

The Cultivation of Medicinal Plants in the United States

by

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SCHOOL OF PHARMACY

A Thesis Submitted for the Degree of
Bachelor of Science Pharmacy Course

University of Wisconsin

1915

Bibliography of Journal Literature.

Stearns, F.

1859

The Peppermint Plantations of Michigan.

Proc. A. Ph. A., 31, p. 33.

The author gives a detailed account of the history and cultivation of peppermint in Michigan with special reference to the production of volatile oil.

Grahame, I. J.

1866

On American Opium.

Proc. A. Ph. A., 14, p. 233.

The author gives an account of the cultivation of the opium poppy in Campbell County, Va.

Heinitsh, C. A.

1866.

Note on the Culture of Saffron in Pennsylvania.

Proc. A. Ph. A., 14, p. 254.

The article tells briefly of the cultivation of crocus sativus by the Germans in Lancaster County, Pa.

1874.

Herb Cultivation at Mitcham.

The Garden. (Pharm. Journ., 34, p. 182).

The article deals with the following plants:

Chamomile	Spearmint
Lavender	Poppies
Licorice	Sage
Peppermint	Squirting cucumber

Ramsey, W. H.

1875.

Hop Culture in Wisconsin.

Am. Journ. Pharm., 47, p. 241.

The author discusses the cultivation of hops in Wisconsin. Reedsburg, Sauk County.

Holmes, E. M.

1881.

The Cultivation of Medicinal Plants in Lincolnshire.

Pharm. Journ., 41, p. 237.

The author gives a detailed account of the cultivation of medicinal plants at Market Deeping, near St. James Deeping, England, where on the farm of W. Holland the following plants are cultivated:

Peppermint
Henbane
Belladonna
Dill
Caraway
Squirting cucumber
Lactuca virosa
Savin
Rosemary
Wormwood
Thyme
Lemon thyme
Aconite
Dandelion root

On the Germination of Seeds of Medicinal Plants.

Proc. A. Ph. A., 30, p. 565.

The following seeds were tested:

Aconitum napellus
Agrimonia officinalis
Anchusa Italica
Anethum graveolens
Angelica Archangelica
Artemisia absinthium
Asclepias tuberosa
Atropa belladonna
Berberis vulgaris
Bryonia alba
Calendula officinalis
Colchicum autumnale
Coriandum sativum
Digitalis purpurea
Gentiana lutea
Glycyrrhiza glabra
Hyoscyamus niger
Hyssopus officinalis
Lobelia inflata
Marrubium vulgare
Phytolacca decandra
Polygala Senega
Ruta graveolens
Saliva officinalis
Sarrothamnus scoparius
Solanum dulcamara
Tanacetum vulgare
Taraxacum dens-leonia
Valeriana officinalis
Veratrum album

Rhubarb.

Proc. A. Ph. A., 32, p. 463.

The author gives in detail the history, habitat, culture and preparation of rhubarb, with reference to its cultivation in the United States.

Report on the cultivation of *Aconitum Napellus*.

Pharm. Journ., 48, p. 213.

The author discusses some factors which enter into the cultivation of *Aconitum Napellus*. He mentions the following varieties of aconite:

Aconitum Napellus

Aconitum variegatum

Aconitum paniculatum

Der Anbau der Arzneigewächse in Deutschland.

Archiv Der Pharm., 228, p. 663.

In connection with a somewhat detailed account, the author supplies a list of the following medicinal plants cultivated in Germany and records the localities:

Lilium candidum L.

Acorus Clamus L.

Cannabis sativa L.

Saponaria officinalis

Adonis vernalis

Nigella sativa

Aconitum Napellus

Paeonia officinalis

Papaver somniferum

Papaver Rhoeas

Cheiranthus Cherri

Sinapis alba

Brassica nigra Koch

Cochlearia officinalis

Malva vulgaris Fries

Malva silvestris L.

Althaea officinalis

Althaea rosea Cavanilles

Ruta graveolens

Rhus toxicodendr. Mich.

Pimpinella Anisum

Carum Carvi

Archangelica officinalis Hoffmann

Levisticum officinale Koch

Foeniculum capillaceum Gilibert
Anethum graveolens
Petroselinum sativum, Hoffmann

Meum athamanticum Jacq.
Coriandrum sativum
Conium maculatum
Prunica granatum
Rosa gallica
Rosa centifolia
Rosa damascena Miller (bulgar. Rose)
Trigonella Faenum graecum
Melilotus officinal u. M. altissimus Thull.
Glycyrrhiza glabra
Menyanthes trifoliata
Borago officinalis
Cynoglossum officinal
Hyoscyamus niger
Atropa Belladonna
Datura stramonium
Verbascum thapsus
Verbascum thapsiforme
Verbascum schrad
Verbascum phlomoid
Veronica officinalis
Mentha piperita
Mentha crispa
Pulegium vulgare Mill.
Salvia officinalis
Salvia sclarea
Rosmarinus officinal
Glechoma hederacea
Melissa officinalis
Hyssopus officinalis
Thymus vulgaris
Lavendula vera DC
Lamium album
Origanum Majorana
Ocimum Basilicum
Satureja hortensis
Teurium scordium
Bryonia vulgaris
B. dioica Jacqu.
Asperula odorata
Sambusus nigra
Valeriana officinalis
Artemisia absinthium
Artemisia abrotanum
Artemisia Dracunculus
Pyrethrum cinerariae folium Trev.
Pyrethrum carneum Bieb.

Pyrethrum roseum Bieb.
Anacyclus officinarum Hayne
Calendula officinalis
Spilanthus oleracea Jacq.
Anthemis nobilis
Silybum marian Gaertn.
Lappa major Gaertn.
Lappaarten
Lactuca virosa
Tanacetum vulgare
Inula helenium
Scorzonera hispanica
Cnicus benedictus Gaerth

For a tabulation of the districts and the plants cultivated in each, see p. 686 of the original.

Rittenhouse, H. N. 1895.

The Cultivation of Licorice Root in the United States.
Amer. Journ. Pharm., 67, p. 72.

The author discusses briefly the history, commerce and cultivation of licorice root. He claims to have grown the root in New Jersey, Pennsylvania, Louisiana and Florida.

Holmes, E. M. 1897.

The Cultivation of Sumbul in England.

Pharm. Journ., 58, p. 347. (Am. Journ., Pharm., 69, p. 314.)

The author records his experiences in the cultivation of Sumbul. The article is illustrated.

Holems, E. M. 1899.

The Cultivation of Medicinal Plants in Cambridgeshire.

Pharm. Journ., 49, p. 122.

The article deals with the following plants:

Aconite
Henbane

Belladonna
Foxglove

Gorden, F. T.

1900.

Notes on the Culture of Drugs.

Am. Journ. Pharm., 72, p. 534.

The author records his experience in cultivating,

Belladonna
Hyoscyamus
Carthamus
Aconiti.

Holmes, E. M.

1900.

The Cultivation of Herbs in Surrey.

Pharm. Journ., 65, p. 214.

The author gives an account of the herb farm of Messrs. Potter and Clark near Carshalton in Surrey. The following plants are cultivated:

Pennyroyal
Peppermint
Hyssop
Yarrow
Mugwort
Wormwood
Tansy
Feverfew
Marshmallow
Germander (Teucrium chamaedrys)
Rue
Lavendar
Balm
American golden rod (Solidago)
Comfrey
Greater celandine (Chelidonium majus)
Southernwood (Artemisia abrotanum)
Stinking oracle (Chenopodium olidum)
Cotton lavender (Santolina chamaecyparissus)
Belladonna
Datura tatula
Parsley
Spearmint
Summer savory (Satureia hortensis)
Winter savory (Satureia montana)
Garden majoram (Organum majorana)
Thyme
Lemon thyme

Tarragon (*Artemisia dracunculus*)
Red sage
White sage

Holmes

1900

The Cultivation of Medicinal Plants in Bedfordshire and
Suffolk.

Pharm. Journ., 65, p. 338.

The author gives an account of the plants cultivated on the drug farm of Stanfford Allen & Sons at Ampthill and Steppingley, in Bedfordshire, and at Long Melford in Suffolk. The following plants are cultivated at Steppingley:

Belladonna
Lavender
Henbane
Black peppermint
White peppermint
Foxglove
Pennyroyal

The following plants are cultivated at Ampthill:

Aconite
Belladonna
Rhubarb
Opium poppy
Squirting cucumber
Lavender
Conium
Lactuca virosa
Rosa gallica
Rosemary
Savine
Pennyroyal

The following plants are cultivated at Long Melford:

Peppermint
Opium poppy
Dill
Henbane
Valerian

Kilmer, F. B.

1901.

Drug Culture

Am. Journ. Pharm., 73, p. 10.

In a lengthy article, the author gives reasons for the desirability and possible necessity of drug culture. He tells of his experience in cultivating a few medicinal plants.

Ransom, F.

1902.

Notes on Medical Plants Cultivated in Great Britain.
Pharm. Journ., 68, p. 149.

The author tells of the cultivation of the following plants:

Aconite
Belladonna
Henbane
Lactuca virosa

True, R. H.

1902.

Drug and Medicinal Plant Investigations in the
Department of Agriculture.

Am. Journ. Pharm., 74, p. 419.

The author tells of the scope of the work in this direction by the Bureau of Plant Industry. Trial plats of the following plants have been started in Florida, North Carolina, Washington, D. C., Massachusetts, Vermont, Wisconsin and Washington, on both sides of the Cascades.

Belladonna
Hyoscyamus
Stramonium
Digitalis

Aconite
Arnica
Opium
Licorice

Todd, A. M.

1903.

Mint. Its Early History and Modern Commercial Development.
Proc. A. Ph. A., 51, p. 271.

The author discusses the early history of the mints and then discourses upon the Michigan peppermint industry under the following heads:-

Commercial History
Soil
Planting and Cultivation
Harvesting and Distillation

Schneider, A.

1904.

Gardens of Medicinal Plants.
Am. Journ. Pharm., 76, p. 19.

The author discusses the subject under the following heads:-

- 1.) Prefactory
- 2.) Historical
- 3.) Purposes of gardens of medicinal plants.
- 4.) Plants to be grown.
- 5.) Grouping of plants.

Holmes, E. M.

1905.

Cultivation of medicinal plants.
Pharm. Journ., 74, p. 585.

The author gives directions for the following drug plants:

- I. Aconitum napellus, p. 586.
Papaver Rhoëas, p. 586.
Papaver hybridum, p. 586.
Papaver argemone, p. 586.

Papaver dubium, p. 586.
Papaver aomniferum, p. 586.
Brassica alba, p. 586.
Brassica nigra, p. 586.
Cochlearia armoracia, p. 586.
Althaea officinalis, p. 586.
Ruta graveolens, p. 586.
Cystus scoparius, p. 586.
Rosa canina, p. 586.
Prunus lauro-cerasus, p. 506.
Bryonia dioica, p. 586.
Bryonia alba, p. 586.
Conium maculatum, p. 586.

II. Foeniculum capillaceum, p. 690.
Oenanthe crocata, p. 690.
Sambucus nigra, p. 690.
Sambucus canadensis, p. 690.
Valeriana officinalis, p. 690.
Valeriana officinalis, Var. sambucifolia, p. 690.
Valeriana officinalis, Var. milanii p. 690.
Anthemis nobilis, p. 690.
Matricaria chamomilla, p. 690.
Traxacum officinale, p. 690.
Memyanthes trifoliata, p. 690.
Oenanthe crocata, p. 690.
Atropa belladonna, p. 690.
Solanum dulcamara, p.

III. Datura stramonium, p. 780.
Hyocyamus niger, p. 788.
Juniperus communis, p. 788.
Juniperus sabina, p. 788.
Taxus baccata, var. fastigiata, p. 788.
Aspidum filix-mas. p. 788.
Polyaticum

IV. Digitalis purpurea, vol. 75, p. 5.
Lavandula vera, p. 5.
Mentha piperita p. 5.
Mentha viridis, p. 5.
Mentha pulegium, p. 5.
Rosmarinus officinalis, p. 5.
Daphne laureola, p. 5.
Daphne mezereon, p. 5.
Quercus robar, p. 5.
Ulmus campestris, p. 5.
Salix alba p. 5.
Colchicum autumnale, p. 5.
Hordeum distichon, p. 5.
Triticum vulgare, p. 5.
Prunus sylvestris, p. 5.

Carr, F. H. and W. C. Reynolds

1908.

The Variation in activity of Commercial Crude Drugs.
Pharm. Journ. 80, p. 542.

The authors show in a series of experiments how the potentancy of drugs depends on such factors as fertilization, curing and time of collection. The following plants are mentioned:

Pilocarpus jaborandi
Pilocarpus microphyllus
Cytisus Scoparius
Silex rubra
Datura arborea
Hyocyanus, Egyptian
Atropa Belladonna

1910.

English herbs gathered and grown.

Chem. and Drugg., 76, p. 179.

The article is treated under the following heads:

The herb gatherer

English herb growing in Kent.

Special reference is made to the farm of Burroughs Wellcome & Company, at Dartford, where the following plants are cultivated.

Hydrastis canadensis
Hyoscyamus niger
Datura metel
Belladonna
Digitalis purpurea
Aconitum nepellus
Conium maculatum
Colchicum autumnale
Lavender
Mentha piperita
Senega
Taraxacum

Ginseng
Podophyllum peltatum
Scapola atropoides
Glaucum luteum
Grindelia robusta

The article is illustrated.

Borneman, J. A.

1912

Cultivation of Medicinal Plants.

Am. Journ. Pharm., 84, p. 546.

The author tells of his experience in cultivating medicinal plants at the H. K. Mulford Drug Farm, Glenolden, Pa. He mentions in detail the following plants:

Digitalis purpurea
Atropa Belladonna
Hyocyamus niger
Cannabis sativa
Hydrastis canadensis

The article is illustrated.

Evans, J. H. E.

1912.

Suggestions for the more extended cultivation of drugs.
Yearbook of Pharm., 49, p. 451; (Am. Journ. Pharm., 84,
p. 470.

The author makes a plea for government aid in the cultivation of medicinal plants in Great Britain and Colonies. He discussed the subject under the following heads.

ing
Natural causes influenc/ supply.
Time and method of collection.
The supply of labor.
Deficiency in supply.
Cultivation of drugs.
Difficulties to be reckoned with.

Dependence of selected localities.
Introduction of synthetic bodies.
Conclusion.

Evans, E.

1912.

Presidential Address, B. P. C.

Chem. and Drugg., 81, p. 49.

In a general address the author tells what is being done by the United States government in regard to the cultivation of medicinal plants. He gives an extract of a letter from Dr. True which contains a few scientific hints on drug plant cultivation, harvesting and curing.

Llody, J. U.

1912.

The cultivation of hydrastis.

Journ. A. Ph. A., 1, p. 5.

The author discusses the subject somewhat at length under the following captions:-

Names
Native distribution
Commercial history
Cultivation
Character of rhizome
Increase by root buds
Increase by cuttings
Gathering the crop
Recapitulation

The article is illustrated.

Miller, F. A.

1912.

The Improvement of Medicinal Plants.

Proc. Ind. Acad. of Science, 1911, p. 309. (Pharm. Journ.,
89, p. 367.)

The article contains the reports on a series of experiments performed by selecting heavy and light seeds of

Articum lappa

Hyocyamus niger, and

Digitalis purpurea.

The author finds that while heavier seeds produce a more luxuriant plant, hence more drug, the increase is not as great for the medicinal plants tested as for sugar beets etc. as suggested by the Div. of Bot., U. S. Dept., of Agr.

The article is illustrated.

Newcomb, E. L.

1912.

Cultivation of medicinal plants at the College of Pharmacy of the University of Minnesota.

The article contains a long list of the plants cultivated.

Stingel, J. L.

1912.

Cultivation of *Hydrastis*.

Amer. Journ. Pharm., 84, p. 299.

The article deals briefly with the cultivation of *Hydrastis*.

Chevalier, J.

1913.

La culture des plants médicinales, résultats de 10 ans d'expériences à Houdan.

Nouveaux Remedes, 30, p. 169. (Year Book of Pharm., 50, p. 285.)

The author tells of his successful cultivation of medicinal plants in Houdan. He gives detailed directions for the treatment of various crops.

I. General Considerations, p. 169.

II. Special Considerations, p. 217.

Miller, F. A.

1913.

Breeding medicinal plants.

Am. Journ. Pharm., 85, p. 291. (Lilly Scientific Bull., 1, p. 127).

The author tells of his experiences in the improvement of medicinal plants with special reference to the Solanaceae. The following plants are treated in detail:

Belladonna

Henbane

Stramonium species

Digitalis (foxglove)

The article is illustrated.

Miller, F. A.

1913.

The Improvement of Medicinal Plants.

Journ. A. Ph. A., 2, p. 730.

The author tells of his experiments in improving medicinal plants by means of breeding. He mentions the

following plants in detail:-

Belladonna

Henbane

Stramonium

Digitalis

Cannabis

The article is illustrated.

True, R. H.

1913.

Drug Plant Work in the United States.

Department of Agriculture.

Amer. Drugg., 61, p. 153.

The author discusses the scope of the work by the Department of Agriculture in the improvement of medicinal plants. The following plants are mentioned:

Digitalis

Stramonium

Camphor

Monarda punctata

Wintergreen

The article is illustrated.

1914.

A Connecticut Herb Farm.

The Spatula, 21, p. 141.

The article which is of a popular nature, gives a brief historical sketch of the cultivation of medicinal plants in the Eastern states. More specifically it refers to the distillation of worm-wood by W. F. Young, the manufacturer of Absorbine, at Enfield, Conn. (Illustrated)

1914.

The Japanese Mint Industry.

La Parfumerie Moderne, p.

Chem. and Drugg., 84, p. 213

The article deals with the cultivation of peppermint in Japan. One illustration.

Miller, F. A.

1914.

The Commercial possibilities in growing medicinal plants.

Journ. A. Ph. A., 3, p. 34. (Lilly Scientific Bull.,
1, p. 163.)

In a lengthy article the author tells of some misleading statements that are made about the cultivation of medicinal plants with reference to their commercial possibilities.

Miller, F. A.

1914.

Influence of Soil Composition on Medicinal Plants.

Journ. A. Ph. A., 3, p. 308.

The author records in detail his experiences in using fertilizers in an effort to improve the potency of medicinal plants. Special reference is made of

 Digitalis

 Stramonium

 Belladonna.

Miller, F. A. and Reed, R. N.

1914.

A Study of American Grown Belladonna.

Journ. of Ind. & Eng. Chem., 6, p. 25.

The author gives a detailed account of the cultivation of belladonna in this country with special reference to alkaloidal content.

Stockberger, W. W.

1914.

Medicinal Plant Gardens.

Journ. A. Ph. A., 3, p. 1436. (Am. Journ. Pharm., 86,
p. 506.)

The author points out some popular misconceptions concerning the scope of medicinal herb gardens. He defines the so called pedagogic garden and industrial garden.

Bruder,

1914.

Cultivation of Medicinal Plants.

Journ. N. A. R. D., 19, p. 508.

In a series of articles the subject is treated under the following heads:

General Introduction, p. 508.

Golden seal, p. 508.

Description, p. 510.

Propagation, pp. 510-555.

Root and bud method, p. 510.

By seed, p. 555.

Soil and fertilizer, pp. 555 and 605.

Artificial shade, p. 605.

Ventilation, p. 605.

Mulching, p. 606.

Forest bed culture, p. 606.

Digging and curing, p. 607.

Diseases and pests, p. 608.

Time required, p. 608.

Cost and yield, p. 608.

Ginseng, p. 798.

Habitat, p. 798.

Description, p. 798.

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Planting the beds, p. 799.

Mulching, p. 800.

Ventilation and protection, p. 800.

Forest plantings, p. 800.

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Digging the root, p. 801.
Diseases, p. 801.
Value, p. 801.
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General information, continued, p. 862.

Aspidium, p. 862.

Description, p. 862.
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Collection, p. 863.

Cimicifuga, p. 863.

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Unused resources, p. 110.

Source and supply of medicines, p. 1110.

Sanguinaria, p. 1112.

Description, p. 1112.

Root stock, p. 1118.
Collection, p. 1118.

A New Department, p. 1165.

Triticum, (couch grass), p. 1165.

Description, p. 1165.
Collection, p. 1165.

Calamus(sweet flag), p. 1166.

Description, p. 1166.
Collection, p. 1166.

Why cultivation, p. 1218.

Rumex(yellow dock) p. 1218.

Description, p. 1218.
Collection, p. 1219.

. Podophyllum(may apple, mandrake), p. 1219.

Description, p. 1219.

Collection, p. 1219.

General information continued, p. 1264.

Lovage(Levisticum) p. 1264.

Collection, p. 1265.

Skunk cabbage(Dracontium) p. 1265.

Collection, p. 1265.

Canada snake root(Asarum) p. 1265.

Collection, p. 1265.

Bruder,

1915.

Cultivation of Medicinal Plants Continued.

N. A. R. D. Journ., 20, p. 57.

General information continued, p. 57.

Burdock(lappa) p. 57.

Description of root, p. 57.

Collection, p. 57.

Echinacea(cone flower) p. 57.

Description, p. 57.

Collection, p. 57.

Dandelion(Taraxacum), p. 58.

Description, p. 58.

Collection, p. 58.

Black Indian Hemp(Apocynum, p. 58)

Description, p. 58.

Collection, p. 58.

Yellow Jasmine, p. 59.

Collection, p. 59.

General Information continued, p. 157.

Stillingia, p. 157.

Description, p. 157
Collection, p. 157.

Spigelia, p. 157.

Description, p. 157.
Collection, p. 157.

Belladonna, p. 158.

Propagation, p. 158.
Soil, p. 158.
Collection, p. 158.

1915.

The Medicinal Garden of the Missouri Botanical Garden.

Missouri Botanical Garden, Bull., p. . (Natl. Drugg.,
45, p. 199.

This is the official description of the "medicinal garden" in which the plants are arranged into thirty-three groups or beds according to the therapeutic classification of their medicinal properties, hence not a few of them occur not only twice but even many times.

1915.

Winter work on the Cultivation of Medicinal Plants.

Tile and Till, 1, p. 4.

The article deals with some of the problems which are encountered in cultivating medicinal plants with special reference to the work being done at the drug farm of Eli Lilly & Company, Indianapolis, Ind. The following plants are mentioned:

Belladonna

Datura species

Digitalis purpurea
Henbane (annual)
Henbane (biennial)
Henbane (Egyptian)
Indian canabis
Conium
Pulsatilla
Marshmallow
Seoparius
Monarda

The article is illustrated.

Day, Elsie

1915.

Drug Plant Cultivation.

Drugg., Circ., 59, p. 15.

The author gives a brief historic sketch of the growing of medicinal plants, and supplies a list of such plants native to Nebraska.

Kilmer, F. B.

1915.

The Cultivation of Medicinal Plants.

Pharm. Era, 48, p. 156.

The author discusses in a somewhat general way, the cultivation of drug plants in America and Europe. He mentions the following plants:-

Hydrastis

Senega

Spigelia

Belladonna

Digitalis

Hyoscyamus

Belladonna

The following growers of medicinal plants are mentioned:

Ransome & Son, Hitchin, England.
Squire & Son, Bedfordshire, England.
Stafford, Allen & Son, Bedfordshire, England.
Johnson & Johnson, New Brunswick, N. J.
Eli Lilly & Co., Indianapolis, Ind.
H. K. Mulford Co., Philadelphia, Pa.

Otto, B.

1915.

Atropa Belladonna.

Journ. A. Ph. A., p. (Nat'l. Drugg., 45, p. 188)

The author discusses the subject under the following heads:

History
Description
Preparation
Uses
Symptoms of over doses
Antidotes
Cultivation

Mention of cultivation is made at the following places:

Johnson & Johnson

New Brunswick, N. J.
Conshohockere, Pa.
Salinas, Cal.

Parke, Davis & Company.

Detroit, Michigan.

Eli Lilly & Company

Indianapolis, Indiana.
H. K. Mulford & Company, Glenolden, Pa.

Index to Journal Literature.

- Aconitum Napellus.* Holmes, 1881; Saunders, 1882; Holmes, 1888;
Holmes, 1899; Holmes, 1900; Gorden, 1910;
Ransom, 1902; True, 1902; Holmes, 1905.
- Acorus calamus.* 1914.
- Agrimonia officinalis,* Saunders, 1882.
- Althaea officinalis.* Holmes, 1900; Holmes, 1905; 1915.
- Anemone Pulsatilla.* , 1915.
- Anethum graveolens.* Holmes, 1881; Saunders, 1882; Holmes, 1900.
- Angelica archangelica.* Saunders, 1882.
- Anthemis nobilis.* Holmes, 1905.
- Anthusa italica.* Saunders, 1882.
- Apocynum.* , 1915.
- Apium petroselinum.* Holmes, 1900.
- Arctium lappa.* Miller, 1912; , 1915.
- Arnica montana.* True, 1902.
- Artemisia absinthium.* Holmes, 1881; Saunders, 1882; Holmes,
1900; , 1914.
- Artemisia abrotanum.* Holmes, 1900.
- Artemisia dracunculus.* Holmes, 1900.
- Artemisia vulgaris.* Holmes, 1900.
- Asarum.* , 1914.
- Asclepias tuberosa.* Saunders, 1882.
- Aspidium.* Holmes, 1905; , 1914.
- Atropa belladonna.* Holmes, 1881; Saunders, 1882; Holmes, 1890;
Holmes, 1899; Gordon, 1900; Holmes, 1900;
Ransom, 1902; True, 1902; Carr, 1908.

—, 1910; Borneman, 1912; Miller, 1913;
Miller, 1914; Miller, 1914; Miller, 1915;
Kilmer, 1915; —, 1915.

Balm. See *Mellissa officinalis*.

Belladonna. See *Atropa Belladonna*.

Berberis vulgaris. Saunders, 1882.

Black Indian Hemp. See *apocynum*.

Brassica alba. Holmes, 1905.

Brassica nigra. Holmes, 1905.

Bryonia alba. Saunders, 1882.

Bryonia dioica. Holmes, 1905.

Burdock. See *Arctium lappa*.

Calamus. See *Acorus calamus*.

Callendula officinalis. Saunders, 1882.

Cannabis sativa. Borneman, 1912; —, 1915.

Canada snakeroot. See *Asarum*.

Caraway. See *Carum carvi*.

Carthamus tinctorius. Gordon, 1900.

Carum carvi. Holmes, 1881.

Celandine. See *Chelidonium*.

Chelidonium majus. Holmes, 1900.

Chenopodium olidum. Holmes, 1900.

Chrysanthemum parthenium. Holmes, 1900.

Cimicifuga. Bruder, 1914.

Cochlearia armoracis. Holmes, 1905.

Colchicum autumnale. Saunders, 1882; Holmes, 1905; —, 1910.

Comfrey. See *Symphytum officinale*.

Cone flower. See *Echinacea*.

Conium maculatum. Holmes, 1900; Holmes, 1905; , 1910;
 , 1915.

Coriandrum sativum. Saunders, 1882.

Cotton lavender. See *Santolina chamaecyparissus*.

Crocus sativus. Heinitsch, 1866.

Cystisus scoparius. Holmes, 1905; Carr, 1908; , 1915.

Dandelion. See *Taraxacum*.

Daphne laureola. Holmes, 1905.

Daphne mezereum. Holmes, 1905.

Datura. Miller, 1913; Miller, 1914; , 1915.

Datura arborea. Carr, 1908.

Datura metel. , 1910.

Datura stramonium. True, 1902.

Datura tatula. Holmes, 1900; Holmes, 1905.

Digitalis purpurea. Saunders, 1882; Holmes, 1889; Holmes, 1900.
 True, 1902; Holmes, 1905; _____, 1910;
 Borneman, 1912; Miller, 1912; Miller, 1913;
 Kilmer, 1915; , 1915.

Dill. See *Anethum graveolens*.

Dracontium. Bruder, 1914.

Ecballium elaterium. , 1874; Holmes, 1887; Holmes, 1900.

Echinacea. Bruder, 1915.

Feverfew. See *Chrysanthemum*.

Foxglove. See *Digitalis*.

Foeniculum capillaceum. Holmes, 1905.

Garden majoran. See *Organum majorana*.

Gelsemium. Bruder, 1915.

Gentiana lutea. Saunders, 1882.

Germander. See *Teucrium chamaedrys*.

German chamomile. See *Matricaris*.

Ginseng. See *Panax*.

Glaucum leutum. , 1910.

Glycyrrhiza glabra. , 1874; Saunders, 1882; Rittenhouse,
1895.

Golden rod. See *Solidago*.

Golden seal. See *Hydrastis*.

Grindelis robusta. , 1910.

Hedeoma pulegioidis. Holmes, 1910.

Henbane. See *Hyoscyamus niger*.

Hops. See *Humulus lupulus*.

Hordeum distichon. Holmes, 1905.

Humulus lupulus. Ramsey, 1875.

Hydrastis canadensis. —, 1910; Bonpreman, 1912; Lloyd, 1912.
Stingel, 1912; Bruder, 1914; Kilmer, 1915.

Hyoscyamus niger. Holmes, 1881; Saunders, 1882; Rittenhouse,
1895; Gordon, 1900; Ransom, 1902; True, 1902;
Borneman, 1912; Miller, 1912; Miller, 1913;
Kilmer, 1915; , 1915.

Hyssopus officinalis. Saunders, 1902; Holmes, 1900.

Indian cannabis. See *Cannabis sativa*.

Japanese peppermint. See *Mentha pipereta*.

Juniperus cummunis. Holmes, 1905.

Juniperus sabina. Holmes, 1881; Holmes, 1900; Holmes, 1905.

Lactuca virosa. Saunders, 1882; Holmes, 1900; Ransom, 1902.

Lappa. See Arctium.

Lavendula officinalis. , 1874; Holmes, 1900; , 1910.

Lavendula vera. Holmes, 1905.

Levisticum. Bruder, 1914.

Licorice. See Glycyrrhiza glabra.

Lobelia inflata. Saunders, 1882.

Lovage. See Levisticum.

Malefern. See Aspidium.

Mandrake. See Podophyllum.

Marrubium vulgare. Saunders, 1882.

Marshmallow. See Althaea officinalis.

Matricaria chamomilla. , 1874; Holmes, 1905.

May apple. See Podophyllum.

Mellissa officinalis. Holmes, 1900.

Mentha piperita. Stearns, 1859; , 1874; Holmes, 1881;
Holmes, 1900; Todd, 1903; Henkel, 1905; Holmes,
1905; , 1910; , 1914.

Mentha pulegium. Holmes, 1905.

Mentha viridis. , 1874; Holmes, 1900; Holmes, 1905.

Memyanthes trifoliata. Holmes, 1905.

Monarda. , 1915.

Mugwort. See Artemisia vulgaris.

Mustard. black, See Brassica nigra.

Mustard, white. See Brassica alba.

Oenanthe crocata. Holmes, 1905.

Opium. See Papaver somniferum.

Organum majorana. Holmes, 1900.

Rosmarinus officinalis. Holmes, 1881; Holmes, 1900; Holmes, 1905.

Rosmary. See *Rosmarinus officinalis*.

Rumex. Bruder, 1914.

Ruta graveolns. Saunders, 1882; Holmes, 1900; Holmes, 1905.

Rue. See *Ruta graveolens*.

Saffron. See *Crocus sativus*.

Sage. See *Salvia officinalis*.

Salix alba. Holmes, 1905.

Salvia officinalis. , 1874; Saunders, 1882; Holmes, 1900.

Sambucus canadensis. Holmes, 1905.

Sambuscus nigra. Holmes, 1905.

Sanguinaria. Bruder, 1914.

Santolina chamacyparissus. Holmes, 1900.

Sarthamnus Scoparius. Saunders, 1882.

Satureia hortensis. Holmes, 1900.

Satureia montana. Holmes, 1900.

Savin. See *Juniperus sabina*.

Scoparius. See *Cytisus Scoparius*.

Scopla atropoides. , 1900.

Senega. See *Polygala senega*.

Silex rubra. Carr, 1908.

Sinking orach. See *chenopodium olidium*.

Skunk cabbage. See *Dracontium*.

Solanum dulcamara. Saunders, 1882; Holmes, 1905.

Solidago. Holmes, 1900.

Southern wood. See *Artemisia odoratum*.

Spigelia marilandica. Kilmer, 1915.

Squirting cucumber. See *Ecballium elaterium*.

Stillingia. Bruder, 1915.

Stramonium. See *Datura*.

Sumbul. Holmes, 1897.

Summer savory. See *Satureia hortensis*.

Sweet flag. See *acorus calamus*.

Symphytum officinale. Holmes, 1900.

Tanacetum vulgare. Saunders, 1882; Holmes, 1900.

Tansy. See *Tanacetum vulgare*.

Taraxacum officinalis. Holmes, 1881; Saunders, 1882; Holmes, 1905; , 1910; Bruder, 1915.

Tarragon. See *Artemisia dracunculus*.

Taxus baccata. Holmes, 1905.

Teucrium chamaedrys. Holmes, 1900.

Thyme. See *Thymus vulgaris*.

Thymus vulgaris. Holmes, 1881; Holmes, 1900.

Triticum. Bruder, 1914.

Triticum vulgare. Holmes, 1905.

Ulmus campestris. Holmes, 1905.

Valeriana officinalis. Saunders, 1882; Holmes, 1900; Holmes, 1905.

Veratrum album. Saunders, 1882.

Winter savory. See *Satureia montana*.

Wormwood. See *Artemisia absinthium*.

Yellow dock. See *Rumex*.

Yellow jasmine. See *Gelsemium*.

Government Publications.

Dodge, C. R.

1895.

Flax for seed and fiber in the United States.

U. S. Dept. Agric., Farmers Bull., 27.

The author discusses the subject under the following heads:

Introduction

Can both seed and fiber be saved ?

Soil selection

Fertilizing

Rotation of crops

Sowing of seed

Kind of seed to sow

Meteorological considerations

Weeds

Harvesting the fiber

Saving the seed

Rotting the straw

Practical considerations

The "American practice"

Flint, D.

1900.

Hop culture in California.

U. S. Dept. Agric., Farmers Bull. 115.

The subject is treated under the following heads:

Introduction

Botanical features of hop plant

Varieties of hops

Where grown and yield per acre

Sacramento county
Yuba county
San Joaquin County
Yolo county
Sonoma county
Mendocino county
Alamenda County

Climatic conditions.

Beginning of the industry in California.

Method of culture

Preparing the ground
The rows
The roots or sets
Pruning
Planting
Replanting
Cultivation

Systems of training

The high wire trellis
Low trellis

Tying up the vines

Harvesting

Hop picking
The pickers

Curing hops

The kiln
Drying the hops
Bleaching
Cooling

Baling

Marketing

Prices, wages and expenses.

The price of hops
Wages
Expenses

Conclusion

Requisites for success
The labor question

Some hops statistics

Hop production in U. S.

Acreage, yield and value of hops in U. S. in 1889.
Acreage, yield and value of hops in U. S. in 1890.
Estimated hop-production on Pacific coast, 1890-1898.
Estimated hop production of U. S., 1889-1899.
Exports and imports.

Export of hops from U. S. for yrs. 1894-1898.
Imports of hops from U. S. for yrs. 1894-1898.
Excess of exports over imports and excess of
import prices over export prices for the
years 1894-1898.

True, R. H.

1903.

Cultivation of Drug Plants in the United States.

U. S. Dept. Agric., Yearbook, 10, p. 337.

The author treats the subject under the following heads:

Introduction

Importation of drug-producing plants.

Summary of crude drug importation for the
fiscal year ended June 30, 1902.

Drug substances of vegetable origin,
advanced in value by preparation, imported
during the fiscal year ended June 30, 1902.

Prospects for growing drug plants.

Experiments of the Dept. of Agriculture.

Licorice
Capsicum
Opium poppy
Belladonna
Henbane
Stramonium
Caraway
Anise
Coriander
Sage

The article is illustrated.

Weeds used in Medicine.

U. S. Dept. Agric., Farmers Bull. 188.

The author treats the subject under the following heads:

Introduction

Collection and Curing of Drugs.

Roots
Barks
Leaves and herbs
Flowers
Seeds

Disposal of drugs.

Description of plant.

Burdock(*Articum lappa*)

Dandelion(*Taraxicum taraxicum*; *Taraxacum officinale*.)

Yellow dock(*Rumex crispus*)

Broad leaved dock(*Rumex obtusifolius*)

Yellow-rooted water dock(*Rumex britannica*)

Couch grass(*Agropyron repens*; *Triticum repens*)

Pokweed(*Phytolacca americana*; *Phytolacca decandra*)

Foxglove(*Digitalis purpurea*)

Mullein(*Verbascum thapsus*)

Lobelia(*Lobelia inflata*)

Tansy(*Tanacetum vulgare*)

Gum plant(*Grindelia robusta*)

Scaly Grindelia(*Grindelia squarrosa*)

Boneset(*Eupatorium perfoliatum*)

Capnip(*nepeta cataria*)

Hoarhound(*Marrubium vulgare*)

Blessed thistle(*Cnicus benedictus*)

Yarrow(*Achillea millefolium*)

Canada Fleabane(*Liptilon canadensis*;
Erigeron canadensis)

Jimson weed(*Datura stramonium*)

Purple thorn-apple(*Datura tatula*)

Poison hemlock(*Conium maculatum*)

American wormseed(*Chenopodium ambrosioides*)

Black mustard(*Brassica nigra*; *Sinapis nigra*)

White mustard(*Sinapis alba*)

The bulletin is illustrated.

Henkel, A.

1905.

Peppermint.

U. S. Dept. Agriculture, Bureau of Plant Industry.

Bulletin 90, part III.

The author discusses peppermint under the following heads:

Description

Countries where grown.

Peppermint cultivation in the United States.

Cultivation

Conditions injurious to crop.

Harvesting and distillation.

Description of still.

Peppermint oil and menthol.

Export of peppermint oil.

Prices of peppermint oil.

The bulletin is illustrated.

American Root Drugs.

U. S. Dept. Agric., Bull. 107.

The author treats the subject under the following heads:

Introduction

Collection of root drugs.

Plants furnishing root drugs.

Male-fern(*Dryopteris filix-mas*; *Dryopteris Marginalis*; *Aspidium filix-mas*, *Aspidium Marginale*).

Couch grass (*Agropyron repens*; *Triticum repens*)

Wild turnip(*Arisaema triphyllum*; *Arum triphyllum*)

Skunk-cabbage(*Spathyema foetida*; *Dracontium foetidum*; *Symplocarpus foetidus*)

Sweet-flag(*Acorus calamus*)

Chamaelirium, or Helonis(*Chamaelirium luteum*; *Helonas dioica*).

American Hellebore(*Veratrum viride*)

Aletris (*Aletris farinosa*)

Bethroot(*Trillium erectum*)

Wild yam(*Dioscorea villosa*)

Blue-flag(*Iris versicolor*)

Lady's-slipper(*Cypripedium hirsutum* *crypripedium parviflorum*)

Crawley-root(*Corallorhiza adontorhiza*)

Canadia snake-root(*Asarum canadense*)

Serpentaria(*Aristolochia serpentaria*; *Aristolochia reticulata*)

Yellow dock(*Rumex crispus*)

Polkweed(*Phytolacca decandra*; *Phytolacca Americana*)

Soapwort(*Saponaria officinalis*)

Goldenseal (*Hydrastis canadensis*)
Indian-Physic (*Porteranthus trifoliatu*s;
Gillenia trifoliata)
Wild Indigo (*Baptisia tinctoria*)
Crane's-bill (*geranium maculatum*)
Senega snakeroot (*Polygola senega*)
Stillingia (*Stillingia sylvatica*)
Wild sarsaparilla (*Aralia nudicaulis*)
Ginseng (*Panax quinquefolium*)
Black Cohosh (*Cimicifuga racemosa*; *Actaea racemosa*)
Oregon Grape (*Berberis aquifolium*)
Blue cohosh (*Caulophyllum thalictroides*)
Turnleaf (*Jeffersonia diphylla*)
May-apple (*Podophyllum peltatum*)
Canada moonseed (*Menispermum canadense*)
Bloodroot (*Sanguinaria canadensis*)
Hydrangea (*Hydrangea arborescens*)
Water eryngo (*Eryngium yuccifolium*; *Eryngium*
aquaticum)
American Angelica (*Angelia atropurpurea*)
Yellow jasmine, or jessamine (*Gelsemium sempervi-*
rens)
Pinkroot (*Spigelia marilandica*)
American Colombo (*Frasera carolinensis*)
Black Indian hemp (*Apocynum cannabinum*)
Pleurisy-root (*Asclepias tuberosa*)
Comfrey (*Symphytum officinale*)
Stoneroot (*Collinsonia canadensis*)
Culver's root (*Veronica virginica*)

Dandelion(*Taraxacum officinale*; *Taraxacum Taraxacum*;
Taraxacum dens-leonis)

Queen of the meadow(*Eupatorium purpureum*)

Elecampane(*Inula helenium*)

Echinacea(*Brauneria angustifolia*; *Echinacea*
angustifolia)

Burdock(*Arctium lappa*; *Lappa major*)

The bulletin is illustrated.

Henkel, A. and C. F. Klugh.

1908.

The Cultivation and Handling of Goldenseal.

U. S. Dept. Agric., Bureau of Plant Ind. Circular No. 6.

The author treats the subject under the following heads:-

Introduction

Habitat and range of goldenseal.

Description of the plant.

Description of rhizome and root stock.

Collection and preparation of the soil.

Brief Medical history.

Cultivation.

Necessary soil conditions.

Fertilizers.

Artificial shade.

Use of trees as shade.

Attention required.

Methods of propagation.

Experiments with seeds.

Experiments with divided rhizome.

Experiments with plants from fibrous roots.

Yield of roots

Time necessary to mature the crop.

Hydrastis content of cultivated roots.

Market conditions.

Highest and lowest prices.

The bulletin is illustrated.

Henkel, A.

1909.

American Medicinal Barks.

U. S. Dept. Agric., Bureau of Plant Ind. Bull. 139.

The author treats the subject under the following heads:

Introduction

The collection of barks.

Trees and shrubs furnishing medicinal barks.

White Pine(*Pinus strobus*)

Tamarack(*Larix laricina*; *Larix Americana*)

Aspen(*Populus tremuloides*)

White Willow(*Salix alba*)

Bayberry(*Myrica cerifera*)

Butternut(*Juglans cinerea*)

Ironwood(*Ostrya virginiana*)

Sweet Birch(*Betula lenta*)

Tag-alder(*Alnus rugosa*)

White Oak(*Quercus alba*)

Slippery Elm(*Ulmus pubescens*)

Magnolia(*Magnolia acuminata*;
Magnolia tripetala;
Magnolia glauca)

Tulip-Poplar(*Liriodendron tulipifera*)

Sassafras (*Sassafras sassafras*; *S. officinale*;
S. variifolium)

Spicebrush (*Benzoin benzoin*; *Larus benzoin*;
Lindera benzoin; *Benzoin odoriferum*.)

Witch-Hazel (*Hamamelis virginiana*)

Blackberry (*Rubus villosus*; *R. migrobacus*;
R. Cunceifolius)

American Mountain-ash (*Sorbus americana*)

Wild cherry (*Prunus serotina*; *P. virginiana*)

Prickly Ash (*Xanthoxylum americanum*, *Xanthoxylum*
clava-herculis; *X. fraxineum*, *X.*
carolinianum; *Fagara clava-herculus*)

Wafer Ash (*Ptelea trifoliata*)

Black Elder (*Ilex verticillata*; *Prinos verticillata*)

Wahoo (*Euonymus atropurpureus*)

False Bittersweet (*Celastus scandens*)

Horse-chestnut (*Aesculus hippocastanum*)

Cascara Sagrada (*Rhamnus purshiana*)

Cotton (*Gossypium hirsutum*)

Dogwood (*Cornus florida*)

Moosewood (*Dirca palustris*)

White ash (*Traxinus Americanus*; *F. alba*;
F. acuminata)

Fringe-Tree (*Chionanthus virginica*)

Bittersweet (*Solanum dulcamara*)

Button bush (*Cephalanthus occidentalis*)

Cramp Bark Tree (*Viburnum opulus*)

Black Haw (*Viburnum prunifolium*)

The bulletin is illustrated.

Growing and Curing Hops.

U. S. Dept. Agric., Farmers Bull. 304.

The author discusses the subject under the following heads:

Introduction

Conditions essential to hop growing.

Climate

Soil

Propagation

Propagation from seed

Use of cuttings

Originating new varieties

Selection

Planting and cultivating

Time to plant

Setting the roots

Cultivating

Pruning

Trellises

The high trellis

The low trellis

Systems of training

Stringing

Training

Picking

Time to pick

Necessity for clean picking

Disadvantages of unripe hops

Tests for ripe hops

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The objects of curing

The theory of drying

Nature of curing process

Practical drying

Sulphuring

The air blast kiln

Treatment in the cooler

Baling

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Yield of crop

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The Diseases of Ginseng and their control.

U. S. Dept. Agric., Bureau of Plant Industry, Bull. 250.

The subject is treated under the following heads:

Introduction

Specific diseases of ginseng

Blights

Alternaria Blight

Phytophthora mildew

Vermicularia stem anthracnose

Pestalozzia leaf anthracnose

Papery leaf spot

Injury caused by cold, following use of
Bordeaux mixture.

The damping off of seedlings

Wilts

Acrostalagmus wilt

Fusarium wilt

Galls

Nematode root-gall

Rots

Rust(fiber-rot, end-rot)

Corrosive sublimate injury

Soft rot

Sclerotinia white rot

Scerotinia black-rot

The spraying of ginseng

Fungicides

Time of application

Thoroughness of application

The philosophy of spraying

Soil sterilization for ginseng.

Formaldehyde

Steam sterilization

Relation of fertilizers to diseases of ginseng.

Lime
Wood ashes
Acid phosphate
Leaf mulch
Nitrogenous fertilizers

Drainage of ginseng beds

Depth, frequency, and size of drains.
Effect of drainage.

The bulletin is illustrated.

Henkel, A.

1913.

American Medicinal Flowers, Fruits and Seeds.

U. S. Dept. Agric., Bull. 26.

The author discusses the subject under the following heads:

Introduction

Collection of Flowers, Fruits and Seeds.

Plants furnishing medicinal flowers, fruits and seeds.

Juniper(*Juniperus communis*)

Saw Palmetto(*Serenoa serrulata*; *Sabal serrulatum*)

Wormseed(*Chenopodium athelminticum*; *Chenopodium ambrosioides anthelminticum*)

Pokeweed(*Phytolacca americana*; *Phytolacca decandra*)

Black Mustard(*Brassica nigra*; *Sinapis nigra*)

White Mustard(*Sinapis alba*)

Rasberries(*Rubus occidentalis*; *R. strigosus*;
Rubus idaeus; var., *americanus*;
Rubus idaeus, var., *strigosus*)

Prickly ash(*Xanthoxylum americanum*;
Xanthoxylum clava-herculis;
Xanthoxylum fraxineum;
Xanthoxylum carolinianum;
Fragara clava-herculis)

Smooth Sumac(*Rhus glabra*)

American Linden(*Tilia americana*; *Tilia glabra*;
Tilia canadensis)

Poison Hemlock(*Conium maculatum*)

Jimson Weed(*Datura stramonium*)

Mullein(*Verbascum thapsus*)

Elder(*Sambucus canadensis*)

The bulletin is illustrated.

Van Fleet, W.

1914.

Goldenseal Under Cultivation.

U. S. Dept. Agric., Farmer's Bull. 613. (Physician's
Drug News, 10, p. 11)

The author treats the subject under the following heads:

Description of the golden seal plant.

Habitat and range

Commercial history

Quantity of root consumed

Production of goldenseal

Preparation of the soil

Propagation

a.) Root bud propagation
Propagation by seed

Shade

Ventilation

Mulching

Attention required

Forest-bed culture

Digging and curing

Diseases and pests

Time to produce crop

Yield and cost

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The bulletin is illustrated.

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- Achillea millefolium*. Henkel, 1904.
- Acoramus Calamus*. Henkel, 1907.
- Actoea racimosa*. Henkel, 1904.
- Aesculus hippocastanum*. Henkel, 1909.
- Agropyron repens*. Henkel, 1904; Henkel, 1907.
- Aletris farinosa*. Henkel, 1907.
- Alnus rugosa*. Henkel, 1909.
- American colombo. See *Frasera carolinesis*.
- American hellebore. See *Veratrum viride*.
- American linden. See *Tilia americana*.
- American mountain-ash. See *Sorbus americana*.
- American wormseed. See *Chenopodium ambrosioides*.
- Angelica atropurpurea*. Henkel, 1907.
- Anise. See *Pimpinella anisum*.
- Apocynum cannabinum*. Henkel, 1907.
- Aralia nudicaulis*. Henkel, 1907.
- Aristolochia reticulata*. Henkel, 1907.
- Aristolochia serpentaria*. Henkel, 1907.
- Arctium lappa*. Henkel, 1904; Henkel, 1907.
- Arisaema triphyllum*. Henkel, 1907.
- Arum. See *Arisaema*.
- Asarum canadense*. Henkel, 1907.
- Asclepias tuberosa*. Henkel, 1907.
- Aspin. See *Populus tremuloides*.
- Atropa Belladonna*. True, 1903.
- Baptisia tinctoria*. Henkel, 1907.

Bayberry. See *Myrica cerifera*.

Belladonna. See *Atropa Belladonna*.

Benzoin benzoin. Henkel, 1909.

Berberis aquifolium, Henkel, 1907.

Bethroot. See *Trillium erectum*.

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Black berry. See *Rubus*.

Black cohosh. See *cimicifuga racemosa*.

Black haw. See *Viburnum prunifolium*.

Black mustard. See *Brassica nigra*.

Blessed thistle. See *Cnicus benedictus*.

Blue cohosh. See *Caulophyllum thalictroides*.

Bloodroot. See *Sanguinaria canadensis*.

Blue flag. See *Iris versicolor*.

Boneset. See *Eupatorium perfoliatum*.

Brassica nigra. Henkel, 1904; Henkel, 1913.

Brauneria angustifolia. Henkel, 1907.

Burdock. See *Arctium lappa*.

Butternut. See *Juglans cinerea*.

Button bush. See *Cephalanthus occidentalis*.

Canada fleabane. See *Liptilon canadensis*.

Canada moonseed. See *Menispermum canadense*.

Catnip. See *Nepeta cataria*.

Capsicum fastigiatum. True, 1903.

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Carum carvi. True, 1903.
Caulophyllum thalictroides. Henkel, 1907.
Cephalanthus occidentalis. Henkel, 1909.
Cascara sagrada. See *Rhamnus Purshiana.*
Celastrus scandens. Henkel, 1900.
Chamaelirium luteum. Henkel, 1907.
Chenopodium ambrosioides. Henkel, 1904; Henkel, 1913.
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Culver's-root. See *Veronica virginica.*
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Dandelion. See *Taraxacum taraxacum.*
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Digitalis purpurea. Henkel, 1904.
Dioscorea villosa. Henkel, 1907.
Dirca palustris. Henkel, 1909.

Dock. See *Rumex*.

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Dracontium foetidum. Henkel, 1907.

Dryopteris felix-mas. Henkel, 1907.

Echinacea angustifolia. See *Brauneria angustifolia*.

Elder. See *Sambucus canadensis*.

Elecampane. See *Inula helenium*.

Erigeron canadensis. Henkel, 1904.

Euonymus atropurpureus. Henkel, 1909.

Eupatorium perfoliatum. Henkel, 1904.

Eupatorium purpureum. Henkel, 1907.

False bittersweet. See *Celastrus scandens*.

Flax. See *Linum usitatissimum*.

Foxglove. See *Digitalis purpurea*.

Frasera carolinensis. Henkel, 1907.

Fraxinus americana. Henkel, 1909.

Fringe-tree. See *chionanthus virginica*.

Geranium maculatum. Henkel, 1907.

Gelsemium sempervirens. Henkel, 1907.

Gillenia trifoliata. Henkel, 1907.

Ginseng. See *Panax quinquefolium*.

Glycyrrhiza glabra. True, 1903.

Goldenseal. See *Hydrastis canadensis*.

Gossypium hirsutum. Henkel. Henkel, 1909.

Grindelia robusta. Henkel, 1904.

Grindellia squarrosa. Henkel, 1904.

Gum plant. See *Grindelia robusta*.

- Hamamelis virginiana*. Henkel, 1909.
- Helonis. See *Chamaelirium*.
- Henbane. See *Hyoscyamus niger*.
- Hoarhound. See *Marrubium vulgare*.
- Hops. See *Humulus lupulus*.
- Horse-chestnut. See *Aesculus hippocastanum*.
- Humulus lupulus*. Flint, 1900; Stockberger, 1910.
- Hydrangea arborescens*. Henkel, 1907.
- Hydrastis canadensis*. Henkel, 1907; Henkel and Klugh 1908;
Van Fleet, 1914.
- Hyoscyamus niger*. True, 1903.
- Ilex vertifillata*. Henkel, 1909.
- Indian physic. See *Porteranthus trifoliatus*;
Gillenia trifoliatus.
- Inula helenium*. Henkel, 1907.
- Iris versicolor*. Henkel, 1907.
- Iron wood. See *Ostrya virginiana*.
- Jeffersonia diphylla*. Henkel, 1907.
- Jimson weed. See *Datura Stramonium*.
- Juglans cinerea*. Henkel, 1909.
- Juniperus communis*. Henkel, 1913.
- Lady's slipper. See *Cypripedium hirsutum*.
- Larix laricina*. Henkel, 1900.
- Leptandra virginica*. See *Veronica virginica*.
- Licorice. See *Glycyrrhiza*.
- Linum usitatissimum*. Dodge, 1895.
- Liptilon canadensis*. Henkel, 1904.
- Liriodendron tulipifera*. Henkel, 1909.

Lobelia inflata. Henkel, 1904.

Magnolia acuminata. Henkel, 1909.

Magnolia glauca. Henkel, 1909.

Magnolia tripetala. Henkel, 1909.

Male-fern. See *Dryopteris felix-mas*.

Marrubium vulgare. Henkel, 1904.

Mayapple. See *Podophyllum peltatum*.

Menispermum canadensis. Henkel, 1907.

Mentha piperita. Henkel, 1905.

Moosewood. See *Dirca palustris*.

Mullein. See *Verbascum thapsus*.

Myrica cerifera. Henkel, 1909.

Nepeta cataria. Henkel, 1904.

Opium. See *Papaver somniferum*.

Oregon grape. See *Berberis aquifolium*.

Ostrya virginiana. Henkel, 1909.

Panax quinquefolium. Henkel, 1907; Whetzel, 1912.

Papaver somniferum. True, ¹⁹⁰³1913.

Peppermint. See *mentha piperita*.

Phytolacca americana. Henkel, 1904; Henkel, 1913.

Phytolacca decandra. Henkel, 1904; Henkel, 1907.

Pimpinella Anisum. True, 1903.

Pinus strobus. Henkel, 1909.

Pleurisy-rot. See *Asclepias tuberosa*.

Podophyllum peltatum. Henkel, 1907.

Pinkroot. See *Spigelia marilandica*.

Polk weed. See *Phytolacca decandra*.

Polygalla senega. Henkel, 1902.

Poison Hemlock. See *Conium maculatum*.

Populus tremuloides. Henkel, 1909.

Porteranthus trifoliatus. See Henkel, 1907.

Prickly ash. See *Xanthoxylum americanum*.

Prunus serotina. Henkel, 1909.

Ptelea trifoliata. Henkel, 1909.

Queen of the meadow. See *Eupatorium purpureum*.

Quercus alba. Henkel, 1909.

Rasberries. See *Rubus occidentalis*.

Rhamnus Purshiana. Henkel, 1909.

Rhus glabra. Henkel, 1913.

Rubus cuneifolius. Henkel, 1909.

Rubus nigrobaccus. Henkel, 1909.

Rubus villosus. Henkel, 1909.

Rubus accidentalis. Henkel, 1913.

Rubus strigosus. Henkel, 1913.

Rumex obtusifolius. Henkel, 1904.

Rumex britannica. Henkel, 1914.

Rumex crispus. Henkel, 1904; Henkel, 1907.

Sage. See *Salvia officinalis*.

Sanguinaria canadensis. Henkel, 1907.

Salvia officinalis. True, 1913.

Salix alba. Henkel, 1909.

Sambucus canadensis. Henkel, 1913.

Saponaria officinalis. Henkel, 1907.

Sassafras sassafras. Henkel, 1909.

Saw-palmetto. See *Serenoa serrulata*.

Scaly grindelia. See *Grindelia aquarrosa*.
Senega snakeroot. See *Polygala senega*.
Serenoa serrulata. Henkel, 1913.
Sinapis alba. Henkel, 1904; Henkel, 1913.
Skunk cabbage. See *Dracontium*.
Slippery elm. See *Ulmus pubescens*.
Solanum dulcamara. Henkel, 1909.
Sorbus americana. Henkel, 1909.
Soapwort. See *Saponaria officinalis*.
Spigelia marilandica. Henkel, 1907.
Stone root. See *Collinsonia canadensis*.
Stramonium. See *Datura*
Stillingia salvatica. Henkel, 1907.
Sumac. See *Rhus glabra*.
Sweet birch. See *Betula lenta*.
Sweet-flag. See *Acorus Calamus*.
Symphytum officinale. Henkel, 1907.
Symplocarpus foetidus. Henkel, 1907.
Tag-alder. See *Alnus rugosa*.
Tamaric. See *Larix laricina*.
Tanacetum vulgare. Henkel, 1904.
Tansy. See *Tanacetum vulgare*.
Taraxacum dens-leonis. See *Taraxacum taraxacum*.
Taraxacum officinale. See *Taraxacum taraxacum*.
Taraxacum taraxacum. Henkel, 1904; Henkel, 1907.
Tilea americana. Henkel, 1913.
Trillium erectum. Henkel, 1907.

Tulip-poplar. See *Liriodendron tulipifera*.
Twin-leaf. See *Jeffersonia diphylla*.
Ulmus pubescens. Henkel, 1909.
Veratrum viride. Henkel, 1907.
Verbascum thapsus. Henkel, 1904; Henkel, 1913.
Veronica virginica. Henkel, 1907.
Viburnum prunifolium. Henkel, 1909.
Wafer-ash. See *Ptelea trifoliata*.
Wahoo. See *Euonymus atropurpureus*.
White ash. See *Fraxinus americana*.
White oak. See *Quercus alba*.
White pine. See *Pinus strobus*.
White willow. See *Salix alba*.
Wild cherry. See *Prunus serotina*.
Wild indigo. See *Baptisia tinctoria*.
Wild sarsaparilla. See *aralia nudicaulis*.
Wild turnip. See *Arisaema triphyllum*.
Wild yam. See *Dioscoria villosa*.
Witch-hazel. See *Hamamelis virginiana*.
Wormseed. See *chenopodium anthelminticum*.
Xanthoxylum americanum. Henkel, 1909; Henkel, 1913.
Xanthoxylum clava-herculis. Henkel, 1909; Henkel, 1913.
Yarrow. See *Achillea millefolium*.
Yellow jasmine. See *Gelsemium sempervirens*.

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