

“Take of sarsaparilla root, sliced, *a pound*; boiling water, *a gallon*. Macerate for twenty-four hours, then boil down to four pints; strain the solution while it is hot, and evaporate it to a proper consistence.”

This extract has nothing to recommend it to practice. The decoction of the root is preferable in every respect, but neither of them is possessed of much efficacy. The dose is from grs. ix. to ʒj. dissolved in the decoction, or given in the form of pills.

EXTRACTUM TARAXACI. Lond. EXTRACTUM HERBÆ ET RADICIS TARAXACI. Dub. *Extract of Dandelion.*¹

“Take of fresh dandelion root, bruised, *a pound*; boiling water, *a gallon*. Macerate for twenty-four hours; then boil down to four pints, strain the hot liquor, and evaporate it to a proper consistence.”

The medicinal powers of dandelion have been already noticed. (See *Part ii.*) This extract is supposed to contain all the active principles of the plant, and to prove equally efficacious in hepatic obstructions. Dr. Pemberton affirms, that he has seen great advantage result from its administration in doses of ʒiss. in chronic inflammation and incipient scirrhus of the liver, and in chronic derangement of the stomach.² The usual dose is from grs. x. to ʒj. united with sulphate of potash.

EXTRACTUM VALERIANÆ. Dub. *Extract of Valerian.*³

“Take of valerian root in coarse powder, *six ounces*; boiling water, *six pints*. Mix and digest for twenty-four hours with a moderate heat in a covered vessel; then express the liquor, and reduce it by evaporation to a proper consistence.”

The odour of the plant is almost entirely dissipated in preparing this extract; and if the efficacy of the remedy be connected with that quality, which is extremely probable, it must be much inferior to the infusion, or tincture. The usual dose is from grs. x. to ʒj. given in the form of pills, or dissolved in some distilled water.

MISTURÆ.

MIXTURES.

THE term Mixture in pharmaceutical language denotes a mingled compound, in which different ingredients are held suspended in a fluid medium by means of mucilaginous or saccharine matter. The London College has placed under this

¹ Löwenzahn-extrakt (G.) Estratto di Tarassaco (I.)

² On Diseases of the Abdominal Viscera, p. 43.

³ Baldrian-extrakt (G.)

title, also, those medicines which consist of the fixed oil of seeds diffused through water by means of the mucilage, fecula, or saccharine matter contained in the seeds, and which have hitherto been denominated *Emulsions*. Both these kinds of preparations should always be extemporaneous; and in prescribing them attention is required not to bring together incompatible substances, nor to order in mixtures insoluble matters of a specific gravity too great to be suspended in the fluid vehicle by the ordinary means.

MISTURA AMMONIACI. Lond. *Mixture of Ammoniac.*

"Take of ammoniac, *two drachms*; water, *half a pint*. Triturate the ammoniac, gradually adding the water until they be thoroughly mixed."

LAC AMMONIACI. Dub. *Milk of Ammoniac.*

"Take of gum ammoniac, *a drachm*; pennyroyal water, *eight fluid ounces*. Triturate the gum, gradually adding the pennyroyal water, until the mixture acquire the appearance of milk, which is to be strained through linen."

The resinous part of the ammoniac is suspended in the water by means of the gummy part; but after a little time the greater portion of the resin subsides. It is coagulated by distilled vinegar, the oxymels, ether, spirit of nitric ether, supertartrate of potash, and oxymuriate of mercury, which are therefore incompatible in prescriptions with mixture of ammoniac. It is advantageously employed as an expectorant in doses of from ℥ss. to ℥j. combined with an equal quantity of almond mixture.

MISTURA AMYGDALARUM. Lond. *Almond Mixture.*¹

"Take of almond confection, *two ounces*; distilled water, *a pint*. Add the water gradually to the almond confection whilst triturating, and then strain."

EMULSIO AMYGDALI COMMUNIS. Edin. *Almond Emulsion.*

"Take of sweet almonds, *an ounce*; refined sugar, *half an ounce*; water, *two pounds and a half*. Beat diligently the blanched almonds in a stone mortar, adding the water gradually; then strain."

LAC AMYGDALÆ. Dub. *Almond Milk.*

"Take of sweet almonds, blanched, *an ounce and a half*; purified sugar, *half an ounce*; water, *two pints and a half*. Rub the almonds with the sugar, adding the water gradually; then strain."

EMULSIO ACACIÆ ARABICÆ. Edin. *Emulsion of Gum Arabic.*²

¹ Emulsion d'Amandes (F.) Mandelmilch (G.) Latte di Mandorle (I.)

² Emulsion de Gomme Arabique (F.) Emulsione di Gomma Arabica (I.)

“Take of mucilage of gum arabic, *two ounces*; almonds, *an ounce*; refined sugar, *half an ounce*; water, *two pounds and a half*. Blanch the almonds, and then beat them in a stone mortar with the sugar and the mucilage, gradually adding the water; then strain through linen.”

EMULSIO ARABICA. Dub. *Arabic Emulsion.*

“Take of gum arabic in powder, *two drachms*; sweet almonds blanched, purified sugar, of each *half an ounce*; decoction of barley, *a pint*. Dissolve the gum in the warm decoction, and when it is almost cold, pour it gradually upon the almonds previously beaten to a paste with the sugar, triturating at the same time so as to form a milky mixture; then strain.”

In these preparations the oil of almonds is diffused through the water, and suspended in it by the mucilage and fecula the almonds contain; the gum in the two latter preparations contributing nothing to this effect. The confection ordered by the London College affords an expeditious mode of making the mixture, but does not prevent the necessity of straining. The use of distilled water is an unnecessary refinement.

Qualities.—These emulsions are inodorous, bland, milky fluids. The oil, after some time, rises like a thick cream to the surface; and in forty-eight hours the acetous fermentation commences, and the mixtures become sour. They are decomposed by acids, oxymel, and syrup of squill, spirits, and tinctures, (unless these be in small quantity,) tartrate and supertartrate of potash, supersulphate of potash, oxymuriate of mercury, acetate of lead, and spirit of nitric ether, which are therefore incompatible in prescriptions with almond emulsions.

Medical properties and uses.—These mixtures are in common use as diluents and demulcents in inflammatory fevers, strangury, dysury, and other affections of the urinary organs; but they are chiefly useful as pleasant vehicles for the exhibition of more active remedies. The dose is from fʒij. to ʒss. frequently repeated.

MISTURA ASSAFCETIDÆ. Lond. *Mixture of Assa-fetida.*

“Take of assafoetida, *two drachms*; water, *half a pint*. Triturate the assafoetida, gradually adding the water to it, until they be thoroughly mixed.”

LAC ASSAFCETIDÆ. Dub. *Milk of Assafoetida.*

“Take of assafoetida, *a drachm*; pennyroyal water, *eight fluid ounces*. Triturate the assafoetida, gradually adding the water until it forms an emulsion.”

Owing to the disagreeable flavour of assafoetida, it is seldom given by the mouth in this form, which is chiefly employed as an enema in flatulent colic, worms, and the convulsions of in-

ants arising from irritations of the bowels during dentition. When given by the mouth, the dose may be from $\text{f}\overline{\text{3}}\text{ss}$. to $\text{f}\overline{\text{3}}\text{jss}$. frequently repeated.

MISTURA CAMPHORÆ. Lond. *Mixture of Camphor.*¹

"Take of camphor, *half a drachm*; rectified spirit, *ten minims*; water, *a pint*. Rub the camphor first with the spirit, then add the water gradually, and strain."

MISTURA CAMPHORATA. Dub. *Camphorated Mixture.*

"Take of camphor, *a scruple*; rectified spirit of wine, *ten drops*; refined sugar, *half an ounce*; water, *a pint*. Rub the camphor first with the spirit, and then with the sugar; add the water during the trituration, and strain the mixture through linen."

A pint of water takes up scarcely more than one half the quantity of camphor ordered by the London College; but it communicates to it both odour and taste in a considerable degree. Solution of pure potash separates the camphor. It is an elegant vehicle for more active remedies in low fevers and nervous affections. The dose is from $\text{f}\overline{\text{3}}\text{j}$. to $\text{f}\overline{\text{3}}\text{ij}$. given every three or four hours.

EMULSIO CAMPHORÆ. Edin. *Camphor Emulsion.*

"Take of camphor, *a scruple*; sweet almonds blanched, refined sugar, each *half an ounce*; water, *a pint and a half*. It is to be made in the same manner as the common almond emulsion."

In this preparation the whole of the camphor is diffused through the mixture; the medicinal powers of which are consequently more considerable than those of the foregoing preparation. It is less apt to excite nausea and uneasiness at the stomach than camphor taken in the solid state, and is given with advantage in typhus and nervous cases in doses of $\text{f}\overline{\text{3}}\text{ij}$. every three or four hours. Its preparation should always be extemporaneous, as the camphor separates and swims on the surface of the mixture after a few days.

MISTURA CORNU USTI. Lond. **DECOCTUM CORNU CERVINI.** Dub. *Mixture of burnt Hartshorn.*

"Take of burnt hartshorn, *two ounces*; acacia gum, in powder, *an ounce* (*three drachms*, Dub.); water, *three pints*. Boil down to two pints, constantly stirring, and strain."

This is the most unchemical, injudicious, and useless preparation in the pharmacopœias which have admitted it; being a simple diffusion of insoluble phosphate of lime in a thin mucilage.

MISTURA CRETÆ. Lond. Dub. *Mixture of Chalk.*

¹ Mixture Camphré (F.) Kampfermixtur (G.) Mistura Canforata (I.)

“Take of prepared chalk, *half an ounce*; refined sugar, *three drachms*; acacia gum, in powder, *half an ounce* (*an ounce*, Dub.); water, *a pint*. Mix, by trituration.”

POTIO CARBONATIS CALCIS. Edin. *Chalk Potion*.

“Take of prepared carbonate of lime (chalk), *one ounce*; refined sugar, *half an ounce*; mucilage of gum arabic, *two ounces*. Rub them together, and then gradually add of water, *two pounds and a half*; spirit of cinnamon, *two ounces*. Mix them.”

These are common and useful forms of giving chalk in acidity of the primæ viæ; and combined with opium or catechu in diarrhœa. The dose is from fʒj. to fʒij. given every three or four hours; or after every liquid evacuation.

MISTURA FERRI COMPOSITA. Lond. ¹ *Compound Mixture of Iron*.

“Take of myrrh, in powder, *a drachm*; subcarbonate of potash, *twenty-five grains*; rose-water, *seven fluid ounces and a half*; sulphate of iron, in powder, *a scruple*; spirit of nutmeg, *half a fluid ounce*; refined sugar, *a drachm*. Rub together the myrrh, the subcarbonate of potash, and the sugar, and while triturating, add first the rose-water and the spirit of nutmeg, and afterwards the sulphate of iron. Put the mixture immediately into a proper glass vessel, and keep it closely stopped.”

In this mixture the sulphate of iron is decomposed by the subcarbonate of potash forming, by the change of constituents which takes place, sulphate of potash and subcarbonate of iron; the former of which is dissolved, while the latter is diffused through the mixture, and kept suspended by the myrrh, which forms a saponaceous compound with the excess of alkali. The iron is in the state of a suboxide; and as it rapidly attracts oxygen in this state, and is converted into the red oxide, it is necessary to keep the mixture very well excluded from the air.

Medical properties and uses.—This mixture, which is nearly the same as the celebrated antihectic mixture of Dr. Griffith, is an useful tonic, in all cases in which preparations of iron are indicated, particularly in hysteria and chlorosis, and in phthisis, when no active inflammatory diathesis subsists. The dose is from fʒj. to fʒij. given two or three times in a day.

MISTURA GUAIACI. Lond. *Mixture of Guaiac*.

“Take of guaiac, *a drachm and a half*; refined sugar, *two drachms*; mucilage of acacia gum, *two fluid drachms*; cinna-

¹ This name is certainly improper; but it is not easy to invent one which would be descriptive of the compound, and yet be sufficiently concise: *Mistura subcarbonatis ferri cum myrrha* would have been less objectionable.

mon water, *eight fluid ounces*. Rub the guaiac with the sugar, then with the mucilage, and during the trituration add gradually the cinnamon water."

This is a convenient mode of exhibiting guaiac. It is given in doses of from $\text{f}\overline{3}\text{ss}$. to $\text{f}\overline{3}\text{ij}$. two or three times a day; diluting freely with tepid barley-water or gruel to assist its operation.

MISTURA MOSCHI. Lond. *Mixture of Musk.*

"Take of musk, acacia gum, in powder, refined sugar, of each, *a drachm*; rose-water, *six fluid ounces*. Rub the musk with the sugar, then with the gum, and add gradually the rose-water."

The quantity of gum ordered is scarcely sufficient to retain the musk suspended in the mixture. It is a convenient form of exhibiting the remedy, and may be given to the extent of $\text{f}\overline{3}\text{ij}$. every three or four hours in spasmodic affections, and the sinking state of typhus. The late Mr. White of Manchester, found this mixture combined with ammonia zss . spirit of lavender $\text{f}\overline{3}\text{j}$. and spirit of juniper $\text{f}\overline{3}\text{j}$. of great utility in sloughing phagedenic ulcers of a syphilitic and strumous nature.

ENEMA CATHARTICUM. Dub. *Purging Clyster.*

"Take of manna, *an ounce*; dissolve it in compound decoction of chamomile, *ten fluid ounces*; then add of olive oil, *an ounce*; sulphate of magnesia, *half an ounce*. Mix them."

ENEMA FETIDUM. Dub. *Fetid Clyster.*

"It is to be prepared by adding to the purging clyster *two drachms* of assafoetida."

SPIRITUS.

SPIRITS.

UNDER this title are placed alcohol and spirituous solutions of vegetable matter, chiefly volatile oils, formed by simple mixture, by maceration, and by distillation. They are uniform, transparent, unchanging solutions, containing, in general, a large proportion of volatile oil; and when well prepared, are free from empyreuma. Pure alcohol is more volatile than many of the volatile oils, which do not therefore rise in distillation with it; and, consequently, proof or distilled spirit is employed. As medicinal agents the spirits are stimulant and cordial; but sometimes bad habits are acquired from their continued use. They are employed to cover the taste and flavour of disagreeable medicines; and to make some, which are apt to produce nausea, sit light upon the stomach.

Mixture avec le musc (F.) Mixture Muschiato (I.)