used principally for cleansing purposes. Dr. Ruschenberger returned from Chili in 1829 with specimens of the bark, stating that as late as 1833 the extract had not been used in Valparaiso, although in 1835 Dr. J. Stiles, of Valparaiso, is authority for the statement that at that (1835) date the extract had been made in that city, and was being used experimentally. The natives of South America employ an infusion of the drug as a wash, which led Dr. Ruschenberger to say, "From what I have seen of the effects of this cold infusion, I should be disposed to give it a fair trial as an injection in leucorrhea, with the expectation of very favorable results." The nature of quillaia, so nearly resembling the qualities of senega, led to the expectation that it would parallel that drug in its remedial qualities in the direction of coughs and pulmonary affections. It has not, however, become a favorite other than as a producer of suds and as a frother for syrups, in which direction the extract has been employed in the making of the popular American beverage, the so-called soda-water, which use the Government has now wisely prohibited.

RESINA, See TEREBINTHINA

RHAMNUS. (RHAMNUS PURSHIANA, U. S. P.)

Rhamnus catharticus (Buckthorn) is of wide distribution, prevailing over Northern Africa, most of Europe, the Caucasus, and into Siberia. In some instances it becomes almost a small tree, Fluckiger having a specimen 8 inches in diameter. It was known as a laxative before the Norman Conquest, being called Waythorn or Hartshorn. The Welsh physicians of the 13th century (507) prescribed the berries, under the name Syrup of Buckthorn, a title which, recognized by all writers on domestic or official medicine, still prevails. In the London Pharmacopeia, 1650, this syrup, aromatized, became official.

The official drug of the Pharmacopeia (Rhamnus purshiana) is not only related botanically to the above, but is therapeutically similar, being laxative in small doses and cathartic in large doses. The tree (Rhamnus purshiana) is distributed over the mountain ranges of the Western Pacific States, being most abundant in California and Oregon. Possibly collectors do not distinguish between this species and Rhamnus californica. To the settlers of that region it has long been known as Chittim wood, an infusion of the bark being used as a cathartic.

Dr. J. H. Bundy, an Eclectic physician of Colusa, California, impressed with its value, brought the bark, under the name Cascara Sagrada, to the attention of Parke, Davis & Co., of Detroit, Michigan. This energetic firm introduced it in 1877, through the columns of their publication, New Preparations, (1877 and 1878).

The remedy became a great favorite, and within a reasonable period was in demand throughout the civilized world, becoming official in the Pharmacopeia of the United States, 1890.

The remarkable record of this drug has been a subject of many contributions to botanical and therapeutical literature, much of interest even now remaining unwritten. To this writer its journey from the aborigines to scientific use and therapeutic study appears to parallel the course of such drugs as coca, jalap, benzoin, sassafras, croton tiglimm, etc.

Summary.—To Dr. J. H. Bundy, Colusa, California, 1877, is due the credit of introducing the bark of Rhamnus Purshiana (Cascara

Sagrada) to the medical profession.

To "New Preparations," Parke, Davis & Co., of Detroit, Michigan, (1877 and 1878) is due the credit of bringing the drug to the attention of physicians and pharmacists. The firm of Parke, Davis & Co. introduced to the world the preparations of this drug, of which they were, for some years, the sole manufacturers.

A descriptive treatise that will record some unwritten phases of its dramatic history, familiar only to those concerned in its introduction, should not be lost to posterity. The following, contributed by this writer to the Research Committee of the American Pharmaceutical Association (vol. 44, 1896) is a brief summary.

HISTORY AND NAMES OF RHAMNUS PURSHIANA. (CASCARA SAGRADA)

By J. U. LLOYD.

Contribution to the Research Committee of the American Pharmaceutical Association.*

In a paper contributed to "New Preparations,"† October 15, 1877, p. 8, the late Dr. J. H. Bundy, an Eclectic physician of Colusa, California, commended "Cascara Sagrada" as a valuable remedy in the treatment of constipation. This notice was by means of a brief note that was part of a paper on Berberis aquifolium, Dr. Bundy promising, however, to give it further attention, as follows:

"It is not my purpose to treat on Cascara Sagrada in this paper,

but using it in connection with the Berberis, I simply make mention of it. In the future I will introduce the drug to the profession."

This, so far as the writer can determine, was the first reference concerning this remedy in pharmaceutical or medical print. Agreeably to promise, in January, 1878,‡ Dr. Bundy contributed a paper on the subject, "Cascara Sagrada," in which he gave the uses of fluid extract of "Cascara Sagrada." Following this came many papers from Dr. Bundy and other physicians, twenty contributions on the subject being printed in "New Preparations," 1878, to which journal, with few exceptions, the subject was confined during 1877 and 1878. Dr. Bundy stated in his paper (1878) "A description of the Cascara I am unable to give at this time, but suffice it to say that it is a shrub, and in

^{*}Introductory to a contribution from chemical investigations of Rhamnus Purshiana, undertaken by Alfred R. L. Dohme.
† New Preparations, Detroit, Parke, Davis & Co.
† New Preparations, January, 1878, p. 1.

due time its botanical name will be known." He neglected, however, to concern himself further in the matter.

In the fall of 1878, Dr. C. H. Adair, of Colusa, California, a partner of Dr. Bundy, sent the writer specimens of the bark and botanical specimens of the tree yielding it. These, on identification by Mr. Curtis G. Lloyd, proved to be Rhamnus Purshiana. This fact was announced in a paper on "Some Specimens of Western Plants," presented to the American Pharmaceutical Association held at the meeting in Atlanta, Ga., November, 1878, (Proceedings, 1879, p. 707)

and completed the drug's history.

Names.—Dr. Bundy supplied the drug under the Spanish name "Cascara Sagrada," a name said to have been in local use throughout some sections of California, which soon came to be the common name of the drug, and will surely dominate all others as long as the drug is in use. The anglicised name "Sacred Bark" has also been applied to the drug, and the Scriptural term Chittim bark was also employed in early days in some parts of California, but these last names are now obsolete.

RHEUM

Rhubarb (Rheum officinale, etc.) is a gift of the Chinese, who have used it in domestic practice from all times, as noted in the herbal Pen-king, probably the production of the Emperor Shen-nung, the "father of Chinese agriculture and medicine," about 2700 B. C. As exported from its home in China, it has been respectively known as Russian, Turkish, and Chinese rhubarb, in accordance with the country through which it reaches the market from its native land. As a cathartic and a laxative this drug is sold in large amounts, having been accepted as a household remedy in syrups and tincture forms the world throughout. It is a gift of empiricism to the medical profession.

RHUS GLABRA

Sumach, Rhus glabra, is found in most of the temperate parts of the United States, to which it is indigenous. The North American Indians used the powdered seeds to treat piles and as an application to wounds, the juice of the fresh fruit being used as an application to warts and in skin diseases like tetter. In domestic medication, following the Indians, the roots were used by the settlers for rheumatism, in alcoholic tincture, as well as in infusion. In domestic medicine the berries were also employed in a decoction, as a gargle in quinsy, ulceration of the mouth and throat, and, following the Indian use of the drug, as a wash for ringworm, tetter, and offensive ulcers. These well-known uses of the American plant, so ornamental after the frost strikes its leaves in the fall, led to its introduction into professional medicine. In Turkey the berries of sumach are used (so this writer was informed) in starting their popular curd food.

ROSA GALLICA

The rose, in some form of its many varieties, is indigenous to the warmer parts of Europe, Asia Minor, the Caucasus, and other countries. Its use in medicine as well as in perfumes dates from the earliest times. The Rosa gallica is said to have been introduced into France by the Count of Champagne on his return from the Crusades in 1241. In the study of attar of roses made by the writer on the bottom lands beneath Mt. Olympus in Turkey, the roses planted in rows appeared much like raspberry fields, the roses being of a rather insignificant appearance, but very fragrant. The use of the rose in confection form, in pharmacopeial medicine, once very popular, has, with the exception of its employment in blue mass (Massa hydrargium), become nearly obsolete. In the "Arabian Nights" (88), rose water is often referred to, and in Turkish home life it is employed as a refreshing perfume after bathing.

RUBUS

Blackberry, Rubus villosus, grows abundantly in most parts of the United States. The roots of the various species as well as varieties or rubus are more or less astringent and have been used in domestic medicine from the days of America's first settlement. The Cherokee Indians (Rafinesque [535]), chewed the root of this plant and swallowed the saliva for a cough, probably its astringency being helpful to the throat membranes. They also used a poultice of it for piles, in which direction its mild astringency seems rationally to adapt it. A syrup of blackberry root has been a great favorite in some sections of the country as a remedy for dysentery. This use of the drug in domestic medication, in which it has always been valued in America, led finally to its employment by the members of the medical profession. The juice of the blackberry fruit, spiced and mixed with whisky, is and has ever been a valued carminative drink in Kentucky and other parts of the Southern United States, and founded the pharmacopeial blackberry cordial.

SABAL

Saw palmetto, Serenoa serrulata, Sabal serrulata. The berry of the saw palmetto, practically unknown in medicine before 1879, came rapidly into conspicuity, both in pharmacy and in medicine, after that date. It had been observed by the settlers of the South that animals feeding on the matured fruit "grew very sleek and fat," a fact that was ascribed to the therapeutic qualities of the berries, reasoning from which they prepared a decoction of the fruit for domestic medication. In 1877, Dr. Reed, of the Southern United States, in an article entitled "A New Remedy," in the Medical Brief, St. Louis (417), stated that several persons in his neighborhood were using a preparation of the berry, giving instances of its use in various directions. This article was reproduced in New Preparations (467), July, 1879, and was followed in the same publication by another article from the Medical