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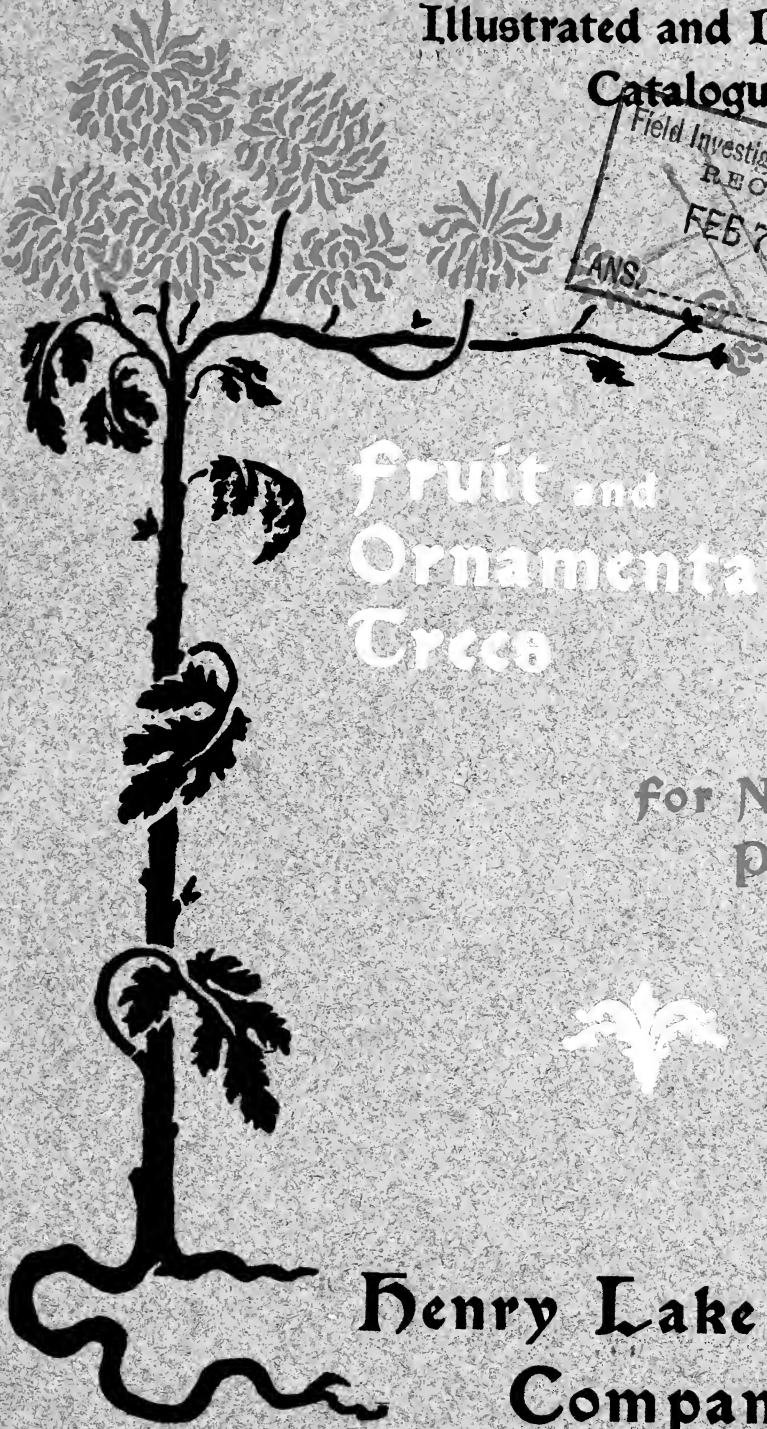
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1911/13

Illustrated and Descriptive Catalogue

Field Investigations in Pomology
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Fruit and Ornamental Trees

for Northern
Planting



Henry Lake Sons Company

Black River falls, Wisconsin

Press of
Rochester Lithographing Co.,
Rochester, N. Y.

Descriptive Catalogue

Henry Lake Sons Co.

NURSEYMEN

**Black River Falls,
Wisconsin**



Northern Grown Trees

**For Planting in the
North**

Preliminary Remarks

Our soil is a heavy upland clay loam, a timber or wood growing soil. On this soil we grow a grade of nursery stock unexcelled by any firm. The very best skill is employed in the production of our trees. No expense is spared in digging, handling, storing and packing the stock for shipment in order that the stock

sence in our lists of certain well known sorts.

Guarantee—We exercise the greatest care to keep varieties separate and true to name. It is mutually agreed between the purchaser and ourselves that we shall be held for no damage over and above first cost of stock, should mixture occur.

Replacing—We do not replace free. No reliable and responsible firm can do this without charging a higher price for all their stock to make up for this loss, which is decidedly unfair to those who properly plant and care for stock. Replacing is demoralizing both to the buyer and seller. It gives a premium and an incentive to carelessness and neglect. The best firms are all discontinuing this practice.



Pit for Winter Storage of Trees

arrives to the purchaser in live, thrifty, growing condition.

All fruit trees, plants and shrubs are dug in fall and stored in frost proof cellars with roots covered with damp material. We cannot compete in price with those who handle nursery stock as "junk."

Our lists of Fruit trees and plants are short. Our lands are too valuable to be used in growing undesirable varieties, yours should be. This explains the ab-

FALL OR SPRING PLANTING.

All the small fruit plants, Grapes, Currants, Gooseberries, Raspberries, Blackberries, Asparagus and Rhubarb should be planted in the fall, also all the hardy shrubs, and given a good mulch of coarse litter or manure for winter protection. If planted in the fall all of this list will make a much better growth and better stand than planted in the Spring. Usually one half to a whole seasons growth is gained.

All fruit and shade trees should be got in the Fall and buried in a pit, all below the surface of the ground as shown by cut, covered first with boards, then with earth sufficient to throw off the surface water. In the pit, the roots only need be covered with earth well sifted among the roots to exclude air. It is not necessary to make the pit frost proof, but it is VERY ESSENTIAL that the trees are buried all below the surface of the ground and covered enough to prevent hard freezing and to exclude water from the interior of the pit. We issue a special circular on how to bury trees for winter.

Fruit trees got in the fall and buried as directed are then in the hands of the planter, ready to be taken out of the pit very early in the spring, a cool, cloudy day, trenched upright in soil with roots well covered. At the earliest moment the ground is dry and friable enough,

they should be planted. In the fall the trees are as nearly dormant as possible to get them. There is less damage in handling them. They can be planted out much earlier than spring received stock, which means very much in our short northern summers for a tree to recover transplanting and get a new root system and established for the following winter. Early planted trees get a root system started during the cool days of spring when the soil has good moisture. In Spring received stock the circulation of sap begins early in the spring and is checked many times in handling this stock in getting it out of storage cellars, tying up and packing the orders, also by the planter when setting them out. Trees got in the spring rarely ever get the growth started before hot, drying winds prevail and the soil mois-

ture is deficient, consequently they make a poor growth the first summer and are in poor condition to withstand the first winter after planting out.

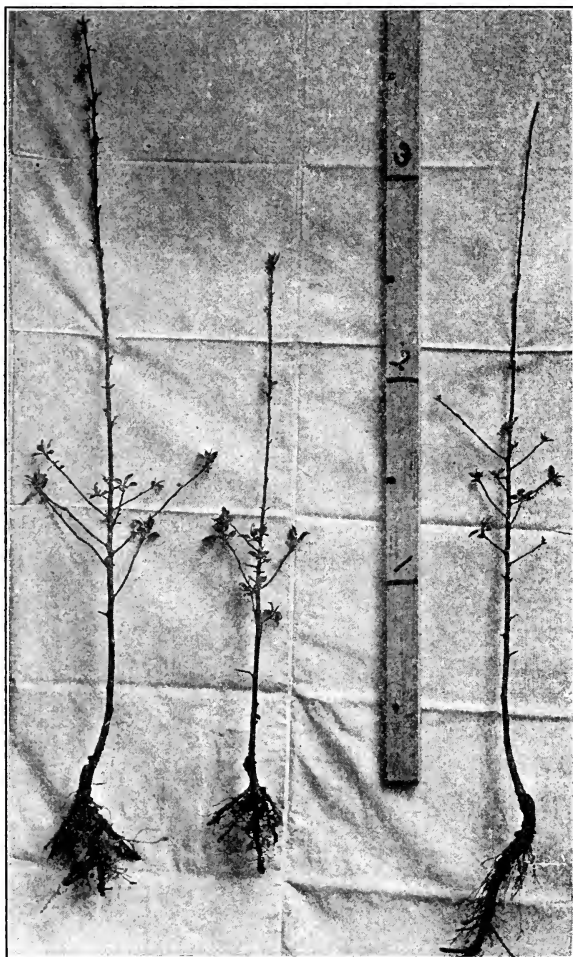
COMMERCIAL ORCHARDS.

For a commercial orchard, place your order far in advance of time trees are wanted for planting. This will insure getting first-class stock and varieties wanted. We are ready now to book your order for fall delivery 1911, and spring 1912. If you wait until you are ready to plant the trees, the nurseryman will get you what you order even if he has to telegraph all over the United States to get it. The trees usually grow some leaves, but do not always bear the kind of fruit as labeled.

Our terms are Cash.

TREE FRUITS.

In this latitude or any other, get your trees in the fall, bury in pit as directed previously in this catalogue, and plant them very early in spring as soon as the ground is dry and friable. Do not plant when soil is wet. Cut back the roots so none are more than 4 to 6 inches long. Cut small fibrous roots back to 1 to 2 inches. These roots are covered with an impenetrable cork so they absorb nothing and new growth begins only at the end where cut. You lose nothing by cutting back the roots, but gain much. Use no manure in soil, but tread very firmly with feet at planting time, leaving the surface soil loose. If you cannot cultivate among the trees, give heavy mulch of manure well away from the trunk of the trees so the new roots grow out under this manure, in cool moist soil.



Root pruned ready to plant (See description inside back cover).

APPLES.

Send for our Special Circular on Apple Trees if not enclosed.

SUMMER APPLES.

Tetofsky. Striped red and yellow; medium size; tree slow, stocky grower, very hardy. July and August.

Yellow Transparent. Of Russian origin and now largely planted, and succeeds everywhere. Very early and productive, of medium size, pale yellow, good quality. Tree bears very young. July and August.

Duchess of Oldenburg. A large, beautiful Apple, roundish, streaked red and yellow. Tender, juicy and pleasant. Tree a vigorous, fine grower and abundant bearer; very hardy. September.

FALL AND EARLY WINTER.

Wealthy. Originated in Minnesota. Fruit large, roundish; skin smooth, mostly covered with dark red; flesh white, juicy, good. Tree very hardy, vigorous and productive. Very profitable to plant. September to January.

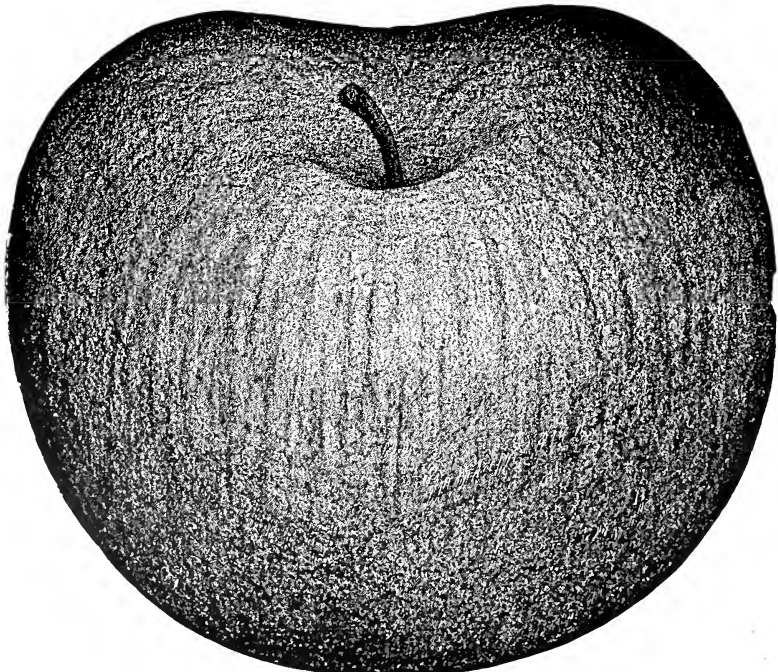
Dudley, or North Star. This is a seedling of the Duchess of Oldenburg, and is apparently as hardy and productive as that variety, but its season is about two months later. A very valuable variety.

Gem City (Townsend). Large, oblate, pale yellow marked with broad stripes of dark red; flesh very white, crisp, fine grained, slightly acid; quality good. Late winter.

Tuttle's Winter. Originated by the late A. G. Tuttle, Baraboo, Wisconsin, and considered by him the crowning effort of his life. In addition to the vigor and hardiness of the tree, it combines the important requisites of good size, beautiful color and fine quality of fruit. At the same time it is sufficiently productive to render it very profitable to the commercial grower. It keeps in ordinary cellar until spring. Form roundish, sometimes slightly oblate; size medium to large; surface smooth; color bright red; quality good to very good. Tree is hardy and very vigorous grower both in nursery and orchard; leaves large, glossy dark green; bark dark, rich color. We believe that the Tuttle's Winter and Gem City, both strictly winter apples, will bring Wisconsin to the front as an apple growing state.

Hanko. Large, oblate; deeply furrowed and ridged; color greenish-yellow; ground nearly covered with broad, broken strips of crimson, shaded with beautiful bright red; flesh greenish white, tinged with red; sub-acid; quality good. October to April.

McIntosh Red. Medium size, dark red, good quality, juicy, sub-acid. Tree a vigorous grower and hardy. November to February.



Tuttle's Winter

CRAB APPLES.

Whitney No. 20. Large, averaging $1\frac{1}{2}$ to 2 inches in diameter. Skin smooth, glossy, green, striped, splashed with carmine; flesh firm, juicy, and flavor pleasant; ripens the latter part of August.

Transcendent. A beautiful variety of Siberian Crab. Red and yellow. Aug.

Hyslop. A hardy, good-keeping variety. Fruit produced in clusters. Good for cooking and other purposes. Dark red, with heavy bloom.

Chippewa Crab. Found growing by the roadside in Chippewa County, Wisconsin. The original tree was trans-

planted by Robert Ritchie, of Boyd, Wisconsin, is still alive and bearing heavy crops. The tree closely resembles the Hyslop in bark and leaves. The fruit is about same size as Transcendent and same color except a little more striped with red; quality not so acid as the Transcendent, but very fine for cooking. The Chippewa Crab will keep in ordinary cellar until April. It is a prolific and annual bearer. The fact that it will keep through the winter, combined with its good cooking qualities, should make the Chippewa a very valuable market crab apple.

PLUMS.

De Soto. Medium to large, round-oblong, purple-red when fully ripe with moderate bloom; skin thick; flesh medium firm, good. Medium to late. This probably is more extensively grown than any other variety at present. Inclined to overbear, and fruit should be thinned to get best results.

Wolf. Freestone; large, round, yellow blotched with red; skin thick, flesh firm, meaty and good. Tree a stout, good grower, prolific. Medium season. Valuable for home use or market.

Wyant. Fruit medium to large, slightly oblong and distinctly flattened; purplish-red; semi-cling; thick skin; rich, yellow flesh, sometimes red next to stone; of good quality. A sure cropper. September 1.

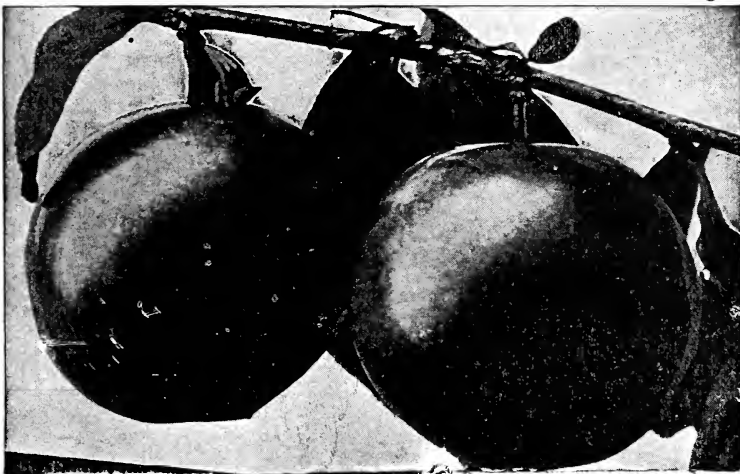
Surprise. Fruit large, dark purplish-red when fully ripe, covered with a heavy bloom and densely sprinkled with yellowish dots; flesh firm, tender and of the very best quality. Tree a fine grower.

Brittlewood. Origin Nebraska. Introduced about 1896. Fruit large, dark red, mottled with thick grayish bloom; flesh firm and of good quality. Said to be a cross of Harrison's Peach and Quaker.

Miner. One of the Chickasaw type; similar in quality to the Wild Goose; not so much subject to injury by the Curculio as most improved varieties; flesh vinous, adheres to the stone. September.

Shipper's Pride. Medium, round, bright red; core small; a good shipper; commences to ripen with the earliest and holds out with the last. Tree very vigorous.

Krikon. Originated in Sweden in 1901. Is one of the few blue plums that can be successfully planted in southern Minnesota. The tree is upright, requires but little pruning. Branches low, well adapted to open localities. Fruit medium sized; pit very small; skin thin; meat solid; very juicy and sweet.



Surprise

CHERRIES.

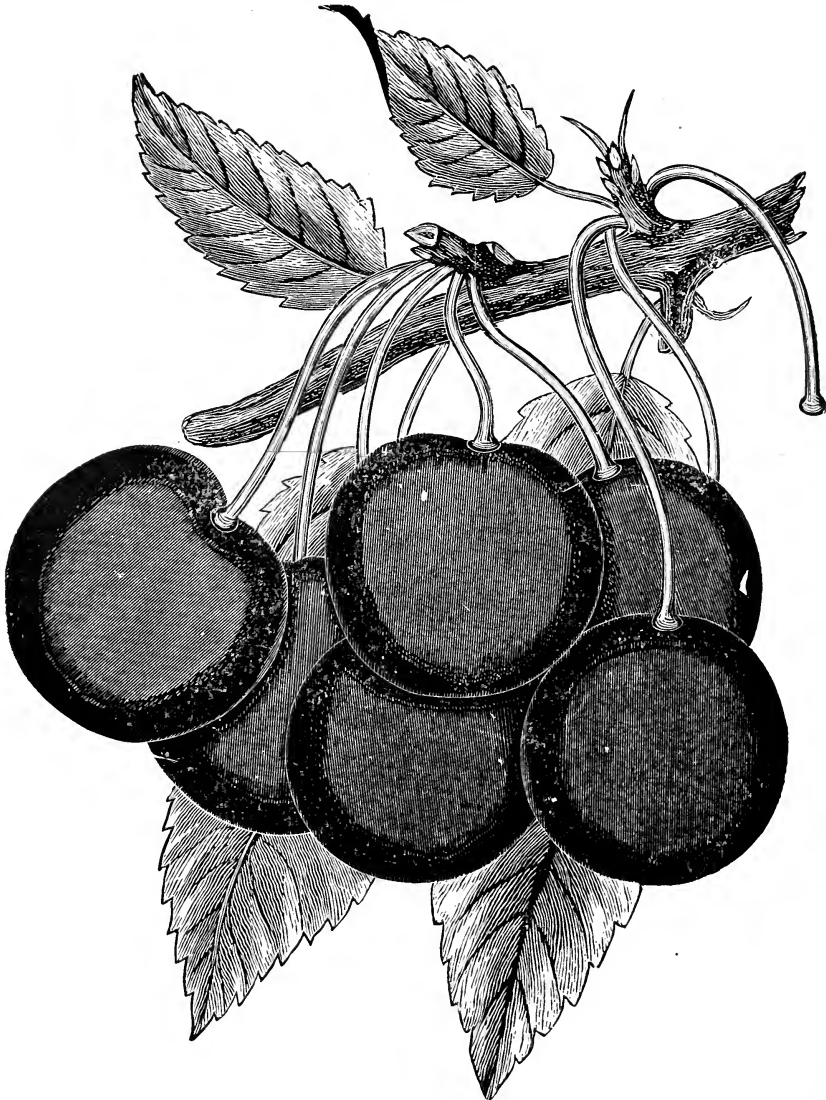
Early Richmond. Medium size, dark red, melting, juicy; sprightly, rich acid flavor. The stone adheres to the stem with remarkable tenacity. This is one of the most valuable and popular of the acid Cherries, and is unsurpassed for cooking purposes. Tree a slender grower with a roundish, spreading head, and is exceedingly productive. Ripens through June. Hardest sort in the list.

Homer. Fruit medium size juicy and acid; fine for cooking and pleasant to

eat when ripe. Perfectly hardy and an abundant bearer; very late.

English Morello. Large, dark red, nearly black, rich, juicy and good. One of the best late varieties. Very productive. August.

Compass. A new Hybrid, iron-clad Cherry, nearly an inch in diameter; bright red color; sweet, juicy and of very fine flavor. It is a regular and heavy bearer and bears fruit the next year after setting out.



Compass

PEARS.

Flemish Beauty. Large, pale yellow, russety-brown cheek, beautiful; melting, sugary and delicious; requires to be picked early. Tree vigorous, bears young and abundantly. One of the most hardy of all Pear trees; very popular. September to October.

ASPARAGUS.

Columbian Mammoth White. A new sort, with white shoots that remain white. Very large.

Palmetto. Extensively grown for market on account of earliness, large size and fine appearance. We consider it our best.

RHUBARB.

Victoria. Early, large and good, either for home use or market.

Queen. The extra large, tender stalks are a decided pink color. Delicious for cooking or canning. A very strong grower.



Moore's Early

GRAPES.

Worden. A splendid Grape of the Concord type, but earlier, larger in bunch and berry and of decidedly better quality; vine as hardy as the old stand-by and in every way as healthy.

Moore's Early (Black). One of the very best early black Grapes. Clusters medium size; berry very large. Ripens nearly two weeks before the Concord, and is about the same quality. Vine hardy. Should have a place in every fruit garden.

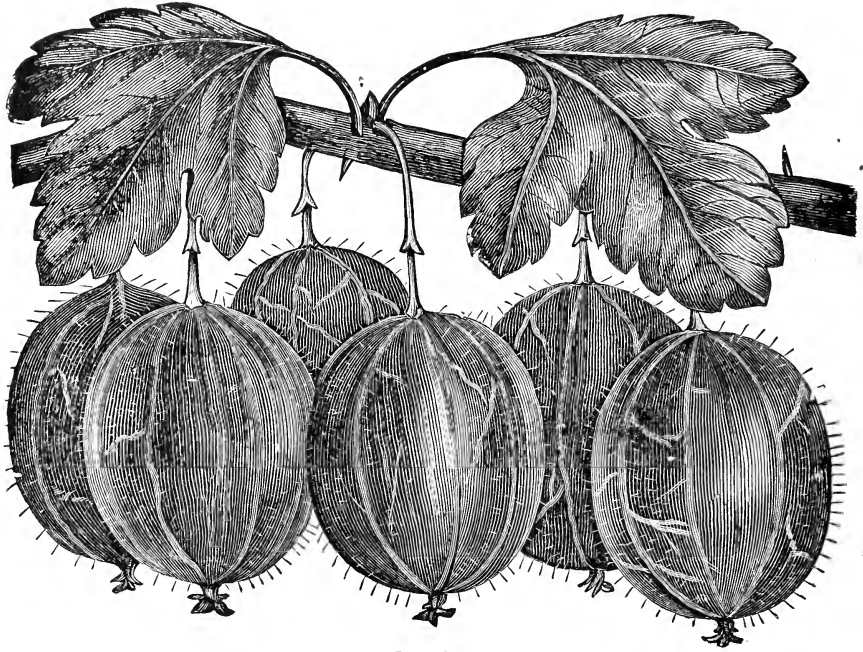
Campbell's Early (Black; new). Vine is a strong, vigorous grower, with thick, heavy, healthy foliage; bunch large, shouldered; berry large, nearly round, covered with a blue bloom; adheres to the stem; skin thick, does not crack, qual-

ity about same as Concord. Ripens about with Moore's Early.

Moore's Diamond (White). Bunch and berry large, excellent quality. Ripens with Delaware. Vine strong, healthy grower and productive.

Brighton (Red). Bunch medium to large, long, compact, shouldered. Berries of medium size, thin skin, flesh tender and of best quality. Vine hardy, vigorous and productive; ripens with Concord. Should be planted near other varieties, as it does not always fertilize when alone.

Delaware (Red). Still holds its own as one of the finest Grapes. Bunches small, compact, shouldered; berries rather small, round, skin thin, light red, flesh very juicy without any hard pulp, with an exceedingly sweet, spicy and delicious flavor.



Josselyn

GOOSEBERRIES.

Downing. This we consider the most valuable Gooseberry grown, always giving good crops of large, handsome, pale green berries of fine quality. Bush a vigorous grower, free from mildew and enormously productive.

Pearl. Similar to Downing, but fruit a little larger, very hardy, free from mildew and very productive; valuable for home use or market.

Houghton's Seedling. Small to medium; roundish oval, pale red, sweet, tender. Plants spreading, slender, very productive, free from rust.

Josselyn (Red Jacket). An American seedling that has been widely planted. Fruit is large and smooth. Bush is hardy, clean, healthy and productive.

Carrie. Originated in Minnesota. Fruit red. After the third year, bush loses its thorns; very heavy bearer, medium size; excellent quality.

CURRENTS.

Improved Red Dutch. An old standard sort. Berry medium size, good quality; plant a strong, upright grower; productive.

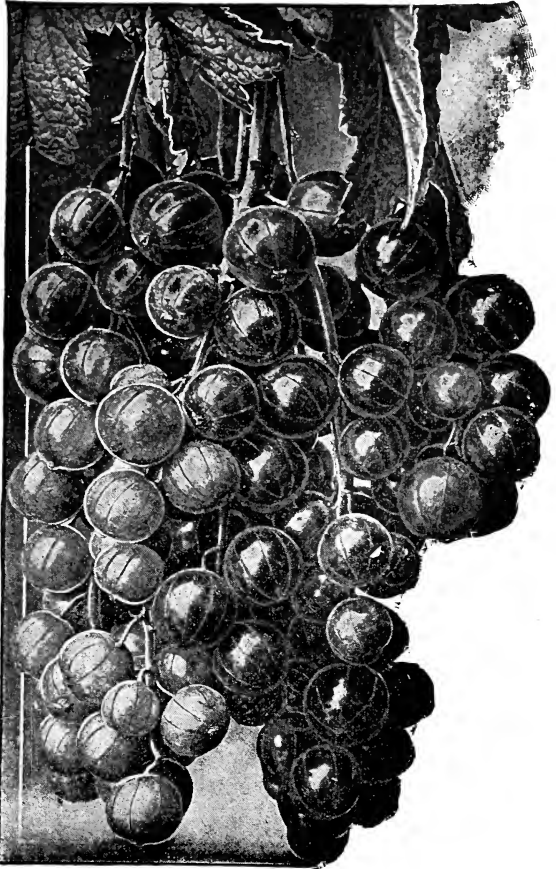
Pomona. A fine market sort of good size, color and quality; will hang on the bushes for some time after ripening, and market well. Bush is an open, vigorous grower and very productive.

Perfection. A variety that originated in New York, and has received many medals and prizes where it has been on exhibition at Horticultural Societies and exhibitions. It is a beautiful bright red in color. Size equal to Fay, the cluster averaging longer, with good, long stem, making it easy to pick. Equal in productiveness to any of the large sorts. The quality is rich, mild, sub-acid with few seeds. One of the best varieties for table use. The bushes make good growth and have an abundance of large, healthy foliage.

White Grape. The best table variety, large and luscious. A good grower and productive.

Lee's Prolific. Bush a strong grower; berry good size and productive.

Black Victoria. A new black currant of great promise; long bunches and good size berries, a very heavy cropper; robust habits.



Perfection

RED RASPBERRIES.

Minnetonka Ironclad

Minnetonka Ironclad. Originated near Lake Minnetonka, where the demand for the last five years has been greater than the supply. It has given such immense satisfaction to the fruit growers at Long

Lake that it is almost impossible to buy any plants from those who have it. The berry closely resembles the Loudon in color; same excellent quality for canning, unlike some berries it does not go to pieces in the process of canning, retains color, form and flavor remarkably, and does not shrink. Bush does not resemble the Loudon. It is healthy and vigorous, of a somewhat drooping habit, and bends almost to the ground beneath its load of fruit, reminding one of that immensely productive old variety, Philadelphia. True to its name it is an ironclad, and the best variety

ever introduced for the farmer who does not give any winter protection. Berries large, beautiful, rich, dark crimson color, firm and of excellent quality. Outyields any other red variety we have ever seen.

Marlboro. Fruit of very large size, of a bright scarlet color, excellent flavor, firm, a good shipper. Canes very large and strong; foliage dark green, perfectly hardy, exceedingly productive, and commences to ripen early. A profitable market variety.

King. The earliest red Raspberry on record. It is the early red Raspberry that makes the big money—often sell for 25 cts. per quart. You want to add this to your collection. Round, medium size; light crimson-colored; firm and of excel-

lent quality. A seedling of Thompson and ripens about the same time, but larger and more productive. King is in a class by itself. Nothing compares to it in yield, beauty, firmness or size. Supply very limited, order at once.

Herbert. A very hardy cane, strong and vigorous; fruit bright red, somewhat oblong; the largest of all red Raspberries, larger than Cuthbert or Loudon; flavor very sweet and juicy, very best for table use. Enormously productive.

Cuthbert (Queen of the Market). A strong grower and very productive; very large, bright red, fruit firm, of very fine quality. Season medium to very late; a good one for market or home use. It is doing well everywhere. Needs winter protection.

BLACK RASPBERRIES.



Plum Farmer

PURPLE RASPBERRIES.

Columbian. The strongest-growing variety on our grounds. Fruit large, dark purple and of good quality; excellent for canning. Hardy, very productive, and, taken all together, one of the most desirable sorts we have.

Plum Farmer. This is the introducer's description: It is the largest, most productive, best colored and most attractive black-cap in cultivation. The plants are models of growth, very vigorous, clean growers, presenting a silvery bluish appearance when not in leaf. It succeeds where other black-caps fail. The fruit is not jet-black but has a grayish appearance with bloom. It is early and ripens the bulk of its crop in a short time. The fruit is enormously large, sometimes measuring a full inch in diameter. The berry growers in this locality have gone wild over it. It sells for the highest price in the market. This berry is being planted extensively in Wisconsin and bears out the introducer's statements fully.

Cumberland. The largest black Raspberry known. It has been well tested and is giving the best of satisfaction. The quality is of the best, and, in spite of its great size, is very firm; ripens mid-season. The canes are very large and strong and able to carry their load of fruit.

Kansas. This is a general favorite with all who have grown it. Ripens early. Berries nearly or quite as large as the Gregg; jet black, firm, handsome and of best quality.



Eldorado

BLACKBERRIES.

Ancient Briton. A popular variety in many sections. Sells well in market and is very profitable; berries large and sweet. Does better on sandy land than on heavy soil. Requires winter protection, but is well worth the little labor this costs.

Eldorado. Perhaps the most valuable Blackberry for our northern climate. The berries are large, jet black, ripen well together and are borne in large clusters; they are sweet and delicious, have no hard core, and keep well after picking.

Lucretia Dewberry. A variety of the low bush or running Blackberry, ripening before black raspberries are gone. Fruit large, jet-black, and very showy, often measuring from 1 to 1½ inches in length. Plant four by six feet, and cut the new canes back, not allowing them to get more than four or five feet long. Very easy to cover on account of its trailing habit.

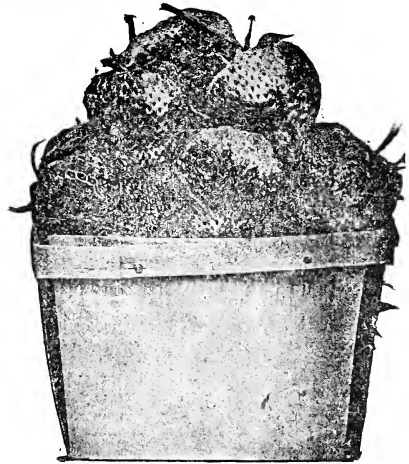
STRAWBERRIES.

Warfield (Imp.). One of the most popular Strawberries to-day. It is a very vigorous grower, with long, penetrating roots and rather tall foliage, which protects blossoms from late spring frosts. It is one of the best of shippers, and its rich color, large size, fine shape and good flavor make it an almost perfect market berry; unequalled for canning purposes, and, taken all together, we consider it one of the most valuable varieties for the general grower that we have thoroughly tested. Dunlap is a good fertilizer for this variety.

Virginia. We can offer it to our customers with great confidence. The plant is a healthy, luxuriant grower; sends out many runners, bears abundantly. The fruit is large and far above the average in quality and appearance.

Lovett (Per.). Succeeds generally in any soil or locality. It is one of the tough, hardy varieties. The fruit is firm, medium to large size, conical, and of good color and quality. Season medium. Good fertilizer for Warfield, Crescent, etc.

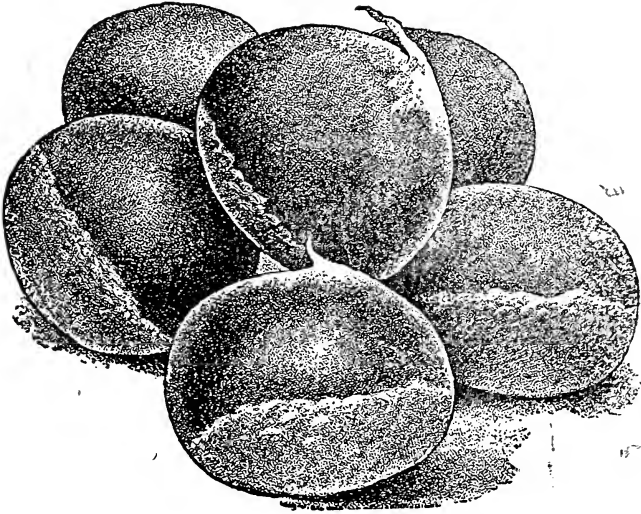
Senator Dunlap (Per.). We firmly believe this to be the greatest all-round berry now on the market. In the first place, the plant is perfect, not large, but tough, bright, a rampant runner, and ready to grow under any circumstances. It is wonderfully productive, and every



Warfield

berry is generally brought to perfection. The fruit is beautiful, bright red and glossy, as regular as if cast in a mold, never known to be misshapen and of delicious quality. Large, but not the largest, firm, a good shipper and splendid keeper, and, when canned, one of the richest varieties we ever saw. It begins to ripen early and continues a long time in bearing. Needs plenty of room; a splendid sort to plant with Warfield.

Additional list on application.



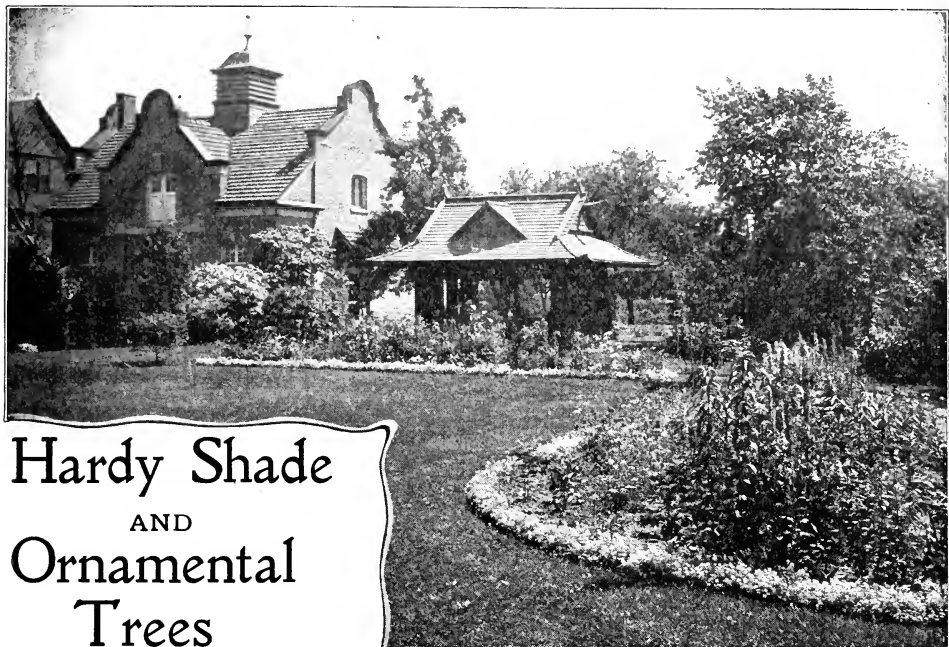
American Sweet Chestnut

NUT TREES.

Chestnut, American Sweet. 40 to 50 feet. A native of the eastern states. The nut is sweet and of nice flavor.

Black Walnut. 40 to 50 feet. The tree is of large size, good form and foliage; a valuable timber tree; nut is round and of good quality.

Butternut, or White Walnut. 20 to 40 feet. A native tree of spreading habit that produces a rough, longish nut, the kernel of which is sweet, oily and rich.



Hardy Shade AND Ornamental Trees

Two thousand years of change have made the English people enthusiastic lovers of enduring things. A thousand years from now the Americans will have the same spirit and America will be quite as mellow as England. For half the trees one can then see in any direction will be a century or more old. And they will not be trees we now plant by the million, such as poplars, willows, soft maples, and others. They will be Oaks, Elms, Lindens, and the like, for slow-growing trees are the only ones that can achieve great age and stature.

On a great estate trees are a big item, because they form the frame-work of every home picture. But city and suburban lots are so small that only a few large trees, if any, are desirable, and we must always look to shrubs as the main attraction.

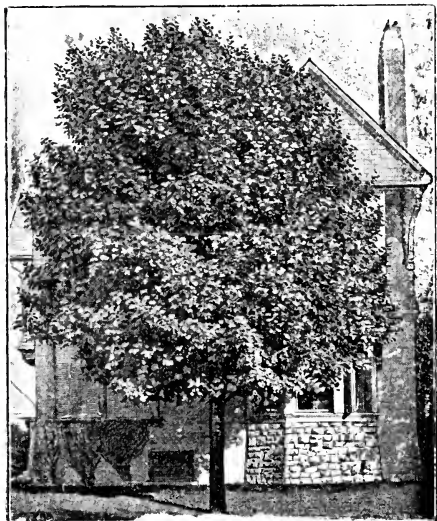
ACER. Maple

This group of trees is hardy, easily transplanted and comparatively free from disease. They are equally valuable for street or lawn planting. Wier's and Schwedler's make very fine lawn specimens. The North American species, especially, have very brilliant colored foliage in the fall.

A. dasycarpum (Soft or Silver Maple).

50 to 60 feet. Of rapid growth, large size and irregular rounded form; foliage bright green above and silvery white beneath. Tree very hardy and easily transplanted. Valuable where quick shade is wanted.

var. *Wierii laciniatum* (Wier's Cut-leaved Silver Maple). 35 to 40 feet. This is a variety of the Silver-leaved Maple, with cut or dissected foliage. Its growth is rapid, shoots slender and drooping, giving it a habit almost as graceful as a cut-leaved birch. A very desirable tree.



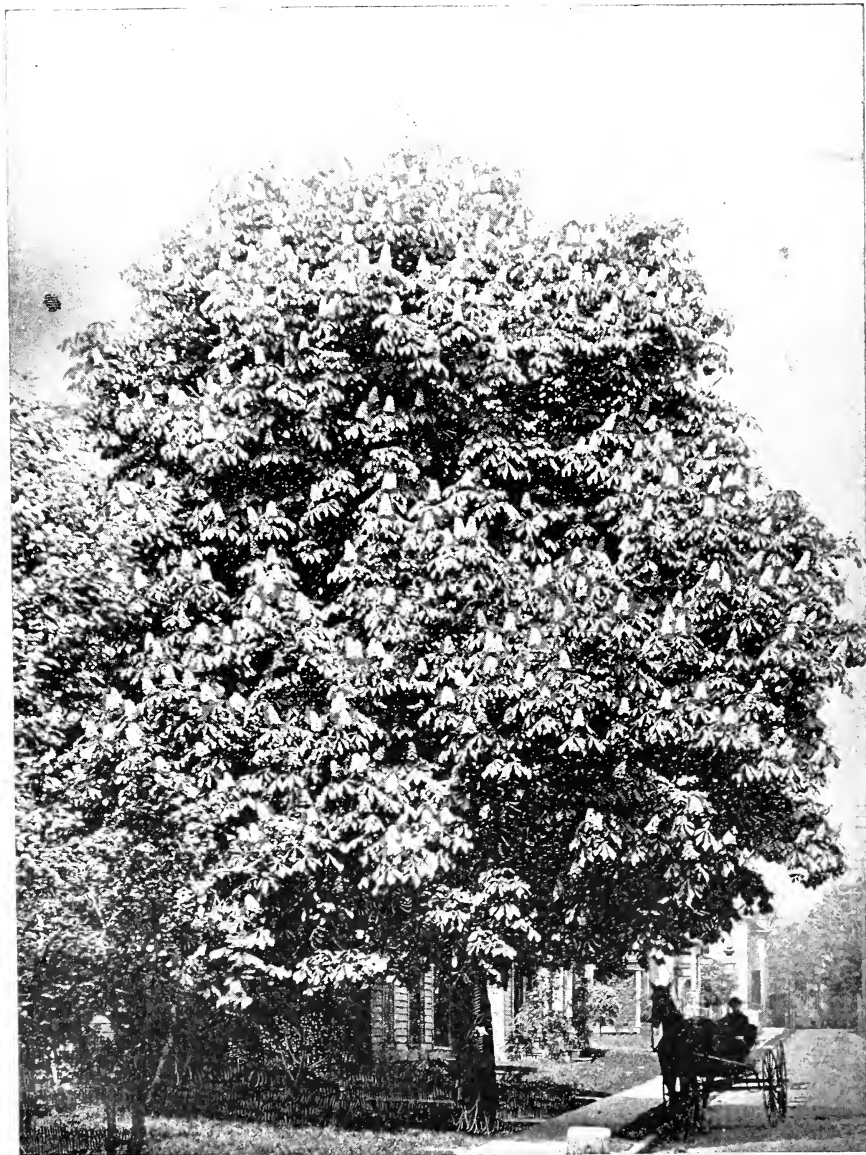
Sugar Maple

A. Ginnala (Siberian Maple). Of dwarf and compact habit, with medium or small leaves. Makes a very pretty small tree, or can be used as a large shrub, perfectly hardy. Brilliant crimson in autumn.

A. Negundo (Ash-leaved Maple Box Elder). 30 to 40 feet. A native tree, easily distinguished by its ash-like foliage of light green color. Well adapted to a great variety of soils and locations, is hardy, a very rapid grower, and therefore especially valuable where quick shade is desired.

A. platanoides (Norway Maple). 40 to 50 feet. The most popular of the Maple family for lawn or street planting; of fairly rapid growth; forms a well-rounded head, with large, deep green foliage that holds its color until late autumn. Is very free from injurious insects.

A. Specatum (Mountain Maple). A very attractive native species of moderate growth; leaves medium size, rough, three to five lobed, somewhat pointed; flowers greenish, in closely branched clusters becoming pendulous.



Horse Chestnut

AESCULUS. Horse-Chestnut.

A valuable tree, having large spikes of flowers in May and June. Do best in a deep, rich soil, as on dry soil the leaves are liable to blight and drop early in the season.

AE. glabra (American Horse-Chestnut, or Buckeye). 50 to 60 feet. The fastest grower of this species. Leaves smooth, flowers yellow; blooms before others.

BETULA. Birch.

The trees of this group are hardy, and succeed on light soils as well as in ordinary locations. Their light, airy foliage, graceful form and beautiful bark make them valuable for either landscape work or lawn specimens.

B. lutea (Yellow Birch). Very rapid grower, yellowish gray bark.

B. laciniata (Cut-leaf Weeping Birch). 30 to 40 feet. Beyond question one of the most elegant of all weeping or pendulous trees. Its tall, slender, yet vigorous growth, graceful, drooping habit, silvery white bark and delicately cut foliage present a combination of attractions rarely met with in a single tree.

Carpinus Caroliniana

(Blue Beech). A native species, growing from 15 to 20 feet high. In its mode of growth, quite similar to the Beech, but the foliage is thinner and more irregular in form.

CATALPA.

C. speciosa (Hardy or Western Catalpa). 30 to 40 feet. A valuable, upright, rapid-growing tree, that is being extensively planted in the West for railroad ties, telegraph poles, etc. The flowers (which appear in June) are borne in large clusters, are creamy white, slightly mottled inside, and are followed by long, bean-like pods that remain on the tree during the winter. Leaves are very large, yellowish green.

CERASUS. Cherry

C. serotina (Wild Black Cherry). 30 to 35 feet. Blooms in May. Flowers are white, followed by small fruit that ripens in August.

CRATAEGUS. Thorn.

C. Crus-galli (Cockspur Thorn). 10 to 12 feet. Very pretty dwarf tree with wide-extended branches, giving it a flat top effect. Flowers white tinged with red; fruit scarlet, hangs on well.

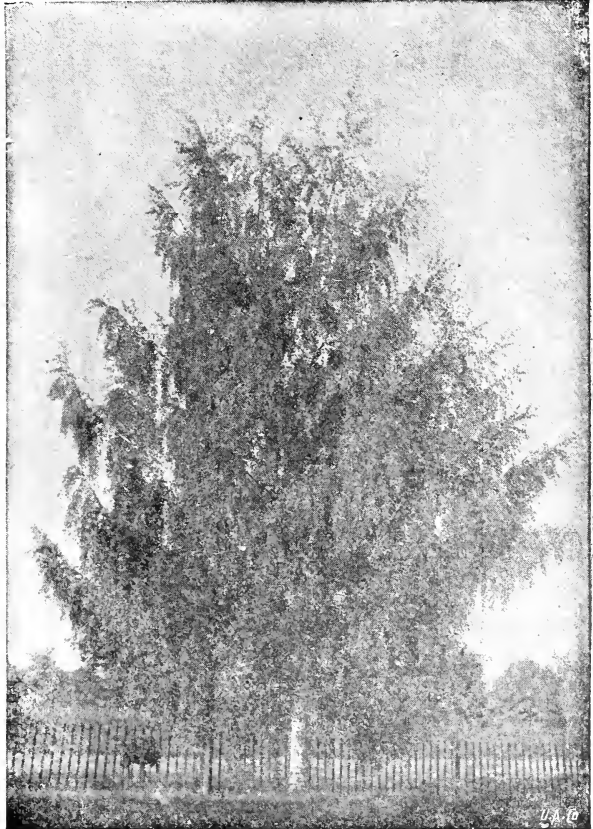
C. Cordata (Washington Thorn). A very desirable species, with beautiful fall-coloring and large clusters of bright red fruits, remaining a long time on the branches.

C. Mollis. One of the most decorative species, with large, bright green foliage and showy flowers and fruits; ripening in September.

FAGUS. Beech.

The Beeches are hardy and thrive best in a deep, rich clay soil. The glossy foliage and gray bark form a fine contrast. The best success will be obtained by planting small specimens and pruning severely at time of transplanting.

F. Americana (American Beech). 40 to 50 feet. One of our finest native trees.



Cut-Leaf Birch

LARIX. Larch.

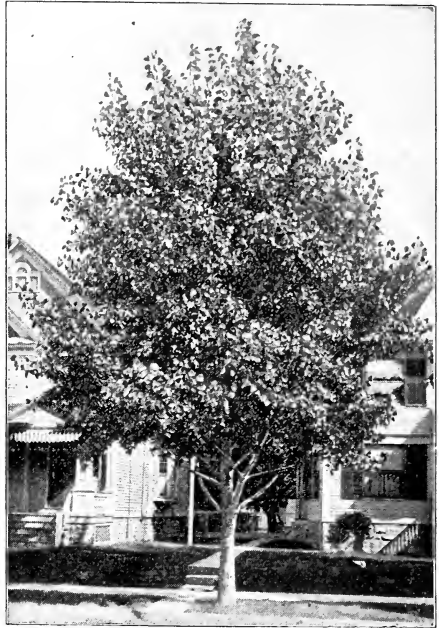
L. Americana (American Larch). 40 to 50 feet. A lofty, rapid-growing pyramidal tree, with small drooping branches and delicate feathery foliage. Valuable for timber.

POPULUS. Poplar.

P. alba, var. Bolleana (Bolle's Poplar). A very compact, upright grower, resembling the Lombardy Poplar, with leaves glossy green above and silvery beneath.

P. fastigiata (Lombardy Poplar). Attains a height of from 100 to 150 feet. Well known and remarkable for its erect, rapid growth and tall, spiry form. Indispensable in landscape gardening, to break the ordinary and monotonous outlines of most other trees.

P. monilifera (Carolina Poplar). Pyramidal in form and robust in growth; leaves large, glossy, serrated; pale to deep green. One of the best. Valuable for street planting, also for screens. Very rapid grower.



Carolina Poplar



American Linden

SALIX. Willow.

S. laurifolia. 20 to 25 feet. A rapid-growing tree that deserves a larger place in our landscape work than it receives. Its dark, glossy foliage makes a fine background for shrubbery; also valuable for screens, as it bears shearing well. Bark bright green; is very showy in winter, easily transplanted, and thrives in a variety of soils.

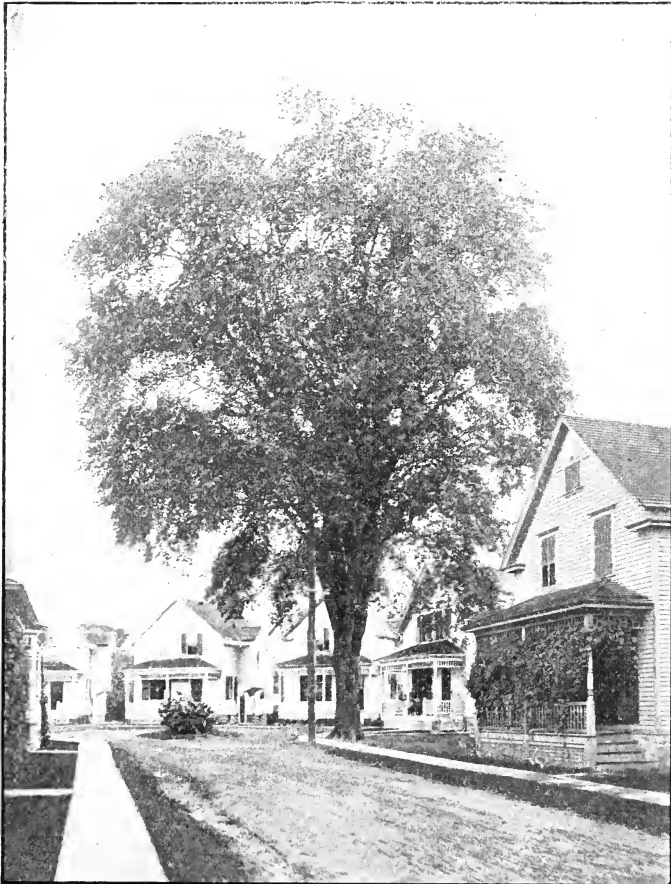
S. vitellina (Golden Willow). Very effective in winter seasons when planted in groups, on account of its yellow bark. Should be severely trimmed each season to produce plenty of new growth.

ULMUS. Elm.

U. Americana (American White Elm). 50 to 60 feet. In our estimation has no superior for street planting or large lawns. Of large size, rapid growth, and wide-spread branches, that droop gracefully with age. With the rest of this genus, it prefers a low, damp location, but will do well in any ordinary soil. Should have plenty of room to develop.

TILIA. Linden.

T. Americana (American Linden, or Basswood). 50 to 60 feet. One of the best large-sized, rapid-growing trees. Suitable for either street or lawn planting. Should be given plenty of room to develop. Foliage large; flowers, borne in large clusters, are very fragrant.



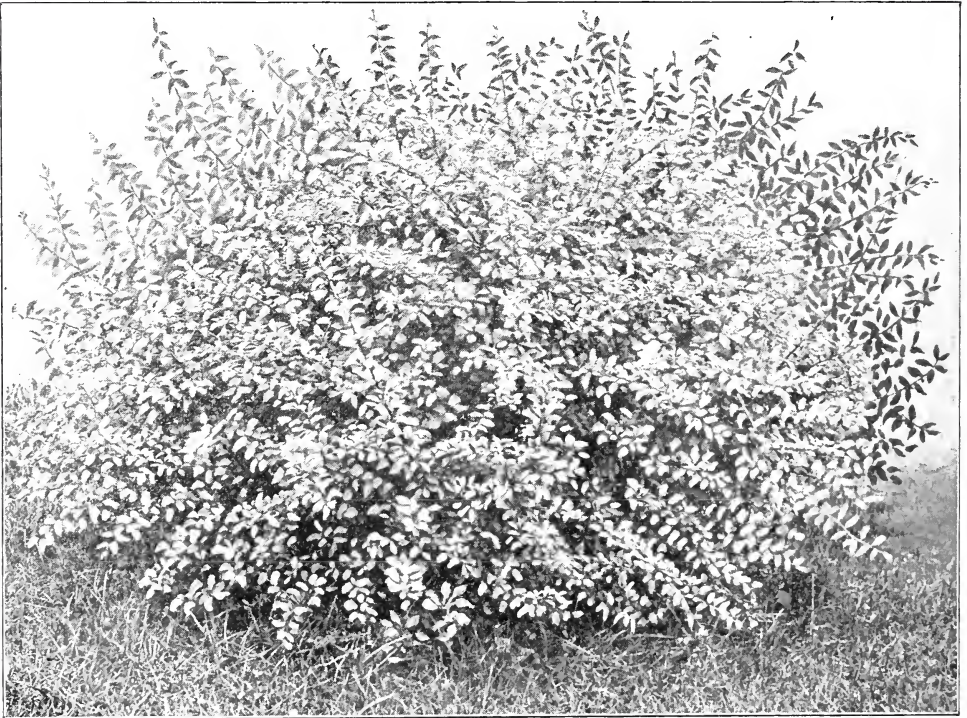
American White Elm

Hardy Shrubs

We believe the instinct of the American people in making shrubbery a National Institution is thoroughly sound. The American idea is to have the front ground of every small place composed of an unbroken lawn flanked by irregular borders of shrubbery; this frank open treatment which subordinates the individual's rights to the park-like effect of the whole street is a fit expression of a Democratic people. But if we have the right instinct about shrubbery, we are pitifully weak in carrying out the idea, for the ordinary shrubbery is attractive only two months of the year and an eyesore for five. This is simply because the only shrubs we all know are those with showy flowers, all of which are totally devoid of interest for five-eighths of the year, while most of them are also common place in foliage, the same is true of a vast majority of shrubs that are famous for their flowers. It is absolutely impossible to get artistic effects by this method.

Flowers are not the main object, they are only an incident, the principal thing is the form, texture, and density of the foliage masses, and their ways of carrying lights and shadows, for any particular shrub blooms only a short time; what you have to live with every day for seven months is foliage. It is all wrong to try and make the shrubbery brilliant in midsummer; it is bad enough to have our autumn landscape made monotonous by too many top heavy hydrangeas in every yard. It makes for restlessness, not repose. In other words what we ought to have in every home shrubbery, is flowers in spring, foliage in summer that is so restful and cooling, vivid colors in autumn, bright, ruddy berries and branches in winter. Against the snow those fiery berries give a warmth and coziness to the landscape that is unequalled. If you want to wake right up to our heaven born opportunity, and have your eyes opened to a new world of beauty, plant your grounds with reference to twelve months instead of two or three.

Our soil is especially adapted for growing a very high grade of shrubs with bright clean bark and foliage, typical of the rich woods of Wisconsin. We make a specialty of native shrubs.



Berberis Thunbergi



Viburnum—Lantana

AMELANCHIER. Mespilus.**Juneberry**

- A. Canadensis** (Shad-bush). 25 to, 50 feet. One of the handsomest of the early flowering smaller trees, its racemes of snow-white flowers appearing in profusion in April. Fruit edible.
- A. botryapium.** An American species known as "June Berry," "Wild Pea," "Service Tree" and "Shad Blow." Grows 30 to 40 feet high, of festigate form; flowers white, produced in great profusion early in April, succeeded by a small fruit of purplish color; ripe in June and pleasant to the taste.
- A. rotundifolia** (Round-Leafed Dwarf June Berry). It has broad, roundish foliage and rather smaller petals than the species. A very pretty little shrub of easy cultivation, growing 4 to 6 feet high.

BERBERIS. Barberry.

The Barberry is fine for grouping with other shrubs or in masses by itself. The foliage is good at all seasons, the green varieties turning to crimson in autumn, and all have yellow flowers in May or June, followed by bright red berries that are carried well into winter. They are of quick growth, hardy and succeed on any well-drained soil. Their sharp thorns also make them useful as hedges.

Berberis Thunbergi (Thunberg's Barberry) 2 to 3 feet. From Japan. A pretty species, of dwarf habit; small foliage, changing to a beautiful copper-red in autumn. Makes a beautiful, low, ornamental hedge; also very effective in groups. Stands shearing well.

- B. vulgaris** (Common Barberry). 5 to 8 feet. A native species, forming a large shrub with handsome, distinct foliage and yellow flowers from April to June, succeeded by bright-colored fruit.
- B. purpurea** (Purple-leaved Barberry). An interesting shrub, growing 5 to 8 feet high, with purple foliage which retains its color all summer. Blossoms yellow in May or June and bright-colored fruit in autumn.

CARAGANA.

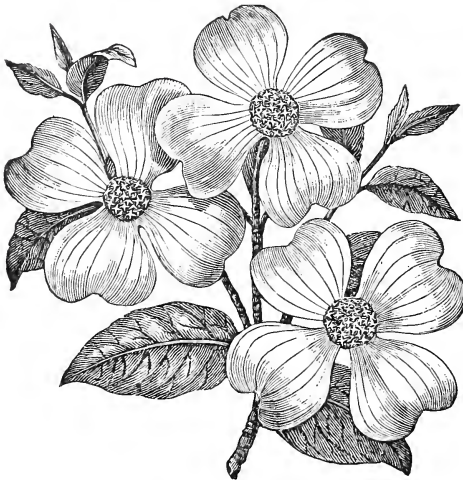
- C. arborescens** (Pea Tree). 8 to 10 feet. A large shrub or small tree. The flowers are pale yellow, pea-shaped, and are borne in great abundance in May. Good for massing, but should be kept somewhat in the background. Very hardy.

CHIONANTHUS. Fringe Tree.

- C. Virginica** (White Fringe Tree). 10 to 20 feet. In favorable locations this develops into tree-like proportions. The contrast between its large, deep green, thick, leathery leaves and the loose drooping bunches of white flowers resembling silken fringe is fine; blossoms in May or June.

CORNUS. Dogwood.

- C. Siberica alba** (Red-branched Dogwood). A shrub 6 to 8 feet with erect stems and bright, blood-red branches. Makes a striking effect in winter. Very useful in mixed borders of shrubs.



Dogwood—Alba

- C. stolonifera** (Red-twigged Dogwood). This is often confused with *C. alba*, which has erect branches, while *C. stolonifera* is of a spreading habit and the branches are of a dark purplish-red color. Fruit white or lead colored.



Dogwood—Variegated

- C. alternifolia** (Alternate-Leaved Dogwood). Flowers creamy white in large bunches, very fragrant; foliage large. Distinct and curious in habit of growth.
- C. amomum** (Silky Dogwood). A native shrub, found usually in low, damp soil, but succeeding well on high ground also. Bark purplish; leaves have a silky pubescence on the under side; fruit pale blue; growth less rapid than in most other species.
- C. Baileyi**. A shrub of erect growth with reddish branches. The foliage is highly colored in autumn and the wood, in winter, is dull red.
- C. paniculata** (Gray Dogwood). Smooth, ash-colored bark; pointed leaves, light green above, whitish beneath; flowers greenish white; fruit white.
- C. Siberica, elegans** (Variegated Dogwood). In the winter this is the most showy of all the shrubs, standing out bright and cheerful with its brilliant red bark. It should be planted in groups where its color effect is visible at a distance. It has healthy, compact foliage, white flowers and white berries.

HAMAMELIS. Witch Hazel.

- H. Virginiana** (Common Witch Hazel). 6 to 7 feet. A native of the Atlantic states. Small yellow flowers, which appear late in the fall.

DEUTZIA.

- D. hybrida Lemoinei.** A hybrid obtained by crossing the well-known *Deutzia gracilis* with *Deutzia parviflora*. Flowers pure white, borne on stout branches, which are of upright growth. Habit dwarf, and free-flowering. A decided acquisition.

EUONYMUS.**Strawberry Tree.**

- Euonymus Americanus** (Strawberry Bush). A slender-growing shrub, with shining foliage and deep scarlet fruit.

DIERVILLA. Weigela.

- D. Eva Rathke.** 6 to 8 feet. A charming new *Weigela* with bright crimson flowers; a beautiful, distinct, clear shade. Blooms all summer.
- D. rosea** (Rose-colored *Weigela*). 6 to 8 feet. The best known of the *Weigelas*. An elegant variety with fine rose-colored flowers in June.

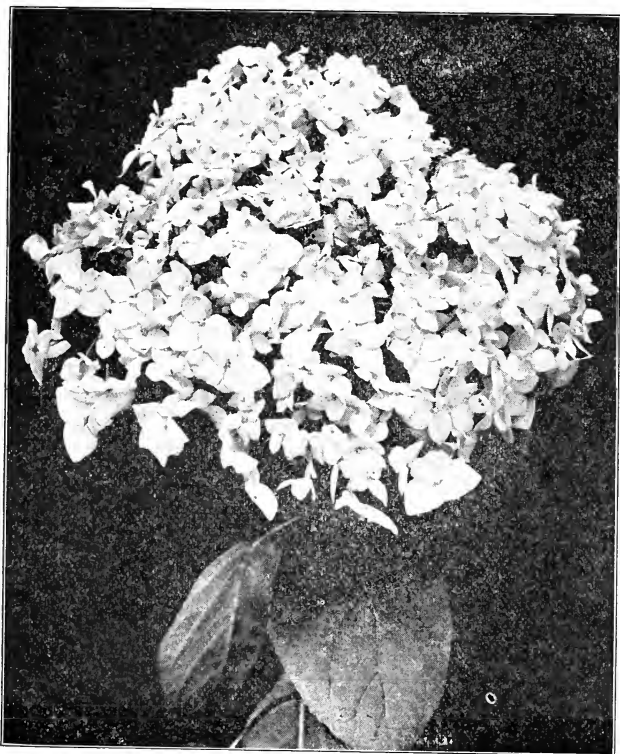
FORSYTHIA. Golden Bell.

These are pretty shrubs of medium size. Natives of China and Japan. The flowers are drooping, yellow, and appear very early in spring before the leaves. Bush hardy, but flower buds-kill in severe winters.

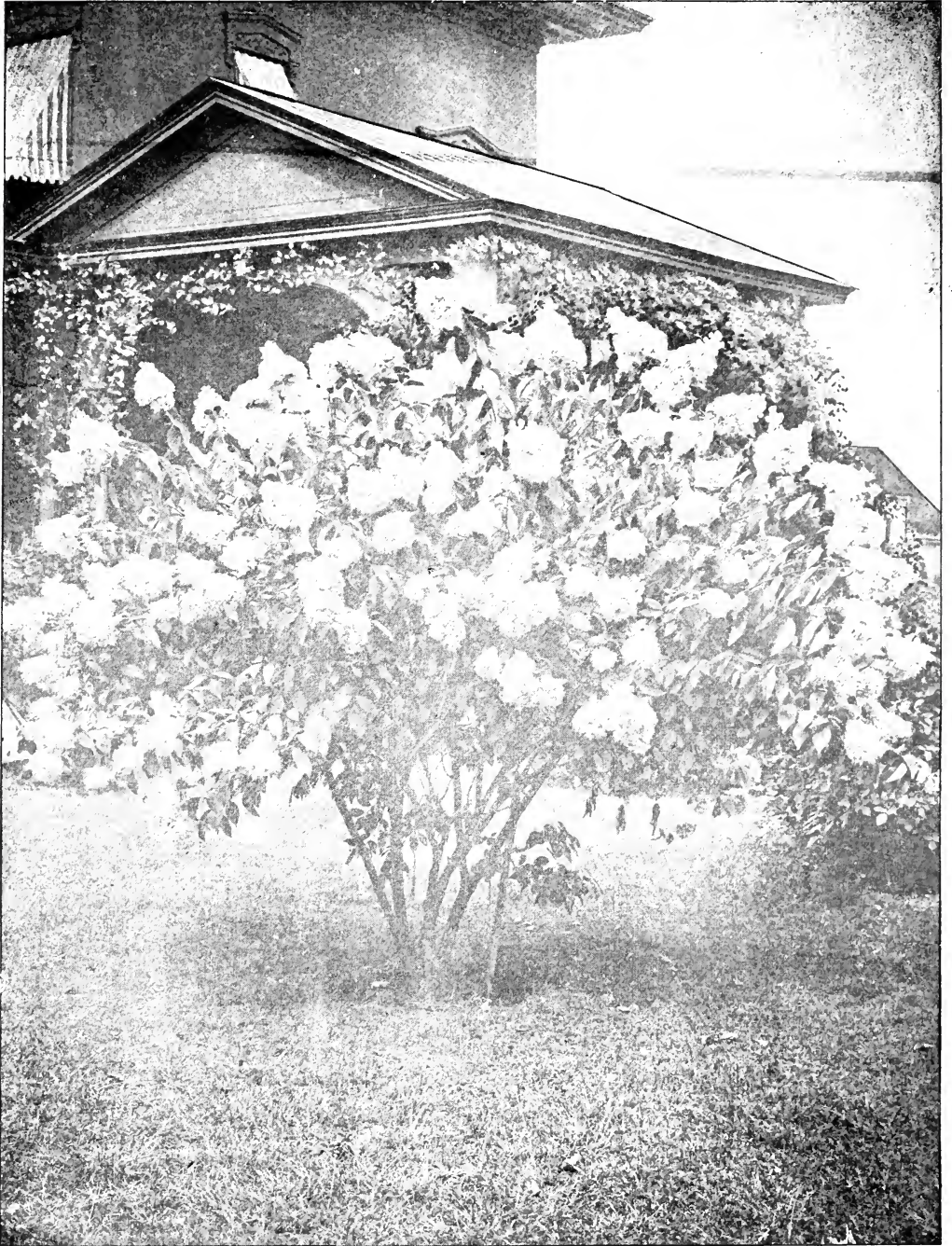
- F. Fortunei** (Fortune's *Forsythia*). 5 to 6 feet. A strong grower, with rich green foliage; flowers dark yellow.

HYDRANGEA.

- H. arborescens grandiflora alba.** This magnificent hardy American shrub is the very finest addition to this class of plants found in many a year. The blooms are of the very largest size, of pure snow-white color, and the foliage is finely finished. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring shrubs, while its long period of bloom—from early June through August—makes it doubly valuable, not only to the florist, but to every owner of a garden. Perfectly hardy. The habit of the plant is excellent. It is bound to become the most widely grown and the most useful of



Hydrangea Arborescens



Hydrangea Paniculata Grandiflora

all the Hydrangeas, and one of the most valuable shrubs found in the American garden.

H. paniculata grandiflora (Hardy Hydrangea). 5 to 6 feet. One of the best shrubs in cultivation. Is a strong grower and produces large panicles of white flowers in August that change to a delicate pink and then green, lasting until winter. To produce best results should be grown in rich soil with plenty of manure, and be severely pruned each season, as the bloom is produced on the ends of the new wood. Very showy and effective.

ILEX. Holly.

Ilex verticillata (Black Adler). Glossy, dark green foliage and bright crimson berries late in fall. Ornamental. 2 to 3 feet.

LONICERA. Bush Honeysuckle.

The following sorts are of erect, upright growth. The flowers are followed by small berries. (See climbing vines for other Honeysuckles.)

- L. Morrowi.** 4 to 5 feet. From Japan. Bush an upright grower; blossoms are white and appear in May and June. The bright red berries that come in autumn are, however, its chief attraction.
- L. tartarica alba.** A beautiful shrub with large white flowers in early spring.
- L. tartarica rubra.** Similar to white Tartarian, with red flowers.
- L. tartarica rosea.** A fine sort with large bright pink flowers, striped with white, in June.



Syringa

PHILADELPHUS.

Mock Orange; also known as Syringa.

Are mostly large shrubs, growing from 6 to 10 feet high. Of vigorous habit, very hardy, with large, handsome foliage and beautiful white flowers produced in great profusion. They merit a place in every collection of shrubbery.

P. coronarius (Garland Syringa). 5 to 6 feet. One of the first to bloom. Pure white, highly scented flowers.

P. aurea (Golden-leaved Syringa). A very pretty plant, growing 4 to 5 feet high, with golden yellow foliage. It keeps its color the entire season and is valuable for planting with purple-leaved shrubs.

P. Gordonianus (Gordon's Syringa). A vigorous grower and profuse bloomer; flowers slightly fragrant; blooms late, and valuable on that account.

P. boule d'argent. Flowers double; pure white.

RHUS-SUMACH.

R. Glabra (Smooth Sumach). Very effective in autumn with its crimson seeds and foliage.

R. var. laciniata (Cut-leaved Sumach). A very striking plant, of moderate size, with deeply cut leaves resembling fern leaves; dark green above and glaucous below, turning to rich red in autumn.

RIBES. Currant.

These shrubs are of easy culture and produce an abundance of very fragrant flowers in early spring. Hardy.

R. aureum (Missouri Currant). Has long been in cultivation and greatly esteemed for the delightful, spicy, fragrance of its rich, golden yellow flowers. Fruit is brownish black and edible.

R. alpinum (Mountain Currant). Early yellow flowers in showy racemes. Glossy foliage which gives brilliant autumn tints. Height 2 to 3 feet.

RHAMNUS. Buckthorn.

R. catharticus (Common Buckthorn). 8 to 10 feet. A very useful hedge plant. Foliage dense and dark green. Has attractive white flowers in June and July.



Sambucus Aurea

SAMBUCUS. Elder.

Large, rapid-growing shrub that blooms in June; flowers white. They are grown chiefly for the foliage effect; require severe pruning to keep them in shape.

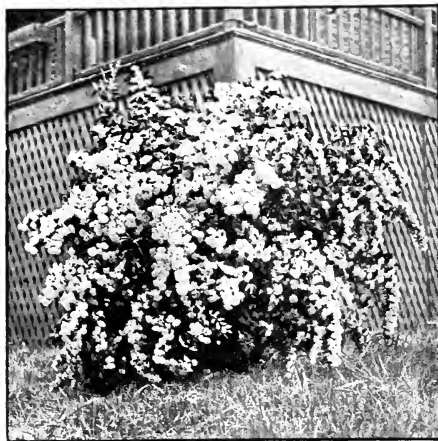
S. Canadensis (Common Black Elder). 5 to 8 feet. A well-known shrub, having large, flat bunches of white flowers in June and reddish purple berries in autumn. Very showy and deserving of more extended cultivation.

S. nigra aurea (Golden Elder). 6 to 8

feet. A handsome, large-growing variety with golden yellow foliage which holds its color throughout the season. Should be planted where it can get full sunlight to be at its best.

S. pubens. A native shrub with long cymes of pure white flowers in May, followed by large clusters of bright scarlet fruit.

S. tenuifolia. A cut-leaved variety of the Red-berried Elder, hardy and very attractive planted among or grouped with other shrubbery.



Spirea Van Houttei

SPIRAEA. Meadow Sweet.

These hardy shrubs are well adapted to various locations and soils; easily grown and profuse bloomers. The bloom period of the different sorts extends from May till September.

S. Bumalda, var. Anthony Waterer. 2 to 3 feet. An improved variety of this type; dwarf, upright grower, covered from June or July until fall with large heads of dark crimson flowers. Darker than Bumalda. A valuable addition to the list.

S. callosa rubra. Has large panicles of deep rosy blossoms, grows freely and blooms nearly all summer.

S. collosa.. Fortune's Spirea. Has large panicles of deep rosy blossoms; grows freely and blooms nearly all summer; fine.

S. Van Houttei. 4 to 6 feet. Without question the finest variety in the collection. The branches droop gracefully and when covered with bloom the latter part of May it is a beautiful sight. Makes a nice hedge to divide the lawn from the garden; foliage is beautiful at all seasons. Perfectly hardy. Is sometimes erroneously called Bridal Wreath. Much used in all good landscape work.

SYMPHORICARPUS. Snowberry.

These are especially valuable for planting in the shade and in undergrowth.

S. racemosus (White Snowberry). 3 to 4 feet. Flowers small, pink, in June or

July; foliage dark green; berries large, white, and hang well into winter.

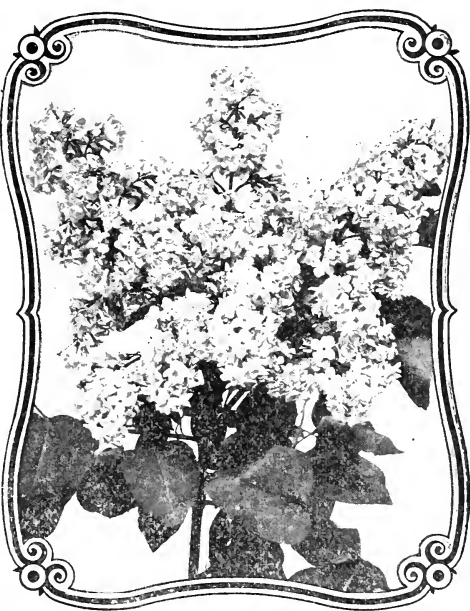
S. rubra (Red Snowberry). Similar to white.

S. vulgaris (Indian Currant, Coral Berry). 3 to 4 feet. Similar to Snowberry, except berries are smaller and are red.

SYRINGA. Lilac.

This group is so well known that there is no need of extended description. To reach perfection, should have moist, rich soil. We would call special attention to the newer varieties, as great improvement has been made in them.

S. vulgaris (Common Purple Lilac). 8 to 10 feet. Bluish purple flowers; well known.



President Grevy

S. Persica (Persian Lilac). Usually does not grow to be more than 4 to 6 feet in height; branches slender; foliage small; flowers purple, borne in loose clusters.

- S. var. alba** (White Persian Lilac). Similar to above, only flowers are white.
- S. Mme. Casimir Perier.** Double white.
- S. President Grevy.** Large Double Blue.
- S. var. Ludwig Spaeth** (Single). 6 to 8 feet. Panicles long; individual flowers large, dark purplish red, distinct; the finest of its color.

VIBURNUM. Arrow Root.

Large shrubs found almost all over the world. Flowers mostly in compound cymes, the outer row of inflorescence in some species being sterile. In addition to these varieties of Snowballs, our native species are well worthy of extensive use, the clean healthy foliage alone recommending them to notice.

- V. acerifolium.** (Maple-leaved arrow-wood.) A medium-sized native shrub, with flat heads of white flowers in May and clusters of Black berries in the fall.
- V. cassinoides** (Wythe Rod). Cymes of white flowers in June.—Black berries in autumn.. Handsome foliage.
- V. dentatum** (Arrow Root). Dented-leaved Viburnum. Flowers greenish-white. One of the best shrubs for massing for foliage effect.
- V. molle** (Large Arrow Root). A robust growing shrub with cymes of white flowers, which appear later than those of the other viburnums.
- V. lantana** (Wayfaring Tree). A large robust shrub with soft, heavy leaves, and large clusters of white flowers in May, succeeding with red fruit—retains its foliage very late.
- V. lentago** (Sheep Berry). Flowers creamy white, very fragrant; foliage is light glossy green.
- V. opulus, Americana,** (High or Bush Cranberry). Both ornamental and useful. Its red berries resembling cranberries, esteemed by many, hang until destroyed by frost late in the fall.
- V. opulus, Europea.** Very similar to the American variety, with smaller berries which ripen later and hang to the branches through the winter.
- V. prunifolium** (Black Haw). Has smooth, glossy foliage, and white flowers in May or June.
- V. pubescens.** Handsome low growing shrub with flat cyme of attractive white flowers, followed by clusters of bluish-black berries when ripe. Autumn coloring of the leaves a beautiful dark wine color.



Viburnum

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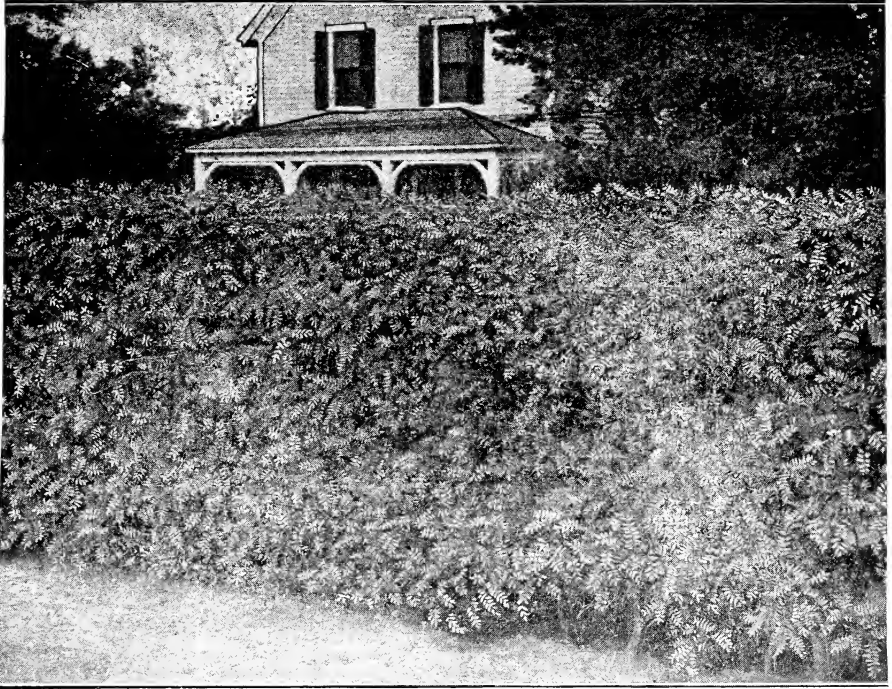
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TYPOGRAPHICAL ERROR

Under Viburnum words Arrow Root
should read Arrow Wood.

Shrubs for Hedges



Caragana Hedge

SPIREA.

S. van Houttei. 4 to 6 feet. Without question the finest variety in the collection. The branches droop gracefully and when covered with bloom the latter part of May it is a beautiful sight. Makes a nice hedge to divide the lawn from the garden; foliage is beautiful at all seasons. Perfectly hardy. Is sometimes erroneously called Bridal Wreath. Much used in all good landscape work.

CORNUS.

C. Siberica (Siberian Dogwood). 8 to 10 feet. A hardy, free-growing shrub; bark bright red in winter.

HYDRANGEA.

H. paniculata grandiflora (Hardy Hydrangea). 5 to 6 feet. One of the best shrubs in cultivation. Is a strong grower and produces large panicles of

white flowers in August that change to a delicate pink and then green, lasting until winter. To produce best results should be grown in rich soil with plenty of manure, and be severely pruned each season, as the bloom is produced on the ends of the new wood. Very showy and effective grown as a hedge.

CARAGANA.

Caragana, arborescens (Siberian Pea Tree). A shrub or low tree. Native of Siberia. Pear-shaped yellow flowers in May.

BUCKTHORN.

Buckthorn. Excellent for hedges. Black fruit in fall. Very popular.

GOLDEN WILLOW.

Golden Willow. Most valuable for hedges because of its rapid and dense growth, hardiness and adaptability to all soils. Foliage bright green holding till late, bark golden in winter.

BARBERRY.

Barberry (Thunbergii). A leading species; from Japan, dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.

B. Vulgaris (Common European). A handsome deciduous shrub with yellow flowers in terminal drooping racemes.

B. var purpurea. An interesting shrub, very effective in groups and masses; foliage of violet purple.

RIBES.

Ribes (Alpina). A good old variety, very easy to cultivate and fine for a hedge; gay flowering in early spring.

Climbing Vines

AMPELOPSIS.

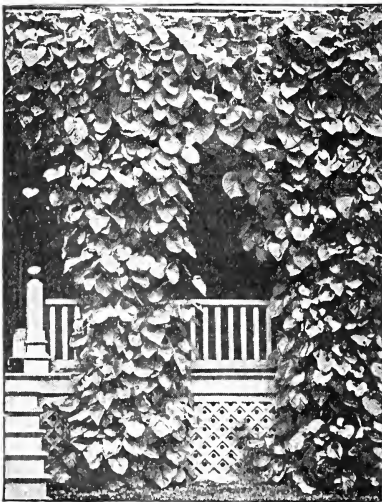
A. quinquefolia (Virginia Creeper, or American Ivy). A perfectly hardy, rapid climber, with large, five-lobed leaves which change to bright scarlet or crimson in autumn.

var. Engelmannii. Shorter jointed and having finer foliage than *Quinquefolia*. Clings to brick or stone. A good grower and hardy. The best for the North and Northwest.

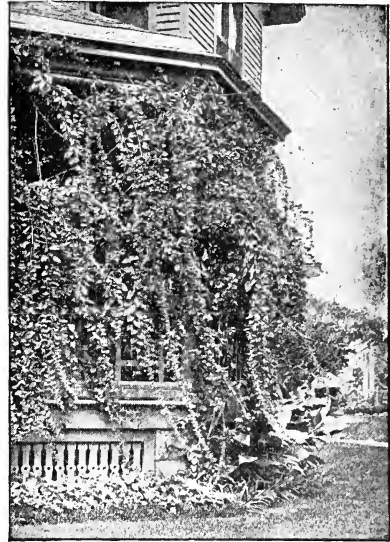
A. Veitchii (Boston, or Japan Ivy). From Japan. It is a splendid plant for covering any object, as it clings perfectly to the smoothest surfaces. The foliage is a bright, glossy green, changing to bright tints of scarlet, crimson and orange. Kills back some in a cold, dry climate.

ARISTOLOCHIA

A. Sipho (Dutchman's Pipe). A native species of climbing habit and rapid growth, with magnificent light green foliage, ten to twelve inches in diameter, and curious pipe-shaped, yellowish brown flowers.



Dutchman's Pipe



Matrimony Vine

CELASTRUS.

Scandens (Climbing Bitter Sweet or Wax Work). A native climbing and twining plant with fine large leaves, yellow flowers, and clusters of orange capsuled fruit in the autumn.

CLEMATIS.

This family of plants is noted for rapid, slender growth, delicate foliage and profusion of bloom through the summer. They do best in rich soil, and where they can have plenty of sun. We give a few of the best only. Give winter protection in this section.

C. Jackmani. Flowers from 4 to 6 inches in diameter, intense violet-purple, with a velvety appearance. Hardy. A free grower, and frequently blossoms from midsummer until frost.

C. Henryi. New, and one of the best perpetual hybrids; of robust habit; not as free a bloomer as *Jackmani*. The flowers are white, large and very showy.



Clematis Paniculata

- C. Madame Edouard Andre.** Flowers large, of a beautiful, bright, velvety red; free-flowering and a continuous bloomer.
- C. paniculata.** A great novelty from Japan. It has proved to be one of the most desirable, useful and beautiful of hardy vines; a luxuriant grower and profuse bloomer. Small, white, fragrant flowers in September.

LYCIUM.

Lycium Barbarum (Matrimony Vine). This is generally regarded as a climber, as its long, vigorous shoots push up-

ward 8 to 10 feet, and then recurve gracefully to the ground, strung along their entire length late in summer with transparent, brilliant crimson berries. Good in poor soil.

LONICERA. Climbing Honeysuckle

- L. Belgica**, or Monthly Fragrant. Blooms all summer; red and yellow, very fragrant flowers.
- L. Flava, Canadensis.** (Canadian Honeysuckle.) A very robust, rapid grower; with large glaucous leaves and yellow flowers.

L. sempervirens (Scarlet Trumpet Honeysuckle). A strong, rapid grower; blooms very freely the entire season; bright red trumpet-shaped flowers.

L. Halliana (Hall's Japan Honeysuckle). A strong, vigorous, almost evergreen sort, with pure white flowers, changing to yellow. Very fragrant and covered with flowers from July to November. Holds its leaves until January. The best of the Honeysuckles.

MENISPERMUM. Moonseed.

Menispermum Canadense. A curious twining, slender vine, with small yellow flowers and black berries. Fine for shady, moist spots.

VINCA. Myrtle.

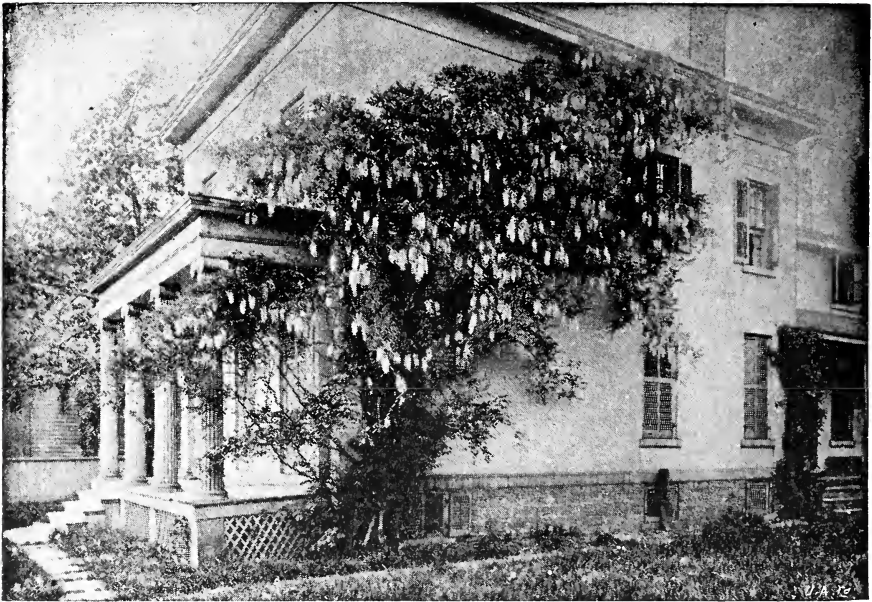
V. mayor variegata. Trailing habit, leaves broadly margined with yellow. A fine basket plant.

V. caerulea minor. A blue flowering, trailing evergreen.

WISTARIA.

W. frutescens (Shrubby Wistaria). An American variety. Not so free as the Chinese form, but a rapid grower. Fragrant, pale blue flowers. Vigorous and perfectly hardy.

W. magnifica. Flowers in dense, drooping racemes, and of pale lilac color.



Wistaria—Purple

Evergreen Trees

Our Evergreens are grown in wide rows and cultivated with horses. They are not to be compared in quality and prices with those grown thickly without cultivation. We made a specialty of stock Arbor Vitae for hedges.

ABIES. Spruce and Fir.

A. alba (White Spruce). 25 to 30 feet. Pyramidal in form; foliage silvery green. More compact than Norway Spruce.

A. Canadensis (Hemlock Spruce). 35 to 40 feet. A beautiful lawn tree; fine, dark foliage. Fine for hedges.

A. excelsa (Norway Spruce). 40 to 50 feet. A lofty, elegant tree of rapid growth and pyramidal habit. After



Colorado Blue Spruce.

the tree is 20 to 25 feet high the branchlets droop very gracefully. Probably the most extensively planted of any evergreen in this country; thrives in any well-drained soil. Valuable for windbreaks, screens and hedges.

- A. balsamea** (Balsam Fir). 40 to 50 feet. A rapid-growing native tree, with dark green foliage; handsome while young, becomes somewhat straggling in appearance when it reaches full size.
- A. pungens glauca** (Colorado Blue Spruce). 25 to 30 feet. A rare and elegant tree, with foliage of rich blue. One of the most distinct and striking of all the Spruce family. The trees we offer are grafted.
- A. picea pungens**. A green specimen.

JUNIPERUS. Juniper.

- J. Virginiana** (Red Cedar). 25 to 35 feet. A well-known native tree; does well in very trying situations; foliage is fine, and has a reddish cast; makes a very good hedge plant.

PINUS. Pine.

- P. Strobus** (White Pine). 40 to 50 feet. A strong, rapid-growing tree, with light, silvery green foliage. The best and most ornamental of our native Pines.

P. resinosa (Norway Pine). Lr. A native Pine with red bark and light green foliage, growing in whorls. Useful for its timber.

P. montana (Dwarf Mountain Pine). Of compact, spreading growth. Is more of a bush than tree; valuable in landscape work where a low, broad evergreen is needed. Very hardy.

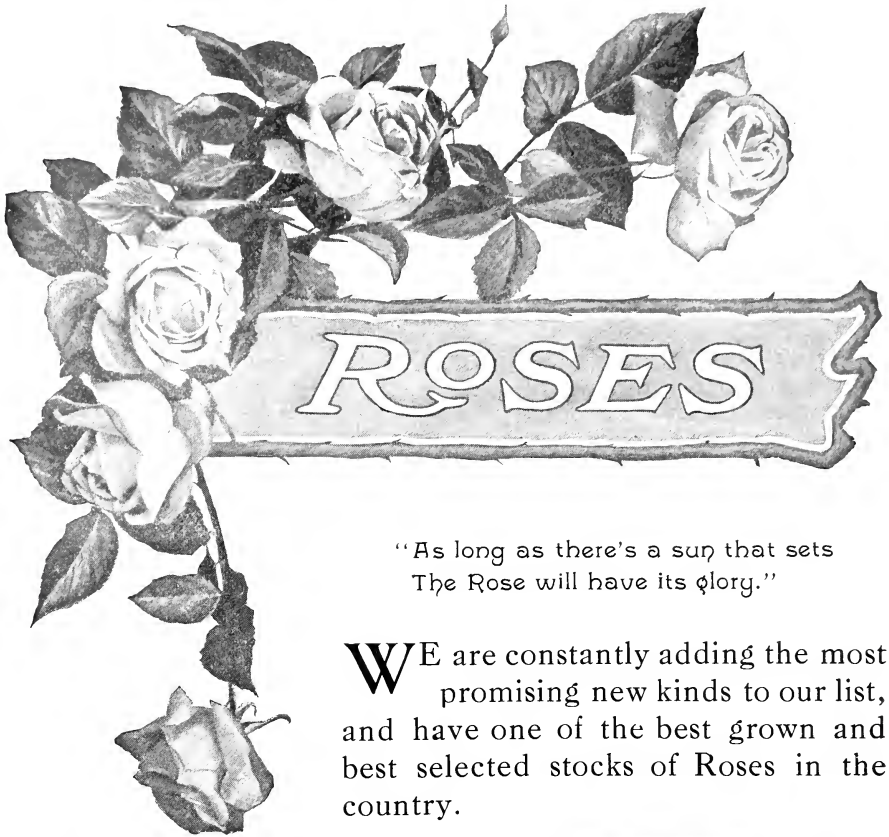
THUYA. Arborvitae.

T. occidentalis (American Arborvitae). 10 to 20 feet. The finest evergreen for hedges. It grows rapidly and soon forms a beautiful hedge, very dense. Is not adapted to turn stock, but forms a most desirable and ornamental screen to divide the lawn from other parts of the grounds, or any other like purpose. May be trained in any form desired, as no evergreen bears the shears with so little injury as this.

T. pyramidalis (Pyramidal Arborvitae). 10 to 12 feet. A superb, new and hardy sort, of very compact habit, like the Irish Juniper. Is rare and beautiful, and is largely planted in cemeteries and places where spreading trees would be out of place. This is perhaps the most valuable Arborvitae in cultivation.



American Arbor Vitae



"As long as there's a sun that sets
The Rose will have its glory."

WE are constantly adding the most promising new kinds to our list, and have one of the best grown and best selected stocks of Roses in the country.

HARDY PERPETUAL ROSES.

Alfred Colcomb. Bright rich crimson; leaves large and full; very fragrant; a superb sort in every respect.

Baron de Bonstetten. Dark velvety maroon; very double.

Frau Karl Druschki. This new Rose comes from Germany. The flowers are large, of perfect form and snow-white in color; a free and perpetual bloomer. Claimed by many to be the best white Rose of its class yet introduced; bush a vigorous grower.

General Jacqueminot. Very fragrant; not very full, but large and effective. One of our best garden Roses.

Jchn Hopper. Bright rose; large and full; free bloomer. One of the best old sorts.

Marshall P. Wilder. Bright cherry-red; of good size; very fragrant and perfectly



Frau Karl Druschki double. Plant is a vigorous grower and continues long in bloom. One of the very best of its color.

Margaret Dickson. A very free grower, foliage large and dark. Flower white, with pale flesh center; petals are thick and bell-shaped, quite fragrant; a fine sort.



Prince Camille de Rohan

Prince Camille de Rohan. Very dark, velvety crimson; large, moderately full, handsome.

Soleil d'Or (New). This new yellow Rose comes very highly recommended. The flower is full, large, globular-shaped, yellow shaded with red. A vigorous grower and said to be a free bloomer.

Mrs. J. H. Laing. Soft delicate pink. A free bloomer, vigorous grower; flower large, well formed and produced on good stems. Fine in bud.

Paul Neyron. The largest variety in cultivation. Deep rose color, very full and double, finely scented, good foliage and free bloomer.

CLIMBING ROSES.

Baltimore Belle. Pale blush, nearly white, very double; blossoms in clusters.

Crimson Rambler. The most valuable acquisition of recent years. Is of vigorous habit, strong, rapid growth (10 to 12 feet in a season), with handsome, shining foliage. Produces, in marvelous abundance, large clusters of the brightest crimson, semi-double Roses, that remain perfect for some time. Is suitable for walls, fences, pillars and porches.

Dorothy Perkins. A very good companion for the Crimson Rambler, as it is of the same habit of growth. Flowers are borne in clusters, are a beautiful, shell-pink color and very fragrant. Where one wishes a "Pink Rambler" we advise using this variety.

Queen of the Prairie. Bright rosy red, large, compact and globular flowers; blooms in clusters; a good strong grower. One of the best.

MOSS ROSES.

Blanche Moreau. Pure white, large, full, of perfect form, and well furnished with deep green moss. Very strong grower.

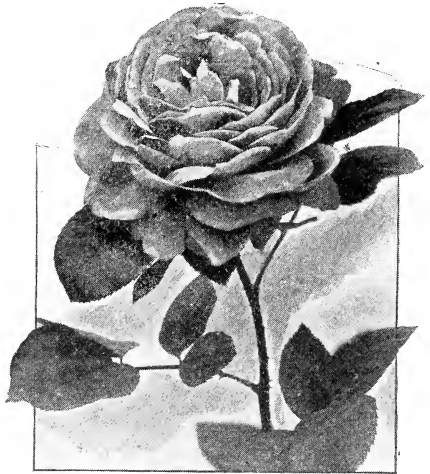
Countess of Murinais. Large, white tinged with flesh.

Crested Moss. The deep pink buds are surrounded with a mossy fringe and crest; fragrant. One of the best.

MISCELLANEOUS ROSES.

Madam Plantier. Pure white double Rose. Plant of fine form and produce flowers in great abundance in June. One of the best for cemetery planting.

Persian Yellow. Flowers double and full; deep golden yellow color; blooms freely in June. Finest hardy yellow Rose grown.



Persian Yellow

ROSA RUGOSA.

A Japanese variety that forms a strong, sturdy bush 4 to 5 feet high. The foliage is dark glossy green, impervious to the attacks of insects of all kinds. Makes a fine background for low shrubbery; also makes one of the very best shrub hedges. The flowers are single, borne in clusters and followed by large red seed-balls. Is very attractive.

var. alba. Single; pure white.

var. rubra. Single; rosy crimson.



Dorothy Perkins

Hardy Perennials

ACHILLEA.

A., *The Pearl*. 2 feet. Produces an abundance of small white flowers during the summer months.

AQUILEGIA. Columbine.

Bloom in late spring and early summer; grow about 2 feet high and succeed in any ordinary garden soil. Worthy of more extensive planting.

A. *caerulea* (*Rocky Mountain Columbine*). Color blue and white. One of the best hardy flowers in cultivation.



Aquilegia—Columbine

- A. *chrysantha*. Golden yellow. Is in bloom for several weeks.
- A. *Californica* Hybrids. Long-spurred flowers in a variety of colorings, such as yellow, pink, flesh, red, etc.

DELPHINIUM

Delphinium English Hybrids, Kelway Strain. The most superb and satisfactory of the Larkspurs, in all shades of blue, from the palest tints of sky-blue through shades of lavender to dark purple.



Lily of the Valley

CONVALLARIA.

Lily-of-the-Valley.

- C. *majalis* (*Lily-of-the-Valley*). 6 to 8 inches. One of the most charming of the spring flowers. Flowers small, bell-shaped, very fragrant.

DIANTHUS. Pink.

- D. *barbatus* (*Sweet William*). Comes in a variety of shades.

DIELYTRA, or DICENTRA

- D. *spectabilis* (*Bleeding Heart*). Blooms early in the spring. Makes very nice borders. Pink, heart-shaped flowers borne in graceful racemes.

HEMEROCALLIS.**Yellow Day Lily.**

H. flava (Lemon Lily). 2 to 3 feet. A pretty plant, with long narrow leaves; flowers are a pretty lemon color, fragrant and produced freely in June. Desirable.

H. Kwanso fl. pl. Leaves are larger and coarser than the Flava; flowers large, double, copper-colored; grows and does well in almost any location.

HIBISCUS. Mallow.

H., Crimson Eye. White, with crimson eye. August.

GERMAN IRIS. Iris Germanica.

The German Iris is one of the most desirable of early spring-flowering plants. The flowers are of large size and exquisite colors. No garden is complete without a collection of these beautiful flowers. The following are among the best:

I. Madam Chereau. Standards and falls pure white daintily edged with light blue.

I. Florentina. Medium height, early. Standards and falls light porcelain-blue changing to pearly-white. Very large, open flowers held well above foliage. A good free bloomer. A superb variety.

I. Royal Blue. Similar to above except in color which is a rich Yale-blue.

I. Pumila (European Dwarf Iris). Bluish purple, first to flower. Makes a fine edging plant for borders.

I. Honorabilis. Stands bright Indian-yellow, falls chestnut red.

I. Queen of Gypsies. Tall, rather early. Large open flowers. A strong grower.

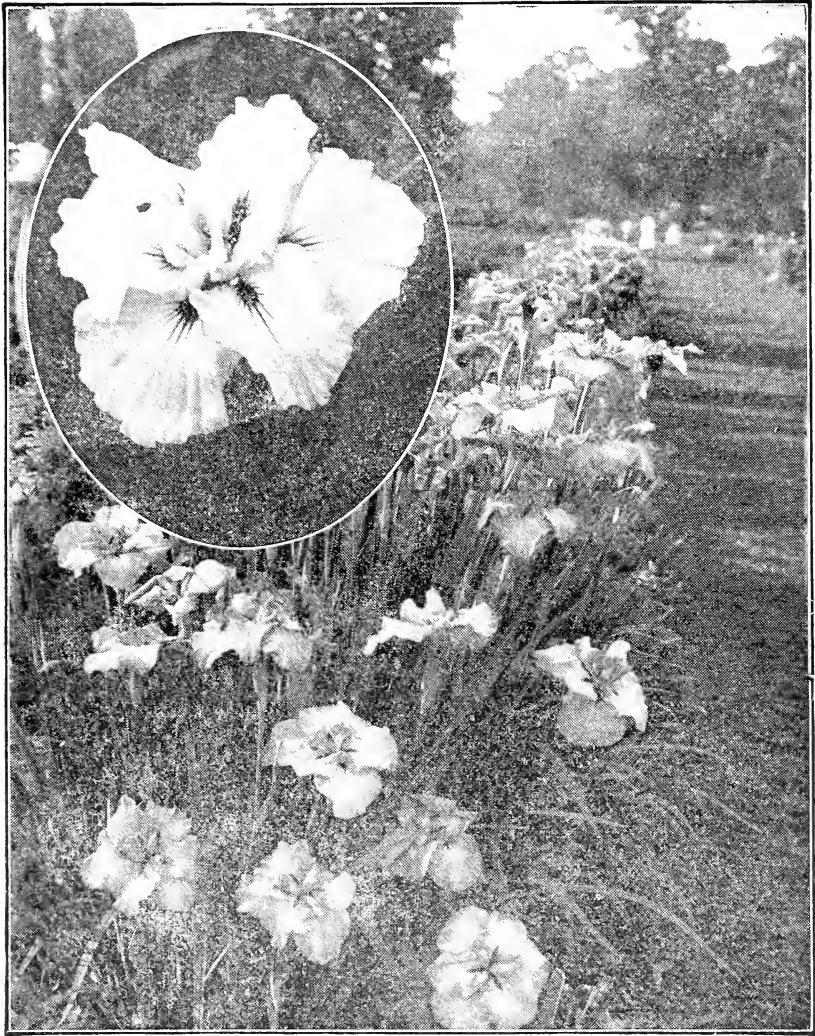
I. Siberica. Tall and slender-growing, with small flowers, form large, strong, compact and blooms freely.

JAPAN IRIS

I. Japan laevigata. Flowers differ from the German Iris, in being broad and flat. They exhibit a wonderful variety of color and shades and appear later than the others. They rank among the most desirable of hardy plants. Succeed best in a moist soil.



Hibicus



Japan Iris

PAPAVER. Poppy.

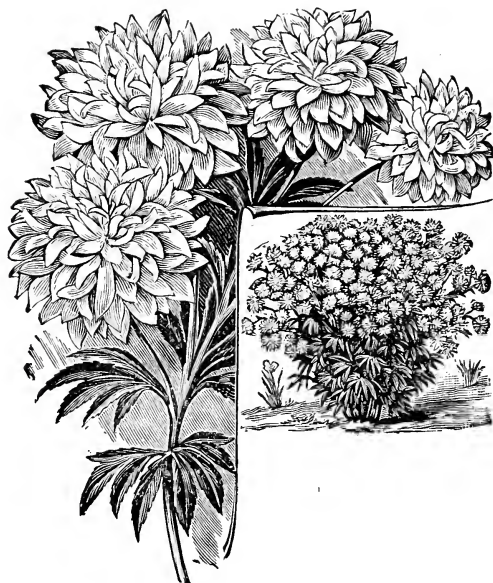
P. orientale (Oriental Poppy). For a gorgeous display of rich brilliant coloring nothing can excel the Oriental Poppies during their period of flowering in May or June, and whether planted singly or in masses their large flowers and freedom of bloom render them conspicuous in any position.

PLATYCODON. Bell-flower.

These are very closely allied to the Campanulas. Of upright habit; bloom through July, August and September. Very desirable.

P. grandiflorum. 1½ feet. Large, fine dark blue, star-shaped flowers.

P. grandiflorum album. A white flowering form of the above.



Rudbeckia

PYRETHRUM. Daisy.

- P. roseum.** A single-flowering; invaluable for cutting. Will flower the second time in the fall if cut down in June.
- P. uliginosum.** (Feverfew, Giant Daisy). Flowers are two inches across, white with yellow center. A most profuse bloomer. Fine for cutting.

RUDBECKIA. Cone Flower.

- R. laciniata** (Golden Glow). We doubt if any perennial has been more popular than this, or more largely planted. It fills a very important place; producing an abundance of beautiful, golden yellow, double flowers during the hot sum-

mer months, when they are greatly appreciated. Fine for cut-flowers. Attains a height of 6 to 8 feet in good soil.

SPIREA. Goat's Beard.

Elegant border plants with feathery plumes of flowers and neat, attractive foliage. Succeeds best in rich, moist soil and a shady location.

- S. palmata.** One of the most beautiful. The deep purple-red of the stems and branches passing into the crimson-purple of the broad corymbs of flowers which are produced very freely during June and July. 3 feet.



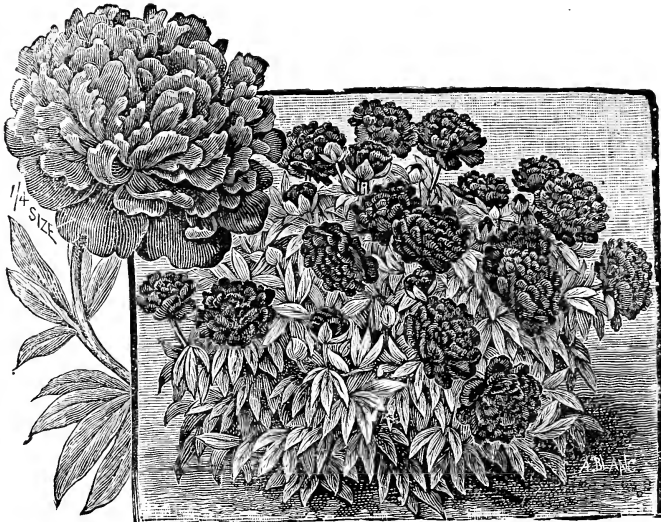
Yucca

YUCCA. Spanish Bayonet.

Y. filamentosa (Adam's Needle). A tropical-looking plant, with long narrow leaves that remain green the entire year. It throws up a strong flower stem in the summer, 3 to 5 feet high, bearing a spike of creamy white bell-shaped flowers, which retain their beauty for a long time. Very hardy, and likes the sun and dry soil. The foliage is of strong, upright growth.

Herbaceous Peonies

There is quite a revival in the planting and demand for these old-time favorites. Their requirements are few. Give them a good, rich, deep soil and plenty of water and there will be bloom in abundance. They succeed best in an open, sunny location, but will do almost equally well in partially shaded places. While they are perfectly hardy, we think a mulch of coarse manure in this climate is beneficial, removing it early in the spring. They may be planted during September or October, or in the spring. The following varieties are selected with care from a long list and will be found satisfactory.



Peony

P. Achille, calot. Delicate flesh. Buds and half-open flowers exquisitely beautiful. Foliage very distinct and beautiful dark green with crumpled edges. Fine habit. Splendid cut-flower sort.

P. Charlemagne, crousse. Rosy white, shaded lilac and chamois. Very full and well rounded bloom. Opens very slowly. Fragrant and exquisite when in perfection, but some flowers do not fully develop. Very late.

P. Couronne D'or calot. Very large and full imbricated flower of superb form; color white reflecting yellow, center petals bordered with carmine. Fragrant. A good grower. The perfection in the Peony.

P. Delachii. Dark purple, crimson; resembling Pottsii, but larger and richer foliage; one of the best dark sorts.

P. Felix Crusse. Brilliant red, bell-shaped bloom; the popular color with florists; rather late.



Peony—Festiva Maxima

P. Festiva maxima. This is the most beautiful of all the white Peonies. The flowers are of extra large size, in clusters, and petals as fine as silk. Color pure white, with a crimson drop in the center.

P. Gen. Cavaignac. Lively lilac-pink, shaded clearer pink.

P. Grandiflora rosea. Large, late, fine form.

P. La Sublisse. Brilliant purplish scarlet; free bloomer; fine for massing or landscape work.

P. Queen Victoria. A desirable sort of fine form and very fragrant.

P. Rubra superba (Richardson's). Dark crimson, large and full. Very late and one of the best of the dark reds.

P. officinalis rubra. Dark red; very early.

Hardy Phlox

We know of nothing more desirable among the hardy plants than Perennial Phlox. They may be used in hardy borders, groups on the lawn, or planted in front of shrubbery, where they furnish an abundance of flowers for a long time. Our collection is made up of the most distinct and striking colors and contains the best new sorts, as well as the cream of the old varieties. The culture is very easy. Succeed in any good garden soil. The blooming season, which in established plants is during July and August, may be prolonged by pinching back some of the plants in June. They may be planted in either fall or spring. Are perfectly hardy. Plants should be taken up and transplanted every three or four years.



Coquelicot. Fine; pure scarlet-crimson center. One of the very best.

Eclairer. Purplish crimson, with lighter center. An early and continuous bloomer; flower large.

P. Henri Murger. Flowers very large, pure white, large carmine center. One of the finest varieties.

P. Candeur. Pure white, very dwarf, good-sized flower and spike.

P. La Vogue. Large flowers, silvery rose.

P. Lumineux. Pure light red, shaded lighter toward centre, bright crimson eye, very large flower.

P. Montagaard. Large, dark crimson, darker center.

SPRAYING CALENDAR

Experience and careful study into the habits of insects and the causes of rot, fungus and blight, that are so destructive to fruit trees, plants and fruits, has demonstrated the fact that spraying at the proper time and properly done, for the protection against these enemies of the horticulturist, is the best, if not the only remedy, and that it has succeeded and will succeed is evidenced by the rapidly increasing interest manifested in the manufacture, sale and use of spraying machines, and the good results obtained by those who practice this mode of protection.

It is impossible in a catalogue like this to give descriptions of insects, diseases, etc., but only a brief outline of how to prepare formulas and when and how to use them in order to effect a remedy, which will be found as follows:

VARIOUS APPLICATIONS OF SPRAYING SOLUTIONS					INSECTS AND FUNGI
NAME OF PLANT	FIRST SPRAYING	SECOND SPRAYING	THIRD SPRAYING	FOURTH SPRAYING	
Apple	When buds are swelling, apply Bordeaux.	Before blossoms open, Bordeaux. Add Paris green to the solution for canker worm or bud moth.	When blossoms have fallen, Bordeaux and Paris green.	Twelve days later, Bordeaux and Paris green.	Codling moth, canker worm, bud moth, apple scab.
Pear	Before buds swell, Bordeaux.	Before blossoms open, Bordeaux. Kerosene if aphid is present.	After blossoms fall, Bordeaux and Paris green.	Fourteen days later, Bordeaux and Paris green.	Codling moth, leaf blight, scab and psylla.
Plum	Just before buds open, Bordeaux and Paris green.	After blossoms fall, Bordeaux and Paris green.	Twelve days later Bordeaux and Paris green.	Kerosene when aphid or scale is present.	Curculio, rot, aphid and scale.
Cherry	Just before buds open, Bordeaux. Kerosene when Aphid is present.	When fruit has set, Bordeaux.	Twelve days later, Bordeaux, if signs of rot are present.	Kerosene if aphid is present.	Rot and aphid.
Peach	As buds are swelling, Bordeaux.	Before blossoms open, Bordeaux and Paris green.	After blossoms have fallen, Bordeaux and Paris green.	Two weeks later, Bordeaux and Paris green.	Rot, mildew and curculio.
Grape	When buds are beginning to swell, Bordeaux.	As buds are opening, Bordeaux.	Two weeks later, Bordeaux.	Two weeks later, Bordeaux.	Rot and other fungous diseases.
Currant and Gooseberry ...	When leaves appear, Bordeaux.	Ten days later, Bordeaux. Hellebore for worms; quassia and tobacco for Aphid.	Repeat second when necessary	Ammoniacal copper carbonate after fruit is half grown.	Mildew, worms aphid.
Raspberry, Blackberry and Strawberry	When buds begin to swell, Bordeaux.	When leaves are open all rusted canes.	Two weeks later (when not in flower), repeat second	Before fruit is full size, ammoniacal copper carbonate solution.	Fungous diseases.

We present this table to assist fruit-growers in spraying at the right time and with the correct solution.

Spraying Mixtures

BORDEAUX MIXTURE.

Bluestone	6 pounds
Good Lime	4 pounds
Water	50 gallons

Dissolve the bluestone by suspending it in a sack in 25 gallons of water in a barrel. Slake the lime in another vessel, adding water slowly to make 25 gallons of lime milk. Pour the two at the same time slowly into a third vessel, allowing them to mix thoroughly as they are poured in. Many orchardists now use only 4 pounds of bluestone to make this mixture.

If there is not enough lime in the water it will burn the foliage. To test this, take a saucer full of the mixture and add a full drop of a solution of yellow prussiate (ferrocyanide) of potash (one ounce to one-half pint of water). If a brown color appears, more lime must be added until no change takes place, when the test is applied. Even the best bordeaux may scorch the fruit if applied in rainy weather.

ARSENATE OF LEAD.

Arsenate of lead.....	1 pound
Water	40 to 50 gallons

It is unnecessary to use it stronger. It is more reliable than paris green. It is especially useful where there is much rain. It sticks well and does not scorch the leaves.

SULPHUR-LIME WASH

Sulphur	12 pounds
Good Lime	12 pounds
Water	45 gallons

First slake the lime in the cooking vat. When slaked add the sulphur and about ten gallons of water, so that the mixture will boil easily. Keep it well stirred until boiling begins. Boil until the sulphur is completely dissolved, which usually takes less than an hour. Then add the rest of the water, and the mixture is ready to spray. It should be poured into the spraying tank through a strainer. It may be hot or cold. Salt, which was formerly added to this mixture, is wholly unnecessary. There are several ready-made sulphur-lime washes which give good results when properly diluted.

WHALE OIL AND QUASSIA.

Quassia chips	8 pounds
Whale oil soap	7 pounds

Soak the chips twelve hours in eight gallons of water. Dissolve the soap in boiling water. Strain the quassia extract to remove the chips, and add the soap solution. Stir thoroughly and dilute to make 100 gallons.

This solution is used almost exclusively for the hop aphid. It is almost as effective without the quassia against other species of aphides. Soap powders may be used in the same proportion without the quassia for most aphides.

KEROSENE EMULSION.

Kerosene	2 gallons
Whale oil soap	½ pound
Water	1 gallon

Dissolve the soap in the water by boiling, and add the suds boiling hot to the kerosene, away from the fire. The mixture is then to be agitated violently, preferably by pumping it back on itself with a force pump. After four or five minutes the mixture suddenly becomes creamy in consistence. If well made, the cream will stand for a long time without free oil rising to the surface. Unless otherwise stated, use one gallon of the emulsion to 12 gallons water in spraying. One quart soft soap or one pound laundry soap may be used instead of the whale oil soap.

LYE.

Lye (potash)	½ pound
Water	10 gallons

FOR RABBITS AND MICE.

Last of October or first part of November, whitewash the trees with common lime whitewash to which add Paris Green same proportion as for Potato Bugs.

Distances for Planting

Standard Apples	25 to 40 feet apart each way
Standard Pears and Strong Growing Cherries.....	20 " " " "
Duke and Morello Cherries	18 " " " "
Standard Plums, Peaches, Apricots and Nectarines....	16 to 18 " " " "
Dwarf Pears	10 to 12 " " " "
Dwarf Apples	10 to 12 " " " "
Quinces	10 to 12 " " " "
Grapes	rows of 10 to 16 feet apart; 7 to 16 feet in rows
Currants and Gooseberries	4 feet apart
Raspberries and Blackberries	3 to 4 by 5 to 7 feet
Strawberries, for field culture.....	1 by 3 to 3½ feet
Strawberries , for garden culture	1 to 2 feet apart

Number of Trees on an Acre

40 feet apart each way	25
30 " " " "	50
25 " " " "	70
20 " " " "	110
18 " " " "	135
15 " " " "	205
12 " " " "	300
10 " " " "	435
8 " " " "	680
6 " " " "	1210
5 " " " "	1745
4 " " " "	2725
3 " " " "	4840

Rule—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet, for each plant or hill, which, divided into the number of square feet in an acre (43,560), will give the number of plants or trees to the acre.



“BEFORE”



“AFTER”

Plant One Year Old Trees

According to government statistics the production of apples for the whole United States has decreased 29,000,000 barrels from 1895 to 1909. Why this enormous decrease despite the fact that millions and millions of apple trees have been planted during the past twenty years we leave you to draw your own conclusions.

The greatest decrease has been in localities where they begin an orchard by planting large three-year old trees. The greatest increase has been in localities where they begin an orchard by planting trees with one-year old top. The only localities where there has been any fair degree of success by planting large three-year old trees are those favored by lake or ocean influence. It has been thoroughly proven and demonstrated that the one-year top trees are far superior in those favored localities.

The ignorant planter insists on having a large three-year old tree to begin an orchard. A fair comparison is for an inexperienced dairyman to start with a herd infected with tuberculosis and then try to make the cows regain their health. All the proof needed is the orchards started with large three-year old trees in every community with their rotten decaying trunks and tops.

The western irrigated orchardist begins his orchard with one-year top trees to produce an orchard worth \$2,000 to \$4,000 per acre and gets it. He plants only one or two varieties for which his locality is celebrated and has been proven that his soil and climate will grow to perfection. The planters in this section demand a large three-year tree and get—What? Nothing, nine times out of ten. He also plants all the varieties that produce apples that are unfit to eat. If all the apple trees planted in Wisconsin had been one-year top trees of Wealthy, this state would be as noted for Wealthy apples as Montana is for McIntosh Reds.

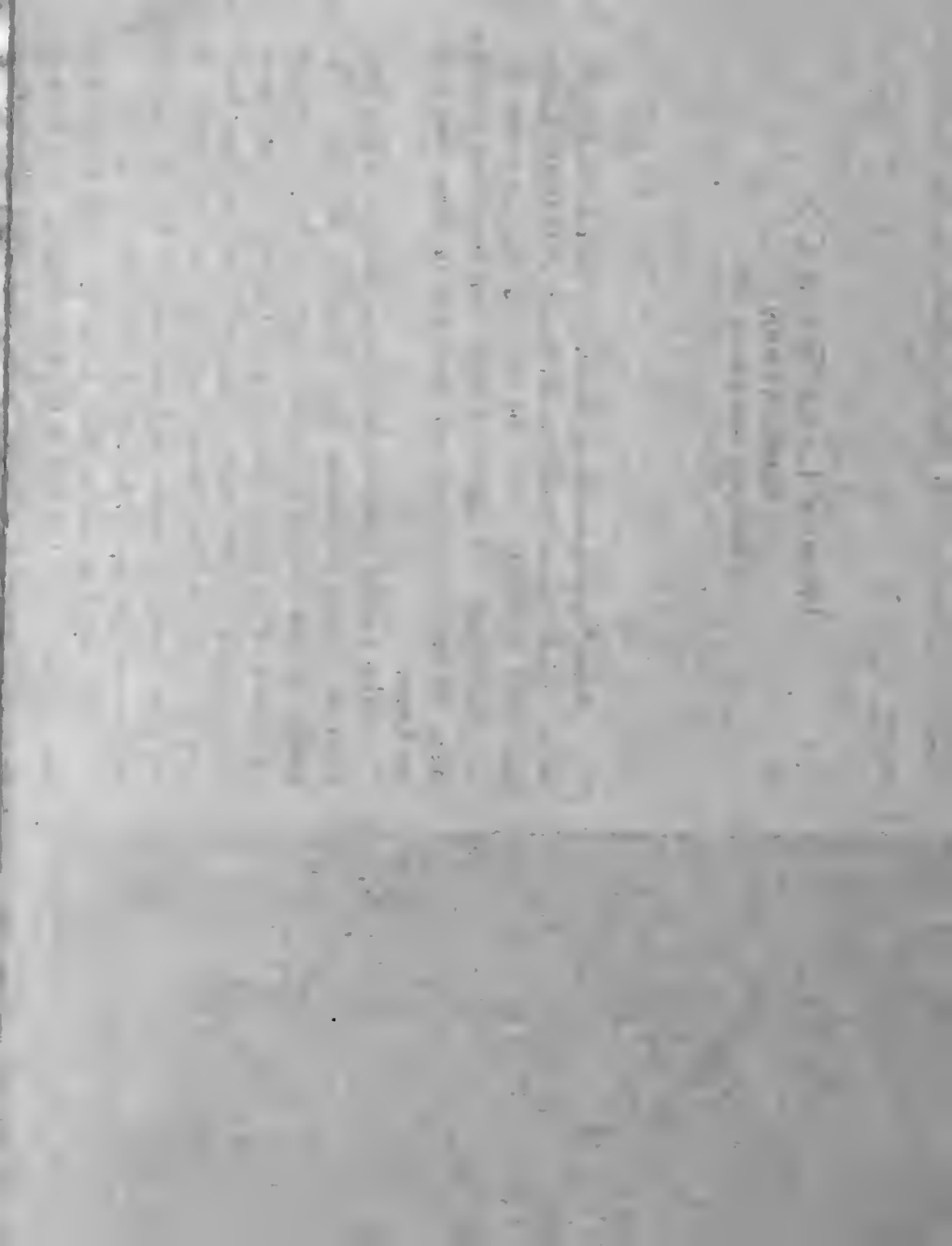
The past season we grew a limited quantity of trees with one year old top, both budded and grafted. The sale of these trees has been so satisfactory that next season we shall grow a much larger quantity.

Let us book your order now for delivery fall 1911 and spring 1912 in order that you may secure the varieties wanted. The habit of waiting until the trees are wanted and then taking anything the nurserymen has left is not a good business method.

We show a cut of our one-year budded Tuttle's Winter apple trees. Note the uniform low branching habit of these trees, all alike. An orchard of 100 or 1000 trees will be just as uniform. Also note the large open angle the branches form with the main trunk. This one-year top tree will be sound and healthy in top and root. A three-year old headed tree is rarely sound and healthy. If this tree is planted as received with no pruning it will continue to form a top or superstructure with the same large open angle and under natural law. Cut the leaders with a knife and you will get an artificially formed top, with acute or sharp angle, limbs all formed in a bunch and splitting and decaying as soon as the tree gets at a valuable bearing age. This is the well known result of planting large three-year old headed trees.

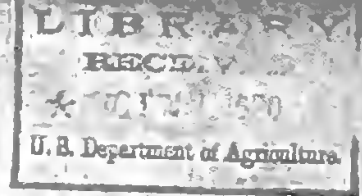
We are looking for buyers of apple trees who are willing to adopt western methods by planting apple trees with one-year old top and give them proper care and cultivation. Nothing new, startling or revolutionary about it.

**See Cut of One-Year Budded Tuttle's Winter Apple Tree
on Page 3 of this Catalogue.**



We have the following stocks for shipment spring 1913, all except the Arbor Vitae are in our frost proof cellars ready for early shipment. The stock will be evenly graded, uniform and packed to arrive in excellent condition.

20	Acer Spicatum, -----	2 $\frac{1}{4}$ - 3 $\frac{1}{2}$	feet,	\$20.	per 100'	
400	Amelanchier Canadensis	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"	
200	Amelanchier botryapium	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"	
24	Bechtel's Crab, -----	2 - 3	"	15.	"	
140	Berberis purpurea, ----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	7.	"	
100	Berberis purpurea, ----	2 - 3	"	6.	"	
2200	Berberis vulgaris, 3 yr.	3 - 4	"	9.	"	
780	Berberis vulgaris, "	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"	
250	Berberis vulgaris, "	2 - 3	"	7.	"	
140	Berberis vulgaris, 2 yr.	3 - 4	"	8.	"	
1600	Berberis vulgaris, "	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	7.	"	
1200	Berberis vulgaris, "	2 - 3	"	6.	"	
40	Carpinus Caroliniana,	4 - 5	"	20.	"	
75	Carpinus Europea,	18-24	inch,	8.	"	
360	Caragana Siberica,	18 - 24	"	6.	"	Cut-back
380	Caragana Siberica,	12 - 18	"	5.	"	Cut-back,
13	Cornus altinerfolia,	3 - 4	feet,	15.	"	
35	Cornus Baileyii,	3 - 4	"	15.	"	
80	Cornus Baileyii,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"	
20	Cornus Baileyii,	2 - 3	"	10.	"	
121	Cornus circinata,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
60	Cornus circinata,	2 - 3	"	12.50	"	
9	Cornus paniculata,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"	
7	Cornus paniculata,	2 - 3	"	10.	"	
1315	Cornus Siberica,	3 - 4	"	10.	"	
930	Cornus Siberica,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"	
200	Cornus Siberica,	2 - 3	"	6.	"	
23	Crataegus mollis,	4 - 5	"	25.	"	
250	Crataegus azarolus,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
125	Crataegus azarolus,	2 - 3	"	12.50	"	
20	Lilac President Grevy,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
10	Lilac Count d' Choisel,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
30	Lilac Mad. C. Perier,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
8	Lilac Mad. C. Perier,	2 - 3	"	12.50	"	
30	Lilac La T. d'Auvergne,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
20	Lilac La T. d'Auvergne,	2 - 3	"	12.50	"	
4	Lilad Josika, -----	2 - 3	"	12.50	"	
20	Lilac Ludwig Spaeth,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"	
20	Lilac Ludwig Spaeth,	2 - 3	"	12.50	"	
20	Lilac Chas. 10th, ----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"	
20	Lilac Persian red, ----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"	
20	Lilac common white, ---	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"	
165	Lilac common purple, --	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"	
90	Lilac common purple, --	2 - 3	"	6.	"	
20	Forsythia Fortunei, ---	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"	
1700	Golden Willow, 1 yr. ---	3 - 4	"	6.	"	Cut-back
1000	Golden Willow, 1 yr. ---	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	4.	"	Cut-back,
38	Hamamelis Virginiana,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"	
80	Hamamelis Virginiana,	2 - 3	"	10.	"	



Shade & Ornamental Trees,

130	American White Elm,	10 - 12	feet, select	\$60.	per 100
450	American White Elm,	8 - 10	" select	50.	"
550	American White Elm,	7 - 8	" select,	35.	"
30	White Birch European,	8 - 10	"	25.	"
80	Yellow Birch,	5 to 8	" low branched	35.	"
28	Cut Leaved Birch,	6 to 8	" very fine	40.	"
3	Cut Leaved Birch	5 - 6	"	20.	"
18	American Linden,	8 - 10	"	50.	"
40	American Linden,	6 - 8	"	40.	"
65	European Linden,	8 - 10	"	40.	"
150	European Linden,	6 - 8	"	30.	"
15	European Linden	5 - 7	"	25.	"
45	Black Walnut,	7 - 8	" select	35.	"
80	Black Walnut,	6 - 7	" select	30.	"
250	Butternut,	8 - 10	" select	40.	"
160	Butternut,	7 - 8	" select	30.	"
70	Silver Maple	6 - 8	"	20.	"
40	Mt. Ash European,	6 - 8	"	15.	"
15	Wild Black Cherry,	8 - 10	"	30.	"
20	Wild Black Cherry	7 to 8	"	20.	"

2000 American Arbor Vitae, 2½ - 3½ ft, \$8. per 100
 500 American Arbor Vitae 2 - 3 " 7. "

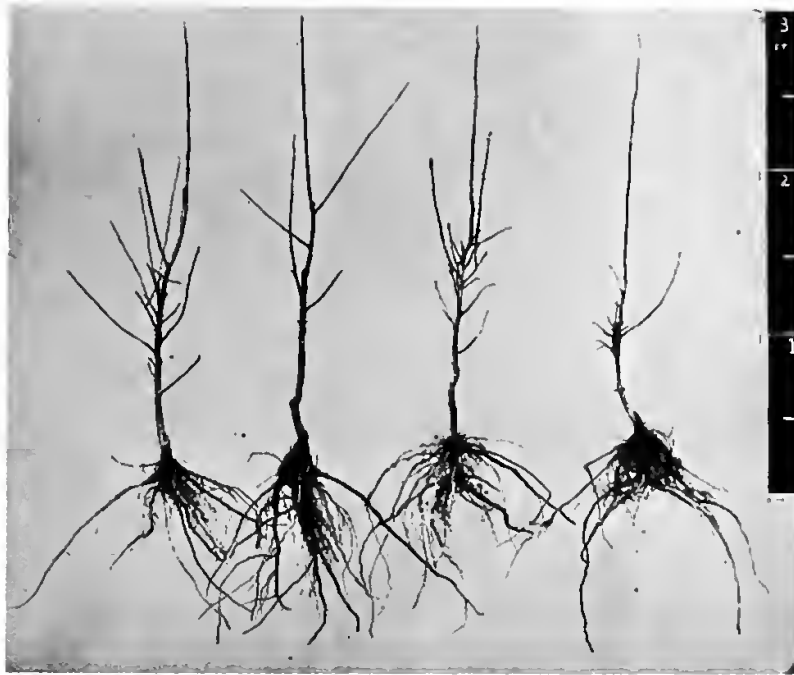
Paeonias,

500	Rosea superba, best pink,	\$15.	per 100
800	Gen Cavaignac, pink,	8.	"
500	Dortens Coros, bright pink	6.	"
1400	Grandiflora rosea, rose,	.6.	"
300	Comte de Nanteuil, dark rose	7.	"
600	Rosea plena superba, rose,	7.	"
400	Clarrisa, pink,	7.	"
100	Queen Victoria, white,	12.	"
70	Humei, rose pink,	8.	"
190	Speciosa striata, red,	10.	"
80	Dennis Helye, red,	12.	"
60	Louis Vanhoutte,	12.	"
40	Francois Ortegat, pur. crim,	10.	"
55	La Sublisse, red,	12.	"

Boxing additional at cost.

Henry Lake Sons Co., Nurserymen,
 Black River Falls, Wisconsin, December 2, 1912.

135	Lonicera tartarica red,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	feet,	\$10.	per 100
120	Lonicera tartarica red,	2 - 3	"	8.	"
125	Lonicera tartarica pink,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"
170	Lonicera tartarica pink,	2 - 3	"	8.	"
6	Philadelphus coronarius,	2 - 3	"	8.	"
120	Philadelphus boule d'arg.	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"
250	Rhamnus cathartica,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	7.	" Cut-back
180	Rhamnus cathartica,	2 - 3	"	6.	" Cut-back,
8	Rhodotypos kerroides,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"
25	Ribes aureum, -----	2 - 3	"	6.	"
90	Rosa humilis, -----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"
30	Sambucus aurea, -----	3 - 4	"	10.	"
280	Sambucus Canadensis, ---	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"
10	Sambucus racemosa, -----	3 - 4	"	8.	"
60	Sambucus tenuifolia, -----	3 - 4	"	12.50	"
120	Symphoricarpos glomeratus	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"
990	Symphoricarpos racemosa,	3 - 4	"	10.	"
120	Symphoricarpos racemosa,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"
950	Symphoricarpos vulgaris,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"
280	Symphoricarpos vulgaris,	2 - 3	"	7.	"
1230	Spirea Vanhoutte, -----	3 - 4	"	10.	"
1200	Spirea Vanhoutte, -----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	8.	"
500	Spirea Vanhoutte, -----	2 - 3	"	6.	"
260	Viburnum dentatum, -----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"
100	Viburnum dentatum, -----	2 - 3	"	10.	"
400	Viburnum lantana, -----	3 - 4	"	12.50	"
250	Viburnum lantana, -----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	10.	"
125	Viburnum lantana, -----	2 - 3	"	8.	"
14	Viburnum lentago, -----	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	15.	"
55	Viburnum opulus Americana	3 - 4	"	15.	"
210	Viburnum opulus Americana,	2 - 3	"	12.	"
250	Viburnum opulus Europea,	2 $\frac{1}{2}$ - 3 $\frac{1}{2}$	"	12.50	"
100	Viburnum opulus Europea,	2 - 3	"	10.	"
100	Viburnum opulus sterilis,	2 - 3	"	8.	"
Climbing Vines,					
400	Ampelopsis Englemanni,	2 yr. 3 - 4 ft		6.	"
50	Ampelopsis quinquefolia "	3 - 4 "		5.	"
100	Celastrus scandens	2 yr. 6 to 8 ft,		25.	" twined to stakes
9	Menispermum Canadense,	4 - 5 "		15.	"
60	Lonicera serper virens,	2 yr 3 - 4		8.	"
500	Lycium barbarum,	2 " 3 - 4		8.	"
280	Lycium barbarum,	2 " 2 - 3		6.	"
20	Aralia racemosa, Am. Spikenard,	3 yr.		20.	"
2000	German Iris, divisions, honorable, yellow,			\$2.50	per 100
200	Hemerocalis dumorteri, divisions,			2.50	" 100
Currants;					
2000	Red Dutch 2 yr. # 1	\$3.50	per 100		
400	White Grape, "	3.50	"		
400	Black Victoria, "	4.00	"		



AGE OF TREES.

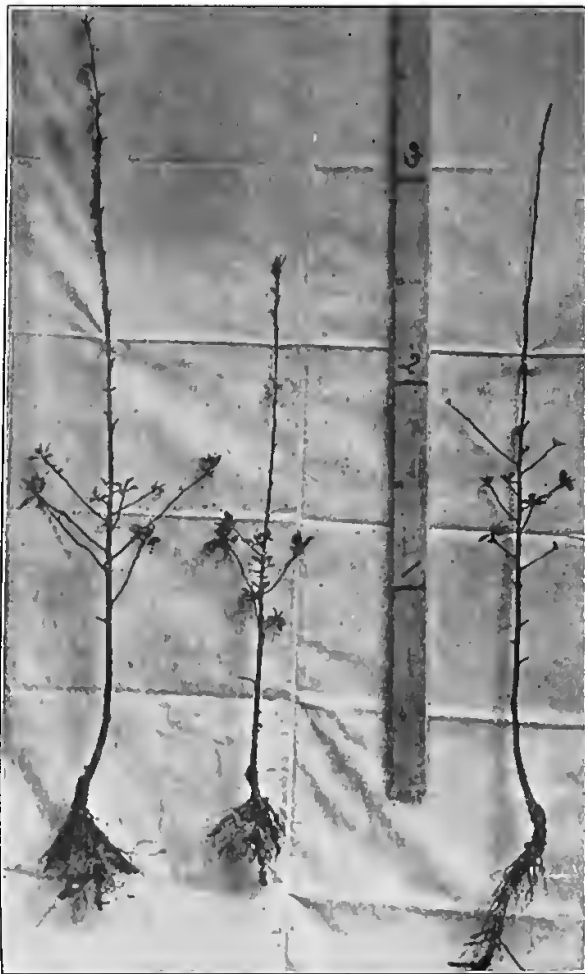
In nature roots and top of a tree are always in equal proportion. In digging a tree in the nursery, with digger, the roots are cut off the same length in any age of a tree, and the older the tree the farther the roots extend. Consequently more of the root system is cut off an older tree than a one-year-old top tree and as roots and top must be in equal proportion before the tree begins thrifty growth, the top will not make thrifty growth before the roots have reached the proportions of the top.

A one-year-old top tree is provided with buds from top to bottom. It may be cut back to any desired height or not pruned at all and it will grow to perfection. An older tree has been cut back in the nursery and the head started according to the notions of a nurseryman, and as the trees stand closely crowded in the nursery rows the heads form at uneven heights and branch unevenly. Such trees make an ugly unbusiness-like appearing orchard.

The most healthful tree is the most vigorous tree; the one-year-old top tree is the most vigorous because its root system has been reinforced. In 3 and especially 4 year old trees, the vigor of growth is being checked to start the fruit bearing functions of the tree and in transplanting the damage to the tree is much greater than younger trees. The slower the tree grows the smaller the cells, and the poorer the circulation of the sap. The more vigorous a tree grows the larger the cells and the larger and better circulation of the sap. Note the proportion of roots to top as shown.

HENRY LAKE SONS CO., Nurserymen.

Black River Falls, Wis.



[Root pruned ready to plant]

We exercise the greatest care to keep varieties separate and true to name. It is mutually agreed between the purchaser and ourselves that we shall be held responsible for no damage over and above first cost of stock, should mixture occur.

A. H. LAKE,
PRESIDENT

N. M. LAKE,
VICE-PRESIDENT

HENRY LAKE SONS CO.

NURSERYMEN

BLACK RIVER FALLS, WIS.

According to government statistics the production of apples for the whole United States has decreased 29,000,000 barrels from 1895 to 1909. Why this enormous decrease despite the fact that millions and millions of apple trees have been planted during the past twenty years we leave you to draw your own conclusions.

The greatest decrease has been in localities where they begin an orchard by planting large three-year old trees. The greatest increase has been in localities where they begin an orchard by planting trees with one-year old top. The only localities where there has been any fair degree of success by planting large three-year old trees are those favored by lake or ocean influence. It has been thoroughly proven and demonstrated that the one-year top trees are far superior in those favored localities.

The ignorant planter insists on having a large three or four year old tree 5 to 7 feet high to begin an orchard. He is in a great hurry to grow a "Hat-full" of apples. Does not object to the replacing of dead trees several consecutive springs if the nursery-

men will furnish them free. He gives no consideration to the value this orchard should be to his property six to eight years later or the amount of apples it should produce at that time.

The western irrigating orchardist begins his orchard with one year top trees, as he is in a great hurry to grow a "Car-load" of apples and to get an orchard worth \$2,000 to \$4,000 per acre, and he gets results, as the eastern markets flooded with his product amply proves. He knows by experience that the whole top or superstructure of an orchard tree should be produced in the orchard and not in the nursery row; that one year trees give an even stand first spring planted, and a uniformly low branched orchard; that one year trees six to eight years after planted in orchard will be healthier, larger and produce more bushels of apples than if larger trees had been planted. He plants one or two varieties for which his locality has become celebrated and has been proven that his soil and climate will grow to perfection. If all the apple trees planted in Wisconsin had been one year Wealthy, this state would now be as celebrated for Wealthy apples as Montana is for McIntosh Reds.

The past season we grew a limited quantity of trees with one year old top, both budded and grafted. The sale of these trees has been so satisfactory that this season we shall grow only one year top apple trees.

Let us book your order now for delivery fall 1911 and spring 1912 in order that you may secure the varieties wanted. The habit of waiting until the trees are wanted and then taking anything the nurseryman has left is not a good business method.

We show a cut of our one-year budded Tuttle's Winter apple trees. Note the uniform low branching habit of these trees, all alike. An orchard of 100 or 1000 trees will be just as uniform. Also note the large open angle the branches form with the main trunk. This one-year top tree will be sound and healthy in top and root. If this tree is planted as received with no pruning it will continue to form a top or superstructure with the same large open angle and under natural law. Cut the leaders with a knife and you will get an artificially formed top, with acute or sharp angle, limbs all formed in a bunch and splitting and decay as soon as the tree gets at a valuable bearing age. This is the well known result of planting large three-year old headed trees. A three-year old headed tree is rarely ever sound and healthy when delivered to the planter.

We are looking for buyers of apple trees who are willing to adopt western methods by planting apple trees with one year old top and give them proper care and cultivation. Nothing new, startling or revolutionary about it.

We do not replace free.

HENRY LAKE SONS CO.

