



DELIGHTS IN HIS GINSENG GARDEN.

GINSENG AND OTHER MEDICINAL PLANTS

**A Book of Valuable Information for
Growers as Well as Collectors
of Medicinal Roots, Barks,
Leaves, Etc.**

BY
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(Revised Edition.)

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INTRODUCTION

WHEN the price of Ginseng advanced some years ago hundreds engaged in the business who knew little or nothing of farming, plant raising and horticulture. That they largely failed is not to be wondered at. Later many began in a small way and succeeded. Many of these were farmers and gardeners. Others were men who had hunted, trapped and gathered "seng" from boyhood. They therefore knew something of the peculiarities of Ginseng.

It is from the experience of these men that this work is largely made up writings of those who are in the business.

This edition is more complete than the first, being increased from 317 to 367 pages. The chapters on Ginseng and Golden Seal have been revised by C. M. Goodspeed, Editor and Publisher of Special Crops, as well as grower of medicinal roots for many, many years.

Golden seal is also attracting considerable attention owing to the rapid increase in price during the early years of the present century. The growing of this plant is given careful attention also.

Many other plants are destined to soon become valuable. A work gotten out by the government—American root drugs—contains a great deal of value in regard to habits, range, description, common names, price, uses, etc., etc., so that some of the information contained in this book is taken therefrom. The prices named in the government bulletin which was issued in 1907 were those prevailing at that time—they will vary, in the future, largely according to the supply and demand.

The greatest revenue derived from plants for medicinal purposes is derived from the roots, yet there are certain ones where the leaves and bark are used. Therefore to be complete some space is given to these plants. The digging of the roots, of course, destroys the plant as well as does the peeling of the bark, while leaves secured is clear gain—in other words, if gathered when matured the plant or shrub is not injured and will produce leaves each year.

The amount of root drugs used for medicinal purposes will increase as the medical profession is using of them more and more. Again the number of people in the world is rapidly increasing while the forests

(the natural home of root drugs) are becoming less each year. This shows the growers of medicinal roots will find a larger market in the future than in the past.

Those who know something of medicinal plants—"Root Drugs"—can safely embark in their cultivation, for while prices may ease off—go lower—at times, it is reasonably certain that the general trend will be upward as the supply growing wild is rapidly becoming less each year.

A. R. HARDING. (1912, revised 1936)

CHAPTER I.

PLANTS AS A SOURCE OF REVENUE.

With the single exception of ginseng, the hundred of plants whose roots are used for medical purposes, America is the main market and user. Ginseng is used mainly by the Chinese. The thickly inhabited Chinese Empire is where the American ginseng is principally used. To what uses it is put may be briefly stated, as a superstitious beverage. The roots with certain shapes are carried about the person for charms. The roots resembling the human form being the most valuable.

The most valuable drugs which grow in America are ginseng and golden seal, but there are hundreds of others as well whose leaves, barks, seeds, flowers, etc., have a market value and which could be cultivated or gathered with profit. In this connection an article which appeared in the *Hunter-Trader-Trapper*, Columbus, Ohio, under the title which heads this chapter is given in full:

To many unacquainted with the nature of the various wild plants which surround them in farm and out-o'-door life, it will be a revelation to learn that the world's supply of crude, botanical (vegetable) drugs are to a large extent gotten from this class of material. There are more than one thousand different kinds in use which are indigenous or naturalized in the United States. Some of these are very valuable and have, since their medicinal properties were discovered, come into use in all parts of the world; others now collected in this country have been brought here and, much like the English sparrow, become in their propagation a nuisance and pest wherever found.

The impression prevails among many that the work of collecting the proper kind, curing and preparing for the market is an occupation to be undertaken only by those having experience and a wide knowledge of their species, uses, etc. It is a fact, though, that everyone, however little he may know of the medicinal value of such things, may easily become familiar enough with this business to successfully collect and prepare for the market many different kinds from the start.

There are very large firms throughout the country whose sole business is for this line of merchandise, and who are at all times anxious to make contracts with parties in the country who will give the work business-

like attention, such as would attend the production of other farm articles, and which is so necessary to the success of the work.

If one could visit the buyers of such firms and ask how reliable they have found their sources of supply for the various kinds required, it would provoke much laughter. It is quite true that not more than one in one hundred who write these firms to get an order for some one or more kinds they might supply, ever give it sufficient attention to enable a first shipment to be made. Repeated experiences of this kind have made the average buyer very promptly commit to the nearest waste basket all letters received from those who have not been doing this work in the past, recognizing the utter waste of time in corresponding with those who so far have shown no interest in the work.

The time is ripe for those who are willing to take up this work, seriously giving some time and brains to solving the comparatively easy problems of doing this work at a small cost of time and money and successfully compete for this business, which in many cases is forced to draw supplies from Europe, South America, Africa, and all parts of the world.

From the writer's observation, more of these goods are not collected in this country on account of the false ideas those investigating it have of the amount of money to be made from the work, than from any other reason; they are led to believe that untold wealth lies easily within their reach, requiring only a small effort on their part to obtain it. Many cases may be cited of ones who have laboriously collected, possibly 50 to 100 pounds of an article, and when it was discovered that from one to two dollars per pound was not immediately forthcoming, pronounced the dealer a thief and never again considered the work.

In these days when all crude materials are being bought, manufactured and sold on the closest margins of profit possible, the crude drug business has not escaped, it is therefore only possible to make a reasonable profit in marketing the products of the now useless weeds which confront the farmer as a serious problem at every turn. To the one putting thought, economy and perseverance in this work, will come profit which is now merely thrown away.

Many herbs, leaves, barks, seeds, roots, berries and flowers are bought in very large quantities, it being the custom of the larger houses to merely place an order with the collector for all he can collect, without restriction. For example, the barks used from the sassafras roots, from

the wild cherry tree, white pine tree, elm tree, tansy herb, jimson weed, etc., run into the hundreds of thousand pounds annually, forming very often the basis of many remedies you buy from your druggist.

The idea prevalent with many, who have at any time considered this occupation, that it is necessary to be familiar with the botanical and Latin names of these weeds, must be abolished. When one of the firms referred to receives a letter asking for the price of Rattle Top Root, they at once know that *Cimicifuga Racemosa* is meant; or if it be Shonny Haw, they readily understand it to mean *Viburnum Prunifolium*; Jimson Weed as *Stramonium Datura*; Indian Tobacco as *Lobelia Inflata*; Star Roots as *Helonias* Roots, and so on throughout the entire list of items.

Should an occasion arise when the name by which an article is locally known cannot be understood, a sample sent by mail will soon be the means of making plain to the buyer what is meant.

Among the many items which it is now necessary to import from Germany, Russia, France, Austria and other foreign countries, which might be produced by this country, the more important are: Dandelion Roots, Burdock Roots, Angelica Roots, Asparagus Roots, Red Clover Heads, or blossoms, Corn Silk, Doggrass, Elder Flowers, Horehound Herb, Motherwort Herb, Parsley Root, Parsley Seed, Sage Leaves, Stramonium Leaves or Jamestown Leaves, Yellow Dock Root, together with many others.

Dandelion Roots have at times become so scarce in the markets as to reach a price of 50c per pound as the cost to import it is small there was great profit somewhere.

These items just enumerated would not be worthy of mention were they of small importance. It is true, though, that with one or two exceptions, the amounts annually imported are from one hundred to five hundred thousand pounds or more.

As plentiful as are Red Clover Flowers, this item last fall brought very close to 20c per pound when being purchased in two to ten-ton lots for the Winter's consumption.

For five years past values for all Crude Drugs have advanced in many instances beyond a proportionate advance in the cost of labor, and they

bid fair to maintain such a position permanently. It is safe to estimate the average enhancement of values to be at least 100% over this period; those not reaching such an increased price fully made up for by others which have many times doubled in value.

It is beyond the bounds of possibility to pursue in detail all of the facts which might prove interesting regarding this business, but it is important that, to an extent at least, the matter of fluctuations in values be explained before this subject can be ever in a measure complete.

All items embraced in the list of readily marketable items are at times very high in price and other times very low; this is brought about principally by the supply. It is usually the case that an article gradually declines in price, when it has once started, until the price ceases to make its production profitable.

It is then neglected by those formerly gathering it, leaving the natural demand nothing to draw upon except stocks which have accumulated in the hands of dealers. It is more often the case that such stocks are consumed before any one has become aware of the fact that none has been collected for some time, and that nowhere can any be found ready for the market.

Dealers then begin to make inquiry, they urge its collection by those who formerly did it, insisting still upon paying only the old price. The situation becomes acute; the small lots held are not released until a fabulous price may be realized, thus establishing a very much higher market. Very soon the advanced prices reach the collector, offers are rapidly made him at higher and higher prices, until finally every one in the district is attracted by the high and profitable figures being offered. It is right here that every careful person concerned needs to be doubly careful else, in the inevitable drop in prices caused by the over-production which as a matter of course follows, he will lose money, It will probably take two to five years then for this operation to repeat itself with these items, which have after this declined even to lower figures than before.

In the meantime attention is directed to others undergoing the same experience. A thorough understanding of these circumstances and proper heed given to them, will save much for the collector and make him win in the majority of cases.

Books and other information can be had by writing to the manufacturers and dealers whose advertisements may be found in this and other papers.

CHAPTER II.

LIST OF PLANTS HAVING MEDICINAL VALUE.

The list of American Weeds and Plants as published under above heading having medicinal value and the parts used will be of especial value to the beginner, whether as a grower, collector or dealer.

The supply and demand of medicinal plants changes, but the following have been in constant demand for years. The name or names in parenthesis are also applied to the root, bark, berry, plant, vines, etc., as mentioned:

Balm Gilead (Balsam Poplar)	The Buds.
Bayberry (Wax-Myrtle)	The Bark of Root.
Black Cohosh (Black Snake Root)	The Root with Rootlets.
Black Haw (Viburnum. Sloe.)	The Bark of Root.
	The Bark of Tree.
Black Indian Hemp (Canadian Hemp)	The Root.
Blood Root	The Root with Fibre.
	The Root with no Fibre.
Blue Cohosh (Papoose Root. Squaw Root)	
	The Root.
Blue Flag (Larger Blue Flag)	The Root.
Burdock	The Root.
	The Seed.
Cascara Sagrada (Chittem Bark)	Bark of Tree.
Clover, Red	The Blossoms.
Corn Silk	—
Cotton Root	The Bark of Root.
Cramp Root (Cranberry Tree. High Bush Cranberry)	The Bark of Tree.
	The Root.
Culvers Root (Black Root)	The Root.
Dandelion	The Root.
Deer Tongue	The Leaves.
Elder	The Dried Ripe Berries.
	The Flowers.
Elecampane	The Root, cut into slices.
Elm (Slippery Elm)	The Bark, deprived of the brown, outside layer.
Fringe Tree	The Bark of Root.

Gelsemium (Yellow Jasmine) (Carolina jasmine)	The Root.
Ginseng	The Root.
Golden Seal (Yellow Root. Yellow Puccoon. Orange Root. Indian Dye. Indian Turmeric)	The Root.
Gold Thread (Three-leaved Gold Thread)	The Herb.
Hops	These should be collected and packed in such a manner as to retain all of the yellow powder (lupulin.)
Hydrangea	The Root.
Indian Hemp, Black (See <i>Black Indian Hemp</i>)	
Lady Slipper (Moccasin-Flower. Large Yellow Lady Slipper. American Valerian)	The Root, with Rootlets.
Lobelia (Indian Tobacco)	The Herb.
	The Seed.
Mandrake (May-apple)	The Root.
Nettle	The Herb.
Passion Flower	The Herb.
Pipsissewa (Prince's Pine)	The Vine.
Poke	The Berries.
	The Root.
Prickly Ash (Toothache Tree. Angelica Tree Pepper Wood. Tea Ash)	The Bark.
	The Berry.
Sassafras	The Bark of the Root.
	The Pith.
Saw Palmetto	The Berries.
Scullcap	The Herb.
Snake Root, Virginia (Birthwort-Serpentaria)	The Root.
Snake Root, Canada (Asarabacca. Wild Ginger. "Coltfoot Root")	The Root.
Spruce Gum....	Clean Gum only.
Squaw Vine (Partridge Berry).	The Herb.
Star Root (See <i>Unicorn False</i>).	
Star Grass (See <i>Unicorn True</i>).	
Stillingia (Queen's Delight) .	The Root.
Stramonium (Jamestown-weed. Jimson-weed. Thorn-apple)	The Leaves.
	The Seed



Senega Snake Root (Cultivated) in Blossom.

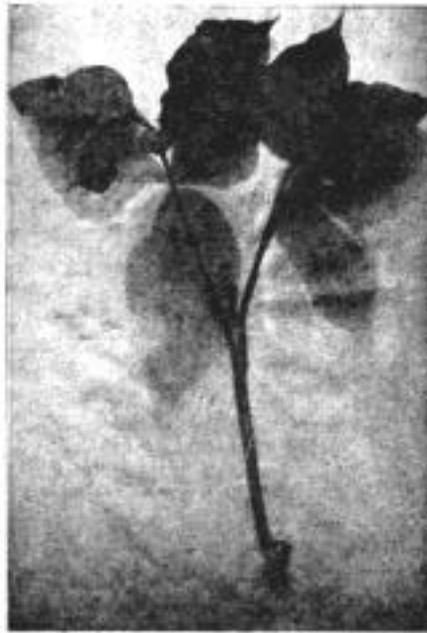
- Unicorn True (Star Grass. Blazing Star. Mealy Starwort. Colic Root) **The Root.**
- Unicorn False (Star Root. Starwort) **The Root.**
- Wahoo (Strawberry Tree. Indian Arrow. Burning Bush. Spindle Tree. Pegwood. Bitter) **The Bark of Root.**
The Bark of Tree
- White Pine (Deal Pine. Soft Deal Pine) **The Bark of Tree, Rossed.**
- Wild Cherry **The thin Green Bark, and thick Bark Rossed.**
The dried Cherries.
- Wild Indigo (Horsefly Weed. Rattle-bush. Indigo Weed. Yellow Indigo. Clover Broom) **The Root.**
- Wormseed, American (Stinking Weed. Jesuit Tea. Jerusalem Tea. Jerusalem Oak) **The Seed.**
- Wild Yam (Colic Root. China Root. Devil's Bones) **The Root.**
- Yellow Dock (Sour Dock. Narrow Dock. Curled Dock) **The Root.**

The following are used in limited quantities only:

Arbor Vitae (White Cedar)	The Leafy Tips.
Balmony (Turtle-head. Snakehead)	The Herb, free from large stalks.
Beth Root (Trillium Erectum. Wake Robin. Birth-root)	The Root.
Birch Bark (Cherry Birch. Sweet Birch. Black Birch.)	The Bark of Tree.
Black Root (see <i>Culversroot</i>)	The Bark of Root.
Blackberry (High Blackberry)	The Bark.
Black Willow	The Buds.
Boneset (Thoroughwort)	The Herb, free from large stems.
Broom Corn	The Seed.
Broom Top (Scotch Broom)	The Flowering Tops.
Bugle Weed (Water Horehound)	The Herb, free from large stems.
Butternut	Bark of Root.
Catnip	The Herb.
Chestnut while still green.	The Leaves, collected in September or October
Chicory (Succory)	The Root, cut into slices (Cross section.)
Corn Ergot (Corn Smut)	The Fungus, replacing the grains of corn.
False Bittersweet (Shrubby Bittersweet. Climbing Bittersweet Wax-wort. Stafftree)	The Bark of Tree.
Garden Lettuce	The Leaves.
Geranium (Cranesbill)	The Root of the wild Herb.
“Gravel Plant” (May Flower. Ground Laurel. Trailing Arbutus)	The Leaves.
Great Celandine (Garden Celandine)	Entire plant.
Helebore, False (Adonis Vernalis)	The Root.
Hemlock	The Bark.
Horse Nettle	The Gum.
Huckleberry	The Berries.
Life Everlasting (Common Everlasting. Cudweed)	The Root.
Life Root Plant (Rag-wort)	The Dried Berry.
Lovage	The Herb.
Maiden Hair	The Herb.
	The Root.
	The Fern.

Milkweed (Pleurisy Root)	The Root cut into Sections lengthwise.
Motherwort	The Herb.
Mountain Ash (Mountain Laurel (See <i>Sheep Laurel</i>).	The Bark of Tree.
Mullein (Common Mullein)	The Leaves.
Pennyroyal	The Herb.
Peppermint	The Leaves. The Herb.
Pitcher Plant (Side-Saddle Plant, Fly Trap. Huntsman Cup. Water Cup)	The Plant.
Plantain (Rib-grass. Rib-wort. Ripple-grass)	The Leaves.
Poison Oak (Poison Ivy)	The Leaves.
Pumpkin	The Seed.
Queen of the Meadow (Joe-Pye Wood. Trumpet-Weed)	The Root.
Ragweed (Wild Red Raspberry)	The Leaves.
Rosinweed (Polar plant. Compass plant)	The Root.
Rue	The Herb.
Sage	The Leaves.
Scouring Rush (Horsetail).	The Herb.
Sheep Laurel (Laurel. Mountain Laurel. Broad-leafed Laurel. Calico Bush. Spoon Wood)	The Leaves.
Sheep Sorrel (Field Sorrel)	The Leaves.
Shepherd's Purse	The Herb.
Skunk Cabbage	The Root.
Spikenard	The Root.
Stone Root	The Root.
Tag Alder	The Bark.
Tansy	The Herb.
Trailing Arbutus. See <i>Gravel Plant</i>	
Veratrum Viride (Green Hellebore. American Hellebore)	The Root.
Vervain (Blue Vervain)	The Herb.
Virginia Stone Crop (Dutch Stone)	The Herb.
Wafer Ash (Hop Tree. Swamp Dogwood. Stinking Ash. Scrubby Trefoil. Ague Bark)	The Bark of Root.
Water Avens (Throat Root. Cure All. Evan's Root. Indian Chocolate. Chocolate Root. Bennett Root)	The Root.
Water Eryngo (Button Snake Root. Corn Snake Root. Rattle Snake's Weed)	The Root.
Water Hemlock (Spotted Parsley. Spotted Hemlock. Poison Parsley.	

Poison Hemlock. Poison Snake Weed. Beaver Poison)
The Herb.
Watermelon **The Seed.**
Water Pepper (Smart Weed. Arsmart) **The Herb.**
Water Ash **The Bark of Tree.**
White Oak (Tanners Bark) **The Bark of Tree, Rossed.**
White Ash **The Bark of Tree.**
White Poplar (Trembling Poplar. Aspen. Quaking Aspen)
The Bark of Tree.
Wild Lettuce (Wild Opium Lettuce. Snake Weed. Trumpet Weed)
The Leaves.
Wild Turnip (Indian Turnip. Jack-in-the-Pulpit. Pepper Turnip.
Swamp Turnip) **The Root, sliced.**



Indian Turnip. (Wild)

Wintergreen (Checkerberry. Partridge Berry. Teaberry. Deerberry)
The Leaves.
Witch Hazel (Striped Alder. Spotted Alder. Hazelnut)
The Bark.
The Leaves.
Yarrow (Milfoil. Thousand Leaf) **The Herb.**
Yellow Parilla (Moon Seed. Texas Sarsaparilla)
The Root.
Yerba Santa (Mountain Balm. Gum Plant. Tar Weed)
The Leaves

CHAPTER III.

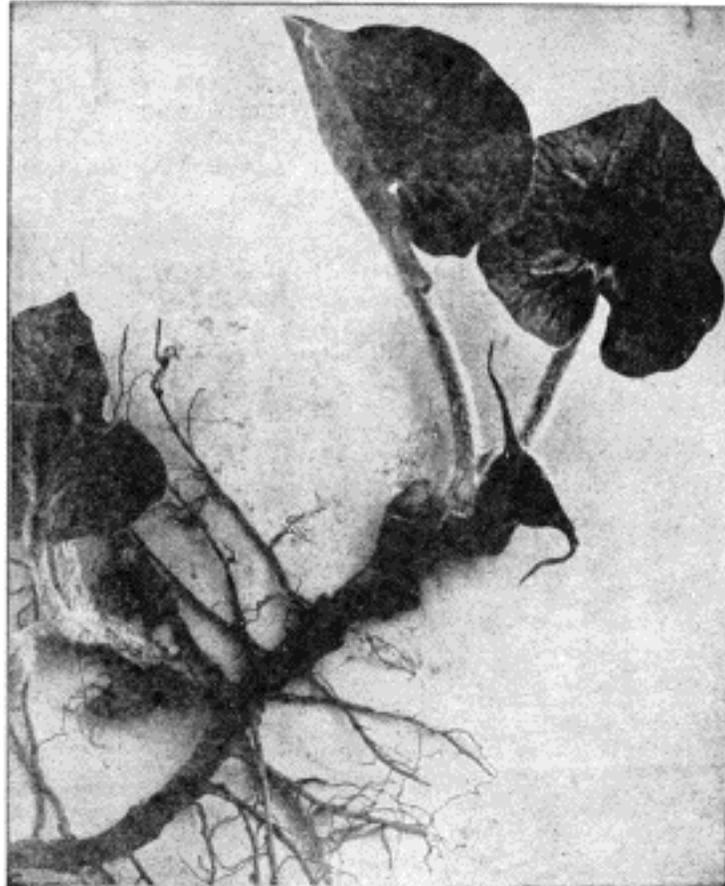
CULTIVATION OF WILD PLANTS.

The leading botanical roots in demand by the drug trade are the following: Ginseng (*Aralia Quinquifolium*), Golden Seal, (*Hydrastis Canadensis*), Senega Snake Root (*Polygala Senega*), Virginia Snake Root, also called Serpentaria (*Aristolochia Serpentaria*), Canada Snake Root or Wild Ginger (*Asarum Canadense*), Mandrake or May Apple (*Podophyllum Peltatum*) Pink Root (*Spigelia Marilandica*), Blood Root (*Sanguinaria Canadensis*), Lady Slipper (*Cypripedium*), Poke Root (*Phytolacca Decandra*) of the common farm and garden weeds, the root of the Dandelion and the Narrow Leaf Dock are in the greatest demand. Most of these plants, except the two last named, grow in more or less shade, several of them in dense woods. These plants were originally found in abundance in their natural habitat but from the constant digging of the roots and also from clearing off of the forest lands some of these plants are becoming scarce.

The price paid for most of the wild roots used for medicine is still too low to make it an object for people to gather, wash, dry and market them, much less to be to the expense of cultivating, especially as most of them must be grown under shade.

There are a few medicinal roots, however, that have become so scarce that cultivation must be resorted to or the Physician or Druggist will have to go without them. If our people were willing to work for the low wages paid in foreign lands, several other roots could be either cultivated or gathered wild. Out of the many tons of Dandelion roots used yearly in this country almost none of them are gathered here on account of the high cost of labor. Golden Seal, Ginseng, Senega Root Serpentaria, Wild Ginger and the Lady Slippers have advanced in price to a point where they can be very profitably grown and people are becoming interested in their several natures, manner of growth, natural habitat methods of propagation, cultivation, etc.

This opens up a new industry to persons having the natural aptitude for such work. Of course, the soil and environment must be congenial to the plant grown. A field adapted to growing winter wheat would not be well adapted to growing Peppermint as the soil would be too hard and too dry.



Canadian Snake Root (Cultivated).

It would also be too-dry for growing the Lady Slippers, but Ginseng and Golden Seal will do very well where good heavy crops of corn and winter wheat can be grown. In fact, these two plants will thrive in any good garden soil where well drained. As we shall show later on, these plants can be grown on good soil and under proper climatic conditions, with a profit that the corn and wheat grower never dreamed of. In fact, a half acre of either is equal in profit to a large farm under the most favorable conditions of stock or grain farming.

The writer began the cultivation of Ginseng in 1899 or fourteen years ago. I have had a very wide range for observations along the line of cultivation, propagation, and marketing of this valuable root. Besides visiting hundreds of gardens, I have had separate beds of wild roots in my garden arranged side by side, each bed containing roots from some one state only. At one time we had one such bed for each state where Ginseng grows wild. A comparison of these beds was very interesting, but more of this later.

It is the history of nearly all wild plants when brought under cultivation to develop a weakness and liability to disease. Ginseng has been no exception. This has been brought about in part by a change of environment, but of all the causes that have brought disease to the Ginseng plant, I think the greatest single element has been too high feeding. Naturally this plant grew among the roots of trees and other large and strong plants. These sapped the fertility from the soil and Ginseng was fed sparingly and made a very slow growth. Taking the plant from this condition and giving it rich garden soil with nothing to steal the fertility from the soil and then covering the beds every fall with from one to three inches of manure proved too much and so enfeebled the constitution that for a time it looked as if the plant would succumb to disease but for two or three years now the growers have been getting the upper hand again and I believe soon everything will be moving along smooth again.

Whether this disease will attack Golden Seal or not I do not know, but I expect it will, as I said before; that is the history of wild plants same as it is of wild people. Take a tribe of Indians from their wild life and educate them and civilize them, giving them the big city to live in and you will kill ninety per cent of them. Spread the transition from wild to civilized life over a half dozen generations and the Indians will not suffer by the change. So we reason if the growers of Golden Seal will "go slow" they may escape the troubles Ginseng growers have had.

I began growing seal in 1902 and so far as I know was the first to grow it to any extent in the garden. There may have been others ahead of me that I do not know of. In this FOREWORD I might say that from actual measured plots of ground at the end of four years I harvested four square rods of seal, washed and dried the roots and sold them at market price and the plot brought at the rate of over \$20,000.00 per acre. This plot was set with small wild roots, six by eight inches. This present fall what Golden Seal I harvested was only three years from planting and yielded at market price slightly over \$12,000.00 per acre.

While this does not begin to reach what has been done with Ginseng, yet it is a good showing and sufficient to interest anyone adapted to this kind of work. On small plots of Ginseng at six years from planting I have reached as high as 50,000.00 per acre. These two roots are the largest money makers of the list. None of the others will at present bring a price much over fifty cents per pound, and no fabulous amounts need be expected from cultivating small plots until the wild supply is more

nearly exhausted than at present. That time will surely come and the drug farmer will do well to, grow some of all kinds to become acquainted and ready to take advantage of his knowledge when the time comes.

This work of growing medicinal roots and such other of nature's products as is to be desired by man and has not yet been cultivated, gives a wide and very fascinating study. Not only that but it can be made very profitable. I think the time has come when the Ginseng and Golden Seal of commerce and medicine will practically all come from the gardens of the cultivators of these plants. I do not see any danger of overproduction. The demand is great and is increasing year by year. Of course, like the rising of a river, the price may ebb and flow, somewhat, but it is constantly going up.

The information contained in the following pages about the habits, range, description and price of scores of root drugs will help hundreds to distinguish the valuable plants from the worthless. In most instances a good photo of the plant and root is given. As Ginseng and Golden Seal are the most valuable, instructions for the cultivation and marketing of same is given in detail. Any root can be successfully grown if the would-be grower will only give close attention to the kind of soil, shade, etc., under which the plant flourishes in its native state.

Detailed methods of growing Ginseng and Golden Seal are given from which it will be learned that the most successful ones are those who are cultivating these plants under conditions as near those as possible which the plants enjoy when growing wild in the forests. Note carefully the nature of the soil, how much sunlight gets to the plants, how much leaf mould and other mulch at the various seasons of the year.

It has been proven that Ginseng and Golden Seal do best when cultivated as near to nature as possible. It is therefore reasonable to assume that all other roots which grow wild and have a cash value, for medicinal and other purposes, will do best when "cultivated" or handled as near as possible under conditions which they thrived when wild in the forests.

Many "root drugs" which at this time are not very valuable-bringing only a few cents a pound—will advance in price and those who wish to engage in the medicinal root growing business can do so with reasonable assurance that prices will advance, for the supply growing wild is dwindling smaller and smaller each year. Look at the prices paid

for Ginseng and Golden Seal in 1908 and compare with ten years prior or 1898. Who knows but that in the near future an advance of hundreds of per cent. will have been scored on wild turnip, lady's slipper, crawley root, Canada snakeroot, serpentaria (known also as Virginia and Texas snakeroot), yellow dock, black cohosh, Oregon grape, blue cohosh, twinleaf, mayapple, Canada moonseed, blood-root, hydrangea, crane's bill, seneca snakeroot, wild sarsaparilla, pinkroot, black Indian hemp, pleurisy-root, culvers root, dandelion, etc., etc.?



Sarsaparilla Plant (Wild).

Of course it will be best to grow only the more valuable roots, but at the same time a small patch of one or more of those mentioned above may prove a profitable investment. None of these are apt to command the high price of Ginseng, but the grower must remember that it takes Ginseng some years to produce roots of marketable size, while many other plants will produce marketable roots in a year.

There are thousands of land owners in all parts of America that can make money by gathering the roots, plants and barks now growing on their premises, If care is taken to only dig and collect the best specimens an income for years can be had.

CHAPTER IV.

THE STORY OF GINSENG.

History and science have their romances as vivid and as fascinating as any in the realms of fiction. No story ever told has surpassed in interest the history of this mysterious plant Ginseng; the root that for nearly 200 years has been an important article of export to China.

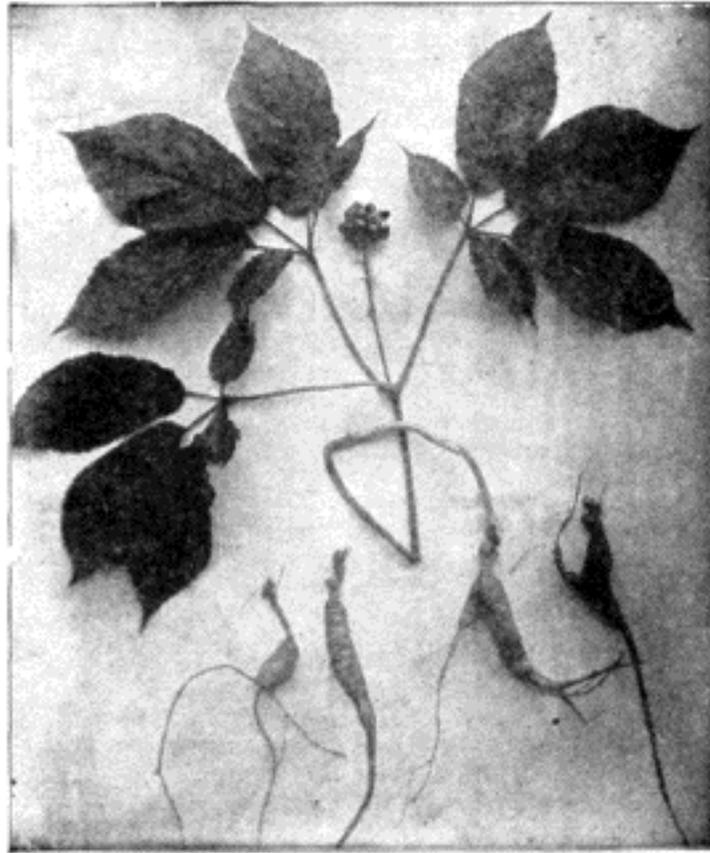
Until a few years ago not one in a hundred intelligent Americans living in cities and towns, ever heard of the plant, and those in the wilder parts of the country who dug and sold the roots could tell nothing of its history and use. Their forefathers had dug and sold Ginseng. They merely followed the old custom.

The natural range of Ginseng growing wild in the United States is north to the Canadian line, embracing all the states of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, Delaware, New York, Pennsylvania, New Jersey, Maryland, Ohio, West Virginia, Virginia, Indiana, Illinois, Michigan, Wisconsin, Kentucky and Tennessee. It is also found in a greater part of the following states: Minnesota, Iowa, Missouri, North and South Carolina, Georgia and Alabama. Until recently the plant was found growing wild in the above states in abundance, especially those states touched by the Allegheny mountains. The plant is also found in Ontario and Quebec, Canada, but has become scarce there also, owing to persistent hunting. It also grows sparingly in the states west of and bordering on the Mississippi river.

Ginseng in the United States was not considered of any medical value until about 1905, but in China it is and has been highly prized for medical purposes and large quantities of the root are exported to that country. It is indeed doubtful if the root has much if any medical value, and the fact that the Chinese prefer roots that resemble, somewhat, the human body, only goes to prove that their use of the root is rather from superstition than real value.

However, this superstition is in the main confined to the wild mountain Ginseng of Korea and Manchuria and does not apply at all to the American cultivated Ginseng and, in fact, I cannot find that it has any application even to our wild root. I have shipped direct to China large amounts covering a period of years and have had very definite

instructions as to what kind and shape of root to ship, but have never had any mention made of roots resembling the human form.



Ginseng Plant and Roots.

Some of our orders for dry Ginseng root have been as high as one thousand pounds at a single order, and not only that, but we have had several Chinamen come to our place and personally select the roots, and through all my dealings with the Chinese I have never heard one of them mention such shaped roots as being desirable.

It has been supposed that certain localities gave a better quality of Ginseng than others. The fur dealers, in their price list usually quote, especially the wild root, at a higher price from the northern states than they do from the southern states. The cause of this difference in price is not the real quality of the root but the manner of gathering and handling. In the south it has been the practice of Ginseng hunters to dig and dry everything. In the north only the larger roots have been dug. This makes all the difference there is. In the south, most of the wild root is gathered by poor, ignorant people and their methods are not the

best. When gathered, it is usually strung on strings and hung up in the living room, where it gathers dust and colors unevenly from the light striking it on one side only. Not only this shiftless manner of handling but often stems are put on the string and sometimes other kinds of root and all left on strings when sent to market. I have repeatedly taken roots from the south and others about the same size from the north, and I find no Chinaman can tell them apart. With the cultivated, there is absolutely no difference as to quality that is caused by location so far as the northern and southern states are concerned, nor in fact, any locality where Ginseng will thrive. In this connection the short chapter on quality will be interesting.

Ginseng in its wild or natural state grows mainly in mixed hard wood forests, although it is sometimes found among evergreens. Originally, it was usually found in abundance among the maples, beeches, basswood, rock elm and butternuts, and especially on the shady sides of deep gullies.

The Ginseng plant ripens its seed in late summer or early fall, according to the locality in which it grows. As nature planned it, this seed, coated with a bright scarlet covering, dropped on the ground, and often became dry before the leaves would fall and cover it. From the time the leaves of the forest trees covered the seed, it would naturally be moist until time for it to grow. It, therefore, follows that soon after gathering the seed, it may be allowed to dry but after that it should at all times be kept somewhat moist. The seed ripens in New York state the last of August and does not grow until about eighteen months after. In other words, it does not grow, except in rare cases, the spring following but waits until the second spring.

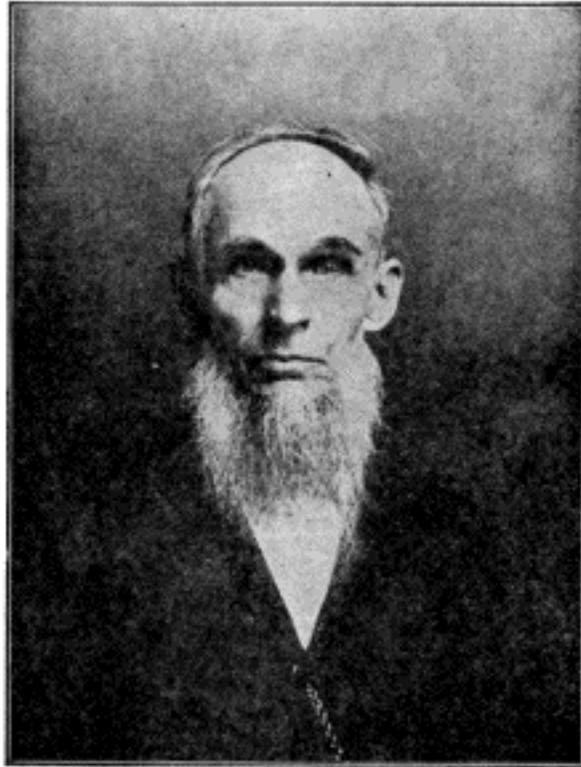
The first season the young Ginseng plant has but three leaves and it very strongly resembles the wild strawberry leaf. At two years old it generally has four leaves and reaches a height of eight or ten inches. It is not unusual for strong two year old cultivated plants to show the mature leaf arrangement, which is three leaf stalks branching from one stalk and each leaf stem having five leaves. The mature plant sometimes reaches the height of two feet but eighteen inches is a good average for garden Ginseng. The wild plant is less. The stalk dies down every fall, and where it perishes away from the neck of the root, it leaves a scar which remains to tell the age of the plant in after years. In this locality, about the middle of July a new bud forms for the next season's stalk. This bud forms on the opposite side of the neck. This

habit causes the neck of this root to be made up of series of scars from the stalks dropping off. I have in my possession a wild root showing 90 of these scars. It often happens, however, that as the neck of these very old plants gets very long, that it rots off and a bud will form down near the main root. In this case, the age of the plant cannot be told.

While the palmy days were on, it was a novel occupation. The “sang diggers,” as they were called, go into the woods with a small mattock, a sack and a lunch and the hunt for the valuable plant begins. Ginseng usually grows in patches. This is not because the plant is by nature a bedding plant but for the reason that the seeds fall near the parent plant. The Ginseng family does not spread from the root at all but comes wholly from seed. In the early days, hunters found very large patches where for hundreds of years the parent plant and its progeny had increased without molestation. Sometimes as high as one hundred pounds of root would be secured from one such plot. Women as well as men and boys hunt the root. The plant is well known to all mountain lads and lasses and few are the mountain cabins that have no Ginseng in them waiting or in preparation for market. The fall is the proper time to gather this root and in the north that is about the only time it is gathered but in the south, it is dug whenever found, as the hunting of “seng” is a business there, if the finder does not gather it as soon as found, some other “digger” is sure to save him the trouble.

How this odd commerce with China arose is in itself remarkable. Many years ago, Father Jartoux, a Catholic priest, one who had long served in China, came as a missionary to the wilds of Canada. Here, in the wilds of the forest, he noted a plant bearing a close resemblance to one much valued as a medicine by the Chinese. A few roots were gathered and sent as a sample to China. Many months later, the ships brought back the welcome news that the Chinese would buy the roots. Early in its history, the value of Ginseng as a cultivated crop was recognized and repeated efforts made to propagate it, but without success at that time. Many failures led to the belief that Ginseng could not be grown. All the early experiments in growing Ginseng were conducted by common “sang diggers” and their failures all hinged on shading. To me it seems strange that it never occurred to them that shade was needed.

It remained for Geo. Stanton, in the early eighties, to be the first to successfully grow this plant. I can do no better at this point than introduce a short obituary written by J. K. Bramer.



GEORGE STANTON.
The Father of the Cultivated Ginseng Industry.

GEORGE STANTON.

My DEAR MR. GOODSPEED:

Unless others more prompt and thoughtful of the memory of our lamented friend and co-worker and first president of the New York State Ginseng Association—George Stanton—have occupied all the space at your disposal in next issue of SPECIAL CROPS, perhaps you and your many readers who, through his contributions to your paper, extended correspondence and wide personal acquaintance, had learned to respect and honor the man, will be pleased with a few lines in commemoration from one who has known him all his life and considered him as a brother, as well I might, for at the time of my birth Mr. Stanton, as a poor, homeless boy, was living with my folks and learning the tinsmith's trade with my father in the village of Fabius, N. Y. Upon completing his apprenticeship he took a part interest in the business

and still later purchased the entire business, which he conducted profitably for a number of years. As a tin worker Mr. Stanton was an expert. Anything that could be constructed from tin or sheet iron that the ordinary man failed on, fell to him, and it is a frequent thing to hear his ingenuity as a mechanic mentioned. The need of more and better tin working tools stimulated him to invent and patent several devices. The improved vat used so commonly years ago and to some extent yet, in cheese factories, was also his invention, the model of which is in my possession now.

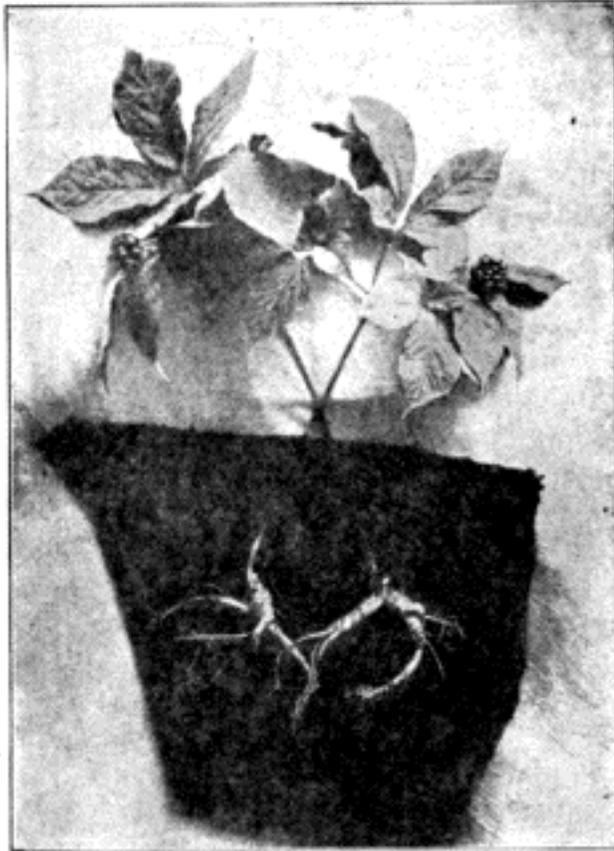
Never a robust man, he was finally compelled to give up his indoor work. For years it seemed that his struggle for life would be against him, as it surely must except for his indomitable will. Coupled with the frail body and poor health, was an ambition and perseverance that rarely accompany a much more robust person, and which would never allow him to be idle. His motto was "wear out, not rust out," which he did in living up to. Along about 1885 nobody expected he could survive any length of time, but he would drag himself to the woods and dig a few wild ginseng roots because of the love he had for the exercise. About this time the thought occurred to him that if he could only transplant the small roots in his garden and cultivate and grow them to a profitable size for drying it might be a pleasing vocation, and work that he, in his feeble health, could do. The carrying out of this thought was the foundation work of Ginseng culture and the "George Stanton Chinese Ginseng Farm."

It is probable that had Mr. Stanton been a robust man and able to carry on a heavier work, the cultivation of Ginseng as an industry would not have been put before the public until much later, if ever. There is no gainsaying that Mr. Stanton is the "father of the Ginseng industry," a title he was justly proud of. The many incidents connected with the early and tender years in the life of his much loved child before it was able to run alone, are interesting and sometimes pathetic. The tenderness with which he would handle the little roots, which he called his "babies," would remind you of the care a mother would show in the tucking away of a real baby in its little bed. The study he gave to their necessities, and the anxiety lest certain things and conditions might be harmful to them, were amusing to me, because at that time and for a long time after, I had not become imbued with the spirit and belief in the real vale of what I called his "hobby" and the prominence it was destined to take. The efforts he made to get the results of his first two years' experience before the public, and the contempt he met with from

most publishers would have discouraged anybody else, but he kept hammering away, got out a small circular and finally kindled a small spark of interest in the minds of a few. From this spark a flame was started that finally caught such men as Timerman, Crosly, Ready, Mills, Perkins, Curtis, Goodspeed, the Knapps and others in this vicinity, and many more in other parts of the state and many other states, who became expert growers. The history of Ginseng culture from then on, you are all more or less conversant with. Mr. Stanton's prominence in the history of the business, especially its first years, must always rest secure with him. Those who knew him best knew his peculiarities and many of the later growers did not think it necessary to follow him in all the little details of cultivation laid down by him. Improvements in methods in any enterprise are looked for and expected. But in honor to Mr. Stanton's methods and thoroughness I am free to say that so far as my knowledge goes no nicer or larger roots have ever been produced than in certain beds over which he had entire supervision. Now that the good kind-hearted old man is gone, I feel a great pleasure in knowing that he had a perfect right to enjoy his feeling of pride in the pattern he had set. Others have outgrown him in the business so far as territory is concerned, but I do not think the particular beds above referred to have been equaled. Am in hope this small tribute may be of interest to some of your readers, and I also hope some one better equipped may give the subject of this sketch fuller measure of justice. Personally, I fell the loss of my long time friend very keenly. His death occurred January 31st, near Jamestown, N. Y., where he was spending the winter. It was my privilege in carrying out one of his last requests to bring his body back to his home for burial in the family plot at Tully, N. Y. He was buried from his old home M. E. church, of which he was a member of long standing. It was the common expression of his old acquaintances that he had by his life earned the epithet of an honest man. Cannot we all strive to earn as grand a title?

Yours truly, J. K. BRAMER.

Apulia Station, N, Y., Feb, 28, 1908.



Four ounce, six year old, reset, wild roots, from L. H. Austin's Garden (Gloverville, N. Y.)

As has since been shown, Ginseng can be easily grown and responds readily to proper care and attention. Under right conditions, the cultivated roots are much larger than the wild and at first brought extremely high prices. As the Chinese came to know of our cultivating the root, it lost favor with them and the wild root is still the highest in their esteem. This is mainly owing to the slow growth which will be touched upon in the chapter on Quality.

The Chinese Ginseng is not quite the same plant as the American Ginseng, but is so near that the casual observer could not distinguish the one from the other. The chemists, however, say that so far as analysis shows, both have practically the same properties.

The photos which accompany give a more accurate appearance of the plants than is possible to give from a written description.

Western authorities have heretofore placed little value on Ginseng as a

curative agent, but a number of recent investigations seem to reverse this opinion. The Chinese, however, have always placed the highest value upon it and millions have used and esteemed it for untold centuries. Its preparation and uses have never been fully understood by western people.

Our Consuls in China have at various times furnished our government with very full reports of its high value and universal use in the "Flowery Kingdom." From these we learn that "Imperial Ginseng," the highest grade grown in the royal parks and gardens, is jealously watched and is worth from \$40.00 to \$200.00 per pound. Of course its use is limited to the upper circle of China's four hundred. The next quality comes from Korea and is valued at \$15.00 to \$35.00 per pound. Its use is also limited to the lucky few. The third grade includes American Ginseng and is the great staple kind. It is used by every one of China's swarming millions who can possibly raise the price. The fourth grade is Japanese Ginseng and is used by, those who can do no better.

Mr. Wildman, of Hong Kong, says: "The market for a good article is practically unlimited. There are four hundred million Chinese and all to some extent use Ginseng. If they can once become satisfied with the results obtained from the tea made from American Ginseng, the yearly demand will run up into the millions of dollars' worth." Another curious fact is the Chinese highly prize certain peculiar shapes among these roots especially those resembling the human form. For such they gladly pay fabulous prices, sometimes six hundred times its weight in silver. The rare shapes are not used as medicine but kept as a charm, very much as some Americans keep a rabbit's foot for luck.

Sir Edwin Arnold, that famous writer and student of Eastern peoples, says of its medicinal values: "According to the Chinamen, Ginseng is the best and most potent of cordials, of stimulants, of tonics, of stomachics, cardiacs, febrifuges, and, above all, will best renovate and reinvigorate failing forces. It fills the heart with hilarity while its occasional use will, it is said, add a decade of years to the ordinary human life. Can all these millions of Orientals, all those many generations of men, who have boiled Ginseng in silver kettles and have praised heaven for its many benefits, have been totally deceived? Was the world ever quite mistaken when half of it believed in something never puffed, nowhere advertised and not yet fallen to the fate of a Trust, a Combine or a Corner?"

It has been asked why the Chinese do not grow their own Ginseng. In reply it may be said that America supplies but a very small part, indeed, of the Ginseng used in China. The bulk comes from Korea and Manchuria, two provinces belonging to China, or at least which did belong to her until the recent Eastern troubles.

Again, Ginseng requires practically a virgin soil, and as China proper has been the home of teeming millions for thousands of years, one readily sees that necessary conditions for the plant hardly exist in that old and crowded country.