

PHARMACOPŒIAL VEGETABLE DRUGS.

Nicolaus Poll (517), 1517; Leonard Schmaus (578), 1516; and Ulrich von Hutten (332), 1518, by whom it is given a place. Oviedo (487), who landed in America in 1514, observed the tree, which was called by the natives *Guayacan*. This drug, and its resin as well, was used empirically in domestic (native) medicine before its introduction to the profession.

Resin of Guaiacum is a product obtained from slow combustion, wherein, by a crude method, a horizontal guaiacum log, raised from the ground, is slowly burned, the resin collecting in grooves that are cut in the logs. It is used more extensively than is the wood.

GUARANA

Guarana, a dried paste from the crushed seeds of *Paullinia cupana*, was introduced into France from South America by a French officer in 1817, as a product of an unknown plant, this paste being made and used by the tribe of Indians (Guaranis) from whom it took its name. In 1826 Martius (409) identified the plant, which is called *Paullinia sorbilis* in deference to Simon Paulli (493). In 1840, (Am. Journ. Pharm., pp. 206-208), Dr. Gavrelle presented a specimen of guarana to the Paris Society of Medicine, the same being analyzed by M. de Chastetus, who discovered "a crystallizable matter, which possessed the chemical properties of caffeine." In 1888 Professor H. H. Rusby (564) (Amer. Jour. of Pharm., p. 267) authoritatively described the manner in which the natives prepared Guarana from the seed, and in their crude way produced the smoked sausage-like rolls familiar in commerce. The date of its discovery by the Indian tribes whose preparation and use of the substance as "a stimulating substance" led to its European notice, is lost to record.

HÆMATOXYLON

Logwood (*Hæmatoxylon campechianum*, L.) is the wood of a tree used throughout the civilized world as a dye stuff, in which direction we find it is most largely consumed. The tree is native to Central America, being abundant in Campeachy, Honduras, and other sections of that country. Flückiger (239) accepts that the wood was introduced into England in the latter half of the sixteenth century, because in 1581 its use was abolished by act of Parliament, for the reason that it was considered a poor substitute for better dyes, and was viewed in the light of a sophisticant. Eighty years later, probably because a better study of the drug had rendered its use practicable, logwood was again permitted to enter England. According to De Laet (368), 1633, one of the names by which it was commonly known, *peachwood*, was derived from the town of Campeachy, whence the wood was exported in quantities to Europe. The accounts of travelers and sailors at the time of the great excitement produced by the discovery of the abundant sources of wealth in the new world, almost universally mentioned logwood. This is evident from the record found in such narratives as appear in sailors' descriptions of their voyages, in *Chambers Miscellany*, and elsewhere.

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In the form of a decoction of its chips, logwood has been a favorite in domestic medicine, and owing to its mild astringency it has been used for a considerable time by licensed physicians. In 1746, under the name of *Lignum tinctile Campechense*, it became official in the *London Pharmacopœia*.

HAMAMELIDIS CORTEX ET FOLIA

Witch-hazel, *Hamamelis virginiana*. The decoction and infusion of the bark as well as of the leaves of this shrub have been in common use from the days of the American Indian, whose use of the plant led the settlers to its employment. They also used the leaves as well as the pounded bark in the making of a poultice for topical use in inflammations. These domestic uses of the drug led to its introduction by the medical profession at an early date. A mixture of hydrastis root and hamamelis leaves was held in high repute by Professor John King, M. D. (356), as a wash and as an injection. The preparation known as distilled hamamelis, or distilled extract of hamamelis, introduced by Pond about the middle of the nineteenth century, became very popular and has an increasing demand at the present time, a substitute or imitation being introduced into the pharmacopœia under the title "hamamelis water."

HEDEOMA

American pennyroyal, *Hedeoma pulegioides*, is a fragrant herb, native to America, and generally distributed throughout the temperate portions of North America. It was used by the Indians in the form of decoctions and infusions, and was introduced by them to the settlers, coming thence to the attention of the medical profession. Its chief use at the present time is in the making of the volatile oil distilled therefrom. This plant must not be confused with the pennyroyal of Europe, a small, aromatic herb, *Mentha pulegium*, common throughout Europe, extending northward to Sweden, eastward to Asia Minor and Persia, and southward to Abyssinia and Arabia. The European pennyroyal, also a common domestic remedy, has fallen into therapeutic neglect by the profession.

HUMULUS

Hops (*Humulus lupulus*) is a climbing vine found in thickets and along river banks throughout Europe, and extending to and beyond the Caucasus and Caspian regions. Introduced into America, hops have become acclimated, and especially in the Northwest are cultivated in immense quantity. Hop gardens existed in France and Germany in the eighth and ninth centuries, and "Bavarian hops" were esteemed in the eleventh century. It has been asserted that William the Conqueror, 1069, granted the use of land for hops in England. The original use of hops was in decoction as a stomachic medicine, whilst their employment in the making of malted liquors is familiar to all. As a tonic, the hop is still valued in simple decoction and in extract, both by the people and the profession of medicine.

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HYDRASTIS

Hydrastis canadensis is native to North America. Once abundant in the thick woodlands of the Central West, in the territory bordering the Ohio River from Illinois to Virginia, it is now in its native home practically exterminated. *Hydrastis* is known by the common names, golden seal, yellow puccoon, yellow root, and other similar expressive appellations signifying its color or applying to its nature. The root of this plant, of a rich golden yellow, like its companion, *sanguinaria*, which, however, has a red color, was used by the Indians as a cuticle stain, and also as a dye for their garments. Being exceedingly bitter, it was also useful in repelling insects, when mixed with grease and smeared upon the skin, and hence served a double purpose in the use of primitive man. Its first printed conspicuity came from a paper read by Mr. Hugh Martin (408) before the American Philosophical Society, 1782, published in their Transactions, 1793, under the title, "An account of some of the principal Dyes employed by the North American Indians." By reason of its red berry, *hydrastis* was also called *ground raspberry*. Although it had been mentioned in various medical publications, the drug was held in slight repute, and was of no commercial importance until the advent of the American Eclectics, who first prepared its alkaloidal salts for professional use (388a). Its medical history dates from its use by the Indians, who introduced it as a native remedy to the earliest botanical explorers, and to settlers. Its therapeutic qualities were overlooked, however, by Kalm (350), 1772; Cutler (178), 1783; and Schoepf (582), 1785; Barton (43) first bringing it before the medical profession, 1798. He credits the Cherokee Indians for its ascribed uses, and in the third part of his work (1804) he devotes considerable attention to the drug. Rafinesque (535) (1828) states that the Indians employed it as a stimulant, and that the Cherokees used it for cancer, in which direction better remedies were to them known. The principal use of *hydrastis* by the Indians, however, and which afterwards crept into domestic practice, was as an infusion or wash for skin diseases and for sore or inflamed eyes. It was also employed as a stimulant for indolent ulcers, and as an internal tonic. *Hydrastis* may be considered typical of the drugs that are employed very extensively by the medical profession, through their empirical introduction, it being recorded that even for gonorrhoea the Indians discovered its utility.

Early authorities on American medical plants, such as Barton (43) (1798 and 1804), Hand (298) (*House Surgeon*, 1820), Rafinesque (535), Elisha Smith (601) (1830), Kost (361) (1851), Sanborn (571) (1835), give to *hydrastis* considerable conspicuity, whilst Dugglison's Medical Dictionary (203) pessimistically (1852) states that in Kentucky only it is used, and then only as an outward application, for wounds. (See *Drugs and Medicines of North America*, pp. 154-5 [389].)

HYOSCYAMUS

Hyoscyamus niger is distributed throughout Europe, from Portugal and Greece to Norway and Finland. It is found in the

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Caucasus, Persia, throughout Asia Minor, Northern India, and even in Siberia. It has been naturalized in North America and Brazil, and in England is a common weed. Dioscorides (194) mentions it among medicinal plants, and under the name *Henbane* it has been employed in domestic medicine throughout Europe from the remotest times. Anglo-Saxon works on medicine in the eleventh century give it a place. During the Middle Ages the seeds and roots were much used. Its re-employment and introduction to modern regular medicine, after it had fallen into disuse, came through the efforts of Störck (617). Its qualities were well known to the Arabians, as is witnessed in numerous references thereto in the "Arabian Nights" (88), of which the following is a sample:

"Presently he filled a cresset with firewood, on which he strewed powdered *henbane*, and lighting it, went round about the tent with it till the smoke entered the nostrils of the guards, and they all fell asleep, drowned by the drug." (88) History of Gharib and his Brother Ajib, Vol. VII, p. 7.

Had Herodotus not said *tree*, it might have been accepted that the volatile intoxicant mentioned by him referred to this drug. Indeed, the presumption would not have disturbed an author who made errors more pronounced than the distinction between an herb and a tree, and who qualified his statement by "it is said." However, as shown in our article on *Matico*, that plant was originally described as "Soldier's Herb or Tree."

"Moreover it is said that other trees have been discovered by them which yield fruit of such a kind that when they have assembled together in companies in the same place and lighted a fire, they sit round in a circle and throw some of it into the fire, and they smell the fruit which is thrown on, as it burns, and are intoxicated by the scent as the Hellenes are with wine, and when more of the fruit is thrown on they become more intoxicated, until at last they rise up to dance and begin to sing." Herodotus (Macaulay), Book I, p. 99.

In this connection, through tradition probably, its uses in the same manner came to popular uses. The grandmother of the writer, afflicted with asthma, found her greatest relief in smoking stramonium leaves mixed with small amounts of henbane leaves. This was an heirloom of primitive medication transplanted to the Western American wilderness.

IPECACUANHA

The beginning of the history of ipecacuanha root and the first study of its virtues is clouded in mystery and fable. It is stated that the South American Indians were acquainted with the medicinal properties of the plant, having gained their experience from observing the habits of animals (409).* A vague yet probably the first source of information on the subject of ipecacuanha root is found in a work published in London in 1625, named "The Pilgrimes," by Samuel Purchas (527), which in five volumes gives an account of many travels and the natural history of foreign countries. In Vol. IV, page 1311,

*This fable has a parallel in the quaint description given by Clusius concerning the discovery of the healing virtues of *nux vomica* bark in cases of snake bite.