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NEW ANNUAL
NURSERY CATALOG

FRUIT AND ORNAMENTAL TREES,
SHRUBS, PLANTS, BULBS, ETC.
True to Name and of Best Strains

The Property Owners Improvement Co.
PENLLYN NURSERIES
Growers and Importers. Wholesale Nurserymen.
PENLLYN, PENNA.

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In presenting this catalogue, we desire to extend our thanks for the past patronage of our many customers, and to solicit your orders for the future. Our right to existence is based upon our service and no order is too large or too small to receive our careful consideration.

We do not attempt to grow in our own nursery all the varieties catalogued in this book in a most comprehensive manner, which we have prepared to give you a full knowledge of what the market affords, but we are always glad to consult with prospective customers and give them suggestions based upon personal knowledge of what others have found the most profitable and satisfactory under similar circumstances.

In common with other merchandise, the general trend of prices for both fruit and ornamental stock is upward, which is made necessary by the increased cost of labor, material and general expense of operation. For this reason we do not give prices in this book, issuing a price list from time to time, but because of the constantly increasing prices we strongly recommend that you buy NOW whatever you contemplate planting. They will be no cheaper in cost in the future, and you will have that much more time to enjoy the satisfaction which comes from planting. and it is not well to lose sight of the fact that we will be dead a long time after we leave this earth, and satisfaction now is better than the anticipated satisfaction of someone else. For commercial returns, the early bird gets the worm and while there seems no possible failure of the fruit demand for the future, yet the quicker you get your plants into bearing, and learn the marketing, the greater your advantage over those who plant next year or "after a while."

In the nursery trade there has grown up a standard of ethics which is observed by all reputable nurserymen, and you are respectfully referred to these terms and conditions when placing your orders.

We feel confident that all things considered, we can supply your wants better than anyone else, because of our knowledge of local problems you have to meet, and we trust you will consult us before placing your order elsewhere.
INFORMATION ABOUT ORDERING

THE SHIPPING SEASON generally begins from the first to the middle of March, and about the 15th of October in the autumn. The season is not regulated, however, by any definite date, nor by the state of vegetation at the locality of the planter, but by the condition of the trees when received. Parties south of us may receive our trees some weeks after their season has opened, yet when planted they will give entire satisfaction.

EARLY ORDERS—To one familiar with the rush at the packing season, it must be obvious that it is impossible to fill an order requiring much time in its preparation on short notice without doing an injustice to others who have their orders previously booked. In fairness to all, we have adopted the practice of filling orders in the rotation received, unless orders are received far enough ahead of the packing season, with instructions to ship at a given date, so that we can arrange a special shipping date. So we again say—place your order as far in advance of shipping as you possibly can, stating when you would like stock sent.

PACKING—We do not charge for packing, boxing or delivering to freight or express companies at our station. We do not prepay any charges, unless goods are to be delivered to a prepaid station, as all our prices and quotations are free on board cars at our nurseries. If you have no agent at your station and shipment has to be prepaid, notify us and we will prepay and bill charges to you after shipment.

OUR GUARANTEE—We exercise care to have our stock genuine and reliable, and hereby guarantee that if all, substantially all or any part of stock delivered, does not prove true to name as ordered, we will replace it free of charge, or refund the money paid for it, that being the measure of damages for a breach of the contract.

OUR RESPONSIBILITY—Inquire of any commercial agency, banker or postmaster in our city. Our trees are sold by pleased customers recommending us to their friends. We cannot afford to give unsatisfactory service to our patrons. If we please you, tell your friends. If not, tell us.

WRITE YOUR NAME, postoffice, freight station, and express office very plain.

REMIT by Postoffice Order, Express Money Order, Registered Letter, Draft or Check, making them payable to us. If we are unable to supply stock ordered, we will state what we can substitute in place, and if, upon hearing from you, that is unsatisfactory, we will refund your money, or any part of it, as you direct.

OUR NURSERIES HAVE BEEN INSPECTED by the state inspector, and all stock shipped will be furnished with his certificate, and be as free from any injurious pests or disease so far as we know or our care can provide against.
FRUIT DEPARTMENT

APPLES

The apple is universally recognized as the king of fruit, and the supply is becoming yearly more inadequate. When given the same intelligent care that other fruit requires to be profitable, it is also the greatest money earner per acre of any crop grown in the temperate zone. The export demand is multiplying as the old world gets a taste of what good fruit is. To be commercially profitable, the apple must not only have attention in growing, but in spraying, thinning, packing and shipping. Orchards can be located on ground that otherwise would not be desirable for cultivation, and if managed well, will produce $1,000 and upwards, per acre. For the home, even a very few trees, selected to give luscious fruit the year round, will return a royal dividend for their cost and care. The standard orchard contains about fifty trees to the acre and rows of peaches can be set between them, which can be removed when they are too old to bear, leaving the apple orchard all the better for their protection.

Apple trees will thrive on nearly all well drained soils. It is better to plant them on the higher ground, rather than in the bottoms or valley. Cultivation of young orchards is desirable, one of the great growers in the west has cultivated as high as sixteen times. The growing of grain crops is not recommended, but some do recommend clover as helping furnish nitrogen for the growing trees. Details of this kind are a part of the personality of the grower, one man may succeed in one way, another in a different way, but all will succeed in apple growing who will give them care and attention.

In picking varieties, the well known market sorts should be planted most, experimental trees being limited to local market conditions or what appeals to the palate of the buyer. In case of doubt the recommendations of your nurseryman should govern, because he is almost as interested in your success as yourself, his future success depending on the success of his present customers. The descriptions given here are the unbiased reports from all sections, checked up by the Agricultural Department of the United States.

SUMMER VARIETIES

Benozzi—Pale yellow, marked with dark crimson; fine bloom; juicy crisp acid; medium size; tree a medium grower; bears young and profusely; August.

Bough, Sweet—Large, roundish, remotely conical; ovate, flesh white, very tender, with an excellent sweet flavor. Ripens from the middle to end of summer. Good for dessert and kitchen. Tree a moderate and regular bearer. Somewhat irregular. Ascending. Tree round-headed.

Early Harvest—Medium to large; pale yellow; fine flavor. Tree moderate, erect grower, and a good bearer. A beautiful and excellent variety for dessert and kitchen.

Early Pennock—Very large; yellow with red stripes; flavor sub-acid; good quality; ripens, August-September. Tree vigorous and hardy. A profitable and productive market variety.

Early Strawberry—Smallish size; striped with deep red; tender and sub-acid. Excellent eating variety for market. Tree a poor grower but productive.

Golden Sweet—A large handsome, yellow apple; fine; sweet; good for market. Tree rather spreading and irregular. A free grower and productive; August-September.

Keswick (Keswick's Codlin)—Large, pale yellow; oblong; acid; excellent for kitchen and market. Tree erect grower, vigorous and hardy. Profuse bearer, popular throughout the west; August-September.

Duchess of Oldenburg—Large size, roundish; streaked with red and yellow; flesh whitish; juicy; flavor sprightly, sub-acid; market variety. Tree a vigorous grower; very hardy; succeeds in northwest where many kinds fail. August-September-October.

Primate (Sour Harvest)—Above medium size; straw color, tinged with blush; tender, fine grained; juicy and sub-acid. Tree vigorous grower and abundant bearer. July-August.
Red Astrachan—Large, roundish; nearly covered with deep crimson; over-spread with a thick bloom; juicy; rich; acid. Cooking and eating variety, suitable for market. Tree a vigorous grower with large foliage; a good bearer; August.

Red June (Carolina)—Medium; dark red; flesh white, tender, sub-acid; very good for dessert and market. Quite early and continues to ripen for four weeks; will keep well for a summer apple. Tree fine erect grower; very hardy; bears young and abundantly; August.

Sops of Wine—Medium; oblong; dark red; texture and flavor peculiar and highly esteemed; splendid market, eating apple. Tree hardy; erect and distinct growth.

Summer Queen—Medium to large; roundish; yellow blotched and streaked with red; flesh yellow and tender, with an acid, aromatic flavor.

Tetofski—Good sized, nearly round; yellow, beautifully striped with red; flesh white and juicy, pleasant acid. Cooking and market. Tree hardy as a crab; good bearer and has proved profitable.

Yellow Transparent—Good size; clear white, turning to pale yellow; flavor sub-acid; highly prized for cooking and eating; popular market variety. Tree of Russian origin; upright grower; bears early and abundantly; hardy. July-August.

**FALL VARIETIES**

Alexander (Emperor Alexander)—Large beautiful, deep crimson; flesh yellowish-white, crisp, tender, rather acid; recommended for kitchen and market. Tree, Russian origin, very hardy, rather shy bearer. October.

Autumn Sweet Bough—Large; pale greenish-yellow; flesh tender and sweet. One of the best sweets. Tree moderate grower, good bearer. August.

Baily's Sweet—Large, crimson, superb; flesh tender, sweet, excellent flavor. Tree vigorous, hardy and productive. October-November.

Bietigheimer (Red Bietigheimer)—Large to very large; pale green color, mostly covered with purpslish-crimson stripes; flesh white, firm and rather dry. A good cooking apple which attracts attention in market on account of size. Tree, German origin, a fine grower, abundant bearer. September-October.

Buckingham (Fall Queen, Byer's Red)—Very large; yellow, with bright red cheek and crimson stripes; flesh yellow, sub-acid very rich and juicy; tree compact and vigorous grower, and bears young. A magnificent apple. Very popular south and west. October to December.

Chenango (Strawberry)—Rather large, oblong, conic, angular; whitish-yellow striped and splashed with light crimson; flesh white, very tender, with mild, pleasant sub-acid flavor. A market and eating variety. Tree vigorous and productive.

Fall Jenneting (Geneting)—Large, oblate; pale greenish-white, with blush; tender, juicy, mild and sub-acid. Recommended for marketing. Tree vigorous spreading and productive. October.

Fall Orange (Mason's)—Large, golden yellow; flesh acid. A good cooker but too sour for table. A good keeper. Tree very hardy, and a strong grower; fairly productive.

Fall Pippin—Very large, roundish, oblong, yellow; flesh tender and delicious. One of the most valuable varieties for table or market. Tree a free grower and a fine bearer. October-December.

Fameuse (Snow Apple)—Medium size; pale greenish-yellow, mixed with stripes of red and splashes of red on shady side; flesh white, tender and juicy, slightly perfumed, sub-acid; extra good; recommended for table, kitchen and market. An old and well known variety. Tree a moderate grower but productive. October-November.

Gravenstein—Large, rather flat; yellow, with red stripes; beautiful and showy; flesh firm, tender and crisp, highly flavored; cooking and market. Generally recommended as a good fall variety.

Haas (Fall Queen)—Large, flat; yellowish-green, striped with dull red; flesh white, tender, juicy,
Pumpkin Sweet—Very large, round; yellowish-green; very sweet and rich. Tree a vigorous, upright grower. October-November.

Porter (Yellow Summer Pearmain)—Rather large; conical; yellow; flesh tender, rich and fine; recommended as all-around sort; dessert, cooking and market. Tree moderate grower but productive.

Rambo—Medium size; oblate, smooth; streaked and marbled with dull yellowish ground; dots large, whitish; flesh tender, rich, mild, sub-acid. An old variety; good for cooking or eating. Tree a great grower and very productive. Most popular in the west. October-December.

Smokehouse (Red Vandervere)—Large; yellow, shaded with bright red; flesh firm, crisp, juicy, sub-acid; cooking and market. Tree spreading and quick grower, but very crooked.

Twenty Ounce (Carpura Red Streak)—Very large; striped; very showy; flesh fair, quality, pleasant, sub-acid; Excellent for baking; popular market kind. Tree good grower and fine bearer. October-January.

Wealthy—Medium size; roundish; smooth; nearly covered with dark red; flesh white or a little stained; tender and very good; dessert; very profitable as a market sort. Tree good grower and productive. October-January.

Williams—Medium size; dark red, sometimes yellow splashed; sub-acid. Considered a first-class market variety.

Longfield—Medium size; roundish, clear, waxen color; smooth and polished; flesh very white, tender and juicy; recommended for cooking and market. Tree, originated in Russia, hardy, vigorous, spreading, pendulous growth. An early annual bearer. October-November.

Lowell—Large; oblong; skin oily; pale yellow; flesh brisk, juicy, rather acid. Good for table or cooking. Tree good bearer. September-October.

WINTER VARIETIES

Arkansas Black—Large, round, smooth; often very black; flesh yellow, juicy, and delicious when ripe; cooking or market; splendid keeper. Tree vigorous, hardy and abundant bearer. December-April.

Baldwin—Medium size; conical; bright red; flesh crisp, juicy, sub-acid; rich flavor; great market variety of eastern states for cooking and market. Tree vigorous, open head. Abundant crops, but does not bear young. November-March.

Banana—Medium size; smooth; easily polished; deep yellow; slight blush; flesh solid, juicy, mild sub-acid; has delicate banana perfume and flavor; very popular for dessert and market.

Baxter—Very large; dark red, stripes; flesh mild acid; quality good; market sort. Tree, originated on St. Lawrence river, hardy.

Ben Davis—Medium large; red, striped; flesh white; sub-acid; rather coarse grained; great market variety but not really good until very late. Tree very vigorous and productive; rarely fails to crop. December-March.

Bethel—Medium large; deep red; flesh crisp and tender; sub-acid; recommended for cooking and market. Tree, native of Vermont and extremely hardy.

Bismark—Very large; crimson or light yellow; flesh yellow and tender; mild acid; recommend-
ed for cooking and market. Tree, native of New Zealand; dwarf habits, bears in two years. Can be grown in pots.

**Black Annett**—Medium size; roundish; dark red; mild sub-acid; spicy; good; has proved one of the hardiest and best winter apples. February.

**Boiken**—Medium size; yellow with red cheeks; flesh snow white, fine grained; is recommended for dessert. Tree very hardy, and a young and continuous bearer. January to June.

**Clayton**—Medium large; yellow striped; flesh yellow; sub-acid; recommended as excellent for cooking, dessert and market.

**Cooper's Market**—Medium size; conical; yellow striped with crimson; flesh white and tender; brisk sub-acid; recommended for market. Vigorous, upright grower. December to May.

**Cranberry**—Medium size; yellow and red stripes; flesh juicy; sub-acid; good flavor. Tree healthy and a good annual bearer.

**Domine**—Medium size; roundish; greenish-yellow with red stripes; flesh white, firm, mild having spicy flavor; very productive and keeps through the winter.

**English Russet**—Medium size; very regular; greenish-yellow and nearly covered with russet; flesh yellowish-white, firm and crisp, with pleasant flavor. Recommended for dessert and market. Tree vigorous grower and good bearer, hardy. November to April.

**Fallawater** (Tulpehocken)—Very large, handsome green, nearly covered with dull red; flesh juicy, crisp, pleasant; sub-acid. A good shipper and keeper for market. Tree a strong grower, very productive, even while young. November to March

**Gano** (Black Ben)—Large; conical; smooth; very deep red and attractive; flesh pale yellow, fine grained; mild sub-acid. A good shipper and keeper for market. Tree healthy, vigorous and hardy; annual bearer. February to May.

**Gideon**—Medium size; yellow with vermilion blush or sunny side; mild acid; good for cooking. Originated in Minnesota from crab seed. An upright grower. December to March.
Lady—Very small; pale yellow with red cheek; flesh juicy, rich and pleasant; a beautiful little dessert fruit. November to May.

Limber Twig—Medium size; green or yellow, almost covered with dull red; flesh whitish; not very tender; flavor sub-acid; rich and aromatic; a late keeper. Trees hardy and productive.

McIntosh (McIntosh Red)—Medium large; polished; smooth; yellow, nearly covered with brilliant crimson; beautiful; flesh snow white, crisp, very tender, aromatic; sub-acid; very good quality. Resembles Fameuse type, but is larger and more hardy. Tree vigorous, with spreading head; a good annual bearer; popular in northwest. November to February.

Malinda—Medium large; conical; yellow; flesh white; fine grained; mild sub-acid; juicy; hardy and good keeper.

Mann (Ditz)—Medium large; roundish, oblate, nearly regular; deep yellow with brownish-red side; flesh yellowish, juicy, half tender, mild sub-acid; good keeper; recommended for cooking and market. Tree vigorous; upright grower; an early and annual bearer. January to May.

Minkler (Mumper Vandevere)—Medium size; roundish, oblate, slightly conical; pale greenish-yellow, splashed with red; flesh yellowish, compact, moderately juicy; mild, pleasant, sub-acid. Tree immense grower and very productive; very popular throughout west. December to April.

Milam—Medium small; round; conical; green, red striped; flesh juicy; sub-acid; recommended for market and cooking. Tree vigorous and very productive; fairly hardy. November to March.

Missouri Pippin—Medium large; oblong; red or yellow striped with red; brisk sub-acid; quality good; a good keeper. Tree hardy and an early and prolific bearer.

Nero—Medium size; red; flesh firm, sub-acid. A very late keeper; best used just before apples come. Tree hardy, healthy and very big.

Northern Spy—Large; roundish; slightly conical; striped with sunny side purplish-red; flesh white and tender, with mild, rich, spicy flavor. An old favorite and one of the best all-around apples grown. Tree is a strong, upright grower, head very compact and should be opened up by pruning to admit air and light. December-June.
Northwestern Greening—Large; round; green, turning to yellowish-green when ripe; flesh yellow-low, fine grained and firm, good flavor, smooth and attractive; market sort bringing high prices. Tree one of best growers in the west; extremely hardy and bears young. Blossoms early.

Oskbena—Medium size; striped with red; similar to Duchess; flesh good, mild, sub-acid; dessert and cooking. Tree originated in Minnesota and is a hardy, vigorous grower. Medium late.

Ontario—Large; creamy-yellow, overlaid with deep, rich red; flesh tender; vinous; slightly aromatic; refreshing. January-April.

Paragon—Large; deep red; flesh tender, yet firm; mild sub-acid; one of the handsomest apples grown; recommended for market and dessert; quality good. Tree hardy, vigorous and very productive. Season, December to May.

Patten (Patten’s Greening)—Medium large; uniform; greenish-yellow; sub-acid; good for eating and cooking. Tree hardy and good bearer. Season, October to January.

Peak (Peck’s Pleasant)—Medium large; pale yellow; flesh tender, sub-acid, rich, highly delicious flavor; excellent quality. Tree erect and excellent bearer. Season, November to March.

Peerless—Large; green, striped with red; pleasant sub-acid. Tree hardy, blight-proof and productive; excellent for severe climates; a straight, upright grower.

Ralls (Janet)—Medium size, roundish; greenish-yellow, streaked with red; flesh white, crisp, rich and juicy; pleasant sub-acid; recommended for all purposes as excellent. Tree vigorous but slow grower. Comes into blossom late and sometimes escapes frost damage. Long and good keeper.

Red Canada—Medium size; oblate; red; flesh tender, crisp, rich sub-acid; recommended for dessert and market. Tree thrifty but tender; productive. January-May.

Rhode Island Greening—Large; greenish-yellow; tender, juicy, rather acid but high flavored; very popular; extra good cooker. An old standard sort. Tree vigorous and spreading; a heavy and constant bearer. December-March.

Roman Stem—Medium size; round; russet blush; tender; juicy; sub-acid; recommended for both dessert and cooking. Tree vigorous, upright, productive and profitable. November-February.

Rolfe (Macomber)—Medium size; dark red; sub-acid; quality good for both dessert and cooking; highly recommended; some. Tree an abundant bearer.

Rome Beauty—Large; round; mottled and striped in different shades of red; flesh yellowish, tender; juicy; sub-acid; recommended as a dessert and market variety. Good grower, blooms late, productive; especially recommended in eastern states. November-February.

 Roxbury Russet—Large; roundish; oblate; partly or wholly covered with rather rough russet on greenish-yellow; flesh greenish-white, rather granular; slightly crisp, with good flavor; rather acid; especially recommended for kitchen and market. Tree vigorous and spreading; succeeds well in all northern states. December-May.

Rubicon—Medium size; yellow, shaded with bright, rich red. A showy apple; flesh juicy and firm, brisk sub-acid flavor. Tree moderate grower, but regular bearer. December-June.

St. Lawrence—Medium size; roundish; greenish-yellow; striped with very dark red; flesh white, slightly stained, crisp, juicy, sub-acid; quality good. Tree hardy and productive. Early winter.

Salome—Medium size; conical; yellow ground; red striped; flesh whitish-yellow; half firm; tender; mild sub-acid; good; recommended as an all-around apple till summer, does not get dry until July or August. Tree a strong grower, very hardy; bears young, alternating heavy and light crop.

Scott’s Winter—Medium size; deep red on yellow ground; flesh yellowish-white; coarse grained; juicy; small core; pleasant acid; recommended for market and cooking, being an excellent keeper, being at its best in April and May. Tree vigorous, spreading grower, and productive with age.

Smith’s Cider—Medium size; red and yellow; handsome; flesh tender, juicy, pleasant sub-acid. Tree moderate grower and good bearer; succeeds best in south and west. December to March.

Stayman Winesap—Medium size; roundish; greenish-yellow, red striped; flesh yellow, firm, fine grained, crisp, juicy, aromatic; recommended for cooking and eating. Tree quick

Jonathan

Northwestern Greening
and vigorous grower, adapts itself readily to different soils and situations. November to February.

Sutton—Medium large; roundish; handsome; waxen yellow, striped with crimson; flesh white, tender, juicy, sub-acid; recommended as an all-around market variety. Tree vigorous grower; very productive. December-January.

Talman Sweet—Medium size; pale yellow; flesh fine grained, white, firm, moderately juicy and very sweet; quality excellent. Tree vigorous, upright, spreading and very productive; one of the old eastern varieties. December-March.

Tompkins King (King Tompkins County)—Very large; attracts attention by size; red; flesh yellowish crisp and tender, sub-acid of best quality; always in demand on market. Tree vigorous grower, good bearer and hardy. November-January.

Utter—Medium large; very uniform in size; red; pleasant sub-acid; quality good. Tree a profuse bearer; one of the most hardy sorts. December-January.

Wagener—Medium large; round, oblate; deep red in sun; flesh firm, sub-acid and excellent; one of the best for general use. Tree is a quick grower; largely planted as a filler; bears young; rather small but handsome and upright. December-May.

Walbridge—Medium size, roundish, oblate; striped with red; handsome; flesh firm, sub-acid. Tree vigorous grower, and hardy in extreme north and northwest; very productive. March-June.

Westfield (Seeknafurther)—Large; slightly russeted with dull red stripes; flesh tender, rich, spicy; highly recommended as an all-around variety. Good grower and bearer. November-February.

White Pearmain—Medium size; conical, angular or ribbed; light yellowish-green, with a brownish-red cheek; flesh whitish, fine grained, with a mild sub-acid, rich flavor; one of the very best general utility varieties. Tree productive and popular in the west.

Willow Twig—Medium large; roundish, slightly conical, very regular; greenish-yellow, striped and mottled with dull red, flavor sub-acid or rather acid; popular as a long keeper. Tree hardy, vigorous and early bearer. December-April.

Winesap—Medium size; roundish; deep red; flesh yellow, firm, crisp, juicy; excellent quality; a leading export variety. Tree moderately vigorous with open irregular head; very productive and an early bearer.

Wisser—Medium large; smooth; yellow, shaded with bright red in stripes and blotches, marked with russet dots; flesh melting, buttery, pear-like texture, juicy, delicious flavor. Tree extremely hardy, good grower. December-March.

Wolf River—Very large; handsome; red, on greenish-yellow skin; flesh whitish, tinged with yellow, very firm, tender, juicy, and of good quality, rather acid; market sort. Tree very hardy and productive.

Yates—Small; deep red; dotted with white spots; flesh firm, juicy, aromatic; splendid dessert apple. Tree immense bearer; an extra good keeper.

Yellow Belleflower—Very large; sometimes angular; pale yellow, often with a blush; flesh white, very tender when ripe, fine grained, crisp and juicy; acid, becoming sub-acid later; an old and highly recommended variety. Tree rather upright. November-February.

Yellow Newtown (Newton Pippin)—Medium large; round or a little lop-sided and somewhat irregular; yellowish-green; flesh very juicy, crisp and highly delicious flavor; rated as among the very best all-around varieties. Tree needs rich soil, and is a rather slow grower. December-May.

York Imperial—Medium large; often oblong; greenish-yellow, covered with bright red; flesh crisp and juicy when mellow. A great variety for cold storage market and raised in immense quantities in Pennsylvania section. Tree vigorous and productive, almost equalling Ben Davis.

Paradise Winter Sweet—Large; round; brownish-white to yellow; flesh white, fine grained, juicy, sweet, sprightly; market or home. Tree upright, moderate grower, blights in some localities. December to March.

Dwarf Apples

Description of the following varieties are given on pages preceding: Astrachan Red, Autumn Strawberry, Baldwin, Duchess of Oldenburg, King of Tompkins County, Maid- en Blush, Sweet Bough, Wealthy and Yellow Transparent. These are budded on Doucine stock which dwarfs the trees, same as Pear on Quince stock. Especially adapted to small yards or town lots, where space is limited. They can also be grown in tubs or barrels.
CRAB APPLES

Within the past few years a good many people have given much attention to improving this class of fruit. Their efforts have been attended with marked success. Crab apples succeed equally well in all sections and are so hardy that they give good crops even in those sections where the larger apples will not thrive. They are valuable for cider, preserving and jellies, and some of the improved sorts are excellent for eating. Every orchard should contain a few, as the trees are handsome, annual bearers, and usually fruit the second year.

Alaska—Fruit larger than Transcendent; yellow; flavor excellent; long keeper; tree a strong grower and perfectly hardy.

Brilr Sweet—Medium large; red striped; flesh sweet and good, but slightly bitter if not fully ripe. August-September.

Elgin (Lady Elgin)—Large, round, oblate; white and yellow, with red blush; flesh yellowish, moderately juicy, mid sub-acid; suitable for eating as well as cooking. Tree vigorous grower and very productive. November-December.

Excelsior—Large; yellow and red; sweet and good quality. A seedling of Wealthy and of similar quality. September.

Florence—Medium large; carmine; flesh yellowish, medium fine, acid, excellent cooking; a fine jelly crab and suitable for market. Tree spreading, hardy, bears young and inclined to overbear. August-September.

Gideon—Large; waxy white, slightly golden on sunny side. Tree resembles Duchess of Oldenburg, both in habit and growth; very hardy and productive.

Grant—Large, roundish, oblate; yellow, with stripes of dark red, almost black on sunny side; flesh white, moderately fine grained, mild sub-acid. Tree an excellent grower; fruits in dense clusters. October-December.

Hyslop—Large, round, conical; yellow, with heavy shadings of deep crimson and splashes of maroon with heavy blue bloom; flesh fine, firm, yellow, astringent; its high color always commands a fancy market price. Tree very vigorous where hardy, blights in some localities; bears abundantly in clusters, which make them exceedingly ornamental. September-October.

Martha—Medium large, oblate; yellow, with heavy blush of light red; flesh fine grained, firm, juicy, sub-acid; recommended for market, dessert and cooking. Tree vigorous grower and very free from blight, but not very productive. September.

Montreal—Large, oblate; yellow, with red stripes, one of the most beautiful crabs in appearance; flesh yellowish, firm and acid. October-November.

Orange—Medium, oblate; yellow; flesh firm, crisp, juicy, sub-acid; very good flavor. Tree moderate grower, abundant annual bearer. October-December.

Red Siberian—Medium or small; round, oblate; yellow, with scarlet cheek; flesh yellow and acid; recommended for cooking and market. Tree hardy; fruit grows in clusters; bears young and abundant. August-September.

Transcendent—Medium large, oblate; golden yellow, with blush; flesh firm, crisp, yellowish, fine grained, very juicy and acid; when ripe is edible. It is generally grown all over the United States and is very popular for cider as well as jelly and preserves. Tree grows rapid and irregular; a great bearer; subject to blight, and should not be planted near other apple trees. September.

Van Wyck—Large, round, conical; yellow, with red blush; flesh tender, sweet, juicy. Tree vigorous.

Virginia—Large, oblate; quality good; highly flavored, sub-acid; recommended for kitchen and market. Tree vigorous.

Whitney—Large, averaging one and one-half to two inches; round, conical; smooth, glossy yellow, with red stripes; flesh firm, juicy and rich; almost sweet; especially bred for wine and cider. Tree hardy, handsome and very productive. August.

Yellow Siberian—Small, round; yellow; flesh yellowish and acid; popular on market for jellies. Tree vigorous and hardy. September.
The home orchard is incomplete without pears and they are a staple and profitable commercial crop in nearly all parts of the country. While pears will live on a variety of soils, they succeed best in a rather hard, clay soil, which rather retards a too rank growth. Tilling and fertilizing are an advantage, but should not be carried so far as to produce too vigorous a growth, and fertilizers should not be too rich in nitrogen, as rank growth favors attacks of blight. If at any time this appears, cut back into sound wood and burn the clippings. The pear bears on spurs and these should not be removed in pruning unless the tree is bearing too heavily. The quality is much improved by proper ripening indoors, the early varieties being gathered about ten days before maturity, autumn varieties two weeks, and winter varieties left on the trees as long as possible before the leaves begin to fall. Place them in a cool place, sorting occasionally. Dwarf pears are produced by joining a pear scion to a quince root. A standard pear tree grows on a French pear root and attains a much larger size than the dwarf trees.

**SUMMER VARIETIES**

**Bartlett**—Large; rich yellow, with beautiful blush next the sun; buttery, very juicy and highly flavored. Very popular; grown everywhere. A favorite market variety. Tree a strong grower; bears early and abundantly. Does best as a standard. Last of August and early September. Conform to the dry atmosphere of the city and a late variety. 

**Brandywine**—Medium; greenish-yellow, with russet; flesh melting, sweet, very good quality; recommended for dessert and market. Tree vigorous and productive. Standard or dwarf. Last of August.

**Clapp's Favorite** (Fay)—Large; pale lemon yellow with red cheek; flesh of fine texture, melting, buttery, juicy, with a rich vinous flavor; good for market and kitchen. Tree hardy and very productive; does well in all sections. Standard or dwarf. August.

**Elizabeth** (Manning)—Medium small; yellow, with red blush; flesh melting rich, sugary, sprightly, perfumed, flavor excellent; one of the best dessert pears grown. Tree a good grower and productive. August.

**Early Harvest**—Medium; golden yellow, with red; flavor not the best, but recommended for kitchen and market, because extremely early—a month before Bartlett.

**Gifford**—Medium; greenish-yellow, red in sun; quality very good; recommended for dessert and market. Tree slender but healthy. August.

**Hoonce**—Medium; yellow, with red cheek; originated in southern Illinois; largely planted for market sort. Can be picked green and will color up well in a few days. Tree vigorous, bearing large crops annually. July-August.

**Lawson**—Medium large; yellowish-brown, and red; very showy; crisp and juicy; an early market sort. Tree healthy, free from blight and very productive. Middle July.

**Le Conte**—Large; skin smooth yellow; flesh firm and juicy; not recommended very highly for quality, but a good shipper. Tree vigorous and prolific.

**Lincoln**—Large; yellow and red; flesh buttery, melting, sweet and very good. Tree hardy and prolific. September.

**Osband**—Medium; clear yellow, with red cheek; flesh melting, sweet and perfumed. A very good dessert variety. August.

**Seckel**—Small; yellow, with crimson cheek; flesh melting, sweet and aromatic; most exquisitely flavored pear known. Tree slow grower, but hardy and healthy. September.

**Summer** (Doy de Ette)—Small; yellowish; melting, sweet; very good quality for dessert. Tree vigorous and productive. August.

**Tyson**—Medium small; bright yellow, with russet cheek; flesh melting, sweet and delicious. Tree upright, hardy, but not so early to bear; recommended for the west. August. Standard or dwarf.

**Wilder**—Medium small; yellow, with dark red cheek; flesh melting, sweet and good for dessert; popular on market. Tree very attractive, of vigorous and symmetrical growth. Standard or dwarf. Early August.
AUTUMN VARIETIES

Angouleme (Doucehese d' Angouleme)—Very large; green and yellow, with russet; flesh very juicy, with rich, excellent flavor. An all around variety for dessert, cooking and market. Succeeds best as a dwarf.

Anjou (Pouere D' Anjou)—Large; greenish, shaded with russet-crimson; flesh is highly flavored, vinous and rich; dessert and market sort; keeps well until winter holidays, when it commands a high price. Tree hardy and productive, and succeeds well in all sections. October-January.

Bessemianki—Medium; green, with russet blush; flesh tender and juicy; recommended for cooking and market. Tree succeeds best as standard; upright grower.

Bosc (Beurre Bosc)—Large; beautiful, crimson and russet; flesh melting; highly flavored; delicious; a dessert variety. Tree poor or irregular grower; bears well. Standard.

Boussock (Doyenne Boussock)—Large; yellow with russet blush; flesh buttery; excellent for dessert and market. Tree strong grower and productive. Standard. September.

Buffum—Medium or small; yellow, somewhat covered with reddish-brown and russet; flesh buttery, sweet of variable quality; recommended for home use. Tree of remarkable vigor, upright and hardy. Standard or dwarf. September.

Clairgeau (Beurre Clairgeau)—Large; yellow, with russet and brown, sometimes shaded with crimson; flesh yellow, juicy, aromatic and somewhat granular; recommended for cooking and as an attractive market sort. Tree a very good grower and bears early. Standard or dwarf. October-November.

Flemish (Flemish Beauty)—Large; pale yellow, covered with light russet, turning reddish-brown when ripe; flesh juicy, very rich and melting; a dessert-market variety. Tree very hardy, vigorous and fruitful; recommended for extreme northern states. Standard and dwarf. September.

Fred Clapp—Medium large; smooth, clear lemon yellow; flesh fine grained, very juicy and melting; rich and perfumed; kitchen and market. Tree vigorous grower. Standard. October.

Garber—Large; bright yellow, with red blush; flesh juicy and rich; a cross with the Kieffer, but two weeks earlier and better quality. Tree very productive and bears three years after planting. Standard. September.

Goodale—Large; yellow, crimson and russet; flesh white, juicy, melting; a very good dessert sort. Tree hardy, vigorous, upright and uniformly productive. Standard or dwarf. October.

Hovell—Large; waxen yellow, with a red cheek; rich, sweet, melting with aroma; dessert and market sort and market sort, because of its quality and appearance. Tree an upright grower and good bearer; considered very hardy; standard or dwarf. September-October.

Idaho—Large, nearly globular; rich, light yellow, covered with small "freckles"; flesh white, grained and rich; generally considered a good market sort, but little grown for home use.

Kieffer—Medium large; yellow and crimson, with russet and brown; flesh firm and good when ripe; the Ben Davis of the pear family; when properly ripened is delicious, but taken from trees and sold to inexperienced people has created prejudice against it. Tree vigorous, with healthy, dark green foliage; an early bearer and very productive everywhere. October.

Longworth’s No.1—Medium; greenish-yellow; quality recommended as good; especially a home fruit. Tree hardy and blight proof; usually crooked; not an early bearer. September.

Louise—Medium size; yellowish-green, with russet-red cheek; flesh juicy, melting; good dessert and market sort. Tree productive and good grower, either as standard or dwarf. October.

Lucrative—Medium size; yellowish-green, slightly russeted; flesh melting and delicious; recommended as one of the very best dessert sorts for home use. Good grower and productive. September-October.

Onondaga (Swan’s Orange)—Large yellow, with russet; flesh vinous; of variable quality. Tree early and good bearer; popular in west. October-November.

Butler—Medium large; skin rou.h; greenish-yellow, with russet; flesh white, moderately juicy, sweet and slightly vinous; one of the market-dessert sorts; an extra good keeper for its class. Tree a vigorous grower, bears when young, and is claimed to be more hardy than Kieffer.

Sheedon—Medium to large; yellow and russet, with red cheek; flesh a little coarse, melting, juicy and crisp; highly perfumed; the government reports this as one of the very best market-dessert sorts. Tree vigorous and productive; succeeds in the north. October.

Vermont Beauty—Medium; roughish; yellow, with hoary carmine cheek; flesh exceedingly fine, sweet and julicy; for table use. Tree makes strong, healthy growth; productive; bears early. October.

Washington—Medium size; clear yellow, with red dots on sunny side; flesh melting, juicy; per-
fumed and unusually sweet; recommended for market. Tree vigorous grower.

Worden (Worden's Seckel)—Medium size; golden yellow, with russet cheek; flesh fine grained, juicy, buttery, with a rich aroma; recommended highly as a dessert and market sort. Tree hardy and an enormous bearer. September.

WINTER VARIETIES

Bordeaux (Duchesse de Bordeaux)—Medium; yellow and russet; very thick, tough skin, which helps its keeping qualities; flesh melting, juicy, and rich; an all around sort that keeps until March, and is rated as very good, Standard.

Drouard (President)—Very large; greenish-yellow and russet; very handsome; flesh melting, juicy and highly aromatic; recommended for dessert and market. Tree vigorous, healthy and prolific bearer. February-March.

Glout Mercœur—Large; greenish-yellow and brown; flesh sweet, melting, juicy and buttery; one of the best early winter sorts. Tree vigorous and productive. Dwarf.

Lawrence—Medium; lemon yellow, with brown dots; flesh sweet, melting, aromatic; recommended as one of the very best winter sorts. Tree hardy, healthy and productive, bearing large crops annually. Either dwarf or standard. November-December.

Lincoln III—Large; greenish-yellow, with bright cheek; quality very good. Tree very hardy and free from blight.

Lincoln Coreless—Large; golden yellow; quality only medium, distinctive as having very few if any seeds, almost clear of core. Tree good grower and productive, reported to blight in some localities.

Malines—Medium; greenish to light yellow, with russet; flesh rose colored, melting, delicately perfumed; very good quality. Tree moderate grower; irregular, with small leaves; fruit borne in cluster. December-February.

Mount Vernon (Walker’s Seedling)—Medium; light yellow, with crimson and russet; the flesh is juicy, rich, melting, with a spicy flavor. Tree an early bearer. Standard or dwarf. November-January.

Vicar (Vicar of Wakefield)—Large; greenish-yellow, with brown; not first quality, but productive and sells well in season; recommended as a dwarf. November-January.

Winter Nolig—Medium; greenish-yellow, with russet; flesh fine grained, melting and rich; considered one of the most delicious and best winter sorts. Tree stragglly and slender grower, but hardy and thrifty. Standard or dwarf.

NECTARARINES

The nectarine is almost identical with the peach; most colonists consider them of the same species, the principal difference being that the skin has an exquisite wax-like appearance, making them popular for dessert. They require the same culture and management as the peach.

Boston—Large, roundish, oval; yellow and red; flesh yellow, sweet, with a pleasant flavor. September.

Downtown—Large, roundish-oval; pale green, with violet cheek; flesh pale green with some red at it; melting, rich and very good; freestone. Very early.

Early Violet—Medium; yellowish-green, with dark purple or red; flesh juicy, rich and highly flavored. Last of August.

Elrige—Medium large; greenish-yellow, with dark red cheek; flesh greenish-white; juicy and highly flavored. Fruits part of September.

Near White—Medium large, nearly round; white; flesh white, tender and juicy, with a rich, vinous flavor. August.

Red Roman—Largest size; greenish-yellow, with a dull red cheek; flesh yellowish; pleasant and good quality. Early September.

Stanwick—Above medium size, roundish, oval; pale greenish-white; flesh white, tender and juicy. Very late.
These are about seven hundred known varieties of peaches, and it takes about fifty varieties to meet all the varying conditions of the soil, elevation, cold, moisture, purposes and seasons. It is useless to plant a kind not suited to your locality, as your investment and time will be a dead loss. In planting, study the local conditions and plant varieties which are adapted to them and will come into bearing successfully. Commercial peach orchards will lose money if not given proper attention, but will on the other hand, under favorable circumstances, earn a lot of money; $4,000 an acre for single crops has been recorded.

To secure healthy, vigorous and fruitful trees, the ground must be well drained and kept clean and mellow. Some recommend light gravel soil. Wood ashes or potash is a desirable fertilizer. Every spring, the tree should be pruned and the shoots of the last year’s growth shortened in. This keeps the head round, full and well furnished with bearing wood, but care must be taken to leave a sufficient supply of fruit buds, as the fruit is produced on wood of last season’s growth. In planting, prune the tops to a clean whip, and remove bruised and broken roots.

Alexander (Semi-Cling)—Medium; greenish-white with red blush; flesh sweet and juicy. A good market sort. Tree vigorous and very productive.

Alton—Large; white, with red cheek; flesh white, firm, juicy, melting, with a rich flavor; handsome and popular in market. Tree one of the hardest and continuous bearers, according to widespread reports.

Banner—Large, round; yellow, with crimson cheek; flesh firm, yellow, rich, excellent; keeps and ships as well as any peach on the market; general utility and recommended as among the very best. Tree early bearing, productive and hardy. Originated in Canada. For fifteen or twenty years found to be an annual bearer. October.

Barnard—Medium large, round; yellow, almost covered with red; flesh yellow, juicy and rich; quality recommended as very good. Tree hardy and productive. Early September.

Beers Smock—Medium large; creamy white, with crimson blush; flesh yellow, tender and rich; very good quality for the season, and recommended for market. Tree a rapid grower, prolific bearer, and hardy. Last September-October.

Belle of Georgia—Medium large, oblate; white, with red cheek; flesh white, firm and excellent flavor; recommended for dessert, kitchen and market. Tree a rapid grower and very productive. Early July.

Barber—Large; deep yellow, nearly covered with red; flesh yellow, tender, juicy, sweet and rich. Tree hardy but slow grower. Middle of September.

Bokara—Large; yellow, with red cheek and very tough skin; flesh of excellent quality; a sort especially adapted to market on account of freedom from injury and keeping quality. Trees of great hardiness and regular and prolific bearers. September.

Bronson—Large; yellow, with handsome red flesh sweet, rich, fine flavor. Tree hardy and a good bearer. Middle of September.

Carman—Large, round; white, with deep blush; flesh tender and juicy; with fine flavor; skin very tough, making it available for marketing with profit. Tree reported very hardy and a prolific bearer. August.

Chair’s (Chair’s Choice)—Large, round; yellow; with handsome blush; flesh firm, yellow; of good quality. Tree prolific bearer. Last of September.
Champion—Large, round, quite regular; creamy yellow, with red blush; flesh white, with red stains around pit; flavor delicious, sweet and juicy. Tree very hardy and productive. First of September.

Chili (Hill's Chili)—Medium, ovate; dull yellow, with blush; flesh yellow, sweet and rich, rather dry; especially recommended for drying. Tree hardy and productive. September.

Chinese Cling (Cling)—Large, round; creamy white, with red blush; flesh white, red at pit, tender and excellent flavor; especially esteemed in the south. September.

Chillow Cling—Medium; lemon shape; rich yellow, shaded a soft red; flesh yellow; one of the best all around yellow clings; excellent shipper.

Conklin—Medium large, round; yellow, with crimson blush; flesh fine quality. Last of August.

Con nell—Extra large; creamy white, with blush; fine quality. Southern variety.

Cooledge's Favorite—Large; white, with crimson cheek; flesh pale, very melting and juicy, rich sweet and highly flavored. Tree vigorous and productive. Last of August.

Crosby—Medium, roundish, oblate; bright orange, with bright red cheek; flesh yellow, mild and pleasant. Tree unusually hardy, sometimes named "frost proof." Middle of September.

Crawford's Early—Large; yellow, with red cheek; flesh yellow, juicy and sweet; its size and beauty make it very popular. Tree vigorous and productive, but buds are very tender. First of September.

Crawford's Late—Large; yellow or greenish-yellow, with dull red cheek; flesh yellow, stained red at pit, melting, vinous and very good. Tree hardy and productive, usually needs thinning to make good sized fruit. Last of September.

Delaware—Medium, round; creamy white, with blush; flesh white, juicy and good. Tree very prolific bearer.

Dewey (Admiral Dewey)—Medium; yellow; flesh firm, yellow and delicious; good shipper; highly recommended as very early sort. Tree is strong, hardy, symmetrical grower and produces well. July.

Ede (Captain Ede)—Very large; yellow, tinted with red; flesh yellow and about same quality as Elberta; claimed to be harder than Elberta and as good a market sort. August-September.

Elberta—Very large; red blush; flesh yellow with

Crawford's Early—Large, round, quite regular; creamy yellow, tender and juicy; the great market peach of the country. Rank, vigorous grower, does well in all peach growing sections. Middle September.

Engle (Engle's Mammoth)—Large, roundish, oval; yellow, with red blush; flesh sweet, rich, juicy; small stone; recommended for market. Early September.

Everbearing—Large; creamy white; flesh good quality; distinctive in that the first fruit to ripen is very large, diminishing in size as later specimens ripen. Fruit may be had from the same tree for several weeks.

Family Favorite—Large; creamy with a blush; flesh firm, excellent for cooking, drying or shipping. Tree a prolific bearer. Late July.

Foster—Large; deep orange, red, becoming quite dark on sunny side; flesh yellow, rich and juicy, with sub-acid flavor, firm; one of the best for canning or drying.

Globe—Very large; ovate; yellow, with red blush; flesh firm, juicy, rich and luscious. Tree rapid and vigorous grower and enormous bearer. September-October.

Gold Drop—Medium; has a transparent golden appearance, rendering it very attractive in market; flesh good quality. Tree bears early and abundantly; hardy. Last of September.

Greensboro—Medium; yellow, with beautiful blush; flesh white, juicy and good; freestone when fully ripe; said to be larger than Alexander. July.

Hale's Early (Semi-Cling)—Medium size; greenish-white, with red cheek; flesh white, melting and juicy. Tree vigorous and healthy; an abundant bearer. July-August.
Heath Cling (Cling)—Very large; creamy white, with delicate red blush; flesh white, slightly red at pit, tender, juicy, sweet; splendid for market or canning. Early September.

Hiley—Large, round; creamy white, with rich blush; flesh firm, excellent quality; freestone. Tree vigorous and hardy. June-July.

Kalamazoo—Medium to large; oval; yellow, striped with red and a thin bloom; flesh yellow, red at pit; rich, vinous and of good quality. Tree a strong grower and bears at two years old; hardy and reliable. September.

Large Early York—Large, round; white, with red cheek; flesh fine-grained, very juicy, rich and delicious; a market sort and good for dessert. Tree vigorous and productive. Last of August.

Lemon Cling (Cling)—Very large; light yellow, with red in the sun; flesh firm, yellow and rich, sub-acid flavor. August.

Lemon Tree—Medium, large, roundish; often with pointed apex; light yellow, with greenish-white tingee and thick bloom; flesh yellow, tender and good; a good canning sort. Tree a regular and prolific bearer. October.

Levy (Henrietta, Cling)—Large; deep yellow, with a shade of brownish-yellow; flesh of good quality for canning and market. Tree hardy; strong grower; productive. Very late.

Lewis—Medium large, roundish; white and red, and very at-tractive; flesh white, melting and rich; very good: one of the earliest white kinds; dessert, market kitchen. Tree hardy and very productive. Last of August.

Longhurst—Medium large; yellow, with rich red; smooth and handsome; flesh yellow and well flavored; an excellent shipper and canner. Tree hardy and productive.

Lone Tree—Medium size; golden yellow; flesh yellow, juicy and very good; pit very small and free. September.

Lovett’s White—Large to very large, roundish; creamy white, with considerable bloom; flesh creamy white to pit, tender and quite rich.

Mamie Ross—Medium large, ovate; white, nearly covered with carmine; flesh firm, juicy and of good quality; dessert and market. Tree hardy, thrifty, and quick grower; very early.


Mayflower—Medium size; practically red all over; flesh firm and of good flavor; extremely valuable as a very early market sort, especially in southern states. Tree blooms very late; upright and good grower; prolific bearer. Earliest known.

Mountain Rose—Large, round; white, splashed with light and dark red; flesh white and very delicious; dessert and market sort. Tree reported favorable from all sections. First of August.

Old Mixon Cling—Large, round, ovate; creamy white, with red blush; flesh juicy, rich and high flavored; one of the best Clings. Tree reported successful from all sections. Last of September.

Old Mixon Free—Large; pale whitish-yellow, with red cheek; flesh tender, rich and good; one of the best white fleshed varieties. Tree productive and hardy; very successful everywhere.

Reeves—Large, roundish; yellow, with red; flesh yellow, with red at the pit; juicy, melting, with a vinous flavor; excellent for market. Tree hardy. September.

Rivers (Early Rivers, Semi-Cling)—Large size; creamy white, with a delicate pink cheek; flesh melting, with a remarkably rich flavor; for dessert or market. First of August.

St. John (Yellow St. John)—Medium large, roundish; orange-yellow, with deep red cheek; flesh yellow, juicy, sweet and highly flavored; one of the very early market sorts, and is showy and has good quality. Tree is strong and vigorous; does well in all sections. First of August.

Salway—Large; dull yellow, mottled with brownish-red; flesh firm, juicy and sweet; a very showy market sort and profitiable. Tree vigorous and productive; grown in all sections. October.

Slappey—Medium, roundish; yellow; flesh yellow, sweet, excellent flavor; a very good early sort; ripens middle of June in Georgia; free of rot and keeps splendidly. Tree very hardy.

Smock—Large, roundish, somewhat oval; yellow, with some blush and thick bloom; flesh yellow, tender and sprightly; a good market sort.

Sneed (Semi-Cling)—Medium large, ovate; greenish-white, with red cheek; flesh yellow; red at stone; excellent quality; not inclined to rot. Tree productive; very early. July.
Snow—Medium; orange-yellow, with dark red cheek; flesh yellow and of good quality. Tree hardy and very productive. Beginning of September.

Steven’s Bareripe—Medium, oblong; creamy white, with beautiful blush; flesh white and of highest quality. Tree bears early and is prolific. Early October.

Stearn's—Large; brilliant red; flesh yellow and of good quality; a market sort originated near South Haven, Mich. Tree is a strong, upright grower; hardy and free from disease. September.

Stump—Very large, roundish; white, with red cheek, considerable bloom; flesh white, Juicy and good flavor. Tree very prolific. Last of September.

Susquehanna—Large; rich yellow, with hard, some red cheek; flesh yellow, sweet, juicy and rich. Tree not generally very productive. Middle of September.

Stinson—Large, oval; creamy white, with fine blush; flesh white and rich.

Thurber—Large to very large; white, with light crimson mottling; flesh white, very juicy, vinous and delicately aromatic. Last of July.

Triumph—Medium large; dark yellow, nearly covered with red; flesh yellow nearly to pit, where it changes to greenish-white; juicy, melting and sweet. An attractive market sort. July.

Wagner—Medium; brilliant yellow, with red; flesh yellow, juicy and of fair flavor; a canning and market sort. Tree very healthy, long lived and reliable. Last of August.

Wheatland—Large to very large, roundish; golden yellow, shaded on cheek with dark crimson; flesh yellow, firm, sweet and juicy; stained red at the pit. September.

Wonderful—Large, roundish; yellow, with carmine blush; flesh tender and highly flavored; a good general peach because very late and good keeper. Seedling of Smock. Tree very prolific.

APRICOTS

A most delicious fruit of the plum species. Is of a distinct flavor and one of the best and most profitable of market fruits. The tree bears very young and most profusely. Ripening as it does between the cherries and peaches, the apricot is a most welcome fruit. In very sunny localities it is apt to bloom too early in the spring and get caught by the frosts. The tree is slender in form, has beautiful dark green foliage, pretty pink blossoms, and will give very satisfactory results as a ornamental tree in any garden or house lot. To avoid being caught by late spring frosts, spread long strawy manure about one foot thick around the tree, in some winters after the ground is frozen hard and deep. The woolen will keep the frosts in the ground two weeks longer in the spring, and the tree will not bloom so early. Russian varieties have stood thirty degrees below zero without injury and are therefore very desirable for the northwestern states and exposed locations.

Alexis—Large to very large; yellow with red cheek; flesh slightly acid, rich and juicy. Tree very hardy and abundant bearer. July.

Alexander (Russian)—Medium to small size; light orange flecked with red; flesh tender, juicy, sweet, and good flavor; dessert and market. Tree hardy and productive. August.

Breda—Small; orange and red; flesh rich, juicy, vinous; very good for both dessert and market. Tree hardy and productive. August.

Eudd (J. L.)—Medium to large; light orange with blush on sunny side; flesh yellow, juicy, sweet, and has peach flavor. Tree hardy and productive. August.

Early Golden—Small, roundish-oval; pale orange with smooth skin; flesh yellow, juicy, sweet and desirable for dessert use. Tree hardy and productive.

Gibb—Medium size; flesh yellowish, sub-acid, juicy and rich. Tree hardy, grows symmetrical; productive. June-July.

Harris—Large, oval; bright yellow with red cheek; flesh tender, juicy, sweet and good; dessert and market. Tree hardy and productive. Last of July.

Moor Park—Very large; orange-yellow with numerous specks and dots; flesh yellow, sweet, juicy and rich; good to very good market and dessert. Tree is rather tender, and fruit ripens unevenly. August.

Nichols—Medium to large; flesh white, sweet and melting. Very hardy and prolific. July.

Peach—Very large; orange with dark cheek; flesh juicy and high flavored; good for dessert. August.

Royal—Large; dull yellow, mottled with dark brown; flesh juicy, rich and highly flavored; recommended for drying, market and dessert. Tree rather tender and should not be planted in the north.

Superb—Medium size; light salmon, with slight blush; flesh firm and solid; exquisite flavor. Tree is recommended as the most hardy and productive; grows large and spreading.
The plum, like the pear, succeeds best in a rather heavy soil with some clay, and being generally free from disease is profitable. The finer sorts are excellent dessert fruits, of rich and luscious flavor; for cooking and canning they are unsurpassed. For home consumption they should be gathered a few days ahead of use that they may develop their perfect flavor. Most of the varieties, especially the nature sorts, are extremely hardy and will withstand the most severe weather. For family use, they especially do well in poultry yards, or where the hogs keep the ground free of fallen fruit. They should be planted about ten feet apart, and the varieties should be mixed. The Japanese varieties are more tender and should not be planted too far north. Plums are prone to overbear, and, in order to get perfect fruit, should be thinned, the well formed and larger fruit being much more profitable, and leaves the tree more vigorous. A number of varieties do better when planted together than just one sort.

**NATIVE VARIETIES**

**Aitkin (Minn.)**—Large; yellow; cling; flesh yellow, rich, tender and sweet; good for dessert, kitchen and market. Tree does well in far north. Very early.

**Cheney (Nebr.)**—Large; dull purplish-red; cling; flesh yellow, firm and of good quality; recommended for dessert and market. Tree fine, vigorous, upright grower, with large oriental flowers. Hardy Early.

**Desota (Wis.)**—Medium; yellow with red cheek and thin blue bloom; cling; flesh firm, juicy and highly flavored; kitchen and market sort. Tree is very hardy and healthy; its fault is over-bearing and it should be thinned. Last of August.

**Forest Garden (Iowa)**—Large; dull purplish-red; cling; flesh yellow or reddish near stone firm, sweet and pleasant flavor; one of the very best sorts for kitchen. Tree thrifty upright grower; regular bearer. Medium early.

**Hawkeye (Iowa)**—Large; yellow, with red cheek; cling; flesh firm; a good shipper; kitchen and market. Cooks pretty sour. Tree hardy and productive. Last of August.

**Pottawatomie (Tenn.)**—Medium large; red, with white dots; cling; flesh yellow, sweet and juicy; recommended for kitchen and market. Not hardy in the north.

**Stodard (Iowa)**—Large; yellow, with red cheek; cling; flesh splendid for dessert, develops too much acid for cooking. August.

**Surprise (Minn.)**—Medium large; red; cling; flesh rich, sugary and delicious; good for all purposes. Tree prolific, vigorous and hardy far into northwest. September.

**Terry (Iowa)**—Medium large; yellow, with red cheek; cling; flesh very good; especially valuable for market. Tree thrifty and prolific.

**Weaver (Iowa)**—Large; yellow, with dark red; blue bloom; semi-cling; flesh firm; meaty and very good for kitchen and market. Tree very hardy and prolific; good regular bearer. August.

**Wolf (Iowa)**—Medium large, yellow, with red, bluish-red; has a blue bloom; free; flesh yellow and of good quality for kitchen and market. Unusually productive and hardy. August.

**Archduke (Europe)**—A large, black cling. Its flesh is firm: it is good for kitchen and market. Hangs well to tree. A good late sort. Early October.

**EUROPEAN VARIETIES**

**Arctic (Maine)**—Medium small; very dark purple; blue bloom; semi-cling; flesh greenish-yellow, juicy and sweet, with pleasant flavor; for dessert and market. Tree healthy and vigorous; early and abundant bearer.

**Bradshaw (Niagara, Amer.)**—Medium large; purplish-red; free; flesh green and juicy; good shipping qualities. Tree an upright grower, bears regularly; enormous crops. Medium early.

**Damson (Europe)**—Small; black, with thick blue bloom; free; flesh juicy, but rather tart; best
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for kitchen and market. Tree enormously productive and hardy. September.

**German Prune** (Ger.)—Medium small; blackish-purple; free; flesh juicy, fine; sells high on market, a leading favorite. Tree vigorous and productive.

**Giant Prune** (Calif.)—Very large; reddish-purple; free; flesh of high quality for drying, kitchen or market.

**Golden Drop** (Eng.)—Large to very large; yellow; semi-clinging; flesh firm, rich and sweet; good for dessert, drying and market.

**Grand Duke** (Europe)—Large to very large; dark purple; cling; flesh fine; recommended for kitchen and market. Commanding good prices. Tree rather poor grower; regular bearer. Last of September.

**Green Gage** (France)—Medium; greenish-yellow; semi-clinging; flesh juicy, rich and delicious; one of the best for dessert. Tree slow grower. September.

**Guell** (Blue Magnum Bonum, N. Y.)—Medium; bluish-purple; cling; flesh yellowish-green; rather coarse; sweet, pleasant flavor; a great market sort. Tree hardy; very vigorous and upright grower. September.

**Han** (General Hand, Pa.)—Medium large; greenish-yellow; cling; flesh coarse but sweet and good for market. Tree stocky, producing heavily. Early September.

**Imperial Gage** (N. Y.)—Medium; yellowish-green; heavy white bloom; free; flesh juicy, sweet, rich and excellent; one of the very best for dessert and market. Tree upright and vigorous. September.

**Italian Prune** (Europe)—Medium large; purplish-black; blue bloom; free; flesh greenish-yellow, juicy, sweet and of good quality, will hang on tree after ripening; splendid for drying and market. Tree very productive. September.

Jefferson **(N. Y.)**—Medium large; greenish-yellow, with light purple cheek; free; flesh juicy and high flavored. Tree bears regularly. Last of August.

Lombard **(N. Y.)**—Medium large; reddish-violet, with heavy bloom; cling; flesh firm, yellow and very pleasant for both kitchen and market. Tree unusually vigorous, succeeding well on even light soils. Late August.

Moldarka **(Russia)**—Medium large; blue; free; flesh juicy, rich and luscious especially good for dessert. Tree productive and hardy.

Monarch **(Eng.)**—Large; reddish to blue-purple; thin bloom; free, flesh pale golden-green, juicy, pleasant; recommended for dessert, kitchen and market. Trees come into bearing young and yield abundantly. August.

Niagara—See Bradshaw.

Orleans **(Eng.)**—Large to very large; reddish-purple; cling; flesh firm and juicy with fine flavor; very good; recommended for market. Tree very productive. September.

Peach **(Amer.)**—Very large; blackish-red; free; flesh very good; recommended for kitchen and market. Tree reported very productive and early.

Pond's **(Eng., Pond's Seedling)**—Very large; yellow and covered with reddish-violet; free; flesh yellow, sugary but rather coarse; popular for dessert and market. Tree vigorous and fruitful. September.

Pride **(Shipper's Pride)**—Large; purple; flesh firm, sweet and excellent for shipping and...
mehch's rich, rapid, yellow kitchen with reddish little not rapid free profuse dessert, good large;...
The cherry succeeds well on dry soils, and the trees may readily be trained in any form as taste or circumstances require. The sour varieties are more hardy than the sweet, but they thrive well in all the northern states, they are so hardy that they thrive and bear with almost no care, but respond to good treatment when given them, and should be cultivated until well grown at the least. While they are the great home fruit for the farm and village lot, they have great possibilities as a commercial proposition.

**HEART AND BIGARREAU**

**Allen**—Medium size; glossy crimson-black; flesh meaty, firm, sweet and delicious and tops the market in price. Ripens uneven. Tree hardy and free from rot and disease. Late July to August.

**Bing**—Fruit large, dark brown or black; one of the most delicious late sweet cherries on the Pacific coast; is considered one of the most profitable. Tree hardy and vigorous; seems to succeed east better than most sweets. Late.

**Centennial**—Large, compressed heart shape; yellow, red or white; flesh sweet and very good. This is a new California variety of good promise.

**Coe** (Coe's Transparent.)—Medium size, round, pale amber to red in the sun; flesh tender, juicy, sweet and delicious. Counted as one of the very best dessert varieties, but too tender for market. Tree a strong grower, very productive. Late June.

**Downers**—Medium large, round, heart-shaped, red. Flesh good quality for dessert and market. Originated in Massachusetts and is reported favorably in the east.

**Eagle**—Fruit large; red-black color, with rich and juicy flesh of high flavor. Tree a vigorous grower and quite productive. Fruit ripens latter part of July.

**Early Purple Guigne**—Medium size, heart shaped; tender, juicy and sweet. Tree rather a slender grower, but very hardy and productive. First to middle of June.

**Eliza**—Large to very large; heart-shaped; pale yellow with pink cheek; quality excellent for both dessert and market. A very early variety which ripens in May and June.

**Ida**—Medium large, yellowish-red; sweet; quality very good. Originated in Pennsylvania and has been well tested and is extensively grown. Middle of June.

**Knight**—Large to very large; oblate heart-shaped, reddish-black; quality extremely good, rich and sweet. An early dessert variety but too tender for shipping.

**Lambert**—Very large, heart shaped; dark purplish red, turning to almost jet-black when fully ripe; flesh very firm, solid, rich and juicy. Tree rugged, strong grower, hardy, enormous bearer. Late July.

**Luelling**—Very large; black; flesh very solid and firm; a good keeper. Tree a moderate grower and rather tender, an early and profuse bearer. A native of Oregon.

**Napoleon**—Very large, heart-shaped; pale yellow with bright red cheek; flesh firm, juicy and sweet. A market variety reported successful in all sections. Tree vigorous and very productive. July.

**Rockport**—Large to very large; short heart-shaped; amber with red cheek; flesh firm, sweet and excellent for dessert and market. Tree vigorous and good bearer. June and July.

**Smith** (Smith's Bigarreau.)—Very large, dark reddish-black; flesh dark, tender, very juicy with a fine flavor. Tree vigorous.
Eugenia (Empress Eugenia.)—Large, dark red; rich, juicy flesh. A thrifty, productive tree; a superior variety. July.

Komer—Fruit large, round; a clear shiny red; flesh rather acid but quality first-class for kitchen and market. Tree strong and hardy, rapid grower and bears enormous crops. Late June.

Late Duke—Medium large, short, heart-shaped; light red; flesh light colored, sub-acid, with a good flavor. A kitchen cherry of the very best quality. Tree strong, upright grower; bears well. Last of July.

Late Kentish—Medium size, round, red; flesh similar to Early Richmond, but two weeks earlier. Tree hardy and productive. A valuable sort.

May Duke (Early Duke)—Medium large, roundish, heart-shaped, dark red; juicy, rich sub-acid. Tree very hardy, vigorous and productive. Ripens through a long period. June.

Montmorenci (Ordinaire.)—Large, round, handsome red, flesh fine flavored, sub-acid; rich. Recommended for kitchen and nearby market. Tree good grower, hardy, productive. Late June.

Olivet—Medium large, round, shining red; flesh rich and vinous, with a sweet acid flavor. For kitchen and dessert. Tree of Duke species, vigorous and hardy. Early and ripens slow.

Ostheim (Russian Cherry.)—Fruit roundish ovate; dark red; flesh liver-colored, tender, juicy, almost sweet. Valuable for market and productiveness; ripening season extends for about two weeks. Trees usually begin to bear second year. Last of June.

Richmond, Early—Medium size, dark red; sprightly acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes. Tree a slender grower, and is exceedingly productive. The most hardy of all varieties. Ripens through June.

Royal Duke—Medium large, roundish, heart-shaped, red; flesh sub-acid, sweet and rich; one of the sour varieties suitable for dessert. Tree hardy but moderate bearer.

Wragg—Large, roundish, heart-shaped; dark crimson and when ripe black or nearly so; flesh and juice light crimson; firm and good. Very productive, hardy and a sure cropper. July.

**DUKE and MORELLO SOUR VARIETIES.**

**Baldwin**—Fruit very large, round, dark red; flavor slightly acid, yet the sweetest and richest in the Morello type; exceeds in earliness, vigor, hardness, quality and productivity. June.

**Belle Maguique**—Fruit large; bright red; flesh tender, juicy, sprightly sub-acid; one of the finest of this class of cherries. Tree hardy, vigorous and very productive. Ripens last of July.

**Choicy**—Medium size; amber, mottled with red; flesh tender, juicy, sweet and rich. One of the very best for dessert. June.

**Dyehouse**—Medium size; red; flesh melting, juicy with a sprightly tart flavor. Reminiscent of New Richmond. Tree hardy and upright.

**English Morello**—Medium large; roundish, heart-shaped; dark red, nearly black when ripe; flesh purplish-red, meaty, juicy and slightly astringent. Tree small and slender, but productive. Good variety for nearby market. August.
QUINCES

In quinces we have a very desirable fruit. It is used a great deal for preserves and canning especially with other fruits. A small part of quince will impart the quince flavor to three or four times as many apples. Quince syrup is very delicious, even excelling the finest maple syrup. The tree is easily transplanted and does well on any good soil on which corn grows well. It is hardy as far north as Nebraska. Plant trees as close as peach or plum. Under proper conditions and good culture the tree bears heavily and regularly and is a highly profitable crop, since all markets are never fully supplied. Quince trees are usually scarce.

Angera—Medium size, pear shaped; golden yellow; rather acid, tree a thrifty grower and an abundant bearer. October.

Bourgeat—Very large; golden yellow, tender, good flavor. With careful handling it keeps in a good cellar until spring. The tree exceeds all others in fruitfulness and sometimes bears when 3 or 4 years old. October.

Champion—Very large, greenish-yellow; flesh cooks as tender as an apple and without hard spots or cores; flavor delicate, imparting an exquisite quince taste and odor to any fruit with which it is cooked. Trees are vigorous growers and bear heavy crops of superior fruit; one of the best for sections not subject to early frosts.

Meech’s Prolific—Large size, bright yellow, very fragrant, good flavor; one of the best; bears early and very productive.

Missouri—One of the largest and handsomest of the quinces; very rich and aromatic. Tree is a young and prolific bearer.

Orange—Large, bright golden yellow; fine, firm flesh and good flavor; one of the best for cooking. The most popular and extensively cultivated of the old varieties. October.

Rea—A seedling of the Orange quince; one-third larger, same form and color, equally as good and said to be as productive. Tree a hardy and healthy grower.

Van Deman—Very large; golden yellow; fine flavored; delicious for preserves, jellies or quince syrup. Ripens through a long season and keeps well. It is the best of all in size, quality, flavor and beauty and succeeds farther north than any other.

We use the greatest care in filling orders true to name, and of well-ripened wood that will stand transplanting and make good, healthy trees.

MULBERRIES

The mulberry is valuable as an ornamental shade tree and the fruit is quite popular in some sections. It is especially valuable in poultry parks, as the fruit ripens by degrees and affords them a continued supply for some weeks. Some varieties must be canned with more tart fruit to be good. Eaten raw, the fruit, when ripe, is excellent.

Black (English)—Very ornamental, fine for shade and bears large, long, black fruit of good flavor.

Downing—Highly ornamental for street or lawn, bearing an abundance of large, black, sub-acid fruit. Its long bearing season makes it a universal favorite wherever grown.

New American—Equal to Downing in all respects and a much harder tree. It bears fruits of the finest size and flavor from mid-July until Autumn.

Russian—More valuable for hedge or shade than fruit, which is of little value.

White—A beautiful, ornamental tree and used for its decorative effect. Valuable for feeding silkworms.
GRAPES

There is scarcely a yard so small in the country or the city that from one to a dozen grape vines cannot be grown. They do admirably trained up the side of any building, or along the garden fences, occupying but little room and furnishing an abundance of the healthiest fruit. Make the soil mel- low, and plant the vines somewhat deeper than they stood in the nursery. Plant about eight feet apart by fence or building.

As a commercial crop there is nothing more satisfactory. They are as reliable as a corn crop, and as staple on the market as wheat. When a vineyard is once established it will be productive for a lifetime with ordinary care, and the income from it can be counted on almost as certainly as the changing of the season.

Grapes do well on either gravelly, sandy soil, or a combination of these. If planted on clay soil, it must be thoroughly underdrained to secure good results. Any good, dry soil of sufficient fertility to produce good farm crops is suitable for vineyard planting, if climate and exposure are favorable.

The ordinary necessary preparation of the soil is to thoroughly plow and pulverize it to a depth of twelve to eighteen inches. If in sod it should be summer-fallowed in August or September preceding planting and again plowed at the time of planting. At this last plowing many of our best vineyardists plow the ground into lands in width to the distance apart the rows are to be planted, and plant the vines in the dead furrows. This saves a large amount of labor in digging the holes.

If the soil is naturally poor it should be given a liberal application of thoroughly rotted stable manure, which should be plowed in at the last plowing. If this cannot be had, use raw bone meal, about 600 pounds per acre, with about 300 pounds muriate of potash, or two tons of good, unbleached hardwood ashes. It is not desirable to put manure or fertilizers of any kind in the hole when planting. The roots will quickly find their necessary food if it is in the soil.

Agawam—Large, round, early, dark red or brown; large, bunched berries, meaty and free from sour pulp; has a tough skin and beard never attack it; in flavor it is sprightly, moderately sweet. Midseason.

Barry—Berries large, roundish, delicate, sweet and tender; much like Hamburg; ripens with Concord. Midseason.

Brighton—Medium in size, red; flesh rich, sweet and of the best quality. Ripens earlier than Delaware. Vinous, vigorous and very hardy. Early.

Brilliant—Berries large, light red with a thin blue bloom, very handsome, melting and delicious. A splendid table grape and a good market variety. Early.
Columbian—Very strong grower, with thick leathery leaves. Large size, showy, early. Ripens with Moore’s Early.

Campbell (Campbell’s Early)—Large size, glossy black color, pulp sweet and juicy, seeds small, few in number and part readily from the pulp, clusters very large; an excellent keeper and shipper. Early.

Catawaba—Berries large and round, reddish-coppery colored; flesh fine flavored, sweet. An excellent late sort. Well known as the great wine grape. Very late.

Clinton—Small, round, black. When thoroughly ripe quite good for dessert, but is really a wine grape of the Fox species. Bunches are compact. Very late.

Champion—Large, black grape, medium quality; the earliest of all, strong grower and very hardy; succeeds in all sections, and thus makes it one of the most valuable market grapes. Very early.

Concord—Large, purplish black grape, very hardy and productive, ripening about the middle of September. This is one of the most popular market grapes. Midseason.

Delaware—Berries rather small, round, skin thin, light red, flesh juicy without any hard pulp, sweet and spicy and delicious flavor. Vine moderately vigorous, hardy and productive. Midseason.

Diamond (Moore’s Diamond)—Large, delicate, greenish-white with a yellowish tinge when fully ripe; few seeds, almost free from pulp, excellent quality. Vine like Concord in growth and hardiness and foliage; the leading early white grape. Midseason.

Eaton—Berry is very large, black, thick skinned; very juicy with some pulp. Clusters very large, often weighing 20 ounces and the berries measuring an inch in diameter. Midseason.

Goethe—Large bunch and berry; yellowish-green, shaded dull red; tender, sweet, quality perfection; vine vigorous and productive. In the north, vines should be laid down and covered for protection. Midseason.

Hartford—Large, black grape; very early; good quality; large bunches. Strong, thrifty grower and very productive. If handled properly are profitable market variety. Midseason.

Herbert—Large, superior black grape; one of the finest for table use. Fruit keeps remarkably well long after Concord has gone; very highest quality and a good shipper. Early.

Isabella—Large, black grape, very attractive, of good quality; bunches very large. Vine vigorous, hardy, rugged and fruitful. Early.

Lutie—Rich red, a good grape everywhere, succeeds better in south; vigorous, heavy bearer, and always dependable.

Lindley—A very handsome light red grape; sweet and tender; good keeper and shipper.
Worden.

Martha—Medium size, round; yellowish-white; flesh very sweet; a little foxy, but good; bunches medium and shouldered; recommended for dessert and market. Vine hardy and vigorous. Early.

McKinley's Early—Large, oval like Malaga; green to yellow; very sweet and extra quality; good shipper; remarkable keeper and hangs on the vine extra well. Vines strong growing, bunches large and compact. Mid-season.

McPike—Very large, round; black with blue bloom, melting and fine flavor; ripens evenly and keeps well when shipped; their extreme size makes them popular on the market; vines hardy, leaves large and leathery; a seedling of Worden.

Merrimac—Very large, round; black; flesh sweet, rich and tender; dessert and market; one of the earliest and best Roger's sorts. Vine vigorous and productive. Midseason.

Mills—Large, round; black; flesh firm, meaty, rich and sprightly; adheres well to stem; large bunches; especially a dessert sort. Vine originated in Canada. Vigorous and hardy. Midseason.

Moore's Early—Very large, round; a black with a blue bloom; quality very fine and is classed as better and sweeter than Concord; they stand handling and shipping, and have an established reputation on the market. Vines extremely hardy and productive. Early.

Moyer—Small, round; red; resembles the Delaware; flesh very good and recommended for dessert and market. Vine a native of Canada, and more vigorous in growth than Delaware. Early.

Norton—Small, round; black; wine grape; flesh tender. Vine hardy, vigorous and reliable. Very late.

Niagara—Large, slightly oval; pale yellow with a white bloom; the quality is equal to Concord and is the standard white grape of the country, bunches are large and compact. Vine vigorous, hardy and very productive.

Perkins—Very large, round, red; quality considered poor; bunches compact and shouldered. Vine vigorous and productive. Very early.

Pocklington—Very large, round, golden yellow; clear, juicy, sweet and tender, with a little pulp; especially a market sort. Vine hardy and healthy, and productive in favorable seasons. Midseason.

Salem—Very large, round; red or light chestnut color; thick skinned; flesh very sweet and sprightly with a most exquisite flavor; bunches compact and large; for dessert and market. Vine hardy and productive.

Vergennes—Large, oval; red or amber; flesh firm, sweet, juicy and of the best quality for dessert and market. Vine hardy. Midseason.

Wilders—Very large; black; flesh sweet, rather sprightly; buttery with a fibrous center; dessert and market. Midseason.

Worden—Large, round; black; flesh has a flavor unlike any other grape; delicious and melting; a dessert and market sort, considered superior to Concord in every way. Vine hardy and productive. Early midseason.

Woodruff—Large, round; red; handsome; quality very good and recommended for both dessert and market. Vine a strong grower, healthy and hardy. Early midseason.
The raspberry is one of the most delicious and popular fruits grown. They are always in demand in season and command good prices on the market. For canning purposes they are unexcelled. They are easily cultivated and require little care. Cut out the old and weak roots each year; plant in good soil in hills about four feet apart. With a little care and attention, they will produce large crops of berries. For winter protection, bend the canes over and cover with straw or leaves and remove early in the spring.

The plan most commonly recommended for laying out the raspberry plantation is to plant in rows from six to eight feet apart and two or three or more feet in the row; but recent experience has convinced us that there is a much better plan: We now plant raspberries in hedge rows; plant one foot apart in row and rows twelve feet apart. The dense hedge row smothers out all weeds in and near the row, rendering cultivation easier and quicker; keep this space between the rows well cultivated. It is a well known fact that raspberries are always larger, finer and sweeter if grown partially in the shade; the hedge row furnishes this condition. It also stays the young canes against the wind twisting and breaking them, resulting in more and better canes, more and finer fruit, and rendering easier and quicker cultivation. Give this plan a trial and you will be convinced of its advantages over the old way.

**BLACK VARIETIES**

**Conrath**—Large; black and very sweet; firm; may be gathered without crushing or breaking; for dessert and market. Bush very vigorous and large grower; needs extra room; very productive. Early.

**Cumberland**—The largest of all the black-caps; coal black berries; very firm and quality of the very best; excellent shipper. Bush a strong grower, stocky canes and unusually prolific. Midseason.

**Earheart**—Large; jet black; good quality; for kitchen purposes, very hardy; commences to ripen early and continues until frost.

**Bureeka**—Large, jet black; good quality, firm and ships well for market. Bush good, strong, thrifty grower and hardy. Very early.

**Gregg**—Large; black, covered with a bloom; quality excellent for shipping, evaporating and general use. Bush hardy and favorably known in every district; productive. Midseason.

**Hilborn**—Large; black; the quality of this berry for dessert and market is regarded as the very best. The bush is extremely hardy, being a native of Canada. Early.

**Koosier**—Medium to large; jet black; very firm; excellent for dessert, market and kitchen. Bush hardy and a dependable bearer. Has been thoroughly tested. Early.

**Kansas Raspberry**
Kansas—Very large; black; a berry of splendid quality for general use and popular on the market. In many sections it is the leading sort for extensive planting on account of its vigorous and healthy growth, and prolific bearing. Midseason.

Munger—Large; black; firm but sweet and juicy; good shipper. Bush strong, vigorous grower and hardy.

Older—Large; jet black; sweet and excellent flavor; desirable for dessert and market. Bush hardy, vigorous and productive. Medium early.

Palmer—Medium; black; good flavor; desirable for kitchen and market. Bush hardy and productive. One of the very best early sorts.

Souhegan—Rather small; jet black with a little bloom; firm with a sweet, pleasant flavor. Bush vigorous, strong and hardy. Midseason.

REDA VARIETIES

Brandywine—Large; bright red; very firm and good quality; valuable for market on account of its fine shipping qualities. Early.

Columbian—Very large; deep purplish-red; sweet and highly flavored; for kitchen and market. Bush very vigorous and large grower; needs extra room as it is very productive. Early.

Cuthbert—Very large; conical; rich crimson; very handsome and firm; flavor sweet, rich and luscious; a great market sort and will stand shipping long distances. Bush hardy, both north and south; stocky, upright grower and productive. Midseason.

Golden Queen—Medium large; clear amber yellow with highest quality; for dessert and kitchen; one of the best yellow berries ever introduced. Bush vigorous, hardy, upright and productive.

Hansell—Medium to large; bright crimson fleshy, firm and quality the best for both dessert and market. Bush hardy and very productive. Very early.

Haymaker—Very large; a bright purplish-red; excellent flavor; delicious for table use and splendid for canning and shipping. Bush vigorous, hardy and free from diseases, and a great producer. Recommended as profitable.

King—Large crimson; firm good flavor and desirable for dessert and market. Bush hardy and very productive. Early.

London—Large; bright red or crimson; quality excellent for both dessert and market; stands shipping well, and is very hardy. Midseason.

Reliance—Medium size; purple; flesh firm; good quality for kitchen and for market. The bush is hardy and very productive; a seedling from the Philadelphia, but is much more valuable. Midseason.

Ruby—Large; bright red; exceedingly firm, of excellent quality and is a strong grower. Ruby ripens with the earliest.

Superlative—Large, conical, dark red; flavor fine and berry delicious for table; Bearing stout; heavy cropper; hardy.

St. Regis—Earliest of all; wonderfully prolific, it equals most black cap varieties; gives a crop of fruit all summer and autumn, fruiting on old canes in generous quantities until late in August, when berries begin to ripen on young canes. Berries bright crimson, of large size and surpassing quality; canes stocky, strong growth with abundance of dark green leathery leaves. It succeeds upon all soils, whether light and sandy or cold heavy clay, and canes are absolutely hardy.
Blackberries are among the best-known six or seven feet apart, three to four feet in kind is more wholesome. A liberal use of berries and other good fruits will save doctors' bills. Blackberries should be planted in rows six or seven feet apart, three to four feet in the row. Keep the ground light, rich and clean, and pinch the canes back when they have reached four feet in height. The demand for blackberries is always good.

**Agawam**—Ripens very early and has a flavor similar and equal to the wild berry. Perfectly hardy.

**Blower**—Claimed to be the hardest, most productive, the finest quality and for market to bring the highest price of all blackberries. Large size, jet black, good shipper, best quality and unexcelled productivity are the main characteristics of this splendid new sort.

**Briton** (Ancient Briton)—A new and valuable blackberry; perfectly hardy and very productive.

**Early Harvest**—Good quality; firm; extremely productive; attractive on the market; an early sort.

**Eldorado**—Jet black; does not turn red on exposure to sun; hardy, strong grower. An excellent shipper.

**Erie**—Large, round; excellent quality; strong, hardy, and free from rust.

**Iceberg**—Large; white; very transparent; the seeds which are unusually small, can be seen in the ripe berries. The clusters are larger and the berries sweeter and more tender than those of the Lawton, its parent; up to the average in hardness and productivity. Great novelty.

**Illinois**—One of the earliest, hardiest, and most profitable; ripens shortly after Early Harvest, but crops mature more quickly.

**Kenyore**—Glossy black; easily picked; never sunburns, and does not turn red after picking; superior to Early Harvest.

**King**—Good size; good quality, moderately vigorous and hardy; early.

**Kittatinny**—Fruit large, rich blackberry. Ripens early, just after strawberries.

**Mercereau**—Large, jet black; extra quality, very sweet; without core; unsurpassed as a shipper and keeper. Remarkably strong grower, claimed to be the hardiest blackberry.

**Minnewaska**—This valuable new berry is extremely hardy, wonderfully productive, of excellent quality, being without the hard core so often found in blackberries; very early and continues fruiting late.

**Rathburn**—Berries very large; sweet, luscious; have no core and are firm enough to ship and handle well; canes make a strong, erect growth, yielding fine crops.

**Snyder**—Medium size, sweet melting; extremely hardy and wonderfully productive. Early.

**Stone**—Medium size; juicy, sweet, fine flavor, good quality. This variety should receive cultivation and be thoroughly pruned; it sets more fruit than it can mature properly under ordinary cultivation; particularly adapted to northern Minnesota and similar latitudes.

**Taylor**—Very large, best quality and without core; very productive and extremely hardy. One of the largest blackberries grown.

**Ward**—Fine, large fruit, without core; black throughout; excellent quality; a healthy and strong grower; resembles the Kittatinny.

**Wilson**—A very superior, large, early berry, of sweet, excellent quality; strong growing; very productive and is earlier than any other variety.
GOOSEBERRIES

Should be planted in good rich soil and well manured once a year. They will do well on any variety of soil, well drained and fertile. Prune regularly and thoroughly, cutting out all dead wood and all surplus branches. Do not let the bushes grow too thick, the fruit will be larger and the yield better. Plant in rows four to six feet apart, and four feet apart in the rows. Mulch heavily, and in the fall put two or three forks full of good stable manure around each bush. Gooseberries should be planted in every garden, no matter how small; they are hardy, rugged and easily grown, and the fruit is always in good demand, green or ripe.

Champion—Large, round; greenish-yellow; the quality is very good for all purposes. The bushes are very productive. Midseason.

Chautauqua—Very large; greenish-white; thin skinned, sweet and of the very best quality for kitchen and market. Bush vigorous, hardy and free from mildew. Midseason.

Columbus—Large, oval; skin greenish-white; extra fine quality. A strong, robust grower, with large spikes of thorns. Foliage large and glossy. A new American seedling gooseberry of the English type. Midseason.

Carmen—Very large; golden yellow: the very best quality for all purposes. Bush a good grower and wonderful bearer; free from mildew; fruit sets close and often needs propping up. Early.

Crown Bob—Large, oblong; red and of good quality for kitchen and market. Early.

Downing—Large; roundish; light green, with distinct veins; skin smooth; flesh soft, juicy and very fine flavored; highly esteemed for home use and market. Bush vigorous and productive. Midsseason.

Glaucous—Large; round; red; tender, sweet, very good, and berries are very de-liciously flavored. Very profitable for canning or for catsup. Bish vigorous, slender and rather spreading. Enormously productive. Seldom mildewed. Midseason.

Industry—Very large; red; hairy; fine quality; excellent flavor; extensively planted for market. Bush upright, strong and productive. English sort and somewhat liable to mildew. Early.

Jessup—(Red Jacket)—Large, pale red when ripe; oblong; very highly flavored. Bush a strong, vigorous grower; hardy and a wonderful cropper. Early.

Pearl—Medium; greenish; quality the very best; sweet enough for dessert when ripe; a desirable sort for market also. Bush a strong grower and very productive.

Keepsake—Very large; pale yellow; good quality and flavor; excellent shipper. Bush vigorous; foliage protects blossoms from frost.

Portage—Large; bright yellow, handsome; very good quality. Bush free from mildew and is productive; considered one of the best.

Smith (Smith’s Improved)—Large; oval; light green with bloom; flesh moderately firm, sweet and good. Bush a vig-orous grower and very productive. An excel-

DEWBERRIES

A variety of the blackberry that trails on the ground. In size and quality, the fruit excels. A prolific bearer and reasonably hardy. Vines should be covered over winter in very cold climates. The vines are let run on the ground while growing, and in the spring the fruiting canes are tied to stakes, while the new vines are allowed to grow on the ground again. Thousands of acres of this fruit are grown for market.

Lucretia—Large, jet black, highly flavored and hardy; berries ripen before raspberries are gone, sweet and juicy throughout with no core. The best, most dependable and profitable of all Dewberries grown.

Austin—Good quality, one of the best south.

Fremo—Jet black, firm, good. One of the har-

diest; plant with Lucretia as bloom is imper-
fect.
FRUIT DEPARTMENT

The currant is one of the most reliable of small fruits. They mature just before raspberries and can be used either raw or cooked. Being hardy, they do not winter kill, are easy of cultivation and require little care. They can be grown in any good garden soil. The market is never over-supplied. Prune out dead wood, and mulch heavily. If currant worms appear dust with hellebore.

Champion—Very large; black; flavor of fruit particularly delicious; for kitchen and market. Bushes large; fruit hangs well on the bushes and bears severe pruning without injury.

Cherry—Very large; red; rather acid; bushes short, erect; stout, vigorous and productive.

Crandall—Very large; black; especially valuable for market because of its large size; fine quality, and keeping qualities after being picked. Bush a strong grower, vigorous and hardy; proof against currant worms.

Fay—Very large; red; fine flavor; a great market currant; universally praised. Bush a cross between Cherry and Victoria, and very prolific.

Lee—Medium large; black; fruit of fine quality, desirable for both kitchen and market. Bush a vigorous grower and very productive.

Loudon—Rather small; red; excellent for market and kitchen; ships any distance. Bush hardy and is planted extensively in northern climates; retains its foliage throughout the season; very prolific.

Naples—Medium large; black; rich and tender; recommended for market, jellies and wine. Bush very productive.

North Star—Medium size; fine flavor and prized in both kitchen and market. Bush very strong grower and should have plenty of live and hardy.

Perfection—Very superior; good growers and pro

Perfection. —Large; bright red; quality rich, mild, sub-acid. Bush and healthy foliage; long clusters productive.

Pomona—Medium size; bright, transparent red; one of the sweetest sorts; quality fine; keeps well on bush or after picking for market. Bush a vigorous grower, healthy and hardy; very productive.

Ruby Castle—Medium large; red; sweet and of highest quality; one of the very best and prized for dessert use as well as market and kitchen. Bush vigorous and productive, with long fruit clusters.

Red Cross—Very large; red; sweet and of highest quality; one of the very best and prized for dessert use as well as market and kitchen. Bush vigorous and productive, with long fruit clusters.

Versailles—Very large; red; excellent quality, considered a market sort. Bush productive; fruit clusters long; resembles the Cherry.

White Dutch—Medium large; white; one of the very best quality sorts; especially prized for dessert use; very popular. Bush productive.

White Grape—Large; white; sweet or mild sub-acid; very good quality and popular for dessert and kitchen, and well known in market. Bush low and spreading. Dark green foliage; very productive.

Wilder—Very large; bright red and attractive; a splendid market sort; not so acid as most. Bush very productive; large bunches; ripens rather early; fruit keeps well.
Strawberries are entirely too well known to need any extended remarks on their value for home gardens, for commercial planting, or for planting for the pleasure in growing them. If planted for home use, a very small bed will yield a very large amount of berries. Commercially, some of the most remarkable successes in money making from land, which has been made in this country have been with strawberries. Growing them presents so many problems of bringing out the perfect color, shape and flavor by different systems of planting, mulching, cultivating, fertilizing, etc., as well as improving the varieties themselves, that it is a science in itself, interesting to anyone. But it is by no means hard to secure wonderful results.

Strawberries are the fruit for big profits on small space. The idea of profit from strawberries deserves attention from every farmer and home owner in every state in the union. Lots of people learn about it by starting a little bed to supply berries for home use, while others grow them to sell from the beginning. The first mentioned get finer berries for their table than they ever had before, and both find out what a big demand there is for strawberries, and how easy it is to make money growing them.

They will do well in any ordinary farm or garden soil, the richer the better. The ground should be well prepared and mellow. April planting is generally recommended as best. As some varieties are imperfect in propagation they must be planted near those noted as perfect in order to bear. Plants should be kept moist until ready to plant. Thoroughly wet before setting out and choose a still day, soon after a rain. Our plants are taken from young beds, fresh dug before shipment, plants are well rooted. Buy a few strawberry plants now and start growing one of the best and most profitable crops to be grown.

Aroma—Large; dark red; uniformly roundish, heart shaped; flesh firm and of very good quality. Stands shipping well; plants vigorous and very productive; blossoms rich in pollen and is a good fertilizer for imperfect varieties. Late.

Bederwood—Medium size; light scarlet; rather roundish; flesh red, shading down to cream near the heart; quality excellent. Recommended for dessert and market. Plants very productive and popular in shipping districts. Perfect.

Brandywine—Very large; crimson; roundish and only slightly conical; flesh firm and of a peculiarly pleasing flavor; popular on the market. Plants require strong and high culture to get satisfactory results. Perfect. Medium late.

Bubach—Very large; scarlet; round to broad, oblong; flesh moderately firm and of good quality, red clear through. Grown as a market variety all over the country. Vines yield well and are reliable. Imperfect. Midseason.

Cardinal—Large; roundish, conical; light crimson; flesh firm and excellent flavor for dessert and market. Plants strong growers with long runners. Imperfect. Medium late.
Commonwealth—L a r g e; dark red and handsome; flesh firm and fine flavor. Plants strong growers, productive, but not rank; especially recommended for extending the strawberry season. Perfect. Very late.

Crescent—Medium size; round, conical, light scarlet; flesh fairly firm and of very good quality. Especially desirable for market. Plant a strong grower and can be relied upon for a crop. Will set along with little attention. Especially desirable for sandy soil; over-crowds on rich. Imperfect. Midseason.

Clyde—Large; roundish; crimson; flesh firm and of good quality; especially prized as a market variety. Plants large, healthy and productive. Perfect. Midseason.

Cumberland—Very large; light scarlet; flesh rather dark and rich, with a delicious flavor. Highly esteemed both as a home and market variety. The plant is a strong grower and is claimed to withstand late frosts better than most sorts. Perfect. Medium to late.

Climax—Medium size; dark red; handsome; firm and of good quality. A popular market sort, especially in the east. Plant a good grower, a productive one and bears a long time. Perfect. Medium early.

Dorman (Uncle Jim)—Very large; light scarlet or crimson; flesh delicate sub-acid and very rich. The plant withstands drought extremely well; foliage of a waxy, r.h. green; very large and vigorous. Good as a pollinator. Perfect. Midseason.

Dunlap—Medium size; dark, glossy red with golden seeds; flesh reasonably firm, red and of excellent flavor. Highly recommended for all purposes. The plant is tall, upright, bright green. This variety is unquestionably one of the standards of the strawberry world. Productive and hardy. Midseason.

Enormous—Very large, broad and wedge-shaped; dark crimson; flesh of fine quality and recommended for dessert and market. Plants of moderate size, healthy and vigorous. Does best on moist, clay loam, but will prove satisfactory on any rich soil. Imperfect. Late.

Excelsior—Medium size, roundish, dark red with dark seeds; flesh firm, rich and red, rather tart, but is an unequalled shipper. Largely raised in the south for the northern markets. Plants very productive. Perfect. Extra early.

Gandy—Large, light crimson; flesh of firm, good quality and desirable for dessert and market. This is one of the oldest varieties now on the market and still very popular. Plants vigorous but should be planted on swamp or moist, clay soils. Perfect. Late.

Glen Mary—Very large; crimson with prominent seeds; flesh firm, rich and juicy. Recommended for both dessert or market; of the very best quality. Plants strong and vigorous, thriving on all kinds of soils. Perfect. Midseason.

Greenville—Large; light crimson. One of the old varieties that has outlived many competitors by reason of its good quality for dessert and market. Plants vigorous and hardy. Imperfect. Early.

Haverland—Large and long, scarlet or crimson. Makes fine showing in boxes. Fruit of fine quality and flavor. Recommended as one of the very best sorts for dessert and market. This is another of the old varieties that has retained its popularity for years. Especially notable as withstanding late frosts and being a sure cropper. Imperfect. Midseason.
**Jessie**—Very large; light scarlet; one of the finest berries grown for appearance, size and quality. Should not be planted largely until tested out. Perfect. Midseason.

**Klondike**—Large; red; flesh firm, red to the core, with a mild and delicious flavor, unlike any other variety. Is very popular with southern growers who ship. Plant tall, compact, vigorous grower; resists frosts well and yields good crops. Perfect. Midseason.

**Lovett**—Medium to large; dark crimson; flesh firm, richly flavored and juicy, with enough tartness to make a good canning variety, and is popular on the market because of its handsome appearance. Strong, healthy grower and good pollinizer for other early varieties. Perfect. Early.

**Manhattan**—Extremely large, bright, glossy red; flesh firm but not coarse, and of delightful flavor. The plant requires a soil adapted to its needs and should be tested out before extensive plantings are made. Perfect.

**Marshall**—Very large; dark, glossy red; of extra quality; rich flavored and sweet. Especially popular in New England where it tops the market in price. It is an old and well-tried variety and does well throughout the north. Perfect. Late.

**Michel**—Medium size; red; flesh pink with brown seeds rich and mild. A first-class strawberry which was originated in Arkansas. Plants tall, light green and throw out a great many runners. Heavy cropper and an old and well-tried variety. Perfect. Early.

**Michigan’s Pride**—Large and oblong; bright, glossy red; flesh firm and of good quality red for canning and shipping. Plant a splendid producer and rich in pollen. Perfect. Late.

**Patagonia**—Large; flesh remarkably sweet and melting with a pineapple flavor. This is a late production of Luther Burbank. Plants large, vigorous and productive. It continues in bearing for a long time; is especially desirable for home use. Perfect. Midseason.

**Parson’s**—Medium to large; dark red; flesh has a mild, delicious flavor which it keeps well after cooking. The plant bears well in northern sections and high altitudes. Tall, dark green and a leathery leaf. Perfect. Midseason.

**Pocomoke**—Large to very large, light crimson or scarlet; flesh firm and a little tart. Especially good for canning and market. Plant needs no petting; good healthy grower. Perfect. Medium early.

**Sample**—Large; light red with red seeds; flesh rich and juicy with a high flavor, and recommended for dessert and market. Plants very productive. Imperfect. Late.

**Saunders**—Large; crimson; flesh of good quality and flavor. Plant thrives on lighter soil than most varieties and for many is an excellent choice. Perfect. Early.

**Sharpless**—Very large; light red; flesh moderately firm, sweet and excellent. An old and well known variety of the very best quality. Needs good rich soil. Perfect. Midseason.

**Splendid**—Large; dark crimson; flesh firm and red, shading to white in the center. Melting and fine flavor. Makes fine appearance in market. Plant spreading, glossy green. Perfect. Early to late.

**Stephen’s Late**—Large; bright red; flesh red and firm, but a little tart for dessert. Splendid for cooking. Plant is hardy and vigorous, thriving on almost any soil. Stands droughts well.
NUT TREES

ALMONDS

Hard Shell—The tree is very showy when in bloom. The kernels of the nuts are large, plump and sweet. Hardy.

Soft, or Paper Shell—Encloses as fine a nut in a softer shell. Needs protection.

CHESTNUTS

American Sweet—The nuts of this tree form quite an item in our commerce. Although smaller than some other sorts, they are sweeter and more delicately flavored. This Chestnut is also a grand timber and ornamental shade tree, spreading, in midsummer, billowy masses of creamy fragrant catkins above it's large, deep green leaves, making a most beautiful specimen on the lawn.

Spanish—A handsome, round-headed tree, producing abundant crops of very large nuts that sell readily for good prices. The crop of a single tree has sometimes brought $25. Not so sweet as the American in nut, and not so hardy in tree. The Spanish or European seedlings are strong, top-worked trees recommended as the best of the improved seedlings yet introduced. These make beautiful ornaments on the lawn and are valuable as shade trees.

Paragon (Great American.)—The most widely planted and most uniformly successful variety yet cultivated in the United States. The three or more broad, thick, handsome nuts in each bur are of extra size and quality. The tree makes a strong growth, bears early and abundantly. Trees four years from graft have produced one bushel each.

Alpha—The earliest of all and very large, the nuts being 4 inches in circumference and running two and three to a bur. Ripen the early part of September without frost. Tree is an upright, vigorous grower and begins to bear when very young.

Perry's Giant—One of the largest and most beautiful in this group. The nuts measure 6 to 7 inches in circumference, and there are usually two in the bur; the yare smooth, dark and attractive. The trees make a neat, sturdy growth, and bear heavy crops. Late September.

FILBERTS (Hazelnuts)

The Filbert succeeds well on almost all soils, the little trees or bushes bearing early and abundantly.

English—Most hardy and generally satisfactory over a wide territory. The nuts are nearly round, rich-flavored and toothsome.

Kentish Cob—The larger of the two varieties, meaty and of excellent flavor.

HICKORY

Shellbark—In flavor and quality of kernel this is generally esteemed the choicest of our native nuts,—of all nuts, some experts have said. The tree is a handsome, stately shade tree, with tough white wood of great strength and elasticity, marketable at high prices.

Pecan—This species of the Hickory may well rank first among our native nuts in value and cultural importance. The trees grow fast, are reasonably precocious in development and bearing, and produce large crops of thin-shelled nuts that are full-kernelled and delicately flavored. These nuts are already quite a factor in commerce, growing in importance yearly in the southern and middle states, where hardy Pecan orchards yield handsome profits.

WALNUTS

American Black—The large, oily nuts are borne in heavy crops. They are much relished by children, and always marketable at a fair price. The tree grows quite fast; its dark rich wood is exceedingly valuable.

English, Persian or Jmelaria—A fine, lofty-growing tree, with handsome, spreading head; produces large crops of thin-shelled, delicious nuts which are all always in demand at good prices. The large orchards of California and the south are yielding handsome profits, and still the nuts are imported in great quantities. Not hardy enough for general culture north.

Siebold's Japan—Of the finer imported Walnuts this is the species best adapted by its hardy, vigorous habit for general culture in our country. It grows with great vigor, assuming a handsome shape without pruning, and has withstood a temperature of 21 degrees below zero without injury. Its nuts are considerably larger than the common hickory-nut, and are borne in clusters of fifteen to twenty. The shell is a little thicker than that of the English Walnut, which it resembles in a general way; the kernels are meaty, delicate, and can be removed entire. The trees begin to bear when two or three years old.

White, or Butternut—The nuts are large, long, oily and nutritious. The lofty, spreading tree is one of our finest natives, valued for its tropical appearance and beautiful wood, as well as for its nuts.
ORNAMENTAL DEPARTMENT

There is no home or farm in the whole country which cannot be improved in appearance and enhanced in value by the planting of appropriate trees, shrubs and plants. The selection of these should be in keeping with the surroundings, and the effect that it is desired to produce, and after due consideration, and not indiscriminately from any stock at hand. While a tree is a tree, by a proper selection from the varieties listed on the following pages, the home maker can have not only shade, but interesting specimens in their most perfect state, interesting to himself and the passerby at all times of the year.

Trees should be planted only after mature deliberation and with an allowance for future growth, as they cannot be moved except at large expense and trouble. In planting it should not be forgotten that a well kept lawn is as essential to a beautiful landscape as the trees, shrubs and flowers, and the latter should be located so as to accentuate its beauty and repose, rather than to clutter it up with scattered bushes and beds. If it is clearly kept in mind that the object of the plantings are to furnish a background and contrast for the buildings and lawn any one can secure most beautiful effects without the aid of the professional landscape gardner, though in large plantings their services are very desirable.

In cities and villages the home maker is generally limited to the planting of street trees, shrubbery and roses, which can be selected so they each come to perfection in turn, and the others furnish the desirable contrast. As in the planting of trees these should be massed so as to embellish, rather than to detract from the lawn or building.

All of our trees are well bred, twice transplanted, and root pruned. Deciduous trees, shrubs and vines can be planted in either spring or fall, each season having its advocates. All broken or bruised roots should be removed, as this hastens the growth of new roots, without the slow process of decay, which nature sets up to get rid of them. A certain amount of pruning is necessary, and before planting the top should be cut back so that it will not demand more nourishment than the roots can supply, until they have become attached to their new environment, but as far as possible this should be done to preserve their natural beauty.
AILANTHUS (Tree of Heaven.)

A. Glandulosa—From Japan; a lofty, rapid growing tree, with long elegant feathery foliage; free from all diseases and insects. One of the most distinct of ornamental trees.

ALDER (Alnus)

European or Black—A vigorous and rapid growing tree, leaves dull, dark green, turning to yellow in autumn. Of great value for planting in cold damp ground.

Smooth (A. rugosa)—A small tree; very valuable for planting in low, damp ground or along a water side. Flowers in late winter or early spring.

AMELANCHIER (The Service Tree)

Service Berry (Amelanchier Botryapum)—A tree with upright or spreading branches, leaves dark green, flowers appearing with the leaves; the fruit is edible. An ornamental tree of great hardiness and especially effective on steep hillsides.

Shade Bush—(A. Canadensis) Has small, spreading branches, dark green turning to yellow in fall; white flowers appear with the leaves; the fruit is edible, bright red when fully grown, dark purple when ripe. One of the earliest to bloom.

ASH (Fraxinus)

White—(Americana) A well known native tree; very straight, with broad round head and dense foliage. A beautiful and desirable shade tree.

Green—(F. Lanceolata) A tree of medium size, with slender spreading branches forming a shapely round head; leaves dark green, fading to brown and yellow in autumn.

Flowering Ash—(F. Ornus) A small tree producing dense terminal panicles of fragrant white flowers in May or June; leaves dark green. Very showy.

BEECH (Fagus)

American (Americana)—A large, stately tree with smooth gray bark and a compact, round top head. Grows very high and is one of the handsomest for street or lawn.

European (F. Sylvatica)—A large and beautiful tree, with dark green glossy leaves. Rather more compact and of slower growth than the American. A grand lawn tree.

Purple Leaved—(F. Purpurea)—A large tree with purple leaves, changing to crimson in the fall. It lends a strong contrast to the greenery of other vegetation. It is fine for lawn or garden.

BIRCH (Betula)

European White—(Betula Alba)—A beautiful tree with white bark, and in age spreading and pendulous branches. Very effective for landscape or lawns.

Purple Leaved—(B. Atropurpurea)—A vigorous tree with purple leaves, contrasting strongly with the beautiful white bark.

River or Red—(B. Nigra)—A tall tree often with divided trunk; reddish brown papery bark; leaves deep green, turning to dull yellow in the fall. A picturesque lawn tree.

CATALPA

Chinese—(C. Bungei) A remarkable densely round headed bush, grafted high upon straight, upright stem. Very hardy and effective for lawns or formal gardens.

Hardy—(C. Speciosa)—A variety that is being grown in the west for timber as well as posts and shade. Has broad, deep green leaves and beautiful large blossoms, making it highly ornamental for lawns or streets. A rapid grower.

CHERRY

(Cerasus)

Double White Flowering—(C. Avium Flore Pleno) A small tree of garden origin, with double white flowers in great profusion. More beautiful and lasting than the common cherry. Of great service as cut flowers.

Wild Black—(Soroluta) A graceful tree with narrow, oblong head. Excellent for lawn or landscape. A great attraction to birds, as the fruit continues to ripen for several weeks.

CHESTNUT (Aesculus)

Common or White Flowering—(A. Hippocastanum)—A handsome tree of regular form with showy foliage and covered in the spring with panicles of white showy flowers marked with red. As a lawn or shade tree it has no superior.

Double Flowering—(A. H. Flore Pleno)—Similar to the single, except the bloom is more lasting. Bears no fruit.
Leaves bright green turning red or scarlet in the fall. Indispensable for lawn or landscape.

**ELM (Ulmus)**

**American**—(U. Americana.) A magnificent tree growing 80 to 100 feet high, with drooping, spreading branches. One of the fast growing and grand native trees for lawn or street.

**English** (U. Campestris.)—A large tree with spreading branches forming a round-topped crown; leaves deep green and hold their color late.

**Scotch or Wych** (U. Montana.)—A large handsome tree with spreading branches forming a round-topped crown; leaves very rough but remaining a dark green until late in the season.

**GUM (Liquidambar)**

**Sweet Gum Tree** (L. styraciflua.)—A beautiful rough barked tree of large size. Leaves odd shaped and of the most beautiful scarlet tinged color in the fall. Not hardy north of fortieth parallel.

**Sour Gum Tree** (Nyssa.)—A beautiful tree of soft white wood. Foliage similar to Magnolia; hard to transplant but worth the trouble.

**HACKBERRY (Celtis)**

**American Nettle Tree** (C. Occidentalis.)—A handsome tree with stout spreading branches, forming a round-topped crown; leaves almost like the apple, but more pointed; fruit resembles a small blackberry. Very desirable for street planting.
KENTUCKY COFFEE TREE

Kentucky Coffee Tree (Gymnocladus)—A very ornamental tree of upright, rapid growth, with rough bark and coarse branches; foliage—bluish-green; flowers white, followed by long pods which hang on the tree all winter.

KOELREUTERIA

Varnish Tree (Koelreuteria Paniculata)—A small, hardy tree with a round head and large panicles of showy yellow flowers the latter end of July. Grows twenty-five to thirty feet tall. Leaves bright green fading to yellow and bronze in the fall.

LARCH (Larix)

American or Tamarack (L. Americana)—A tall, slender tree that is best at home on wet or damp soil; leaves pale green in tufts fading and falling in autumn. Cones globular two-thirds of an inch long.

LINDEN (Tilia)

American or Basswood (Tilia Americana)—A large tree forming a broad, round-topped crown. Leaves broadly oval, dark green on top and light beneath, turning yellow in autumn; creamy flowers in summer, and very attractive to the honey bee. A grand tree anywhere.

European (T. Europaea)—A native of the Alps with a conical head; is esteemed as a timber variety as well as a graceful landscape and park tree. Only suitable for well drained soils.

European (T. Europaea)—Very similar to the American variety except the crown is a little pyramidal.

Large Leaved (T. Platyphylla)—A large and stately tree with a handsome pyramidal crown or in age, round-topped and massive; very large heart shaped, dark green leaves turning yellow in autumn; the flowers are large, yellowish-white and fragrant.

Silver Leaved (T. Argentea)—Showy heart-shaped foliage light green above and silvery underneath. Grows about forty feet tall and its handsome form and foliage makes it one of our best ornamental trees.

LOCUST (Gleditschia)

Honey Locust (G. Tricanthos)—A rapid growing native tree with powerful spines and delicate foliage, the greenish flowers which appear in early summer are followed by flat pods eight or ten inches long. Used extensively for hedge, as well as an ornamental.

LOCUST (Robina)

Black Locust (R. Pseudacacia)—A rapidly growing tree that reaches a large size and is valuable for timber as well as an ornamental. Flowers which appear in June are yellowish-white and very fragrant.

MAGNOLIA

Cucumber Tree (M. Acuminata)—A splendid pyramidal tree that grows to a great height, with large bluish-green leaves that are six to eight inches long; flowers yellowish-white, and if it resembles a cucumber. A most valuable hardy shade tree.

Sweet Or White Bay (M. Glanca)—A slender tree or very large shrub, evergreen in the south. Leaves oblong or oval, shiny green on top and nearly white underneath; flowers creamy white, fragrant and cup-shaped, two to three inches across, blossoming for several weeks in spring and early summer.

Chinese White Flowering Magnolia.
NEW ANNUAL CATALOGUE

Sugar or Hard (A. Saccharum)—A well known native tree, valuable both for the production of sugar and wood; very desirable as an ornamental shade tree.

Sycamore (A. P-Platanus)—A native of Europe; leaves large, deep green and smooth; bark smooth and an ash grey color; rapid upright growth; a beautiful tree for street planting.

Wiss’s Cut Leaved (A. Laciniatum)—A variety of silver-leaved and one of the most beautiful, with cut or dissected foliage; rapid growth, shoots slender and drooping; ranks among the best as an attractive lawn or street tree.

MOUNTAIN ASH (Sorbus)

European (S. Aucuparia)—A fine tree with dense and regular head; covered from mid-summer to winter with great clusters of bright scarlet berries.

American (S. Americana)—A small tree with spreading branches, forming a round crown; leaves dark green, turning yellow in autumn, flowers white, and flat cymes, followed later by showy clusters of bright scarlet berries. Especially adapted to the northern regions.

Oak Leaved (S. Quercifolio)—A hardy tree of fine pyramidal habits; foliage deeply lobed, bright green above and downy underneath; one of the finest lawn trees.

OLIVE (Eleagnus)

Russian (E. Augustifolia)—A very large shrub or small tree; leaves narrow and silver white; flowers yellow and white; very hardy.

MAPLE (Acer)

Soulang’s Magnolia (M. Soulangiana)—A large shrub or tree; leaves dark green, expanding after the flowers have fallen; flowers large cup-shaped white and rosy pink. Very fragrant.

Hard Maple.

Box Elder or Ash Leaved Maple (A. Negundo)—A rapidly growing tree with spreading branches which grow to good size. Leaves smaller than other maples. Frequently planted as an ornamental, but especially popular as a wind break or for timber because very hardy, withstands cold and drought.

Norway Maple (A. Platanoides)—A very handsome tree attaining large proportions, its spreading branches form a dense, round head and is especially desirable for street or lawn planting. Has five lobed leaves, bright green, lighter underneath, and smooth on both surfaces, fading to yellow and gold.

Schwedler’s (A. Platanoides)—A beautiful variety with very large bronze red leaves and young shoots of the same color; a vigorous grower and most effective ornamental tree; grows about fifty feet high.

Soft or Silver Leaved (A. Dasyacarpum)—A rapid growing tree of large size, irregular rounded form; foliage bright green above and silver beneath; a favorite tree for streets and park; attains about the same height or taller than the Norway

Soft Maple.
ORNAMENTAL DEPARTMENT

OAKS (Quercus)

White (Q. Alba)—The grandest of this genus of our American trees. A spreading, towering species, growing one hundred feet high when fully developed, with rugged, massive trunk and branches. The deeply lobed leaves change to dark crimson in the fall.

Pin (Q. Palustris)—A magnificent tree for lawn and street planting. Deep green foliage which changes to a bright scarlet and yellow by autumn; a most shapely and graceful tree, assuming the drooping habit with age.

Red (Q. Rubra)—Makes a tree of great height, eighty to one hundred feet; a native of large size and rapid growth; leaves dark dull green turning to orange and brown in the autumn; acorns very large; a beautiful specimen tree for park or street.

Scarlet (Q. Coecinea)—A rapid growing pyramidal tree, especially beautiful in the fall, when the foliage changes from green to bright scarlet; very symmetrical in outline.

PAULOWNIA (Empress Tree)

Empress (P. Imperialis)—A tree of tropical appearance from Japan with stout spreading branches, forming a rounded top crown. Of unusually rapid growth, leaves twelve to fifteen inches in diameter; flowers pale violet disposed in large erect panicle’s. Not hardy north of Missouri, but a splendid street tree south.

PEACH (Persica)

Double White Flowering (P. Vulgaris Alba Plena)—A double-flowering form of the common peach; very ornamental, and valuable as cut flowers.

PERSIMMONS (Diospyros)

American (D. Virginiana)—A native variety with round top head and spreading; often pendulous branches; foliage dark green and very dense; fruit over an inch in diameter, pale orange yellow, with a whitish bloom; delicate flower; very astringent until fully ripe or early frost; makes a beautiful lawn tree.

PLUM (Prunus)

Purple Leaved (P. Pissardii)—A tree of medium size, wood and leaves dark purple; fruit is also purple until ripened; a native of Persia; one of the most conspicuous ornamental trees.

POPLAR (Populus)

Balm of Gilead (P. Balsamifera Candicans)—A strong growing spreading native tree; esteemed for its vigor and hardiness; leaves broad and heart-shaped, green above and rusty white below; makes a good street tree and is perhaps the best of the poplars for shade.

Bollee Silver (P. Alba Bolleana)—A very compact, upright grower, with glossy leaves, green above and silver underneath. One of the most desirable for poplars.

Carolina (P. Monilifera)—Pyramidal in form and vigorous in growth; leaves large, glossy, pale to deep green; valuable for street planting on account of its rapid growth.

Lombard (P. Fastigiata)—Attains a height of from one hundred to one hundred fifty feet; well known for its erect, rapid growth and tall spiry form; indispensable tree for landscape gardening to break the monotony of most other trees.

Silver Leaved (P. Alba Var. Niven)—A tree of wonderful rapid growth and wide spreading habits, leaves large, glossy green above and white underneath; prefers a moist soil, but grows anywhere.
slopy branches; very hardy and will thrive in a dry soil; this is the famous May thorn of English gardens and is very beautiful; double white rose blossoms cover the tree when in bloom.

Cockspur (C. Crus-Galli)—A small tree with very spiny branches and a broad round topped head; leaves dark green and shining, fading to orange and scarlet, flowers profuse in May; white with a tinge of red; fruit is a red berry that hangs throughout the year.

Paul’s Double Scarlet (C. Monogyna)—The most showy of the double flowering thorns; spreading branches, flowers bright scarlet; large full and very double. Perhaps the best sort.

**TULIP TREE (Liriodendron)**

Tulip Tree (L. Tulipfera)—A tall pyramidal trunk rises to a great height and is clothed with a splendid foliage of large glossy leaves; large, tulip-shaped flowers are borne in the spring, greenish yellow and orange. One of the most distinguished tall trees.

**WILLOW (Salix)**

Laurel Leaved (S. Pontandra)—A medium sized tree with compact habits; leaves shiny dark green and fragrant when bruised, the odor resembling the bay tree. One of the best willows for ornamental planting.

Rosemary (S. Incana)—A shrub or small tree with a symmetrical round top; does not grow over eight feet tall; leaves narrow, bright green, silvery white beneath.

Yellow (S. Vitellina)—A large tree with a bright yellow bark; forms a round head, and grows to very large size. The conspicuous color of the bark gives it a pleasing contrast to evergreens or other trees in the winter.
ASH (Fraxinus)

European Weeping (Excelsior Pendula)—The common well-known sort; one of the finest lawn and arbor trees, covering a great space and growing rapidly.

Golden Bark Weeping (Aurea Pendula)—An elegant variety; bark in winter as yellow as gold.

BEECH (Fagus)

Weeping (Pendula)—A native of Belgium; a fine, vigorous and beautiful tree, attaining a large size; though ungainly in appearance when divested of its leaves; is extremely graceful and effective when covered with its rich, luxuriant foliage.

BIRCH (Betula)

Cut-leaved Weeping (Pendula Laciniata)—Extremely vigorous and hardy. Mr. Scott, in his "Suburban Home Grounds", says of it: "No engraving can do it justice, like the palm trees of the tropic, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character."

Young’s Weeping (Youngii)—A picturesque form of naturally trailing habit, grafted on straight, upright stems. Forms an irregular weeping head of great density.

MULBERRY (Morus)

Tea’s Weeping (Alba, Tatarica Pendula)—A variety of the well-known Russian mulberry. Forms a perfect umbrella-shaped head, with long, slender branches which droop to the ground, parallel with the stem. Very beautiful and hardy.
NEW ANNUAL CATALOGUE

Iowa Weeping—Similar to the Tea's in habit of growth, but harder and a more vigorous grower; a valuable ornamental weeping tree.

CERASUS

Japan Weeping Rose-flavored Cherry (Japonica, rosea pendula)—An exquisite little tree, eight or ten feet high, draped in rosy masses of bloom in early spring before its leaves appear. Even when grafted on tall stems its slender branches sometimes sweep the ground in graceful garlands. Well adapted to small lawns.

WILLOW (Salix)

American Weeping (Purpurea Pendula)—A dwarf, slender variety; grafted five to six feet high; it makes one of the most ornamental of small weeping trees; more hardy than the Babylonian.

Babylonian Weeping (S. Babylonica)—Our familiar weeping willow; a fine drooping tree thirty to forty feet high, with slender branchlets.

Kilmarnock Weeping (S. Caprea, var. pendula)—A form with drooping branches grafted on an upright, straight stem; forms an umbrella-like canopy, the branches eventually sweeping the ground. Crafted about five feet from the ground; makes a very desirable small lawn tree.

Wisconsin Weeping (S. Babylonica, var. Dolorosa)—A very hardy variety, withstanding the winters of the far north. The leaves are whitened on the lower surface.

RING (Annularis)—An odd tree with the leaves twisting so as to form rings along the drooping branchlets.

ELM (Ulmus)

Camperdown Weeping (Scabra, pendula)—One of the most distinct and picturesque of all our weeping trees. Grows well in almost any climate; is of fine and notable habit, the strong branches often sweeping out horizontally several feet before they curve downward, making a broad, handsome head.

EVERGREEN TREES

ARBORVITAE (Thuya)

American (T. Occidentalis)—A beautiful native bright green; yellow-green beneath; valuable for screens and hedges.

Globe (T. Globosa)—A dense, light green evergreen of dwarf habit, grows naturally round like a ball; one of the best dwarf trees.

Golden (T. Orientalis, Aurea)—Broad, bushy grower, with deep golden foliage; very ornamental.

Berckman’s Golden (T. Bioti Aurea Nana)—A very dwarf, compact shrub, with golden yellow foliage; very popular and one of the best evergreens.

Parson’s (T. Occidentalis, Compacta)—Of dwarf habit; dark green foliage.

Pyramidal (T. Occidentalis, Pyramidalis)—A compact and narrow pyramidal tree; its branches are short and densely clothed with bright green foliage; very formal and attractive, and the narrowest and most columnar of the arborvitae.

Siberian (T. Occidentalis, Siberian)—One of the best of the genus of this country; exceedingly hardy, keeping color well in winter; growth compact and pyramidal; makes an elegant lawn tree.

Tom Thumb—Similar to Globosa, but taller in growth and more bushy in foliage.

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Compacta (T. Orientalis)—A dwarf, compact variety, with a conical head; of bright green color; perfectly hardy; a native of Japan.

Eriocoides—Dwarf and pyramidal, with heath-like leaves of grayish-green, turning to brown in winter.

Chinese (T. Orientalis, aurea)—A fine, little, globe-shaped bush of bright yellow. The Chinese or Eastern arborvitae need some protection in our climate.

JUNIPER

Irish (J. Communis, Hibernalis)—A slender, columnar form, with numerous upright branches and invaluable in Italian gardens and whose architectural features are desired; foliage glaucous green.

Red Cedar (J. Virginia)—Always popular and can be used ornamentally in a number of ways, thriving well and making a fine appearance in soils or situations where other trees will not grow. Eighty to 100 feet.

American Upright—A remarkably pretty, little tree, with dense upright growth and handsome, fastigate form; ends of young shoots have a recurving habit, making foliage quite graceful.

Scaley Leaved (Squamata)—A prostrate shrub, with long and trailing branches; foliage bluish-green or glaucous; valuable in rock gardens.
ORNAMENTAL DEPARTMENT

Sawin (Sabina)—A low spreading tree, with handsome, dark green foliage; very hardy, and suitable for lawns and cemeteries; can be pruned to any desired shape and made very ornamental.

Swedish (Sueurica)—Of narrow, columnar form, sometimes forty feet in height; has lighter and more bluish foliage than the Irish. Branchlets droop at the tips.

Golden Japan (Aurea)—Of moderate growth and spreading habit; its attractive golden-hued foliage is constant throughout summer.

Blue Virginia Cedar (Glaucia)—A very vigorous variety with silvery-blue foliage. This is one of the most beautiful forms of the red cedar, and makes a splendid specimen tree.

PINE (Pinus)

Austrian (P. Austriaca)—A tall tree, with a broad, ovate crown: leaves in pairs, about four inches long, rigid and very dark green; cones two to three inches long, of a glossy yellowish-brown color. A fast growing, dense tree of wonderful adaptability.

Bull (P. Ponderosa)—A lofty tree from our western coast, growing sometimes to 150 feet. Hardy, quick-growing with needles of silvery green.

Gray (P. Divilcata)—The most ornamental all American pines; valued for its extreme hardiness and vigor; withstands the long droughts and hot, dry winds; of rather irregular and shaggy growth; foliage bright green, needles short and stiff.

Japan Red (P. densiflora)—Rapid growing, and very ornamental; leaves in pairs, bright bluish-green, three to four inches long; the cones grayish-brown, two inches long.

Scotch (P. Sylvestris)—Dense, broadly pyramidal, fifty to eighty feet high; luxuriant in growth, with strong, erect shoots and silvery needles.

White (P. Strobus)—The most ornamental of all our native pines. Foliage is light, delicate and silvery-green; it will grow in the poorest of sandy soils; it is a long-lived, beautiful tree and a rapid grower, presenting a good appearance.

Yellow (P. echinata)—A tall, handsome tree with slender, often perpendicularly branches, forming a broad oval crown; leaves in twos and threes, dark green, three to four inches long; cones about two inches long, dull brown. Splendid for lawn and landscape.

SPRUCE (Picea)

Black (P. Nigra)—A handsome, small tree, rarely over twenty-five feet high, with slender, pendulous branches. Valuable for cold climates and light, dry soils.

Colorado Blue (P. Pungens)—One of the most beautiful and hardy of all spruces; in form and habits, similar to the white spruce; foliage a rich, light, bluish-green.

Douglas (P. Douglasii)—A native of Colorado; large, conical form; branches are spreading, horizontal; the leaves are light green above, silvery-white below.

Engelmann’s (P. Engelmannii)—A handsome Colorado species that is exceedingly hardy and fine in every way; grows eighty to one hundred feet tall; has soft, plummy foliage of a delicate bluish color.

Hemlock (P. Canadensis)—A graceful and beautiful native tree, with drooping branches and delicate, dark foliage, distinct from all other trees; a handsome lawn tree and it makes a very ornamental hedge.

Koster’s Blue Spruce (P. Pungens, var. Kosteriana)—A type of the Colorado blue spruce; foliage is a rich and beautiful silvery-green, densely crowded on the many branches; very hardy.

White (P. Alba)—A native tree of dense habit; foliage light, bluish-green; cones one to two inches long, glossy brown; attractive and shapely.

Dwarf Norway (P. Excelsa Pygmaea)—Is a low, dense bush in which the branches are much shortened and crowded. A peculiar and interesting form.

Golden Norway (Aurea)—Is desirable on account of its yellow foliage, making a lively contrast to the darker sorts.

Weeping Norway (Inverta)—A remarkable pendulous variety with drooping branches which are closely appressed to the stem of the tree; grows forty to sixty feet high and has larger and lighter green foliage than its parent.

Norway Spruce (P. Excelsa)—Of large and lofty appearance, well adapted for large enclosures, and stands pruning well when used for hedges.
Siberian (P. Obovata)—Of slender outline and with pendulous branches; it affords a pleasing addition to the hardiest of the spruces; cones about three inches long, reddish-brown.

FIR (Abies)

Balsam (A. Balsamea)—A slender tree, possessing qualities of extreme hardiness and rapid growth. Foliage fragrant in drying; dark green above and silvery beneath. Cones violet or purple, and two to four inches long.

White (Concolor)—A very beautiful species with yellow bark on the young branches; leaves green and arranged in double rows.

one-half inch or more in length. A beautiful tree and indispensable for park or landscape; grows naturally to sixty or eighty feet in height, but may be trimmed to any desired size.

Compact (T. Canadensis compacta)—A low conical or pyramidal form with numerous branches and small leaves. Very attractive.

Carolina (T. Caroliniana)—A stately tree, with grace and beauty seldom excelled; leaves dark green and glossy, with two white lines beneath; cones an inch or more in length; very hardy and one of the most desirable evergreens.

Western (T. Hookeriana)—A beautiful tree with slender pendulous branches; foliage bluish-green, spirally arranged around the branches; cones two to three inches long, violet-purple, changing to brown at maturity; a grand species.

REDWOOD (S. Sempervirens)

California (S. Sempervirens)—A gigantic evergreen tree, ranking second in size and age of the world’s greatest trees; leaves dark green with two pale bands beneath; a fast-growing pyramidal tree, thriving best in the neighborhood of the sea.

YEW (Taxus)

English (Baccata)—Grows to a tall, dark tree forty to sixty feet high naturally, but can be sheared into any shape and size, has a short, large trunk with reddish bark and dark green foliage.

Irish (Fastigata)—Strictly fastigiata, with stout, crowded, upright branches; the dark, shining leaves are spirally arranged; has red berries. One of the best columnar evergreens for formal gardens; grows 30 to 40 feet high.

Canadian (Canadensis)—A prostrate shrub with ascending branches, rarely exceeding two to three feet in height, the slender branches clothed with bright or yellowish-green foliage, splendid for rock gardens, especially in cold sections.

Japanese (T. Cuspidata)—In cultivation usually a dense shrub with several stems; foliage dark, shining green, tawny yellow beneath. Fruit bright scarlet, berry-like. In Japan this beautiful and hardy species has been grown from time immemorial.

Colorado Blue Spruce.

Veitch’s (A. Veitchii)—A very hardy and beautiful fir; of slender habit and average height; foliage bright green above and silvery white below; cones freely produced, two to two and one-half inches long, dark violet-blue, changing to brown at maturity; an ornamental tree of great value.

HEMLOCK (Tsuga)

Canadian—A tall, graceful tree with spreading or drooping branches, forming a pyramidal crown; foliage dark green and glossy; cones
DECIDUOUS SHRUBS

AZALEA

These shrubs are among the most beautiful of ornamentals, and thrive in moist, well-drained soils, but prefer those having a mixture of leaf or wood mould. They should be protected from the full sweep of piercing cold winds.

Japanese—(A. Mollis.) Grows 2 to 5 feet high and in the early spring is covered with a mass of bloom, the red, white and yellow flowers are grown in great masses of large size and beauty.

Ghent—(A. Pontica. or Gandavensis) Plants grow 4 to 6 feet high and produce magnificent effects in early spring when in bloom. The flowers vary in all shades of orange, yellow, white, red, pink, carmine and lilac, and this variety is recommended as flowering in the greatest profusion.

AESCULUS

Dwarf Horse Chestnut—An attractive and hardy shrub which grows from 5 to 8 feet tall. Flowers grow on long spikes and make a beautiful showing as single specimens or in groups or with other shrubbery. Thrives best in a porous loam. Flowers creamy white, often suffused with pink.

ALNUS

Alders—Small, hardy shrubs which thrive near the water-side or on the rocky banks of streams or lakes.

Green or Mountain Alder—Seldom exceeds 4 to 5 feet high. The leaves are broadly oval, rich, lustrous green. Cuttings are long and slender, drooping in beautiful festoons.

Smooth Alder—Is more of a small tree, growing 10 to 15 feet high; leaves oval and rich green, finely toothed. Blossoms in late winter or early spring with long, drooping, pretty catkins.

AMORPHA

Hardy shrubs which thrive in sunny places, on well drained soil. Valuable for borders or massing on rocky slopes or banks.

Dead Plant—(A. Canescens) A low, dense shrub of silvery aspect; leaves compound, consisting of fifteen and upwards of crowned leaflets; flowers light blue, grow in clusters.

False Indigo—(A. Fruticosa.) Usually 6 to 10 feet tall, of branching habits; leaves compressed, flowers violet-purple in clustered vacenies.

BENZOIN

Spice Bush—(Lindera Benzoin.) Grows 6 to 10 feet high. An early flowering shrub that is a native of the eastern part of the United States. The leaves are bright green, fading in autumn to a beautiful yellow. Scarlet berries in summer and early autumn.

BARBERRY

The barberry is one of the most beautiful shrubs, with white, yellow and orange flowers; the leaves turn brilliant colors in the fall, and the scarlet, blue or black berries persist during most of the winter. They make a low, dense hedge which will stand any amount of trimming.

Canadian—(B. Canadensis.) A native shrub which flowers in May, Handsome foliage with yellow flowers.

European—(B. Vulgaris.) Grows 5 to 8 feet high, with light green foliage; flowers yellow; berries dark red.

Japanese—(B. Thunbergii.) Of dwarf habit, small foliage, changing to a beautiful coppery-red color in the late fall.
Siberian Bog'wood Berries.

Purple Leaved—Similar to the European except the fine purple leaves, which make beautiful contrasts with other foliage.

BUTNERIA

Carolina Alspice—(B. Fertillis.) Grows 4 to 6 feet high, native of the southern Appalachian mountains. Leaves smooth, bright green, turning yellow in early autumn. Blossoms in late spring, chocolate colored, but very fragrant and delicious.

Strawberry Shrub—(B. Florida.) Grows 4 to 6 feet tall. A very ornamental shrub; leaves broad, dark green, downy on underside. Blossoms reddish-brown; very sweet and fragrant.

CARGANA

Pea Shrub—(C. Arborescens.) Grows 10 to 12 feet tall on good soil. Compound foliage; bright green with small clusters of bright yellow flowers. Hardy and desirable for specimen or mass planting.

CEPHALANTHUS

Button Bush—(C. Occidentalis.) Grows from 6 to 10 feet tall in damp soil. A dense growth of dark green and desirable to cover unsightly spots. Blossoms with white bell-shaped flowers, growing in large clusters in July.

CHIONANTHUS

Fringe Tree—(C. Vargin.ca.) Grows 10 to 20 feet tall, with dark green leaves, turning yellow in the fall. Blossoms in May and June, with graceful white flowers, which are followed by small plum-like fruit.

CLETHRA

Sweet Pepper Bush—(C. Alnifolia.) Grows 3 to 5 feet tall; foliage dark green and lustrous, fading with yellow tones. Blossoms in September when white flowers are scarce, with long showy wands.

COLUTEA

Bladder Senna—(C. Arborescens.) Grows 15 feet tall in dry, sunny places, with graceful branches of delicate foliage. Blossoms in summer with long racemes of yellow and reddish flowers, followed by showy red bladder-like seed pods.

CORNUS

The shrubby Dogwoods are highly valued in ornamental planting, their bark in winter making contrasts with evergreens.

Siberian Dogwood—(C. Alba, var. Sibirica) Grows 6 to 10 feet tall; dark green foliage, pale on underside. Blossoms in early summer with numerous flat-topped clusters of creamy white, followed by fruit of light blue or bluish-white. Branches Blood red, very attractive shrub.
Rose of Sharon

European Red Dogwood—(C. Sanguinea.) Grows 8 to 10 feet high with purplish red branches and leaves marked with white. Blossoms in May and June are greenish-white in flat-topped clusters, followed by bunches of black berries.

Cornelian Cherry—(C. mas.) Ten to 12 feet high with glossy foliage and yellow flowers, succeeded by scarlet berries, which persist for a long time.

Red Osier Dogwood—(C. Stolonifera.) Four to 6 feet; spreading habit with reddish-purple branches; white flowers followed by white berries.

Variegated Dogwood—(Var. Sibirica Variegata.) Grows 6 to 10 feet high. A large, spreading shrub with clusters of white flowers in June, with red bark and variegated foliage, turning to rose color in the fall.

Corylus

Filbert—(C. Avellana.) Grows 10 to 12 feet; foliage heart-shaped, deep green leaves. Nuts large and of superior quality.

Hazelnut—(C. Americana.) Four to 8 feet with numerous upright stems; nuts large and good. Very proline.

Purple Leaved—(C. Maxima Purpurea.) Ten to 12 feet with dark bronzy-purple foliage, which is retained throughout the growing season. The nuts are delicious. This variety is especially desirable for its peculiar color effect.

Cydonia

Japan Quince—(Pyrus Japonica) Grows 3 to 6 feet high with deep green, glossy foliage. The branches are spreading, bushy and with numerous thorns. Blossoms in early spring with scarlet flowers, followed by quince-shaped fruit which is fragrant and may be used in jelly. An effective flowering hedge plant, which can be trimmed as desired.

Desmodium

Sweet Pea Shrub—(D. Penduliflorum.) A low-growing shrub whose top dies down in the fall, but comes up again in the spring, when it makes a valuable border, blooming in Sep-

tember and October with rose-purple, pea-shaped blossoms.

Deutzia

Double White—(D. Crebata Candidissima.) Six to 8 feet high with numerous upright branches, rough, dull green leaves; blossoms in June with double, pure white flowers in erect panicles 2 to 4 inches long.

Double Pink—(D. Crebata Florerosca Plena.) Similar to the preceding except that the outer row of petals are a rosy-purple. Very showy.

Lemoines—(D. Lemoinel) A small shrub about 3 feet high, spreading habit; foliage bright green, blossoms in early summer with white flowers in large compound clusters.

Pride of Rochester—Six to 8 feet high, blooms in early spring with extra large, double white flowers. A distinct and valuable variety.

Slender Branched—(D. Gracillis.) Usually about 2 feet high with slender and arching branches. Foliage bright green; blossoms very early with a profusion of white flowers. An excellent plant for indoor culture.

Diervilla

Hardy shrubs of spreading habit which thrive best in a moist loam. The Asiatic species are especially beautiful with great masses of showy flowers clustered thick along the branches in late spring or early summer.
White Double Flowering Lilac

Flowering Weigelia—(D. Floribunda.) Six to 8 feet high, with numerous upright branches. Foliage dark green; blossoms in June with brownish-crimson buds which change to bright crimson.

Rose Colored Weigelia—(D. Florida) About six feet high with spreading habit; dark green foliage, blooming profusely with large rose-colored flowers.

Hybrida Weigelia—Grows 6 to 8 feet tall with numerous spreading branches, flowers trumpet-shaped, large and showy. They can be had in a variety of colors such as:

Able Carriere—Rose carmine with yellow spot in throat.
Chameleon—Rose.
Desboisi—Dark rose.
Eva Rathke—Dark carmine.
Hendersoni—Dark rose color.
Mad. Contourier—Yellowish white, changing to pink.
Pascal—Dark red.
Van Houttei—Clear carmine.

ELARAGNUS (Oleaster)

Russian Olive—(E. Augustifolia.) Eight to 12 feet high. Very hardy and prospers in almost all well-drained soils. The foliage is very handsome, willow-like and of a rich, silvery white. Blossoms in June with small, yellow flowers, followed by yellow fruit.

Silver Thorn—(E. Longipes) Five to 8 feet high, of bushy habits. Foliage dark green above, with silver beneath; very showy. Blossoms in April or May; are creamy white, followed by edible fruit, delicious for sauces. Fruit ripens in July.

EUONYMUS

Burning Bush, Winged—(E. Alatus.) Six to 8 feet high, with corky winged branches. Foliage bright green, fading in autumn to gorgeous tones of red and crimson.

Burning Bush—(E. Atropap Pierceus.) Eight to 12 feet high with upright branches; foliage bright green turning to pale yellow in autumn. Flowers purple, followed by red fruit which persists until mid-winter.

Strawberry Bush—(E. Americanus.) Five to 8 feet tall. Erect with slender green branches. Foliage bright green with very rose colored warty fruit.

EXOCHORDA

Pearl Bush—(E. Grandiflora.) Eight to 10 feet high. Foliage bright green, pale or whitened beneath, fading to yellow in fall. Flowers dazzling white, produced in terminal racemes. The buds look like pearls strung on threads. Very beautiful.

FORSYTHIA

Hybrid Golden Bell—Eight to 10 feet high with slender, arching branches. Foliage lustrous dark green; blooms very early in the spring, often before the snow is off the ground. One of the most showy shrubs in cultivation.

Drooping Bell—(F. Suspenso.) Eight feet tall, a graceful shrub with long and slender drooping branches. Foliage dark, lustrous green, persisting until frost. Blossoms in great profusion of golden yellow.

Fortune's Golden Bell—(F. Fortunei.) Medium size; foliage deep green; blossoms of bright yellow and appear before the leaves. The best early flowering shrub.

DIERVILLAS or BUSH HONEYSUCKLE.
HAMAMELIS
Witch Hazel—(H. Virginiana.) Ten to 15 feet high with fine foliage that colors to orange or yellow in fall. Blossoms come very late when there are few flowers left. Likes a moist, sandy or peaty soil.

HIBISCUS SYRIACUS
Althea, Rose of Sharon—Eight to 10 feet high, resembling small flowering tree; planted closely together they make a good flowering hedge. They blossom in great profusion late in the fall. The following are among the popular varieties:
Admiral Dewey—Pure white; double.
Arthur—Bluish-purple; double.
Corinth—Blue; single.
Comte de Hainaut—Delicate pink; double.
Duchesse de Brabant—Reddish lilac; large, double.
Fleur de Panache—Variegated, white and pink; double.
Jeanne d'Arc—Best of the white; double.
Lady Stanley—Bluish-white; double.

HYDRANGEA
Hardy—(H. Paniculata Grandiflora.) A beautiful, tall shrub; foliage of bright, shiny green; the flowers are borne in August and September in huge panicles from 8 to 12 inches long, light pink at first, changing to brown later in the fall; beautiful as a border or can be grown in tree form.
Arborescens Alba Grandiflora—Resembles the Paniculata in general form and shape of flowers; borne in panicles of pyramidal shape from 5 to 8 inches in diameter and 8 or 10 inches long. White of such an imposing appearance they dominate all displays in which they appear.
Oak Leaved—(H. Quericifolia.) Four to 6 feet high with spreading branches; foliage dark green, whitened on under side. Flowers grown in large panicles, creamy white with numerous white or pinkish rays. Beautiful.

HYPERICUM
St. John's Wart—(H. Moserianum.) One or 2 feet high, half pendulous; foliage bluish-green, with light under the leaf. Blossoms in mid-summer with yellow flowers. Desirable for massing or borders.
Aaron’s Beard—(H. Calycinum.) A low shrub, less than a foot in height, spreading by the roots; foliage dark green, evergreen in the south. Blooms 1 to 3 inches in diameter and of bright yellow. An excellent ground coverer.

KERRIA
Globe Flower—(C. Japonica.) Five to 6 feet high; a slender branched shrub. Foliage bright green, fading to yellow in autumn. Blooms from July to October with large, bright yellow flowers; an old-fashioned plant, but desirable.

LONICERA
Fragrant Bush Honeysuckle—(L. Fragrantissima.) Six to 8 feet high, with numerous spreading branches; foliage bright green and persisting until winter; blooms with the first breath of spring; flowers white or light yellow; very fragrant.
Ledebour's Honeysuckle—(L. Ledebouri.) Very showy; blossoms in May with bright red flowers.
Golden Alder.

Japanese Bush Honeysuckle—(L. Morrowi.) Four to 6 feet high, with spreading branches; foliage dark green with light underside. Blooms very early in the spring, followed by brilliant red fruit in August, which persists all fall.

Tartarian Honeysuckle—(L. Tartariae.) Eight to 10 feet high with numerous upright branches; foliage bright green; blossoms in late spring with white or pink flowers, followed by red or orange berries, which are its chief charm, and last until late fall. Other varieties of the same species are:

Alba—Creamy white flowers in May and June.

Grandiflora—Large bright red blossoms striped with white.

Virginalis Alba—Large pure white and fragrant flowers.

MYRICA

Wax Myrtle—(M. Cerifera.) Five to 8 feet high with branching habit; foliage dark green and fragrant when bruised; bears great crops of bluish-white berries covered with wax from which bayberry tallow is made.

PHIADELPHUS

Common Mock Orange or Syringa—(P. Coronarius.) Eight to 10 feet high with upright or arching branches; foliage bright green; blossoms in May with great quantities of creamy white flowers.

Golden Mock Orange—(P. Aureus.) A variety with golden-yellow foliage which remains through the season and is very striking.

Large Flowered Mock Orange—(P. Grandiflorus.) Foliage bright green; blossoms in June with very large, pure white flowers.

Gordon’s Mock Orange—(P. Granonianus.) Eight to 10 feet with spreading branches; foliage bright green; blossoms in July with pure white flowers in dense racemes.

PRUNUS

Flowering Plum—(P. Triloba.) Three to 5 feet high; of spreading habit; blossoms very early in the spring before the leaves appear, with double light pink flowers in great profusion.

Dwarf Flowering Almond—(P. Japonica.) Two to 4 feet high, of branching habit; foliage bright green; blossoms in very early spring with double rose colored and white flowers in great profusion.

Sand Cherry—(P. Pumila.) Three to 5 feet high, with upright branches; foliage dull green, whitened on underside, fading to orange and red; blossoms in early spring with white flowers in numerous clusters; fruit dark purple.

RHAMNUS

Buckthorn—(R. Catharticus.) Six to 10 feet high with spiny branches; foliage oval, dark green and lustrous, fading in autumn to yellow; blossoms in June and July with masses of attractive white flowers, followed by showy, black fruit.

RHODOTYPUS

White Kerria—(R. Kerriafrida.) Three to 6 feet high; foliage lustrous green; blossoms in May with large single white flowers, followed by attractive black seed.

PRIVET (Ligustrum)

Amoor River Privet—(L. Amurensis.) A valuable ornamental shrub for hedges and borders; very hardy, foliage glossy green and holds its color almost the entire year; will stand shearing to any extent.

California Privet—(L. Ovalifolium.) The well-known variety; vigorous and hardy; deep glossy green; useful for hedges and borders.

English Privet—(L. Vulgaris.)—Foliage narrow; showy white flowers in June followed by fruit.

Chinese Privet—(L. Ibeta.) A native of China and Japan; foliage long and shining; flowers large.
white and fragrant; a distinct sort, valuable for its flowers and foliage.

**ROBINIA**

_Bose Acacia_—Two to three feet high with bristly spreading branches; foliage bright green; blossoms in June with clusters of rose-colored flowers in loose, nodding racemes.

**RHUS**

_Fragrant Sumac_—(_R. Aromatica._) Two to 4 feet high with branching habits; foliage bright green, changing to brilliant red and yellow in autumn; the blossoms take the form of very bright mist-like flowers, having the appearance of smoke at a little distance, and last during mid-summer.

_Smooth Sumac_—(_R. Glabra._) Ten to 15 feet high, branching with an open crown; foliage green, changing to yellow and red in autumn; blossoms in July, followed by a crimson or brown fruit which persists all winter.

**FLOWERING CURRANT**—(_R. Aureum._) Five to 8 feet high with upright branches; foliage lustrous green; blossoms in early spring with large and showy yellow flowers, followed by dark brown or black edible berries.

_Pink Flowering Currant_—(_R. Gordonianum._) A showy, upright shrub; foliage bright green, fading to yellow and orange; blossoms in May with rose colored flowers on long pendulous racemes.

**SAMBUCUS**

_American Elder_—(_S. Canadensis._) Six to 10 feet, upright habit, the stems filled with white pith; foliage bright green; blossoms in June and July with delicate white flowers in dense masses, which are followed by the edible elderberry, much prized for wine and pastry. An ornamental plant at all seasons.

_Golden Elder_—(_S. Nigra Aurea._) Ten to 15 feet; similar to the American, except the foliage is an attractive golden color which contrasts with surrounding leaves.

_Cat Leaved Elder_—(_S. Lacinata._) Eight to 10 feet high; the foliage is almost fern-like with semi-drooping habit.

**RED BERRIED ELDER**—(_S. Racemosa._) Five to 7 feet high with warty branches and brown pith; foliage dark green; blossoms in late spring with white flowers, followed by red berries which ripen in early summer, often before the American is in bloom.

**SPIREA**

These are among the most popular of flowering shrubs grown in America and are hardy, growing in almost any soil. There is a large number of varieties varying in form and habit. The most popular will be found below.

_Anthony Waterer_—A dwarf with dark crimson flowers.

_Billard's_—(_S. Billardi._) Four to 6 feet high; flowers rose colored and blooms nearly all summer.

_Bridal Wreath_—(_S. Prunifolia Flora Pleno._) Five to 7 feet tall; foliage glossy orange, in autumn; blossoms cover the entire length of the graceful arching branches with double white flowers. Will stand pruning to any height.

_Japanese Spirea_—(_S. Turbata._) In three to four feet tall; dwarf habit, of vigorous growth; foliage narrow green leaves, blossoms in great profusion with flat clusters and for a long time, rose color.

_Douglas Spirea_—(_S. Douglasiana._) Five to 7 feet tall, with red-dish brown branches, foliage bright green above and wooly white below; blossoms in July and August with deep pink flowers in long dense panicles. Showy and hardy.

_Ninebark_—(_S. Opulifolia._) Eight to 10 feet high, with spreading and arching branches; foliage bright green and lustrous; blossoms in June with great masses of snow white flowers, which bend down the branches with their weight.

_Golden Leaved Spirea_—(_S. Opulifolia Aurea._) The same as the Ninebark only the Golden Leaved Spirea is covered with a rich golden-yellow foliage.

_Thuernberg's Spirea_—(_S. Thuernbergii._) Three to 5 feet high, with numerous slender branches, forming a dense feathery bush; foliage narrow, bright green, fading to orange and scarlet in autumn. Blossoms in early spring with pure white flowers which cover it like a mantle of snow.
Van Houttel’s Spirea—(S. Van Houttel.) Five to 6 feet high; with numerous arching branches; foliage dark green persisting until late autumn; blossoms in late spring, the white flowers often bending the branches in graceful curves to the ground under their profusion. The most popular sort for specimen or hedge.

SYMPHORICARPUS

Snowberry—(S. Racemosus.) Three to 5 feet tall; foliage dark green, blossoms in June with conspicuous rose-colored flowers, followed by large, inflated white fruit which gives the plant the name of “Bladder Nut,” and persists until late in winter. Will grow in shaded places where other shrubs fail.

Coral Berry—(S. Vulgaris.) Similar to Snowberry except that its red fruit is small and clusters in thick ropes about the stems which droop under the weight.

SYRINGA (Lilac)

Common Lilac—(S. Vulgaris.) Up to 20 feet in height; upright habits; bright green foliage; blossoms in May with dense panicles of flowers of the most delicious fragrance. It can be had in varying shades of flowers as follows:

Alba Grandiflora—Has large white flowers.

Charles X—Loose tresses of reddish-purple flowers.

Dr. Lindley—A dark purple-red.

Marie Negri—White favorite for hot house forcing.

Frau Bertha Dammann—White; immense panicles.

Ludwig Späth—Dark blue.

Double Lilacs—Are more dwarf than the single flower kinds; the flowers last longer but do not bloom so profusely. They are to be had in the following varieties:

Alphonse Lavalle—A beautiful shade of blue.

Belle de Nancy—Pink or rose with white center. Large.

Jean Bart—Rosy-carmine, in large plumes.

Mme. Abel Chatnacy—Pure white in large panicles.

Mme. Jules Finger—Rose in strong erect plumes.

Mme. Lemoine—White in superb panicles.

President Carnot—Pale blue with white center.

Hungarian Lilac—Eight to 10 feet high; of upright habits; foliage lustrous dark green; blossoms in late spring with violet flowers in long, narrow panicles.

Japanese Snowball—(V. Plicatum.) Six to 8 feet high, vigorous with spreading branches; foliage dark green with bronze margins; blossoms in spring with compact, globular white clusters four inches across. Better habits and preferred to the old variety.

Persian Lilac—Six to 8 feet high with slender upright branches; foliage rich green; blossoms in late spring with pale lilac colored flowers. Very fragrant.

White Persian Lilac—Same as above with white flowers.

Chinese Lilac—(L. Pekinensis.) Ten to 12 feet tall, with slender spreading branches; foliage dark green; blossoms in late spring with creamy-white flowers in large panicles. Very productive when well established.

Chinese Weeping Lilac—(L. Pekinensis.) Same as above with a graceful, drooping habit.

TAMARIX

African Tamarisk—(T. Parviflora) Fifteen feet high; strong, upright but slender branches; foliage light and feathery as asparagus; blossoms in April and May with bright pink flowers on slender racemes.

French Tamarisk—(T. Gallica.) Fifteen feet high with slender, spreading branches; foliage feathery and of a bluish-green, has scale-like leaves; blossoms in late spring or early summer with pinkish flowers on slender racemes.

Caspian Tamarisk—Four to 6 feet tall; upright habit; foliage silvery-green; blossoms in late summer with pink flowers on loose paniced racemes.

VIBURNUM

Arrow-Wood—(V. Dentata.) Eight to 12 feet in height and of bushy habit; the foliage is green, changing to a rich, purple and red; blossoms in late spring or in early summer with handsome white flowers in flat cymes, followed by blue-black berries.

Cranberry Bush—(V. Opulus.) Eight to 10 feet high; foliage lustrous green, changing to rich copper; blossoms in May with white flowers in flat-topped clusters, followed by scarlet fruit.

Common Snowball—(V. Opulus Sterilis.) Six to 10 feet high; numerous upright stems; blossoms in the spring with globular clusters in great profusion. An old-time favorite.

Japanese Snowball—(V. Plicatum.) Six to 8 feet high, vigorous with spreading branches; foliage dark green with bronze margins; blossoms in spring with compact, globular white clusters four inches across. Better habits and preferred to the old variety.
HARDY CLIMBING VINES

AKEBIA

A. Quinata.—A beautiful, hardy Japanese vine with unique foliage and chocolate-purple flowers of delightful fragrance, in immense clusters. The foliage is never attacked by insects.

AMPELOPSIS

American Ivy or Virginia Creeper (A. Quinquefolia.) The well-known native vine with five-parted leaves that change to rich crimson in autumn; berries are blue-black. Very rapid grower and entirely hardy. One of the finest for covering walls, verandas or trunks of trees.

Var. Engelmanni.—A splendid climber, growing from 6 to 10 feet in a season; of dense growth, short jointed and rich effect. This variety has become very popular on account of its ability to cling to walls, etc., without wire trellis.

Boston Ivy (A. Veitchii.)—A beautiful, hardy Japanese species. Leaves overlap one another, forming a dense sheet of green. It grows rapidly and clings firmly to the smoothest surface with the tenacity of Ivy; the foliage is very handsome in summer and changes to scarlet in autumn. When once established is quite hardy; give some protection the first year.

ARISTOLOCHIA

Duchman’s Pipe (A. Siphio.)—A magnificent native vine of climbing habit and rapid growth, with magnificent light green foliage 10 to 12 inches in diameter, and curious pipe-shaped, yellowish-brown flowers. Splendid for archways or verandas and forms a dense shade.

BIGNONIA

Trumpet Creeper (B. Radicans.)—A robust, woody vine, climbing high and twining tightly with numerous roots along its stems. Its orange-scarlet flowers cluster at the tips of the branches. Leaves light green.

B. Grandiflora.—Flowers much larger and more brilliant, coming earlier than above.

CLEMATIS

Sweet Scented Japan Clematis (C. Paniculata.)—Flowers are pure white, medium size, fragrant and borne in immense sheets in September. Foliage is clean and glossy. It makes a growth of from 25 to 30 feet in a single season and should be cut back to the ground each spring.

American White Clematis (C. Virginiana.)—A remarkably rapid climbing plant, growing to the height of 20 feet, producing an immense profusion of flowers in August.

C. Henryi—Creamy white, very large, fine form; a free grower and bloomer.

C. Jackmanni.—Intense violet-purple, flowers are 4 to 6 inches in diameter when fully expanded; remarkable for its rich, velvety appearance; distinctly veined; free in growth; an abundant and successive bloomer.

C. Madame Edouard André.—Color a distinct crimson-red, flowers very large and velvety; has been called the crimson Jackmanni. The plant is a strong, vigorous grower and very free in bloom.
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Kalmia

CELASTRUS

Climbing Bittersweet or Wax Work (C. Scandens.)—A native climber with handsome glossy foliage, and large clusters of beautiful, orange-crimson fruits, retained all winter. Very bright in effect, and its graceful sprays of berries are charming for winter house decoration.

Japan Climbing Bittersweet C. Articulatus, syn. orbiculatus.—A very vigorous climbing shrub from Japan, adapted for running over wild and rugged arrangements. It is most attractive in autumn when covered with fruits, which are a light yellow color when ripe and which split open after the manner of Euonymus, showing bright red seeds within.

EUONYMUS

Evergreen Vine (E. Radicans.)—One of the finest evergreen vines, with small, rich green foliage and pink fruits in cells which separate and expose the scarlet arils covering the seeds, making a most attractive feature. For covering rough walls, rocky banks, tree trunks, etc., it is a treasure. Used for vases baskets and borders of beds.

Var. Variegata—In all respects like the type, except that the foliage is edged with creamy white.

HEDERA

English Ivy (H. Helix)—The well-known vine which is still the most beautiful covering that can be given to any rough wall or surface. Leaves of rich green.

LONICERA

Japan Golden-Leaved Honeysuckle (L. brachypodanaurea reticulata.)—A handsome and desirable variety with the foliage beautifully netted or variegated with yellow. Flowers are creamy white and form radiant festoons and masses.

Chinese Twining Honeysuckle (L. Japonica.)—Almost evergreen; flowers white.

Hall’s Japan Honeysuckle (var. Halliana.)—Pure white and creamy yellow, very fragrant flowers; in bloom the whole season. Almost evergreen. Besides its ordinary uses as a climber, it is valuable for covering banks, bare places, etc., where grass will not grow.

Scarlet Trumpet Honeysuckle (L. Sempervirens.)—A strong, rapid grower, producing scarlet, trumpet-formed inodorous flowers.

Yellow Trumpet Honeysuckle (Lonicera semper- virens flav.)—Large, clustered yellow flowers.

PERIPLOCA

Silk Vine (P. Gracca.)—A rapid-growing, beautiful climber. Will twine around a tree or other support to the height of 30 or 40 feet. Foliage glossy, and purple-brown exillary clusters of flowers.

PUERARIA

Kudzu Vine (P. Thunbergiana.)—A magnificent climbing vine for all purposes, growing 40 to 50 feet in a season; especially adapted to covering pergolas or to secure dense shade. The leaves resemble those of the lima bean in shape and are dark green and woolly. Flowers pea-shaped, borne in long, handsome racemes.

WISTARIA

Chinese Wistaria (W. Sinensis)—One of the most elegant and rapid growing of all climbing plants; attains an immense size, growing at the rate of 15 to 20 feet in a season. Has long, pendulous clusters of pale blue flowers in May and June, and in autumn.

Japanese Wistaria (W. multijuga.)—A Japanese species with dark blue flowers, in racemes of astonishing length.
EVERGREEN SHRUBS

ANDROMEDA

A. Floribunda—A pretty evergreen plant of dwarf compact habit, with rich, dark green foliage and pure white flowers in great abundance in spring; requires the same treatment as the Rhododendron.

BUXUS

Tree Box (B. sempervirens)—A beautiful English evergreen shrub of rather slow growth, with small, shining foliage. Familiar in old-fashioned gardens; indispensable in formal ones. It grows well in many soils and endures much pruning. Quite popular as a tub plant for house and terrace decoration.

Var. Aurea—Has bright golden yellow foliage, excellent for contrasts.

Rosemary Leaved Box (var. rosmarinifolia)—Forms a beautiful small bush; foliage glaucous.

Var. Suffruticosa Nana—The pretty Dwarf Box so much used for edging. Slow growing, neat, dense; the best plant in cultivation for the purpose.

Var. Variegata—A beautiful small bush, having its shining leaves oddly marked with white.

DAPHNE

Garland Flower (D. Cneorum)—A charming dwarf shrub, with fine foliage and dainty clusters of pink perfumed flowers in May. Blooms at intervals until September. Excellent for growing in front of shrubbery.

EUONYMUS

Radicans Variegata—A charming shrub of dwarf and trailing habit; it is perfectly hardy and has foliage beautifully variegated with silvery white, tinted with red in winter. Unsurpassed for borders.

KALMIA

Mountain Laurel or Calico Bush (K. latifolia)—Next to the rhododendron this is our most beautiful hardy evergreen. Its quaintly formed, rosy white buds and flowers cluster in great trusses and contrast finely with the shining dark leaves. Even small plants are gay with them. Nothing could be finer for grouping with rhododendrons, for massing in groups or planting singly. Easily forced and frequently grown in tubs.

MAHONIA

Holly Leaved Mahonia (M. Aquifolia)—Sometimes included under Berberis. Handsome native evergreen of medium size, with shining, prickly leaves and showy, bright yellow flowers in May, followed by bluish berries. Quite useful in decorative planting for its neat habit and fine bronze-green leaves.

RHODODENDRONS

These are the most magnificent of the evergreen shrubs, with rich, green foliage and superb clusters of showy flowers. They require a peaty soil, free from lime and a somewhat shaded situation; they do best near the seashore, and will repay all the care that may be bestowed in preparing a bed suited to their wants. Protect in winter by driving stakes and filling in with leaves to cover plant. They can be furnished in colors of red, pink, white, lavender and blue.

YUCCA FILAMENTOSA

Adam's Needle—A conspicuous tropical-looking evergreen plant with long narrow leaves; the flower stalk rises from the center about three feet and is covered with creamy white, bell-shaped flowers. Perfectly hardy; similar to cactus in growth; blossoms every season.
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HYBRID PERPETUALS

Alfred Colomb—Brilliant carmine crimson, very large, full and globular, fragrant and hardy.

Anna de Diesbach—Beautiful shade of carmine, large and showy, flower slightly cupped, particularly fine in bud. A vigorous grower, quite hardy, a good forcing rose.

American Beauty—Deep pink, shaded with carmine; large, globular, delicious odor, desirable for forcing; not to be chosen for out doors growing.

Baron de Bonstettin—Rich velvety maroon, large, full and double; very highly scented. One of the finest roses grown.

Baroness Rothschild—Of light pink, flowers of immense size, perfect form and exquisite color, highly scented. One of the finest exhibition varieties, very hardy and late bloomer.

Captain Hayward—Color bright crimson carmine, flowers very large, distinct, vigorous and free flowering.

Clio—Flesh color shaded in the center with rosy pink, large globular form. Plant is strong and blooms freely, displaying its great flowers boldly on good stems against large, rich leaves.

Coquette des Alpes—White tinged with pale rose, size medium, fine form, a free bloomer, dainty and attractive.

Coquette des Blanches—A pure white rose of medium size, finely formed with shell-shaped petals, evenly and daintily arranged. Of free growth and bloom with fine dark leaves and almost thornless stems. Excellent for cemetery planting.

Earl of Dufferin—Rich crimson maroon with dark velvety shadings. Flowers are large, full, globular and very fragrant. Thick petaled and very fragrant. Grows well and blooms freely, with many handsome buds in autumn. One of the finest dark roses.

Eugene Purst—Velvety crimson with darker shadings; large and full and good shape; fragrant and beautiful.

 Francois Levet—Bears cherry red flowers of medium size; a fresh, clear rose, bright and glistening; free and vigorous bloomer.

 Frau Karl Druschki—Snow white, very large, perfect form. A vigorous grower and free bloomer. Bright, heavy foliage and strong upright growth; flowers borne on long fine stems.

General Jacqueminot—Brilliant velvety crimson, large and extremely effective. A famous bud and forcing rose quite as well adapted for garden culture. Very fragrant and one of the most popular sorts grown.

General Washington—Deep crimson red, very large and double, opens wide and flat, very free blooming.

Gloire de Lyonnaise—A beautiful shade of pale salmon yellow, sometimes passing to creamy white, flowers full and fragrant.

Gloire de Margottin—Brilliant scarlet, flowers of fine size and shape, semi-double with long handsome buds; quite fragrant. Vigorous and free-flowering.

John Hopper—Flowers of fresh, bright rose with carmine center. A fine and free blooming old sort.


Jules Margottin—A bright cherry red, large, full and very fragrant. Double.

Louis Van Houtte—Red, shaded crimson, very vivid; fine globular form, delicately perfumed, one of the best.

Mabel Morrison—Flesh white, changing to pure white, in the autumn tinged with rose, double, cup-shaped flowers. A grand white rose similar to Baroness Rothschild. A fine producer.

Magna Charta—Bright rosy pink suffused with carmine; full, globular. A fragrant, excellent rose, valuable for forcing. Foliage and wood light green with numerous dark spines.

Madam Gabriel Luizet—Grand flowers of light silvery pink, large, full and sweet; cup-shaped and produced quite freely, slightly fragrant. One of the choicest.

Marchioness of Londonderry—Ivory white flowers of great size and substance, perfectly formed and carried on stout stems; shell shaped and reflex; free flowering and highly perfumed. Growth vigorous and foliage very handsome.

Marchioness of Lorne—Long handsome buds opening into flowers of rich shining rose colors shaded with carmine, cup-shaped, perpetual blooming.
Margaret Dickson—A large and handsome winter rose of vigorous growth and magnificent form; petals very large, shil-shaped and of great substance; fragrant. Foliage is large, dark green and rich, displaying the grand flowers well.

Marshall P. Wilder—Raised from the seed of Gen. Jacqueminot. Cherry color of good size, perfectly double and very fragrant. It is of vigorous growth and healthy foliage. In wood, foliage and form of flower it resembles Alfred Colombe, but excels that variety in vigor, hardiness and freedom of bloom. One of the finest of its color.

Mrs. J. H. Laing—The color is a soft and delicate shade of pink; the flower is large, well formed, very fragrant and produced on good stems. The buds are long and pointed and extremely pretty. For outdoor planting this is one of the best roses introduced in many years. It blooms continuously in the open ground and is also valuable for forcing, the buds selling at high prices.

Mrs. R. G. Sharman-Crawford—Grandly formed flowers of a warm, delicate shade of pink, pale flesh on the outer petals, deep rose in the center; the large thick petals are finely imbricated. The flowers are produced on splendid stems. Plants make a vigorous growth and bloom early in the summer until autumn.

Paul Neyron—The largest rose in cultivation, sometimes called the peony rose; color bright cerise red. Often produces blooms five inches in diameter, very fragrant. The plant makes a strong, healthy growth and has clean, glossy foliage, blooms almost without intermission from June until late October.

Prince Camille de Bohan—A velvety blackish crimson rose of deep distinct shading, the darkest rose in cultivation, large, full and handsome; a beautiful sort.

Silver Queen—Silvery blush with center of delicate rose-pink; large, full, cupped, delightfully fragrant and a free bloomer.

Soleil d'Or (Sun of Gold)—Color varies from gold and orange-yellow to reddish gold shaded with nasturtium red. The flower is full, large and globular, the petals in the center being well incurved. The flowers are fragrant and measure as much as three and one half inches in diameter. It is a robust, vigorous grower with brownish wood and beautiful bright green foliage. It is characterized as a perpetual bloomer.

Tom Wood—Cherry red flowers of fine size and fullness, with shell-shaped petals; makes a strong, clean growth, well furnished with heavy foliage. Blooms with especial freedom in autumn.

Ulrich Brunner—Brilliant cherry-crimson, a rose of beautiful form and finish; very fragrant. The bush is vigorous, blooming continually in the open air, displaying its superb flowers on good stems.

Vick's Caprice—A novel striped rose, with ground color of soft satiny pink, distinctly marked with white and carmine. It is large and full with long buds that show stripes to advantage. Harty and a good bloomer; resists mildew; one of the best varieties for forcing and open air culture.

Victor Verdier—Fine, bright rose, shaded with carmine; very hardy and a fine bloomer; a splendid rose.
Everblooming Roses

Bridesmaid—Clear bright pink of an exquisite shade; large, full and globular, a constant bloomer. Grown chiefly for its large, solid and handsome buds; the stems are good, the foliage glossy. Excellent for bedding.

Duchess de Brabant—Salmon rose with amber shadings, a rich and peculiar color. The flowers are gracefully irregular and loose when expanded, but have elegantly pointed buds and a pervading peach fragrance. Extra vigorous and free in bloom; in every way a beautiful rose.

Étoile de Lyon—Pale yellow with a golden center; the blooms are very large, double, regularly formed and delightfully fragrant. So vigorous and free of bloom that it is unsurpassed for budding.

General McArthur—The bud when first opening is the brightest crimson scarlet, and the flower retains this perfect coloring until it drops its petals. Blooms continuously the whole season through and gives fine stems for cutting; flowers and buds are extra large, their form being superb. It is the nearest approach to the perfect red rose.

Golden Gate—Creamy white delicately edged and tinged with rose and golden yellow, very double and full, fragrant and a constant bloomer.

Gruss an Templs—The flower is dark rich crimson, passing to velvety fiery red, one of the brightest colored roses we know. Flowers full, large and sweet, very showy and handsome, blooms constantly, throwing up fresh buds and flowers the whole season. It is a healthy, vigorous grower, entirely hardy with usual winter protection.

Mamam Cochet—An exquisite silvery rose with shadings of buff and salmon. Flowers and buds are as large, full, perfectly formed and fragrant as any bud rose grown under glass. The best pink Tea for bedding on account of its vigor, hardiness and lavish bloom.

Moss Roses

Admiral Dewey—Dark red, very vigorous, one of the best.
Blanche Moreau—Pure white, large, full, perfectly formed.
Countess of Murinais—Large, pure white, beautifully moisted.
Crested Moss—Deep pink buds surrounded with a mossy fringe and crest; exquisitely fragrant.
Glory of Mosses—Flowers large; color pale rose. A strong grower, with fine healthy foliage.
Henry Martin—Rich, glossy pink, tinged with crimson; large globular flowers, full, sweet and finely moisted.
John Cranston—Deep crimson, very double.
LaNeige—A pure white Moss, with medium sized flowers full in shape and double.
Luxembourg—Clear, deep crimson, large, very sweet and mossy.
Perpetual White—Pure white, blooms in clusters, double, beautiful, vigorous.

Salset—Light rose; large and full; a good autumn bloomer. An elegant Moss.

Raphael—Pinkish-white, shaded with rose. A splendid rose.

Venus—Flowers are bright glowing crimson, fully double. The plant is branching in habit, forming a fine, compact bush. One of the most vigorous Mosses with splendid foliage.

Miscellaneous Roses

Harrison Yellow—Semi-double; bright yellow, very showy and fine; blooms very early.

Mad Plantier—A perfectly hardy, pure white double rose. The plant grows in fine bush form and blooms profusely in June. Desirable cemetery plant as it grows luxuriantly without attention.

Persian Yellow—Deep golden yellow, semi-double, very fine. A very early bloomer and much the finest hardy yellow rose. This does best when budded.

Clothilde Soupert—Outer petals pearl white, shading to a center of rosy pink; the flowers are very double and handsomely formed. A grand free-flowering rose, fine for bedding or pot culture.

Mignonette—Clear pink flowers, changing to white, very double. Young shoots frequently carry forty to sixty flowers.

Mosella—(Yellow Soupert.)—Color light yellow shading to white at edge of petals. Dwarf and bushy, a mass of bloom the whole year. Quite hardy, will stand the severest winters with but slight protection.

Parquette—Pure white flowers of perfect camellia form, in clusters.

Pink Soupert—An excellent pink rose, surpassing even Clothilde Soupert in freedom of bloom. Strong, healthy grower, and a fine, hardy bedding plant. Dainty and effective.

Crimson Baby Rambler—Crimson flowers in broad clusters, like those of the Crimson Rambler; a compact bush about two feet high. One of the finest bedding roses ever introduced.

Pink Baby Rambler—This has all the characteristics of the Crimson, but is loaded with great clusters of bright pink roses.

Hermosa—Flowers of a pretty pink color, daintily cupped. A fine fragrant old favorite that is always in bloom.

Souvenir de la Malmaison—Bears great flowers of clear flesh white, double to the center. One of the finest fall blooming roses and a superb old favorite.

Helen Gould—One of the finest crimson Tea roses, bearing extra large flowers which are exquisite in perfume. Thoroughly hardy and a vigorous bloomer.

Kaiserin Augusta Victoria—Creamy white and sweetly fragrant; buds are large and pointed and flowers very full and large. Very hardy and continuous bloomer.

LaFrance—Flowers a delicate silvery rose, often silvery pink with peach shading; very large very double and of superb form. The sweetest and most useful of all roses; flowers continually throughout the season and is deservedly a favorite with many rose growers.

Meteor—A rich, dark, velvety-crimson, ever-blooming rose. Flowers are of good size, very double and perfect in shape, either as buds or when fully opened. Plant is vigorous and remarkably free-flowering. Excellent for pot culture and best of all the Hybrid Teas to bed for summer cut flowers as it retains its color well even in the hottest weather.

Souvenir President Carnot—Color a delicate rosy flesh, shaded a trifle deeper at the center. Flowers is of fine size and shape with thick, shell-like petals. A strong, healthy grower, with handsome bronze-green foliage.

Persian Yellow—Deep bright yellow; small but handsome, double, a very early bloomer and much the finest hardy yellow rose; does best when budded.

Kaiserin Augusta Victoria.
Climbing Roses

Baltimore Belle—Pale blush, nearly white, very double. Blooms in large clusters late in the season, one of the best white climbers.

Climbing Meteor—Produces large, velvety crimson flowers, in great profusion throughout the season. Makes shoots twelve to fifteen feet long in a single season. One of the finest climbers grown.

Empress of China—Light red changing to pink when fully expanded; of twining habit. Flowers of medium size. The vines have few thorns; free and continuous bloomer.

Multiflora Japonica—Large clusters of single snow-white blossoms followed by red seed vessels; fragrant. Of strong, quick growth and perfectly hardy everywhere.

Marechal Neil—Beautiful canary yellow, large, full, globe-shaped flowers of delightful fragrance. Free-flowering; one of the finest yellow tea-scented roses yet introduced.

Prairie Queen—Bright rosy red, large, compact and globular flowers; a rapid climber; hardy and one of the best.

Ruby Queen—Ruby red with clear white center; a great climber. Flowers produced in clusters in enormous quantities. Perfectly hardy. Produces a charming effect when the plant is in full bloom.

Russell's Cottage—Rich dark crimson, medium size; very double and full; blooms abundantly, strong grower.

Setigora or Prairie Rose—Large single flowers of rosy pink, blooming in clusters after others are gone. A climber that makes a beautiful display.

Seven Sisters—Crimson, changing all shades to white, flowers are borne in clusters; one of the old fashioned sorts.

Wm. Allen Richardson—Flowers are a beautiful orange-yellow, of medium size, very showy and distinct. One of the most valued climbers.

Rambler Roses

Crimson—The famous crimson clustered climber, so extremely effective when grown on pillars and trellis. The flowers are grown in pyramidal panicles, each carrying thirty to one hundred blooms and over; the individual flowers are from one to one and one-half inches in diameter and remain in perfect condition a long time. The plant is a vigorous grower, making shoots from eight to ten feet long in a season.

Dorothy Perkins—Clear, shell-pink, flowers borne in large clusters of twenty-five to thirty, sweetly scented, full and double with crinkled petals. Foliage stays on a long time.

Lady Gay—Flowers are of a delicate cherry pink, fading to soft-tinted white; borne in large loose clusters. Claimed to be far superior to Crimson Rambler of which it is a seedling and which it closely resembles in habit of bloom and vigor of growth. Foliage deep green, perfectly hardy and unsurpassed for climbing work.

Philadelphia—Flowers deep rich crimson, more intense than the Crimson Rambler, with larger tresses of flowers which are perfectly double; the color does not fade and the clusters completely cover the bush. Vine is very hardy and a strong grower.

Pink Rambler—Similar to others of this group but flowers are double, of a clear shell-pink, borne in large clusters; a valuable rose for cutting.

Yellow Rambler—A clear decided yellow, flowers of medium size in immense clusters, very sweet scented; hardiest of all yellow climbing roses. It is a rampant grower, well established plants often making a growth of ten to twelve feet in a season.

White Rambler—White, resembles Crimson Rambler.
Rosa Rugosa

Alba Rugosa—Pure white, single, having five petals and highly scented.

Rubra Rugosa—Bright rosy crimson, single, succeeded by large brilliant berries of much beauty.

Agnes Emily Carman—Rich deep crimson, flowers large, semi-double, fine in bud state. A remarkably free bloomer, and continues in bloom a long time.

Madam Georges Brunt—White and fragrant, buds long and pointed, semi-double when open, borne in clusters throughout the season; vigorous and hardy.

Blanc Double de Coubert—Purest paper-white, double, blooming in clusters of from five to ten flowers, very sweet. Flowers nearly five inches in diameter. A strong, rampant grower having the true rugosa foliage.

Charles Frederick Worth—Flowers are deep crimson with carmine shadings. A hybrid Rosa Rugosa of extremely strong growth, with attractive green foliage, more dense than other varieties.

Counsel Ferdinand Meyer—Double silvery pink flowers, large cup-shaped, borne well above handsome Rugosa foliage. Exquisitely perfumed and perfectly hardy.

New Century—Flowers clear, flesh-pink, three to four inches across, perfectly full and double. Its perfume reminds one of sweetbriers and it is one of the most constant bloomers of its class.

Rubiginosa—(English Sweetbrier.)—An old garden favorite that is highly prized on account of the delightful fragrance of its leaves and young branches. It is perfectly hardy and once planted requires very little care. It is particularly fine for hedges, and makes splendid single plants on the lawn.

Japanese Trailing Roses

Rosa Wichuraiana—Flowers are pure satiny white with bright golden center, single and very large, frequently five or six inches around. They are borne in large clusters, covering the bush with a sheet of snowy blossoms during the early summer months. Will creep over the ground like ivy, forming a dense mat of dark green foliage. Valuable for covering banks, rockeries, slopes and beds among shrubs.

Manda's Triumph—Flowers pure white, very double, produced in clusters of ten or twelve on small side shoots, literally covering the plant and standing well above the foliage.

Pink Roamer—Flowers are bright rich pink with large silvery white centers and orange red stamens. Blossoms are over two inches in diameter and very fragrant. It is a hybrid of the sweetbrier, which it somewhat resembles in character of bloom; of rampant growth.

South Orange Perfection—Soft blush-pink at the tips, changing to white; the perfectly formed double flowers are about one and one-half inches in diameter. Remarkably free flowering.

Universal Favorite—Blossoms are a beautiful rose color, similar to Bridesmaid, and very fragrant; they are double and measure over two inches in diameter. It is a vigorous grower, with long branching shoots that are covered with dense, bright green foliage.

Tree Roses

The Tree Roses are grafted on hardy stems, 4 to 5 feet high, and thus form tree shapes. When in full bloom they are very handsome, and are becoming more popular every year as the demand for formal gardens grows. It is very necessary to have varieties which will lend themselves to the severe pruning and training necessary to produce the tree form, and in this shape we offer only the Hybrid Perpetual or hardy class, with flowers of white, pink, scarlet and crimson.
HARDY PERENNIAL PLANTS

The following collection embraces the most desirable varieties. They are all showy, of easy cultivation and the flowering season is from May to November. By a careful selection a continuous display of flowers may be had the entire season. If you desire we can make selections for you.

Achillea, The Pearl—Has very showy heads of pure white, double flowers, on strong, erect stems, 2 feet high; blooming constantly.

Alyssum, Golden Tuft—A fine border plant, not over 12 inches high, which bears numerous clusters of bright yellow flowers in May, similar in shape to the well-known Sweet Alyssum.

Anemone, Windflower—One of the most showy of all our autumn-blooming herbaceous plants. Blooms freely from August till cut down by frost. In somewhat moister, rich soil, the plants make a beautiful, hardy border or bed. A slight covering of leaves or straw is sufficient protection in most severe winters.

Aquilegia, Columbine—These are: plants of elegant habit, distinct in foliage and flowers. The latter form a showy cream wall above the clear cut leaves. All the species, like partially shaded, well-drained soil. One of the best plants for rock-work, or growing under trees.

Asters—Bloom in late fall in great profusion, perfectly hardy, and are to be had in almost all colors, plants growing 3 to 4 feet high.

Boltonia (Asteroldes)—Tall, 4 feet or more in height, with white, aster-like flowers in broad heads during August. A handsome plant for borders and masses.

Campanula, Bellflower (Hare-bell)—A lovely, hardy little perennial, widely planted everywhere for its delicate sprays of drooping white bells and their delightful fragrance. The leaves are a rich dark green; the plant vigorous, soon forming fine clumps which bloom early in the spring; largely forced in winter.

Coreopsis (Tickseed)—Showy and valuable free flowering perennials. Produces bright golden yellow flowers in great profusion the entire season.

Chrysanthemums (Hardy Pompon)—This class of beautiful plants is now so universally popular for out-door bedding, and lusty so. They produce a lavish profusion of blooms, giving color, life and beauty to the garden at a time when other plants have been nipped by frost. They are quite hardy, but it is well to give a slight covering of leaves or manure during winter. Grow from 2 to 3 feet high.

Daisy, Shasta—Large snowy-white flowers, 4 inches across; in bloom all summer; a good cut-flower variety.

Delphinium (Larkspur)—The hardy Larkspurs are one of the most important and most satisfactory plants in the herbaceous garden, and should be planted extensively, even in the smallest garden. Their long spikes of flowers are produced continuously from June until late in the fall, if the precaution is taken to remove the flower stems before they can produce seed.

Dianthus (Sweet William)—The old-time favorite, growing 1½ to 2 feet high and bearing during May and June a profusion of round-topped clusters of flowers of all shades of red and pink to white.

Dicentra (Bleeding Heart)—A hardy perennial with heart-shaped, rose colored flowers in drooping spikes. One of the best border plants; perfectly hardy and easily cultivated.

Digitalis (Foxglove)—Long bell-shaped flowers, on stems 3 to 4 feet high; white and red; very showy. July to September.

Puukia (Day Lily)—A superb autumn flower, having broad, light green leaves, prettily veined and long, trumpet-shaped, pure white flowers, that possess a delightful, though delicate fragrance.
Gaillardia Grandiflora (Blanket Flower)—A showy plant with dense tufts of drooping leaves and flower stems, producing daisy-like blossoms 2 to 3 inches across, of gorgeous colors; blooms in the most wonderful profusion from June to November.

Helianthus (Sunflower)—One of the showiest of the hardy perennials. Flowers are large and vary in color from light to deep orange-yellow.

Hibiscus (Militaris)—Strong growing, 4 to 6 feet high, with white, blush, or pale rose flowers, with purple eye; blooming in August and September.

Hibiscus (Crimson Eye)—Immense flowers of purest white, with large centers of velvety crimson. Blooms very profusely, the plants being covered all summer with a wealth of most beautiful, attractive flowers.

Hollyhocks—Few hardy plants combine as many good qualities as the Hollyhock. For planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. The flower forms perfect rosettes of the most lovely shades of yellow, crimson, rose, pink, orange, white, etc. The Hollyhock requires a rich, deep soil, well drained and well repay in quality and elegance of bloom any extra care. A slight protection in the winter will be beneficial.

Hyacinthus (Candidans)—A magnificent yucca-like plant producing in July and August, a flower stem 3 to 4 feet high, covered with from 20 to 30 pure white, pendent, bell-shaped flowers.

Iris Germanica (German Iris)—This group blooms in May with wonderful combinations of coloring; leaves broad sword-like. We have an assortment of the best sorts.

Iris Kaufmert (Japan Iris)—The Japanese Iris should be planted in a somewhat cool, moist situation, and in rich soil. Its flowers, in late June and July, are quite distinct from those of all the varieties, and will compare favorably with some of the exotic orchids. We have a good assortment of the best varieties.

Italian Starwort—Lilac blue.

Michaelmas Daisies—Tall, leafy perennials, blooming in the fall when flowers are scarce.

Myosotis (Forget-Me-Not)—The Forget-Me-Nots are familiar flowers of many gardens, hardy, easy to grow, with bloom sprays of exquisite blue.

Papaver (Poppy)—Nothing can equal these in gorgeous effect, and, whether planted singly or in masses, their large flowers, rich brilliant colors, and freedom of bloom render them conspicuous in any position.

Platycodeon (Chinese Bell-Flower)—A valuable perennial, forming a dense branching bush of upright habit, 1 to 2 feet high, with neat foliage. From the middle of July until September it bears a constant succession of handsome, large bell-shaped, deep blue flowers. Succeeds well in any ordinary soil.

Rudbeckia (Golden Glow)—A distinct, tall-growing, hardy perennial, from 6 to 7 feet high. Foliage deeply cut, handsome bright green; flowers very double, rich golden-yellow; 2 to 3 inches in diameter; borne on long, smooth stems, forming for the tall plant a solid head of bloom.

Tritoma (Red-Hot-Poker)—These are tall and striking plants of much beauty when well placed and properly grown. The great spikes of flowers sent up from the center of a broad circle of green leaves, have quite a rich and tropical appearance. Give some protection in cold climates. Bloom from July to September.

Hardy Bulbs

Crocus—These are delicate and tasteful in form and varied and gay in color. Until the flowering of the Hyacinth, and through the most changeable and unpleasant of the spring weather, the garden depends almost alone upon the
Crocus for its brightness. Plant the bulbs in autumn about 3 inches apart and cover with 2 inches of soil. Cover in fall with a little straw or coarse manure to keep the bulbs from being blown out by frost.

Galanthus (Snowdrop)—This is the earliest of spring-flowering bulbs, is universally admired for its elegant, snow-white, drooping blossoms. Plant thickly in groups in a cool, sheltered spot, and the flowers will surprise you before the snow is all gone.

Hyacinths—Among all the bulbs used for winter flowers, the Hyacinth stands foremost. Flowers may be produced by placing the bulbs in a glass filled with water or placed in pots or boxes in soil; colors, blue, red, white with various shades.

Jonquils—Sweet scented, yellow. It is one of the early blooming bulbs.

Lilies

Lilium Auratum (Gold Band or Lily of Japan)—Flowers very large, delicate ivory-white, thickly dotted with rich, chocolate-crimson spots. A bright golden band runs through the center of each petal. The finest of all lilies.

Lilium Harrisii (Bermuda Easter Lily)—Flowers large, trumpet-shaped, pure waxen white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular.

Lilium Longiflorum—Large, snow-white, trumpet-shaped; very fragrant.

Canna.

Lilium Tigrinum (Double Tiger Lily)—Orange-scarlet, with dark spot

Lilium Speciosum—White, shaded with rose, spotted red.

Cannas

The large-flowering Dwarf Cannas begin to bloom a short time after planting and are a mass of gorgeous colors until withered by frost in the fall. When grown as pot-plants they are beautiful specimens for the porch in summer and continue to bloom for some time in winter if taken into the house or conservatory. We have a splendid list of all the finest varieties of Cannas.

Auris—A fine variety of the orchid-flowered type; large, handsome foliage; canary-yellow blooms.

Black Beauty—Small red bloom; rich bronze foliage. Best of all the red-leaved sorts.

Florence Vaughan—Flowers of the most brilliant golden yellow, dotted with brightest scarlet.

Louise—Rich rose-pink, delicately dappled and streaked with red.

Pillar of Fire—A tall-growing variety; the foliage is fine; a rich crimson-scarlet.

Richard Wallace—A canary-yellow with exceptionally large flowers.

Robusta—A very fine, tall-growing, dark-leaved variety.

Narcissus

Some varieties bloom as early as the Crocus. The flowers assume many forms and present many charming combinations of white, gold, primrose, orange, sulphur and pure yellow. Some are quite fragrant; all very hardy, except the clustered Polyanthus. Double and single.
Peonies

The peonies are recognized as a fine, effective flower, grown either for lawn decoration or cut flowers. They are extremely hardy and easy of cultivation. Flowers are lasting, finely finished and exquisitely colored, in planting for cut flowers do not plant a long list of varieties. For good results they must be cut at the right time which is hard to do if you have too many varieties.

Charlemagne—Creamy white, center tinted lilac; very large and late.

Couronne d'Or—Late white, showing gold reflections and slight carmine tips.

Dorchester—Extra size; light pink; very late.

Duchesse de Nemours—Sulphur-white, with a greenish reflex, flowers cup-shaped. Late.

Duchess of Orleans—Pale red and blush.

Duke of Wellington—Ivory-white, with creamy center. Very large and double.

Edouard André—Crimson-maroon, showing golden stamens.

Edulis Superba—Bright violet-rose, silvery reflex. Fragrant and early.

Eugene Verdier—Blush, with white center; very large and beautiful.

Felix Crousse—Bright red; round and massive.

Festiva Maxima—Extra large; white, center petals tipped carmine.

Golden Harvest—Creamy pink; very large and fragrant.

Kumrei—Pure bright rose; one of the best late bloomers.

Hercules—Single, rose, tipped white.

L’Indispensable—Bright carmine-lake.

Isabella Karlutzy—Delicate rose; very large and full.

Jeanne d’Arc—Exquisitely scented, large flowers. Lilac-pink guards and tufted center, body soft yellow.

Peony.

Marie Lemoine—Fine, large, double; white.

Marie Stuart—Bright fleshly rose, with outer edges tinged with sulphur-yellow.

L’Esperance—Rosy white, suffused with violet-pink; late.

Meissonier—Rich brilliant red; extra-large size.

Mme. Crousse—White with pink tinge; center petals with carmine edges.

Mme. Émile Galle—Clear pink, running lighter toward center.

Mme. Lebon—Enormous flowers of cherry-red.

Moderne Guerin—Cherry-rose; large and full.

Officinalis rosea f. pl.—Beautiful, clear pink; double.

Officinalis rubra pleno—Rich deep crimson; very early and one of the brightest of all dark-colored varieties.

Princess Mathilde—Rose tinged violet; enormous flower.

Mathilde Rosenneck—Saucer-shaped; delicate shell pink and white.

Mont Blanc—Paper-white guards, full center of ivory-white; free blooming and flowers lasting. Rare.

Queen Victoria—The broad guard petals are a pretty blush-color; the center flesh-pink.

Richardson’s rubra superba—Grand red flowers; very vigorous.

Rosea plenissima superba—Bright, clear rose; full-centered double; dwarf and compact grower.

Rubra triumphe—Dark, purplish crimson; strong-growing, semi-double.

Tenuifolia f. pl.—Double scarlet flowers; foliage fern-like; very early.

Dahlias

These showy and pretty flowers are becoming very popular and justly so. The Dahlia is one of the showiest of all fall flowers, commencing to flower in July, they are a perfect bloom until stopped by frost. Flowers are most perfect and of beautiful form. Dahlias are divided in classes as follows: Cactus, Decorative, Show, Fancy, Pompon, Single, Collarette and Seedling; each class is comprised of a number of different varieties. Colors numerous. Before freezing weather, dig up plants and store in a frost-proof cellar.
Phlox

Phlox Paniculata

No class of hardy plants is more desirable than the Perennial Phloxes. They will thrive in any position and can be used to advantage in the hardy border, in large groups on the lawn, or planted in front of belts of shrubbery, where they will be a mass of blooms the entire season.

Bridesmaid—Pure white, with large crimson center.

Champs-Elysees—Fine, rich purplish crimson.

Charlotte Saison—White, suffused crimson; tall.

Coquelicot—Pure scarlet, with crimson eye.

Eclaireur—Salmon-scarlet, with bright crimson eye.

Eugene Scott—Deep lilac edged and mottled white; dull red eye.

Le Soleil—Bright magenta-salmon with light halo; a pretty pink effect.

Princess Louise—Small round flower, with sharp, dull rose eye.

Von Hochberg—Crimson-ed wine-color, in conspicuous loose panicles.

Rhubarb

Make the ground rich and deep, as recommended for Asparagus. Plant four feet apart each way.

Early Scarlet—Smaller than Myatt’s, but extremely early and very highest quality. The best extra early sort for home or market.

Myatt’s Zinnia—Those who have never grown this variety, which is of superior quality, will hardly recognize the old “Pie Plant.” It is an early, tender variety, without being in the least tough or stringy, with a mild, subacid flavor.

Asparagus

See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well-rotted barnyard manure. Place the plants eight inches apart in rows four feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and three pounds of salt per square yard early every spring. Do not cut for use until the second season.

Conover’s Colossal—This is much superior in size and quality to any of the old common sorts, being remarkably tender and fine flavored.

Palmetto—Until recently we believed that the Conover’s Colossal was the best sort known, but we are forced to concede that the Palmetto is earlier and a better yielder, and more even and regular in its growth, and that it will eventually supercede the old favorite. It has been tested both North and South, and has proven entirely successful in every instance.

Tulips

These are the most glowingly brilliant and effective of all the early spring flowers. Plant them thickly and lavishly in the fall, and they will reward you with abundant cheer during the cold, dull months of early spring. We offer many varieties. The Duc Van Thols are earliest to bloom. Then come the Single Early and Double Early sorts, —the Parrot, Late Snow, and other fine species.

Wonderful Lemon Ponderosa

Nothing has ever been brought to our notice in the plant line that has caused half the commotion that this wonderful Lemon has. It is a true ever-blooming variety. On a plant six feet high not less than eighty-nine of the ponderous Lemons were growing at one time. It was a beautiful sight to see. The tree was blooming at the same time and had fruit in all stages of development. The Lemons have very thin rind for such large fruit. The juiciest of all Lemons, makes delicious lemonade, and for culinary purposes cannot be excelled. It is not uncommon to make a dozen lemon pies from one lemon.
General Information For Planters

Preparing the Ground. The ground should be well plowed and made mellow. A subsoil plow is of value in preparing an orchard site. In a close hard clay or where there is a hard pan, the use of dynamite has been very successful, and is highly recommended.

Caring for Trees. As soon as the trees are received if the holes are not ready for planting, they should be "heeled in" by placing them in a trench about 18 inches deep and covered with mellow earth, after thoroughly wetting them.

Pruning. Do not omit to prune before planting. Apples, Plums and Standard Pears should have all the branches cut off except three or four at the top; these should be cut back to about nine inches long. Dwarf Pears and Cherries do not require any cutting back. See that all bruised roots are cut off clean. It is beneficial to trim off all the ends of the roots. Plant a little deeper than in nursery rows, except Dwarf Pears—these should be planted deep enough to bury the union stock 3 or 4 inches.

Planting. The ground should be well prepared and holes dis charged than necessary, so that they can be partly filled with surface soil. The earth should be firm ed very thoroughly around the roots, as it is disastrous to allow the air to enter. When the earth is nearly filled in, a fall of water may be thrown on to settle and wash in the soil around the roots. It is not necessary to use water except in dry weather.

Mulching. Mulching prevents the moisture from escaping and maintains equitable temperature about the roots. The material used may be long manure, litter, straw, grass or hay, which should be spread on the surface around the tree for the space of four or five feet and three to six inches deep. Pearing trees may be benefited by mulching heavily in winter, which will tend to prevent an early development of the fruit buds and assist them to escape the effect of late frosts.

After-Culture. Grass should not be allowed to grow about young trees or plants. The ground should be cultivated for a space of at least a foot outside the roots. If the ground is poor it should be enriched with surface applications of manure. Pruning should be varied according to the condition of the tree and the purpose of the planter. It should be done regularly every spring before the buds swell any. In this way the removal of large branches will be avoided.

Fall Planting. When planted in the fall, all trees should be banked up at least one foot high until spring. This overcomes the tendency of the trees to heave out, protects them from mice and prevents the roots from freezing before they have taken hold of the soil. In planting roses, shrubs, vines, and other delicate stock in the fall, the tops should be nearly or quite buried with mellow earth during the first winter. The surplus earth should be removed in the spring.

Injured Trees. If trees are received in a frozen state, place the package unopened in a cellar, away from frost and heat, until thawed out and then unpack. If partially dried from long exposure, bury entirely in the ground or place in water from 12 to 24 hours.

Distances for Planting

<table>
<thead>
<tr>
<th>Tree Type</th>
<th>Distance</th>
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</thead>
<tbody>
<tr>
<td>Standard Apples</td>
<td>40 feet</td>
</tr>
<tr>
<td>Standard Pears and Cherries</td>
<td>20 to 40</td>
</tr>
<tr>
<td>Standard Plums, Peaches, Apricots</td>
<td>16 to 18</td>
</tr>
<tr>
<td>Dwarf Pears</td>
<td>10 to 12</td>
</tr>
<tr>
<td>Quinces</td>
<td>10 to 12</td>
</tr>
<tr>
<td>Grapes</td>
<td>10 to 12</td>
</tr>
<tr>
<td>Currants and Gooseberries</td>
<td>3 to 4</td>
</tr>
<tr>
<td>Raspberries and Blackberries</td>
<td>1 by 3</td>
</tr>
<tr>
<td>Strawberries, for field culture</td>
<td>3 to 5</td>
</tr>
<tr>
<td>Strawberries, for garden culture</td>
<td>1 to 2</td>
</tr>
</tbody>
</table>

Number of Trees on an Acre of Ground

To find the number of trees or plants on an acre (43,560) will give the number of plants or trees to the acre.

Placing Grape Vines. Plant 8x8 feet apart for trellis and 6x6 feet for stake culture. Dig holes the same as for trees. Place the vine in the hole so that the first bud next to the stem will come on a level with the surface; spread the lower layer of roots in their natural position, fill in the earth and press down the soil firmly with the foot; then spread the second layer of roots, fill in the balance of the hole and press gently with foot. After planting trim the vine back to two buds. A strong stake four feet long should be driven in at each vine to support the canes the first two years.

Placing Small Fruits. The soil should be mellow and rich. Place 14 Raspberries 2x7 feet
apart; Black Raspberries, Blackberries, Dewberries, 5X7 feet apart; Currants and Gooseberries, 6X feet apart; Strawberries for field culture, 1x1 feet, and for garden, 2 feet apart. Plant small fruits about one inch deeper than they stood in the nursery, except strawberries, which should be planted so as to leave the crown even with the surface—too deep planting will smother the plant. Spread the roots, in planting small fruits, as much as possible, and press the earth over the roots firmly with the hand. If planted in the fall, cover with coarse straw manure to prevent the plants from being heaved out during the winter. After planting, cut back the tops to the base, and flood the ground. If planted in open flats or shallow boxes, they should be covered with cloths, rollers or paper to prevent the hot sun from striking the tree, for the first two or three weeks, or until the tree starts to grow.

**Insect Enemies and How to Destroy Them**

We embody herewith brief but plain descriptions of the various insects which attack different classes of trees and plants, and in each case the remedy and/or known relations can be relied upon implicitly, and we need only ask our friends and customers to follow the directions in each case to the letter.

**DIRECTIONS FOR PREPARING THE REMEDIES.**

**Paris Green or London Purple—**These poisons are used either in solution or dry form. In solution one pound is mixed with from 100 to 250 gallons of water, the strength depending on the plant sprayed and the insect to be destroyed. The poison should first be mixed with enough water to form a paste, after which the full quantity may be added. It is always best to add one or two pounds of lime for each pound of the green, as the danger to foliage will be much lessened thereby. Paris Green alone is sometimes applied in dry form. It is best, however, to mix each pound with ten pounds of flour or plaster. The liquid is much less objectionable, and we would in all cases recommend it.

**Kerosene Emulsion—**Take common bar soap, one-half pound, water one gallon, and kerosene two gallons. In the soap, dissolve water, and then beat the whole until all the soap is dissolved; add the soap liquid, boiling hot, to the kerosene, and churn for ten minutes by pumping it back into itself; when cool, the emulsion should have the consistency of thick cream or soft butter, this depending somewhat upon the kind of soap used.

**INSECTS AFFECTING THE GRAPE.**

**The Flea Beetle.**

This small, steel blue insect, appears in early springs, and at once begins eating the tender foliage. After eating a short time the female beetle deposits small yellow eggs on the foliage. These soon hatch into small larvae, which continue the work of destruction. The eggs are conspicuous.

**Remedies—**Spray with Paris Green, one pound, and one and one-half pounds lime to 200 gallons of water, as soon as the bees are noticed. Two applications of this solution at intervals of a week or ten days, will usually destroy all the insects.

**The Rose Bug.**

It makes its appearance early in the summer, devouring flowers, young fruit and leaves. The beetle is about half an inch long and of a brown color.

**Remedies—**The best results have followed the use of Pyrethrum, which should be applied in solution at the rate of one ounce to two gallons of water.

**INSECTS AFFECTING THE APPLE.**

**The Cooling Moth.**

The little white caterpillar, whose effects are so familiar to everyone, is the larva of a small, nocturnal, gray moth. The moth deposits her eggs on the blossom end of the fruit. As soon as the eggs hatch the larvae eats its way into the young fruit; the rest of the story is well known to everyone.

**Remedies—**Spray the trees with Paris Green or London Purple at the rate of one pound to 250 gallons of water, add one and a half pounds of lime, first when the flowers are falling and again when the fruit is the size of peas.

**The Canker Worm.**

This measuring worm eats the green portion of the leaf, giving the tree a brownish color, as though scorched by fire. The worms appear in early spring, and when full grown are an inch long.

**Remedies—**Spray the trees when the leaves are one-third grown, with Paris Green solution, one pound to 250 gallons of water, add one and a half pounds of lime. Usually one spraying will be sufficient, but if the worms appear to be on the increase a second application will be advisable.

**Apple Tree Tent-Caterpillar.**

The large silken nests made by this insect are familiar to everyone. The caterpillars appear in May or June, and in five or six weeks have attained their full size.

**Remedies—**Cut out and burn the nests as soon as they are seen, taking the precaution to do this in the morning when the caterpillars are all in. This, together with one or two sprayings of Paris Green solution, having a strength of one pound to 250 gallons of water, and one and a half pounds of lime, will effectually rid the trees of the pest.

**The Apple Aphid.**

Apple trees are often attacked early in the season by this insect. The lice are quite small and green in color. By sucking the juices from
the young growth they greatly interfere with the functions of the latter, and as a result the tree has a sickly, yellow appearance.

**Remedies**—Spray with kerosene emulsion at the rate of one gallon to twenty gallons of water, as soon as the lice appear. Repeat the treatment in eight or ten days if necessary. A decoction made by soaking over night four or five pounds of tobacco stems, or refuse tobacco of any kind, in five gallons of water, will also be found an excellent remedy against the lice.

**The Oyster Shell Bark Louse.**

These are frequently seen on the trunks, branches and twigs of the apple tree, small, whitish shells, resembling in shape those of an oyster. Under these shells are numerous small lice busily engaged in sucking the sap from the tree.

**Remedies**—Scrape the trees thoroughly in spring before the leaves appear and then paint the trunk and large limbs with a thick solution made by dissolving one quart of soft soap in half a gallon of hot water. Two ounces of crude carbolic acid added to this will also increase its efficiency. Make no further treatment until the middle of May, when kerosene emulsion, one gallon to twenty to fifty gallons of water, should be applied. It is always best to apply the emulsion soon after the lace hatch.

**INSECTS AFFECTING THE PEACH.**

**The Black Aphis.**

Numbers of this small, shiny black insect may be seen in the spring on the leaves and twigs of the peach. The lice often do a great deal of damage above ground as well as below on the roots.

**Remedies**—For the form above ground, spraying with kerosene emulsion, one gallon to thirty-five gallons of water, is the most effective remedy. The first spraying should be made as soon as the lice appear; if necessary, this should be followed by others at intervals of a few days until the trees are rid of the pest. Under the ground the lice are best destroyed by digging in tobacco stems or dust among the trees. The tobacco is scattered on the ground to the depth of half an inch or more, then dug in with a spade or fork.

**Peach Yellows.**

This is one of the few diseases as to which very little is positively known, except its effects. It usually makes its appearance about mid summer, causing the foliage of the tree to turn yellow, and soon thereafter the body and large limbs will throw out a considerable number of weak, yellow leaved suckers. If the tree is loaded with fruit it will be under size, little or no flavor, and riper prematurely.

**Remedies**—The moment that you feel sure that a tree is affected with yellows, dig it up root and branches and burn it, and plant any tree that you like, other than a peach tree, in its place.

**INSECTS AFFECTING THE PEACH.**

**The Pear Tree Slug.**

This insect attacks the leaves, eating away the green portion so that nothing remains but the parchment-like tissues and veins. It appears usually the latter part of June and again in August.

**Remedies**—Spraying with a simple solution of milk of lime, made by mixing two pounds of lime in twenty gallons of water, will often rid the tree of this pest. The first application should be made as soon as the slugs are noticed; if necessary, others should follow in a week or ten days. By adding a little Paris Green, say one ounce to the tone of milk, the latter will be made more effectual.

**The Scurby Bark Louse.**

This insect resembles the Oyster Shell Bark Louse already described as attacking the apple.

**Remedies**—The same as for Oyster Shell Bark Louse.

**Pear Blight.**

It is understood by the best authorities, both practical and scientific, that the cause of the disease is absolutely unknown, and there is but one certain remedy, namely cut out the blighted parts promptly on appearance of the disease and burn them.

**INSECTS AFFECTING THE PLUM.**

**The Curculio.**

This little grub originates from eggs deposited by a small, dirty gray bettle, when the flowers are still small.

**Remedies**—The most reliable way now known of dealing with Curculio is spray it with Paris Green. The first application should be made when the flowers are falling, using a solution made by mixing one pound of Paris Green in 200 gallons of water, and adding one and a half pounds of lime. In a week or ten days make a second application, and follow this by another after the lapse of same length of time.

**The Plum Tree Aphis.**

This insect resembles the one occurring on the peach, and like it may be destroyed by spraying with kerosene emulsion, made by mixing one gallon of the concentrated emulsion in twenty gallons of water.

**Black Knot.**

The most scientific as well as practical fruit growers in the country are by no means agreed as to the cause of Black Knot on plum and cherry trees, but they are entirely agreed as to the only known remedy, namely: Just as soon as the Black Knot appears cut it out, removing the branch at least two inches below where the knot appears. Burn the affected parts and follow this method promptly, thoroughly, and in most cases, you will have exterminated the disease before it has done serious damage.

**INSECTS AFFECTING THE CHERRY.**

**Cherry Aphis.**

Cherry trees are affected with Black Knot the same as the plum trees, and the same remedy should be used.

**INSECTS AFFECTING THE CURRANT AND GOOSEBERRY.**

**The Currant Worm.**

The perfect form of the worm is a small fly, which lays its eggs on the leaves in early spring. As soon as the eggs hatch, the worms eat circular holes in the foliage. As the worms increase in size, they become more voracious, often ridding the leaves.

**Remedies**—As soon as the worms are seen, spray the plants with a solution made by mixing one ounce of Hellebore in two gallons of water.

**The Currant Aphis.**

The insect attacks the leaves, causing them to curl and turn brown. The lice are usually abundant in early summer, but as hot weather advances they disappear.

**Remedies**—Spray with kerosene emulsion, one gallon to thirty-five gallons of water, as soon as the lice are noticed.

**INSECTS AFFECTING THE ROSE.**

**The Rose Bug.**—The same as sometimes attacks the grape. **Remedies**—The same.

**The Green Aphis.**—The same that attacks the apple. **Remedies**—The same.

**The Black Aphis.**—The same that attacks the peach and other trees. **Remedies**—The same.
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