

CHAPTER XXI.

COHOSH—BLACK AND BLUE.

Black Cohosh.

CIMICIFUGA RACEMOSA (L.) Nutt.

SYNONYM—*Actaea racemosa* L.

DRUG NAME—Cimicifuga or Macrotyls.



Black Cohosh (*Camicifuga Racemosa*) Leaves, Flowering Spikes and Rootstock.

OTHER COMMON NAMES—Black snakeroot, bugbane, bugwort, rattlesnakeroot, rattleroot, rattleweed, rattletop, richweed, squawroot.

HABITAT AND RANGE—Altho preferring the shade of rich woods, black cohosh will grow occasionally in sunny situations in fence corners and woodland pastures. It is most abundant in the Ohio Valley, but it occurs from Maine to Wisconsin, south along the Allegheny Mountains to Georgia and westward to Missouri.

DESCRIPTION OF PLANT—Rising to a

height of 3 to 8 feet, the showy, delicate-flowered spikes of the Black Cohosh tower above most of the other woodland flowers, making it a conspicuous plant in the woods and one that can be easily recognized.

Black Cohosh is an indigenous perennial plant belonging to the same family as the Golden Seal, namely, the crowfoot, family (Ranunculaceae.) The tall stem, sometimes 8 feet in height, is rather slender and leafy, the leaves consisting of three leaflets, which are again divided into threes. The leaflets are about 2 inches long, ovate, sharp pointed at the apex, thin and smooth, variously lobed and the margins sharply toothed. The graceful, spikelike terminal cluster of flowers, which is produced from June to August, is from 6 inches to 2 feet in length. Attractive as these flower clusters are to the eye, they generally do not prove attractive very long to those who may gather them for their beauty, since the flowers emit an offensive odor, which account for some of the common names applied to this plant, namely, bugbane and bugwort, it having been thought that this odor was efficacious in driving away bugs. The flowers do not all open at one time and thus there may be seen buds, blossoms, and seed pods on one spike. The buds are white and globular and as they expand in flower there is practically nothing to the flower but very numerous white stamens and the pistil, but the stamens spread out around the pistil in such a manner as to give to the spike a somewhat feathery or fluffy appearance which is very attractive. The seed pods are dry, thick and leathery, ribbed, and about one-fourth of an inch long, with a small beak at the end. The smooth brown seeds are enclosed within the pods in two rows. Any one going thru the woods in winter may find the seed pods, full of seeds, still clinging to the dry, dead stalk, and the rattling of the seeds in the pods as the wind passes over them has given rise to the common names rattle-snakeroot (not "rattlesnake"-root), rattleweed, rattletop and rattleroot.

DESCRIPTION OF ROOTSTOCK—The rootstock is large, horizontal and knotty or rough and irregular in appearance. The upper surface of the rootstock is covered with numerous round scars and stumps, the remains of former leaf stems, and on the fresh rootstocks may be seen the young, pinkish white buds which are to furnish the next season's growth. From the lower part of the rootstock long, fleshy roots are produced. The fresh rootstock is very dark reddish brown on the outside, white within, showing a large central pith from which radiate rays of a woody texture, and on breaking the larger roots also the woody rays will be seen in the form of a cross. On drying, the rootstock becomes hard

and turns much darker, both internally and externally, but the peculiar cross formation of the woody rays in both rootstock and roots, being lighter in color, is plainly seen without the aid of a magnifying glass. The roots in drying become wiry and brittle and break off very readily. Black cohosh has a heavy odor and a bitter, acrid taste.

COLLECTION, PRICES AND USES—The root should be collected after the fruit has ripened, usually in September. The price ranges from 2 to 3 cents a pound.

The Indians had long regarded black cohosh as a valuable medicinal plant, not only for the treatment of snake bites, but it was also a very popular remedy among their women, and it is today considered of value as an alterative, emmenagogue, and sedative, and is recognized as official in the United States Pharmacopoeia.

Blue Cohosh.

CAULOPHYLLUM THALICTROIDES (L.) Michx.

OTHER COMMON NAMES—Caulophyllum, papoose-root, squaw-root, blueberryroot, blue ginseng, yellow ginseng.

HABITAT AND RANGE—Blue Cohosh is found in the deep rich loam of shady woods from New Brunswick to South Carolina, westward to Nebraska, being abundant especially thruout the Allegheny Mountain region.

DESCRIPTION OF PLANT—This member of the barberry family (Berberidaceae) is a perennial herb, 1 to 3 feet in height, and indigenous to this country. It bears at the top one large, almost stemless leaf, which is triternately compound—that is, the main leaf stem divides into three stems, which again divide into threes, and each division bears three leaflets. Sometimes there is a smaller leaf, but similar to the other, at the base of the flowering branch. The leaflets are thin in texture, oval, oblong, or obovate and 3 to 5 lobed.

In the early stage of its growth this plant is covered with a sort of bluish green bloom, but it generally loses this and becomes smooth. The flowers are borne in a small terminal panicle or head, and are small and greenish yellow. They appear from April to May, while the leaf is still

small. The globular seeds, which ripen about August, are borne on stout stalks in membranous capsules and resemble dark-blue berries.

DESCRIPTION OF ROOTSTOCK—The thick, crooked rootstock of Blue Cohosh is almost concealed by the mass of matted roots which surrounds it. There are numerous cupshaped scars and small branches on the upper surface of the rootstock, while the lower surface gives off numerous long, crooked, matted roots. Some of the scars are depressed below the surface of the rootstock, while others are raised

above it. The outside is brownish and the inside tough and woody. Blue Cohosh possesses a slight odor and a sweetish, somewhat bitter and acrid taste. In the powdered state it causes sneezing.



COLLECTION, PRICES AND USES—The root is dug in the fall. Very often the roots of Golden Seal or twinleaf are found mixed with those of Blue Cohosh. The price of Blue Cohosh root ranges from $2\frac{1}{2}$ to 4 cents a pound.

Blue Cohosh, official in the United States Pharmacopoeia for 1890, is used as a demulcent, antispasmodic, emmenagogue and diuretic.

CHAPTER XXII.

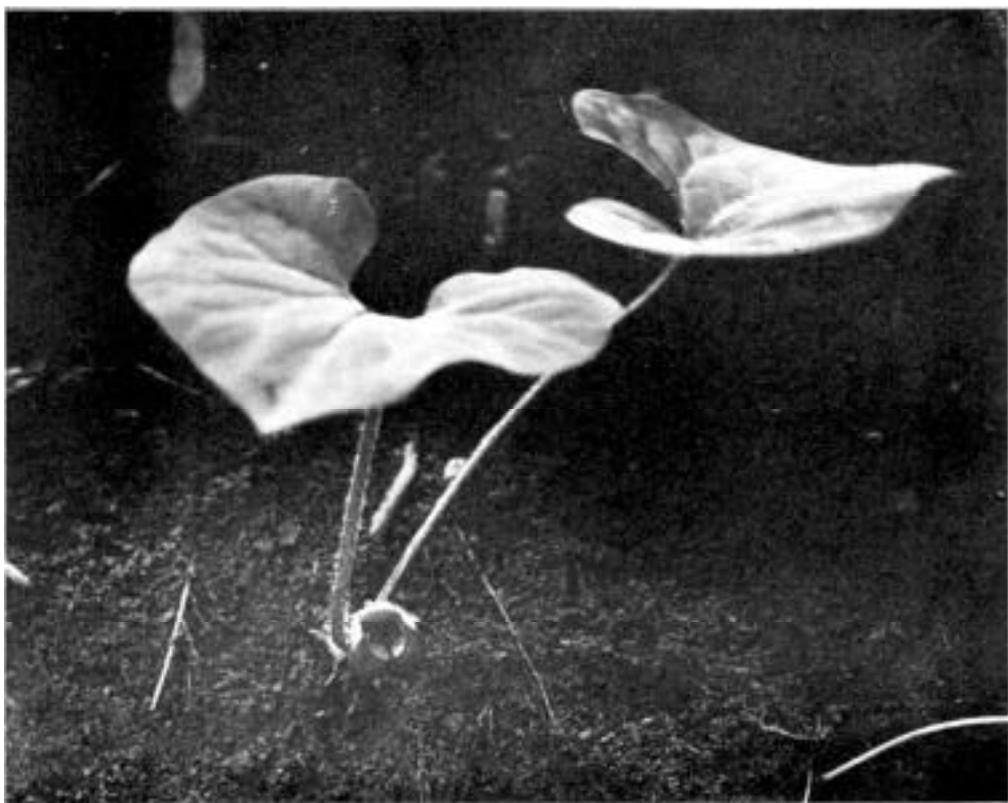
SNAKEROOT -CANADA AND VIRGINIA.

Canada Snakeroot.

ASARUM CANADENSE L.

OTHER COMMON NAMES—Asarum, wild ginger, Indian ginger, Vermont snakeroot, heart-snakeroot, southern snakeroot, black snakeroot, colt's-foot, snakeroot, black snakeweed, broadleaved asarabacca, false colt's-foot, cat's foot, colicroot.

HABITAT AND RANGE—This inconspicuous little plant frequents rich woods or rich soil along road sides from Canada south to North



Carolina and Kansas.

DESCRIPTION OF PLANT—Canada snakeroot is a small, apparently stemless perennial, not more than 6 to 12 inches in height,

and belongs to the birthwort family (Aristolochaceae). It usually has but two leaves which are borne on slender, finely hairy stems; they are kidney shaped or heart shaped, thin, dark green above and paler green on the lower surface, strongly veined, and from 4 to 7 inches broad.

The solitary bell-shaped flower is of an unassuming dull brown or brownish purple and this modest color, together with its position on the plant, renders it so inconspicuous as to escape the notice of the casual observer. It droops from a short, slender stalk produced between the two leaf stems and is almost hidden under the two leaves, growing so close to the ground that it is sometimes buried beneath old leaves, growing so close to the ground that it is sometimes buried beneath old leaves, and sometimes the soil must be removed before the flower can be seen. It is bell shaped, wooly, the inside darker in color than the outside and of a satiny texture. The fruit which follows is in the form of a leathery 6-celled capsule.

DESCRIPTION OF ROOTSTOCK—Canada snakeroot has a creeping, yellowish rootstock, slightly jointed, with this root, lets produced from joints which occur about every half inch or so. In the drug trade the rootstock is usually found in pieces a few inches in length and about one-eighth of an inch in diameter. These are four-angled, crooked, brownish and wrinkled on the outside, whitish inside and showing a large central pith, hard and brittle and breaking with a short fracture. The odor is fragrant and the taste spicy and aromatic, and has been said to be intermediate between ginger and serpentaria.

COLLECTION, PRICES AND USES—The aromatic root of Canada snakeroot is collected in autumn and the price ranges from 10 to 15 cents a pound. It was reported as very scarce in the latter part of the summer of 1906. Canada Snakeroot, which was official in the United States Pharmacopoeia from 1820 to 1880, is used as an aromatic, diaphoretic and carminative.

VIRGINIA SNAKEROOT.

(1) **ARISTOLOCHIA SERPENTARIA** L. and (2) **ARISTOLOCHIA RETICULATA** Nutt.

DRUG NAME—Serpentaria.

OTHER COMMON NAMES—(1) Virginia serpentaria, Virginia Ginseng and Other Medicinal Plants - Harding - Page 198

snakeroot, serpentary, snakeweed, pelican-flower, snagrel, sangrel, sangree-root; (2) Texas serpentaria, Texas snakeroot, Red River snakeroot.



Aristolochia serpentaria.

trellises. Virginia serpentaria and Texas serpentaria both belong to the birthwort family (Aristolochiaceae). The Virginia serpentaria is nearly erect, the slender, wavy stem sparingly branched near the base, and usually growing to about a foot in height, sometimes, however, even reaching 3 feet. The leaves are thin, ovate, ovate lance shaped or ob long lance shaped, and usually heart shaped at the base; they are about $2\frac{1}{2}$ inches long and about 1 or $1\frac{1}{2}$ inches in width. The flowers are produced from near the base of the plant, similar to its near relative, the

HABITAT AND RANGE—Virginia serpentaria is found in rich woods from Connecticut to Michigan and southward, principally along the Alleghenies, and Texas serpentaria occurs in the Southwestern States, growing along river banks from Arkansas to Louisiana.

DESCRIPTION OF VIRGINIA SERPENTARIA—About midsummer the queerly shaped flowers of this native perennial are produced. They are very similar to those of the better known “Dutchman's-pipe,” another species of this genus, which is quite extensively grown as an ornamental vine for covering porches and

Canada snakeroot. They are solitary and terminal, borne on slender, scaly branches, dull brownish purple in color, and of a somewhat leathery texture; the calyx tube is curiously bent or contorted in the shape of the letter S. The fruit is a roundish 6-celled capsule, about half an inch in diameter and containing numerous seeds.

DESCRIPTION OF TEXAS SERPENTARIA—This species has a very wavy stem, with oval, heart-shaped, clasping leaves, which are rather thick and strongly reticulated or marked with a network of veins; hence the specific name *reticulata*. The entire plant is hairy, with numerous long, coarse hairs. The small, densely hairy purplish flowers are also produced from the base of the plant.

DESCRIPTION OF ROOTSTOCK—*Serpentaria* has a short rootstock with many thin, branching, fibrous roots. In the dried state it is thin and bent, the short remains of stems showing on the upper surface and the tinder surface having numerous thin roots about 4 inches in length, all of a dull yellow, ish brown color, internally white. It has a very agreeable aromatic odor, somewhat like camphor, and the taste is described as warm, bitterish and camphoraceous.

The Texas *serpentaria* has a larger rootstock, with fewer roots less interlaced than the Virginia *serpentaria*.

COLLECTION, PRICES AND USES—The roots of *serpentaria* are collected in autumn. Various other roots are sometimes mixed with *serpentaria*, but as they are mostly highpriced drugs, such as golden seal, pinkroot, senega and ginseng, their presence in a lot of *serpentaria* is probably accidental, due simply to proximity of growth of these plants. Abscess-root (*Polemonium Reptans* L.) is another root with which *serpentaria* is often adulterated. It is very similar to *serpentaria*, except that it is nearly white. The price of *serpentaria* ranges from 35 to 40 cents a pound.

Serpentaria is used for its stimulant, tonic, and diaphoretic properties. Both species are official in the United States Pharmacopoeia.

CHAPTER XXIII.

POKEWEED.

Phytolacca Decandra L. a.

SYNONYM—*Phytolacca Americana* (L). a.

DRUG NAME—*Phytolacca*.

OTHER COMMON NAMES—Poke, pigeon-berry, garget, scoke, pocan, coakum, Virginia poke, inkberry, red inkberry, American nightshade, cancer-jalap, redweed.

HABITAT AND RANGE—Pokeweed, a common, familiar, native weed, is found in rich, moist soil along fence rows, fields, and uncultivated land from the New England States to Minnesota south to Florida and Texas.



Pokeweed (*Phytolacca Decandra*), Flowering and Fruiting Branch.

DESCRIPTION OF PLANT—In Europe, where pokeweed has become naturalized from his country, it is regarded as an ornamental garden plant, and, indeed, it is very showy and attractive with its reddish purple stems, rich green foliage, and clusters of white flowers and dark-purple berries.

The stout, smooth stems, arising from a very large perennial root, attain a height of from 3 to 9 feet and are erect and branched, green at first, then reddish. If a piece of the stem is examined, the pith will be seen to be divided into diskshaped parts with hollow spaces between them. The smooth leaves are borne on short stems and are about 5 inches long and 2 to 3 inches wide, ovate or ovate oblong, acute at the apex, and the margins entire. The long-stalked clusters of whitish flowers, which appear from July to September are from 3 to 4 inches in length, the flowers numerous and borne on reddish stems. In about two months the berries will have matured and assumed a rich dark-purple color. These smooth and shining purple berries are globular, flattened at both ends, and contain black seeds embedded in a rich crimson juice. This plant belongs to the pokeweed family (Phytolaccaceae).

a. *Phytolacca Americana* L. by right of priority should be accepted but *P. Decandra* L. is used in conformity with the Pharmacopoeia.



DESCRIPTION OF ROOT—Pokeweed has a very thick, long, fleshy root, conical in shape and branches very much resembling that of horseradish and poisonous. In commerce it usually occurs in transverse or lengthwise slices, the outside a yellowish brown and finely wrinkled lengthwise and thickly encircled with lighter colored ridges. It breaks with a fibrous fracture and is yellowish gray within. The transverse slices show many concentric rings. There is a slight odor and the taste is sweetish and acrid. The root when powdered causes sneezing.

COLLECTION, PRICES AND USES—The root of the Pokeweed, which is official in the United States Pharmacopoeia, is collected in the latter part of autumn, thoroughly cleaned, cut into a transverse or lengthwise slices, and carefully dried. It brings from $2\frac{1}{2}$ to 4 cents a pound.

The root is used for its alterative properties in treating various diseases of the skin and blood, and in certain cases in relieving pain and alaying inflammation. It also acts upon the bowels and causes vomiting.

The berries when fully matured are also used in medicine.

The young and tender shoots of the pokeweed are eaten in spring, like asparagus, but bad results may follow if they are not thoroughly cooked or if they are cut too close to the root.

CHAPTER XXIV.

MAY-APPLE.

Podophyllum Peltatum L.

DRUG NAME—*Podophyllum*.

OTHER COMMON NAMES—Mandrake, wild mandrake, American mandrake, wild lemon, ground-lemon, hog-apple, devil's-apple, Indian apple, raccoon-berry, duck's-foot, umbrella-plant, vegetable calomel.

HABITAT AND RANGE—The May-apple is an indigenous plant, found in low woods, usually growing in patches, from western Quebec to Minnesota, south to Florida and Texas.

DESCRIPTION OF PLANT—A patch of May-apple can be distinguished from afar, the smooth, dark-green foliage and close and even stand making it a conspicuous feature of the woodland vegetation.



May-apple (*Podophyllum Peltatum*), Upper Portion of Plant with Flower and Rootstock.

solitary flower, sometimes 2 inches in diameter, appears in May, nodding on its short stout stalk, generally right between the two large umbrella-like leaves, which shade and hide it from view. The fruit

May-apple is a perennial plant, and belongs to the barberry family (Berberidaceae.) It is erect and grows about 1 foot in height. The leaves are only two in number, circular in outline, but with five to seven deep lobes, the lobes 2 cleft, and toothed at the apex; they are dark green above, the lower surface lighter green and somewhat hairy or smooth, sometimes 1 foot in diameter, and borne on long leafstalks which are fixed to the center of the leaf, giving it an umbrella-like appearance. The waxy-white,

which follows is lemon shaped, at first green, then yellow, about 2 inches in length and edible, altho when eaten immoderately it is known to have produced bad effects.

In a patch of May-apple plants there are always a number of sterile or flowerless stalks, which bear leaves similar to those of the flowering plants.

DESCRIPTION OF ROOTSTOCK—The horizontally creeping rootstock of May-apple when taken from the ground, is from 1 to 6 feet or more in length, flexible, smooth, and round, dark brown on the outside and whitish and fleshy within; at intervals of a few inches are thickened joints, on the upper surface of which are round stem scars and on the lower side a tuft of rather stout roots. Sometimes the rootstock bears lateral branches. The dried rootstock, as it occurs in the stores, is in irregular, somewhat cylindrical pieces, smooth or somewhat wrinkled, yellowish brown or dark brown externally, whitish to pale brown internally, breaking with a short, sharp fracture, the surface of which is mealy. The odor is slight and the taste at first sweetish, becoming very bitter and acrid.

COLLECTION, PRICES AND USES—The proper time for collecting the rootstock is in the latter half of September or in October. The price paid for May-apple root ranges from 3 to 6 cents a pound.

May-apple root, which is recognized as official in the United States Pharmacopoeia, is an active cathartic and was known as such to the Indians.

CHAPTER XXV.

SENECA SNAKEROOT.

Polygala Senega L.

DRUG NAME—Senega.

OTHER COMMON NAMES—Senega snakeroot, Seneca root, rattlesnake-root, mountain flax.

HABITAT AND RANGE—Rocky woods and hillsides are the favorite haunts of this indigenous plant. It is found in such situations from New Brunswick and western New England to Minnesota and the Canadian Rocky Mountains, and South along the Allegheny Mountains to North Carolina and Missouri.



Seneca Snakeroot (*Polygala Senega*), Flowering Plant with Root.

DESCRIPTION OF PLANT

PLANT—The perennial root of this useful little plant sends up a number of smooth, slender, erect stems (as many as 15 to 20 or more), sometimes slightly tinged with red, from 6 inches to a foot in height, and generally unbranched. The leaves alternate on the stem, are lance shaped or oblong lance shaped, thin in texture, 1 to 2 inches long, and stemless. The flowering spikes are borne on the ends of the stems and consist of rather crowded, small, greenish white, insignificant flowers. The flowering period of Seneca Snakeroot is from May to June. The spike blossoms gradually,

and when the lower-most flowers have already fruited the upper part of the spike is still in flower. The seed capsules are small and contain two black, somewhat hairy seeds. The short slender stalks supporting these seed capsules have a tendency to break off from the main axis before

the seed is fully mature, leaving the spike in a rather ragged-looking condition, and the yield of seed, therefore, is not very large. Seneca Snakeroot belongs to the milkwort family (Polygalaceae).

A form of Seneca Snakeroot, growing mostly in the North Central States and distinguished by its taller stems and broader leaves, has been called *Polygala Senega* Var. *latifolia*.

DESCRIPTION OF ROOT—Seneca Snakeroot is described in the United States Pharmacopoeia as follows: “Somewhat cylindrical, tapering, more or less flexuous, 3 to 15 cm. long and 2 to 8 mm. thick, bearing several similar horizontal branches and a few rootlets; crown knotty with numerous buds and short stem remnants; externally yellowish gray or brownish yellow, longitudinally wrinkled, usually marked by a keel which is more prominent in perfectly dry roots near the crown; fracture short, wood light yellow, usually excentrically developed; odor slight, nauseating; taste sweetish, afterwards acrid.”

The Seneca Snakeroots found in commerce vary greatly in size, that obtained from the South, which is really the official drug, being usually light colored and small. The principal supply of Seneca Snakeroot now comes from Minnesota, Wisconsin, and farther northward, and this western Seneca Snakeroot has a much larger, darker root, with a crown or head sometimes measuring 2 or 3 inches across and the upper part of the root very thick. It is also less twisted and not so distinctly keeled.

Seneca Snakeroot is often much adulterated with the roots of other species of *Polygala* and of other plants.

COLLECTION, PRICES AND USES—The time for collecting Seneca Snakeroot is in autumn. Labor conditions play a great part in the rise and fall of prices for this drug. It is said that very little Seneca Snakeroot has been dug in the Northwest during 1906, due to the fact that the Indians and others who usually engage in this work were so much in demand as farm hands and railroad laborers, which paid them far better than the digging of Seneca Snakeroot. Collectors receive from about 55 to 70 cents a pound for this root.

This drug, first brought into prominence as a cure for snake bite among the Indians, is now employed as an expectorant, emetic and diuretic. It is official in the Pharmacopoeia of the United States.

CHAPTER XXVI.

LADY'S-SLIPPER.

(1) *Cypripedium hirsutum* Mill. and (2) *Cypripedium parviflorum* Salisb.

SYNONYM—(1) *Cypripedium Pubescens* Willd.

DRUG NAME—*Cypripedium*.

OTHER COMMON NAMES—(1) Large yellow lady's-slipper, yellow lady's-slipper, yellow moccasin-flower, Venus'shoe, Venus'-cup, yellow Indian-shoe, American valerian, nerve-root, mate nervine, yellow Noah's-ark, yellows, monkeyflower, umbil-root, yellow umbil; (2) small yellow lady's slipper.

HABITAT AND RANGE—Both of these native species frequent bogs and wet places in deep shady woods and thickets. The large yellow lady's-slipper may be found from Nova Scotia south to Alabama and west to Nebraska and Missouri. The range for the small yellow lady's-slipper extends from Newfoundland south along the mountains to Georgia and west to Missouri, Washington and British Columbia.



DESCRIPTION OF PLANTS—The orchid family (Orchidaceae), to which the lady's-slipper belong, boasts of many beautiful, showy and curious species and the lady's-slipper is no exception. There are several other plants to which the name lady's-slipper has been applied, but one glance at the peculiar structure of the flowers in the species under consideration,

as shown in the illustration will enable any one to recognize them as soon as seen.

The particular species of lady's-slipper under consideration in this article do not differ very materially from each other. Both are perennials, growing from 1 to about 2 feet in height, with rather large leaves and with yellow flowers more or less marked with purple, the main difference being that in *hirsutum* the flower is larger and pale yellow, while in *parviflorum* the flower is small, bright yellow, and perhaps

more prominently striped! and spotted with purple. The stem, leaves and inside of corolla or lip are somewhat hairy in the large yellow lady's-slipper, but not in the small yellow lady's-slipper. These hairs are said to be irritating to some people in whom they cause an eruption of the skin.

The leaves of the Lady's-Slipper vary in size from 2 to 6 inches in length and from 1 to 3 inches in width, and are broadly oval or elliptic, sharp pointed, with numerous parallel veins, and sheathing at the base, somewhat hairy in the large Lady's-Slipper. The solitary terminal flower, which appears from May to June, is very showy and curiously formed, the lip being the most prominent part. This lip looks like a large inflated bay (1 to 2 inches long in the large Lady's Slipper), pale yellow or bright yellow in color, variously striped and blotched with purple. The other parts of the Rower are greenish or yellowish, with purple stripes, and the petals are usually twisted.

DESCRIPTION OF ROOTSTOCK—The Rootstock is of horizontal growth, crooked, fleshy and with numerous wavy, fibrous roots. As found in commerce, the rootstocks are from 1 to 4 inches in length, about an eighth of an inch in thickness, dark brown, the upper surface showing numerous round cup-shaped scars, the remains of former annual stems, and the lower surface thickly covered with wavy, wiry, and brittle roots, the latter breaking off with a short, white fracture. The odor is rather heavy and disagreeable and the taste is described as sweetish, bitter and somewhat pungent.

COLLECTION, PRICES AND USES—Both rootstock and roots are used and these should be collected in autumn, freed from dirt and carefully dried in the shade. These beautiful plants are becoming rare in many localities. Sometimes such high-priced drugs as golden seal and senega are found mixed with the, lady's-slipper, but as these are more expensive than the lady's-slipper it is not likely that they are included with fraudulent intent and they can be readily distinguished. The prices paid to collectors of this root range from 32 to 35 cents a pound.

The principal use of Lady's-Slipper, which is official in the United States Pharmacopoeia, is as an antispasmodic and nerve tonic, and it has been used for the same purposes as valerian.