have the cardiac muscle in a state of contraction resembling cadaveric rigidity. It does not act through the nervous system, but paralyzes the muscular tissue, striated and non-striated, by direct contact; and when contractility has been once destroyed thereby no stimulus will re-excite it. It does not affect the vascular system directly. The influence of one injection of gr. 1/8 of Strophantin on the circulation in said to have lasted eight days. Strophantus differs from Digitalis in being less irritant to the stomach, more rapid in its cardiac action, more quickly eliminated and therefore not cumulative, more powerfully diuretic, and having no direct contractile influence on the vessels. It has little or no action upon the general nervous system, but its active principle Strophantin is a powerful local anesthetic and a myotic when applied to the conjunctiva.

Therapeutics.

Strophantus is undoubtedly a valuable cardiac stimulant, from the rapidity and permanence of its action, as well as its non-interference with the caliber of the peripheral vessels. It promptly relieves cardiac dyspnea, often modifies the pulse-rate in less than an hour, while the influence of a single dose upon the circulation persists for a long time. It may well replace digitalis in the treatment of chronic Bright's disease and valvular lesions of the heart, when it is important that the work of the heart should not be increased by any additional resistance in the arterial system. It has been reported as exceedingly useful in the treatment of Bright's disease for the dyspnea, orthopnea, dropy and uremia; also in mitral insufficiency with great anasarca and dyspnea, in palpitation, exaggerated cardiac action, in weak heart, and for ophrydaches with tumultuous action of the heart; also in pulmonary edema due to valvular lesions or to pneumonia. It is useful in endocarditis, also in atheroma of the arteries, in reflex palpitation of the anasthesia, hysteria and chlorosis, and for rigors due to catzetherization or operations on the urethra. Notwithstanding its undoubtedly valuable, it has not become popular with the medical profession, by reason of the uncertainty of the pharmaceutical preparations on the market.

Oxathine is an extremely active poison, paralyzing the cardiac muscle by direct action. It is a powerful emetic, especially when given hypodermically; also a potent local anesthetic, being considered by many observers as superior to Cocaine in this respect. In therapeutic doses it does not seem to affect the body-temperature, but increases irritation, either by stimulating the blood-pressure or by paralyzing the sphincter vesicles. It also promotes defecation, probably by stimulating peristalsis. Very small doses give some evidence of action similar to that of Digitalis. It has been used with striking benefit in all stages of pernicious; and to some extent as a local anesthetic for the eye.

STYRAX, Styrax,—is a balsam prepared from the wood and inner bark of Liquidambar orientalis, the Oriental sweet-gum, a tree of the nat. ord. Hamamelidaceae, growing in Asia Minor. It is semi-fluid, sticky, opaque and gray-colored, of agreeable odor and balsamic taste, completely soluble (except acanthic impurities) in an equal weight of warm alcohol.

SUCCINUM,—Sulphonomethanum. It contains a volatile oil named Styrax, C_9H_8O_2, a crystalline solid, Styraxin, which is a mixture of styraxin itself; two peculiar resins, one hard, the other soft; and Citramalic Acid, calcium styraxin, and an Higginsian Acid, and occurring also in the Balsams of Peru and Tolu. Dose of Styrax, gr. x-xv [av. gr. xvi].

Styrax is a stimulant expectorant, an antiseptic and a disinfectant, acting both locally and remotely, like benzoin and the balsams. It is used with benefit in chronic bronchitis and influenza, like benzoin and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams. It is used in tumors and the balsams.
SULPHONEMETHANUM.

if insufficient in practice, would make Trenoral the most powerful hypnotic of the three, but it is scarcely heard of in practice. It is patented in this country, though produced by a foreign manufacturer. Dose, gr. x-xxx.

Verminal, Diäthyläthylenäuren, C₃H₇N₂O₃, is a white, crystalline powder, of faintly bitter taste, soluble in 145 of water, and in 19 of boiling water. Dose, gr. v-vv, an average dose being gr. v½, in some hot liquid, or in cachet, or as a powder.

PHYSIOLOGICAL ACTION AND THERAPEUTIC.

Sulphonal was introduced several years ago as a harmless hypnotic which would produce sound and quiet sleep without unpleasant after-effects, without intoxicant or narcotic action, and having no unfavorable effects on the heart or circulation even in full doses. It rapidly came into general use as a hypnotic in mental diseases, in nervous insomnia and in sleeplessness from various causes. Many competent observers have recorded instances of toxic action following its use, and opinions are now greatly divided as to its therapeutic value. If it were not for the very evident advantage of the drug when used with care and under medical supervision, it would stand a very fair chance of being either excluded from practice or restricted by law (Squibb). Its prolonged use has caused noises in the ears, headache, vertigo, weakness and incapacity for mental or physical exertion. The subject may pass into a condition of drowsiness or stupor, or may suffer from difficulty of speech; and ptoisis, edema of the eyelids and cyanosis may be experienced. In one case a single dose of 20 grains caused edema of the lower limbs after a very restless night. In another a dose of 30 grains taken nightly for 15 months was accompanied by complete cessation of menstruation. It has produced persistent skin eruptions in some cases and severe functional disturbances in others. The chief characteristics of chronic poisoning by this drug are as follows:—disturbances of digestion, shown by vomiting and diarrhoea or constipation; disturbances of the nervous system, as ataxia and feebleness of the limbs, ptoisis and ascending paralysis; also leucocytosis and oliguria, sometimes albuminuria or hematuria. In order to secure elimination and to guard against cumulative action and consequent toxicity, its administration should be interrupted from time to time, and the patient taking it should be frequently purged.

As a hypnotic Sulphonal acts admirably in many instances, if administered in hot fluids and about two hours before its action is required; but its efficacy decreases with age, and it is of no value whatever against insomnia due to pain. The average hypnotic dose is about 20 grains for a woman and 30 grains for a man. The dose is to be administered only once daily, and should be discontinued at the first sign of toxic action. In no case should its administration be continued over any great length of time. In cases of insomnia due to neurasthenia and nervous excitement, the dose of sulphonal may be advantageously combined with a small dose of morphine, in proportion to suit individual cases, the mixture forming a safe and efficient hypnotic. An excellent hypnotic combination is made by mixing together 10 or 15 grains each of sulphonal and trional, to be taken in some hot liquid at bed-time. The trional producing early sleep and the sulphonal effects being manifested later, the patient will usually obtain a more prolonged result from the small dose of each agent administered together than from a larger dose of either alone.

Trenoral is an efficient hypnotic, acting more rapidly than sulphonal, and usually without cumulative action or unpleasant after-effects. Several cases of poisoning, including three deaths, have been reported as caused by it, and in one case its prolonged administration gave rise to multiple neuritis and hematuria (Hart). It has been used with satisfaction as a hypnotic and sedative for the insane and in the treatment of narcocephalia. It acts well in chorea, and as an alternating substitute for the bromides in epilepsy. It is said to be particularly efficient in cases of slight psychical excitement accompanied by obtrusive insomnia, also in many forms of delirium. When pain is present it may be administered in conjunction with phenantron or acetanilide. When used for any long period the daily dose of the bowels should be obtained, an alkaline water should be freely administered, and the drug be intermitted every week for one or two days.

Ethyl Carbamate (Urethane) is a mild hypnotic for adults, but a safe and efficient one for children. It stimulates the respiration, and in medicinal doses does not affect the circulation; but in very large quantity it slows the heart, depresses the body temperature, and induces muscular relaxation and some degree of general anesthesia.

Trenoral is theoretically more hypnotic than trional, but has not proved to be efficient in practice and often causes vomiting. It is rarely used in this country.

Verminal is a very efficient hypnotic in doses of 8 to 10 grains, given in some hot liquid when a rapid action is required. It induces a practically normal sleep, does not affect the heart, circulation or kidneys, and is free from after-effects. It is particularly efficient when mixed with Sulphonemethane (Trenoral) in the proportion of two parts of the former to one of the latter, (gr. vij with gr. iv, or gr. x with gr. v). It sometimes causes some motor inco-ordination, especially of the lower extremities, also an oxyhemoglobinism and urination, and is said to diminish the solid and urinary excretions.

SULPHUR, and SULPHIDES.—The non-metallic element Sulphur, S, is a brittle solid of a pale yellow color, permanent in the air, of crystalline texture and susceptible of several allotropic states, which are for the most part induced by heat. It is obtained native in several volcanic districts, or from the native Sulphides of Iron and Copper (iron and copper pyrites) by roasting, as it sublimes at about 238° F. It is official in three forms, viz.—

Sulphur Sublimatum, Sulphur, S,—is prepared from crude Sulphur by sublimation and condensation. It is a fine citron-yellow powder, of faintly acid taste and acid reaction, inodorous in water or alcohol. Ignited it burns with a blue flame, forming sulphurous acid gas, and leaving no residue or only a trace. Dose, gr. x-xx [rv. 5v].

Sulphur Lotum, Washed Sulphur, S,—prepared by digesting sublimed sulphur with dilute water of ammonia, thoroughly washing with water and passing through a sieve. In this process the ammonia dissolves out any sulphide
of arsenic which may be present and neutralizes any sulphurous or sulphuric acid. For its solubility and dose see Sulphur Peculiarities below.

**Sulphur Peculiarities.** Precipitated Sulphur. *Lac Sulphurum, Milk of Sulphur,*—is prepared by boiling sublimed Sulphur with slaked lime and water, forming the sulphide and hyposulphide of calcium, which are then decomposed by HC1, and Sulphur is precipitated as a very fine powder which is next washed until the washings are tasteless, and dried with a gentle heat.

The result is a very fine, yellowish-white, amorphous powder, colorless and almost tasteless, insoluble in water or alcohol, but completely soluble in carbon disulphide or in a boiling solution of soda. By heat it is completely volatilized.

Dose, gr. 2-5 [av. 5].

**Preparations of Sulphur.**

Unguentum Sulphuris, *Sulphur Ointment,*—has of Washed Sulphur 15, Remaninated Lead 8, rubbed together until thoroughly mixed.

Putridity Glyceritum Compositum, *Compound Laxative Powder* (see under Glycerin),—contains 6 per cent. of Washed Sulphur. Dose, 3-6 [av. 5].

Sulphurous Acid and the Sulphides are described under ACIDUM SULPHURICUM; the Sulphates under the titles of their respective bases. For Sulphuric Acid see ACIDUM SULPHURICUM.

**Sulphides.**

Calcis Sulphurata, *Sulphurated Lime, (Crude Sulphide of Calcium),—is a mixture of CaS, CaS04, and Carbon. In varying proportions, containing as least 60 per cent. of the first. A pale grey powder, of offensive taste and smell, and alkaline reaction, insoluble in alcohol, very slightly soluble in water. Dose, gr. 1-5 [av. 2].

Calci Sulphidum, *Calcium Sulphide, CaS (Mercurothium),—a constituent of the preceding, is named Nitrum Sulphuricum, Liver of Sulphur, by the homoeopathists, who prepare it by mixing equal parts of powdered copper-ash and sublimed sulphur, and heating at a white heat in a crucible hermetically sealed. Dose, gr. 2-5.

Sulphuris Iridium, *Sulphur Iridium, (Toluid Disulphide),—is prepared by fusing together Washed Sulphur, i part, and Iodine 4. It is a greyish-black crystalline solid, having the odor of iodine, an acid taste and a faint acid reaction, insoluble in water, but very soluble in disulphide of carbon and in about 60 of glycerin. Alcoholic and ether extracts of the Iodine, leaving the sulphur. Used only as ointment, gr. xx to the 3.

Hydrogen Sulphidum, *Hydrogen Sulphide, Sulphured Hydrogen, H2S,—is used only for first purposes, a saturated, aqueous solution being one of the official reagents. It is a colourless gas, having the odor of rotten eggs, prepared by the action of dilute sulphuric acid on iron sulphide. It precipitates most of the metals from acid solutions as sulphides, that is, with arsenic, being yellow; with antimony, orange; with cadmium, yellow; with copper, Lead, mercury and silver, black; with brass, brown, and with gold and platinum, bluish-black.

Carbon Disulphide is described under CARBONISIUM.

**Unofficial Allied Compounds.**

Icthyolcum, *Icthyol, Ammoniacum Sulpho-kinothiolatum, CaH6SO(NH4)2,—is prepared from the product of the distillation of bichromatic naphtha from the Tyrol which contains fossil fish. It occurs as a viscous, reddish-brown mass, of tarry odor and appearance and feeble alkaline reaction; insoluble in water and in a mixture of alcohol and ether; volatizes in all proportions with glycerin, tans and oils. It contains a large proportion of Sulphur, about 60 per cent. Dose, gr. 1-3, up to 5-6 daily, in pills or capsules, or dissolved in peppermint water. Sulphocyanates of Iodium, Sodium, and Zinc are on the market.

Icthybath, *Icthyol Albuminatum,—occurs as a greenish-brown powder, odorless and almost tasteless, insoluble in water but soluble in ethyl alcohol. It contains 75 per cent. of Icthyol, and is used in ophthalmia, and in scrofula with a lowered condition of nutrition. Dose, gr. 5-20, three daily.

Icthyargan,—is the trade name of a compound of Icthyol and Silver, described under the title ARGENTUM.

**Icthosulphurin,**—is a chemical compound of Icthyol and Formaldehyde, and occurs as a dark-brown, practically odorless powder, insoluble in the usual solvents. Dose, gr. 1-3, three daily.

Sulphaminol, *Thiobutyl-diphenyl-sulphon,—obtained by the action of sulphur on salts of mono- and di-phenylamine. It is an insoluble, yellowish-white powder, insoluble in water, but soluble in alkaline solutions, alcohol, and glacial acetic acid. It readily breaks up, yielding sulphur and phosgene. Dose, gr. 2-3.

Thigaron,—is the trade name of a solution of sodomic sulphite in a synthetic sulphurated water, containing 10 per cent. of sulphur in organic combination. It occurs as a dark-brown syrup fluid, soluble in distilled water, alcohol, or glycerin. It is odorless and almost tasteless, and is used locally in eczema, seborrhea, acne comedon, and other skin diseases. Dose, gr. 2-3.

Thiolam, *Thiol,—is prepared by the sulphuration of certain non-saturated hydrocarbon, and is a product very similar to Icthyol. It occurs in both liquid and solid form, the former, Thiolam stearum, as dark-brown lamellar powder, of bichromatic odor and bitter, the latter, Thiolam caprum, an aromatic substance, soluble in water and in chloroform, especially in alcohol, insoluble in ether and in benzine. The liquid form, Thiolam liquescent, is a dark-colored, syrupy fluid, miscible in all proportions with water. Dose, internally, gr. 5-30.

**Physiological Action.**

Sulphur used externally is a mild vascular stimulant, causing slight dilatation of the vessels, and in some persons producing eczema. Applied to raw surfaces it is converted into sulphurous and sulphuric acids, and is powerfully irritant. It is parasiticidal, especially to the itch-mite. Taken into the stomach it has no effect on that viscus, and most of it passes out in the feces unaltered; but a portion is converted in the intestinal canal by the alkaline bile into hydrogen sulphide and then other sulphides, which are mildly laxative and diaphoretic. The former is excreted by the lungs, giving to the breath the smell of rotten eggs, also by the skin, discoloring silver articles carried about the person by forming a sulphide of silver. The Sulphides are partly absorbed into the blood and are excreted in the urine, chiefly as sulphates, and in the feces, which they blacken and render soft. Given in full doses they are irritating to the stomach and intestines, extremely nauseous to the taste and smell, increase the secretions of the intestinal glands, produce peristaltic action, and if used for any length of time they impair the blood, causing anaemia, emaciation, tremor and great debility.

Hydrogen Sulphide is very destructive to plant life. In animals it destroys the tissue functions, decomposing the blood and paralyzing the nervous and muscular systems. The symptoms of poisoning are those of asphyxia; muscular tremors occur and are followed by convulsions and death. This gas is often found in cesspools in large quantities, but in one case poisoning occurred.
SULPHUR.

from its excessive formation in the intestines and subsequent absorption into the blood.

Calx Sulphurata and Potassa Sulphurata are parasiticides and act like the sulphides as local irritants and in large doses as irritant poisons, producing narcotic symptoms and convulsions. In small doses they act like sulphur, and are supposed by many observers to have a special influence on suppuration, limiting or preventing it if given in small doses frequently repeated.

The Iodide is believed to possess some of the properties of both its elements. It is doubtful whether it is a distinct chemical compound or merely a physical mixture. As a parasiticide it is very efficient, and has been found remarkably alterative in many local affections of chronic character, but may prove very irritant to the skin if improperly prepared.

The actions of Sulphuric Acid, of Sulphurous Acid and of the Sulphites are respectively described under the titles Actioes Sulphurturm and Actioes Sulphureum; those of the Sulphates under the titles of their respective bases.

Therapeutics.

Sulphur is chiefly used as a laxative when pulvaceous rather than liquid stools are required, as in hemorrhoids and anal fissure, also in constipation. Scabies has long been treated by its local and internal use, but sulphur alone does not kill the itch insect. The older sulphur ointments were made with sublimed sulphur, and probably contained a considerable amount of sulphurous acid, on which their parasiticide property depended. The later ointments, made with purified sulphur, all contain an alkaline ingredient and develop sulphides, which are powerful insect poisons. Sulphur fumigations are practically applications of volatile sulphurous acid, while most of the sulphur baths and sulphurous mineral waters are solutions of sulphuretted hydrogen or of the alkaline sulphides. They are of value in lead poisoning to favor the elimination of that metal, in chronic constipation, chronic rheumatism and sciatica and many skin diseases, especially chronic psoriasis, eczema, pityriasis and prurigo. The Ointment and the alkaline ointment are both used in scabies.

The Iodide has been used internally in scrofula, glanders and cutaneous disorders, but it is chiefly employed as an ointment in lupus and parasitic skin diseases, especially herpes circinatus. Calx Sulphurata is an efficient deplaguey, and is used as a paste to remove hair from fields of operation where the razor cannot be employed. It is painless, non-irritant, leaves no trace behind, and does not prevent the subsequent growth of the hair. Internally, in doses of gr. 1/4 frequently repeated, it has been considered an efficient remedy to prevent or limit suppuration, and is used in crops of boils, scrofulous sores, carbuncles, and tuberculous glands.

Iodophyl was introduced twenty years ago, by Dr. Unna, the celebrated dermatologist, as an efficient remedy in certain chronic skin diseases, particularly eczema and psoriasis. It causes slight irritation and a burning sensation if applied undiluted to the skin, but in a 50 per cent. ointment it is not irritant, even if covered with oiled silk. As a local application its value is due to its large proportion of sulphur, which is in a similar condition to that in organic sulphides and mercaptans, and in any pharmaceutical combination would excite a dermatitis. Its application in medicine depends chiefly upon its reducing property, its antiseptic power and its contractile action upon the vascular system. Most of the affections for which it has been recommended are caused by aminous circulation, especially capillary dilatation. Used internally, it retards the disintegration of albumins and favors their formation and accumulation, checking waste and promoting assimilation without irritating the gastro-intestinal mucous membrane or interfering with digestion. It has little apparent toxic action on the general system, though instances of poisoning are reported as caused by its free use in eczema infantile, and in the curedt uterus. It is an intestinal antiseptic, is analgesic and antiphlogistic, and has remarkable power over exudations, promoting their absorption and alleviating the pain due to them, when given internally and applied externally at the same time. For these purposes it has been highly praised in gynecology and even in pleurisy. For chronic rheumatism a 50 per cent. ointment is used locally and the remedy is also given internally. It has done excellent service in erysipelas and in ulcers of the leg, locally applied in ointment form with Lanolin or pure; and internally in various affections of the digestive and intestinal tract, also in pithiosis, syphilis and leprosy. In gynecology it is combined with glycerin (1 in 10); it is used with turpentine as a liniment for rheumatism, or with an equal weight of a mixture of lanolin and olive oil and 50 per cent. of chloroform; and against erysipelas as a 10 to 20 per cent. collodion, with or without castor oil. Applied as a thick ointment it is very serviceable in many skin diseases, especially furunculosis, impetigo contagiosa, folliculitis of the scalp, impetiginous eczema, acne, herpes genitalis and sycois barbe. In varicela, a 20 per cent. ointment is successfully used, giving prompt relief to the local symptoms, shortening the course of the disease, and preventing pitting; and in other eruptive fevers it alleviates itching and controls the dermatitis. It is an efficient application in chronic joint affections, acute sprains, acute articular rheumatism, fissures of the nipples and anus, and in almost every form of subacute and chronic gout, in lymphatic enlargements, and in all diseases depending on hyperemia and capillary dilatation. For internal administration it should be prescribed in neutral aqueous solutions or in capsules, as it is decomposed in acid or alkaline solutions.

Iodoform is a harmless intestinal antiseptic and has been used internally with much satisfaction in acute gastro-enteritis, chronic gastric catarrh, dysentery, the diarrhea of tuberculosis and typhoid fever, chronic intestinal catarrh, and intestinal fermentation. Locally it is applied with benefit in endometritis, eczema, wounds, ulcers, and other lesions for which iodoform is considered applicable.

Thigienol has been employed with excellent results in various types of eczema, in seborrhea, and in acne rosacea. Sulphamido by insufflation has given satis-
fraction in tuberculous laryngitis and diseases of the antrum and frontal sinuses, also in doses of 0.4 internally in cystitis.

Typhoid causes neither pain, burning, nor other symptoms of irritation, nor any bleeding from eroded surfaces. The dry form is used as a dusting powder in crysipelae, eczema, erythema, intertrigo, impetigo, pemphigus, pemphigoid, subcutaneous hemorrhages, and syphilitic ulcers. It is an efficient application in plica cutaneus and endometritis.

Tumoral is said to owe its therapeutic value to its reducing power rather than to the sulphur in its composition. It is of no service in crysipelae, and is not a parasiticide; but has rendered good service to moist eczema, eruptions, excoriations and superficial ulceration. The tincture is an efficient application in all forms of puritis.

SUMBUL,—is the dried rhizome and root of an undetermined plant, probably of the nat.ord. Umbelliferae, growing in northern Asia. It contains Angélov and Valeric Acid, also a volatile oil, balsamic resin, and a bitter principle. Dose, gr. 1-5 [av. gr. 3-5].

Flosbullus Sumbuls, Flosbullus Sumbul.—Dose, gr. 1-5 [av. gr. 3-5].

Extructum Sumbuls, Extract of Sumbul.—Dose, gr. 3-5 [av. gr. 3-5].

Sumbul is an efficient nerve tonic, having qualities closely resembling musk and valerian. It is used by the Russian physicians in very many morbid conditions and seems to be a favorite remedy in that country for almost any disease. It is probably of some value in hysteria and other nervous derangements of delicate females, and may be used as a substitute for musk in typhoid conditions and fevers, asthma, delirium tremens and perhaps in epilepsy.

TABACUM, Tobacco (Unofficial)—is the commercial dried leaf of Nicotiana Tabacum, an annual plant of the nat.ord. Solanaceae, native of tropical America, but cultivated in several parts of the world, especially in Cuba and Virginia. The leaves contain a very poisonous, oily fluid alkaloid named Nicotine, C₅H₅N, which consists of Pyridine, C₅H₅N, and a hydrated pyrrol ring, occurs in the plant as a malate, and varies in quantity from 1 to 10 per cent. in different specimens. Tobacco contains also a volatile, camphoraceous principle named Nicotannin, the existence of which is denied by some analysts, besides potassium and calcium salts (nitrates and phosphates), silica, gum, resin, and other substances.

The proportion of Nicotine in tobacco is stated at 6 in 10,000 parts (0.06 per cent.) by Plessch and Reimann, but other analysts have found 0.1 per cent. in Havana tobacco and more than 8 per cent. in French tobacco. Turkish tobacco is said to contain little or none. The effect of curing undoubtedly produces chemical changes but chemists differ as to whether the proportion of nicotine is greater or less after that process.

According to Zeise (1843) and Voel and Eilenberg (1872), tobacco-smoke contains no nicotine, but does contain a series of empyreumatic products, the result probably of its decomposition, viz.—pyridine, collidine, picoline, parviline, etc. Of these, Pyridine C₅H₅N, predominates when tobacco is smoked in a pipe, but Collidine C₅H₅N, which is far less active, predominates when there is free access of air as in smoking cigars. Tobacco-smoke also contains Carbon Dioxide, CO₂, of which the amount determines the average proportion to be 9.3 per cent., and to which he credits much of the injurious effects of smoking in young subjects. It also contains cresole, hydrogen cyanide and sulphide gases, also several acids, including acetic and valeric acid.
TAMARINDUS. Tamarind.—is the preserved pulp of the fruit of Tamarindus indica, a large tree of the nat. ord. Leguminosae, native in the East and West Indies. It contains citric, tannic and malic acids; sugar, gum, potassium lactate. Dose. 3–5 ml [av. 5 ml].

TANACETUM—TERREBINTHINA.

Confreto Serensive, Confiture de Serensis.—contains Tamarind to the amount of 20 per cent. Dose. 5–10 ml [av. 5 ml]. (See under SERENES.)

Tamarind is a laxative and refrigerant fruit. In infusion it may be used by convalescents as a pleasant acidulous drink, or the pulp may be boiled with milk as a whey for the same purpose. As a laxative it is usually prescribed in connection with other agents having the same action.

TANACETUM, Tansy (Unofficial)—the leaves and tops of Tanacetum vulgare, a perennial, herbaceous plant of the nat. ord. Compositae, indigenous to Europe but cultivated in gardens and growing wild in old fields. It contains a volatile oil, a bitter principle Tanacetin, a tannin, cinchona, etc. A fumigant may be prepared according to the general rules and administered in doses of not more than 0.3 g. The dose of the volatile oil (Oleum Tansai) is 3 to 6 drops. An infusion (Tansy Tea) may be made in the proportion of 1:10 to the pint, and used in doses of not more than 30 ml.

Tansy is emmenagogue, diuretic and anthelmintic, an aromatic bitter and an irritant nux vomica poison. Fatal results have followed upon overdoses of the oil (Tansy) or strong decoctions, preceded by convulsive spasm, disturbed respiration and cessation of the heart's action. It is a useful remedy in anaemia, but is in popular use as an abortifacient, a virtue which it does possess except in quantity dangerous to life.

TARAXACUM, (Dandelion)—the dried root of Taraxacum officinale, a part of the nat. ord. Compositae. All parts of the plant contain a bitter, milky juice, exuding from any break or wound. Its constituents are a bitter amorphous principle named Taraxerin, a crystalline principle Taraxerol, with potassium and calcium salts, resin and starch cells. The French name for the plant is Pissenlit. Dose. 5–30 ml [av. 5 ml].

Extractum Taraxaci, Extract of Taraxacum.—Dose. gr. t-v [av. gr. 1].

Fluidextractum Taraxaci, Fluidextract of Taraxacum.—Dose. 5–15 ml [av. 5 ml].

Taraxacum is a bitter tonic, a diuretic and an aperient. It has been supposed to act especially on the liver and is chiefly used in dyspepsia with hepatic disturbance. As found in the shops it is usually infested. The extract is used as an excitant for pills.

TERREBINTHINA, Turpentine.—A Turpentine means a vegetable exudation, liquid or concrete, consisting of resin combined with a peculiar essential oil named Olib Turpentine, C₁₅H₂₄O, and generally procured from various species of the nat. ord. Pineaceae. Of the many turpentines two only are official, viz.—

Terebinthina, Turpentine,—a concrete oleoresin from Pinus palustris the Yellow Pine, and other species of Pines, nat. ord. Pinaceae. It occurs in tough, yellowish masses, brittle when cold, crumzy-crystalline interiorly, of terebin-thine odor and taste. Dose, gr. v-vv as a stimulant, antispasmodic or diuretic; sij–iv as an anthelmintic.

Terebinthina Canadensis, Canada Turpentine, (Balsam of Fir),—a liquid oleoresin obtained from Abies balsamea, the Silver Fir or Balm of Gillean, nat. ord. Conifereae. A yellowish, transparent, viscous liquid, of agreeable, terbentinous odor and a bitterish and slightly acid taste, slowiy drying on exposure, forming a transparent mass; completely soluble in ether, chloroform or benzol. Dose. gr. x–xx.

Pitch and its preparations are described under the title Piax.

Unofficial Turpentines.

Chian Turpentine,—from the Pistacies Terebinthus, a small larch tree growing in the islands of Chio and Cyprus; a thick, tenacious, greenish-yellow 32