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Botanical Medicine Monographs and Sundry

PHARMACEUTICAL PREPARATIONS OF THE MEXICAN PHARMACOPOEIA. Part 2

BY THE EDITOR.

A large number of the formulas are identical or nearly so with those admitted into the French Codex, or published in Dorvault's l'Officine. In the following we select only such which differ materially from, or are not contained in the works named:

Café de Bellotas, *Pulvis glandium quercus tostarum*.—Acorns deprived of the rind are heated in a coffee roaster, until they become brittle and have lost 28 per cent. in weight, when they are ground in a coffee mill. The powder is tonic and astringent and is used like coffee, the infusion being made with 15 Gm. to I liter of water.

Capsulas medicinales, *Capsulae medicatae*. —Directions are given for preparing the empty capsules and for filling these as well as the so-called pearls. The material suitable for capsules is prepared by dissolving white gelatin 30, Irish moss paste 60, and honey in water 100 parts. If necessary greater flexibility may be imparted to the mass by adding a little glycerin.

Cataplasma anodina, *Cataplasma anodynum*. —Powdered bread crumb 125 Gm., powdered saffron 2 Gm., yelk of eggs 2, milk sufficient.

Cataplasma con subacetato de plomo, *Cataplasma cum Subacetate plumbico*.—Bread crumbs 60, Goulard's extract 30.

Cataplasma emoliente, *Cataplasma emolliens*.—Ground flaxseed, powdered round-leaved mallow, equal parts; hot water sufficient.

Cataplasms of *belladonna, conium, hyoscyamus, stramonium,* etc., are made in the same manner.

Cataplasma refrigerante, *Cataplasma refrigerans*.—Mix barley meal 185 with powdered red saunders 15 and add gradually oil of rose petals 30, and sufficient strong vinegar.

Cerato de Bell, *Ceratum ex Bell*.—Melt together white wax 100, spermaceti 50 and cold-pressed sesame oil 400.

Cerato de Galeno, *Ceratum ex Galeno*.—White wax 200, sesame oil 600, lard 200,

distilled rose-water 400.

Cerato simple, *Ceratum simplex.*—Like the preceding, omitting the rose-water.

Cervezas medicinales and **Cigarros medicinales** are the *Biéres médicinales* and *Cigares medicinaux* of French pharmacy.

Collodion morfinado, *Collodium cum Chlorhydrate morphico*,—Dissolve morphine hydrochlorate 1 in elastic collodion 30.

Crema fria, *Ceratum cosmeticum anglicum*.—White wax 30, spermaceti 60, cold-pressed sesame oil 215, rose-water 60, tincture of benzoin 15 Gm., attar of rose 6 drops.

Electuarium de Beleño opiado, *Electuarium Hyoscymi opiatum*.—Hyoscyamus seed 25, anise 25, fennel 25, castoreum 25, myrrh 25, Ceylon cinnamon 30, extract of opium 20, saffron 10; reduce to a very fine powder and incorporate with thick honey 1,000. Of this electuary 4 Gm. contain about 0.07 Gm. extract of opium.

Elixir de Jaborandi, *Elixir de Pilocarpo pinnato.*—Jaborandi 100, alcohol (60 per cent.) 600; macerate for 10 days, express, add simple syrup 400, and filter; strength 10 per cent.

Elixir de Coca del Perú is prepared in the same manner.

Emetina medicinal is the aqueous extract of the alcoholic extract of ipecacuanha.

Emplasto agglutinante, *Emplastrum picis compositum*.—Colophony 2,000, white copal 620, turpentine 250, sesame oil 150, white wax 120.

Emplasto de Belladona, *Emplastrum belladonnae.*—Exhaust belladonna leaves 250 with a mixture of ether 1 part and alcohol (60 per cent.) 4 parts, evaporate and incorporate with lead plaster 120 and Burgundy pitch 15.

The plasters of *conium*, *hyoscyamus*, *digitalis*, *stramonium* and similar drugs are prepared in the same manner.

Emplasto Cera católica, *Emplastrum Cera catholica.*—Yellow wax 500, turpentine 250, white copal 500, powdered bdellium 40, powdered olibanum 40, balsam of Peru 40.

Emplasto de Cimbron de Castilla, *Emplastrum Lavandulae compositum*.—White copal 1,000, Campeachy wax 1,000, tar 375, sesame oil 100, sweet gum (liquidambar) 180, powdered allspice 120, and the volatile oils of lavender 4, cinnamon 0.5 , cloves 1, origanum 2, anise 2 and rosemary 2. Spread upon black paper, this plaster is known as *piel divina* (divine skin).

Emplasto de Cloral, *Emplastrum cum Chloralo.*—White wax and chloral hydrate, equal parts.

Emplasto confortativo de Vigo, *Emplastrum catagmaticum ex Vigo.*—Melt together lead plaster 3,250, Campeachy wax 500, and turpentine 250, and add the following in fine powder: olibanum, myrrh, sandarac, dragon's blood, red lead and Armenian bole, of each 120.

Emplasto de Estabillo de Puebla, *Emplastrum ex Estabillo.*—Melt lead plaster 1,600, Campeachy wax 180 and rosin 60, add soft galbanum 30, incorporate with the following in fine powder: ammoniac 30, olibanum 30, zinc oxide 30, dragon's blood 16, Armenian bole 15 and camphor 15, and mix with corrosive sublimate (dissolved in alcohol) 10, oil of rosemary 10 and oil of amber 10.

Especies amargas, *Species amarae.*—Equal parts of the leaves of *Cirsium Mexicanum*, *Artemisia mexicana*, and *Erythraea stricta*.

Especies aromáticas, *Species aromaticae.*—Equal parts of orange flowers and of the leaves of *Artemisia mexicana*, rosemary, spearmint, sage, origanum. and thyme.

Especies diaforéticas, *Species diaphoreticae.*—Equal parts of the flowers of red poppy, borage, violet and elder.

Especies emolientes, *Speciesemollientes.*—Equal parts of the leaves of mallow and parietaria, and of the flowers of elder and *Gnaphalium canescens*.

Especies pectorales, *Species pectorales.*—Horehound 5, yerba dulce 15, *Adiantum tenerum* 15, liquorice root 10.

Three kinds of extracts of the narcotic herbs are recognized, namely, the inspissated juices, the aqueous made with boiling water, and the alcoholic prepared with alcohol of 60 per cent. The other extracts maybe classified according to the menstruum used, as follows:

Cold water: juniper berries, fruit of *Crescentia alata*, gentian, guaiac wood, opium, rhubarb.

Boiling water: cinchona, *Artemisia mexicana*, *Ambrosia artemisiaefolia*, *Prosopis dulcis*, walnut leaves, senna, *Erythraea stricta*, *Milleria linearifolia*, and chamomile.

Alcohol 86 per cent. followed by alcohol 54 per cent.: *Fucus vesiculosus*.

Alcohol 80 per cent.: *physostigma, nux vomica*.

Alcohol 60 per cent.: *cantharides*, cahinca root, ipecac, senega, sarsaparilla, colombo, valerian, squill, agaric, *arnica*, coca, jaborandi, *cannabis indica*, rue, savin, saffron, colocynth, poppy capsules, *conium* fruit, and the seeds of *belladonna*, *colchicum*, *hyoscyamus* and *stramonium*.

Alcohol 50 per cent.: lactucarium.

Glicerado are mixtures with glycerite of starch: sulphur in the proportion of 1:4, tannin 1: 5, potassium iodide 4: 30, and narcotic extracts 1:10. A solution is also officinal consisting of potassium iodide 5, iodine 1 and glycerin 40.

The **gum resins** of ammoniac, asafetida and galbanum are purified by emulsionizing them with about an equal weight of hot water, adding about half their weight of strong alcohol, pressing through rather coarse linen and evaporating by means of a water-bath.

Grajeas are granules, the strength directed being 0.1 Gm. for monobromated camphor, 0.05 Gm. for the valerianates of quinine, iron and zinc; 0.025 Gr. for ammonium valerianate; 0.01 Gr. for codeine and narcotine; 0.001 for arsenious acid, arseniates, strychnine, morphine and Homolle's digitalin; 0.0005 Gm. for aconitine, atropine and zinc phosphide; and 0.00025 Gm. for Nativelle's digitalin.

MATERIA MEDICA OF THE NEW MEXICAN PHARMACOPOEIA. Part 4

BY THE EDITOR.

Banderilla, *Loeselia caerulea*, Cavanilles; nat. ord. Polemoniaceae. The plant grows near Guadalupe, Pachuca, etc., and is commonly employed as a diaphoretic, emetic and cathartic.

Barbas de chivo, *Clematis sericea*, De Cand., Ranunculaceae; in the mountains of Pachuca. The bruised leaves applied to the skin for a few minutes are rubefacient, and by longer contact produce blisters and superficial ulceration; the dried leaves are destitute of these properties.

Bellota, the fruit of Mexican oaks, is used as an astringent. Dose, 12 to 15 Gm. of the powder; the decoction 15 to 30 Gm. to one liter of water.

Berros. Under this name several plants are used for their antiscorbutic and diuretic properties, namely, *Nasturtium officinale*, De Cand., *Nast. amphibium*, De Cand., *Sium angustifolium*, Lin. (also known as **berra** or **berraza**), and *Tropaeolum majus*, Lin. (also known as **mastuerzo**).

Betabel. The leaves of the cultivated *Beta vulgaris*, Lin., are laxative and emollient.

Betónica. In Mexico, *Betonica Alopecurus*, Lin., is somewhat employed as a stimulant, sialagogue and sternutatory.

Boconia, *Bocconia frutescens*, Lin., Papaveraceae; in Michoacan and other hot districts. The milkjuice, in doses of 12 to 24 drops, is used as a purgative and anthelmintic, and, mixed with water, as an application for ulcerated eyelids; the boiled and bruised leaves as vulnerary cataplasms. The extract may be used for dyeing, the colors being handsome and lasting. An analysis appears not to have been made; the milkjuice being of a yellow color, it probably contains the same or similar constituents

as celandine.

Boldo, *Boldoa (Peumus) fragrans*, Jussieu; Monimiaceae; from Chile. Used in affections of the liver and kidneys.

Bolontibi, *Cissus acida*, Lin., Vitaceae; in Yucatan. The acidulous and mucilaginous leaves, bruised, are employed in itch, tinea and other cutaneous affections; also as a maturative.

Borraja, *Borago officinalis*, Lin., naturalized in fields in Mexico. The leaves and flowers are occasionally used as a stimulant and sudorific.

Brea, the residue from the distillation of turpentine. Two kinds are distinguished in Mexican commerce: 1. **Brea de Penca**; congealed in moulds of maguey leaves, it forms elongated planoconvex cakes, yellow, glass-like, transparent and brittle. 2. **Brea de Marqueta**; in cubical cakes or broken, more or less opaque, blackish brown, somewhat empyreumatic.

Butua, *Cissampelos Pareira*, Lamarck, Menispermaceae, near Chilpancingo, in the State of Guerrero, etc. The root is fibrous, bard, externally brown, internally yellowish gray, the cross section showing concentric, easily separable layers; inodorous; taste sweet, afterwards bitter; reputed to possess diuretic properties. The juice of the leaves is used against snake bites.

Cabalonga (the seeds of *Strychnos Ignatii*, Bergius), **Cacao**, Café, **Cálamo aromatico** (calamus), **Canela** (cinnamon), **Cardamomo menor** (cardamom), **Cascarilla**, **Castóreo** (castor), **Catecú**, **Cebada** (barley) **Cebolla** (onion), **Cera de abejas** (beeswax), **Cicuta mayor** (*Conium maculatum*), **Cidra** (*Citrus medica*), **Ciruelo de España** (prunes), **Clavo de especia** (cloves), **Coca de Levante** (*cocculus indicus*), **Coca del Perú** (coca leaves), **Cochinilla** (cochineal), **Cola de pescado** (isinglass, in Mexico also obtained from *Silurus Bagre* and other fishes), **Cólchico** (tuber and seeds), **Colombo**, **Coloquintida** (colocynth), **Comino** (cumin), **Cubeba**, **Cuernecillo de centeno** (ergot), **Cuerno de ciervo** (hartshorn, from *Cervus mexicanus*, etc.), **Culantro** (coriander), **Cúrcuma**, **Cuso**. These drugs, well known in our commerce, have been admitted.

Cacahuate, *Arachis hypogaea*, Lin.; Leguminosae. The seeds are used as an aliment and for preparing the fixed oil; the root is commonly used as a substitute for liquorice root.

Cacaloxochitl, *Plumiera rubra*, Lin., Apocynaceae; in Morelos, Yucatan and other hot districts. The flowers are pectoral; the juice is used for certain ulcers and for destroying warts.

Cacomite, *Tigridia pavonia*, Persoon; Iridaceae; in Central Mexico. The bulb is rich in starch, and is boiled and used for food ; among common people it enjoys the reputation of being febrifuge.

Cainca, *Chiococca anguifuga*, Martius; Rubiaceae; Brazil, etc. The Mexican cainca is

Ch. racemosa, Jacquin, which, with other roots, is known in Brazil as *puaia* (poaya), and in Cuba as *bejuco de verraco.*

It is emetic and purgative; dose, 0.5 to 2.0 Gm., the extract 0.3 to 1.0 Gm.

Calabaza, *Cucurbita maxima*, Duchesne, and *C. Pepo*, Lin. The flowers and fruit are alimentary; the seeds, particularly those from the hot districts are taeniafuge in the dose of 60 Gm.

Calaguala is the name given to the rhizomes of different species of ferns, principally *Polypodium aureum*, Lin., having diaphoretic and pectoral properties, and used in decoction and powder; dose, 2 to 4 Gm.

Calancapatle, *Solidago montana*, Flor. Hex. ined.; the powder as a vulnerary in atonic ulcers; the decoction in lotions. Similar uses are made of *Doronicum glutinosum*, Willd., and *Grindelia glutinosa*, Dunal, known as **Calancapatle de Puebla**.

Camote, *Batatas (Ipomea) edulis*, Choisy; Convolvulaceae. The leaves are used for fodder, the roots as food, and the starch as a substitute for arrowroot. The tubers of *Oncus (Dioscorea) esculentus*, Loureiro, Dioscoreaceae, are known as **Camote the cerro**, and on account of the large quantity of starch are used for food.

Canchalagua, *Erythraea stricta*, Schiede, *E. chilensis*, Persoon, *E. jorullensis*, Kunth; Gentianaceae. Stem slender; leaves oblong-linear, rather obtuse; inflorescence in dichotomous pannicles ; corolla-lobes 4 or 5, elliptic-oblong; stigma cleft; capsule two-celled. Among other constituents Leboeuf (1868) found 9 per cent. of bitter principle. The flowering tops are used as a bitter tonic and stomachic; dose, 15 to 30 Gm. in 500 Gm. infusion.

Cántaridas. A number of Mexican beetles are employed as substitutes for cantharides, of which the following are the most important:

Triodons Barranci, Duges, *M. tridentata*, Lin. The male is 18 rum. long and 7 mm. broad; the female 44 mm. long and 10 mm. broad; color black; jaws prominent, on the inside with three strong teeth; antennae moderate, the second joint very short, the eleventh elongated and thin at the extremity; thorax small, narrower than the elytra and head; wing cases covering the greater portion of the abdomen of the male, and scarcely the second abdominal ring of the female; abdomen voluminous, soft; legs long and stout; claws yellowish, bifid. The insect is collected from June to September.

Cantharis eucera, Chev. Length 30 to 18 mm., width 9 to 4 mm.; head black, the upper half red; antennae black, moniliform in the female, the fourth to sixth joints trigonal and somewhat dilated; thorax a little broader than and about half the length of the narrow, smooth and glossy black wing cases; abdomen black, in the male the upper part red from the second to the last but one segment, and near the centre with five black dots; lives on pumpkin and other cucurbitaceae.

Mendoza and Herrera proved these insects to contain cantharidin and other

constituents of Spanish flies. The indigenous species of Triodons and Meloe were found to be more active than those of the genus Cantharis. For description, etc., see "Gaceta Médica," 1866, vol. ii, and "La Naturaleza," vol. i.

Cañafístula, *Cassia fistuloides*, Flor. Hex. ined. The fruit is 20 to 60 cm. long, indehiscent, has two longitudinal bands, and its chambers are filled with a black saccharine pulp, containing yellowish flat rhomboidal seeds. 100 parts of fruit yield 445.52 parts of pulp. The fruit of *Cassia brasiliana* is also met with in the Mexican commerce.

Cáñamo. The fruit, of *Cannabis sativa*, Lin., is used in the form of an emulsion in inflammations.

Cañuela or **Cola de caballo**, *Equisetum arvense*, Lin.; used as a diuretic and antiblennorrhagic.

Caoba, Swietenia Mahogoni, Lin.; Meliaceae. The bark is antiperiodic and astringent; dose 2 Gm.

Capitaneja, *Bidens* (*Platypteris*, Kunth; *Verbesina*, De C.) *crocata*, Cavanilles; Compositae. In the valley of Mexica, southwest of the capital. Stem stout, four-winged, villous; leaves opposite, villous, the lower ones halbert-shaped, the upper ones pinnatifid and dentate; flowers terminal and axillary, long-peduncled, with the involucre globose, the tubular florets reddish yellow, and the akenes oblong, compressed, two-awned and membranous on the margin. Instead of this plant *Helianthus alatus*, Flor. Mex. ined., is sometimes collected, which has alternate and dentate leaves, a terminal inflorescence and yellow flowers. The decoction is used as a wash for venereal ulcers, together with the powdered leaves; also for curing the sores of beasts of burden.

Capulin, *Cerasus Capollin*, De Cand.; grows in temperate regions of Mexico. The fruit is edible; the distilled water of the leaves is a substitute for cherry laurel water; the bark is antidysenteric and antiperiodic; dose 1 to 2 Gm.

Caraña, *Amyris Caranna*, Humboldt, Terebinthaceae (Rutaceae). In the hot districts of Mexico the tree yields a resin which is externally dark gray, internally dark brown, when heated of a balsamic odor, of a bitter resinous taste, completely soluble in alcohol; it is only used in plasters.

GLEANINGS IN MATERIA MEDICA.

BY THE EDITOR.

Trehala which is used as food in Syria, has been investigated by Guibourt (1858), Berthelot and Hanbury. It is a cocoon formed upon a species of *Echinops* by a beetle which has been named *Larinus nidificans*, Guibourt, *L. subrugosus*, Chevrolat, and *L. maculatus*, Faldermann. The same substance has now been further examined by Dr. G. Apping (Thesis, Dorpat, 1885). His chemical analysis yielded moisture 10.78, ash

2.79, fat and chlorophyll 0.16, *trehalose* 23.84, tannin and citric acid traces; albuminoids soluble in water 8.09, soluble in soda 1.88, and insoluble in both liquids 2.31 ; cellulose like substance derived from starch 24.90 ; true starch 6.72; mucilage soluble in water 7.60, and mucilage insoluble in water 10.93. The most important constituents, *trehalose*, starch and mucilage, were fully examined, and inquiries were made into the origin of *trehala.* The cocoon is a product of the larva, but the material for this structure, although of vegetable origin, cannot have been derived from the plant, upon which it was built, since Apping found the pith and other portions of the tissue of the stems to be entirely free from starch and from trehalose, while the granules detected in portions gnawed by the larva were observed to be outside of the cell walls ; these microscopic observations were verified by Professor Russow.

Products of Xanthorrhoea. Baron Ferd. von Mueller (Zeitschr. Oesterr. Apoth. Ver. 1885, 293) gives an account of the geographical distribution in Australia and Tasmania of the different species of this genus and of their resinous products, which of late years have been extensively exported by Messrs. William Somerville and Henry Willis who prefer the resin of *X. hastilis, X. quadrangulata* and *X. Tateana* for various reasons; *X. Preissii* yields one of the best resins, and is widely distributed in Western Australia. The resin of *X. hastilis* is known as gum acroides, is yellow and lighter colored than the other kinds, usually more sticky, and less inclined to become pulverulent; it is rather fragrant, but less so than the resin of *X. quadrangulata*. A comestible gum somewhat resembling tragacanth is sometimes deposited in the trunk in vertical concentric layers. 300 tons of the resins of X. hastilis have been exported in one year, and at one time the price rose to £65 per ton for the best quality, but for ordinary quality is from £7-10, One trunk yields on an average 5 pounds of resin which exudes from the persistent rudiments of the leaf bases, the exudation being sometimes increased by bush fires.

The resin of *X. Tateana* is dark reddish-brown, like the resin of *X. australis,* but dryer; a trunk yields about 20 pounds, and during the collection of the resin is destroyed; the value is about £25 per ton.

The author has sometimes seen masses of resin weighing 50 pounds at the base of the trunk of *X. australis,* most probably the produce of several years melted together by repeated fires. *X. semiplana* is stemless and produces little resin. *X. minor* is matted, the tufts of leaves being approximate and radical. In wet soil *X. Preissii* remains stemless.

The resin of *X. quadrangulata* is dark, glossy and of an agreeable odor resembling that of honey and benzoin; on exposure it becomes somewhat powdery, but is also found as small globular masses at the base of the trunk. *X. arborea* has the persistent bases of the leaves of previous years very short, and the resin is rather difficult to collect; the yield a of trunk is about 3 pounds, and the resin is almost ruby colored.