proper to renew the application, and touch the parts moſt affected, for ſome nights longer, till the whole quantity is exhauſted. Some have been of opinion, that this external uſe of ſulphur is unſafe; that as ſulphur taken inwardly promotes the expulſion of impure humours and the eruption of cutaneous efflorescences, it muſt act, when outwardly applied, by repreſſing them. This conſequence, however, does not follow; nor is it by affecting the humours that it performs the cure: for it equally removes the itch whether uſed internally or externally, by its vapours diffuſed through the ſkin. All the danger, that is to be apprehended from ſulphureous unguents, is that which may ariſe from the obſtruction of the cutaneous pores by the unctuous matter; and to prevent any diſorder from this cauſe, only one fourth of the body is to be anointed at one time.

SUMACH.

SUMACH ſive rhus obſoniorum Ph. Ed. *Rhus folio ulmi C.B.* SUMACH: a ſhrub or low tree; with oval, pointed, ſerrated, downy leaves, having each a red rib running along the middle, ſet in pairs without pedicles; producing cluſters of ſmall yellowiſh or greeniſh flowers, each of which is followed by a ſmall, red, flattiſh berry, including a roundiſh reddiſh-brown ſeed. It is a native of the ſouthern parts of Europe, and cultivated in ſome of our gardens.

THE berries of ſumach have an acid auſtere taſte: they were formerly uſed for reſtraining bilious fluxes, and hemorrhagies, and colliquative hectic ſweats: ſome direct an infuſion of half an ounce of the berries, and others two or three drams of an extract made from them by water, for a doſe. The leaves and young twigs are ſtrong aſtringents, and have been directed in the ſame intentions.

TACAMAHACA.

TACAMAHACA Ph. Ed. a reſin; obtained from a tree, reſembling the poplar, bearing, at the extremities of the branches, ſmall roundiſh fruits including a ſeed like a peach-kernel; a native of the temperate parts of the continent of America, and in a ſheltered ſituation enduring the winters of our own country.

Two ſorts of this reſin are ſometimes to be met with. The beſt, called, from its being collected in a kind of gourd-ſhells, tacamahaca in ſhells, is ſomewhat unctuous and ſoft, of a pale yellowiſh or

greeniſh colour, a bitteriſh aromatic taſte, and a fragrant delightful ſmell approaching to that of lavender and ambergris. This ſort is very rare. That commonly found in the ſhops is in ſemitranſparent grains or glebes, of a whitiſh, yellowiſh, browniſh, or greeniſh colour, and of a leſs grateful ſmell than the foregoing. The firſt is ſaid to exude from the fruit of the tree, the other from inciſions made in the trunk. The tree, as raiſed among us, affords in its young buds or the rudiments of the leaves, a reſinous juice of the ſame kind of fragrance.

Tacamahaca is uſed chiefly as an ingredient in warm nervine plaſters; though the fragrance and taſte of the finer ſort points out its being applicable to other purpoſes, as an internal balſamic corroborant. Both kinds diſſolve in rectified ſpirit into a gold-coloured liquor, only a ſmall quantity of impurities being left: they impregnate water alſo conſiderably with their ſmell and taſte, but give out very little of their ſubſtance to this menſtruum.

TALCUM.

TALK: an earthy concrete; of a fibrous or leafy texture; more or leſs pellucid, bright or glittering; ſmooth and ſlippery to the touch; in ſome degree flexible and elaſtic, ſo as ſcarce to be pulverable; ſoft, ſo as to be eaſily cut; ſuffering no change in an intenſe fire, or no other than a diminution of its brightneſs, flexibility, and unctuoſity; not acted upon by acids, either in its crude ſtate, or after vehement calcination. There are ſeveral different appearances of this earth; among which, the greeniſh foliaceous *Venice talk*, the fibrous flexible *amianthus* and *aſbeſtos*, and the more rigid fibrous *alumen plumoſum*, have been ſelected for medicinal uſe; though it does not appear that they are capable of anſwering any medicinal intention, as they are not diſſolved, or ſenſibly affected, by any known humid menſtruum. The Venice talk, on account of its unctuous ſoftneſs, and the ſilver hue which it exhibits when reduced by raſping or otherwiſe into powder, has been employed externally as a coſmetic.

TAMARINDUS.

TAMARINDUS Ph. Lond. & Ed. Oxyphœnicon. TAMARIND: the fruit of a pretty large tree, *ſiliqua arabica quæ tamarindus C. B.*

growing in Arabia and in the Eaſt and Weſt Indies. The fruit is a pod, ſomewhat reſembling a bean-cod, including ſeveral hard ſeeds, together with a dark-coloured viſcid pulp: the Eaſt India tamarinds are longer than thoſe of the Weſt, the former containing ſix or ſeven ſeeds each, the latter rarely above three or four: they nevertheleſs ſeem both to be the produce of one ſpecies of plant. The pulp, with the ſeeds, connected together by numerous tough ſtrings or fibres, are brought to us freed from the outer ſhell: the oriental ſort is dryer and darker coloured than the occidental, and has more pulp: the former is ſometimes preſerved without addition, the latter has always an admixture of ſugar.

The pulp of tamarinds is an agreeable laxative acid; of common uſe in inflammatory and putrid diſorders, for abating thirſt and heat, correcting putrefaction, and looſening the belly. The doſe, as a laxative, is two or three drams: an ounce or two prove moderately cathartic. It is an uſeful addition to the purgative ſweets, caſſia and manna, increaſing their action, and rendering them leſs liable to produce flatulencies: the reſinous cathartics are ſomewhat weakened by it. Tournefort obſerves that an eſſential ſalt may be obtained from tamarinds, by diſſolving the pulp in water, and ſetting the filtered ſolution, with ſome oil upon the ſurface, in a cellar for ſeveral months; that the ſalt is of a ſourish taſte, and difficultly diſſoluble in water; and that a like ſalt is ſometimes found alſo naturally concreted on the branches of the tree.

TANACETUM.

TANACETUM Ph. L. & Ed. Tanacetum vulgare luteum C. B. Tanaſia, athanaſia, & parthenium mas quibuſdam. Tansy: a plant with large leaves divided, to the rib, on both ſides, into oblong deeply indented ſegments; producing, on the tops of the ſtalks, ſeveral gold-coloured diſcous flowers, in umbel-like cluſters, followed by ſmall oblong blackiſh ſeeds. It is perennial, grows wild by road-ſides and about the borders of fields, and flowers in June and July.

The leaves and flowers of tanſy have a ſtrong, not very diſagreeable ſmell, and a bitter ſomewhat aromatic taſte: the flowers are ſtronger though rather leſs unpleaſant than the leaves. They give out their virtue both to water and ſpirit, moſt perfectly to the latter: the tincture, made from the leaves, is of a fine green, from the flowers of a bright pale yellow colour. Diſtilled with water, they yield a greeniſh-

yellow eſſential oil ſmelling ſtrongly of the herb: the remaining decoction, inſpiſſated, affords a ſtrong bitter ſubſaline extract. The ſpirituous tinctures give over alſo, in inſpiſſation, a conſiderable part of their flavour; a part of it remaining, along with the bitter matter, in the extract.

THIS plant is uſed as a warm deobſtruent bitter, in weakneſs of the ſtomach and in cachectic and hyſteric diſorders; and likewiſe as an anthelmintic. The ſeeds have been chiefly recommended in this laſt intention, and ſuppoſed by ſome to be the *ſantonicum* of the ſhops, from which they differ not a little in quality as well as in appearance, being much leſs bitter, and of a more aromatic flavour.

TARTARUM.

TARTARUM vini albi vel rubri Ph. Lond. Tartarus Ph. Ed. TARTAR: an acid concrete ſalt; thrown off from wines, after complete fermentation, to the ſides and bottoms of the caſks; of a red or white colour, and more or leſs droſſy, according to the colour and quality of the wine. The white is generally purer than the red: both kinds, when purified, are exactly the ſame.

This ſalt is one of thoſe which are moſt difficultly diſſoluble in water, being ſcarcely affected by it in the cold, and requiring ten or twelve times its own weight when aſſiſted by a boiling heat. From this ſaturated ſolution the tartar begins to ſeparate almoſt aſſoon as the boiling ceaſes: if the quantity of water is greater, as about twenty times the weight of the ſalt, it continues long enough ſuſpended to be paſſed, with due care, through a woollen ſtrainer or a filter. The filtered liquor appears limpid and colourleſs, whether the tartar made uſe of was red or white: if haſtily cooled, the ſalt ſeparates in ſmall grains like ſand, but if the veſſel is cloſely covered, and the heat very leiſurely diminiſhed, it ſhoots into ſemitranſparent white *cryſtals* *: if the filtered liquor be kept boiling, a thick ſkin forms on the ſurface, which, being taken off with a perforated wooden ſkimmer, is ſucceeded by freſh cuticles, till the whole of the ſalt is thus formed into what is called *creme* of tartar †. The refining of tartar is practiſed, in the way of trade, chiefly about Montpelier, from whence the ſhops are generally ſupplied both with the cryſtals and creme; the proceſs being ſo troubleſome, and requiring ſo large conveniencies, that it is ſcarcely ever attempted here. The purer ſort of white tartar, unrefined, eſpecially

* Cryſtalli tartari *P. L. & E.*

† Cremor tartari *Ph. Ed.*

cially that of Rheniſh wine, is, for many purpoſes, particularly for combinations with other bodies, not inferiour either to the creme or cryſtals.

PURE tartar, in doſes of half a dram or a dram, is a mild cooling aperient: two or three drams gently looſen the belly; and ſix or eight prove moderately cathartic. Its acidity and laxative power are its medical characters.

Tartar, diſſolved in water, effervefces with fixt alkaline ſalts, and ſaturates, of the vegetable alkalies, near one third its own weight. The compound ſalt, reſulting from their union, is a neutral one, more purgative than the tartar itſelf, and far eaſier of ſolution, whence its name ſoluble tartar. This ſalt is prepared, either by boiling the refined tartar in ten times its weight of water till it is diſſolved and then dropping in ſtrong alkaline ley *, or by diſſolving the alkali in boiling water in the proportion of a pound to a gallon and then adding the tartar †, till a freſh addition occaſions no further effervefcence: the liquor is then filtered while hot, and either cryſtallized or evaporated to dryneſs. As this ſalt difficultly cryſtallizes, inſpiſſation to dryneſs is the moſt convenient method; and in this caſe, to ſecure the perfect neutralization of the ſalt, the tartar ſhould be made to prevail at firſt, and the liquor ſuffered to cool a little before filtration that the redundant tartar may concrete and ſeparate from it.

Tart. ſolubil.
* *Ph. Edinb.*
† *Ph. Lond.* Sal vegetabilis *quibuſd.*

Of the mineral fixt alkali or ſoda, this acid ſaturates, according to the faculty of Paris, four fifths its own weight. The neutral ſalt reſulting from its coalition with this alkali ‡, is ſomewhat leſs diſſoluble than that with the vegetable; and ſhoots much more eaſily, into pretty large, hard, multangular cryſtals, ſome columnar and flattiſh, others more irregular. It is milder in taſte, and in virtue leſs purgative, requiring to be given to the quantity of an ounce or an ounce and a half to purge effectually: eight drams ſeem to be about equivalent, in cathartic power, to ſix of the ſoluble tartar.

‡ Sel de Seignette, Sal Repellenſis, Rochelle ſalt.

Tartar forms likewiſe ſoluble compounds with all the abſorbent earths, and with ſome metallic bodies, but with theſe laſt it is difficultly made to ſatiate itſelf completely, the part that is firſt ſaturated ſeeming to impede the action of the reſt; for after long boiling, a very conſiderable part of the tartar ſeparates on cryſtallization unchanged.

It is obſervable, that if any of theſe combinations of tartar, with alkalies, with earths, or with metals, be diſſolved in water, and any other acid added, the pure tartar ſeparates and falls to the bottom, as acid, and as difficult of ſolution, as at firſt; the ſubſtance, that was combined

combined with it, being abſorbed by the acid ſuperadded. As th acids of the vegetable kingdom whether native or fermented, vinegar, lemon juice, tamarinds, *&c.* have this effect of diſuniting tartar from all the bodies that are combinable with it, equally with thoſe of the mineral kingdom; it follows, that the tartareous acid is of a kind eſſentially different from all the other known vegetable ones, and that no acid, unleſs it be tartar itſelf, can be joined in preſcription to the *tartarum ſolubile*, the *ſel de Seignette*, or the combinations of tartar with earths or metals.

TELEPHIUM.

TELEPHIUM: a plant with unbranched ſtalks, clothed with thick fleſhy oval leaves, but producing no leaves immediately from the root: the flowers ſtand in form of umbels on the top of the ſtalk, and are followed, each, by from three to ſix pods full of ſmall ſeeds: the root is irregular and knobby. It is indigenous in England, and perennial.

1. CRASSULA *ſive telephium Ph. Ed.* *Telephium vulgare C. B.* *Anacampſeros, fabaria, & faba craſſa quibuſdam.* Orpine: with the leaves very ſlightly or not at all ſerrated; growing in hedges and moiſt ſhady grounds, and producing reddiſh or whitiſh pentapetalous flowers in June. The leaves have been ſuppoſed to be poſſeſſed of an anti-inflammatory power; but their virtues appear to be very inconſiderable, as they have no ſmell, and only an herbaceous mucilaginous taſte.

2. RHODIOLA *ſive roſea:* *Rhodia radix C. B.* Roſewort: with ſerrated leaves; growing in mountainous places, and producing yellow tetrapetalous flowers in the ſpring. The root of this ſpecies, of little ſmell when freſh, has when dry a very pleaſant one, reſembling, when the root is in perfection, that of the damaſk roſe; in this odorous matter conſiſts the medical virtue of the rhodiola, and its principal medical difference from the preceding ſpecies. Linnæus obſerves, that when raiſed in gardens, it has not one hundredth part of the ſmell or virtue of that which is produced on its native mountains.

TEREBINTHINÆ.

TURPENTINES: the native balſams or reſinous juices of certain trees. Four kinds are diſtinguiſhed in the ſhops.

1. TERE-

1. TEREBINTHINA CHIA *Ph. L.* *Terebinthina chia & cypria Ph. Ed.* Chio or Cyprus turpentine: generally about the consistence of thick honey, very tenacious, clear and almost transparent, of a white colour with a cast of yellow and frequently of blue, of a warm pungent bitterish taste, and a fragrant smell more agreeable than that of any of the other turpentines. It is the produce of the common terebinth *(terebinthus vulgaris C. B.)*, an evergreen bacciferous tree or shrub, growing spontaneously in the eastern countries and in some of the southern parts of Europe. The turpentine brought to us is extracted in the islands whose name it bears, by wounding the trunk and branches a little after the buds have come forth: the juice issues thin and clear as water, and by degrees thickens into the consistence in which we meet with it. A like juice, exuding from this tree in the east, inspissated by a slow fire, is said by Kæmpfer to be used as a masticatory by the Turkish women, for preserving the teeth, sweetening the breath, and promoting appetite.

2. TEREBINTHINA VENETA *Pharm. Edinb.* Venice turpentine: usually thinner than any of the other sorts, of a clear whitish or pale yellowish colour, a hot pungent bitterish disagreeable taste, and a strong smell, without any thing of the fine aromatic flavour of the Chian kind. The true Venice turpentine is said to be obtained from the larch *(larix C. B.)*, a coniferous tree, with small cones, and short leaves standing in tufts which fall off in the winter, growing in great abundance on the Alps and Pyreneans, and not uncommon in the English gardens. Though this kind of turpentine bears the name of Venice, it is not the produce of the Venetian territories: the greatest quantities are brought from New England.

3. TEREBINTHINA ARGENTORATENSIS *Ph. Lond. & Edinb.* Strasburg turpentine: generally of a middle consistence between the two foregoing, more transparent and less tenacious than either, in colour yellowish brown, in smell more agreeable than any of the other turpentines except the Chian, in taste the bitterest yet least acrid. This juice is extracted, in different parts of Germany, from the silver and red fir (see page 1) by cutting out, successively, narrow strips of the bark, from as high as a man can reach to within two feet of the ground. In some places, a resinous juice is collected from certain knots under the bark: this, called *lacryma abiegna* and *oleum abietinum*, is accounted superiour to the turpentine.

4. TERE-

4. TEREBINTHINA COMMUNIS *Ph. Lond. & Ed.* Common turpentine: about the consistence of honey, of an opake brownish white colour, the coarsest, heaviest, in smell and taste the most disagreeable, of all the kinds of turpentine. It is obtained from the wild pine *(pinus silvestris C. B.)* a low coniferous tree, with the leaves longer than those of the firs and issuing two together from one tubercle, growing wild in different parts of Europe. This tree is extremely resinous, insomuch that, if not evacuated of its juice, it often swells and bursts. The juice, as it issues from the tree, is received in trenches made in the earth, and afterwards freed from its grosser impurities by colature through wicker baskets. The cones of the tree appear to contain a resinous matter of a more grateful kind than that of the trunk: distilled while fresh, they are said to yield a fine essential oil * greatly superiour to that of the turpentines.

* Camphilinen oleum Germanis.

ALL these juices dissolve totally in rectified spirit, but give out little to watery menstrua: they become miscible with water, into a milky liquor, by the mediation of the yolk or white of an egg, and more elegantly by mucilages. Distilled with water, they yield a notable quantity of a subtile penetrating essential oil † vulgarly called spirit; a yellow ¶ or blackish § resin remaining in the still: this is the common rosin of the shops. It is supposed that the officinal Burgundy pitch ‖, which is brought from Saxony, is a preparation of the same kind, only less divested of the oil, made by boiling the common turpentine till it acquires a due consistence. The essential oil, redistilled by itself in a retort, with a very gentle heat, becomes more subtile, and in this state is called ethereal **; a thick matter remaining behind, called balsam of turpentine ††. A like balsam is obtained also by distilling, with a stronger fire, the common resin; from which there arises, first a thin yellow oil, and afterwards the thicker dark-reddish balsam §§, a blackish resin ¶ remaining in the retort.

† Ol. terebinth. *P. L. & Ed.*
¶ Resina flava *Ph. Lond.*
§ Resina nigra seu colophonia *Ph. Ed.*
‖ Pix Burgundica *Ph. L. & Ed.*
** Ol. terebinth. æther. *P. L.*
†† Balf. terebinth. *Ph. Lond.*
§§ Balf. terebinth. *Ph. Ed.*
¶ Resina nigra seu colophonia *Ph. Lond.*

All the turpentines are hot stimulating corroborants and detergents. They are given, where inflammatory symptoms do not forbid their use, from half a scruple to half a dram and upwards, for cleansing the urinary passages and internal ulcerations in general, and in laxities of the seminal and uterine vessels. They seem to act in a peculiar manner on the urinary organs, impregnating the water with a violet smell, even when applied externally, particularly the Venice sort. This last is accounted the most powerful as a diuretic and detergent, and the Chio and Strasburgh as corroborants: they all loosen the belly, the Venice

Venice moſt; and on this account they are ſuppoſed by Riverius and others to be leſs hurtful than ſuch irritating diuretics, as are not accompanied with that advantage. The common turpentine, as being the moſt offenſive, is rarely given internally: its principal uſe is in ſome external applications, among the farriers, and for the diſtillation of the oil.

The oil is a moſt potent ſtimulating detergent diuretic. It is ſometimes given, in doſes of a few drops, in rheumatiſms and fixt pains of the joints; and ſome have ventured on much larger quantities. Cheyne recommends, as a perfect cure for ſciaticas, though of many years ſtanding, from one to four drams of the ethereal oil, to be taken with thrice its quantity of honey, in a morning faſting, with large draughts of ſack whey after it, and an opiate at bed-time: this medicine is to be repeated, with the intermiſſion of a day now and then, if daily repetitions cannot be born, for four or five days, or eight at furtheſt (*a*). It appears, however, highly imprudent, to venture on ſuch large doſes at once of a medicine ſo very hot and ſtimulating. Boerhaave, after recounting, not without ſome exaggeration, its ſtyptic, anodyne, healing, antiſeptic, and diſcutient virtues when applied hot externally, and its aperient, warming, ſudorific and diuretic qualities when taken internally, adds, that it muſt be uſed with great caution; that when taken too freely, it affects the head, excites heat and pain therein, and, violently urging a diabetes, brings on a flux of the ſemen and of the liquor of the proſtates; and that in venereal runnings, in which it has by ſome been commended, it tends to inflame the parts and increaſe the diſorder.

The balſam and the inſpiſſated reſins are uſed chiefly externally: the balſam is leſs pungent than the oil, and the reſins much leſs ſo than the turpentines in ſubſtance. The common yellow reſin, in taſte conſiderably bitter, is ſometimes given as an internal corroborant, in preference to the turpentines themſelves, as being diveſted of the ſtimulating oil.

TERRA JAPONICA.

TERRA JAPONICA P. Lond. *Catechu ſive terra japonica P. Ed.* JAPAN EARTH, improperly ſo called: the inſpiſſated juice of the fruit, as is ſuppoſed, of an Eaſt-Indian palm-tree, *palma cujus fructus ſeſſilis faufel dicitur C. B.* It is dry and pulverable, outwardly of a reddiſh colour, inwardly of a ſhining dark blackiſh

 brown

(*a*) Eſſay on the gout, Edit. x. § LXXI. p. 119.

brown with a ſlight caſt of red: the deepeſt coloured, heavieſt, and moſt compact, is accounted the beſt.

THIS concrete is a mild aſtringent, more agreeable in taſte than moſt of the other ſubſtances of that claſs, being accompanied with a conſiderable degree of ſweetneſs. It is often ſuffered to diſſolve leiſurely in the mouth; both as a topical reſtringent for laxities and exulcerations of the gums; and in alvine and uterine fluxes, and catarrhal coughs and hoarſeneſs; medicines of this kind acting in general to much better advantage when thus gradually ſwallowed, than when taken in full doſes at once. With this view the terra japonica is made in the ſhops into troches: the college of London directs it to be beaten with equal its weight of gum-arabic, and four times the weight of both of ſugar of roſes, and ſo much water to be dropt in as will reduce them into a maſs of a due conſiſtence for being formed: that of Edinburgh orders one part of the terra japonica, four of gum tragacanth, and twenty four of fine ſugar, to be made up with roſe-water.

Trochiſci e terra japon.

Japan-earth diſſolves almoſt totally in water, excepting the impurities; which are uſually of the ſandy kind, and in conſiderable quantity, amounting, in the ſpecimens I examined, to about one eighth of the maſs. Of the pure matter, rectified ſpirit diſſolves about ſeven eighths, into a deep red liquor: the part, which it leaves undiſſolved, is an almoſt inſipid mucilaginous ſubſtance. In the ſhops a ſolution of it is made in proof ſpirit, with the addition of cinnamon, a ſpice the beſt adapted of any to the intention of this medicine: three ounces of the japan-earth and two of cinnamon are digeſted in a quart of the ſpirit, and the ſtrained tincture * given commonly in doſes of two or three tea-ſpoonfuls. It diſſolves alſo in volatile alkaline ſpirits, in alkaline ley, in the mineral acids, partially and more difficultly in the vegetable acids, and not at all in oils: all the ſolutions are of a red or purpliſh colour.

* Tinctura japonica *P. L.*

TERREA ABSORBENTIA.

ABSORBENT EARTHS: diſtinguiſhable from other earthy and ſtony ſubſtances by their ſolubility in acids. Such are, the mineral calcareous earths, as chalk: the animal calcareous earths, as crabs-claws, oyſter-ſhells, egg-ſhells, pearl, coral, coralline: animal earths not calcareous, as crabs-eyes and burnt hartſhorn. See the reſpective ſubſtances; which have been ſeparately treated of, ſo far as concerned each in particular; and whoſe general and common qualities were reſerved for this article.

THE

The obvious and immediate virtue of these bodies is, to obtund acid humours in the first passages, and thus to relieve the cardialgic and other complaints occasioned by them: the relief, however, which they afford, is oftentimes only temporary; from their acting only upon the acid already generated, without correcting the indisposition which tends to produce more. If no acid humours are contained in the first passages, these earthy bodies, not soluble by any other kind of fluid, can have no salutary operation; and, by concreting with the viscous contents of the stomach into indigestible masses, may prove injurious in a high degree (*a*).

Absorbents are of more general use in infancy than in adult age; acidities being very familiar to young children, being often in that tender age productive of alarming symptoms, and having a greater or less share in most of their diseases; whereas, in adults, they are much less frequent, accompanying chiefly hypochondriacal affections, cardialgiæ, and such disorders as happen in the first passages from the immoderate use of acid and fermentable food. It is not therefore to be concluded, from the good effects of these kinds of substances in childrens cases, that they will be attended with the like success in the similar diseases of adults: convulsions, in children, are often allayed by absorbents; but in the convulsions of adults, the same remedies, though recommended by many practical writers, are insignificant.

An hypothesis formerly obtained, which ascribed the acute diseases of adults to a morbific acid, against which the absorbent earths were introduced as the most direct alexipharmacs. This theory is now justly exploded; these diseases, instead of being produced, being in general most successfully controlled, by acids. The use of absorbents, in different kinds of fevers, is nevertheless still continued, and sometimes perhaps with advantage: for, though the earths of themselves are apparently rather injurious than beneficial, yet as acids are often given freely at the same time, the solution of the earth in the acid may prove a medicine more serviceable in particular cases than the acid unobtunded. It is however, doubtless, more advisable, to use the earth previously dissolved in the acid, than to give them separately.

The college of Berlin, sensible of the advantage of having the earths, in these cases, previously dissolved, or reduced to a soluble saline form; as well as of the absurdity, retained in other German pharmacopœias, of precipitating them from their solutions by fixt alkaline salts, and thus rendering them wholly inert; directs them to be

 digested

(*a*) *Vide* Tralles *Virium terreis remediis ascriptorum examen rigorosus.*

digeſted in diſtilled vinegar, with a gentle heat, till the menſtruum ceaſes to act, and the filtered ſolution to be inſpiſſated to dryneſs *. This preparation is greatly preferable to the ſimple imbibition with vinegar or lemon juice recommended by ſome; as by this laſt management the earth is made ſoluble only in part, and in an undeterminable proportion.

* Magiſterium ſolubile, corallorum, perlarum, &c. *P. Brandenb.*

Solutions of theſe earths in vegetable acids are in taſte ſomewhat auſtere. The different earths differ ſomewhat from one another, both in the degree and in the ſpecies of the taſte, and probably alſo in the medical effects, of the ſolutions: but whether theſe differences are ſuch, that ſome of them, as crabs-claws, pearl, coral, and bezoar, are moſt diſpoſed to promote a diaphoreſis in fevers, while others, as egg-ſhells and oyſter-ſhells, act rather by promoting urine, as ſeems to be generally ſuppoſed, has not been determined by fair experience, the earths having rarely been given in a diſſolved or in a ſoluble ſtate. It is moſt probable that they all act, when diſſolved, as mild cooling reſtringents; for when given in ſubſtance, as abſorbents, in caſes of acidities, they all tend to reſtrain fluxes of the belly or to bring on coſtiveneſs, an effect to which regard ought to be had in the uſe of them---There are two ſoluble earths, not commonly ranked among the abſorbents, whoſe effects, when combined with acids, are known with more certainty, as they have been uſed oftener, ſo combined, than otherwiſe; to wit, the aluminous earth and magneſia; of which the one is ſtrongly ſtyptic, and the other moderately purgative: ſee page 38 and 357.

Combinations of the abſorbent earths with the nitrous and marine acids are bitteriſh and of great pungency, particularly thoſe with the marine: the medical effects of theſe ſolutions are little known (ſee page 397 and 496). The vitriolic acid does not diſſolve them into a liquid form, but precipitates them from all the others, and is thus combined with them into concretes nearly inſipid (ſee page 519).

Experiments have been made for determining the comparative ſtrength of different abſorbents, or the quantities of acid they are capable of ſatiating. Langius reports that ten grains of crabs-claws deſtroyed the acidity of forty drops of ſpirit of ſalt; that egg-ſhells, crabs-eyes, and mother of pearl, taken in the ſame quantity, ſaturated fifty drops each; red coral, white coral, and fixt alkaline ſalt, ſixty drops each; volatile alkaline ſalt and pearl, eighty drops each; chalk, an hundred drops; oyſter-ſhells, an hundred and twenty; and ſome lime ſtones

no

no leſs than an hundred and ſixty (*a*). Theſe experiments however (admitting their accuracy, and the acid to have been equally neutralized in all, which may be reaſonably queſtioned) do not anſwer the end ſo perfectly as could be wiſhed; for, to different acids, the earths have different habitudes: from a ſet of experiments made by Homberg, it appears that oyſter-ſhells, for example, require for their ſolution more of the marine acid than coral does; whereas of the nitrous acid, contrariwiſe, the coral requires more than the oyſter-ſhells (*b*). Neither the nitrous nor the marine acids are thoſe which abſorbents are deſtined to ſatiate in the human ſtomach, and by which their ſtrength ſhould be examined: the acids of the vegetable kingdom, and the acid of milk, may be preſumed to be the moſt analogous to ſuch as are generated in the bodies of animals. On trying, with theſe, the ſeveral ſubſtances enumerated at the beginning of this article, the differences in their abſorbent powers appeared not to be great: they all ſaturated pretty nearly the ſame quantities of the acids; and there remained, from all, quantities very conſiderable, but not very greatly different, of a matter which further additions of the acid would not diſſolve.

THEA.

THEA Ph. Ed. TEA: the leaf of a Chineſe ſhrub, *evonymo affinis arbor orientalis nucifera flore roſeo Pluk. alm.* The leaves, carefully picked, are dried haſtily on warm iron plates; whereby they are ſaid to loſe in great meaſure ſome noxious qualities which they have when freſh, and to preſerve their admired flavour which by ſlow exſiccation would be loſt. The ſeveral ſorts of tea brought to us are ſuppoſed to be the leaves of the ſame plant, collected at different times, and cured in a ſomewhat different manner: Neumann ſuſpects that the brown colour, and the flavour, of the bohea ſorts, are introduced by art.

BOTH the green and bohea teas have an agreeable ſmell, and a lightly bitteriſh ſubaſtringent taſte: with ſolution of chalybeate vitriol, they ſtrike an inky blackneſs. They give out their ſmell and taſte both to watery and to ſpirituous menſtrua: to water, the green ſorts communicate their own green tincture, and the bohea their brown: to rectified ſpirit they both impart a fine deep green. On gently drawing off the menſtrua from the filtered tinctures, the water is found to elevate nearly

(*a*) *Vide* Langii Opera omnia medica, Lipſiæ 1704, p. 452 & ſeq.
(*b*) *V.* Memoires de l'acad. roy. des ſciences de Paris, pour l'ann. 1700.

nearly all the peculiar flavour of the tea, while rectified ſpirit brings over little or nothing, leaving the ſmell as well as the taſte concentrated in the extract: both extracts are very conſiderably aſtringent, and not a little ungrateful; the ſpirituous moſt ſo.

Infuſions of tea, as dietetic articles, have been extravagantly commended by ſome and condemned by others; and notwithſtanding the frequency of their uſe, their real effects are ſcarcely as yet clear. They ſeem, when moderately uſed, to be for the moſt part innocent: in ſome caſes, they ſeem to be ſalutary: in ſome, they are apparently prejudicial. They dilute thick juices and quench thirſt more effectually, and paſs off by the natural emunctories more freely, than mere watery fluids: they refreſh the ſpirits in heavineſs and ſleepineſs, and ſeem to counteract the operation of inebriating liquors. From their manifeſt aſtringency, they have been ſuppoſed to ſtrengthen and brace up the ſolids, but this effect experience does not countenance: it is in diſorders, and in conſtitutions, wherein corroborants are moſt ſerviceable, that the immoderate uſe of tea is peculiarly hurtful; in cold indolent habits, cachexies, chloroſes, dropſies, and debilities of the nervous ſyſtem.

THLASPI.

THLASPI Ph. Lond. a plant with oblong narrow undivided leaves joined immediately to the ſtalks, on the tops of which grow numerous tetrapetalous flowers, each of which is followed by a ſhort flat ſeed-veſſel divided tranſverſely into two cells.

1. *Thlaſpi arvenſe ſiliquis latis C. B.* Treacle-muſtard: with roundiſh-pointed jagged leaves, and broad capſules containing about four ſeeds in each cell. It is annual, and grows wild in corn-fields.

2. *Thlaſpi arvenſe, vaccariæ incano folio majus C. B.* Mithridate muſtard: with hoary ſharp-pointed leaves ſhaped like an arrow-head; and only one ſeed in each cell. It is biennial, and grows in fields and open clayie grounds.

The ſeeds of theſe plants have an acrid biting taſte, approaching to that of the common muſtard; with which they agree nearly in their pharmaceutic properties, their pungent matter being totally extracted by water, only partially by rectified ſpirit, and being elevated by water in diſtillation. They have, joined to their acrimony, an unpleaſant flavour, ſomewhat of the garlick or onion kind; and this they give out to ſpirituous as well as watery menſtrua. They are rarely made uſe of

any

any otherwiſe than as ingredients in the compoſitions whoſe names they bear: though ſome recommend them in different diſorders, preferably to the common muſtard.

THUS.

THUS *Ph. Lond.* *Thus vulgare, reſina pinea ſicca, Ph. Ed.* Frankincenſe: a ſolid brittle reſin, brought to us in little glebes or maſſes, of a browniſh or yellowiſh colour on the outſide, internally whitiſh or variegated with whitiſh ſpecks. It is ſuppoſed to be the produce of the pine that yields the common turpentine, and to concrete upon the ſurface of the terebinthinate juice ſoon after it has iſſued from the tree.

THIS reſin has a bitteriſh acrid unpleaſant taſte, and no conſiderable ſmell: it diſſolves totally in rectified ſpirit, but is ſcarcely acted upon by watery menſtrua. It may be looked upon as a mild corroborant; though at preſent it is little otherwiſe made uſe of than as an ingredient in theriaca, and externally in plaſters.

THYMELÆA.

THYMELÆA *Ph. Pariſ.* a ſhrubby plant; with ſmooth uncut leaves; and monopetalous flowers ſet thick together: each flower is cut into four acute ſections, and followed by an oblong red or black berry containing one ſeed, which reſembles a hemp-ſeed.

1. THYMELÆA: *Thymelæa foliis lini C. B.* Spurge-flax: with the ſtalks and branches clothed with evergreen leaves like thoſe of flax; and white flowers in cluſters on the tops.

2. LAUREOLA *ſeu chamælea:* *Laureola ſempervirens flore viridi, quibuſdam laureola mas C. B.* Spurge-laurel: with evergreen ſhining bay-like leaves, ſtanding ſeveral together, only at the tops of the branches; and greeniſh flowers on pedicles in their boſoms.

3. MEZEREUM: *Laureola folio deciduo, flore purpureo, officinis laureola femina C. B.* Spurge-olive, widow-wail: with pale purpliſh flowers clothing the branches; on the tops of which appear, after the flowers have fallen, bay-ſhaped leaves not ſhining.

The firſt of theſe plants grows on mountainous places in the ſouthern parts of Europe: the ſecond in moiſt woods in ſome parts of England: the third, a native of Germany, is cultivated in our gardens on account of the elegance and earlineſs of its flowers, which ſometimes appear

appear in the end of January: the berries of all the ſorts ripen in Auguſt or September.

The leaves of theſe plants have little or no ſmell, but a nauſeous, very acrid, durable taſte, inflaming the mouth and fauces: taken internally, in ſmall doſes, as ten or twelve grains, they operate with violence, by ſtool, and ſometimes by vomit, ſo as not to be ventured on with ſafety unleſs their virulence be previouſly abated by long boiling, and even then they are much too precarious to be truſted to. The flowers are of a different nature, being in taſte little other than mucilaginous and ſweetiſh, and of a light pleaſant ſmell. The pulpy part of the berries appears alſo to be harmleſs; but the ſeeds, called *coccognidia* or *grana cnidia*, are as acrid, and as virulently purgative, as the leaves.

THYMIAMA.

THYMIAMATIS cortex Officinarum Germaniæ: Thus judæorum Quorundam: a bark, in ſmall browniſh-grey pieces, intermixed with bits of leaves, ſeeming as if the bark and leaves had been bruiſed and preſſed together, brought from Syria, Cilicia, &c. and ſuppoſed to be the produce of the liquid-ſtorax tree.

This bark has an agreeable balſamic ſmell, approaching to that of liquid ſtorax, and a ſubacrid bitteriſh taſte accompanied with ſome ſlight aſtringency. Infuſions of it in water are of an orange colour, in taſte and ſmell ungratefully balſamic: inſpiſſated, they leave a dark reddiſh brown extract, retaining ſome of the ſmell of the bark, in taſte auſtere, ſlightly bitter, and of a mild aromatic acrimony. To rectified ſpirit it communicates a dark colour like that of a ſolution of balſam of Peru: the ſpirit, diſtilled off from this tincture, is highly fragrant, inſomuch that a dram communicates an agreeable odour to ſome quarts of water: the remaining extract is likewiſe of a pleaſant ſmell, and amounts to at leaſt one eighth of the weight of the bark.

This bark, ſaid to be common in the German ſhops, is in this country very rarely to be met with. Cartheuſer and Hoffmann, from whom the above account is extracted, report, that it affords an excellent fumigation for œdemas, rheumatiſms, and catarrhs; and that the ſpirituous tincture and extract, and the diſtilled ſpirit, are uſeful anodynes or antiſpaſmodics in convulſive coughs and other diſorders.

THYMUS.

THYME: a low ſhrubby plant; conſiſting of numerous ſlender tough ſtalks, with little roundiſh leaves in pairs, and looſe ſpikes,

ſpikes, on the tops, of purpliſh or whitiſh labiated flowers, whoſe upper lip is nipt at the extremity, the lower divided into three nearly equal ſegments.

1. THYMUS *Ph. Ed.* *Thymum vulgare folio tenuiore C. B.* Common thyme: with upright ſtalks, and dark browniſh green ſomewhat pointed leaves; a native of the ſouthern parts of Europe, common in our gardens, and flowering in June and July.

This herb is a moderately warm pungent aromatic. To water it imparts, by infuſion, its agreeable ſmell, but only a weak taſte, with a yellowiſh or brown colour: in diſtillation, it gives over an eſſential oil, in quantity about an ounce from thirty pounds of the herb in flower, of a gold yellow colour if diſtilled by a gentle fire, of a deep browniſh red if by a ſtrong one, of a penetrating ſmell reſembling that of the thyme itſelf but leſs grateful, in taſte exceſſively hot and fiery: the remaining decoction, inſpiſſated, leaves a bitteriſh, roughiſh, ſubſaline extract. The active matter, which by water is only partially diſſolved, is by rectified ſpirit diſſolved completely; though the tincture, in colour blackiſh-green, diſcovers leſs of the ſmell of the thyme than the watery infuſion: the ſpirit brings over in diſtillation a part of its flavour, leaving an extract of a weak ſmell and of a penetrating camphorated pungency.

2. SERPYLLUM *Ph. Ed.* *Serpyllum vulgare minus C. B.* Mother-of-thyme: with trailing ſtalks, and obtuſe leaves; growing wild on heaths and dry paſture grounds. This alſo is an elegant aromatic plant, ſimilar to the foregoing ſpecies, but milder, and in flavour rather more grateful. Its eſſential oil is both in ſmaller quantity and leſs acrid, and its ſpirituous extract comes greatly ſhort of the penetrating warmth and pungency of that of the other. Both the leaves themſelves, and their ſpirituous tincture, are of a bright green colour, without any thing of the brown or blackiſh hue of thoſe of the common thyme.

3. THYMUS CITRATUS *Ph. Lond.* *Serpyllum foliis citri odore C. B.* Lemon-thyme: in appearance differing little from the ſecond ſort, except that it is more upright and more buſhy; a native of dry mountainous places, common in gardens, and flowering as the others in June or July. This ſpecies is leſs pungent than the firſt ſort, more ſo than the ſecond, and much more grateful than either: its ſmell in particular is remarkably different, approaching to that of lemons.

Diſtilled with water, it yields a larger quantity than the other ſorts, of a yellowiſh very fragrant oil of the lemon flavour, containing nearly all the medicinal parts of the plant, for the remaining decoction is almoſt inſipid as well as inodorous. It gives over alſo with rectified ſpirit its finer odorous matter; a leſs agreeable flavour, and a moderate warmth, remaining in the ſpirituous extract.

TILIA.

TILIA Ph. L. & Ed. *Tilia femina folio majore C. B.* LIME or LINDEN: a tall ſpreading-branched tree, with large heart-ſhaped, ſerrated, ſoft, ſomewhat hairy leaves: in the boſoms of theſe riſe long narrow leafy productions, from the middle rib of which iſſue one or three pedicles bearing three flowers apiece, or one pedicle bearing nine: the flower is whitiſh, pentapetalous, and followed by a kind of dry berry about the ſize of a filberd. It is a native of England, flowers in July, and begins to loſe its leaves in Auguſt.

THE flowers of the lime-tree are ſuppoſed to have an anodyne and antiſpaſmodic virtue: Hoffmann ſeems to have had a great opinion of them in theſe intentions, and as his theory deduces moſt diſeaſes from ſpaſms and ſpaſmodic ſtrictures, they are accordingly very frequent in his preſcriptions: he ſays he knew a chronical epilepſy cured by the uſe of an infuſion of them drank as tea. The freſh flowers have a moderately ſtrong ſmell, in which their virtue (whatever it may be) ſeems to conſiſt, and which in keeping is ſoon diſſipated: when diveſted of this odorous principle, they diſcover to the taſte only a ſtrong mucilage, from which may be extracted, by rectified ſpirit, a ſlightly bitteriſh ſubaſtringent matter.

TITHYMALUS.

SPURGE: a plant with ſmall ſmooth leaves, round ſtalks full of a milky juice, and umbel-like cluſters of tetrapetalous flowers, whoſe cups are divided into four ſegments ſet alternately with the petala: the flower is followed by a roundiſh or three-ſquare capſule containing three ſeeds.

1. TITHYMALUS PARALIOS: *Tithymalus maritimus C. B.* Sea ſpurge: with oblong narrow flax-like leaves, broadeſt in the middle, clothing

clothing the ſtalks, and lying over one another in an upward direction, like ſcales; and two roundiſh, heart-ſhaped, or kidney-ſhaped leaves incompaſſing each of the ſubdiviſions of the umbel: found wild on ſandy ſhores, and flowering in June. All the parts of this plant are extremely acrid irritating cathartics; apt to inflame the mouth, fauces, and ſtomach; operating with ſo great violence, that though ſome may perhaps have born their operation without much injury to the conſtitution, yet common prudence forbids their being ever ventured on. Several correctors have been employed for them, but none with commendable ſucceſs: maceration of the middle bark of the root in vinegar, directed by the faculty of Paris, renders it indeed leſs virulent, but of precarious operation: digeſtion of the milky juice with alkaline ſalts, recommended by others, leaves it ſtill too acrid. For alleviating inflammatory ſymptoms produced by imprudently ſwallowing or taſting theſe acrid ſubſtances, milk, plentifully drank, ſeems the moſt effectual remedy. Gerard gives an inſtance, from perſonal experience, of the virulent effects of the ſpurge, and the efficacy of milk in relieving them.

2. TITHYMALUS CYPARISSIUS *C. B.* Cypreſs ſpurge: with numerous oblong ſlender leaves, not wider in the middle than at the ends; the umbel divided into numerous ramifications, each of which is divided and ſubdivided into two; the diviſions perforating as it were the two roundiſh leaves which incompaſs them; a native of Germany, Switzerland, and ſome other parts of Europe. This ſpecies, though allowed by the faculty of Paris to be uſed indiſcriminately with the preceding, is in all its parts leſs acrimonious. Poterius ſays he has found half a dram or a dram of the powdered root to act as a mild cathartic; and that the juice obtained from the bruiſed herb and root, depurated and exſiccated in the ſun, is of the ſame operation with ſcammony (*a*).

SEVERAL other ſpurges are enumerated in catalogues of the materia medica, under the names of *eſula*, *pityuſa*, *cataputia*, *lathyrus*, *alypum*, *peplus*, *apios*, &c. among which there does not appear to be any one more virulent than the firſt above deſcribed, or leſs virulent than the ſecond. None of them are among us ventured on for any internal uſe: the milky juice of the wild ſpurges is ſometimes applied externally by the common people for conſuming warts.

(*a*) Pharmacopœia ſpagyrica, Lib. iii. ſect. 3.

TORMENTILLA.

TORMENTILLA Ph. L. & Ed. Tormentilla silvestris C. B. Heptaphyllum. TORMENTIL or SEPTFOIL: a plant with slender, weak, upright stalks; oblong leaves, indented towards the extremity, and converging from the indented part to their juncture with the stalk, standing generally seven at a joint; and small yellow tetrapetalous flowers on the tops of the branches, followed by naked seeds: the root is generally crooked and knotty, of a dark brown or blackish colour on the outside, and reddish within. It is perennial, grows wild in woods and on commons, and flowers in June.

TORMENTIL root is a strong and almost flavourless astringent, and gives out its astringency both to water and rectified spirit, most perfectly to the latter: the watery decoction, of a transparent brownish red colour whilst hot, becomes turbid in cooling like that of the Peruvian bark, and deposites a portion of resinous matter: the spirituous tincture, of a brighter reddish colour, retains its pellucidity. The extracts, obtained by inspissation, are intensely styptic, the spirituous most so.

TRICHOMANES.

TRICHOMANES Pharm. Lond. Polytrichum sive trichomanes Ph. Ed. & C. B. Callitrichum. ENGLISH MAIDENHAIR: a small plant, without stalks: the leaves are long, narrow, composed of little roundish dark-green segments set in pairs along a shining black rib: the seeds are a fine dust lying on the backs of the leaves. It is perennial, and grows wild on shady grounds and old walls.

THIS herb has a mucilaginous somewhat sweetish and roughish taste, and little or no particular flavour. It is accounted serviceable in disorders of the breast, particularly in tickling coughs and hoarseness from thin acrid defluxions, and in these intentions has been long substituted among us to the *adianthum*, from which it appears to be very little, if at all, different in quality. It is usually directed in infusion or decoction, with the addition of a little liquorice: a pectoral syrup is prepared in the shops, from an infusion of five ounces of the dry leaves and four of liquorice root in five pints of boiling water*.

* Syrupus pectoralis *Ph. Lond.*

TRIFOLIUM PALUDOSUM.

TRIFOLIUM PALUDOSUM Ph. Lond. Trifolium palustre sive fibrinum Ph. Edinb. Trifolium palustre C. B. Menyanthes

anthes & acopa quibusdam. BUCKBEAN: a plant with large oval leaves, pointed at each end like those of the garden bean, set three together on long pedicles, which embrace the stalk to some height, and there parting leave it naked to near the top, where issues a short spike of pretty large reddish white monopetalous flowers, each of which is cut into five segments, hairy on the inside, and followed by an oval seed-vessel. It is perennial, grows wild in marshy places, and flowers in May.

THE leaves of buckbean have a bitter penetrating taste, which they impart both to watery and spirituous menstrua; without any remarkable smell or flavour. They have of late years come into common use, as an alterative and aperient, in impurities of the humours, and some hydropic and rheumatic cases. They are usually taken in the form of infusion, with the addition of some of the acrid antiscorbutic herbs, which in most cases improve their virtue, and of orange-peel or some other grateful aromatic to alleviate their ill taste: they are sometimes, among the common people, fermented with malt liquors, for an antiscorbutic diet-drink. Their sensible operation is by promoting urine and somewhat loosening the belly.

TURPETHUM.

TURPETHUM sive turbith Ph. Ed. TURBITH: the cortical part of the root of a species of convolvulus; brought from the East Indies, in oblong pieces, of a brown or ash colour on the outside and whitish within: the best is ponderous, not wrinkled, easy to break, and discovers to the eye a large quantity of resinous matter.

THIS root, on the organs of taste, makes at first an impression of sweetness; but when chewed for some time, betrays a nauseous acrimony. It is accounted a moderately strong cathartic, but does not appear to be of the safest or most certain kind; the resinous matter, in which its virtue resides, being very unequally distributed; insomuch that, as is said, some pieces, taken from a scruple to a dram, purge violently, whilst others, in larger doses, have very little effect.

TUSSILAGO.

TUSSILAGO sive farfara Ph. Ed. Tussilago vulgaris C B. Bechium & ungula caballina quibusdam. COLTSFOOT: a low plant, producing

producing early in the ſpring ſingle ſtalks, each of which bears a yellow floſculous flower followed by ſeveral ſeeds winged with down: the leaves, which ſucceed the flowers, are ſhort, broad, ſomewhat angular, ſlightly indented, green above, and hoary underneath. It is perennial, and grows wild in moiſt grounds.

THE leaves and flowers of coltsfoot, in taſte ſomewhat mucilaginous, bitteriſh, and roughiſh, and of no remarkable ſmell, are ranked among the principal pectoral herbs. Infuſions of them, with a little liquorice or with the other herbs of ſimilar intention, are drank as tea, and ſometimes with conſiderable benefit, in catarrhous diſorders and coughs threatening conſumptions.

TUTIA.

TUTIA Pb. L. & Ed. *Tutia alexandrina.* TUTTY: an argillaceous ore of zinc, found in Perſia; formed on cylindrical moulds into tubulous pieces like the bark of a tree, and baked to a moderate hardneſs (*a*); generally of a browniſh colour and full of ſmall protuberances on the outſide, ſmooth and yellowiſh within, ſometimes whitiſh, and ſometimes with a bluiſh caſt. Like other argillaceous bodies, it becomes harder in a ſtronger fire; and after the zinc has been revived and diſſipated by inflammable additions, or extracted by acids, the remaining earthy matter affords, with oil of vitriol, an aluminous ſalt (ſee *bolus* and *calaminaris*).

TUTTY, levigated into an impalpable powder *, is, like the lapis calaminaris and calces of zinc, an uſeful ophthalmic, and frequently uſed as ſuch in ointments and collyria. Ointments for this intention are prepared in the ſhops, by mixing the levigated tutty with ſo much vipers fat as is ſufficient to reduce it to a due conſiſtence †; or by ſprinkling half an ounce of the powder into two ounces of freſh butter and a dram of white wax liquefied together ‡, to which is occaſionally added a dram or two of camphor §.

* Tutia præparata *Pb. L. & Ed.*

Ung. tutiæ † *Pb. Lond.* ‡ *Pb. Ed.*

§ Ung. tutiæ camphoratum *Pb. Ed.*

VALERIANA.

(*a*) The above account of the origin of tutty is ſupported by the authority of Teixeira and Douglas, and by its chemical properties. That the common opinion, of its being a ſublimate produced in the European founderies where zinc is melted with other metals, is erroneous, appears from hence; that tutty is not found, upon ſtrict enquiry, to be known at thoſe founderies; and by its conſiſting in great part of an earth not capable of riſing in ſublimation. Thus much, however, is probable, that ſublimates or the common ores of zinc are often mixed with argillaceous earths and baked hard, in imitation of the genuine oriental tutty.