CHAPTER IX

SOME MEDICINAL WILDINGS WORTH KNOWING

ROMEO. Your plantain leaf is excellent for that.
BENVOLIO. For what, I pray thee?
ROMEO. For your broken shin.

Romeo and Juliet.

THE subject of medicinal plants is one that I approach with considerable reluctance; because, though the employment of wild herbs as remedies has been a cherished practice with sick humanity whether savage or civilized from the earliest times, there exists still great diversity of opinion about the efficacy of particular simples. One has only to thumb over any ancient herbal or old botanical manual or the succeeding editions of pharmacopeias to notice the decline and fall of one popular medicinal plant after another with the progress of the years, and so to become rather skeptical about the whole subject. Nevertheless, it is a poor chaff-pile that does not hold some kernels of pure grain; and this chapter, without professing to trench upon the prov-

ince of the chemist who distils and extracts a multitude of medicines from the herbs of the field, will call attention to a few of those plants growing wild whose reputation for the relief of some simple disorders appears well grounded. At any rate they are harmless.

Such medicinal wildings may be classed under two principal heads: those occurring also in Europe or Asia, or naturalized here from the Old World, their uses therefore being part of the white race's traditional knowledge; and those indigenous plants that found place in the medical practice of the Indians, from whom we have got a hint of their value.

In the former class one of the best known is Yarrow or Milfoil *(Achillea Millefolium,* L.), a perennial herb a foot or two high, of the Composite family, with flat-topped clusters of small, usually white-rayed flower-heads, and finely dissected leaves. It is found throughout the United States and much of Canada in various soils and situations, and was said by Fremont to be one of the commonest of plants observed during the whole of one of his transcontinental journeys. The entire plant above ground may be dried and an infusion of it (a pint of boiling water poured upon a handful) may be administered for a run-down condition or a disordered digestion,

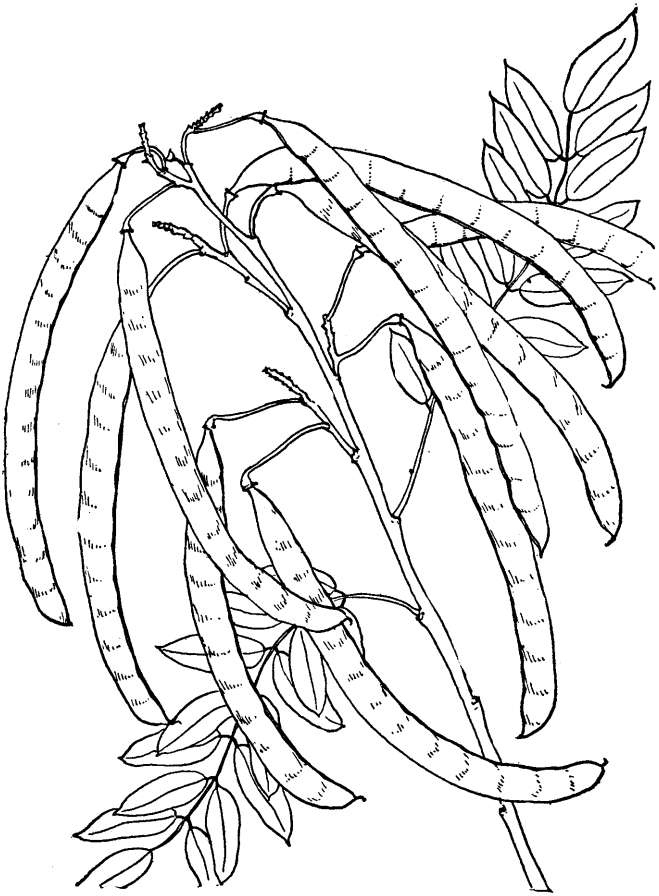
the action being that of a mildly stimulating bitter tonic. The familiar Hoar-hound *(Marrubium vulgare,* L.), originally introduced from Europe for a garden herb in the Atlantic States, has long since taken out naturalization papers as an American, and is now found wild across the continent and from Maine to Texas. It is a somewhat bushy perennial of the Mint family, with square, white-woolly stems, grayish, roundish leaves prominently veined and wrinkled, and small, white flowers densely clustered in the leaf axils. The calyx of the flower is provided with ten short teeth hooked at the tips, which catch readily in the coats of passing animals or people's clothing, facilitating the spread of the plant. The dried herb is tonic and a bitter tea made of it is a time-honored household remedy for debility and colds, being expectorant and promotive of perspiration. In large doses it proves laxative.

Apropos of laxatives, an indigenous wild plant that has been popularly esteemed in this regard and whose value was detected because of the herb's relationship to the famous Senna of the Old World, is *Cassia Marylandica,* L., commonly known as Wild or American Senna. The leaves, collected upon the maturing of the seeds, and dried, used to be among the offerings of the Shaker herbalists. An infusion

of them may be made in the proportion of about an ounce of the leaves to a pint of boiling water-the dose, two or three fluid ounces of the liquid, repeated

WILD SENNA
(Cassia Marylandica)

if needful. The American plant contains the same general principles as the Old World species but in less proportion, and is correspondingly less active. It is a stout, herbaceous perennial, three to eight



WILD SENNA
(Cassia Marylandica)

feet high, bearing pinnate leaves and showy racemes of yellow flowers in the upper leaf-axils, followed in autumn by long, curved pods or legumes, and occurs in damp ground and swamps from the Mississippi Valley to the Atlantic; and from the Canadian border to the Gulf.

Another plant which, although indigenous, I believe, only to America, is so near akin to a popular tonic herb of Europe that its use may have first been suggested by the resemblance, is Boneset *(Eupatorium perfoliatum, L.).* This is a stout, hairy perennial of the Composite tribe, with rather narrow, pointed, wrinkled leaves opposite in pairs upon the stem and united around it at the base, so as to make each pair present the appearance of one long leaf skewered through the middle; whence another common name for the plant, Thoroughwort. The large clusters of white flower-heads are rayless. The leaves and flowering tops are dried, and a bitter tea is made of them. Taken cold, this is tonic and stimulating in small doses and laxative in large ones. The hot infusion is an old-time remedy for a fresh cold or sore throat, and may be taken during the cold stage of malarial fever. The plant is common in low meadows and damp grounds throughout the eastern United States and Canada.

BONESET
(Eupatorium perfoliatum)

And of course every holder to the old traditions is loyal to Wild Cherry bark. This is taken from the familiar Wild Cherry tree *(Prunus serotina,* Ehrh.), growing along streams and fence-rows and in

woods from eastern Canada to Texas. It is from forty to eighty feet high and identifiable by its shiny green leaves (too often a prey to caterpillars) and

WILD CHERRY
(Prunus serotina)

its close racemes of small white flowers succeeded by small, black, juicy, flattened fruit with a bitter but vinous flavor. An infusion of the dried bark

(gathered preferably in the autumn) in cold water, in the proportion of one-half ounce of bark to a pint of water, enjoys a reputation both as a mild sedative suited to cases of nervous excitability and as a tonic adapted to debility and impaired digestion. Also of popular esteem as a stimulant to digestion and a remedy for dyspeptic conditions is the root of the Sweet-flag or Calamus *(Acorus Calamus,* L.). This plant is a denizen of swamps and stream borders throughout the eastern United States, usually growing directly in the water and often in company with cat-tails. Its erect, sword-like leaves, three to four feet tall, are pleasantly aromatic, and this fragrance serves to distinguish the plant, when out of flower, from the somewhat similar-looking Blue-flag or Iris, whose roots are reputed to be poisonous. The Sweet-flag belongs to the Arum family, and its flowering is as curious as inconspicuous, being produced as a compact, greenish spike from the side of a stalk, the interior of which is sweet. The rootstock, dug in the autumn or spring, washed and then dried, is chewed as a stomachic. The unpeeled root is more efficacious than the peeled.

It was the popularity of the Old World Pennyroyal doubtless that first caused attention to be directed to a little minty annual common in dry soil and old

fields pretty much throughout the United States east of the Mississippi and called American Pennyroyal *(Hedeoma pulegioides,* Pers.). It is pungently aromatic, from a few inches to a foot tall, with small, opposite leaves narrowing to the base and tiny, bluish flowers clustered in the upper leaf-axils.

DITTANY
(Cunila Mariana)

The plant contains a volatile oil, and a hot infusion of the dried leaves and flowering tops is an old-fashioned remedy for flatulent colic, sick stomach and bowel complaints. Then there is the nearly related Dittany *(Cunila Mariana,* L), growing on dry woodland hills from New York to Florida, a perennial plant of about the height of the American Pennyroyal, but with larger leaves, rounded at the base and conspicuously clear-dotted. The herb is gently stimulant, and a tea made of it is a pleasant

and refreshing beverage that is sudorific and has a respectable place among the rural remedies for febrile conditions. Dr. Porcher quoted an old-time South Carolinian as saying that "everybody cured everything with dittany."

The plants whose seeds, crushed to a flour and sifted, constitute the mustard of commerce and mustard plasters, are principally two, both of which, though native to the Old World, are found abundantly growing wild within our limits. The more common is Black Mustard *(Brassica nigra,* L.), occupying roadsides, fields and waste land on both sides of our continent. It is a stout, much-branched herb, with coarse, deeply lobed basal leaves, and varies in height from two to twelve or fifteen feet. Its most robust development in this country is on the Pacific coast, where in the spring its showy racemes of yellow flowers make solid sheets of color on the plains and mesas, acre upon acre, to the delight of tourists and the disgust of the land-owners. In Syria it attains similar proportions and is believed to be the mustard of the gospel parable. The other Mustard plant is the closely related *Brassica alba,* (L.) Boiss., popularly known as White Mustard. It is rarely over two feet high, and is distinguished from its black cousin by hairiness of

stem and seed pod, the latter usually constricted between the seeds.

Among a considerable portion of our population the Indians have enjoyed from very early times a reputation for special knowledge in the remedial properties of wild plants; but doubtless they have been credited much in excess of their deserts. Nevertheless, there are some of the aboriginal remedies worthy of all respect. Prominent among them are two or three plants of the Pacific Coast. One of these seems first to have been brought to light through the contact of the Franciscan missionaries of the eighteenth century with the Indians of Southern California, and is still quite generally known by its Spanish name, Cascara sagrada, that is "sacred bark." It is a shrub or small tree of the genus *Rhamnus,* with somewhat elliptic, prominently veined leaves, abundant clusters of tiny yellowish flowers in spring succeeded in the autumn by a conspicuous crop of inedible berries turning yellowish-crimson and finally black. The plant is considered by some botanists as of one variable species *(Rhamnus Californica,* Esch.), and by others as of two-the name *R. Purshiana,* DC., being applied to the arboreal form, which is common through the northern coast regions as far as British Columbia and east-

CASCARA SAGRADA
(Rhamnus California)

ward to the Rockies, attaining a height at times of thirty feet or so, with a trunk a foot in diameter. In that region it goes by a number of names as Chittem-wood, Wahoo and Bitter-bark. Other local names are Pigeon-berry and Wild Coffee-the latter because of some superficial resemblance of the seeds to coffee beans. The shrubby form, common in Southern California and the Great Basin region, is from a few to a dozen feet high, forming usually a dense clump touching the ground.

The medicinal value of the Cascara sagrada is in the bark, which is regarded as one of the safest and best laxatives in the world, especially valuable in cases of chronic constipation. It acts, at the same time, as a tonic and tends to improve the appetite. For the best results the bark should be collected in the autumn or early spring and at least a year before being used. A small piece of the bark put into a glass of cold water and allowed to soak over night makes a useful tonic, drunk first thing in the morning. For a laxative, hot water should be poured upon the bark in the proportion of a teacupful to a level teaspoonful of the finely broken bark, set away to cool, and drunk just before bed-time. country people have told me that the fresh bark boiled several hours is equally efficacious. The gathering of

Cascara sagrada for the medical trade is an important minor industry in the Pacific Northwest, the bark of the *Purshiana* or arboreal form being the kind preferred. There is a considerable European demand for it, as well as from American chemists.

Another of the famous Pacific Coast remedies is Yerba Santa, whose Spanish name (meaning "holy herb") also betrays its connection with the California Mission days, when the Padres not only instructed Indians but now and then learned something from them. An American common name for the plant-Consumptive's Weedl-indicates one of its popular uses. It has, in fact, been esteemed for generations in California as an expectorant, a blood purifier, and a tonic-a standby in all bronchial and respiratory troubles. Botanically it is *Eriodictyon glutinosum,* Benth., and is a shrubby plant, three to seven feet high, with dark green, resinous leaves (shaped somewhat like those of the peach) glutinous and shining on the upper side and whitish underneath, the flowers tubular, clustered and usually purple but sometimes white. It is abundant on dry hillsides and among the chaparral throughout much of California and southward into Mexico. A bitter

1 Others are Mountain Balm, Gum Leaves, Bear's weed and Wild Peach.

YERBA SANTA
(Eriodictyon glutinosum)

tea is made of the dried leaves and taken freely; or it may be prepared by boiling with sugar, if it is desired to disguise the bitterness. The pounded leaves have also been used as a poultice, bound upon sores.

The civilized drug Grindelia is derived from certain species of a botanic genus of that name belonging to the Sunflower family and occurring rather abundantly on the plains and dry hillsides west of the Mississippi. They are coarse, sticky plants, characterized by white, gummy exudations upon the buds and flower heads (these latter are conspicuously yellow-rayed) and are popularly called, on that account, Gum-plants. The California Indians are credited with being the pioneers in discovering the remedial secret of these plants, the species most used by them being apparently *Grindelia robusta,* Nutt. A decoction of the leaves and flowering tops collected during the early period of bloom is a mild stomachic, and is taken to purify the blood, as well as to relieve throat and lung troubles.

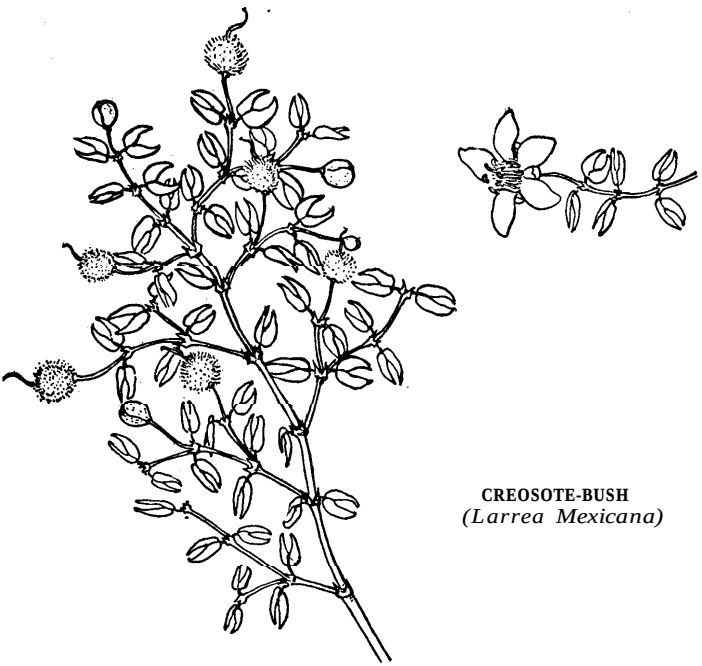
The Indian is also to be thanked for our knowledge of Yerba Mansa (or more correctly, Yerba de1 Manso, " the herb of the tamed Indian"), common in wet, alkaline soil throughout much of the South-

YERBA MANSA
(*Anemopsis Californica*)

west-a low-growing perennial, carpeting the ground with its dock-like leaves and starred in spring with conical spikes of small, greenish florets, subtended by showy involucres of white bracts. It is the botanists' *Anemopsis Californica,* H. & A. The peppery, aromatic root is astringent, and is chewed raw, after drying, for affections of the mucous membrane, and also made into a tea for purifying the blood. It is one of the most popular of remedies among the Mexican population, who employ it also to relieve coughs and indigestion or pretty much anything. As an external remedy for cuts, bruises and sores on man or beast, either the tea or a poultice of the wilted leaves is employed.

For external use in such cases, two other western plants are valuable, particularly for the healing of that bane of the horseman, the saddle gall. One is an ill-smelling shrub of the Southwestern desert region variously called Creosote-bush, Greasewood (one of many Greasewoods, by the way) and, by its Spanish names, Gobernadora and Hediondilla. Botanically, it is *Larrea Mexicana* Moric., or, according to other nomenclaturists, *Covillea tridentata,* (DC.) Vail. It is distinguished by curious little evergreen leaves each consisting of two pointed, sticky leaflets, yellow 5-petaled flowers, the petals

set edgewise to the light, and round silky seed-vessels like fluffy white pellets. The branches are banded at intervals in black. It grows in the aridest of soils, from Southern California eastward



CREOSOTE-BUSH
(Larrea Mexicana)

across Arizona and southward into Mexico. An antiseptic lotion may be made by steeping the twigs and leaves in boiling hot water, effective in the treatment of sores and wounds both of men and

animals.[2] The other plant referred to is *Stachys Californica*, Benth., called Mastransia by the Mexicans, with whom it is a standard remedy. It is a hairy herb of the Mint tribe, a foot or two high, with rather small, purple, 2-lipped flowers and somewhat triangular leaves rather wrinkled in texture, the whole plant quite distinctively odorous. It is found up and down the Pacific Coast in various situations, and varies more or less accordingly in its characters. Mr. J. Smeaton Chase, who has used it with signal success for saddle galls, tells me that the green plant, freshly gathered, is customarily employed. An infusion of stem and leaves is made by soaking them for a few minutes in boiling water. This is applied as a wash to wounds or sores. The soaked leaves may also be bound upon the parts as a poultice. *Stachys* is a genus of wide distribution in both hemispheres, and in England certain species long ago gained repute as remedial agents, under the suggestive common name Woundwort.

Patrons of quinine may find in our wild flora substitutes by no means negligible, when their supply of cinchona gives out. The most important are

2 Mr. J. S. Chase, in his recent book "California Desert Trails," states that a half inch or so of the stem of the Creosote-bush, peeled and held in the mouth like a pebble, is an Indian device for staying off thirst on desert journeys when water is scarce.

Flowering Dogwood *(Cornus florida,* L.) The bark is used in making a medicine similar to quinine, and that of the root produces a red dye used by the Indians. (See page 225.)

(Courtesy of the New York Botanical Gardens.)

certain shrubs or small trees of the Dogwood family, which has representatives on both sides of the continent. One of these is the well-known Flowering Dogwood *(Cornus florida*, L.), which beautifies spring woodlands with its showy white floral involucres from Canada to Florida and Texas. The bark is tonic, mildly stimulant and anti-intermittent, and many physicians have recognized its worth as a remedy in intermittent fevers, inferior only to Peruvian bark. A decoction is made of the dried bark of either the tree itself or the root, the latter being the stronger. (The fresh bark is said to be cathartic.) On the Pacific Coast from British Columbia to Southern California a kindred species is the Western Dogwood *(Cornus Nuttallii,* Aud.), which resembles in general appearance its eastern cousin. The bark is similarly useful. Townsend, in his journal of the Wyeth expedition to the Pacific Coast in the early days, tells of his curing two Oregon Indian children of fever-and-ague with this Dogwood, his supply of quinine being exhausted. He boiled the fresh bark in water and administered about a scruple a day. In three days his little patients were well. As he worked over the decoction, the Indians crowded about him curiously; and "I took pains," he writes, "to explain the whole

matter to them, in order that they might at a future time be enabled to make use of a valuable medicine which grows abundantly everywhere throughout the country."

Closely related to the Dogwoods is a genus of shrubs called by botanists *Garrya*. Several species are indigenous to our Far West. They are evergreen with inconspicuous flowers, which are of two sexes borne on separate individuals in drooping, tassel-like clusters or catkins. *Garrya elliptica*, Dougl., is a common shrub of the California chaparral, that has been considered ornamental enough to be introduced into gardens both in this country and abroad under the name "Silk-tassel bush." Bark, leaves and fruit are exceedingly bitter. The inherent principle seems to be the same as in the Dogwoods, and a decoction of bark or leaves has been similarly used for the relief of intermittent fevers. The shrub is known locally as Quinine-bush and Fever-bush.3

3 A multitude of wild plants have at various times and in all parts of our country had a place in popular favor as remedies more or less efficacious for the bite of venomous serpents. They are usually called, in common speech, Rattlesnake-weed, Rattlesnake-root, Rattlesnake-master, or among the Spanish-speaking people of the Southwest, *Yerba de Vibora* or *Golondrina*. Their real value, however, is so questionable that it seems hardly worth while to devote space here to their description.

Among Spanish Californians an herb of the Pacific Coast believed useful in fevers is Canchalagua, or as the Americans call it Wild Quinine *(Erythraea venusta,* Gray). It is of the Gentian family, whose characteristic bitterness it possesses ; and is one of the most charming of western spring flowers, common on dry hillsides throughout much of California-the bright pink blossoms with a yellow eye borne in terminal clusters upon plants a few inches to two feet high, with lance-shaped leaves in opposite pairs. Of the same family and somewhat similar in appearance but with leaves clasping a quadrangular stem is the American Centaury *(Sabbatia angularis,* Pursh.), common on the Atlantic side of the continent from Canada to Florida. The dried herb is intensely bitter, and is popular among old-fashioned folk for its tonic properties.

One of the most interesting plants of the Pacific Coast is a beautiful evergreen forest tree, known variously as California Bay, California Laurel, Pepperwood and Oregon Myrtle (*Umbellularia Californica* [H. & A.] Nutt.). It is a member of the Laurel family (to which the Sassafras, the Old World Bay and the Camphor-tree belong) and is characterized by a strong, pungent odor given off from the crushed leaves, somewhat suggesting bay

CANCHALAGUA
(Erythraea venusta)

rum. This peculiar aromatic quality of the leaf is diagnostic of the tree, but has the unpleasant effect of causing headache in some persons if inhaled too freely. The cause is a volatile oil resident in the leaf, which is popularly believed to be of medicinal value in several ways. A decoction of the fresh foliage is sometimes used as a disinfectant wash,[4] or, applied to the scalp, for headache. As a headache remedy, on the homeopathic principle, the Indians were accustomed to place a portion of a leaf in the nostril. A bath of hot water in which a quantity of the leaves has been thrown, followed by a thorough rubbing of the body, is a prescribed remedy for rheumatism said to have been efficacious in some cases. The aromatic vapor arising from the leaves boiling in water and allowed to circulate through the house was a preventive measure employed with faith by some people upon the Pacific Coast during the recent Spanish Influenza epidemic. The leaves appear to be also valuable for driving fleas away.

4 Chesnut states that the oil of the leaf has an effect upon the skin comparable to that of camphor and menthol. I am indebted to his monograph, already quoted, for some of the facts given in this paragraph.