

INFUSA.

INFUSIONS.

THESE are solutions of vegetable matter, obtained by maceration either in cold or boiling water. As in the case of decoction, the substance must be sliced or bruised if in a recent state, or pulverized if dry, in order to expose a large surface to the action of the menstruum. The term *Infusion*, in pharmaceutical language, is confined to watery solutions.

The substances which water, without the aid of boiling, can extract from vegetable matter submitted to its action, are gum, mucus, extractive, tannin, the bitter and narcotic principles, gum-resin, volatile oil, acids, and alkalies, a range which includes most of the principles on which the medicinal properties of plants depend. These principles, also, are less liable to be altered by infusion than by decoction, and, consequently, this form of preparation is to be preferred in every instance to which it is applicable. The strength and quality of the infusions are varied by the degree of temperature of the water: those made with hot water being necessarily stronger, but particularly in the case of bitters; cold infusions are more grateful.

In making infusions, when heat is required, the vessel is to be placed near the fire, so that the temperature of the water may be kept up to the necessary point for a sufficient length of time to produce the effect intended. Perhaps it might be an advantage, were the external surface of infusion pots covered with a metallic coating and polished; by which, as the heat would be much more slowly radiated than from the vessels usually employed, the effect of it would be more uniform and certain in promoting the solvent powers of the water.

Infusions, like decoctions, are liable to undergo spontaneous decomposition, if kept even for a few days; and therefore the London College has properly directed half a pint only to be made at one time, thus regarding them as extemporaneous preparations.

INFUSUM ANTHEMIDIS. Lond. INFUSUM ANTHEMIDIS NOBILIS. Edin. *Infusion of Chamomile.*

"Take of chamomile flowers, *two drachms*; boiling water, *half a pint*. Macerate for ten minutes (twenty-four hours, Edin.) in a highly covered vessel, and strain."

This infusion is clear, of a pale yellow colour, and has the odour and taste of the flowers. It precipitates solution of isin-

glass, whitish; infusion of yellow cinchona bark, white; solution of sulphate of iron and tincture of muriate of iron, black; solution of nitrate of silver, white; oxymuriate of mercury, pale brown; and acetate and superacetate of lead, yellowish white. These substances, therefore, are incompatible in prescriptions with this infusion.

Medical properties and uses.—It is a good stomachic and tonic; and may be given in dyspepsia and other complaints attended with debility of the stomach, in doses of from fʒj. to fʒij. two or three times a day.

INFUSUM ARMORACIÆ COMPOSITUM. Lond.

Compound Infusion of Horse-radish.

“Take of fresh horse-radish root, sliced, mustard seed, bruised, of each, *an ounce*; boiling water, *a pint*. Macerate for two hours in a lightly covered vessel, and strain; then add of compound spirit of horse-radish, *one fluid ounce*.”

This infusion, after it is strained, deposits by rest a whitish feculent matter, which should be separated. The supernatant clear part is of a sulphur yellow colour, and holds dissolved in every fluid ounce rather more than grs. x. of solid matter. It has a very pungent odour, and a hot biting taste; precipitates infusion of galls yellowish, and infusion of yellow cinchona bark white. The solutions of the pure alkalies do not affect it: but with their carbonates whitish precipitates are produced, as is also the case with solution of oxymuriate of mercury; while nitrate of silver produces one of a brown colour. Hence all those substances, except the pure alkalies, are incompatible in formulæ with this infusion. This infusion soon spoils in hot weather, and emits an offensive odour.

Medical properties and uses.—This is not an unusual form of giving horse-radish, the stimulant property of which is aided by that of the mustard. It is particularly serviceable in paralysis, and in dropsies occurring after intermittents. The dose is from fʒj. to fʒij. given three or four times a day.

INFUSUM AURANTII COMPOSITUM. Lond. *Compound Infusion of Orange-Peel.*

“Take of dried orange-peel, *two drachms*; fresh lemon-peel, *one drachm*; cloves, bruised, *half a drachm*; boiling water, *half a pint*. Macerate for fifteen minutes in a lightly covered vessel, and strain.”

This infusion has the agreeable compound odour and taste of the ingredients from which it is made. It is clear, and has the brown hue of deep-coloured sherry wine. It precipitates sulphate of iron black; and also produces precipitates with superacetate of lead, infusion of yellow cinchona bark, and lime-water.

Medical properties and uses. — It is an excellent and grateful stomachic. The dose may be from fʒj. to fʒiv. given twice or thrice a day.

INFUSUM CALUMBÆ. Lond. INFUSUM COLOMBÆ. Edin. *Infusion of Calumba.*

“Take of calumba root, sliced, *one drachm*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain.”

The active matter of calumba is not all extracted by water. The infusion is inodorous, and tastes bitter. It is clear, and of a pale brown colour: affords precipitates with infusion of yellow cinchona bark, lime-water, and solution of oxymuriate of mercury, which, therefore, ought not to be ordered in conjunction with it. This infusion soon spoils.

Medical properties and uses. — Infusion of calumba is a good stomachic bitter in dyspeptic cases, and for restraining the nausea and severe vomiting which occur in pregnancy. It is also useful in the severe diarrhœa and vomiting which often attend dentition. The dose may be from fʒjss. to fʒiiij. given several times a day.

INFUSUM CARYOPHYLLORUM. Lond. *Infusion of Cloves.*

“Take of bruised cloves, *a drachm*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain.”

This infusion contains all the active matter of the cloves; one fluid ounce holding nearly grs. vj. in solution. It is of a deep clear brown colour, has an aromatic odour, and a bitterish aromatic taste, and affords precipitates with infusion of yellow cinchona bark, the strong acids, and lime-water. Solution of sulphate of iron occasions a copious black precipitate; sulphate of zinc, superacetate of lead, and nitrate of silver, brown precipitates. It also decomposes tartarized antimony.

Medical properties and uses. — It is a warm and grateful stomachic; and may be advantageously used in dyspepsia, particularly when it arises from the abuse of ardent spirits, accompanied with a sensation of coldness at the stomach; in chronic gout, and flatulent colic. The dose is from fʒjss. to fʒij. given three or four times a day.

INFUSUM CASCARIL/Æ. Lond. *Infusion of Cascarella.*

“Take of cascarella bark, bruised, *half an ounce*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain.”

This is a clear, pale reddish brown infusion, having the aromatic odour of the bark, and a bitterish aromatic taste. It is

incompatible in formulæ with the following substances, which it precipitates, lime-water, infusion of galls, infusion of yellow cinchona bark, solutions of nitrate of silver, acetate and superacetate of lead, sulphate of zinc, and sulphate of iron, which is slowly thrown down, of a pale olive colour.

Medical properties and uses.—It is a light stimulant, and tonic; and is advantageously given in some alvine fluxes, particularly such as occur after measles; and in the aphtha gangrenosa of infants. The dose may be from fʒiſs. to fʒiij.

INFUSUM CATECHU COMPOSITUM. Lond. *Compound Infusion of Catechu.*¹

“Take of extract of catechu, *two drachms and a half*; cinnamon bark, bruised, *half a drachm*; boiling water, *half a pint*. Macerate for an hour in a lightly covered vessel, and strain.”

INFUSUM ACACIÆ CATECHU. Edin. *Infusion of Catechu.*

“Take of pulverized extract of catechu, *two drachms and a half*; cinnamon bark, bruised, *half a drachm*; boiling water, *seven ounces*; simple syrup, *one ounce*. Macerate the extract and bark with the water for two hours, in a covered vessel; then strain, and add the syrup.”

In these formulæ it is intended that the whole of the soluble matter of the catechu taken up by the boiling water should remain dissolved after the infusion cools; but we find that a considerable portion is deposited. When the extract is triturated with water at 212°, as much of it is dissolved as the water can hold in solution, so that a preparation similar to this infusion may be immediately made by simply triturating the materials together. The addition of the syrup ordered by the Edinburgh College prevents the preparation from keeping longer than two or three days, although without the syrup it will keep good for months.

Qualities.—This infusion is inodorous, and has a slightly bitter austere taste, leaving, even when it contains no syrup, an agreeable sweetness in the mouth. The colour when the pale catechu is used, is a light brown or ale colour; but when the dark catechu is employed, a deep red brown. The following substances precipitate its tannin, or otherwise alter its properties, and therefore ought not to be ordered in formulæ with it; solution of isinglass, infusion of yellow cinchona bark, the strong acids, sulphate of iron, sulphate of zinc, oxymuriate of mercury, tartarized antimony, and superacetate of lead. The alkalis only deepen the colour.

Medical properties and uses.—This infusion, which is a pow-

¹ Infusion de Cachou (F.) Katechu infusum (G.) Infuso di Cato (I.)

erful, agreeable astringent, is the best form under which catechu can be prescribed; and is very useful in long-continued diarrhoea, and other fluxes, proceeding from a weakened state of the intestines. The dose is from fʒj. to fʒiij. given after every liquid dejection, or every four hours.

INFUSUM CINCHO'NÆ. Lond. *Infusion of Cinchona Bark.*

“Take of lance-leaved cinchona bark¹, bruised, *half an ounce*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain.”

This infusion contains a very considerable portion of the febrifuge matter of the bark; it is slightly turbid, has a pale pinkish yellow colour, more of the aromatic odour of the bark than the decoction possesses, and an equal degree of bitterness and astringency. It ferments spontaneously in the course of a few days during summer. It affords precipitates with the following substances; the strong acids, the alkaline carbonates, lime-water, solutions of sulphate of iron, sulphate of zinc, nitrate of silver, oxymuriate of mercury, oxide of arsenic, with subcarbonate of potash, and tartarized antimony; the aqueous infusions and decoctions of chamomile flowers, calumba, cascarilla, horse-radish, cloves, catechu, orange-peel, foxglove, senna, rhubarb, valerian, simaruba, and elm bark.

Any considerable portion of the tinctures also produces precipitates in this infusion. Some of these precipitates take place immediately, others not till after several hours have elapsed; the febrifuge virtue is perhaps not always destroyed by them, but the mixtures are certainly rendered inelegant. The sulphuric acid destroys the bitterness of the infusion, but not its astringency.

Medical properties and uses.—The cinchona in this form agrees better with most stomachs than when in powder; but its powers are necessarily diminished. It is chiefly serviceable in dyspepsia, and convalescencies, particularly after the maturation of the pustules in *Ecthyma vulgare*. The dose is from fʒj. to fʒiij. three or four times a day.

INFUSUM CINCHONÆ LANCIFOLIÆ. Edin. *Infusion of Cinchona.* INFUSUM CINCHONÆ SINE CALORE. Dub. *Cold Infusion of Cinchona.*

“Take of cinchona bark, bruised, *one ounce*; water, *one pound* (*twelve ounces by measure*. Dub.) Macerate for twenty-

¹ Infusion de Quinquina (F.) Chinainfusum (G.) Infuso di China (I.)

² The other species of cinchona may be used in the same manner, and proportions.

four hours, agitating frequently, and strain. (Triturate the bark with a little of the water, and whilst triturating, add the remainder; then macerate for twenty-four hours, occasionally agitating, and decant the clear liquor. *Dub.*")

The directions of the Dublin College for making this infusion are preferable to those of the Edinburgh College. It is nearly clear, but deposits by rest a small quantity of a brick red sediment. It is affected by the same substances, and its properties and use are the same as those of the former preparation, from which it differs chiefly in strength. The residuum may be used for some purposes, as its active matter is not nearly exhausted.

INFUSUM CUSPARIÆ. Lond. *Infusion of Cusparia.*

"Take of cusparia bark, bruised, *two drachms*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain."

This infusion is slightly turbid, and of a brownish colour; has a somewhat aromatic odour, and a bitter taste. The solution of sulphate of iron throws down a greenish yellow precipitate, and sulphate of zinc a yellowish one; nitrate of silver, oxymuriate of mercury, superacetate of lead: infusions of galls, and of catechu also, produce precipitates in it. Tartarized antimony is slowly decomposed. These substances, therefore, cannot properly be ordered in formulæ with this infusion.

Medical properties and uses.—This infusion possesses the stimulant and tonic properties of the bark, and is an useful form of giving it in typhoid fevers, obstinate bilious diarrhœa, and in dysentery, after proper evacuations. The tincture of cinnamon both covers its taste, and makes it sit lighter on the stomach. The dose is from fʒj. to fʒiij. given every three or four hours.

INFUSUM DIGITALIS. Lond. *Infusion of Foxglove.**

"Take of dried foxglove leaves, *a drachm*; boiling water, *half a pint*. Macerate for four hours in a lightly covered vessel, and strain; then add of spirit of cinnamon, *half a fluid ounce*."

INFUSUM DIGITALIS PURPUREÆ. Edin. *Infusion of Foxglove.*

"Take of dried foxglove leaves, *one drachm*; boiling water, *eight ounces*; spirit of cinnamon, *one ounce*. Macerate the leaves with the water for four hours, in a lightly covered vessel; then, having added the spirit, strain."

* Infusion de Digitale purpurine (F.) Fingerhut infusum (G.) Infuso di Digitale porporina (I.)

The faint odour and nauseous bitter taste of the foxglove are covered by the spirit of cinnamon in these infusions, which are clear, and of a brownish yellow colour. The solution of sulphate of iron slowly throws down in them a pale olive precipitate; superacetate of lead and infusion or decoction of yellow cinchona produce instantaneous and copious precipitates.

Medical properties and uses. — These infusions do not differ materially from the formula of Withering, and are well calculated to obtain speedily the diuretic effects of the remedy. The dose is from $\text{f}\overline{\text{z}}$ ss. to $\text{f}\overline{\text{z}}$ j. given twice a day; or every eight hours, if the patient be strong, and the symptoms very urgent. For the necessary cautions to be observed in administering them, (See the article *Digitalis*, Part ii.)

INFUSUM GENTIANÆ COMPOSITUM. Lond. *Compound Infusion of Gentian.*

“Take of gentian root, sliced, orange-peel, dried, of each, a drachm; fresh lemon-peel, two drachms; boiling water, twelve fluid ounces. Macerate for an hour in a lightly covered vessel, and strain.”

Edinburgh.

“Take of gentian root, sliced, half an ounce; dried orange-peel, bruised, coriander seeds, bruised, of each a drachm; diluted alcohol, four ounces; water, one pound. First pour on the alcohol, and, after three hours, the water; then macerate without heat for twelve hours, and strain.”

Dublin.

“Take of gentian root, bruised, two drachms; fresh lemon-peel, half an ounce; dried orange-peel, a drachm and a half; proof spirit, four ounces by measure; boiling water, twelve ounces by measure. First, pour on the spirit, and, three hours afterwards, the water; then macerate for the space of two days, and strain.”

The spirit ordered by the Edinburgh and Dublin Colleges, is intended to aid the solvent power of the water, and for preserving the infusion, which in summer very soon becomes ropy, and spoils; but as infusions can always easily be prepared, and boiling water takes up the greater part of the active matter of the ingredients, the spirituous addition, and the length of time ordered for the maceration, are certainly objectionable. The formula of the London College is free from both these objections, and produces a clear infusion, of a yellowish colour, with the agreeable odour of the orange-peel, and a pleasant bitter taste. The solution of superacetate of lead throws down a copious precipitate in this infusion; and sulphate of iron strikes a brown colour, but no precipitate takes place for twelve hours.

Medical properties and uses.—These are very common and elegant tonic and stomachic infusions. They are given in dyspepsia and chlorosis, united with chalybeates, or with alkalies; in atonic gout and diarrhoea, with absorbents and aromatics; in jaundice, with rhubarb and saline purgatives; and in dropsies, with squills and neutral salts. From fʒj. to fʒij. may be given for a dose, three or four times a day.

INFUSUM LINI. Lond. *Infusion of Linseed.*

“Take of linseed, bruised, *an ounce*; liquorice root, sliced, *half an ounce*; boiling water, *two pints*. Macerate for a quarter of an hour, near the fire, in a covered vessel, and strain.”

INFUSUM LINI USITATISSIMI. Edin. *Infusion of Linseed.*

“Take of linseed, *an ounce*; liquorice root, bruised, *two drachms*; boiling water, *two pounds*. Digest for four hours, in a lightly covered vessel, and strain.”

This infusion is a solution of mucus nearly in its pure state. It is clear, colourless, inodorous, and nearly insipid. Alcohol precipitates the mucus in white flocculi; and precipitates are also produced by acetate and superacetate of lead; hence these substances are incompatible in formulæ with this infusion.

Medical properties and uses.—Infusion of linseed is a cheap and very useful demulcent, in the various cases in which this class of remedies is indicated, and during the internal exhibition of corrosive muriate of mercury. The dose is fʒij. frequently repeated.

INFUSUM MENTHÆ COMPOSITUM. Dub. *Compound Infusion of Mint.*

“Take of the leaves of spearmint, dried, *two drachms*; boiling water, *a sufficient quantity to afford six ounces by measure when strained*. Digest for half an hour in a covered vessel, and strain the liquor when cold; then add of refined sugar, *two drachms*, oil of spearmint, *three drops*, dissolved in *half an ounce* (fluid?) of compound tincture of cardamoms. Let them be mixed.”

Medical properties and uses.—This is a grateful stomachic, and is also slightly diaphoretic. It may prove serviceable in anorexia and nausea, and as a vehicle to cover the disagreeable taste of other medicines. The dose may be from fʒj. to fʒijj. or *ad libitum*.

INFUSUM QUASSIÆ. Lond. *Infusion of Quassia.*

“Take of quassia wood, chipped, *a scruple*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain.”

¹ Infusion de Semece de lin (F.) Leinsamen infusion (G.) Infuso di Semi di Lino (I.)

INFUSUM QUASSIÆ EXCELSÆ. Edin. *Infusion of Quassia.*

"Take of quassia wood, rasped, *half a drachm*; boiling water, *eight ounces*. Macerate for two hours in a lightly covered vessel, and strain."

The active matter of quassia taken up by water appears to be a pure, simple bitter. It is not altered by any of the substances usually employed as adjuncts to bitters; and by two only of the metallic salts. Nitrate of silver slowly throws down soft yellow flakes; and superacetate of lead, a white precipitate.

Medical properties and uses.— This infusion is a light tonic, very efficacious in dyspepsia, and other cases in which tonics are indicated. In hysteria it may be combined with purgatives and tincture of valerian; in atonic gout, with aromatics; and in dyspeptic affections with chalybeates, sulphate of zinc, or mineral acids. The dose is from $\text{f}\text{ʒj}$. to $\text{f}\text{ʒiij}$. given twice or thrice a day.

INFUSUM RHEL. Lond. *Infusion of Rhubarb.**

"Take of rhubarb root, sliced, *a drachm*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain."

Edinburgh.

"Take of rhubarb root, bruised, *half an ounce*; boiling water, *eight ounces*; spirit of cinnamon, *one ounce*. Macerate the root with the water in a covered vessel for twelve hours; then add the spirit, and strain."

These infusions differ chiefly in point of strength; and the Edinburgh is rendered pleasanter by the spirituous addition. Neither of them is quite clear; and both have a reddish brown colour, which is very much deepened by the addition of alkalies. The following substances either occasion precipitates in these infusions, or otherwise alter their properties, and are therefore incompatible in formulæ with them: the strong acids, and lime-water, solutions of sulphate of iron, sulphate of zinc, nitrate of silver, oxymuriate of mercury, superacetate of lead, and tartarized antimony; infusions of catechu, cinchona and cusparia.

Medical properties and uses.— These infusions are the best forms in which rhubarb can be given, when intended to act on the bowels. The dose of the former may be from $\text{f}\text{ʒj}$. to $\text{f}\text{ʒiv}$. and of the latter half the quantity, united with neutral salts or aromatics, as circumstances may direct.

INFUSUM ROSÆ. Lond. Dub. *Infusion of Roses.**

"Take of the dried petals of the red rose, *half an ounce*;

* Infusion de Rhubarbe (F.) Rhubarber infusum (G.) Infuso de Rabarbaro (I.)

* Infusion de Roses (F.) Rosen infusum (G.) Infuso di Rose (I.)

boiling water, *two pints and a half* (*three pounds by measure, Dub.*); diluted sulphuric acid, *three fluid drachms* (*three drachms by weight, Dub.*); refined sugar *an ounce and a half*. Pour the water on the rose petals in a covered glass vessel; then drop in the acid, and macerate for half an hour. Finally, strain the liquor, and add the sugar to it."

INFUSUM ROSÆ GALLICÆ. Edin. *Infusion of Red Roses.*

"Take of the dried petals of the red rose, *one ounce*; boiling water, *two pounds and a half*; sulphuric acid diluted, *half an ounce*; refined sugar, *one ounce*. Macerate the petals with the water in an earthen vessel, which has not been glazed with lead, for four hours; then pour in the acid, strain the liquor, and add the sugar."

This infusion is clear, of a beautiful red colour, and has an acid pleasantly austere taste. The addition of the sugar prevents it from being kept so long as it might otherwise be. The incompatible substances are those which are decomposed by the sulphuric acid. The sulphates of iron and of zinc, although they do not immediately alter it, yet slowly produce dark-coloured precipitates after some hours.

Medical properties and uses.— Infusion of roses is indebted for any astringency it possesses chiefly to the acid it contains. It is used alone in the colliquative sweats of phthisis; and as a gargle in cynanche tonsillaris; but it is chiefly employed as an elegant vehicle for more active remedies, particularly sulphate of magnesia, the nauseous taste of which it completely covers. The dose is from fʒij. to fʒiv.

INFUSUM SENNÆ. Lond. *Infusion of Senna.*¹

"Take of senna leaves, *an ounce and a half*; ginger root, sliced, *a drachm*; boiling water, *a pint*. Macerate for an hour in a lightly covered vessel, and strain the liquor."

INFUSUM CASSIÆ SENNÆ. Edin.

"Take of senna leaves, *six drachms*; ginger root, bruised, *a scruple*; boiling water, *nine ounces*. Macerate for an hour in a lightly covered vessel, and strain."

INFUSUM SENNÆ. Dub. *Infusion of Senna.*

"Take of senna leaves, *three drachms*; lesser cardamom seeds, freed from the capsules and bruised, *half a drachm*; boiling water, *as much as will yield, when strained, six ounces by measure*. Digest for an hour, and when the liquor is cold strain it."

These infusions should be clear, and have a deep red brown, nearly black, colour; with a slightly bitter, mawkish taste, which is scarcely corrected by the aromatic. In warm weather they spoil in forty-eight hours; and by simple exposure to

¹ Infusion de Senè (F.) Senna infusum (G.) Infuso di Senna (I.)

the air attract oxygen, which occasions a yellowish precipitate of oxidized extractive, that is not purgative but gripes violently. On this account they should be preserved in a well closed vessel, or made only when wanted. They are also precipitated by the strong acids, the alkaline carbonates, lime-water, solutions of nitrate of silver, oxymuriate of mercury, superacetate of lead, tartarized antimony, and infusion of yellow cinchona bark, which are consequently incompatible in formulæ with these infusions.

Medical properties and uses. — Both these infusions contain all the purgative principles of the plant, whilst the aromatics correct its griping properties: but there is perhaps a waste of senna in the London formula. They are given alone, or more generally combined with neutral salts and manna. The dose of the simple infusions may be from fʒij. to fʒiv.; but with the addition of ʒj. of the tartrate of potash, or ʒiij. of the sulphate of magnesia, which are the usual adjuncts, fʒij. are sufficient.

INFUSUM SENNÆ COMPOSITUM. Edin. *Infusion of Tamarinds and Senna.*

“Take of preserved tamarinds, *one ounce*; senna leaves, *one drachm*; coriander seeds, bruised, *half a drachm*; raw sugar, *half an ounce*; boiling water, *eight ounces*. Macerate in a covered earthen vessel, which is not glazed with lead, shaking frequently, and after four hours strain.

“It may be made also with double or triple the proportion of senna.”

INFUSUM SENNÆ CUM TAMARINDIS. Dub. *Infusion of Senna and Tamarinds.*

Made in the same manner as the infusion of senna, except that ʒj. of tamarinds is added before straining the liquor.

These infusions are pleasanter than the simple infusions, the nauseous taste being well covered by the sugar and the acid of the tamarinds: in other respects they agree both in their properties, and in the effects of the incompatible substances; to which, however, must be added all salts having potash for their base.

INFUSUM SIMAROUBÆ. Lond. *Infusion of Simaruba.*

“Take of simaruba bark, bruised, *half a drachm*; boiling water, *half a pint*. Macerate for two hours in a lightly covered vessel, and strain.”

This infusion is inodorous; has a slightly bitter taste, is clear, and of a greenish straw colour. The alkaline carbonates and lime water render it milky, and the following substances occasion precipitates: nitrate of silver, oxymuriate of mercury, superacetate of lead; infusions of galls, catechu, and yellow cinchona bark.

Medical properties and uses. — Simaruba infusion possesses the same properties as the bark, and is the best form of exhibiting the remedy, but it is not much used in this country. The dose is fʒij. combined with tincture of opium, or an aromatic.

INFUSUM TABACI. Lond. *Infusion of Tobacco.*

"Take of tobacco leaves, *a drachm*; boiling water, *a pint*. Macerate for an hour in a lightly covered vessel, and strain."

This infusion is clear, of a reddish brown colour; has the odour of the plant in a slight degree, and a hot very acrid taste.

Medical properties and uses. — Tobacco infusion is chiefly intended to be given under the form of enema; for although it has been occasionally employed as an emetic, it cannot be recommended. As an enema it has been found useful in ileus, colica pictonum, incarcerated hernia and dysury; the practice of employing it in cases of suspended animation is now justly condemned.

INFUSUM VALERIANÆ. Dub. *Infusion of Valerian.*

"Take of valerian root, coarsely powdered, *two drachms*; boiling water, *seven ounces by measure*. Digest for an hour, and when the liquor is cold, strain."

Valerian infusion is clear, of a pale brown colour; with the odour of the valerian, and a bitterish pungent taste. Solutions of nitrate of silver, sulphate of iron, and infusion of yellow cinchona, afford precipitates with this infusion; and are therefore incompatible in formulæ with it.

Medical properties and uses. — This is an useful form of giving valerian in hysterical and nervous affections, in which the stomach will not always bear the powder. The dose may be from fʒjss. to fʒij. twice or thrice a day.

AQUA CALCIS COMPOSITA. Dub. *Compound Lime-water.*

"Take of raspings of guaiacum wood, *half a pound*; liquorice root, sliced and bruised, *an ounce*; sassafras bark, bruised, *half an ounce*; coriander seeds, *three drachms*; lime-water, *six pints*. Macerate without heat for two days, and strain."

This is a very inert preparation; and unless great care be taken to exclude the air completely from the vessel in which it is made, the lime-water will be decomposed.

AQUA PICIS LIQUIDÆ. Dub. *Tar Water.*

"Take of tar, *two pints*; water, *a gallon*. Mix, stirring with a wooden rod for a quarter of an hour; then, after the tar shall have subsided, let the liquor be strained, and preserve it in well-corked bottles."

Water readily dissolves a portion of tar; and is impregnated with empyreumatic oil, a small portion of resinous matter, and

acetic acid, the components of the tar. The solution has the colour of Madeira wine, and a sharp empyreumatic taste.

Medical properties and uses. — Tar water is stimulant and diuretic; but to produce the latter effect, its operation requires to be aided by bodily exercise. It may prove useful in scurvy, and some cutaneous diseases; but the reputation which it obtained on the faith of the judgment of the worthy Bishop of Cloyne¹ has long since been lost, and it is now scarcely ever employed. From Oj to Oij may be taken in the course of a day.

MUCILAGINES.

MUCILAGES.

MUCILAGES, correctly speaking, are simple solutions of gum or mucus in water; but the term mucilage, in pharmaceutical language, implies also any solution of a thick and adhesive nature, resembling in its appearance the solutions of gum.

MUCILAGO ACACIÆ.² Lond. *Mucilage of Acacia.*

“Take of acacia gum, in powder, *four ounces*; boiling water, *half a pint*. Rub the gum with the water, gradually added, until it forms a mucilage.”

MUCILAGO ACACIÆ ARABICÆ. Edin. *Mucilage of Gum Arabic.*

“Take of gum arabic, in powder, *one part*; boiling water, *two parts*. Digest with occasional agitation, until the gum be dissolved; then strain the mucilage through linen.”

MUCILAGO GUMMI ARABICI. Dub. *Mucilage of Gum Arabic.*

“Take of gum arabic, in coarse powder, *four ounces*; boiling water, *eight pints*. Digest with frequent agitation, until the gum be dissolved; then strain the mucilage through linen.”

The straining through linen is very necessary, as the gum is often mixed with small pieces of wood and other impurities. The mucilage thus obtained is viscid, thick, and adhesive; semipellucid, and nearly colourless, if the gum be good. It has a faint, peculiar odour, is insipid, and may be kept without altering for a considerable time; but at length it becomes sour, and acetic acid is formed. The strong acids act on it as they do on gum; but when diluted, they do not alter mucilage. Alcohol converts it into a white curd; but proof spirit

¹ Berkley's *Siris*—passim.

² This appellation is certainly exceptionable. It is a mucilage of gum of the *Acacia vera*. The Edinburgh name is liable to nearly the same objection, except that the specific name of the plant is used, whereas *Acacia* is the name of the genus. Mucilage de Gomme arabique (F.) Schlieim de Arabische Gummi (G.) Mucilage de Gomma arabica (I.)