

Preparations.

EXTRACTUM DULCAMARÆ FLUIDUM (U.S.).

1 fl. oz. equals 1 oz. Dulcamara. Prepared with Diluted Alcohol.

Dose.—30 to 60 minims.

INFUSUM DULCAMARÆ.

Dulcamara, 1; boiling Water, 10: infuse one hour.

Dose.—1 to 2 fl. oz.

Foreign Pharmacopœias.—Official in Fr. (Tisane), 1 in 50; not in the others.

SOLANINE.—An Alkaloid obtained from *Solanum nigrum*, *S. Dulcamara*, and *S. tuberosum* (Potato plant).

It has been recommended as an analgesic.—*L.M.R.* '86, 496; '88, 242; *T.G.* '87, 56; '88, 630; *L.* '87, ii. 1097.

ELATERIUM.

ELATERIUM.

A sediment from the juice of the fruit of *Ecballium Elaterium*.

'Extractum Elaterii' was the official synonym in B.P. '85 for Elaterium.

Medicinal Properties.—The most powerful hydragogue cathartic. Used in dropsical affections connected with cardiac or renal disease and in cerebral congestion. Its administration in a debilitated state of the system or in gastro-intestinal inflammation requires caution.

Dose.— $\frac{1}{16}$ to $\frac{1}{2}$ grain.

Prescribing Notes.—On account of the similarity in name to the active principle care must be exercised to avoid confusion. The Pulvis Elaterini Compositus is often preferred; it is frequently given in the form of Pill with Compound Extract of Colocynth and Henbane. To prevent it causing persistent diarrhœa, it may be given with Henbane, especially in renal diseases; in cardiac cases it should be guarded by a stimulant to prevent too much depression.

Official Preparations.—Elaterinum. **Elaterin** is contained in Pulvis Elaterini Compositus.

Not Official.—Pilula Elaterii Composita.

Antidotes.—The same as for Croton Oil (q.v.)

Foreign Pharmacopœias.—Official in Mex., Elaterio; Port., Extracto de Pepinos de S. Gregorio; Swed., Elaterium Album; not in the others.

Description.—In light friable flat or slightly curved opaque cakes about one-tenth of an inch (two and a half millimetres) thick; pale green, greyish-green, or yellowish-grey in colour; fracture finely granular; odour faint, tea-like; taste bitter and acrid.

Tests.—It should not give the characteristic reactions with the tests for Carbonates or for Starch, and should yield half its weight to boiling Alcohol (90 p.c.). When exhausted with Chloroform, the solution evaporated, the residue washed with Ether, and the process of solution, evaporation, and washing repeated, Elaterium should yield 25 p.c., or not less than 20 p.c. of Elaterin.

Preparations.

ELATERINUM. ELATERIN.

The active principle of Elaterium ($C_{20}H_{28}O_6$), eq. 345.6.

Solubility.—1 in 160 of Alcohol (90 p.c.); insoluble in Water.

Description.—In small hexagonal scales having a bitter taste, readily soluble in Chloroform.

Tests.—Neutral to Litmus. Heated with access of air it first melts and then burns, leaving no residue. With melted Phenol it yields a solution which, on the addition of Sulphuric Acid, acquires a crimson colour, rapidly changing to scarlet. It is not precipitated from Alcoholic Solutions by Solution of Tannic Acid, Test-solution of Mercuric Chloride, or Solution of Platinic Chloride (absence of alkaloids).

Dose.— $\frac{1}{10}$ to $\frac{1}{5}$ grain.

Foreign Pharmacopœias.—Official in U.S.; not in the others.

PULVIS ELATERINI COMPOSITUS. COMPOUND POWDER OF ELATERIN.

Elaterin, 1; Milk Sugar, 39; triturate in a mortar until a fine powder is produced.

Dose.—1 to 4 grains.

Foreign Pharmacopœias.—Official in U.S. (Trituratio), Elaterin, 1; Milk Sugar, 9; not in the others.

Not Official.

PILULA ELATERII CO. (L.H.)—Elaterium $\frac{1}{2}$ grain, Pill of Colocynth and Henbane 5 grains.

Dose.—1 or 2 pills.

Not Official.

ELEMI.

A concrete resinous exudation, the botanical source of which is undetermined, but is sometimes referred to *Canarium commune*.

It is imported from Manila.

Brazilian and Yucatan Elemis are Official in some of the Foreign Pharmacopœias.

Solubility.—The greater part is soluble in Alcohol (90 p.c.); wholly soluble in Ether.

Medicinal Properties.—Analogous to those of Turpentine. For external use only. The ointment is stimulant to indolent ulcers, and is used to keep up discharge caused by setons.

Foreign Pharmacopœias.—Official in Austr., Belg., Dutch, Fr., Mex. (Goma de Limon), Port., Russ., Span. and Swiss; not in the others.

Preparation.

UNGUENTUM ELEMI.—Elemi, 1; Spermaceti Ointment, 4; melt, strain, and stir till cold. = (1 in 5).

Foreign Pharmacopœias.—Official in Belg., Fr. (Onguent d'Arcens), Russ., Span. and Swiss, 1 of Elemi and 1 of Turpentine in 4 of Ointment; Dutch, 3 of Elemi, 2 of Turpentine, in 10 of Ointment; Port. 2 of Elemi and 1 of Turpentine in 10; not in the others.

Not Official.

EMBELIA RIBES.

The Powdered Seeds are used in India as a remedy for tapeworm.—*L.* '87, ii. 199.

Dose.—1 to 4 drms.

ACIDUM EMBELICUM.—Obtained from the Seeds. It is insoluble in Water, forms salts with Ammonium, Potassium, and Sodium.

AMMONII EMBELAS.—A tasteless crystalline salt, in red needles.

Dose.—3 to 6 grains in Honey or Simple Syrup.—*P.J.*, (3) xix. 305.

EMPLASTRA.

PLASTERS.

The Emplastra of the British Pharmacopœia are as follows, the formulas for which will be found under the names of the drugs from which they are prepared:—

	Proportion of active ingredients in the mass.
EMPLASTRUM AMMONIACI CUM HYDRARGYRO	(Mercury) 1 in 5.
EMPLASTRUM BELLADONNÆ	(Liquid Extract) 1 in 6.
EMPLASTRUM CALEFACIENS	(Cantharides) about 1 in 25.
EMPLASTRUM CANTHARIDIS	(Cantharides) about 1 in 3.
EMPLASTRUM HYDRARGYRI	(Mercury) 1 in 3.
EMPLASTRUM MENTHOL	(Menthol) 1 in 6 $\frac{3}{4}$.
EMPLASTRUM OPII	(Opium) 1 in 10.
EMPLASTRUM PICIS	(Pitch) about 1 in 2.
EMPLASTRUM PLUMBI	(Lead Oxide) about 1 in 4.
EMPLASTRUM PLUMBI IODIDI	(Lead Iodide) 1 in 10.
EMPLASTRUM RESINÆ	(Resin) 1 in 9 $\frac{1}{2}$.
EMPLASTRUM SAPONIS	(Soap) about 1 in 7.

Plasters which are not Official are enumerated in the Index.

ENEMATA.

These are now deleted from B.P.

Not Official.

EPHEDRINE HYDROCHLORIDE.

The Hydrochloride of an alkaloid obtained from *Ephedra vulgaris* or *E. Helvetica*. Has been recommended as a mydriatic in the form of a 5 p.c. Solution.—*B.M.J.E.* '98, ii. 92.

The addition to it of 1 p.c. of Homatropine Hydrochloride enhances its action.

The mixture is supplied under the name 'Mydrin,' which is a white powder readily soluble in Water; a 10 p.c. aqueous solution dilates the pupil moderately within a few minutes, without affecting the accommodation, and its effects pass away in two to four hours. It is useful in diagnostic examinations.—*L.* '98, ii. 24; *T.G.* '98, 757.

ERGOTA.

ERGOT.

The sclerotium of *Claviceps purpurea*, originating in the ovary of *Secale cereale*.*

* Ergot is common on grasses, and if it occurs in the pastures where cattle feed, it is said to occasion dry gangrene, causing them to lose their hoofs and horns.

During an epidemic of *Secale cornutum* it was noticed that one of the symptoms of ergot-poisoning was suppression of milk in lactating women. The same result followed in cows that had been fed on meal containing Ergot.—*M.T.* '75, i. 586.

Medicinal Properties.—Ecbolic; used in obstetric practice to contract the uterus, assist expulsion of placenta, and prevent or stop post-partum hæmorrhage. Employed in uterine hæmorrhage from other causes such as fibroid tumour; and in subinvolution; also in hæmoptysis, hæmatemesis, hæmaturia, and epistaxis. Efficacious in flatulent dilatation of stomach; in acute myelitis and in paraplegia of inflammatory origin; in night sweats of phthisis. Deep intramuscular **injection** gives most rapid action in critical cases. Injections into the sphincter are valuable in prolapsus ani. After elaborate investigations Kobert recommends freshly powdered Ergot for certainty of action.

In hiccough (*L.* '85, ii. 276); in post-partum hæmorrhage, equal parts of Liquid Extract of Ergot and Acetic Acid diluted with Water (*B.M.J.* '88, i. 295, 1148); in the sweats of phthisis (*L.M.R.* '81, 451 and *B.M.J.E.* '94, ii. 4); in periodic neuralgia (*T.G.* '94, 343); in diabetes insipidus, 30 minim doses of the Liquid Extract every three hours.—*L.M.R.* '80, 231, 446; '81, 12.

Dose.—20 to 60 grains.

Prescribing Notes.—The unpleasant taste of the preparations of Ergot is best covered by Tincture of Orange or Tincture of Orange and Cinnamon Water. The Infusion and Hypodermic Injection should be made fresh as required. When the Extract is ordered in pills, Powdered Liquorice Root added q.s. makes a good pill.

Incompatibles.—Astringents, metallic salts.

Official Preparations.—Extractum Ergotæ, Extractum Ergotæ Liquidum, Infusum Ergotæ, Tinctura Ergotæ Ammoniata. Injectio Ergotæ Hypodermica is made with Extractum Ergotæ.

Not Official.—Dises of Ergotin, Pilula Ergotini, Acidum Scleroticum, Ergotinine, Extractum Secalis Cornuti Cornutino-Sphacelinicum, and Cornutine Citrate.

Foreign Pharmacopœias.—Official in Austr., Belg., Dan., Dutch, Ger., Hung., Jap., Norw., Russ., Swed. and Swiss, Secale Cornutum; Fr., Ergot de Seigle; Ital., Segala Cornuta; Mex., Cuernecillo de Centeno, Port., Cravagem de Centeio; Span., Cornezuelo de Centeno; U.S., Ergota.

Description.—Subcylindrical or somewhat triangular, tapering towards the ends, generally curved; from one-third of an inch to an inch and a half (one to four centimetres) in length; longitudinally furrowed on each side, but more especially on that which is concave; often irregularly cracked; very dark violet-black externally, whitish or pinkish-white within; fracture short. Odour peculiar and disagreeable, especially if the powder be triturated with Solution of Potassium Hydroxide; taste disagreeable. Ergot should be free from mustiness; it is liable to deteriorate by keeping and by exposure to damp.

The two principal commercial varieties are Spanish and Russian. The former is usually considered the best.

The Ergot of Russia and Austria is stated to contain the larger amount of Cornutine. Ergot should not be exposed to heat, but dried over quicklime.—*P.J.* '96, i. 84, 163.

Yields its virtues to Water and Alcohol.

It contains about 33 p.c. of fixed Oil, which can be extracted with Ether, Petroleum Ether, and also to a great extent by hydraulic pressure.

Papers by Kobert are summarised (*C.D.* '90, ii. 551), but it must be noted that many of his results are not only questioned but flatly contradicted by Tanret. According to Kobert the most active constituent is **Cornutine**, which together with Sphacelinic Acid is contained in an alcoholic extract after removal of Oil by Petroleum Ether. He also states that no aqueous extract of Ergot will have any therapeutic value after having been made for nine months.

Keller is of opinion that Ergot contains only one basic substance, the Ergotinine of Tanret, the Cornutine of Kobert, and the Picroskleretine of Dragendorff and Podwysotski, being according to him identical or somewhat altered forms of the same substance. The Sphacelotoxin or Spasmodin of Jakobi is considered to owe its activity to the presence of some alkaloid.—*P.J.* '96, ii. 378.

Jacobi has given the name of Sphacelotoxin to a substance of a resinous nature which he has obtained from Ergot, and regards as the specifically active constituent of the drug.—*P.J.* '97, ii. 84.

New reaction for Ergotinine.—*P.J.* '96, i. 299.

Summary of literature on Ergot and description of 'Ergot aseptic.'—*T.G.* '98, 433; *P.J.* '98, ii. 345.

In this country it has been the general opinion that an ammoniated menstruum gave the most reliable preparation, but preference is given by Kobert to an acid (HCl) extractive as in U.S. and the previous Ger. (1882).

Ergot is stated (*P.J.* (3) xvi. 274) to keep much better if a large proportion of the Oil has been extracted by hydraulic pressure; this, however, is disputed (*C.D.* '90, ii. 552), and it is there recommended to keep the drug whole, in air-tight vessels and perfectly dry.

Preparations.

EXTRACTUM ERGOTÆ. EXTRACT OF ERGOT. *B.P.Syn.*—**ERGOTIN.** (ALTERED).

Ergot in No. 40 powder, 20 oz.; Alcohol (60 p.c.), a sufficient quantity; Distilled Water, a sufficient quantity; Diluted Hydrochloric Acid, 7½ fl. drm.; Sodium Carbonate, 175 grains. Moisten the powdered Ergot with 10 fl. oz. of the Alcohol; pack the damp powder in a percolator; percolate with the Alcohol until the Ergot is exhausted. Evaporate the percolate to 5 fl. oz.; add 5 fl. oz. of Distilled Water; filter when cold, washing the residue with a little Distilled Water. Add the Diluted Hydrochloric Acid to the filtrate; set aside for twenty-four hours; filter; wash the residue with Distilled Water until the washings no longer have an acid reaction, adding the washings to the filtrate; add the Sodium Carbonate to the latter; evaporate to a soft extract.

The corresponding preparation to this in B.P. '85 was prepared from Liquid Extract of Ergot and Rectified Spirit.

Dose.—2 to 8 grains.

Foreign Pharmacopœias.—Official in Austr., Belg., Dan., Fr., Ger., Hung., Ital., Jap., Mex. Ergotina de Bongean, Norw., Port., Russ., Span., Swed., Swiss and U.S.

EXTRACTUM ERGOTÆ LIQUIDUM. LIQUID EXTRACT OF ERGOT. (MODIFIED.)

Ergot, crushed, 40; Distilled Water, 300; Alcohol (90 p.c.), 15. Digest the crushed Ergot in 200 of the Distilled Water for twelve hours; draw off the infusion; repeat the digestion with the remainder

of the Distilled Water; press; strain; evaporate the liquid to 28; when cold, add the Alcohol; set aside for an hour; filter. The product should measure 40. =(1 in 1).

Alcohol (90 p.c.) used instead of Rectified Spirit.

Dose.—10 to 30 minims.

60 minims is not infrequently prescribed.

Foreign Pharmacopœias.—Official in Dan., Ger., Norw., and Russ. Extract with Hydrochloric Acid and dilute Alcohol; Mex. (Extracto fluido de Cuernecillo de Centeno) with Acetic Acid and Dilute Alcohol; U.S. percolated with dilute Alcohol acidified with Acetic Acid; Swiss from solid Extract; not in the others.

INFUSUM ERGOTÆ. INFUSION OF ERGOT. (ALTERED.)

Ergot, freshly crushed, 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 time reduced from 30 to 15 minutes.

Dose.—1 to 2 fl. oz.

Used also as an injection for gleet.

(Not in the other Pharmacopœias.)

INJECTIO ERGOTÆ HYPODERMICA. HYPODERMIC INJECTION OF ERGOT. *B.P.Syn.*—HYPODERMIC INJECTION OF ERGOTIN. (ALTERED.)

Extract of Ergot, 100 grains; Phenol, 3 grains; Distilled Water, 220 minims, or a sufficient quantity. Mix the Phenol with the Distilled Water; boil for a few minutes; cool; add the Extract of Ergot, and, if necessary, sufficient recently boiled and cooled Distilled Water to produce 330 minims of the Injection. =(1 in 3).

Camphor Water now omitted and Phenol added.

Dose, by subcutaneous injection.—3 to 10 minims.

This injection should be recently prepared. 110 minims contain about 23 grains of Extract of Ergot; 100 c.c. contain about 33 grammes.

Foreign Pharmacopœias.—Official in Port. (Solutio de Ergotino com Glycerino), Ergotin 1, Glycerin 4, Water 5; all by weight. Mex. (has Injection Ergotinine).

TINCTURA ERGOTÆ AMMONIATA. AMMONIATED TINCTURE OF ERGOT. (NEW.)

Ergot, in No. 20 powder, 5; Solution of Ammonia, 2; Alcohol (60 p.c.) a sufficient quantity. Mix the Solution of Ammonia with 18 of the Alcohol; moisten the powder with two of this mixture, and percolate with the remainder; press the marc; mix the expressed liquid with the percolate; add enough of the Alcohol to form 20 of the Tincture; set aside for twenty-four hours; filter. =(1 in 4).

Dose.—30 to 60 minims.

Foreign Pharmacopœias.—A simple tincture is official in Belg., Dutch, Mex., and Port., 1 in 5; Russ. and Swiss, 1 and 10; all by weight; not in the others; U.S. (Vinum Ergotæ), 15 in 100.

Not Official.

DISCS OF ERGOTIN $\frac{1}{2}$ grain and $\frac{1}{4}$ grain are prepared for hypodermic use.

PILULA ERGOTINI (*L.H.*).—Ergotin 2 grains, Liquorice Powder 3 grains.

ACIDUM SCLEROTICUM.—A weak acid obtained from Ergot by Dragendorff. It

is used **hypodermically** $\frac{1}{2}$ to $\frac{3}{4}$ grain dissolved in Distilled Water or Thymel Water.—*P.J.* (3) vi. 1001; *Y.B.P.* '84, 87.

ERGOTININE.—An alkaloid obtained from Ergot, insoluble in Water, soluble in Alcohol or Chloroform. Used in post-partum hæmorrhage by **hypodermic injection** of 5 to 10 minims of a solution containing $\frac{1}{30}$ grain in 20 minims.—*B.M.J.* '82, ii. 1004. (Fr. Ergotinine Cristallisée).

EXTRACTUM SECALIS CORNUTI CORNUTINO-SPHACELINICUM (KOBERT).
—An Extract which combines the action of **Cornutine** and **Sphacelinic Acid**, an alkaloid and a resinous body, obtained by Kobert from Ergot. It is prepared by exhausting Ergot with strong Alcohol, and evaporating the liquid to an Extract, the fatty Oil being removed by Ether.

He does not give the dose of the above, but states that 'the extract thus prepared is not well suited for subcutaneous injection,' and 'the dose cannot be foretold because the proportion of active principles present in Ergot varies exceedingly with the year and the district.'—*Pr.* xxxiii., 409; xxxv., 414.

CORNUTINE CITRATE.—A soluble salt of an alkaloid which is stated by Kobert to be the active principle of Ergot. A brown powder, which is used in obstetric practice.

Dose.— $\frac{1}{2}$ to $\frac{1}{4}$ grain, or subcutaneously $\frac{1}{2}$ to $\frac{1}{8}$ grain.

Not Official.

ERIGERONTIS CANADENSIS OLEUM.

OIL OF CANADIAN FLEABANE.

A volatile Oil distilled from the fresh flowering herb *Erigeron Canadense*; it grows abundantly in the American Mint fields and frequently contaminates that Peppermint Oil, as shown by its insolubility in 85 p.c. Alcohol.—*Y.B.P.* '82, 214.

When rectified, the Oil, which is a terpene ($C_{10}H_{16}$), has a sp. gr. .850, and boils at 176° C.

A very pale yellow liquid, with neutral reaction.

Medicinal Properties.—Diuretic, tonic, and astringent. Chiefly employed for arresting internal hæmorrhage.

Dose.—5 to 10 minims every two or three hours.

Foreign Pharmacopœias.—Official in U.S.; not in the others.

Not Official.

ERYTHROPHLEUM.

CASCA BARK. SASSY BARK.

The bark of the *Erythrophleum guineense*. Introduced as a cardiac tonic in 1877. An ordeal bark used in West Africa.

Preparations.

TINCTURA ERYTHROPHLEI (B.P.C.).—Casca Bark in No. 20 powder, 2; Rectified Spirit to percolate 20.

Dose.—5 to 10 minims.

ERYTHROPHLEINE HYDROCHLORIDUM.—Soluble in Water.

The statement that it possessed local anæsthetic properties has given rise to a good deal of discussion, the result of which is not in favour of its use for that purpose.—*B.M.J.* '88, i. 317, 545, 604, 661, 1083; *L.* '88, i. 249, 346.

ESSENTIÆ.

These have been deleted from B.P.

Not Official.

ERYTHROL TETRANITRATE.

Is prepared from Erythrite (a tetratomic Alcohol). A colourless crystalline solid melting at 61° C. (142° F.). When kept in a dark and moderately cool place it is fairly stable, but if exposed to warmth, and especially sunlight, it rapidly undergoes decomposition. It is but slightly soluble in Water, but dissolves readily in Alcohol (90 p.c.) and Ether. It is a vaso-dilator and belongs to the group of which Glycerol Trinitrate (Nitroglycerin) may be regarded as the typical representative. Blood pressure experiments show that it has a less marked but more prolonged action than that substance.

Dose.—1 grain, in Alcoholic solution or in the form of tablets.—*B.M.J.* '95, ii. 1213; '97, i. 907; '98, i. 18, 37, 248; ii. 936.

ETHYL NITRITIS LIQUOR.

See under SPIRITUS ÆTHERIS NITROSI.

EUCAINE. See COCAINE, p. 229.**EUCALYPTI GUMMI.**

EUCALYPTUS GUM.

A ruby-coloured exudation, or so-called Red Gum, from the bark of *Eucalyptus rostrata* and some other species of *Eucalyptus*. Imported from Australia.

Under the name of Gummi Rubrum, this has been 'Not Official' in the *Companion* since 1871.

Medicinal Properties.—Astringent, principally used in diarrhœa, dysentery, and relaxed throat.

This gum adheres with great pertinacity to the mucous surfaces, and it is probably on this account that its astringency is more effective than that of Catechu, Kino, etc., although it contains less astringent matter.

Dose.—2 to 5 grains.

Prescribing Notes.—Given in the form of **cachets** or in **pills** massed with Dispensing Syrup q.s. The Tincture mixes with Water and does not require Mucilage.

Official Preparation.—Trochiscus Eucalypti Gummi.

Not Official.—Extractum Gummi Rubri Liquidum, Suppositoria Gummi Rubri, Syrupus Gummi Rubri, Tinctura Gummi Rubri, Trochiscus Gummi Rubri (*Squire*).

Description.—In grains or small masses. Thin fragments are transparent and of a ruby-red or garnet-red colour. It is somewhat tough and has a very astringent taste. When chewed it adheres to the teeth and tinges the saliva red.

Tests.—Cold Water dissolves from 80 to 90 p.c., forming a neutral solution. It is almost entirely soluble in Alcohol (90 p.c.).

TROCHISCUS EUCALYPTI GUMMI. EUCALYPTUS GUM LOZENGE.
(NEW.)

Eucalyptus Gum, 1 grain. Mix with the Fruit Basis to form a Lozenge.

Not Official.

EXTRACTUM GUMMI RUBRI LIQUIDUM.—Red Gum, 7; Water, 21: dissolve, strain, and add Alcohol (90 p.c.), 1.

Dose.—30 to 60 minims in a wineglassful of water.

An excellent styptic; injected into the nostril, at once stays bleeding of the nose.

A tablespoonful in a pint of water forms an astringent **injection** for the vagina or rectum; it also forms an astringent **lotion** for the eyes.

SUPPOSITORIA GUMMI RUBRI.—Powdered Red Gum, 5 grains; Extract Nux Vomica, 1 grain; Cocoa-nut Stearin, *q. s.* to make one suppository.

SYRUPUS GUMMI RUBRI.—Liquid Extract, 20; Sugar, 12: dissolve.

Dose.—30 to 60 minims.

TINCTURA GUMMI RUBRI.—Gum, 1; Alcohol (90 p.c.), 4: digest and strain. Mixes with water without becoming turbid.

Dose.—20 to 40 minims.

1 part of this with 6 or 8 of Water for a gargle.

TROCHISCUS GUMMI RUBRI (Squire).—Made with Rose Paste. This lozenge, which has been in use for about forty years, differs in appearance and flavour from that now introduced into the B.P.

Useful for relaxed throat. They have also been recommended as a preventive of sea-sickness.

EUCALYPTI OLEUM.

OIL OF EUCALYPTUS.

The Oil distilled from the fresh leaves of *Eucalyptus globulus*, and other species of *Eucalyptus*.

Solubility.—3 in 1 (or less) of Alcohol (90 p.c.), in all proportions of Absolute Alcohol; 1 in 38 of Alcohol (60 p.c.) (Amygdalina Oil, 1 in 175).

Medicinal Properties.—It is a powerful antiseptic and deodorizer; antipyretic. It has been used in the treatment of wounds and in surgical operations; as an inhalation in cases of pulmonary gangrene, phthisis, influenza and coryza, and internally or by inhalation to relieve the cough in chronic bronchitis, phthisis, and asthma. Mixed with Iodoform as an application to hard and soft chancres, and as urethral suppository in gonorrhœa. Given internally for chronic inflammation of the bladder.

Eucalyptus antiseptic spray in eye operations.—*L.* '86, i. 305.

Inhalation in whooping cough.—*B.M.J.* '86, i. 430. As a disinfectant, as a throat and nose spray, and as an inunction in scarlet fever.—*L.* '95, i. 861.

Dose.— $\frac{1}{2}$ to 3 minims.

Prescribing Notes.—Given in the form of Emulsion with Mucilage of Acacia and Water, or taken on Sugar. Used as an **inhalation** or **spray**.

Official Preparation.—Unguentum Eucalypti.

Not Official.—Tinctura Eucalypti, Eucalyptus Gauze, Eucalyptus Wool and Lint, Nebula Eucalypti, Pessarium Eucalypti, Vapor Eucalypti, Eugol, Eucalyptol, and Eucalyptol.

Foreign Pharmacopœias.—Official in Belg., Hung., Jap.; Mex. (Aceite Volatil de Eucalipto), sp. gr. .905; Norw. and U.S., sp. gr. .915—.925; not in the others.

Description.—Colourless or pale yellow, having an aromatic camphoraceous odour, and a pungent taste, leaving a sensation of coldness in the mouth.

Tests.—Sp. gr. .910 to .930. It should not rotate the plane of a ray of polarised light more than 10° in either direction in a tube 100 millimetres long, and it should become semi-solid on being stirred, when cold, with a third or half its volume of Phosphoric Acid of commerce of Sp. gr. 1.750 (presence of a due proportion of Cineol). If to 1 c.c. of the Oil there be added 2 c.c. of Glacial Acetic Acid and 2 c.c. of a saturated aqueous solution of Sodium Nitrite, the mixture, when gently stirred, should not form a crystalline mass (exclusion of Eucalyptus Oils containing much Phellandrene).

The distinction between the two principal commercial varieties (the Oil from *E. globulus*, and the Oil from *E. amygdalina*) seems strongly marked. The former has a gravity over .900 (generally .915—.925), a weak dextro-rotatory power, yields crystallisable Eucalyptol (Cineol), and contains no Phellandrene. The latter has a gravity below .900 (generally .880—.890), a laevo-rotatory power, yields little or no crystallisable Eucalyptol (Cineol), and consists largely of Phellandrene, which may be recognised by dissolving the Oil in twice its volume of Glacial Acetic Acid, and adding a solution of Sodium Nitrite; Phellandrene if present separates as an insoluble Nitrite. A pure *Amygdalina* Oil solidifies almost instantly; a *Globulus* Oil, treated in the same way, assumes a green colour, but does not otherwise change. The boiling point of the two Oils appears not to differ to any definite extent. No comparative tests seem to have been made as to the therapeutic values of the different varieties. —*Companion*, 1890.

We noted (*C.D.* '90, ii. 380) the existence of a commercial Oil allied to *Amygdalina*, but with a left-handed rotation three times as great as the ordinary variety, the origin of which has not been identified.

For many years the oil from *E. Amygdalina* was the most esteemed variety and was included in *B.P.* '85, but it is now excluded by the tests given in *B.P.* '98.

Improved process for extraction and determination of Eucalyptol (Cineol).—*J.S.C.I.* '94, 1106; *L.* '95, i. 687.

Note on the estimation of Eucalyptol (Cineol).—*A.J.P.* '98, 492.

Note on Eucalyptus Oil.—*P.J.* (3) xxv. 501.

Examination of commercial oils for Eucalyptol (Cineol).—*C.D.* '98, i. 713.; *J.C.S. Abs.* '98, ii. 543.

Description of oil from *E. loxophleba*.—*C.D.* '98, ii. 287; *P.J.* '98, ii. 198.

Leaves of *E. punctata* yield an abundance of oil containing over 50 p.c. of Eucalyptol (Cineol).—*C.D.* '98, ii. 519.

Preparation.

UNGUENTUM EUCALYPTI. EUCALYPTUS OINTMENT. (ALTERED.)

Oil of Eucalyptus (by weight), 1; Hard Paraffin, 4; Soft Paraffin, white, 5. Melt the Hard and Soft Paraffins together; add the Oil of Eucalyptus; stir until cold. = (1 in 10.)

Now 1 in 10 instead of 1 in 5, and white Soft Paraffin specified.

The leaves and oil of *E. amygdalina* are recommended by Bosisto for making the ointment.—*P.J.* '96, i. 224.

Not Official.

TINCTURA EUCALYPTI (*B.P.C.*).—Eucalyptus Leaves (of the *Eucalyptus globulus*), in No. 20 powder, 4; Rectified Spirit to percolate, 20.

Dose.—15 to 120 minims.

Foreign Pharmacopœias.—Official in Belg., Dutch, Fr., Hung., Mex., Port., Span. and Swiss, 1 in 5; not in the others.

EUCALYPTUS GAUZE.—Contains about 6 p.c. of Oil of Eucalyptus.

EUCALYPTUS WOOL and LINT.—Each contains 10 p.c. of the Oil.

NEBULA EUCALYPTI (*T.H.*).—Oil of Eucalyptus, 5 minims; White Adepsine Oil to 1 fl. oz. Mix. Stimulant.

PESSUS EUCALYPTI.—Oil of Eucalyptus, 15 minims; Oil of Theobroma to 2 fl. drm.

VAPOR EUCALYPTI (*T.H.*).—Oil of Eucalyptus, 20 minims; Light Magnesium Carbonate, 10 grains; Water to 1 fl. oz. Mix a teaspoonful in a pint of Water at 140° F. for each inhalation. Stimulant.

Eugol is a liquid containing Beta-naphthol, Boric Acid, Menthol, Thymol, Eucalyptol, Gaultheria, and Hamamelis.—*B.M.J.* '98, i. 702; *L.* '98, i. 37.

Eucalypteol (Eucalyptene Bichloride).—A crystalline substance almost insoluble in water, melting at 50° C. and boiling at 115° C.

EUCALYPTOL (Crystallisable).—A definite chemical body ($C_{10}H_{18}O$), obtained from Eucalyptus Oil by a freezing process, or by separation as Phosphate and subsequent decomposition of this salt by hot Water. It is liquid at ordinary temperatures, but crystallises about 0° C. (32° F.). It has no action on polarised light. The sp. gr. is given in U.S. as .930, and in the Fr. Codex Supp. as .940. It is identical with an oxidised compound obtained from Oil of Cajuput and a number of other essential oils, consequently the names **Cineol** and **Cajuputol** have also been applied to it.

EUONYMI CORTEX.

EUONYMUS BARK.

The dried root-bark of *Euonymus atropurpureus*.

Medicinal Properties.—Tonic, cathartic, and diuretic. The dry extract is a powerful cholagogue and purgative; useful in chronic constipation and torpid liver.

Prescribing Notes.—Dried **Extract** in one form or another has been known for many years as Euonymin; usually given in the form of **pills** with Extract of Henbane; if prescribed alone a little Soap, one-sixth grain in a 2 or 3 grain pill, and Alcohol (90 p.c.) q.s. makes a good mass. It is also given in Compressed Tablets.

Official Preparation.—Extractum Euonymi Siccum.

Not Official.—Tinctura Euonymi.

Foreign Pharmacopœias.—Official in Fr., Jap. and U.S.; not in the others.

Description.—In quilled or curved pieces, varying in thickness from one-twelfth to one-sixth of an inch (two to four millimetres). The outer layer is a soft friable cork of a light ash-grey colour, marked with darker patches. The inner surface is pale tawny-white and smooth when free from fragments of the white wood. The bark breaks with a short fracture; the fractured surface is yellowish in colour. Odour faint but characteristic; taste somewhat mucilaginous and afterwards bitter and slightly acid.

Preparation.

EXTRACTUM EUONYMI SICCUM. DRY EXTRACT OF EUONYMUS.
(ALTERED.)

Euonymus Bark, in No. 20 powder, 20; Alcohol (45 p.c.) a sufficient quantity; Calcium Phosphate, a sufficient quantity. Moisten the powdered Euonymus Bark with 10 of the Alcohol; pack in a percolator; gradually pour on more of the menstruum until the Euonymus is exhausted; collect the liquid and evaporate the Alcohol; thoroughly dry the residue; powder the product as far as possible and mix it with one-fourth of its weight of Calcium Phosphate, continuing the drying and powdering until a satisfactory preparation is obtained; then immediately transfer it to a well-closed bottle.

Now made with Alcohol (45 p.c.) in place of Rectified Spirit, and Calcium Phosphate substituted for Milk Sugar.

Dose.—1 to 2 grains.

This preparation rapidly absorbs moisture on exposure to the air; which is not the case when Magnesia is used, as previously recommended in the *Companion*.

Is a powerful hepatic, but feeble intestinal stimulant.—*Dr. Rutherford.*

Foreign Pharmacopœias.—Fr. a powder; U.S. an extract.

Not Official.

TINCTURA EUONYMI (B.P.C.)—Euonymus bark in No. 20 powder, 4; Rectified Spirit sufficient to percolate 20.

Dose.—10 to 40 minims.

Not Official.

EUPHORBIA PILULIFERA.

A plant growing in Queensland and Tropical America. The herb is collected when in flower and carefully dried.

It has been recommended in spasmodic asthma and bronchial affections; in coryza and hay fever; and in spasmodic dyspnoea of whatever origin.—*L.* '85, ii. 86; *T.G.* '85, 92; *M.A.* '93, 260; '94, 20; *Y.B.T.* '94, 32.

Preparations.

EXTRACTUM EUPHORBIE PILULIFERE.—Obtained by the evaporation of an Alcohol (60 p.c.) Tincture.

Dose.— $\frac{1}{2}$ to 1 grain.

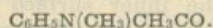
TINCTURA EUPHORBIE PILULIFERE (B.P.C.)—Euphorbia in No. 20 powder, 4; Proof Spirit to percolate 20.

Dose.—10 to 30 minims.

Not Official.

EXALGIN.

METHYLACETANILIDE.



This crystalline substance, which was described by Hofmann in 1874, has been more recently submitted to physiological experiment and found to possess analgesic and, to a much less degree, antipyretic properties.

Solubility.—1 in 50 of Water; 1 in 2 of Alcohol (90 p.c.); 1 in 4 of Alcohol (60 p.c.); 1 in 2 of Chloroform; 1 in 10 of Ether.

In hot water Exalgine is very apt to form supersaturated solutions, which when cold will not separate even when stirred or scratched, but set solid at once on the addition of a fragment of crystal.

Medicinal Properties.—In small doses it acts as an analgesic without producing ill effects, giving the best results in neuralgia and toothache.—*B.M.J.* '90, i. 344, 558; '90, ii. 735; *P.J.* (3) xix. 781, 861; *T.G.* '89, 339, 534, 746, 797; *L.* '89, i. 658; '90, ii. 845; '92, i. 1174, 1175; '93, i. 785. In large doses it possesses toxic properties.

Dose.— $\frac{1}{2}$ to 1 grain was found sufficient by Fraser, but larger doses, 4 to 8 grains, have been given in France.

Foreign Pharmacopœias.—Official in Fr. and Mex., not in the others.

Prescribing Notes.—May be given in Mixtures, previously dissolving it in a little Alcohol, or Tincture before adding the Water. A nice pill mass is made by adding Glucose q.s. or $\frac{1}{2}$ grain Compound Tragacanth powder to each 3 grains of Exalgine and Dispensing Syrup q.s. It may also be conveniently given in **cachets**. Compressed Tablets are also prepared.

Preparation.

MISTURA METHYLACETANILIDI (*L.H.*).—Methylacetanilide 3 grains, Syrup of Orange Peel 1 fl. drm., Chloroform Water to 1 fl. oz.

EXTRACTA.

EXTRACTS.

The following is a complete list of the Extracts of the British Pharmacopœia, the mode of preparation for which will be found under the names of the drugs from which they are prepared:—

DOSE.	EXTRACTUM.	MENSTRUUM.
1 to 4 grains.	ALOEES BARBADENSIS.	Boiling water.
2 to 8 grains.	ANTHEMIDIS (flowers and oil).	Water.
$\frac{1}{4}$ to 1 grain.	BELLADONNÆ ALCOHOLICUM (liquid extract)	
	EXTRACTUM BELLADONNÆ LIQUIDUM (root) (standardised).	Alcohol (90 p.c.) and cold water.
$\frac{1}{4}$ to 1 grain.	BELLADONNÆ VIRIDE (juice of fresh herb).	
$\frac{1}{4}$ to 1 grain.	CANNABIS INDICÆ (dried herb).	Alcohol (90 p.c.)
2 to 8 grains.	CASCARÆ SAGRADÆ (dried bark).	Cold water.
$\frac{1}{2}$ to 1 fl. drm.	CASCARÆ SAGRADÆ LIQUIDUM.	Cold water.
5 to 30 minims.	CIMICIFUGÆ LIQUIDUM.	Alcohol (90 p.c.).

DOSE.	EXTRACTUM.	MENSTRUM.
5 to 15 minims.	CINCHONÆ LIQUIDUM (Red bark).	Hydrochloric acid, Glycerin & Water.
$\frac{1}{2}$ to 1 fl. drm.	COCÆ LIQUIDUM (dried leaves).	Alcohol (60 p.c.).
$\frac{1}{4}$ to 1 grain.	COLCHICI (juice of fresh corms).	
2 to 8 grains.	COLOCYNTHIDIS COMPOSITUM (pulp)	Alcohol (60 p.c.).
2 to 8 grains.	ERGOTÆ (dried Ergot).	Alcohol (60 p.c.).
10 to 30 minims.	ERGOTÆ LIQUIDUM (dried Ergot).	Cold water.
1 to 2 grains.	EUONYMI SICCUM (dried bark).	Alcohol (45 p.c.).
45 to 90 minims.	FILICIS LIQUIDUM (dried rhizome).	Ether.
2 to 8 grains.	GENTIANÆ (dried root).	Water.
	GLYCYRRHIZÆ (dried root).	Cold water.
$\frac{1}{2}$ to 1 fl. drm.	GLYCYRRHIZÆ LIQUIDUM.	Cold water.
5 to 15 minims.	HAMAMELIDIS LIQUIDUM.	Alcohol (45 p.c.).
5 to 15 minims.	HYDRASTIS LIQUIDUM.	Alcohol (45 p.c.).
2 to 8 grains.	HYOSCYAMI VIRIDE (juice of fresh herb).	
Expectorant, $\frac{1}{2}$ to 2 minims.	IPECACUANHÆ LIQUIDUM (dried root) (standardised).	Alcohol (90 p.c.).
Emetic, 15 to 20 minims.		
5 to 15 minims.	JABORANDI LIQUIDUM (dried leaves).	Alcohol (45 p.c.).
2 to 8 grains.	JALAPÆ (dried root).	Alcohol (90 p.c.), and cold water.
5 to 15 grains.	KRAMERLÆ (dried root).	Cold water.
$\frac{1}{4}$ to 1 grain.	NUCIS VOMICÆ (liquid extract) (standardised).	
1 to 3 minims.	NUCIS VOMICÆ LIQUIDUM (dried seeds) (standardised).	Alcohol (70 p.c.).
$\frac{1}{4}$ to 1 grain.	OPII (standardised).	Cold water.
5 to 30 minims.	OPII LIQUIDUM (extract) (standard- ised).	
$\frac{1}{2}$ to 2 fl. drm.	PAREIRÆ LIQUIDUM (dried root).	Boiling water.
$\frac{1}{4}$ to 1 grain.	PHYSOSTIGMATIS.	Alcohol (90 p.c.).
2 to 8 grains.	RHEI (dried root).	Alcohol (60 p.c.).
2 to 4 fl. drm.	SARSÆ LIQUIDUM (root).	Alcohol (20 p.c.).
$\frac{1}{4}$ to 1 grain.	STRAMONII (dried seeds).	Alcohol (70 p.c.).
$\frac{1}{4}$ to 1 grain.	STROPHANTHI (dried seeds).	Ether (rejected) and Alcohol (90 p.c.).
5 to 15 grains.	TARAXACI (juice of fresh root).	
$\frac{1}{2}$ to 2 fl. drm.	TARAXACI LIQUIDUM (dried root).	Alcohol (60 p.c.), and Water.

For Liquid Extracts in India see Appendix.

Extracts which are not official are enumerated in the Index.

Extracts and the determination of their alkaloidal values.—*P.J.* '96, ii. 161; '97, ii. 517.

Examination of commercial Fluid Extracts.—*A.J.P.* '95, 291; *P.J.* '95, ii. 242.

The Liquid Extracts of *B.P.* '98.—*C.D.* '98, ii. 458.