

Preparations.

PILULA QUININÆ SULPHATIS. PILL OF QUININE SULPHATE. (NEW.)

Quinine Sulphate, 30 grains; Tartaric Acid, in powder, 1 grain; Glycerin, 4 grains; Tragacanth, in powder, 1 grain. Triturate the Quinine Sulphate with the Tartaric Acid; add the product to the previously mixed Glycerin and Tragacanth; make a mass.

Dose.—2 to 8 grains.

TINCTURA QUININÆ AMMONIATA. AMMONIATED TINCTURE OF QUININE. (ALTERED.)

Quinine Sulphate, 175 grains; Solution of Ammonia, 2 fl. oz.; Alcohol (60 p.c.), 18 fl. oz. Mix the Solution of Ammonia with the Alcohol; add the Quinine Sulphate; shake until a clear solution is produced; set aside for three days; filter. = (about 1 grain in 55 minims).

Formerly 1 grain in 60 minims. Alcohol (60 p.c.) is now used in place of Proof Spirit and less Ammonia is added.

Dose.— $\frac{1}{2}$ to 1 fl. drm.

When mixed with water the Quinine is precipitated in a fine state of division, but the particles soon aggregate and adhere to the sides of the glass; therefore this preparation should not be prescribed in mixtures, unless Mucilage of Acacia be used to suspend the Quinine.

When prepared with Ammonium Carbonate instead of Liquor, the Tincture does not precipitate so badly and it may be diluted with Water saturated with Carbonic Acid without any precipitation at all.

When first made, the Tincture usually deposits a little, so it is better to allow a day or two to elapse before filtering. It has been shown (*P.J.* (3) xxi. 511) that this deposit contains Cinchonidine.

(Not in the other Pharmacopœias.)

RESINA.

RESIN.

The residue left after the distillation of the Oil of Turpentine from the crude Oleo-resin (Turpentine) of various species of *Pinus*.

Solubility.—In almost all proportions of Alcohol (90 p.c.), Ether, and Oil of Turpentine, and in hot Olive Oil.

Medicinal Properties.—Important as an ingredient of ointments and plasters, but never used internally.

Official Preparations.—Emplastrum Resinæ and Unguentum Resinæ. Used in the preparation of Emplastrum Calefaciens, Emplastrum Cantharidis, Emplastrum Menthol, Emplastrum Picis, Emplastrum Plumbi Iodidi, Emplastrum Saponis.

Resin Plaster is contained in Emplastrum Belladonnæ, Emplastrum Opii, also in Emplastrum Calefaciens.

Foreign Pharmacopœias.—Official in all; U.S., Resina; Austr., Belg., Dutch, Ger., and Swiss, Colophonium; Dan., Norw., Russ., and Swed., Resina Colophonium; Fr., Colophone and Poix-resine; Hung., Colophonium Depuratum Flavum; Ital., Colophonia; Jap., Resina Pini; Mex., Brea; Port., Pez Loaro and Colophonia; Span., Resina Comum de Pino and Colofonia.

Description.—Translucent, of a light amber colour, compact,

brittle, pulverisable; fracture shining; odour and taste faintly terebinthinate. It is soluble in Alcohol (90 p.c.), Ether, Benzol, and Carbon Bisulphide, is easily fusible, and burns with a dense yellow flame and much smoke, leaving no appreciable ash.

Preparations.

EMPLASTRUM RESINÆ. RESIN PLASTER. *B.P.Syn.*—ADHESIVE PLASTER. (ALTERED.)

Resin, 4; Lead Plaster, 32; Hard Soap, 2. Melt each ingredient separately at as low a temperature as possible: mix. = (1 in 9½).

Now made with Hard Soap instead of Curd Soap.

Foreign Pharmacopœias.—Official in Jap. and U.S., Emplastrum Resinæ; Austr., Belg., Dan., Dutch, Ger., Hung., Norw., Russ., Swed., and Swiss, Emplastrum Adhesivum; Port., Emplastro de Chumbo Composto; Mex., Emplasto Adhesivo; Span., Emplasto de Diapalma; all differing in composition; not in Fr. or Ital.

Used chiefly for strapping wounds and ulcers.

UNGUENTUM RESINÆ. RESIN OINTMENT. *N.O.Syn.*—BASILICON OINTMENT. (ALTERED.)

Resin, in powder, 8; Yellow Beeswax, 8; Olive Oil (by weight), 8; Lard, 6. Add the Lard and Olive Oil to the previously melted Resin and Beeswax; strain; stir until cold. = (1 in 3¾).

Olive Oil and Lard used in place of Almond Oil and Simple Ointment and the quantity of Beeswax increased.

Foreign Pharmacopœias.—Official in Dan. and Norw., Ung. Basilicum Nigrum; Fr., Onguent Basilicum; Belg., Ger. and Russ., Ung. Basilicum; Mex., Ung. Amarillo; Port., Ung. de Resina; Span., Ung. de Colofonia Palida; Swed., Ung. Terebinthinæ Resinosum; Swiss, Ung. Resinosum; U.S., Ceratum Resinæ; all differing in composition. Not in Austr., Dutch, Ital. or Jap.

A stimulating dressing for indolent ulcers.

Not Official.

RESORCINUM.

METADIOXYBENZOLUM.

$C_6H_4(OH)_2$, eq. 109.22.

White crystals obtained by the destructive distillation of Brazilin or by fusing Potassium Benzoldisulphonate with Potassium Hydroxide.

Solubility.—4 in 3 of Water; 4 in 3 of Alcohol (90 p.c.); 1 in 1 of Glycerin; 1 in 1 of Ether.

Medicinal Properties.—Antiseptic and antipyretic. Has been employed in the treatment of acute fevers; also as a **spray** (1 or 2 p.c.) in diphtheria and whooping-cough, *Pr.* liv. 381; 5 to 10 p.c. **solutions** in Glycerin; 5 to 10 p.c. **ointments** in skin diseases.—*B.M.J.* '88, i. 435; *L.* '88, i. 570; '90, ii. 1347; '91, ii. 505, 1185; *T.G.* '90, 270. In acne rosacea, *Pr.* li. 380; in pruritus, *M.A.* '95, 436; in diarrhoea and gastric affections, and as a local germicide and stimulant in ulcers and in pharyngitis and chronic rhinitis.—*Y.B.T.* '94, 463; in leucoplakia, *T.G.* '95, 181. Untoward effects when administered internally as a powder.—*L.* '98, ii. 779, 836.

Dose.—1 to 5 grains.

Prescribing Notes.—When given internally it should be in dilute solution, as it has a caustic action.

Antidotes.—White of egg; wash out the stomach with Soda or Saccharated Lime well diluted; stimulants; Atropine; Amyl Nitrite.—*Murrell*.

In large doses it produces profuse perspiration, flushing of the face, and giddiness. Dr. Murrell describes a case of poisoning by 2 drms. of it which nearly proved fatal.—*M.T.* '81, ii. 487.

Foreign Pharmacopœias.—Official in Dan., Dutch, Fr., Ger., Hung., Ital., Mex., Norw., Russ., Swiss and U.S.; not in the others.

Test.—Its aqueous solution becomes deep violet on the addition of Ferric Chloride.

Preparations.

GARGARISMA RESORCIN (*T.H.*).—20 grains to 1 fl. oz. Water.

GLYCERINUM RESORCIN (*G.H.*).—Resorcin 1, Glycerin 4.

LOTIO RESORCINI (*B.S.H.*). Andeer's Lotion.—Resorcin 40 grains, Water 1 fl. oz. Used as an antiseptic and stimulant in foul and syphilitic ulcerations, and to allay irritation in chronic eczema and psoriasis.

PIGMENTUM RESORCIN (*T.H.*).—Resorcin 96 grains, Water to 1 fl. oz.

RESORCIN PLASTER MULL (*Unna*).—Contains $\frac{1}{4}$ grain to the square inch.

RESORCIN CAMPHOR.—A liquid obtained by heating together equal parts of Camphor and Resorcin. Is superior to the mercurial ointment in removing pediculi.—*P.J.* '96, i. 299, 326.

RESORCINOL.—Obtained by melting together equal volumes of Resorcin and Iodoform. It is a red brown powder partially soluble in Water, soluble in Ether. Has been introduced as a substitute for Iodoform as a dressing.—*P.J.* '96, 446.

ANUSOL.—The Bismuth salt of Iodo-resorcin-sulphonic Acid, is employed in suppository form in the treatment of piles.—*P.J.* '96, ii. 378.

Not Official.

RHAMNI FRANGULÆ CORTEX.

Syn.—CORTEX FRANGULÆ.

The dried bark of *Rhamnus Frangula*.

Collected from the young trunk and from the larger branches, and kept at least one year before being used.

Official in B.P. '85, but not in B.P. '98.

Medicinal Properties.—Similar to those of *Rhamnus Purshianus*. A laxative or purgative for delicate constitutions and the aged.

Foreign Pharmacopœias.—Official in Austr., Dan., Dutch, Ger., Norw., Russ., and Swed., Cortex Frangulæ; Port., Amieiro Negro; Swiss, Cortex Rhamni Frangulæ; U.S., Frangula; not in the others.

A solid **Extract** is official in Dutch., Russ. and Swed.; a **Fluid Extract** in Dan., Ger., Norw., Russ. and U.S.

RHEI RADIX.

RHUBARB ROOT.

The erect rhizome or so-called root of *Rheum palmatum*, and probably other species, collected in China and Thibet, deprived of more or less of its cortex, and dried.

Medicinal Properties.—Cathartic and astringent, the latter property not interfering with the former, as the purgative effect precedes the astringent, and therefore is useful in diarrhœa when an aperient is indicated. Stomachic tonic in small doses. Given in dyspepsia attended with constipation. It is non-irritant, suitable for delicate constitutions, and increases the effect of other cholagogues and cathartics. It is frequently combined with an antacid or carminative.

Is a certain though not powerful hepatic stimulant.—Dr. Rutherford.

Dose.—3 to 10 grains, for repeated administration; for a single administration, 15 to 30 grains.

Prescribing Notes.—May be given in **cachets, pills, mixtures**, or Compressed Tablets. The **compound powder** is also prescribed in **cachets, capsules**, etc.

4 grains of Powdered Rhubarb and 1 minim of 'Dispensing Syrup' make a nice **pill**. Sodium Bicarbonate in equal weight with Powdered Rhubarb counteracts the astringency, and covers the taste; the addition of Peppermint Water still further hides it; or 1 drop of Oil of Peppermint, 30 grains of Sugar, will disguise the taste of 15 grains of Powdered Rhubarb; or 1 drop Oil of Nutmeg, 30 grains Sugar, and 10 grains of powdered Rhubarb, make a good **draught** with Water to 1½ fl. oz.

Official Preparations.—Extractum Rhei, Infusum Rhei, Liquor Rhei Concentratus, Pilula Rhei Composita, Pulvis Rhei Compositus, Syrupus Rhei, Tinctura Rhei Composita.

Not Official.—Elixir Rhei, Extractum Rhei Compositum and Vinum Rhei.

Foreign Pharmacopœias.—Official in all; Fr., Rhubarbe; Port., Rhuibarbo; Mex. and Span., Ruibarbo.

Description.—In cylindrical, barrel-shaped, conical, plano-convex, or irregularly formed pieces; the surface sometimes covered with a bright yellowish-brown powder; rounded or somewhat angular, usually smooth, and marked with reddish-brown or dark rusty-brown lines, intermixed in a yellowish-brown or greyish substance, and nearly always presenting small scattered starlike marks. Frequently the pieces are bored with a hole, which sometimes contains a fragment of cord used to suspend them while drying. The pieces are hard and compact; fracture uneven, presenting a marbled appearance, and in some cases a rhomboidal network of reddish lines. Odour characteristic, somewhat aromatic; taste bitter, feebly astringent; when chewed the Root is gritty between the teeth.

Exhaustive paper on the chemistry of Rhubarb.—*P.J.* '95, ii, 325; *A.J.P.* '95, 615.

The *Rheum rhaponticum* and *R. officinale* are grown at Banbury, in Oxfordshire. In four or five years the roots attain the size of a man's arm; in drying, the root loses 75 p. c., and yields a fine yellow powder. A good deal is exported, and some is used in this country.

Preparations.

EXTRACTUM RHEI. EXTRACT OF RHUBARB. (ALTERED.)

Moisten Rhubarb Root, in No. 20 powder, with Alcohol (60 p.c.), and set aside for forty-eight hours; transfer to a percolator; slowly pass as much of the Alcohol as may be sufficient to exhaust the Rhubarb Root. Remove most of the Alcohol by distillation, and evaporate the residual liquid to dryness.

Now made with Alcohol (60 p.c.) instead of Proof Spirit and Water, and evaporated to dryness instead of a soft extract.

Dose.—2 to 8 grains.

Foreign Pharmacopœias.—Official in Austr., with boiling Water; Belg., Fr., Hung., Ital., Mex., Port., Russ., Span. and Swed., with Water; Span., Alcoholic; Dan., Dutch, Ger., Jap., Norw., Swiss and U.S. with Spirit and Water mixed; Mex. and U.S. have also a **Fluid Extract**, 1 in 1.

INFUSUM RHEI. INFUSION OF RHUBARB. (ALTERED.)

Rhubarb Root, in thin slices, 1; Distilled Water, boiling, 20. Infuse in a covered vessel for fifteen minutes; strain. = (1 in 20).

Now 1 in 20 instead of 1 in 40 and the time is reduced.

Dose.— $\frac{1}{2}$ to 1 fl. oz.

Foreign Pharmacopœias.—Official in Belg., 1 and 13 $\frac{1}{2}$ (at 90° C.); Fr. 1 in 200 cold; Ital., 3 in 50; Span., 1 in 20; Mex., 1 in 50; Infusum Rhei Alkalinum.—Dan. and Norw., 1 in 8, Belg. and Swed., 1 in 10; Tinctura Rhei Aquosa.—Austr., 1 in 15 cold Water, Hung., 1 in 16, Ger., Russ., and Swiss, 1 in 10; Dutch, 1 Extract in 20; Jap., has a **Compound Infusion**; not in the others.

LIQUOR RHEI CONCENTRATUS. CONCENTRATED SOLUTION OF RHUBARB. (NEW.)

Rhubarb Root, in No. 5 powder, 10; Alcohol (20 p.c.), 25, or a sufficient quantity. Moisten the Rhubarb with 5 of the Alcohol; pack in a closed percolator; set aside for three days; percolate with the remaining Alcohol, added in ten equal portions at intervals of twelve hours; continue percolation with more Alcohol until the product measures 20.

Dose.— $\frac{1}{2}$ to 1 fl. drm.

PILULA RHEI COMPOSITA. COMPOUND RHUBARB PILL. (MODIFIED.)

Rhubarb Root, in powder, 3 oz.; Socotrine Aloes, in powder, 2 $\frac{1}{2}$ oz.; Myrrh, in powder, 1 $\frac{1}{2}$ oz.; Hard Soap, in powder, 1 $\frac{1}{2}$ oz.; Oil of Peppermint, 1 $\frac{1}{2}$ fl. drm.; Syrup of Glucose (by weight), 2 $\frac{3}{4}$ oz., or a sufficient quantity. Mix to form a mass.

Now made with Syrup of Glucose instead of Glycerin and Treacle.

Dose.—4 to 8 grains.

Foreign Pharmacopœias.—Official in Jap., Swiss, and U.S.; U.S. has also **Pilula Rhei**, Rhubarb 20, Soap 6, Water q. s.; not in the others.

PULVIS RHEI COMPOSITUS. COMPOUND POWDER OF RHUBARB.

B.P. Syn.—GREGORY'S POWDER.

Rhubarb Root, in powder, 2; Light Magnesia, 6; Ginger, in powder, 1; mix. = (1 in 4 $\frac{1}{2}$).

If a less bulky powder be desired, Heavy Magnesia may be employed.

Dose.—20 to 60 grains.

Foreign Pharmacopœias.—Official in Ger. (Pulvis Magnesiæ cum Rho), and Span. (Polvo de Magnesia con Ruibarbo), Carb. Magnes. 60, Sacch. 40, Rhei 15, Ol. Fœnic. 1; Dan., Norw. and Swed. (Pulvis Magnesiæ c. Rho), Carb. Magnes. 1, Sugar 1, Rhubarb 1, Oil of Fennel (Dan. and N. $\frac{1}{5}$, S. $\frac{1}{15}$); also Russ. Carb. Magnes. 4, Sugar 2, Rhubarb 1, Oil of Fennel $\frac{1}{5}$; Jap. (Pulvis Infantum), Carb. Magnes. 3, Rhubarb 1, Elaëosacchari Fœniculi 2; Swiss (Pulvis

Magnesia Compositus), Rhubarb 2, Sugar 3, Oil of Fennel $\frac{1}{5}$, Carb. Magnes 5; U.S. Rhubarb 5, Magnesia 13, Ginger 2; not in the others.

SYRUPUS RHEI. SYRUP OF RHUBARB. (MODIFIED.)

Rhubarb Root, in No. 20 powder, 2; Coriander Fruit, in No. 20 powder, 2; Refined Sugar, 24; Alcohol (90 p.c.), 8; Distilled Water, 24. Moisten the mixed Rhubarb Root and Coriander Fruit with a portion of the mixed Alcohol and Distilled Water, and set aside; pack in a percolator; pass the remainder of the diluted Alcohol slowly through the materials; evaporate the percolate until it is reduced to 14, and in this, after it has been filtered, dissolve the Refined Sugar by the aid of heat. The product should weigh nearly 40.

Now made with Alcohol (90 p.c.) in place of Rectified Spirit.

A very unsatisfactory formula. The Rhubarb is in too fine powder, and by evaporation as above almost the whole aroma of the Coriander is driven off, and the liquid is difficult to filter. Judging from the strong flavour of commercial samples we should say that in practice the B.P. process is largely modified, and Ol. Coriand. added at the finish.

A good formula is to make a (1 in 4) fluid Extract of Rhubarb with Alcohol (60 p.c.); evaporate 8 fl. oz. of the fluid Extract to 3 fl. oz.; mix this and 5 minims of Oil of Coriander, with 24 oz. of Sugar, and add Water to make the weight 40 oz.: dissolve in the cold and filter.

Dose.— $\frac{1}{2}$ to 2 fl. drm.

Foreign Pharmacopœias.—Official in Austr., 1 in 26, with Potassium Carbonate; Belg., Syr. Rhei, and Syr. Rhei Compositus, both 1 in 20; Dan. and Dutch, 1 in 20, Hung., 1 in 27, Swed., 1 in 14, all with Sodium Carbonate; Ger., Russ. and Swiss, with Cassia and Potassium Carbonate, 1 in 20; Ital., Scirropo di Cicoria con Rabarbaro; Mex., Jarabe de achicoria y ruibarbo; Port., 1 in 20; Jap. and U.S., Syr. Rhei, 1 in 10, U.S. has also Syr. Rhei Aromaticus; Fr., Sirop de Rhubarbe Composé; all differ from Brit.; not in Norw. or Span.

TINCTURA RHEI COMPOSITA. COMPOUND TINCTURE OF RHUBARB. (ALTERED.)

Rhubarb Root, in No. 20 Powder, 2; Cardamom Seeds, bruised, $\frac{1}{4}$; Coriander Fruit, bruised, $\frac{1}{4}$; Glycerin, 2; Alcohol (60 p.c.) a sufficient quantity. Moisten the solid ingredients with 2 of the Alcohol; proceed with the percolation process until a volume of 18 of liquid has been obtained; agitate; set aside for forty-eight hours; filter; mix with the Glycerin. = (1 in 10).

Now made with Alcohol (60 p.c.) in place of Proof Spirit, Glycerin is added and Saffron omitted.

Dose.— $\frac{1}{2}$ to 1 fl. drm., for repeated administration; for a single administration, 2 to 4 fl. drm.

Foreign Pharmacopœias.—Official in Belg., Fr., Ital., Mex. and Port., Rhubarb only, 1 in 5; Dan., Norw. and Swed. (Tinct. Rhei Amara) 1 and 10; by weight; Jap. and U.S., 1 in 10, U.S. has also (Tinct. Rhei Aromat.) 1 in 5, and (Tinct. Rhei Dulcis) 1 in 10; not in the others.

Not Official.

ELIXIR RHEI (B.P.C.).—Rhubarb Root, in No. 12 Powder, 5; Fennel Fruit, bruised, 2; Glycerin, 3; Refined Sugar, 4; Rectified Spirit, 1 volume, diluted

with Distilled Water 3 volumes, a sufficient quantity: moisten the Rhubarb and Fennel with 15 of the mixed Spirit and Water; macerate for forty-eight hours, and express. Break up the marc, and add to it sufficient of the menstruum to furnish, with the previous pressing, 15 of clear product. Express again after twenty-four hours' maceration. Unite the liquors, allow to stand for two days, and then filter into the Sugar and Glycerin. Dissolve without heat; then, if necessary, add sufficient of the above menstruum to make the product measure 20.

Dose.—1 to 3 fl. drm.

EXTRACTUM RHEI COMPOSITUM.

Belg., Dutch and Swiss, Ext. Rhei 3, Ext. Aloes 1, Resina Jalapæ $\frac{1}{2}$, Soap $\frac{1}{2}$.

Dan., Norw. and Swed., Ext. Rhei 5, Ext. Aloes 2, Resin Jalap $1\frac{1}{2}$, Soap $1\frac{1}{2}$.

Ger., Ext. Rhei 3, Ext. Aloes 1, Resina Jalapæ $\frac{1}{2}$, Soap 2.

Russ., Ext. Aloes 2, Ext. Rhei 6, Jalapini Resin 1, Soap 1.

VINUM RHEI.—Official in B.P. '85 ($1\frac{1}{2}$ oz. to the 20 fl. oz.), but not in B.P. '98.

Foreign Pharmacopœias.—Official in Belg., about 1 in 17; Fr., 3 in 50; Mex., $1\frac{1}{2}$ and 50; Austr., Ger. and Russ. (Tinct. Rhei Vinosa), also Swiss (Vinum Rhei Compositum), with Orange Peel and Cardamoms.

RHÆADOS PETALA.

RED-POPPY PETALS.

The fresh petals of *Papaver Rhœas*.

Chiefly used as a colouring agent.

Official Preparation.—Syrupus Rhœados.

Foreign Pharmacopœias.—Official in Austr., Flores Rhœados; Belg., Flores Papaveris Rhœados; Dutch, Petala Rhœados; Fr., Coquelicot; Mex. and Span., Amapola; Swiss, Flos Rhœados; not in the others.

Description.—The fresh petals are of a bright scarlet colour; they are transversely elliptical in outline, about two inches (five centimetres) broad, have a smooth lustrous surface and an entire margin. The odour is characteristic and somewhat unpleasant; taste slightly bitter.

Preparation.

SYRUPUS RHÆADOS. SYRUP OF RED-POPPY. (MODIFIED.)

Red-Poppy Petals, 13; Refined Sugar, 36; Alcohol (90 p.c.), $2\frac{1}{2}$; Distilled Water, a sufficient quantity. Add the Red-Poppy petals gradually to 20 of Distilled Water kept hot upon a water-bath; stir frequently, and afterwards, the vessel being removed, infuse for twelve hours. Then press out the liquid; strain; add the Refined Sugar, and dissolve by the aid of heat. When nearly cold, add the Alcohol, and sufficient Distilled Water to produce 58 (by weight) of the Syrup. = (1 in $3\frac{1}{2}$).

Now made with Alcohol (90 p.c.) in place of Rectified Spirit.

Dose.— $\frac{1}{2}$ to 1 fl. drm.

Foreign Pharmacopœias.—Official in Belg., Dutch, Fr., Mex., and Span.; not in the others.

RICINI OLEUM.

CASTOR OIL.

The Oil expressed from the seeds of *Ricinus communis*.

Ricinoleic Acid stated to be the active principle.—*P.J.* '97, ii. 84; *T.G.* '97, 749.

Solubility.—Entirely soluble in all proportions of Absolute Alcohol, Ether, Oil of Turpentine, and Glacial Acetic Acid; 1 in $3\frac{1}{2}$ of Alcohol (90 p.c.).

Medicinal Properties.—A mild and speedy cathartic. It is the best purgative in constipation from indurated feces, or after swallowing acrid substances. Used in diseases attended with irritation or inflammation of the bowels, as colic, and diarrhoea due to indigestible food, dysentery and the constipation of typhoid fever; the most suitable purgative after parturition, during pregnancy and after abdominal operations. The safest cathartic for infants, to whom a larger relative dose than to adults may be given; a small quantity in emulsion relieves infantile spasms. It may be administered in an enema with some mucilaginous fluid.

The decoction of the leaves of *Ricinus* applied to the breast is said to produce an abundant supply of milk.

Stimulates the intestinal glands, but not the liver.—*Dr. Rutherford.*

Dose.—1 to 8 fl. drm.

Prescribing Notes.—In draught suspended with mucilage of Gum Acacia, or in capsules.

One of the least disagreeable modes of taking Castor Oil is to pour it on to some milk contained in a wineglass, the interior and edges of which have been moistened with milk.

Official Preparations.—*Mistura Olei Ricini.* Contained in *Collodium Flexile*, *Linimentum Sinapis*, and *Pilula Hydrargyri Subchloridi Composita*.

Not Official.—Capsules of Castor Oil, *Emulsio Olei Ricini*, and *Enema Olei Ricini*.

Foreign Pharmacopœias.—Official in all. Fr., Huile de Ricin; Ital., Olio di Ricino; Port., Oleo de Ricino; Mex. and Span., Aceite de Ricino.

Description.—Viscid, colourless or with a faint tinge of yellow, having scarcely any odour, and a taste bland at first but subsequently acrid and unpleasant.

Tests.—Sp. gr. .950 to .970. Soluble in an equal volume of Absolute Alcohol, and in five times its volume of Alcohol (90 p.c.). It dries slowly to a varnish when exposed to the air in a thin layer. If 3 c.c. of the Oil be shaken with an equal volume of Carbon Bisulphide, and 1 c.c. of Sulphuric Acid be then added, the mixture on being shaken should not become brown (absence of various fixed oils, including Cotton-seed Oil). Equal volumes of Castor Oil and Petroleum Spirit do not yield a clear mixture if kept at 60° F. (15.5° C.); but they yield a perfectly clear solution if other fixed oils be present.

Results of the analyses of 78 samples of Castor Oil from the Indian section of the Imperial Institute.—*J.S.C.I.* '94, 959.

Preparation.

MISTURA OLEI RICINI. CASTOR OIL MIXTURE. (ALTERED.)

Castor Oil, 3; Mucilage of Gum Acacia, $1\frac{1}{2}$; Orange-flower water of commerce, undiluted, 1; Cinnamon Water, $2\frac{1}{2}$. Mix the undiluted Orange-flower water and the Cinnamon Water; place the Mucilage of Gum Acacia in a mortar and to it add, alternately, in portions, the Castor Oil and the mixed Waters, with constant trituration.

The Oil is now emulsified by means of Mucilage of Acacia in place of saponification with Solution of Potash, and Cinnamon Water replaces the Oils of Lemon and and Cloves.

Dose.—As a draught, 1 to 2 fl. oz.

Not Official.

CAPSULES OF CASTOR OIL.—Flexible capsules containing 30 minims, or 60 minims in each.

EMULSIO OLEI RICINI.—Castor Oil, $\frac{1}{2}$ fl. oz.; Mucilage of Acacia, $\frac{1}{2}$ fl. oz.; Syrup of Ginger, $\frac{1}{4}$ fl. oz.; Cinnamon Water, 1 fl. oz.: mix.

Castor Oil, $\frac{1}{2}$ fl. oz.; Yolk of Egg, $\frac{1}{4}$ fl. oz.; Syrup, $\frac{1}{4}$ fl. oz.; Peppermint Water, 1 fl. oz.: mix.

Either of these formulas yield good emulsions.

ENEMA OLEI RICINI.—Castor Oil, 2 fl. oz.; Mucilage of Starch, 18 fl. oz.

ROSÆ GALLICÆ PETALA.

RED-ROSE PETALS.

The fresh and dried unexpanded petals of *Rosa gallica*; from cultivated plants.

Medicinal Properties.—Astringent. Often used on account of their colouring matter.

Official Preparations.—Of the petals, Confectio Rosæ Gallicæ, Infusum Rosæ Acidum, and Syrupus Rosæ. The confection is contained in Pilula Aloes Barbardensis, Pilula Aloes et Asafetidæ, Pilula Aloes Socotrinæ and Pilula Hydrargyri.

Not Official.—Extractum Rosæ Fluidum, Infusum Rosæ cum Acido Nitrico, and Mel Rosæ.

Foreign Pharmacopœias.—Official in Belg., Flores Rosæ Rubræ; Dutch, Petala Rosæ; Fr., Rose Rouge; Ital., Rosa Rossa; Port., Rosas Rubras; Rus., Flores Rosæ Gallicæ; Span., Rosa Rubra; Swed., Petala Rosæ Gallicæ; Swiss, Flos Rosæ; U.S., Rosa Gallica; not in the others.

Description.—Usually in little cone-like masses, or sometimes separate and more or less crumpled. The petals are velvety, of a deep purplish-red colour, which passes into brownish-yellow towards the base, odour fragrant, especially developed in drying; taste somewhat bitter, feebly acid, and astringent.

Preparations.

CONFECTIO ROSÆ GALLICÆ. CONFECTION OF ROSES.

Fresh Red-Rose Petals, 1; Refined Sugar, 3: beat together in a stone mortar. =(1 in 4).

Used as a pill basis. Also applied in aphthous conditions of the mouth.

Foreign Pharmacopœias.—Official in Belg., Port. and Span., with powdered Petals, Sugar, and Rose Water; Fr., with powdered Petals, Sugar, Glycerin, and Rose Water; Mex., with powdered Petals (*Rosa centifolia*), Sugar, Honey, and Rose Water; U.S., with powdered Petals, Sugar, Honey, and Rose Water; Swed., with *Rosa centifolia* and Sugar; not in the others.

INFUSUM ROSÆ ACIDUM. ACID INFUSION OF ROSES.

Red-Rose Petals, dried and broken, $\frac{1}{2}$ oz.; Diluted Sulphuric Acid, 2 fl. drm.; Distilled Water, boiling, 20 fl. oz. Add the Diluted Sulphuric Acid to the Distilled Water; infuse the Red-Rose Petals in the mixture in a covered vessel for fifteen minutes; strain. =(1 in 40).

Time reduced to fifteen minutes.

A similar infusion was in use in 1674.

Astringent. An excellent vehicle for more powerful medicines. Prescribed with Alum it forms a good **gargle**, but Borax or Alkalis change the colour to green.

Dose.— $\frac{1}{2}$ to 1 fl. oz.

Foreign Pharmacopœias.—Official in Fr. and Mex., 1 in 100, without acid; Port. (Infuso de Rosas Composto), Red Rose Petals 5, Dilute Sulphuric Acid 2, Boiling Water 200; Swed. (Infusum Rosæ Acidulum), Red Rose Petals 3, Dilute Sulphuric Acid 2, Sugar 8, Boiling Water 200; not in the others.

SYRUPUS ROSÆ. SYRUP OF ROSES.

Dried Red-Rose Petals, 2; Refined Sugar, 30; Distilled Water, boiling, 20. Infuse the Red-Rose Petals in the Distilled Water for two hours; strain; press; heat the liquid to the boiling-point; filter; dissolve the Refined Sugar in the liquid by the aid of heat. The product should weigh nearly 46. =(1 in 17 $\frac{1}{2}$).

Mildly astringent. Added to mixtures on account of its colour.

Dose.— $\frac{1}{2}$ to 1 fl. drm.

Foreign Pharmacopœias.—Official in Belg., 1 in 10; U.S., with **Fluid Extract**, 1 in 8; Mex., Jarabe de Rosa (*Rosa centifolia*); not in the others.

Not Official.

EXTRACTUM ROSÆ FLUIDUM (U.S.).—1000 grammes of Roses in No. 30 powder, percolated with a mixture of 100 c. c. Glycerin, and 900 c. c. of Diluted Alcohol until the powder is exhausted. Reserve the first 750 c. c., and evaporate the remainder to a soft extract, dissolve this in the reserved portion, and make up with Diluted Alcohol to 1000 c. c.

INFUSUM ROSÆ CUM ACIDO NITRICO.—Rose Petals, broken small, 2; Diluted Nitric Acid, $\frac{1}{2}$; cold Distilled Water, 40: infuse two hours, frequently stirring, strain, and add Powdered Sugar, 1.

MEL ROSÆ (U.S.).—Fluid Extract of Roses 12 c. c., Clarified Honey a sufficiency to make the product weigh 100 grammes.

Foreign Pharmacopœias.—Official in Ger., Russ. and Swiss, Leaves, 1 in 10; Ital., Infusion of Roses and Honey, evaporated to sp. gr. 1.32; not in the others.

ROSÆ OLEUM.

OIL OF ROSE.

B.P. Syn.—OTTO OF ROSE.

[NEW.]

The oil is distilled from the fresh flowers of *Rosa damascena*.

Medicinal Properties.—The principal use in pharmacy is as a perfume in various preparations.

Official Preparation.—Contained in Unguentum Aquæ Rosæ.

Foreign Pharmacopœias.—Official in Austr., Belg., Dan., Dutch, Fr., Ger., Hung., Ital., Jap., Port., Russ., Swiss and U.S.; not in the others.

Description.—A pale yellow crystalline semi-solid, with the strong fragrant odour of Rose and a sweet taste.

Tests.—Sp. gr. .856 to .860 at 86° F. (30° C.). The congealing and melting points vary according to the proportion of crystalline matter, but should lie between 67° and 72° F. (19.4° and 22.2° C.).

The vehicle of the odour is the éleoptene (Rhodinol) alone, and the less stearoptene there is in an otto used for manufacturing purposes the better.—*C.D.* '96, ii. 349. A method of examination proposed (*C.D.* '96, ii. 795) recommends the determination of the Alcohol-contents by the acetylation process together with a determination of the specific gravity, stearoptene content, and crystallising point, as means of detecting adulteration, but Conroy has pointed out that a mixture containing 10.7 p.c. of Geranium Oil will be within the limits of these four tests.—*C.D.* '97, i. 33, 67, 103. An examination of a number of samples of Rose Oil.—*Analyst* '98, 104.

Constituents of Rose Oil.—*P.J.* '97, ii. 417; *J.S.C. Abs.* '98, i. 35. At this date no trustworthy means existed of detecting Geranium oil in oil of Roses.—*J.C.S. Abs.* '95, ii. 187. The subject of the testing of Rose oil is far from satisfactory and opinions on the value of certain tests differ very widely. The specific gravity depends upon the amount of stearoptene present, as does also the freezing point, and forms no absolute criterion of the purity of a sample, whilst Hager's Sulphuric Acid test and Schiff's reagent are totally unreliable. Far more important than the freezing point is the determination of the optical activity.—*C.D.* '96, ii. 349; *J.C.S. Abs.* '95, ii. 187.

ROSÆ AQUA.

ROSE WATER.

The Rose Water of commerce, prepared by distillation from the flowers of *Rosa damascena*, diluted, immediately before use, with twice its volume of Distilled Water.

The Rose Water of commerce is a saturated solution of the essential oil of the Rose flowers.

Medicinal Properties.—An agreeable vehicle for medicines; employed in making lotions and eye-washes.

Official Preparation.—Unguentum Aquæ Rosæ. Contained in Mistura Ferri Composita, and the 'Rose Basis' for Lozenges.

Foreign Pharmacopœias.—Official in Swiss and U.S.; Rosæ Water of commerce; Fr., Mex., Port. and Span., 1 in 1; Belg. and Dutch, 1 in 2½; Ital., 1 in 2;

Swed., 1 in 3, all with petals; Austr., Ger., Hung., Norw., and Russ., 1 in 4000; Dan., 1 in 10000, all with Otto.

Preparation.

UNGUENTUM AQUÆ ROSÆ. ROSE-WATER OINTMENT. (NEW.)

Rose Water, undiluted, 7 fl. oz.; White Beeswax, 1½ oz.; Spermaceti, 1½ oz.; Almond Oil (by weight), 9 oz.; Oil of Rose, 8 minims. Melt together the White Beeswax, Spermaceti, and Almond Oil; pour the mixture into a warmed mortar and add the Rose Water gradually with constant trituration; add the Oil of Rose; continue the trituration until cold.

Foreign Pharmacopœias.—U.S., Ung. Aq. Rosæ; Fr., Cold Cream; Austr. and Belg., Ung. Rosatum; Hung., Ung. Emolliens; Mex., Cerato de Galeno; Port., Pomada Rosada: various formulas.

ROSMARINI OLEUM.

OIL OF ROSEMARY.

N.O. Syn.—OLEUM ANTHOS.

The Oil distilled from the flowering tops of *Rosmarinus officinalis*. That distilled in Britain is superior to the imported.

Solubility.—In all proportions of Absolute Alcohol; 2 in 1 of Alcohol (90 p.c.); sparingly in Alcohol (60 p.c.).

Medicinal Properties.—Aromatic stimulant and carminative. It is used in hair lotions and liniments as a stimulant; also used for its odour, which is disliked by insects.

Dose.—½ to 3 minims.

Official Preparation.—Spiritus Rosmarini. Contained in Linimentum Saponis, and Tinctura Lavandule Composita.

Foreign Pharmacopœias.—Official in all except Mex.; Dan., Norw. and Swed., Ætheroleum Rosmarini; Fr., Huile Volatile de Romarin; Ital., Essenza di Rosmarino; Port., Essencia de Alecrim; Span., Esencia de Romero.

Description.—Colourless or pale yellow, with the odour of Rosemary, and a warm camphoraceous taste.

Test.—Sp. gr. .900 to .915. It should dissolve in twice its volume of Alcohol (90 p.c.), and should not rotate the plane of a polarised ray of light more than 10° to the right in a tube 100 millimetres long (absence of Oil of Turpentine).

Schimmel says: Oil of Rosemary is dextro-rotatory (*see A.J.P.* '91, 303), but we find both Foreign and English Oils to vary between +5° and -9°. The English oils most likely to be genuine are more usually levo-rotatory.

The following is a comparison, which we made in June, 1893, of the various imported varieties:—

1. Eperte	price 3/1 per lb.,	rotation — 8°	Soluble in S.F.R.	2 in 1
2. Extra	2/6 „ „ „	—12° „ „ „	„ „ „	2 in 1
3. Super	1/9 „ „ „	—33° „ „ „	„ „ „	2 in 9
4. Fine	1/3 „ „ „	—40° „ „ „	„ „ „	2 in 10
French Turpentine	„ „ „	—57° „ „ „	„ „ „	2 in 8

Solid Magenta imparts no colour to Oil of Rosemary, but if Alcohol be present the dye dissolves.—*P.J.* (3) xx. 415.

French and Italian Oils have a Sp. gr. '900 and are slightly dextro-rotatory.—*J.S.C.I.* '96, 925.

Preparation.

SPIRITUS ROSMARINI. SPIRIT OF ROSEMARY. (ALTERED.)

Oil of Rosemary, 1; Alcohol (90 p.c.), a sufficient quantity. To the Oil of Rosemary add enough of the Alcohol to form 10 of the Spirit of Rosemary. = (1 in 10).

Now 1 in 10 instead of 1 in 50, and Alcohol (90 p.c.) used in place of Rectified Spirit.

Dose.—Not given in B.P.; 5 to 30 minims.

This Spirit of Rosemary contains five times the proportion of Oil of Rosemary present in the Spirit of Rosemary of the British Pharmacopœia of 1885.

Foreign Pharmacopœias.—Official in Austr. and Swed., from leaves; Belg., *Essentia Rosmarini*, 1 in 100; Fr. (*Teinture d'Essence de Romarin*), and Norw., 1 in 50; Port. (*Esperito d'Alecrim*), and Span. (*Alcohol de Romero*), from flowering tops; Russ., 1 in 100; Mex., Compound Spirit from leaves; not in the others.

Not Official.

RUTÆ OLEUM.

OIL OF RUE.

The Oil distilled from the fresh herb of *Ruta graveolens*. According to Schimmel it has sp. gr. '833—'840. Rotation +2° in 100 m.m. tube. It crystallises at 8° to 10° C. and gives a clear solution in 2 to 3 parts of Alcohol (70 p.c.).—*J.S.C.I.* '96, 925.

It was Official in B.P. '85.

Medicinal Properties.—Antispasmodic. A topical stimulant, rubefacient and vesicant. Administered in the form of enema for flatulent colic in children.

Dose.—1 to 4 minims.

Foreign Pharmacopœias.—Official in Belg., *Essentia Rutæ*; Fr., *Huile Volatile de Rue*; Port., *Essencia de Arruda*; Span., *Esencia de Ruda*; not in the others.

Not Official.

SABINÆ CACUMINA.

SAVIN TOPS.

The fresh and dried tops of *Juniperus Sabina*, collected in spring from plants cultivated in Britain.

It was Official in B.P. '85.

Medicinal Properties.—A powerful local and general irritant. The ointment is used for maintaining discharges from granulating or blistered surfaces. It is a powerful emmenagogue, but its use requires caution as it may cause inflammation of the abdominal and pelvic viscera.

Dose.—4 to 10 grains.

Antidotes.—Stomach tube, emetics; Castor oil, Linseed poultices to the abdomen, opiates and demulcents.

Foreign Pharmacopœias.—Official in Austr., Belg., Dan., Dutch, Fr., Hung., Ital., Mex., Port., Swed., Swiss and U.S.; not in Ger., Jap., Norw., Russ. or Span.