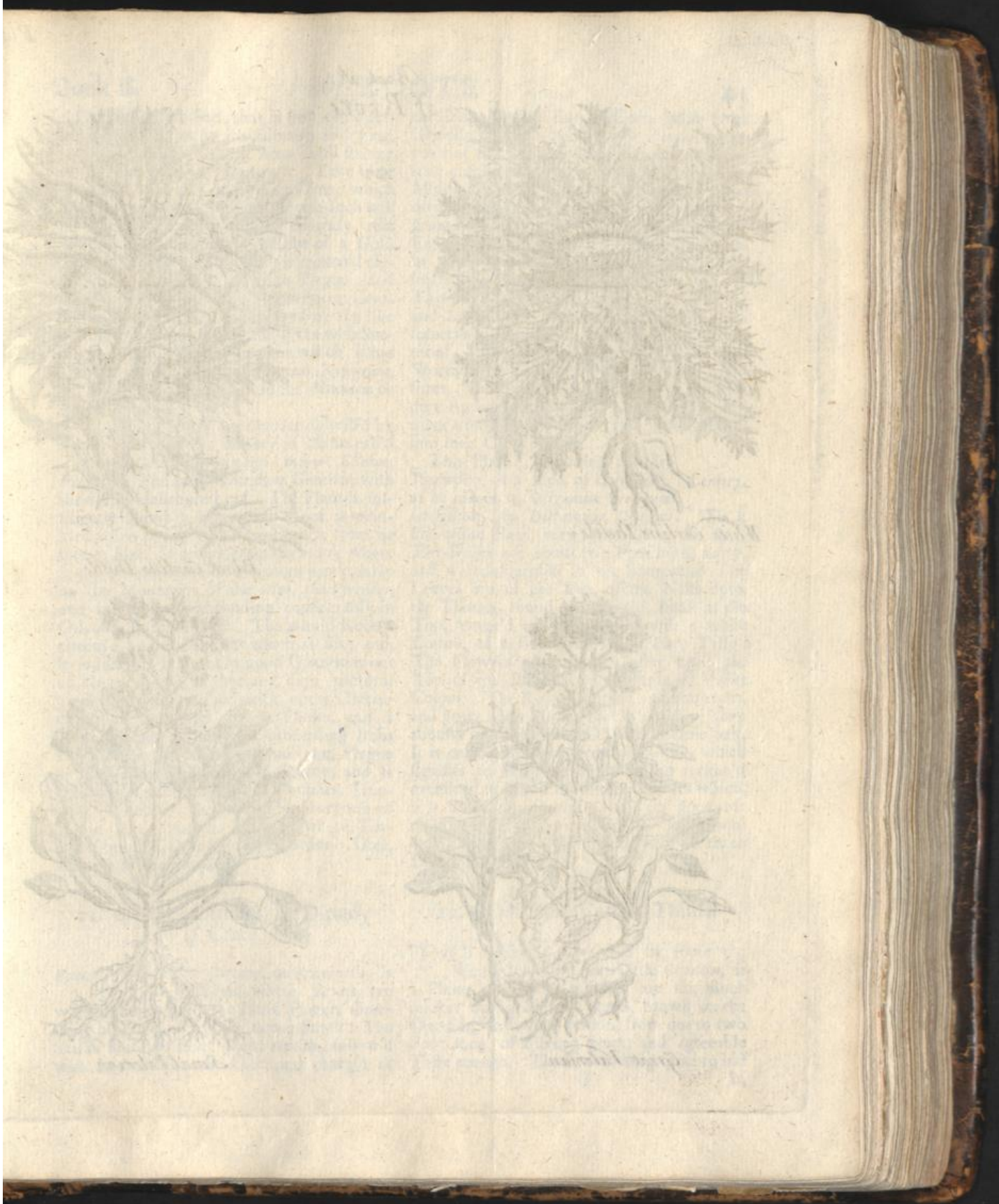
Masterwort.



lian



white Dittanny.



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22



White Carline Thistle.



Black Carline Thistle.

23



Great Valerian.



Small Valerian.

Chuse the least Sort that is fresh, well dried, because it waists considerably in drying, and that which is freest from small stringy Roots, and Dirt that decays it. Take Care also that it be not dried in an Oven, which you may easily distinguish, because such will be black within, but on the contrary, that which is dried in the Air, will be of a Gold colour'd Yellow. This Root is reckon'd useful to resist Poisons and the Plague; and therefore is properly mix'd in the great Compositions of Treacle, and others of the like Nature: It is sudorifick, and given with Success in intermitting Fevers; for which it has received the Name of the *European Kinquina*, the same Name as is given to the *Peruvian* or *Jesuits Bark*.

This is the *Gentian* describ'd by *Lemery*. *Ray* in his History of Plants call'd *Gentiana vulgaris major Ellebori albi Folio*. The larger common *Gentian*, with the white *Hellebore Leaf*. The Plant is sufficiently describ'd before, the Root is wrinkled when dry'd, and shrunk much from its former Size. It grows generally every where in the warm Countries, but more particularly on the Mountains of the *Alps*, the *Pyrenees*, and in *Burgundy* abounding considerably in Oil and Essential Salt. The whole Root is esteem'd better than that which is slit; and, it is likewise brought in good Quantities out of *Germany*. It is hot and dry, pectoral alexipharmack, antiscorbutick, opens Obstructions of the Lungs, resists Poison, and is good against all Diseases proceeding from Putrefaction, as Measles, Small-pox, Plague or Pestilence: It cures the Scurvy, and is beneficial against Cachexies, Dropsies, Jaundice, Ulcers of the Bladder, Sharpness of Urine, &c. May be given either in Tincture, Infusion, Decoction, or Powder. Dose, a Dram of the Powder.

21. Of White Dittany, or Dittany of Crete.

Pomet. **W**Hite Dittany, or *Fraxinella*, is a Plant whose Roots are white, smaller than the Little Finger, something bitterish, of a pretty strong Smell: The Stalks are two Foot high, reddish, follow'd with Leaves like the Oak, and charg'd at

the Top like an Ear of Corn, with large Gridelin Flowers mix'd with Purple, compos'd of five Leaves, sharp pointed, and with long crooked Strings or Filaments: In the Middle of which Flower is produced a Head divided into five Kernels, or Betries, in which grow black shining oval Seeds, pointed at the Ends. Chuse the plumpest Root, white within and without, and least burden'd with small Fibres, and the clearest from Decay. This Plant flourishes in the Forests of *Provence* and *Languedoc*. The Root is brought to us sometimes from *Crete*, and is reckon'd Alexiterial, Uterine, and Diuretick: It kills Worms, cures malignant Diseases and Calentures. *Swelser*, *Charas*, and most of the Modern Authors, have given particular Recommendations of this Root, and introduced it into their Compositions.

This Plant, according to *Mr. Tournefort*, is a kind of *Origanum*. *Lemery*, as he names it, *Origanum Creticum latifolium, seu Dictamnus Creticus*. 'Tis a fine white Plant, very agreeable to the Eye. The Stalks are about two Foot high, hairy, and a little purplish in the Branches: The Leaves are of the Size of the Nails upon the Thumb, round and pointed, small at the Top, cover'd on both Sides with a white Cotton, of a sweet Smell and sharp Taste: The Flowers grow in a Cluster upon the Top of the Branches of a Purple or Violet Colour: The Roots are small and numerous, and grow upon Mount *Ida* in *Candia*; they abound with Essential Oil and Volatile Salt. It is call'd *Dictamnus* from the *Greek*, which signifies to bring forth, this being reckon'd excellent to hasten the Birth; besides which, it is a singular Cordial, and very good for the Head and Nerves, given in Powder from half a Dram to a Dram, or two or three Drams in Tincture.

22. Of the White Carline Thistle.

THE White *Carline*, and by some the White *Chameleon*, or Little *Chardon*, is a Plant, the Roots whereof are not much thicker than a Man's Thumb, brown on the Out-side, and white within, from one to two Foot long, of a strong Scent, and agreeable Taste enough. The Leaves hang quite round

G ir,

it, lying to the Ground, of a pale Green, wav'd and deeply indented, on each Side furnish'd with Prickles or little Thorns. The Flower grows, like the Leaves, close to the Root, without Stalk, five or six Inches large, flat, and like a little Basin, edged with some narrow-pointed Leaves. The Seeds come after the Flowers; they are long, and bear a white Topping. Chuse your Root new, well-fed, and dry, of a sweet Taste, and aromattick Smell, and take care that no other Root be impos'd upon you instead of this, because it is dear. It is one of the best Medicines against the Plague, because it is commonly received in the Catholick Countries that it was discover'd by an Angel to the Emperor *Charlemain*, for the Cure of his Soldiers, who were seiz'd with the Plague in their Camp; from which it took the Name of *Carline*.

The Black *Carline* is very like that we have describ'd, but the Stalk of this is more rais'd, and the Leaves are of a more obscure Green: It is what *Mabiolus* says of another Species, whose Flowers are purple, but that is a Plant very scarce, and of no Use at all. The Virtues of the ordinary *Carline* are to resist Poison, provoke Sweat, to pass by Urine, and to open Obstructions; they are likewise serviceable in the Plague, Dropsy, Hypochondriack Passions, and the like. This Plant grows in the *Alps* and *Pyrenees*, and the Hills of *Auvergne*. Both the Kinds are so common, that the Peasants eat the Roots as the Artichoke when they are young and tender.

Carlina, in French *Carline*, or *Lemery*. White *Chameleon*, is a Plant, whereof there are two Sorts: The first is call'd *Carlina acaulis magno flore*, the prickly *Carline* with the large Flower: This bears from the Root large jagged Leaves, hanging to the Ground, &c. as before describ'd. When the Flower is past, there succeed oblong Seeds, each of which are furnish'd with a Quantity of white Hairs, which represent a Brush: These Seeds are separated from one another by Leaves folded into a Gutter. The Root shoots direct into the Ground, sometimes two Foot deep, the Thickness of an Inch, of a dark Colour without, white within, of a strong aromattick Smell, and agreeable Taste.

The second Sort of *Carline* *Thistle* is the

Chameleon niger vulgaris, the common Black *Carline*. This differs from the former, in that the Head is not so large, nor so much spread. It grows, for the most part, only at the Top of the Stalk, which is rais'd among the Leaves above a Foot high. The Flower is commonly white, very rarely red. The Root is not so big, or half so well fed as the White *Carline*; and both of them grow in the hilly Countries, as aforesaid. They take the Roots out of the Earth in Spring-time, to dry for keeping, which are afterwards us'd in Physick. The first Kind is to be prefer'd for that Use, as being fuller of Volatile and Essential Parts.

23. Of the large Valerian.

Pomet. THE great or large *Valerian*, which *Baubinus* calls *Valeriana major odorata radice*, the great *Valerian* with the scented Root, is a Plant, the Roots of which are about an Inch thick, brown on the Out-side, wrinkled in Rings deck'd with Fibres on the Sides, of a strong aromattick Smell, and very disagreeable: It is three Foot high, hollow, strait, and attended at each Joint with two Leaves, opposite to each other; the first are whole, the others cut on each Side. The Flowers are white, and scented like *Fasmine*; they grow in Clusters: On the Tops of the Branches are small Stalks or Pipes, divided again into five Parts, which leave behind them flat long Seeds, charg'd with a white hairy Tuft.

The little *Valerian* has small Roots, of a good Smell: The Leaves, which grow almost oval, are sharp at the End; the Stalk is a Foot and some Inches high, charg'd at each Joint with two Leaves, slenderly cut in at the Side: The Flowers are purple, and resemble those of the great *Valerian*, but they are thrice as small: Their Seed is the same. In relation to the Choice of these two Roots, take the newest and best dry'd, and least charg'd with Fibres that is possible. They are both us'd as Counter-Poisons, against the Plague, for Cure of the *Asthma*, *Dropsy*, &c.

Valeriana, or *Valerian*, is a Plant, of which there are three Sorts us'd *Lemery*. in Physick: The first is call'd *Valeriana borrensis*, or *Valeriana major odorata radice*.

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Tormentil.



radice, by *Baubinus* and *Ray*; by *Tournefort*, *Valeriana hortensis*, *Pbu folio olusatris*. This bears the Stalks three Foot high, slender, round, hollow, and full of Branches, adorn'd from Joint to Joint with two Leaves opposite to each other, as before in *Pomet*. The Flowers are white, inclinable to purple, and sweet scented. This Plant, which grows in our Gardens, is the best, and most to be valu'd of any of the *Valerians*.

The second Sort is call'd *Valeriana vulgaris*, or *Valeriana Sylvestris major* by *Tournefort*, the great wild *Valerian*; and by *Ray*, *Valeriana sylvestris magna aquatica*, the great watry wild *Valerian*. This bears the Stalks a Man's height, straight, slender, and hollow like a Reed, a little hairy. The Leaves are like those of the foregoing Kind, but more divided, greener, indenred on their Edges, a little hairy without: The Flowers are dispos'd as the great *Valerian*, of a whitish Colour, tending to Purple, which are succeeded by Seeds garnish'd with Plumbe: The Root is fibrous, white, creeping, of an aromack Taste and Smell. This Plant grows in wet and woody Grounds.

The third Sort is call'd *Valeriana Sylvestris minor*, or *Valeriana minor Pratenfis sive Aquatica*, the *Small, Wild, or Water Valerian*. This bears a Stalk above a Foot high, angular, slender, branch'd, hollow, carrying the Leaves by two and two, jagged towards their Edges. The Flowers and Seed are like the former, but much less; the Roots slender, crawling, and white, having a great many Fibres, of an agreeable aromack Taste. These are dry'd in the Sun, to be made fit for Use, and are Cardiack, sudorifick, vulnerary, aperitive, proper to resist Poison, to fortify the Brain and Stomach, to destroy Worms, provoke the Monthly Courtes, assist Perspiration, and expell Wind.

24. Of Spignel.

Pomet. **M**EURUM or *Spignel*, which the Antients furnam'd *Athamanticum*, either from *Athamas*, the Son of *Aeolus*, the suppos'd first Discoverer, or from the Hill *Athamas* in *Thessaly*, where the best was said to grow. This Root is the Thicknes of a little Finger, black without, white within, long, and ac-

company'd with a few small Roots, acrid, a little bitter, and of an aromack Smell. The Leaves are like those of *Fennil*, but much less, more divided, and abundantly finer. The Stalks are a Foot high, charg'd with some Clusters of white Flowers, compos'd of five small Leaves, after which come two brown Seeds, bigger than *Fennil*-Seeds, and more furrow'd; which has made some believe that *Spignet* was a Species of *Fennil* or *Dill*, and so call it crooked *Dill* or *Fennil*. This Root is very alexiterial, for which Reason it enters into the Composition of *Venice-Treacle*: It is likewise sudorifick and diuretick. It is brought to us from the Mountains of *Auvergne*, *Burgundy*, the *Alps* and *Pyrenees*.

Meum Foliis Anethi, or the *Feniculum Alpinum perenne capillaceofo-* *Lemery*. *lio, odore medicato* of Mr. *Tournefort*, is a Plant which raises its Stalk a Foot high, hollow within, and full of Branches: The Leaves are like *Fennil*, but much less, more slash'd, and almost as fine as Hair: The Flowers grow in Bunches on the Tops of the Branches, like *Dill*; and when the Flowers are gone, a Swallow-tail'd furrow'd Seed succeeds. The Head of this Root is full of long Threads, like *Eryngo*. You ought to chuse the longest, roundest, well-fed, and entire, of a blackish Colour outwardly, and white within, the Smell aromack, and the Taste sharp and a little bitter, containing an exalted Oil, and a Volatile or Essential Salt.

25. Of Tormentil and Bistort.

THE *Tormentil* us'd in Physick, which *C. Baubinus* calls *Tormentilla Sylvestris*, Wild *Tormentil*, is a Plant, whereof the Root is lumpish, of an Inch thick, brown or reddish without, astringent and fibrous. The Leaves are like *Cinquefoil*, smooth, shining, six or seven supported on a Stalk. The Stalks are low, short, branch'd, charg'd with several Flowers, of four yellow Leaves; after which comes a Bud, in which several Seeds are contain'd.

The best *Tormentil* Roots come from grassy, wet Places about the *Alps* and *Pyrenees*. They use these in alexipharmack Compositions, as sudorifick; they are likewise appropriated for the Bloody-Flux. Chuse

the newest, and best dry'd, from the hot Countries, which is better than what grows in our Gardens.

Bistort is a Plant that has a Root an Inch thick, crooked, and roll'd upon it self, with annular Foldings, brown without, and flesh-colour'd within, trim'd with many hairy Fibres, of an astringent Taste. The Leaves are like enough those of Wild *Patience*, of a lively Green without, and a Sea-Green on the Inside. This Plant is in Flower towards the End of *May*, adorn'd with several long Leaves, which are white at first. The Flowers are of a Flesh-Colour, crowded together like an Ear of Corn, but very little, and very thick; after which they bear a three-corner'd Seed sharp-pointed enough. This Species is call'd, by *C. Baubinnus*, *Bistorta major radice mapis intorta*, the larger *Bistort*, with the winding or more crooked Root.

Tormentil is a Plant of two Kinds. *Lemery*. The first is call'd *Tormentilla*, by *Ray*; *Tormentilla Sylvestris*, by *Tournefort*; *Heptaphyllum*, by *Fuchsius*, by reason it bears seven Leaves on a Stalk, as the *Cinquefoil* does five. The Flowers are compos'd each of four yellow Leaves, in Form of a Rose, supported by a Cup cut and divided into eight Parts, four larger and four smaller placed interchangeably. The Root is knotty and unequal, and delights to grow in Woods and shady Places, or others well supply'd with Moisture.

The second Sort is call'd *Tormentilla Alpina major*, or *Tormentilla Alpina vulgaris major*, by *Tournefort*, the common larger *Alpine Tormentil*: This differs from the former, in that the Leaves are larger, and the Root thicker, more plump, redder, and fuller of Virtue. We have this brought to us ready dry'd from the *Alps*, &c. The Way to chuse it, is to take the newest, best fed, about an Inch thick, clean, of one Piece, free from the Springs, well dry'd, of a brown Colour, reddish within, and of an astringent Taste. It is binding, vulnerary, proper to stop Loosenesses of the Belly, Hemorrhages, Vomiting, Whites or Reds in Women, and to resist Infection: It is mix'd with cardiack and alexipharmack Medicines.

Bistort, as if you should say twice distorded, because the Root of this Plant is

commonly turn'd and wound about it self: They give it the Name of *Bistort* from *Colubrina*, *Serpentaria*, and *Dracunculus*, by reason that this Root is twisted like a Serpent: 'Tis also call'd *Britannica*, from growing so frequently in *England*. There grow, towards the Bottom of the Flower of some *Bistorts*, several Knots or Excrescencies, which some Authors have call'd *Fungi Bistortæ*; but there are a sort of little Roots, which produce each of them a Plant like what these bear. It is cold, dry, astringent, and stops Fluxes of the Bowels, Vomiting, and Abortion, and dries up Catarrhs: It is given in Powder, Infusion, or Decoction in Wine and Water, and is good in a Gonorrhæa, or Whites in Women.

26. Of the *Aristolochia's*, or Birthworts.

THERE are three Sorts of *Birthwort* generally sold, viz. the *Pomet*, long, the round, the light or small; and there is a fourth Sort, which is the *Savacen's Birthwort*; but as we make little or no Use of that, we shall not speak much of it.

The round *Birthwort* is a tuberous, fleshy Root, of different Sizes, to two or three Inches diameter. They are very uneven and irregular, that is to say, commonly much larger at the Bottom than at the Top. This Root is of an intolerable Bitterness, yellow within, brown without, but not disagreeable in Smell, and furnish'd with some short Fibres: Several Stalks arise from the upper part, which spring above a Foot high, accompany'd interchangeably with almost round Leaves, sticking to and embracing the Stalk at the Bottom, cut into two Ears, Swallow-tail'd: The Flowers grow at the very setting on of the Leaves: The Stalks are yellow, and stretch an Inch and half long, divided in the middle, and flat like an Oxe's Tongue, of a very deep red, which almost comes up to a Soot-Colour; they are without Smell: And the Seeds are black, very thin and flat, almost triangular, and are enclosed in a small membranous Fruit, green in the beginning, brown when ripe, and divided length-ways into six Cells.

The long *Birthwort* is a Root like a *Radish*, but a great deal thicker and longer, fleshy, brittle, brown without, yellow within, very bitter, and something fibrous: The Stalks.

26



Long Birthwort.



Small Birthwort.

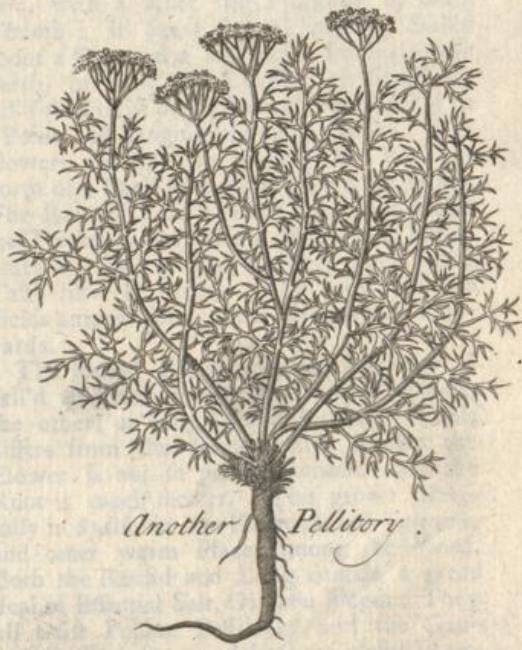


Clematite Birthwort.

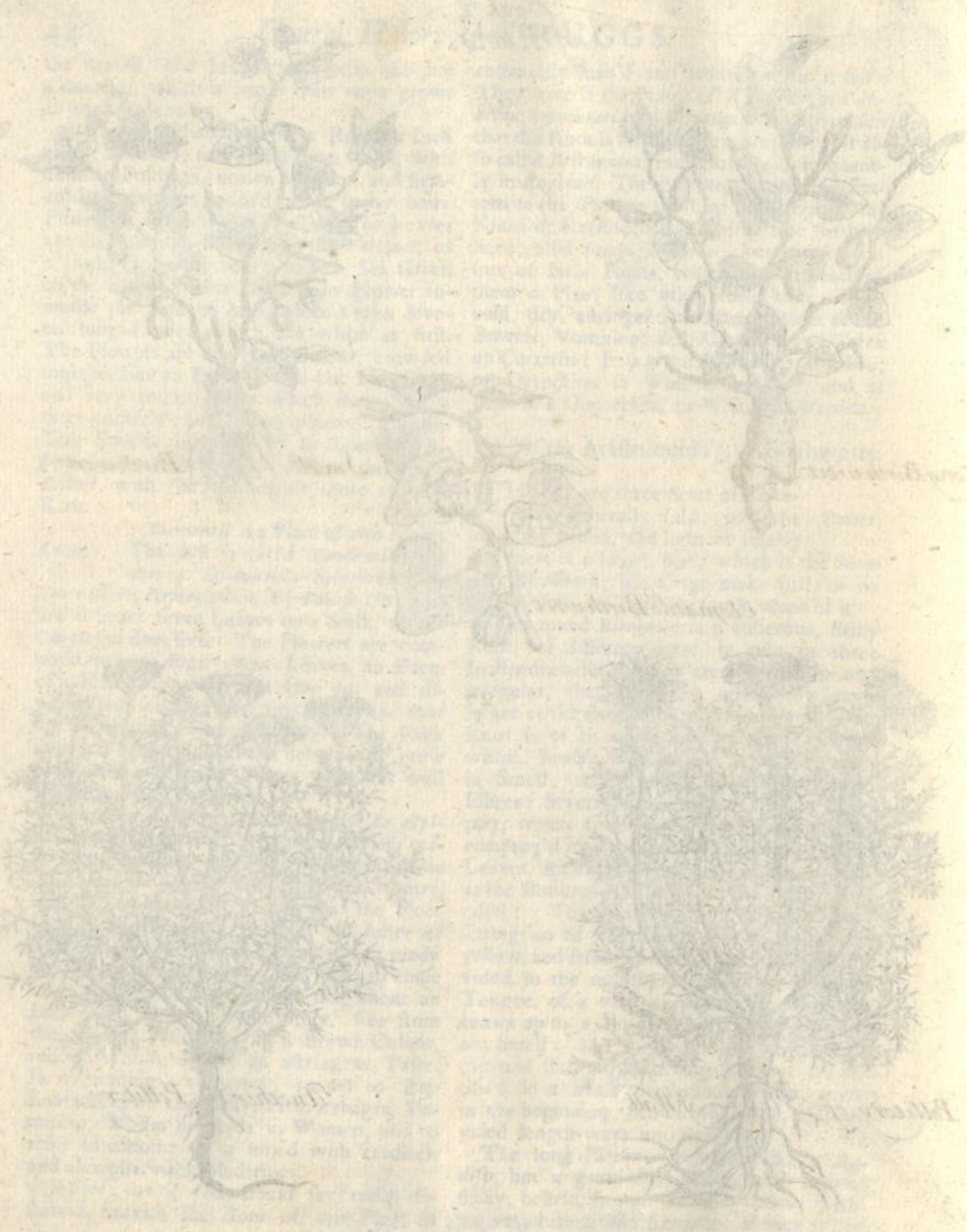
27



Pellitory of Wall.



Another Pellitory.



Stalks are longer than those of the Round, bending to the Ground, hung interchangeably, with Leaves not altogether so round as the former, and which are supported by a small Stem. The Flowers are a little closer than the Round, but the Fruit are of the Figure of a small Pear, which likewise contain in their Cells very flat, black Seeds.

The *Birthewort*, which *F. Baubinus* call'd *Aristolochia Polyrhizos*; and *C. Baubinus*, *Aristolochia Pistolochia Diſta*, is the least of all the Roots: They are compos'd of an infinite Number of very small yellow Fibres, sticking to the same Head, hairy, very bitter, and of a good strong Smell. The Stalks are weak, slender, bending to the Ground, interchangeably deck'd with very small Leaves, which are paler than those of others, in Form of a Heart revers'd, and supported by very fine Stalks, bearing Flowers like the round Kind, but much less, yellowish, mix'd with a Sooty Colour. This is the *Birthewort* we sell for the small Sort.

The *Clematite*, or *Saracen Birthewort*, has fibrous Roots running along its Sides, very bitter, and of a Smell agreeable enough: The Stalks are two or three Foot high, straight, firm, and stronger than the former, furnish'd interchangeably with very large Leaves, of the Figure of a Heart, of a pale Green Colour, hanging upon long Stalks: The Flowers grow upon the Neck of the Leaves, after the same manner as the other Kinds, but much less: Their Fruit, on the contrary, larger, oval, and divided into six Cells full of very flat Seed, which is triangular. *Baubinus* calls this Species *Aristolochia Clematidis recta*.

All these Kinds grow in the Fields and Vineyards of *Provence* and *Languedoc*, except the *Small Birthewort*, which loves the Woods, the Olive-yards, the dry and rocky Hills of the same Countries, so they are more aromatick and stronger. *Messieurs Rondelet* and *Charas*, with good Reason, prefer'd this *Birthewort* to the *Saracen* Kind, for Treacle. All the Sorts open Obstructions, and are purgative: They are us'd every Day with Success, in Decoctions, Injections, Lotions, detensive and vulnerary Draughts, and the like.

Aristolochia, or *Birthewort*, is a *Lemery*. Plant, of which there are four Sorts generally us'd in Physick. The first is call'd *Round Birthewort*, which is di-

stinguish'd into two Sorts, one call'd *Aristolochia rotunda vera*, or *Aristolochia rotunda flore ex purpura nigro*, the *Birthewort* with the black purple Flower: It bears several Stalks, weak and pliant like the Vine Branch about a Foot and a half high. The Root is tuberous, round, pretty thick, fleshy, fibrous, grey on the Out-side, and yellow within, disagreeable to the Smell, and of a bitter Taste.

The second Kind of *Birthewort*, call'd *Round*, is the *Aristolochia rotunda flore ex albo purpurascente*, the round *Birthewort* with the white purplish Flower: This differs from the other, in that the Stalks are more numerous, but shorter; and the Leaves much larger, oblong, and hanging upon longer Stalks; that the Flower is of a white Colour, inclining to Purple, brown on the Inside; and that the Fruit is longer, more like a Pear; the Seed less, of a red Colour; and the Bark of the Root yellow. This Plant grows among the Corn, in the Fields.

The next Sort of *Birthewort*, call'd *Long*, is of two Kinds; the first call'd *Aristolochia longa vera*, or *Aristolochia altera, radice pollicis crassitudine*, or the other Kind of *Birthewort*, with a Root the Thickness of one's Thumb: It bears several winding Stalks about a Foot and a half high, leaning to the Earth, carrying soft Leaves, less Swallow-tail'd than those of the Round, terminating in a Point, and hanging upon their Stalks. The Flowers are like the Round; the Fruit in Form of a small Pear, producing a flat Seed: The Root is near a Foot long, sometimes the Thickness of a Man's Wrist, and sometimes an Inch: The Colour, Smell, and Taste like the others. This grows in the Fields among Corn, in the Hedges and Vineyards.

The second Kind of *Long Birthewort* is call'd *Aristolochia longa altera*, or *Hispanica*, the other, or *long Spanish Birthewort*. This differs from the former only, in that the Flower is not so purplish within, and the Root is much shorter. This grows plentifully in *Spain*, in the Kingdom of *Valencia*, and other warm Places among the Vines. Both the Round and Long contain a great deal of Essential Salt, Oil, and Flegm: They all resist Poison, Pestilence, and the Gangrene: Both Root and Leaf are useful in external Remedies.

The

The third Sort, or Species of *Birchwort*, is call'd the *Saracen Birchwort*, or *Clematite*, of which there are two Kinds. First, the *Aristolochia clematidis recta*: This bears straight, firm Stalks of two Foot high, where there interchangeably hang, upon long Stalks or Tails, Leaves of the Figure of Ivy, but of a pale Green: The Flowers grow in great Numbers upon the very Necks of the Leaves, like the former Kinds, but less, and of a pale Yellow Colour: The Fruit, on the other hand, is larger, fill'd with a black flat Seed: The Root is little, fibrous, winding on all Sides, grey, of an agreeable Smell enough, bitter in Taste, and pungent. This Plant grows in the Fields, Woods, Hedges, or Lanes, in the hot Countries.

The second Sort is call'd *Aristolochia Clematidis Serpens*, or *Altera Hispanica*: It bears a small Vine-like Stem, of three or four Foot high, hollow, winding, and clinging to other Shrubs, or neighbouring Plants, like the *Hop* or *Bindweed*: The Leaves are large, pointed, green, and united above, and purple and white underneath, join'd by long Stalks: The Flower and Fruit are like the other *Clematite*; but the Flower is yellow, or of dark Purple, lin'd within with a fine Wool: The Root is longish, and compos'd of many serpentine Fibres, of a pale Colour, acrid Taste, a little astringent, but not grateful. The whole Plant is sweet, and grows chiefly in *Spain*, in Bushes in the Olive-Grounds.

The fourth is call'd the Small *Birchwort*, of which there are two Sorts; the first, *Aristolochia tenuis*, or *Aristolochia Polyrhizos*, five *Pistolochia Plinii*, it being the best Purgative to assist the Birth, or bring away the After-Birth, *Dioscorides* representing it to be the properest for that Purpose. This is the least of all the *Birchworts*: It produces several small Stalks, or Boughs, which spread themselves upon the Ground. The Leaves are form'd like the Ivy, but little and pale, fasten'd by slender Tails or Stalks. The Flowers are like those of the other Kinds, but a great deal smaller, sometimes black, sometimes of a yellowish Green: The Fruit like a small Pear. The Roots are very fine, stringy, join'd together by a little Head, in Shape of a Beard, or Head of Hair.

The second Sort of this is call'd *Aristolochia*,

or *Pistolochia altera*: It bears Vine-like Stalks, of a Foot in height, that have corner'd, hollow, pliant Branches, lying on the Ground, hard to climb, of a dark Green Colour: The Leaves like the other Sort, but sharper at the Ends, ty'd to long Stalks: The Flower and Fruit like the Long *Birchwort*; but the Flower is not of such a brownish Red, and the Fruit much less: The Roots are fine, with slender Fibres, sweet smelling, like the former Species, and grow in the hot Countries. All the Kinds of *Birchwort* are detensive and vulnerary, good to provoke Urine and Sweat, to attenuate the gross Humours, and assist Perspiration.

27. Of Pellitory.

Pellitory is a Root of a moderate Length, the Thickness of a Little Finger, greyish without, white within, furnish'd with some small Fibres, of an acrid burning Taste. It produces little green Leaves; and the Flowers of a Carnation Colour, like our Daisies. Chuse such as is new, well-fed, dry, difficult to break, and of a Taste and Colour as said before.

The *Pellitory* we have, is brought, by *Marseilles*, from *Tunis*, where it grows common: It is much in Use for easing the Tooth-ach, being held in the Mouth; and is of several Uses in Physick. The Name of *Pyrethrum* is taken from its burning Quality. Some will have it to come from *Pyrus*, King of *Epire*, who first discover'd its Use, and from whom it derives its Name.

There is still another Sort of *Pellitory*, which the *French* call *Alexander's Foot*, and is the rusted *Pellitory*: This is a little Root half a Foot long, of a brownish Grey without, and white within, something fibrous, the Tops of which are a sort of *Spignel*, of an acrid biting Taste, approaching to that of *Pellitory*; upon which Account it is call'd *Wild Pellitory*, and some use to sell it for true *Pellitory*; but it is easy to distinguish, this being smaller, longer, and carry'd about in Bundles. The Plant and Leaves are very little, of a greenish Yellow; and the Flowers which grow in Clusters are of a pale Red. This is brought to us from *Holland* and other Parts. They use this, as well



28.



29.



as the other Kind, to make Vinegar of in France.

Pyrethrum, in English *Pellitory*, or *Lemery*. the Spitting Root, is brought dry'd to us from foreign Countries; but we have two Sorts. The first, and the best, is in long Pieces, about the Thickness of one's Little Finger, round and wrinkled, of a greyish Colour without, and white within, deck'd with a few Fibres, of an acrid, burning Taste, and grows in the Kingdom of *Tunis*.

The Plant which bears this, is call'd *Pyrethrum Flore Bellidis*, the *Pellitory* with the Daisy Flower. These Leaves are slash'd like those of the *Fennil*, but much less, and green, resembling those of the *Carrot*: They rise from small Stalks, which, on their Tops, support large radiant Flowers, of a Carnation Colour, like the Daisy: After them succeed small oblong Seeds.

The second Sort is a long Root about half a Foot high, much less than the former, of a brownish Grey without, white within, furnish'd with Fibres. This Root has an acrid, burning Taste, like the former, and is brought to us in Bundles from *Holland*. Some call it *Wild Pellitory*. The Plant which it bears, is call'd *Pyrethrum Umbelliferum*, and by the French *Alexander's Foot*. It grows a Foot high. The Leaves are small, cut fine as the other *Pellitory*, but of a yellowish Green. The Flowers grow on the Tops, dispos'd in Clusters, of a pale Red. Both the Sorts of *Pellitory* contain a great deal of acrid Salt and Oil, but the first is more powerful than the second. There is also a *Pseudopyrethrum*, which is call'd *Parmica*, or *Sneezewort*, which grows in Meadows, or untill'd Grounds, whose Roots are chiefly kept in the Shops: Being hot and dry, it is inciding, attenuating, and violently sudorifick; us'd chiefly against viscous *Flegm* in the Lungs, which it expells by Spitting and Urine: It is good against most Diseases of the Brain and Nerves; expells Wind, and prevails against Apoplexies, Lethargies, Vertigo's, Palsies, benum'd Members, Cholicks: It stimulates the Fibres, and is said to cure Quattan Agues. A Gargle of it cures the Thrush, and cold Rheums in the Teeth or Gums.

28. Of White and Red Behen, or Ben.

THE *White Ben* is a Root like the *Pellitory*, grey without, and some- *Pomer.* thing whiter within; the Taste almost inspid, but being held long in the Mouth, it leaves a Bitterness disagreeable enough. This Root is brought to us from the same Places that the *Red Ben*; and the Leaves are much the same, except that this has, at the Bottom of each Leaf, four small ones of the same Form and Colour, that grow opposite to each; in the middle of which rises a high Stalk, adorn'd with some few Leaves, and a budding Flower full of Scales, which, when blown, produces a little yellow Flower. Chuse your Root plump, not rotten, or easy to break, but the freshest you can possibly get. It is appropriated to the same Intentions with the *Red Ben*.

The *Red Ben* is a Root brought to us cut in Pieces like *Falap*, from Mount *Libanus*, and other Places of *Syria*, which, standing in the Ground, is of the Shape of a large Parsnip, deck'd with Fibres, of a brown Colour outwardly, and red within; from whence arises green long Leaves, like those of the *Beet* or *Winter-green*. For this Reason, some will have it, that there is another Species, from the midt of which grow Stalks adorn'd with red Flowers, which are ranged two and two together, after the manner of *Jamaica Pepper*. Chuse such as is dry, of a high Colour, astringent, aromatick, and new as it can be. There are some use it in Physick; but those do it more for its Scarceness than any Service, the Roots of *Angelica*, *Zedoary*, *Borage*, and *Bugloss*, supplying its Place. It is reckon'd cordial, and a Resister of Poison.

29. Of Orcanette.

Orcanette is a Root of a moderate Size and Length, of a deep red *Pomer.* Colour on the Out-side, and white within, which produces green rough Leaves, like the *Bugloss*: For this Reason some call it *Wild Bugloss*: In the Middle of which arises a straight Stalk, adorn'd with little Leaves, and the Flowers, by Buds, in Form of a Star.

Star, of a faint pale Blue. Chuse your *Orcanette* new, pliant, but yet of a deep red without, white within, with little blue Heads, and which, being rubb'd a little, wet or dry, upon the Nail, or on the Hand, makes a beautiful *Vermilion*.

As the Colour of the said Root lies in the Superficies, those who use it for colouring of their Wax, Ointment, or Oils, prefer the small to the gross; and if it is clean, it produces a very fine Red. The *Orcanette* grows in *Provence*: From thence it is brought to us, by the Way of *Marseilles*, and *Nismes* in *Languedoc*. This Root is very useful in Physick, as well as for the Purposes aforesaid.

There is another *Orcanette* of the *Levant*, or *Constantinople*, which is a Root of a surprising Nature, as well from its Size and Thickness, which grows sometimes larger than the Arm, which looks, in Appearance, to be nothing but a Mass of large long Leaves, twisted like a Roll of *Tobacco*; which, by the Variety of its Colours, at the first being of an obscure Red, which is succeeded, in time, with a very fine Violet-Colour; at the Top of which is produc'd a kind of Rottenness or Decay, white and blueish, which is, as it were, its Flower. In the middle of the said Root is found a Heart, which is a little Bark, thin and long, like *Cinnamon*, of a very fine Red without, and White within. This *Orcanette* is of very little Use, but yet gives a better Colour than the common.

Anchusa puniceis floribus, or *Buglossum radice rubra*, sive *Anchusa vulgarior*, by *Tournefort*; in *French*, *Orcanette*, is a Species of *Bugloss*, or a Plant which bears several Stalks above a Foot high bending to the Ground. The Leaves are like those of the *Wild Bugloss*: The Flowers grow on the Top of the Branches; and, when they fall, are succeeded by Cups, which contain Seeds shap'd like a *Viper's Head*, of an Ash-Colour: The Root is an Inch thick: The Bark is red, and whitish towards the Heart. This Plant grows in Sandy Places in *Languedoc* and *Provence*. The Root is dry'd in the Sun, to be fit for the Druggist's Use: It makes a good Dye for Pomatums, and the like; and yields a great deal of Oil, with a little Salt: It is

astringent, stops Fluxes of the Belly, being made into a Decoction. They use it outwardly for detarging, and drying up of old Ulcers.

We have brought to us oftentimes, from the *Levant*, a kind of *Orcanette*, call'd *Orcanette of Constantinople*. This is a Sort of Root as thick and large as a Man's Arm, but of a particular Shape; for it produces a Mass of large Leaves, twisted like a *Tobacco-Roll*: In Appearance, the whole looks as if it was artificial.

30. Of Madder.

THE Madder, which is call'd *Rubia tinctorum*, is the Root of a *Pomet*. Plant well known. 'Tis of this Root the *Dutch* make such great Advantages, by the Quantity of *Madder* they sell in different Countries, and throughout *France*.

The *Madder* comes to us after three manner of Ways, which we distinguish by the Names, *Madder* in the Branch, *Madder* in the Bundle, and *Madder* unbundled. The first Sort is brought to us in the Root just as it comes out of the Ground, without any other Preparation than that of being dry'd. The second Sort is that of the *Bunch Madder*, or such as is made into Bundles; which is *Madder* in Branch first freed from the Bark and the Heart, and ground by a Mill into a gross Powder, as we buy it. The third Sort is the *Madder* unbundled, that is to say, the Branch'd *Madder* ground to Powder. But the *Bunch'd Madder*, or that in Bundles, is the best; which, for its Excellency, when it is fresh, is made into Bales, or put up in Casks; of a pale Red, but as it grows older, encreases its Colour to a fine Red. That of *Zealand* is esteem'd the best for the Dyer's Use.

Madder is a Plant whereof there are two Sorts; one call'd *Rubia Tinctorum Sativa*, according to *Tournefort*; sive *Hortensis*, according to *Parkinson*, that is, the Garden or Cultivated *Madder*: The other is *Rubia Sylvestris*, or *Erratica*. The first Kind bears long four-squar'd Stalks, knotty and rough, from whence shoot out at every Joint five or six oblong narrow Leaves, which surround the Stalk in the Shape of a Star or Wheel. The Flowers

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of Roots.

30



Madder.

31



Spanish

Salsaparilla.

31



Mustard Salsaparilla.

32



China Root.

Flowers grow on the Tops of the Branches, fasten'd by little Sæms: They are in small Cups, cut into five or six Parts, dispos'd like a Star, of a yellow greenish Colour; and when the Flower is gone, the Cup brings forth a Fruit of two black Berries, ty'd together, full of Juice; each of which contains a Seed almost round, enclos'd in a Membrane or Pellicle. The Roots are numerous, long, and divided into several Branches; about the Thickness of a Goose-Quill, red throughout, woody, and of an astringent Taste. They cultivate this Plant in rich Ground, in many Parts of Europe, and gather the Root in May and June, to dry it for keeping and Transportation.

The second Sort, call'd *Rubia Erratica*, or *Wild Madder*, is much less, and rougher than the former: The Flowers are small and yellow: It bears the Fruit in Summer and Autumn, which lasts the same in Winter. It grows in the Hedges about *Montpelier*; and the Root is only us'd in Physick, especially the Garden Kind: It contains a good deal of Essential Salt and Oil. Both the Sorts are aperitive by Urine, and a little astringent for the Belly: They provoke the Terms, open Obstructions, and are us'd successfully in the *Faundice*, and may be given in Powder, Tincture, or Decoction, to the Purposes aforesaid.

31. Of Salsaparilla.

Pomet. *Salsaparilla* is the long Filaments, or fibrous Parts of a Root, the Plant whereof runs upon Walls, Hedges, Trees, &c. with long, strait, pointed Leaves, of a green Colour, fill'd with cross Strings or Fibres: At the Bottom of the Leaves grow little Filaments, like Hands to catch hold of Trees, just as the Virgin Vine does: On the Tops of the Branches arise little white Flowers, like Stars, from whence comes small red Fruit, of a sharpish Taste. This Plant grows plentifully in *New Spain*, and in *Peru*, the *East-Indies* as well as the *West*, and delights exceedingly in wet and marshy Grounds.

Some will needs have it, that this *Salsaparilla* is the same Plant which is very common in *France*, and call'd *Smilax aspera ma-*

ior, the large prickly *Bindweed*, or *Smilax*, as it is call'd sometimes, from the Name of a Child, which *Ovid*, in his *Metamorphoses*, says was chang'd into this Plant. There are two Sorts of *Salsaparilla* sold, viz. the *Indian Salsaparilla* of *Spain*, and the bigger *Salsaparilla* of *Marignan*, or *Maraban*. The finest and best of the two, is that of *Spain*, which has long stringy Roots, the Thickness of a Goose-Quill, greyish without, and white within, attended with two Streaks, reddish within, easy to break in two, and when it is broke, is free from being worm-eaten; and, being boil'd, tinges the Water of a reddish Colour. Reject such as is moist, extremely small, full of Fibres; and likewise a Sort of *Salsaparilla* from *Holland*, in little Bunches, cut at both Ends. Some will have it that the *Salsaparilla*, reddish on the Outside, and ty'd up in long Bunches, which comes by the way of *Marseilles*, is not so good as the other; but, for my Part, I can affirm, I never could find any Difference betwixt that and the true *Spanish Salsaparilla*: Yet the large *Basard Salsaparilla*, or that of *Marignan*, ought absolutely to be rejected, which some call falsely *Muscovy Salsaparilla*, which is fitter for lighting of Fires, than to be us'd in Physick. The Use of this Root is much for *Ptisans*, or Diet-drinks, for curing the *Veneral Disease*, and making such lean as are too fat.

Sarsaparilla, or *Salsaparilla*, is a *Lemery*. very long Root, like a small Cord, which is brought from *New Spain* in Collars, or long Bundles of fibrous Branches, the thickness of a Writing Quill. This is the *Smilax*, or *Bindweed*, call'd *Smilax Aspera Peruana*, *sive Salsaparilla*. The Stalk is long, serpentine, woody, prickly, yielding and climbing like the Vine, upon every Shrub or Tree. The Flowers, which are of a white Colour, at last produce Berries, which are round and fleshy like small Cherries, green at first, a little reddish, and at last black, which contain in them one or two stony Nuts, of a whitish Yellow, in which is a Seed, or white hard Almond. The best *Salsaparilla* is that which is round, full, apt to break, when bent together, mealy, and white within; that which is shrivell'd, lean, tough, and not mealy, being nothing near so good. There is some which comes from *Jamaica*, and other Parts, but

H that

that is tough, not mealy, and so not of equal Value with the *Spanish*. Our Merchants bring another Sort, which they call *Marignan Salsaparilla*, which is larger and grosser than that of *Peru*, and nothing nigh so good. It is call'd *Sarsaparilla*, which is as much as to say, in the *Indian Tongue*, A Plant made up of the *Vine* and *Bramble*. This Root is sudorifick, alexipharmack, and a great Alkali. Its chief Use is against the French Pox and its Symptoms, the King's-Evil, Rheumatisms, Catarrhs, Gouts, and all Diseases proceeding from them, taken in Powder from a Dram to two Drams.

32. Of Squills.

Pomet. THE *Squill*, which is very commonly call'd the *Sea-Onion*, or *Sea-Leek*, is a knotty crumpled Root, reddish without and within; which, from the Ground, sends forth climbing Stalks, the Length of other Shrubs, from whence grow large green Leaves, in the Shape of a Heart; and the Stalk is furnish'd all along with little Prickles like Thorns.

The *Squill* which we sell, is brought to us from several Parts of the *East-Indies* and *China*, both by the Way of *Holland*, *England*, and *Marseilles*; just as it is taken out of the Ground, but only freeing it from the first Skin, cleaning and picking off the Extremities, to make it sell the better.

Chuse such as is plump, sound, fresh, and full of Juice; this being a bulbous Root, take care it be clean, free from Worms, cleans'd from the outward Skin, and of a red Colour. The *Squill* is much in Use to make sudorifick Peisans, and is employ'd to that Purpose with *Salsaparilla*; and, 'tis said by some, the one is useles without the other.

There grows in the Islands of the *Antilles*, a large Root, which some affirm to be the true *Squill*; but as that is not yet confirm'd, I shall refer the Reader to a Book of the Reverend Father *du Tertre*, who has made a fine and large Description thereof; but as that Account has no Relation to our Business, I do not think it proper to say more of it.

Scilla, in *English* the *Squill*, is *Lemery.* a Kind of *Ornithogalum*, Dog's-Onion, or a Plant whereof there are two Species: The first is call'd, by *Bau-*

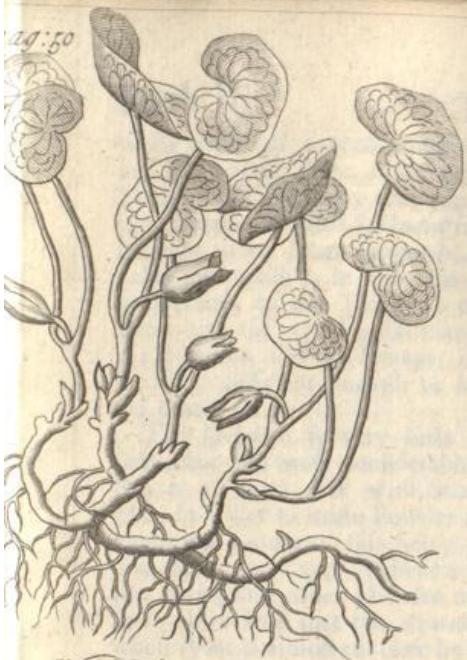
hinus, *Scilla rubra magna vulgaris*, the great common red *Squill*; and, by *Mr. Tournefort*, *Ornithogalum maritimum*, seu *Scilla radice rubra*, the *Sea-Onion*, or *Squill* with the red Root. It bears Leaves above a Foot long, a Hand's breadth, fleshy, very green, fill'd with a clammy bitter Juice, which rises in the Middle of the Stalk, which is a Foot and half high, bearing on the Top round Flowers, compos'd of six white Leaves; which, when drop'd, are succeeded by Fruit made up of three Corners, and divided within into three Apartments fill'd with black Seeds. The Root is an Onion, or large Bulb, as big as a Child's Head, compos'd of thick *Laminae*, which are red, succulent, and viscous.

The second Sort is call'd the *Scilla minor*, or *Ornithogalum maritimum*, seu *Scilla radice alba*, by *Tournefort*. This differs from the former, in that the Leaves are not so large, and the Root is much less, of a white Colour, and not so common. The *Squills* grow in sandy Places near the Sea, in *Spain*, *Portugal*, *Sicily*, and *Normandy*: They are brought to us of all Sizes. We chuse the newest, of a moderate Size, well cured, well fed, gather'd in the Month of *June*, plump, sound, and full of a bitter, acrid, clammy Juice, which yields a great deal of Essential Salt, Oil, and Flegm, with some Earth. They are incisive, attenuating, detersive, aperitive; resist Putrefaction, provoke Urine and the Terms: Internally, they are us'd in Decoctions, or Substance; and, externally, to Scabs, Boils, and the like.

33. Of Azarum, or Wild Spiknard.

THIS Root, commonly call'd *Cabaret*, or *Wild Spiknard*, grows *Pomet.* very frequently in most Parts of the *Levant*, in *Canada*, and likewise in *France* all about *Lyons*, from whence comes almost all we sell now. This Root, when in the Earth, sends forth Stalks, on the Tops of which grow green thick Leaves, like a Man's Ear, and the Flower in Buds, as the Rose, and of a reddish Colour.

Chuse the true *Spiknard* from the *Levant*, if you can possibly get it, and such Roots as are the most beautiful, not fibrous or broken, but of a grey Colour on the Out-side, and white



Wild Spicknard.



A lesser sort of Wild Spicknard.

34



Liquorice.

35



The true Acorus.

white within of a penetrating, quick Smell, and of an acrid Taste, attended with a little Bitterness. Take care that you do not take the *Azarina*, or small *Spiknard* for it, which is brought to us from *Burgundy*, and may be easily distinguish'd, in that the *Azarum* has grey Roots, of the Thickness of a Writing-Pen; and the *Azarina* has many little black dry'd Roots, full of Strings, or Filaments, which is sufficient enough to know it from the other.

The *Spiknard* is very little us'd in Physick; but the most considerable Importance this is of, is to mix with Starch, and the like, in order to make Powder for the Hair, about one Ounce of this being put to two; and the same is very proper for the Cure of the *Farcy*, and other Diseases of that kind. It is observable that the *Azarum* is a Plant, whose Root is almost cut close by the Ground, that is to say, it enters it very shallow; but the Root spreads about a Foot in the Earth, after the Nature of round *Sowbread*, of a yellow Colour without, and white within; which, if squeeze'd, affords a Milk, which burns like Fire. I was willing to take Notice of this Thing, because some People will have it that No-body knows this Plant, or have ever writ about it.

Azarum, or *Afarum*, Wild *Spiknard*, is a small Plant which bears its Leaves like those of the Ground-Ivy, but smaller, rounder, tenderer, smooth, and of a shining Green, fasten'd upon long Stalks. The Flowers grow near the Root, supported upon short Stems, which arise at the Bottom of the Stalks of the Leaves: Each of the Flowers has five or six Purple Supporters, which raise up the hollow of the Cup, that is divided commonly into three Parts. When the Flower is gone, a Fruit follows in the Cup, which is cut into six Parts, and divided each lengthway into six Lodgings, which contain in them little, longish, brown Seeds, full of a white Substance, whose Taste is something acrid. The Roots are close by the Ground, small corner'd, creeping, knotty, crooked, and stringy. This Plant grows upon the Mountains, and in the Gardens, or shady Places; and the Leaves continue green all the Year: It purges sweetly, upwards and downwards; is aperitive, and opens Obstructions. The Dose is from

about half a Dram to two in Infusion, and about half a Scruple to a Dram in Powder: It is likewise us'd in several Compositions, where it does not vomit at all, because it is mix'd but in small Quantities, with abundance of other Ingredients.

34. Of Liquorice.

THE *Liquorice*, which the *Latins* have call'd *Glycyrriza*, *liquiritia*, *Pomet. Radix dulcis*, is a Plant which has clammy Leaves, that are green, shining, and half round; the Flowers like those of *Hyacinth*, of a Purple Colour; from whence come the Husks, which make, in some measure, a round Ball, wherein the Seed is contain'd.

The *Liquorice* sold at *Paris*, is brought thither, by Bales, from several Parts of *Spain*, but chiefly from *Bayonne* and *Saragossa* Side of the Country, where that Plant grows in abundance. Chuse your *Liquorice* fresh, of about two Inches thick, reddish without, of a Gold-Colour within, easy to cut, and of a sweet agreeable Taste: That of *Saragossa* is the best, and is to be prefer'd to that of *Bayonne*, which is greyish without, less, earthy, and of little Esteem. As to dry or powder'd *Liquorice*, chuse such as is yellow and dry, and take care to avoid that which comes loose, and is not brought in Bags or Bales, which is commonly black, spoil'd, and of no Virtue. The Use of *Liquorice* is too well known to be particular in that: I shall only give you a Receipt, which is excellent for Horses that are stuff'd up, and have a Difficulty of Respiration. Take Powder of *Liquorice*, and Flowers of *Brimstone*, of each equal Parts; mix them, and give from two Ounces to four, according to the Size of the Horse, twice a Day. This is a good Medicine to cure broken-winded Horses, taken at the beginning; or for short-winded or purfy Horses, when the Malady is confirm'd.

Of Black Liquorice Juice:

Make of *Liquorice* and warm Water, a strong yellow Tincture, which afterwards is to be evaporated over the Fire, to a solid Consistence, till it becomes black, and is

what we call *Black Liquorice Juice*, which comes to us ready made from *Holland, Spain, and Marseilles*, in Cakes of different Sizes, which sometimes weigh four Ounces, or half a Pound. The *Liquorice Juice* which has the most Virtue, is black without, and of a shining Blackness within, easy to break, and of a grateful Taste enough, but reject such as is soft, reddish, and, when broke, is stony, and has a burnt Taste. The Juice is very useful to cure those who are afflicted with Fluxes of Rheum, Coughs, Asthma's, &c. chewing it in the Mouth like *Tobacco*, and dissolving it in any convenient Liquor. We sell besides, other Kinds of *Liquorice Juices*, as those of *Blois*, both white and yellow, and those of *Rheims* or of *Paris*, which are cut into flat Pastiles. The Juice of white *Liquorice* made at *Paris*, is a Composition of *Liquorice Powder, Sugar, Almonds, and Orrice Powder*; but as there are various Methods of making up these kind of Lozenges, either with Gums, Sugars, and Variety of Druggs, I shall pass them by, and only say, that I think the black Juice, singly, to have more Virtue than any of the Compositions.

There are several other Roots sold in the Shops, besides what I have mention'd, which grow in the Gardens, and other Places about *Paris*, as the *Enula Campana*; the *Paony*, Male and Female; the great and lesser *Arum*, or *Wake Robin*; the large and small *Dragonwort*; the *Cyclamen*, or *Sow-bread*; the *Dog-grass*, or *Quick-grass*; and several others, which the Herb-sellers furnish us with, as we have Occasion.

Glycyrrhiza vulgaris, or, according to *Tournefort*, the *Glychyrrisa siliquosa, vel Germanica*. This is a Plant which bears several Stalks three or four Foot high: The Leaves are longish, viscous, green, shining, dispos'd into Wings like the Oak, or the *Acacia*, ranged in Pairs along the Side, terminating in a single Leaf, of a smart Taste, tending to an acrid: The Flowers are of the leguminous kind, and purple-colour'd, succeeded by short Husks, which enclose Seeds that are ordinarily of the Shape of a little Kidney. The Roots are large and long, dividing themselves into several Branches, some as thick as one's Thumb, and others as the Finger.

There is another Sort of *Liquorish* which

is call'd, *Glycyrrhiza Echinata*, or *Glycyrrhiza capite Echinato*, the prickly *Liquorish*, or that with the *Chestnut Head*: It bears its Branches a Man's Height, carrying long Leaves, sharp at the Ends, and made like the *Mastick Tree*, green, a little glutinous, and dispos'd as the former Species. The Flowers are small, bluish; after which grow Fruit compos'd of several Husks, which are longish and bristled at the Points, standing one against another, and join'd together almost at the Bottom. The Roots are long, and as thick as an Arm, growing straight in the Ground, without any Division at all: This grows chiefly in *Italy*, and is of no kind of use, because the other Sort is so much the better both in Taste and Virtue.

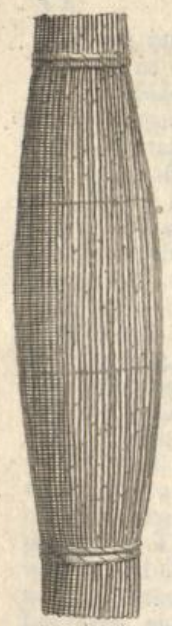
Liquorish is brought to us out of *Spain*, and many other Countries of *Europe*, but the best is that which grows in *England*: The best is large, thick, substantial, and of a good Length, being of a brightish Yellow within. The *Spanish* is much like the *English*, save that it dries faster, and is more wrinkled in its Bark. That which comes from *Brandenburgh* is a good Kind, and being dried will keep good two Years: It is one of the best Pectorals in the World, opens Obstructions of the Breast and Lungs; easeth Gripping of the Bowels and Cholick, and is good to mix with Catharticks. It cures Ulcers of Kidnies and Blader, allays Sharpness of Urine and pissing of Blood; is singularly useful against Coughs, Colds, Asthma's, Wheezing, Difficulty of Breathing, and other Diseases of those Parts.

35. Of the true Aromatick Reed.

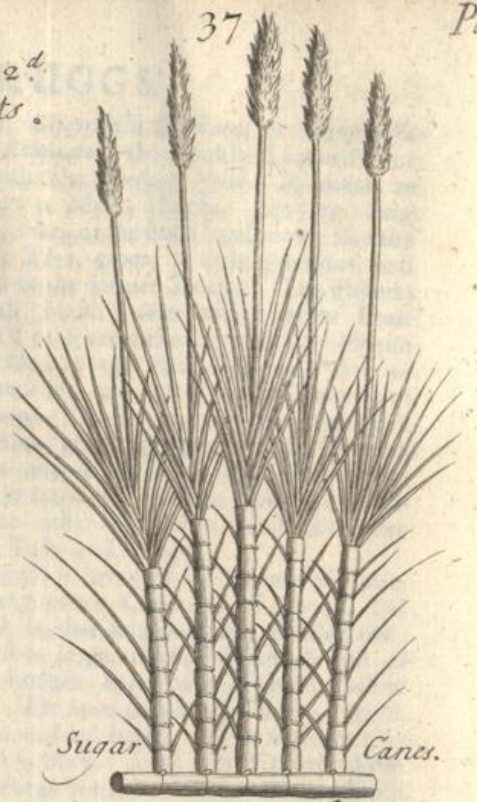
Pomet. THE true *Acorus*, which is improperly call'd *Calamus Aromaticus*, is a Reed or knotty Root, reddish without, and white within, adorn'd with long Filaments, or fibrous Strings, of a light Substance, and easily subject to worm-eat: There come from the said Root green Leaves, long and straight; and the Fruit about three Inches long, of the Size and Shape of long Pepper.

Chuse your *Acorus* new, well fed, clean'd from the Fibres, hard to break, of an acrid Taste, accompanied with an agreeable Bitterness,





Calamus aromaticus.



Sugar Canes.

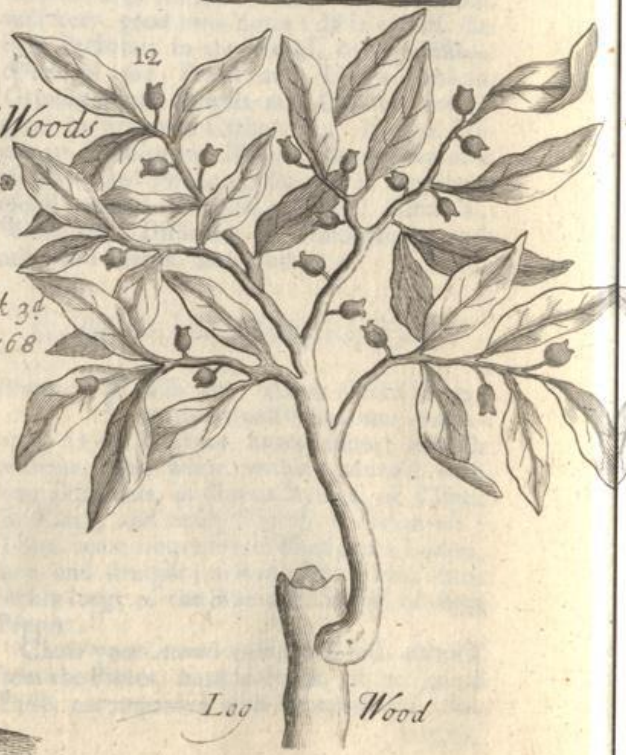


11

of Woods

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Brasil Wood.



12

Leo Wood

terness, of a sweet Smell, and very aromatick; tis for this Reason it is more known by the Name of *Calamus Aromaticus*, tho' altogether improper, than that of the *Acorus*. This Root, which is commonly of the Thickness of a little Finger, and about half a Foot long, is brought to us from several Parts of *Poland* and of *Tartary*; and likewise from the Isle of *Favia*, where it is call'd *Divingo*. The *Acorus* is of some small Use in Physick, and is one of the Ingredients of the Treacle, without any other Preparation but being well pick'd and clean'd, and freed from Dirt, or any thing else that may stick to the Root, which is much used by the Perfumers.

The true *Acorus*, or the *Calamus Lemery*. *Aromaticus* of the Shops, is a Root the Length of one's Hand, a Finger's Thickness, full of little Knots and Strings, of a fine light Substance, reddish without, and white within, scented, acrid, and commonly call'd, but falsely, *Calamus Aromaticus*. It is brought from *Lithuania*, *Tartary*, &c. The Leaves of the Root are long, almost like the *Oryzoe*. There is a false *Acorus*, which is call'd, in *Latin*, *Acorus adulterinus*, seu *Gladiolus luteis liliis*, which is a Species of the Lilly or Flag, with the Yellow Flower; these grow in marshy and other watery Places: Sometimes this Root is us'd in Physick but rarely; both Sorts contain in them a good deal of exalted Oil, mix'd with volatile Salt. The true Sort is bitter, and of a sharp Taste, stomachick, heating and drying, of thin and subtil Parts, attenuating, inciding and aperitive; it opens Obstructions of the Liver, Spleen, and Womb, relieves in the Cholick, and provokes the Terms. It may be given in Powder, the candied Root, Oil or Extract, from a Scruple to half a Dram; or in the *Electuary Diacorum*, which you may see in the *London-Dispensatory*.

36. Of the true Reed, or Calamus Aromaticus.

Pomet. THE true *Calamus*, or rather the *Bitter Calamus*, is a Reed the Thickness of a Quill, of two or three Foot high, compos'd of Joints, from whence grow green Leaves, and little Clusters of yellow

Flowers. This little Reed grows in several Parts of the *Levant*, from whence it is convey'd to *Marseilles*, sometimes whole, but generally in small Bags of about half a Foot long. Chuse the largest which is fresh, cleans'd from the small Root and the Branches, and made up in Bags; 'tis of a brownish Red without, and whitish within, furnish'd with a white Pith; which when it is stale the said Pith will turn Yellow; and after the Reed is broke, and you put it into your Mouth, it has an intolerable Bitterness. It is chiefly us'd for *Venice Treacle*.

Calamus Verus, seu amarus. the true or bitter *Calamus*, is a Kind *Lemery*. of Reed which we bring dry from the *East-Indies* in little Bales; it grows about three Foot high: The Stalk is reddish without, and full of a white Pith within; it is divided by Joints, on each of which grow two long green Leaves, sharp at the Ends; the Flowers rise on the Tops, disposed in Clusters or Yellow Plumes. It is a sweet-scented Root, and fragrant, but somewhat bitterish in Taste, breakes white, and is a little knotty; this is used against Diseases of the Head, Brain, Nerves, Womb and Joints. There is prepared from it as from the *Acorus*, the Candied Root, the Confect, the Spirit, the Oil, the Extract, and the *Electuary Diacorum*, as in the Chapter before.

37. Of the Sugar-Cane.

Sugar-Canes are Reeds which grow *Pomet*. plentifully in several Parts of the *West-Indies*, in *Brasil* and the *Antilles Isles*. These Canes, or Reeds, when in the Ground, shoot out from every Joynt, another Cane of five or six Foot high, which is furnish'd with long, green, straight, sharp Leaves. In the Midway of the Height of every Cane, is a kind of Beam which terminates it self in a Point, the Height or Top of which is in the Nature of a Silver-colour'd Flower, resembling a Plume of Feathers.

The *Indians* prepare the Ground, by digging about half a Foot deep, with their Spades, after the manner of Trenching, in which they put a Cane of about three Foot high, and then make a Rider of a Foot at each End

End

End for two other Canes, and so continue to plant, till the Ground is full. At the End of six or seven Months, which is the Time that they begin to raise their Beams, you must take care to cut for the Preservation of your Sugar, otherwise there wou'd be a great deal lost. These Sort of Beams is what the Savages very much use to make their Bows of.

38. How to make Sugar from the Canes.

Pomet. **T**HE *Americans* having cut their Canes above the first Joynt, and freed them from their Leaves, make 'em into Bundles, and carry them to the Mill, which is compos'd of three Rollers of an equal Size, and equally armed with Plates of Iron, where the Canes are to pass thro' them. The Roller, in the middle, is raised much higher than the rest, to the end that the two Poles, which are affixed cross-ways at the Top; and likewise the Beasts which are yoked to them, may turn about freely, without being hindred by the Machine. The great Roller in the middle is surrounded with a Cog, full of Teeth, which bite upon the Sides of the two other Rollers adjoining to it, which makes them turn about, grind and bruise the Canes, which pass quite round the great Roller, and come out dry, and squeeze'd from all their Juice. If by Accident the *Indians*, or whoever feeds the Mill with Canes, shou'd happen to have his Fingers catch'd in the Mill, they must immediately cut off his Arm, lest the whole Body shou'd be drawn in and ground to Pieces: Therefore, as soon as they see any one have his Finger or Hand catch'd, the Person standing by cuts off his Arm with a Hanger, and sends Word presently to have him cured. The Juice falling into a Vessel which is below the Mill, and being drawn off, runs by a little Channel into the first Boiler, which holds about two Hogheads, where it is heated by a small Fire, and set a boiling, in order to make a very thick Scum arise: The *West-Indians* keep this Scum to feed their Cattle with; this Liquor being well scum'd is put into a second Boiler, where it is set to work again, by throwing on, from time to time, hot Water, in which they have beat up some

Eggs; having been thus purified, they pass this Sugar thro' Strainers; and after it has done running, put it into a Third Boiler, which is of Brass or Copper, and then again upon another refining into a fourth Boiler; and when it begins to cool, and you find it rises to a Grain, pass your Scimmer, or Wooden *Spatula* underneath it, from the Right to the Left, to see what Quality your Graining is of: The Sugar being thus ready, and while it remains hot, cast it into the Moulds, or Earthen-Pots, with Holes in their Bottoms, yet shut: At the End of twenty four Hours, which is the ordinary time the Sugar takes to incorporate, the *Negroes* carry the Pots into their Ware-Houses; and after they have opened the Holes, and pierced the Sugar, they set the Moulds upon little Pots or Jars, in order to receive the Syrup or *Molasses* which runs from it. And when the Syrup is run from the Sugar in the Moulds; you may afterwards cut it with a Knife; which being so done from the Pots, is call'd the grayish *Muscavado* Sugar; which as such is very little in use, but is the *Basis* and Foundation of all the other Sugars sold among us.

Of Cassonade, or Powder Sugar.

The *Cassonade*, or Sugar of the *Leeward-Islands*, is made from the Gray *Muscavado* run again; and after it has been clarify'd, strain'd and bak'd, is cast into the Moulds, and so prepar'd for Use, as we have been speaking before: After which they divide the Loaves, when taken out of the Moulds, into three Sorts, the Top, the Middle and the Bottom, which they dry separately according to their Fineness: The finest Powder-Sugar is that of *Brasil*, which is extremely white, dry, and well grained, of a Violet Taste and Flavour. The *Cassonade*, or Powder-Sugar, is much in use among the Confectioners, above all that of *Brasil*, by reason that it is less subject to candy, upon which account the Confectioners value it the more.

The Sugar, which we improperly call Sugar of seven Pound Weight, because it as often weighs Ten or Twelve; is made of the Gray *Muscavado* form'd into Loaves, as we have de-

on of its nauseous Taste,
 e to the *Molasses* them-
 call the Syrup of Sugar,
 manner of use in Phy-
 es of it are used in *Hol-*
 their Snuff, and to sell
 d of Sugar: I have been
 are better for distilling
Muscavado Sugar.

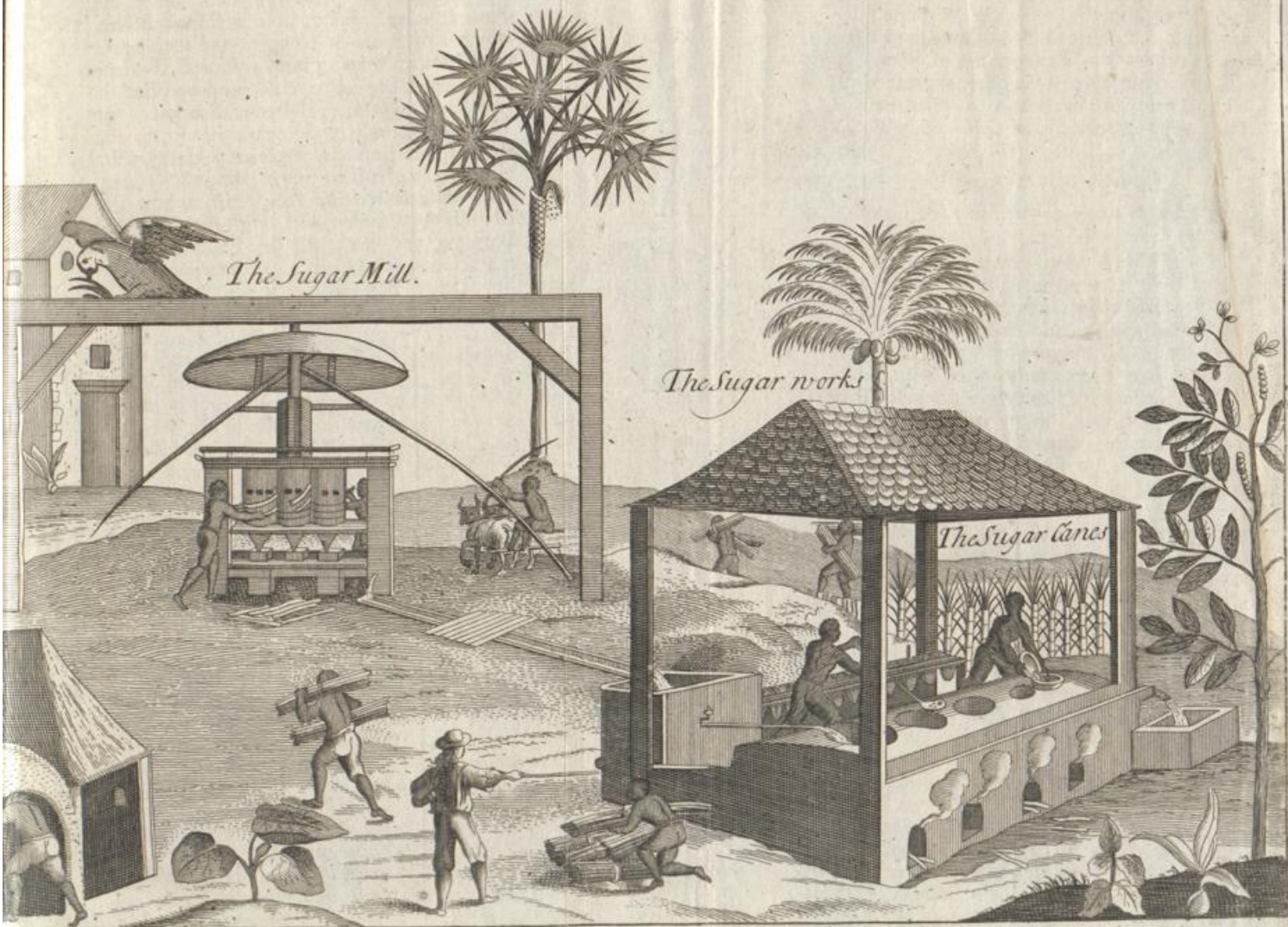
Red Sugar-Candy.

r-Candy is made of the
 ar, and White Sugar
 d boiled to a Candy thus.
 in pure Water, then boil
 of a Syrup, which pour
 s, wherein little Sticks
 der; let it be put into a
 our or five Days without
 : Christal, or Sugar-Can-
 the Sticks. Chuse your
 clear and transparent;
 ndy we have comes from
 sold for Four-Pence or
 dearer than that of *Tours*,
 other Places. The Red
 le the same way with the
 this is made with Brown
 orts are better for *Rheums*,
 rbs, *Aslma's*, *Wheezings*,
 Sugar; because being
 e longer time to melt
 withal keep the Throat
 r than Sugar does. Put
 Powder, they take away
 heal them being Blood-
 old Sores, being strew'd

White and Amber-colour'd,
 Pastiles of Portugal, &c.

made either of white Su-
 first Sort, which is often
 call'd *Sugar-Penids*, is boil'd till the Sugar
 becomes brittle, and will easily break after
 it be cold. When it is boil'd to a height, cast
 it upon a Marble, that is first lubricated
 with Oil of Sweet Almonds; and afterwards
 work it to a Paste, in any Figure you fan-
 cy. The other Sort, improperly call'd *Bar-*
ley-

and to make
 Sugar, after the same manner as the others
 are made. The Use of the Brown-Sugar was
 formerly very considerable, in that it serv'd
 to put into Clysters, instead of Chrystal Mine-
 ral: At present several Apothecaries, very
 improperly, imploy it to make many of their
 Syrups with, which must be very disgustful



End for two other Canes, plant, 'till the Ground is full six or seven Months, which they begin to raise their Bees care to cut for the Preservation, otherwise there would be lost. These Sort of Bees are of very much use to us.

38. *How to make Sugar*

THE *American* Canes above the *Pomet.* freed them from the Bark, and cut 'em into Bundles, and carry 'em to a Mill, which is compos'd of an equal Size, and equally made of Iron, where the Canes are put in, and roll'd between them. The Roller, in the middle, is much higher than the rest, and is supported by the two Poles, which are at the Top; and likewise are yoked to them, may turn without being hindred by the great Roller in the middle, with a Cog, full of Teeth, on the Sides of the two other Rollers, which are set to it, which makes them turn, and bruise the Canes, which are then carried to the great Roller, and come out squeez'd from all their Juice. The *Indians*, or whoever feed the Canes, shou'd happen to be catch'd in the Mill, they must cut off his Arm, lest the wheel be drawn in and ground to powder, as soon as they see any danger or Hand catch'd, the Person cuts off his Arm with a Hatchet. Word presently to have his Juice falling into a Vessel within the Mill, and being drawn off, is carried into a Channel into the first Boiler, about two Hogsheads, where a small Fire, and set a boiling, which makes a very thick Scum arise: The *West-Indians* keep this Scum to feed their Cattle with; this Liquor being well scum'd is put into a second Boiler, where it is set to work again, by throwing on, from time to time, hot Water, in which they have beat up some

which account the Confectioners value it the more.

The Sugar, which we improperly call Sugar of seven Pound Weight, because it as often weighs Ten or Twelve; is made of the *Gray Muscovado* form'd into Loaves, as we have

de-

described before. The Sugar of seven Pounds is distinguish'd into three Sorts; to wit, the White, the Second and the Last, which is of a brown Colour at the Top of the Loaf; the whiter the Sugar is, the better stov'd, grain'd and dry'd, the more it is esteem'd. The less the Moulds are, that is, the less the Loaf is made, and the Whiter it is, so much the dearer: The Use of which is to make choice Syrups, white Confects, and preserve *Abricots*, and the like, or make Presents of.

Of Sugar-Royal, and Demy-Royal.

The Sugar call'd Royal, from its extraordinary Whiteness, is from the small white Sugar, or Powder-Sugar of *Brasil*, melted and cast into Loaf as the former. This *Sugar-Royal* is extremely white throughout the whole; that is to say, as fine at the Top as the Bottom, of a clear, compact, shining Grain, notwithstanding easie to break, which is the general Observation of Sugars, that they are well bak'd, and of a kindly Sort. We sell besides, another Sort we call Demy-Royal, which is a small Sugar-Loaf, very White, and wrap'd in a Blue Paper which comes from *Holland*.

The *Dutch* formerly brought us Sugars of eighteen and twenty Pounds, wrap'd in Paper, made of Palm-Leaves; for which Reason it was call'd Palm-Sugar; which was a white fat Sugar of a good Sort, and a Violet Taste. We have, besides, another Sugar from the *Maderas*, but we shall say nothing of that, because we have it from several other Islands much better.

Of Brown-Sugar.

This Brown Sugar is one Sort of the *Muscavado*, which they turn to Powder-Sugar, and is made of the Syrup of the Seven-Pound Sugar, after the same manner as the others are made. The Use of the Brown-Sugar was formerly very considerable, in that it serv'd to put into Clysters, instead of Chrystal Mineral: At present several Apothecaries, very improperly, imploy it to make many of their Syrups with, which must be very disgustful

to the Body, by reason of its nauseous Taste, and its near Alliance to the *Molosses* themselves, which some call the Syrup of Sugar, and which is of no manner of use in Physick; great Quantities of it are used in *Holland* to temper with their Snuff, and to sell to poor People instead of Sugar: I have been assured that *Molosses* are better for distilling their Rum than the *Muscavado* Sugar.

Of White and Red Sugar-Candy.

The White Sugar-Candy is made of the White *Lisbon* Sugar, and White Sugar melted together, and boiled to a Candy thus. Dissolve your Sugar in pure Water, then boil it to the Consistency of a Syrup, which pour into Pots or Vessels, wherein little Sticks have been laid in order; let it be put into a cool, quiet Place, four or five Days without stirring; so will the Chrystal, or Sugar-Candy, stick close to the Sticks. Chuse your Sugar white, dry, clear and transparent; the very finest Candy we have comes from *Holland*, and it is sold for Four-Pence or Five-Pence a Pound dearer than that of *Tours*, *Orleans*, *Paris*, and other Places. The Red Sugar-Candy is made the same way with the White, except that this is made with Brown *Muscavado*. Both Sorts are better for *Rheums*, *Coughs*, *Colds*, *Catarrhs*, *Asthmas*, *Wheezings*, &c. than common Sugar; because being harder, they take longer time to melt in the Mouth; and withal keep the Throat and Stomach moister than Sugar does. Put into the Eyes in fine Powder, they take away their Dimness, and heal them being Bloodshot, as they cleanse old Sores, being strew'd gently upon them.

Of Barley Sugar, White and Amber-colour'd, Sugar of Roses, Pastiles of Portugal, &c.

Barley Sugar is made either of white Sugar or brown: The first Sort, which is often call'd *Sugar-Penide*, is boil'd till the Sugar becomes brittle, and will easily break after it be cold. When it is boil'd to a height, cast it upon a Marble, that is first lubricated with Oil of Sweet Almonds; and afterwards work it to a Paste, in any Figure you fancy. The other Sort, improperly call'd *Barley-*

ley-Sugar, is made of your *Cassomade*, or coarse Powder Sugar, clarify'd and boil'd to a Toughness that will work with your Hands to any Shape; and is commonly made up in little twisted Sticks: This Kind of Sugar is more difficult to make than the other, because of hitting the exact Proportion of boiling it to such a Height as they may work it as they please. *Sugar of Roses* is made of white Sugar clarify'd, and boil'd to the Consistence of Tablets, or little Cakes, in Rose-water, and so cast into what Form you like best. The *Pastiles*, or *Portugal Lozenges*, are made the same way, of the finest Sugar that can be had, to which is added some *Ambergrise*, or any other Perfume, most grateful to the Maker's Fancy.

Of Sugar-Plums.

There are infinite Variety of Flowers, Seeds, Berries, Kernels, Plums, and the like, which are, by the Confectioners, cover'd with Sugar, and carry the Name of *Sugar-Plums*, which would be endless to set down, and are too frivolous for a Work of this Nature: The most common of the Shops are *Carraway-Confects*, *Coriander*, and *Nonpareille*, which is nothing but Orrice-Powder cover'd with Sugar; and what is much in Vogue at *Paris* is your green *Anise*: Besides these, we have *Almond Confects*, *Chocolate*, *Coffee*, *Barberries*, *Pistachia Nuts*, &c. *Orange Chips* and *Flowers*, *Lemon-peel*, *Cinamon*, *Cloves*, and many other *Roots*, *Barks*, *Fruits*, *Flowers*, &c. too numerous to speak of, together with *Pastes*, *liquid Confections*, and the like; many of which are useful in the Apothecaries Shops, as *green Ginger*, *Oranges*, *Jelly of Barberries*, &c.

Of Spirit and Oil of Sugar.

This Spirit is made by the Assistance of Spirit of *Sal Armoniack*, and Chymical Glasses, Furnaces, &c. and becomes an acid Spirit; which, after Rectification, is a powerful Appetitive, and proper for many Diseases, as the *Gravel*, *Dropley*, and *Dysentery*. The Dose is as much as is sufficient to make an agreeable Acidity in any convenient Liquor proper to the Distemper. As the Oil of Sugar that remains after Rectification, is a black

stinking Oil, I shall direct you to another Sort, which, strictly speaking, is not an Oil, but rather a Liquor of Sugar, or an Oil *per Deliquium*. This is made by putting your Sugar into a hard Egg, and setting it in a cold Place to run into a Liquor, the same Way that Oil of Myrrh is made; and is us'd to beautify the Face, or inwardly to remove Pains in the Stomach.

Sugar, in Latin *Saccharum*, or *Lemery*, *Succharum*, *Zaccharum* or *Zuccharum*, is an Essential Salt, of a kind of Reed call'd *Arundo Saccharifera*, or the *Sugar-Cane*, which grows plentifully in many Parts of the *Indies*, as in *Brasil*, and other Places. This Plant bears on each Joint a Cane of five or six Foot high, adorn'd with long, straight, green Leaves, and carries on its Top a Silver-colour'd Flower, like a Plume of Feathers.

The Juice of the Canes is made by pressing them thro' the Rowlers of a Mill, from whence there runs a great Quantity of sweet pleasant Juice, which being put into Boilers, the watry Part is, by the Force of the Fire, evaporated, till it comes to a Consistency; after which they cast it into a Mixture made of certain Ingredients, fit to cleanse and prepare it for Graining. All the Time it is boiling, with large Copper Scummers they take off the Scum, which constantly rises in great Quantities, until it be fit to empty into Coolers, *viz.* till it arrives to its just Body: From the Coolers it is again shifted into Earthen Pots, with Holes in their Bottoms, and other Pots they call *Drips*, under them, for receiving the *Molasses*; which, in about a Month's Time, will be separated from that which afterwards is call'd *Muscavado-Sugar*, being of a pale, yellowish Colour: This is then knock'd out of the Pots, and put into Casks, or Hogheads, for Transportation.

This first Kind of *Molasses* is either boil'd up again to draw from it a Sort of duskish, pale-grey Sugar, call'd *Paneels*, or sent in Casks for *England*. From this Sugar there drips a second Sort of *Molasses*, which, with the Scum that arises in all the Boilings, together with the Washings of the Boilers, Coolers, Pots, and other Instruments, is preserved in great Cisterns, where it ferments; from which they distill that famous Spirit call'd *Rum*, a noble Liquor, not at all inferior in Strength to *French Brandy*, nor yet in Good-

Goodness or Medical Virtues, the Flavour or Palatableness of it being set aside, having an *Empyreuma*, from a foetid Oil it acquires in the Distillation.

The next thing to be consider'd, is the Refining of Sugar, to wit, the *Muscavado-Sugar*; which is thus: They put it into Refining Coppers, mix'd with Lime-Water, where, as it boils over a gentle Fire, much Scum will arise, which is taken off constantly till it comes to a sufficient Consistency for mixing it with the Whites of Eggs well beaten up, in order to clarify it; this being done, it is boil'd up to a proper Height for refin'd Sugar, and so turn'd off into Coolers, from whence it is put into such Draining-Pots as afore-mention'd, with their Drips: When those Pots have stood draining or dripping eight or ten Days, then Clay, properly temper'd, is put upon the Pots, which is renew'd as often as Occasion requires: This forces down all the *Molasses*, so that in seven or eight Weeks Time these Sugars will be fit for Casking.

These *Molasses*, thus proceeding from Refin'd Sugar, are boil'd up again, and all the former Work repeated; from whence comes another Sort of White Sugar, call'd *Bastard White*: From this Sugar there drips a second Sort of *Molasses*, fit for nothing but the Still to make *Rum* of; it is also to be observ'd, that little or nothing is wasted in the Refining, but you have it some ways or another; for as much as the Refined Sugar wants of its first Weight, you have it in the Scum and the *Molasses*, or Recrement running from it. After this Elaboration of Sugar for Refining it is over, they put up in Casks or Hogsheds that which is call'd *Powder-Sugar*, or make into Loaves what they call *Loaf-Sugar*; both of which is esteem'd in Goodness, according to the Number of Times they have been refin'd.

When Sugar has been but once refin'd, it is a little fat or oily: Now to refine it farther, it is dissolv'd again in Lime-Water, and boil'd as before directed, taking off the Scum all the while, &c. The Sweetness Sugar has, is thought to proceed from an essential, acid Salt, mixed with some oily Particles, of which it consists; for if, by Distillation, we separate the oily Parts from the saline, neither of them will be sweet, but the saline

will be acid, and the Oil insipid upon the Tongue, because it makes little or no Impression upon the Nerve of Tasting; but when the Acid is entirely mix'd with it, the Edges or Points of the Acid penetrate the Pores of the gustatory Nerve, and, by opening them, carry in the oily Particles, and make them also penetrate and irritate the Nerve, whereby the Sweetness of the Taste is produc'd.

The *Powder-Sugar*, or that which is less refin'd, makes a sweeter Impression upon the Tongue than the *Loaf-Sugar*, or that which is more refin'd, because it contains more oily or fat Particles, whereby it remains the longer upon the Taste: This makes some prefer the courser before the finer, for Use and Sweetening. Sugar was first known or produc'd in the *East-Indies*, afterwards in *Barbary* and the *African* Islands, as the *Maderas*, *Canaries*, &c. then in the *West-Indies*, as *Jamaica*, *Barbadoes*, *Nevis*, *Antegoa*, *Montserrat*, as also in the *Spanish Indies*; lastly, in *Europe*, as *Spain* and *Portugal*, but not in that Plenty as it is produc'd in the *West-Indies*. If you make choice of it from the Place, that from the *Maderas* was formerly accounted the best; that from the *Canaries* next, and that from *St. Thomas's* last; but now our fine *Jamaica* and *Barbadoes* Sugar is inferior to none; and next to them is reckon'd the *Lisbon Sugar*, which is fatter, and not so white. If you chuse it for Colour, the whitest is the best; then the next to white, is that of the Cream-Colour, or pale Yellow; and, lastly, the Red. If you chuse it from the making, the treble refin'd is best, and that which is form'd into the Loaf, the whitest of which will look like the Driven Snow.

It is good for the Breast and Lungs, to smooth their Roughness, take away Asthma's, Hoarseness, ease Coughing, and to attenuate and cut tough Flegm, afflicting the Fibres of those Parts: It is very profitable for the Kidneys and Bladder, and in all the Cases afore-mention'd; but is reputed bad for such as are troubled with Vapours and Hysterick Fits, and therefore such Persons ought to avoid the Use of it. Refin'd Sugar is the sharper, and better to attenuate, cut, and cleanse; but the unrefin'd, to levigate and lenify, and so the better for the Lungs; but being constantly us'd, rots and decays the
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Teeth,

Teeth, and makes the Gums scorbutick. There are many Preparations, besides Confects and Sweet-Meats, made of Sugar; the chief of which are, first, Sugar of Roses;

2dly, Sugar of Violets; 3dly, Tincture and Liquor, acid Spirit and Oil, Sugar Penids, Essence of Sugar, and the like.

BOOK the Third.

Of WOODS.

I. Of Wood of Aloes.

Pomet. **O**F all the Woods sold in the Shops, we have none more precious, more valuable and rare, than the true Wood of Aloes, or *Xyloales*; upon which Account it is very little known, and every-one is liable to mistake the Wood, which makes it easy to be counterfeited; so that it is a difficult Matter to know it positively, it being describ'd so differently by different Authors: And I cannot think any more mistaken than those who write like Mr. de Furetiere, who says, That Aloes is a large Tree that grows in the Indies ten Foot high, that the Trunk is of the Thickness of a Man's Thigh, on the Head of which is placed a vast Heap of thick indented Leaves, large at the Bottom, which narrow themselves to a Point, and are four Foot long. The Flower is red intermix'd with yellow, and double like a *Julyflower*; it is supported by the little Branches which arise from the Trunk, with the Leaves, among which they are hid: From the said Flower comes a Fruit, round like a large Weight, white and red: They take the Juice from the Leaves, by sitting them with a Knife; and they gather them with the Calabasses or Gourds, which, when dry'd in the Sun, are prepar'd to make Rosin

of. This Wood is spotted, scented, and bitter. The Bark is so curious, that it resembles a Skin that is of a changeable Colour.

There are several Sorts of it, but the best is the *Agallochum* of India, which comes from *Calecut*: The finest is the black Kind, of a changeable Colour, full, heavy, solid, and thick, which cannot be whiten'd, and is difficult to set on Fire. I do not know whether Mr. Furetiere, in his Description before, does not confound the Plant which produces the Aloes, with the Tree which affords us the true Wood of Aloes. There are others which pretend to affirm, we cannot have the true Wood of Aloes, and that it grows not in this Terrestrial Paradise, it having been swept away by the Deluge: And others will not allow it us, because it is not produc'd among us, except in Deserts, and upon inaccessible Mountains; not only from their Height, but because of the Wild Beasts that inhabit among them, as the Lion, the Tiger, the Panther, and the like; besides a thousand other idle Stories that are told about this Wood: To confute all which, I shall only tell you, that the Embassadors from the Kingdom of *Siam* brought of this true Wood to present to the King of France now reigning, as well wrought as unwrought; among the rest, a Bason, with its Salver, proper to wash the Hands in, made at *Siam*, after the Mode of that Country. This Bason, tho' of Wood, is more