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U.S. Department of Agriculture

Federal Nurseries, Inc.

ROCHESTER, N. Y.

Trees and Plants for Every Place and Every Purpose

HOW TO PLANT TREES, SHRUBS, ETC.

THE failures experienced in the planting of Trees, Shrubs, etc., result from a want of knowledge of conditions necessary to success, or from a careless disregard of them. Many Nurserymen are blamed for what might easily have been avoided had the planter consulted the plain wants and requirements of the stock and given it at least a fair chance

to grow and do well. We are interested in the success of every article we send out; we take the greatest pains to place every item in the hands of our customers in the best possible condition, and in order to furnish some precautions which our experience suggests, and urge to a more cautious and considerate culture, we give a few hints on such points as are most essential.

How to Take Care of Trees on Arrival

If not ready to plant on arrival, unpack the trees, but do not leave the roots exposed to freezing temperature. Dig a trench in some high and dry ground and heel in, covering the roots with earth and follow directly with plenty of water around the tree. You can leave them in the trenches until you are ready to set out. If frozen on arrival, leave in the boxes and place in cellar or in a cool, dark room that is free from

One-year Trees in the Nursery

frost, and let them remain until the frost has disappeared. If no cellar, cover with sawdust or bury in sandy soil until frost has gone. Do not expose frozen trees to heat, light or air. Trees frozen solid will not be injured if handled in this way. If too dry from exposure or transit, bury in earth or place in water from 10 to 20 hours.

How to Prepare the Soil

The soil should be dry for fruit trees, either natural or by drainage. They will not thrive on damp ground. The land

should be plowed two or three times and worked well with spring tooth drag or pulverizer previously to the planting. New land needs no manure, but if you wish to set an orchard on land having green crops, it is a good plan to fertilize either with plenty of barnyard manure or turn under a growth of clover. Give the land as good a preparation as for wheat, corn or potatoes and your trees will show rapid growth, and will fruit earlier.

Standard Trees. They vary from five to seven feet in height, with naked stems or trunks, and a number of branches at the top forming a head. These branches should all be cut back to within three or four buds of their base. This lessens the demand upon the roots, and enables the remaining buds to push with vigor. Cut off smoothly all bruised or broken roots up to the sound wood.

Improperly Planted

FIG. 1
Top left without Pruning
and Roots crowded
together.

SURE TO DIE

Properly Planted

FIG. 2
Top properly Pruned and
cut back, and Roots
trimmed and carefully
spread out.

SURE TO LIVE

Leave about four side or scaffold branches and cut these back to six or eight inches. The middle shoot should be cut back to ten or twelve inches and left as a leader.

Notice.—The above show the right and wrong way to plant trees. Plant and trim according to Fig. 2 and you will have no trouble in making your trees grow.

SPECIAL PRUNING DIRECTIONS

Pruning, after the first year, should be varied according to the purpose of the planter, and the variety of the trees. They should be trimmed as early as possible up to the height it is intended the future head should be, that the cutting off of large limbs may not in the future be necessary. After the removal of the lower branches till the head has reached the desired height, the only pruning needed is to remove such branches as are crossing or interfering with each other, and to keep the head in symmetrical shape and open to sun and air. Trees should receive proper shape by pruning early in the spring of each year, while they are young, and very little pruning will be needed afterwards.

Dig holes large enough to admit the roots of the tree to spread out in their natural position; then, having the tree pruned as before directed, let one person hold it in an upright position, and the other shovel in the earth, carefully putting the finest and the best from the surface in among the roots, bringing every root in contact with the soil. When the earth is nearly filled in, a pail of water may be thrown around the roots; then fill in the remainder and tread gently with the foot. The use of water is seldom necessary, except in dry weather early in fall or late in spring. Guard against planting too deep; the trees, after the ground settles, should stand in this respect as they did in the nursery. Trees on dwarf stock should stand so that all the stock be under the ground, and no more. In very dry, gravelly ground, the holes should be dug twice the usual size and depth, and filled in with good loamy soil. Keep grass and weeds away from trees.

Dwarf Trees, if two or three years growth, with a number of side branches, will require pruning. The branches must be cut into the form of a pyramid by shortening the lower ones, say one-half, those above them shorter, and the upper ones around the leading shoots to within two or three buds of their base. The leader itself must be shortened back one-half or more. When trees have been dried or injured much by exposure, the pruning must be closer than if in good order.

Staking. If trees are tall or in exposed situations, they should be supported by stakes to prevent injury from wind. Staking is done in the best manner by driving two strong stakes firmly in the ground, one on each side of the tree, about a foot from it, and fastening the tree between them with bands of straw or other soft material.

Mulching. This is properly done by placing a layer of coarse manure or litter, from three to six inches deep, about the tree, extending one or two feet further in

each direction than the roots. This keeps the ground moist and of an even temperature; renders watering unnecessary, and is in all respects preferable. Trees properly mulched are more certain to live and also make 2 better growth than those not so treated.

Cultivation after Planting. Many cultivators after going to great trouble and expense in selecting and planting trees, fail by neglecting that after-care and attention that is equally essential. Caterpillars and Canker Worms, Grubs and Borers, Slugs and Aphis, Disease and Blight must be watched for, and remedies faithfully applied. The wants of the trees must be foreseen and a faithful effort made to ensure health and productiveness. For such care the cultivator will be well repaid with thrifty, shapely trees and abundant crops of superior fruit. His neighbor, with perhaps better soil and advantages at the outset, and equal care and experience in planting, having neglected these apparently trivial, but really important matters, sees instead of thrifty trees loaded with luscious fruit, a few mossy, scraggy specimens.

Those who are obliged to plant trees in fields of grain and grass, should see that all such are carefully mulched with coarse manure and that the ground is kept loose and moist about the tree. A hoed crop is preferable in such plantations for the first five years. After this time, Standard Apple, Pear and Plum Trees will grow and produce fairly in turf. The Dwarf Trees and Peaches should be well mulched every year with coarse manure, and the ground thoroughly cultivated.

Pruning Shrubs—With Slender Branches

When pruning the more slender shrubs they may be headed back, as shown at the

left, or they may be thinned out and only slightly cut back, as at the right.

Grape Vines. Require a dry, mellow, well-drained soil, deeply worked and well enriched, with a warm, sunny exposure. In planting give the roots plenty of room and settle the soil firmly about them. A strong vine may be allowed to grow the first season without pruning; in November or December following, the growth should be cut back to three or four buds; the next season allow but two buds to grow, which should make canes seven to ten feet long and be cut back to four or five feet, ready for fastening to the trellis. Finer grapes and larger crops will be secured where there is not an excess of vine. For the subsequent pruning of vines, as well as trees, planters would do well to consult some practical works on the subject.

Pruning Strawberry Plants and Herbaceous Perennials

It is customary when setting these plants to remove all but two or three leaves and these may be partly cut away. It is also well to cut back the roots especially if they are more than five inches in length. It will then be easier to bring the soil in contact with the individual roots.

Berries. Should have strong soil and be kept under constant cultivation. Mulching is of special value. Raspberries and Blackberries should have the old canes cut out each year, and new canes pinched off when three feet high. If the position is at all exposed, it is well to raise a mound between the hills late in the fall, bend the canes over

this mound and peg them down during the winter. Strawberries should be mulched late in the fall; uncover the crowns early in the spring, remove the mulch after fruiting and spade in light dressing of manure. If set for fruit, keep the runners cut off.

Currants and Gooseberries should be mulched every spring and well pruned, so that new wood may have a chance to grow. The ground about them should be kept in good condition by manure and cultivation. The worms may be destroyed with certainty by applying White Hellebore powder shaken from a coarse bag as soon as they appear, and repeating the operation once or twice.

The Pruning of Shrubs and Fruit Plants

Plants which have stout stems, such as hydrangeas, roses, etc., should be cut back to two or three buds, as shown above.

Roses. Nothing repays good care better than Roses. They should have a deep, rich, well-drained soil, thorough cultivation and plenty of manure. They should be pruned every spring before the buds swell, cutting back all the last year's growth to three or four buds, excepting Climbing or Pillar Roses, which may first be allowed partly to cover space desired, old decayed branches should never remain. Climbing, Moss and Hybrid Perpetual sorts require no protection, but the so-called "tender" varieties should be covered with leaves, straw or branches of evergreens, late in the fall. If the "thrip" or fly appears it may be disposed of by applying decoctions of tobacco steeped in water. Every autumn, compost should be placed around the stems of the plants and spaded into the ground the following spring.

Budded roses should be planted deep in the ground so that the bud is slightly covered with earth, and then during the growing season should be carefully watched and every shoot or sucker that grows from the wild root below the bud, should be cut off as soon as it makes its appearance. If this is done the budded shoot or stock receives the full strength of the plant and grows rapidly and blooms freely. If it is not done and the wild shoots or suckers are allowed to grow, they take all the strength of the roots and in a short time the budded shoot dies and nothing is left but the wild shoots from the roots which, of course, bear nothing but ordinary wild roses.

Fruit Growing is a much better line of farm work than raising grain. There is no question about the result. The demand for apples, peaches, pears and cherries is greater to-day than ever, and it will continue as long as the earth bears. Fruit is one of the best foods, besides it comes to us pure and healthful and will always demand a good price.

Every person owning land from a backyard to a 300-acre farm should plant fruit. Plant at the earliest possible time.

Age of Trees and Plants We Sell

Standard Apple, 2 and 3 years.	Dwarf Apples, 2 and 3 years.
Crab Apples, 2 and 3 yrs.	Standard Pears, 2 to 3 years.
Dwarf Pears, 2 and 3 yrs.	Cherries, 2 and 3 yrs.
Plums, 2 and 3 yrs.	Peach, 1 year.
Gooseberries and Currants, 1 and 2 yrs.	Quince, 2 years.
Raspberries and Blackberries, 2 yrs.	Grapes, 2 years.
Shrubs, 1, 2 and 3 yrs., according to kind.	Roses, 1 and 2 years.
	Asparagus, 1 and 2 yrs. according to kind.

Number of Trees or Plants to Acre

2 feet each way--10,890	15 feet each way-- 194
3 feet each way-- 4,840	18 feet each way-- 135
4 feet each way-- 2,723	20 feet each way-- 110
5 feet each way-- 1,742	25 feet each way-- 70
6 feet each way-- 1,210	30 feet each way-- 48
8 feet each way-- 681	33 feet each way-- 40
10 feet each way-- 430	40 feet each way-- 28
12 feet each way-- 302	

To estimate the number of plants required for an acre, at any given distance, multiply the distance between the rows by the distance between the plants, which will give the number of square feet allotted to each plant, and divide the number of square feet in an acre (43,560) by this number, the quotient will be the number of plants required.

Distance for Planting

Apples, Stand.---30-40 ft.	Grapes -----8x10 ft.
Apples, Dwarf--- 8-10 ft.	Currants -----3x 5 ft.
Pears, Standard-18-20 ft.	Gooseberries ---3x 5 ft.
Pears, Dwarf----- 10 ft.	Raspberries, Red-3x 6 ft.
Peaches -----16-18 ft.	Raspberries, Blk.-3x 6 ft.
Nectarines and	Blackberries ---5x 7 ft.
Apricots -----16-18 ft.	Strawber's rows-1x 4 ft.
Cherries, Sweet-18-20 ft.	Strawberries, in
Cherries, Sour---15-18 ft.	beds -----1½x1½ ft.
Plums -----16-20 ft.	Aspar., in beds-1x1½ ft.
Quinces -----10-12 ft.	Asparagus in field-1x3 ft.

Age at which Different Trees Fruit

This varies greatly with different varieties, for instance, the "Duchess" standard apple often fruits the second year after transplanting, and bears very regularly, while the "Northern Spy" seldom fruits in less than seven years after transplanting, though one of the best apples and a prolific bearer when of fruiting age. The average time it takes for standard apples to fruit is four of five years.

Dwarf Apples, 2 yrs.	Blackberries, 3 yrs.
St. Pears, 3 to 4 yrs.	Crab Apples, 2 yrs.
Cherries, 3 to 4 yrs.	Dwarf Pears, 2 yrs.
Gooseberries, 2 yrs.	Plums, 3 to 4 yrs.
Grapes, 2 yrs.	Currants, 2 yrs.
Quinces, 3 to 4 yrs.	Raspberries, 2 yrs.

Roses generally bloom the first year.

Formulas for Spraying

Arsenite of Lead

Arsenite of Lead, 4 to 6 lbs. Water, 100 gal.

Amoniactal Copper Carbonate

The copper carbonate is best dissolved in large bottles, where it will keep indefinitely, as it should be diluted with water as required. For the same purpose as Bordeaux.

Copper Sulphate Solution

Copper sulphate, 1 pound. Water, 25 gallons.

This should be used only before the foliage appears. It is easily applied, and acts as a germicide and disinfectant. In simple solution copper sulphate is very injurious to foliage. When lime is added, as in making Bordeaux mixture, its corrosive action is neutralized and injury to the foliage prevented. In this way a larger quantity of bluestone may be used, and it adheres to the foliage better by the agency of lime.

Bordeaux Mixture

Copper Sulphate	4 pounds
Quicklime	4 pounds
Water	50 gallons

To destroy leaf-eating insects, add four ounces of Paris Green. For Peach, use three pounds each of copper sulphate and lime, and three ounces of Paris Green, on account of the tenderness of the foliage.

Ferrocyanide Test—Dissolve one ounce of yellow prussiate of potash in a pint of water and label "POISON." Drop it into the mixture and if it turns brown more milk of lime should be added. Add milk of lime until the solution will not turn brown.

Tobacco

Boil tobacco stems, and use at the rate of two gallons of water to each pound of stems, for sucking insects.

Hellebore

Fresh White Hellebore, 1 oz. Water, 3 gal.

Kerosene Emulsion

Hard Soap	1/2 pound
Boiling Water	1 gallon
Kerosene	2 gallons

Dissolve the soap in hot water and while hot add the oil. Pump the liquid back into itself 5 or 10 minutes until it becomes a creamy mass.

For a 10 per cent emulsion add 17 gallons of water to 3 gallons of the above emulsion.

For a 15 per cent emulsion add 10 1/2 gallons of water to 3 gallons of the above emulsion.

Lime Sulphur Salt Solution

Stone Lime	15 pounds
Flower of Sulphur	15 pounds
Common Salt	15 pounds

Put lime in kettle, add three or four buckets hot water. While lime is boiling, add sulphur and stir brickly. If contents of kettle is likely to boil over, add another bucket of hot water. When the lime and sulphur have boiled for ten minutes, add salt, and cook until the solution becomes dark amber in color. An hour is sufficiently long to cook the mixture, but if it is not of the right color at this time, cooking should be continued. When the mixture has been properly cooked, there ought not to be more than a pint or so of residue left in the kettle. At the beginning of the cooking, stir continually, but after a few minutes, occasionally stirring will suffice. When the cooking is completed, the solution should be strained through a fine sieve, made for the purpose, or through a gunny sack into the pumping barrel or tank and made up to 50 gallons of hot water. The mixture should be applied while hot and preferably as soon after making as possible, always bearing in mind to keep it well agitated while the pump is in operation. Pumps and accessories used should be well washed and cleaned after each time of using.

Concentrated lime-sulphur solutions may be purchased from the manufacturers, of which there are now a larger number making a good product, and can be used according to directions furnished with each package.

To Salesmen

If this descriptive catalogue is carefully studied, it will yield a large amount of valuable information. In selling stock you may give purchasers dozen rates for half-dozen lots, and hundred rates for lots of fifty and upward.

Study up whatever you have decided to push as your specialty. Don't try to learn all about everything, simply study on what you decide you can sell in the territory you intend to work. You will find in your price list, prices on nearly everything unless it is something new that has been introduced since price list was issued. In this case, write for prices.

SPRAYING CALENDAR

EXPLANATION.—While the number of applications recommended will be found desirable in seasons when the fungi are particularly troublesome, a smaller number may often suffice. Those printed in bold face are of most value, and can generally be made with profit. An Asterisk (*) cautions against spraying with poisons while the plants are in blossom; a dagger (†) indicates that there is danger in making applications within 3 weeks of the time the fruit is to be used as food.

Plants and Disease	1st Application	2d Application	3d Application	4th Application
APPLES, Scab codling moth, bud moth, caterpillar, canker worm.	After the blossoms have formed, but before they open, Bordeaux.	Within a week after blossoms fall, Bordeaux and Paris Green.*	10 to 13 days later, Bordeaux and Paris Green.	10 to 14 days later, Bordeaux.
CHERRY, Rot, aphid, curculio, slug, knot.	As flower-buds appear, but before they open, Bordeaux; for aphid, use Kerosene Emulsion.	When fruit has set, Bordeaux and Paris Green.*	10 to 14 days later, if signs of rot appear, repeat.	10 to 14 days later, Ammonical Carbonate Copper.
CURRENT, Mildew, worms.	As soon as worms are found on lower and inner leaves, leaves, Paris Green.	If they reappear, repeat, adding Bordeaux for mildew.†	If worms still trouble, Pyrethrum or Hellebore.*	After fruit is picked, Bordeaux.
GOOSEBERRY, Mildew, worms.	As leaves open, Bordeaux and Paris Green.	In 10 to 12 days, repeat with both.	10 to 14 days later, Sulphide Potash, on English varieties.	10 to 14 days later, repeat.
GRAPE, Fungous diseases, flea beetle.	When first leaves are half grown, Bordeaux and Paris Green.	As soon as the fruit has set, repeat.*	10 to 14 days later, repeat.	10 to 14 days later, if disease is present, apply Bordeaux.
PEACH, APRICOT, Rot, curculio leaf, curl, mildew.	Before blossoms open, Bordeaux.	Within a week after fruit has set, Bordeaux and Paris Green.*	7 to 11 days later, repeat.	7 to 12 days later, repeat.
PEAR, Leaf-blight, scab, psylla, codling moth.	Just before blossoms open, Bordeaux.*	Within a week after blossoms fall, Bordeaux and Paris Green.	8 to 12 days later, repeat.	10 to 16 days later, Bordeaux.
PLUM, Fungous diseases, rot, curculio, knot.	Within a week after blossoms have fallen, repeat.*	10 to 12 days later, repeat.	10 to 20 days later, Bordeaux.	Cut out black kinds on Plum or Cherry and burn.
QUINCE, Leaf and fruit spots.	When blossom buds appear, but before they open, Bordeaux.	When fruit has set, Bordeaux and Paris Green.*	10 to 14 days later, repeat.	10 to 20 days later, Bordeaux.
RASPBERRY, BLACKBERRY, Anthracnose, rust.	Cut out canes diseased with anthracnose, and burn. Before buds open, spray with Copper Sulphate solution.	When new canes appear, Bordeaux and Paris Green.*	10 to 14 days later, repeat.†	NOTE.—If orange rust appears, dig and burn infected plants.
ROSE, Aphis worm.	Kerosene Emulsion for aphid.	10 days later, Bordeaux and Paris Green.	Afterwards keep lice and caterpillars off by turning a fine stream from hose on under side of leaves.	

Do not spray with arsenites or copper compounds within 3 weeks of the time the sprayed portions are to be eaten. While there would be no danger of fatal effects resulting, it is best not to run any risk. Bordeaux mixture and other lime compounds should not be used upon rough or full-grown fruits even as late as that time. Not only does the lime disfigure the fruit, but the amount of copper is large.

If the information you seek cannot be found in this calendar, or if your trees suffer from some disease or pest not mentioned above, we advise writing at once to your Agricultural Experiment Station, giving full details and particulars. The Agricultural Experiment Station of your State is established to help you produce more and better fruit and the Director will be very glad to give you all the information necessary to this end. The address will be found in the list of Agricultural Experiment Stations facing page 1 of this catalogue.

PLANT AN APPLE FOR ITS BLOSSOMS; PLANT FOR FRUIT; PLANT FOR SHADE

The capital letters following the names of varieties and descriptions are a key to the location where that particular fruit thrives best: N means North; FN Far North; C is for Central; S for South. Varieties followed by NCS may be planted North, Central or South. CS indicates varieties adapted to Central or Southern States; CFN Central to Far North; SFN South to Far North and S for South only. This area reaches from the Gulf of Mexico to Hudson Bay and from Atlantic to Pacific.

The following varieties of Summer Apples are the best and most prolific. If you know of some other variety you wish, write us about it.

SUMMER VARIETIES

Caroline Red June
Crimson Beauty

Early Harvest
Early Strawberry

Golden Sweet
Red Astrachan

Sweet Bough
Yellow Transparent

Caroline June.—(Red June)—Popular in the south and west; small to medium, deep red, productive, hardy and a free grower. Aug. NCS.

Crimson Beauty.—Originated in Maine. Very hardy, strong grower and very productive; extremely early bearer, earliest ripening apple known. Just the variety to plant in the home yard. Two year trees in the nursery rows frequently produce fine fruit. Flesh sub-acid, pleasant to eat out-of-hand. Unexcelled for pies and sauce. NCS.

Early Harvest.—Medium size, pale yellow, mild, fine flavor and popular for both dessert and cooking. Ripens early, very productive. Subject to fungous in some sections unless sprayed with Bordeaux. Trees do not grow very large. Ripens in August. NCS.

Golden Sweet.—Large, yellow; very fair, sweet apple. Tree a free grower, good bearer. Aug. and Sept. NCS.

Red Astrachan.—The most toothsome of early varieties, very handsome. Trees grow perfect. Apples medium in size, but uniform. Flesh, white, tender, streaked with red, juicy, having a rich, acid-tart taste. Excellent for cooking or dessert. The best early market apple. Ripens in August. Brings highest market prices. NCS.

Strawberry, (Early Strawberry).—Tree a moderate, erect grower and good bearer. Fruit tender, mild and fine flavored. Season, middle to end of August. NCS.

Sweet Bough.—A fine apple for baking or to eat out of hand, but too perishable as a market variety. Baked whole and eaten with cream it is delicious. Large, pale yellow,

Strawberry

low, tender and sweet. Will grow in all good apple districts. Season, Aug. Origin, U. S. NCS.

Yellow Transparent.—The most valuable early apple ever introduced. Came from Russia and succeeds in the coldest apple sections. Two-year-old trees often bear in the nursery row. Bears heavily yearly and is the earliest of all apples. The fruit is good size, mild and delicious, yellowish white when ripe. Season, early Aug. Origin, St. Petersburg, Russia. Imported by U. S. Dept. of Agriculture in 1870. NCS.

THE BEST FALL VARIETIES OF APPLES

Alexander
Duchess
Fall Pippin

Fameuse
Gravenstein
Maiden's Blush

Pound Sweet
Rambo
Red Beitigheimer

Smoke House
Twenty Ounce

Fameuse, Rambo, Gravenstein, Fall Pippin, Red Beitigheimer, Duchess of Oldenburg, Alexander

Alexander.—Tree hardy and productive, bears early. Fruit is round and large, with a rich, yellowish green skin intermingled with russet spots. Flesh white, juicy and snappy; very nice eating apple. Good for cooking and an extra fine shipper. In bearing from September 15 to November 15. Tree hardy; grow almost anywhere. NCS.

Duchess of Oldenburg.—A Russian apple. Large, roundish, streaked with red and yellow; flesh whitish, juicy, and sprightly subacid; ripening in the Fall; tree a vigorous grower, having fine, large foliage, bearing abundantly and when very young; very hardy, succeeds in nearly all sections of the country, and is as valuable in the extreme north as in the south. Sept. NCS.

Fall Pippin.—Very large, yellow, tender, juicy and rich. A general favorite as a fall cooking apple. Pleasant, aromatic flavor when eaten. Tree is vigorous, hardy and productive, but fruit is quite subject to moss spots. Season, October to December. American origin (probably seedling). NCS.

Fameuse or Snow Apple.—One of the best table apples. Medium size, deep crimson color. Inside is snowy white and delicious. First-class for all markets, and will do well North. Tree is vigorous and productive. Season, October to December. Origin, Quebec. NC.

Gravenstein.—The best apple for its season for either home use or market. Brings good price. Fruit is large, greenish yellow, striped with red. Has a rich, spicy flavor. Tree is adapted to all apple sections, and

bears regularly heavy crops of finely shaped, handsome fruit. Season, late Sept. to Nov. NCS.

Maiden's Blush.—A standard variety for the commercial orchard. Bears young and is prolific. Hardy tree and the fruit usually brings an extra price. Is good size and handsome. Rich yellow color with bright red cheeks on the sunny side. A tender, juicy apple; first class for cooking or eating. Season, Sept. and Oct. Origin, New Jersey. CS.

Pound Sweet (Pumpkin Russet).—A very large, round, yellowish russet apple; very sweet and rich. Tree a vigorous and rapid grower. Oct. and Nov.

Rambo.—Medium; yellowish, streaked with dull red and somewhat dotted; mild, tender and good. Fine grower, productive; more especially valuable in the West. Oct. to Dec.

Red Beitigheimer.—A rare and valuable German variety. Fruit looks fine and grows very large. Skin whitish yellow, almost covered with pale red. Not first class for eating, but a good cooking variety. Tree is hardy, a strong grower and a heavy cropper. Season, early fall, Sept. Origin, Germany. NCS.

Smoke House.—Large, yellow, shaded with bright red; flesh firm, crisp, juicy and fine flavored. Especially esteemed in Central states. Oct. and Nov. NC.

Twenty Ounce.—Very large, nearly round; yellow, striped with red; quality good; vigorous and good bearer; popular as a market variety. Nov. and Dec.

THE BEST WINTER VARIETIES OF APPLES

Arkansas Black	Gano	Newtown Pippin	Stayman's Winesap
Bailey Sweet	Greening, R. I.	Northern Spy	Sutton Beauty
Baldwin	Grimes' Golden	North Star	Tolman Sweet
Baxter	Golden Russet	N. W. Greening	Wagener
Bellefleur, Yellow	Hubbardston Nonesuch	Pewaukee	Walbridge
Ben Davis	Jonathan	Rome Beauty	Wealthy
Bismark	King of Tompkins Co.	Roxbury Russet	Winter Banana
Boiken	Mammoth Black Twig	Spitzenburg	Wolf River
Delicious	Mann	Stark	York Imperial
Fallawater	McIntosh Red		

Arkansas Black.—Fruit large, round, oblong, covered all over with very dark red. Much darker than Wine Sap; flesh orange-yellow; a splendid keeper. Dec. to Apr.

Bailey Sweet.—Large; deep red, tender, rich, sweet; vigorous, upright, good bearer. Nov. to Apr.

Baldwin.—The most popular winter apple for shipping and the heaviest bearer. Baldwin orchards should be mixed with other varieties, such as King, Northern Spy, Russets, etc. The fruit is much better. Tree grows rapidly and its fruit is large, round, with red and yellow skin. Flesh yellowish and tart. One of the best apples for both American and export trade. A fine keeper in ordinary dry cellar. Comes into heavy bearing in eight years. Will bear some in five years. If your orchards are tilled and the trees sprayed and properly trimmed you will bring fruit much quicker. NC.

Baxter.—A fine, large, red apple which brings a big price in all markets. Somewhat subject to fungus. Tree is a good grower, hardy, but only moderately productive. Flesh is white with red streaks; slightly sour; not very juicy, but a first-class cooking apple. Season, Oct. to Jan. NC.

Ben Davis.—Once very popular, but falling in favor. Can be shipped around the world without hurting it; is a good color, a heavy producer, but quality medium to poor. Makes a fair cooking apple. Fruit runs medium in size. Yellow skin with red stripes. Season, Jan. to May. A seedling brought from North Carolina to Kentucky by Mr. Ben Davis, about 1820. NCS.

Bismark.—Tree is short, stocky and healthy. Bears very young. Often used as a filler in orchards of later bearing varieties. Originated in New Zealand and has been planted wherever apples are grown. Fruit is large, yellow, with red cheeks; fine for eating and keeps well into the winter. NCS.

Bellefleur, Yellow.—A valuable apple be-

Baldwin

cause of its good quality all through the winter. Tree is hardy and a strong grower. Does well on light, sandy soils. The fruit is large, yellow with blush on sunny side, crisp and fine flavored in season. Bruises easily, but valuable in home markets. Season, Nov. to Apr. Origin, Burlington, N. J. NCS.

Boiken.—A handsome fruit, fine for cooking. Bears young and persistently, and keeps till July. Fine reddish-yellow color, and is at its best in April and May, when other varieties are gone. Tree is very hardy and healthy. A good commercial variety with a good sale. Imported from Russia. NCS.

Delicious.—Distinctive in shape and marvelously beautiful in color, remarkable in quality and perfect in tree and blossom. Delicious is large, with the surface almost covered with a most beautiful, brilliant dark red, blending to golden yellow at the blossom end. The calyx, or blossom end, is one of its ever characteristic features—having five protuberances more or less pointed or

Baxter

BEST WINTER VARIETIES—Continued

flat-rounded, depending on the section where grown. In quality it is unsurpassed and incomparable. In flavor it is sweet, slightly touched with acid, but only enough so to make it all the more pleasing, with an aroma delightfully fragrant. The flesh is fine grained, crisp, juicy, melting, and withal, delicious. People with delicate stomachs, to whom an acid apple is wholly indigestible, can enjoy Delicious without disagreeable after-results. Physicians of note have prescribed it for cases of this character. In keeping quality it ranks with the best, coming out of storage in March and April in perfect condition. In tree, Delicious is tree perfection and one of the strongest, hardiest and most vigorous growers among apples; aphid-resistant and a late bloomer, the hardiest in bud, the best pollenizer; blossoms strongly frost-resistant—a most important and valuable feature. Bears annually.

Fallawater—(Tulpehocken).—Very large, yellowish-green with dull red cheek. Juicy and a good cooking apple. A strong grower and very productive even while young. Season, Jan. to March. NCS.

Gano.—Good size, deep red with tender yellow flesh. A good keeper and shipper. Tree is a strong grower and bears well. Fruit has peculiar cone shape. Season, Feb. to May. NCS.

Golden Russet.—Medium size and clear-golden russet color. A good apple in colder sections and brings good prices. Keeps till May in a cold cellar, and is then rich and sweet. Tree grows rather willowy; mod-

erate producer. Season, Nov. to April. Origin, Western N. Y. NCS.

Greening.—(Rhode Island Greening)—An old standby in all apple sections, more widely planted than any other kind, except the Baldwin. One of the best cooking apples and good for table use. Fruit large, green, sometimes with red cheek. Tree is vigorous and a big producer. Origin, R. I. NCS.

Grimes Golden.—Comes into bearing early and makes a good filler. Tree is good cropper and hardy grower. Fruit is a rich, golden yellow, with spicy flavor. One of the best table apples. Season, Nov. to Jan. Origin, Virginia. NCS.

Hubbardston.—A first class commercial apple for early winter use. Very productive and bears young. Tree is a vigorous grower and the fruit is large and uniform. Color greenish yellow, nearly covered with bright red splashes. Flesh is fine grained and tender, just sour enough to be good. Season, Oct. to Jan. Origin, Hubbardston, Mass. NCS.

Jonathan.—Medium in size, but of the very finest quality. Valuable for the home garden, but runs a little small as a market apple unless soil is fertile and well tilled. Tree is not very large and slightly drooping. The fruit is bright red in sun and striped with red. One of the best table apples. Season, Nov. to Feb. Origin, Woodstock, N. Y. NCS.

King of Tompkins County.—A standard commercial variety. Hard to beat for either

BEST WINTER VARIETIES—Continued

table use or cooking. Looks well for market and is just as good as it looks. Fruit bright red, large and uniform. Brings a fancy price over other varieties. Keeps well in cold storage. Flesh is yellow, crisp and juicy; vigorous and a good cropper. Season, Oct. to Feb. Origin, N. J. NC.

Mammoth Black Twig.—(Paragon)—One of the most profitable of all apples. Resembles the Wine Sap, but is a better grower. An excellent keeper.

Mann.—Fruit medium to large, roundish oblate, nearly regular; skin deep yellow when fully ripe; flesh yellowish, half fine, half tender, juicy, mild, pleasant, sub-acid. The tree grows straight and symmetrical and makes a large tree in the orchard. It is an early and annual bearer.

McIntosh Red.—A very fine table apple for early winter use. Attractive in appearance, deep red and good size. Flesh is white, crisp, tender, juicy and aromatic. Tree is hardy and comes into bearing young. It requires several pickings, as the fruit ripens unevenly. Season, Nov. to Jan. Origin, John McIntosh, Dundela, Ont. NCS.

Newtown Pippin.—(Albemarle Pippin)—One of the best keeping varieties that can be grown. Brings highest prices in the English markets. Tree needs rich soil and cultivation to do its best. Grows rather slowly and is not extremely hardy. Fruit is good size, bright yellow with a pink blush, rich flavored, firm and juicy. Season, Nov. to June. Origin, Newtown, L. I. NCS.

Northern Spy.—This variety stands third in commercial importance in the Eastern fruit sections. Fruit large, fine color, bright red unless shaded too much, with a delicate bloom. Flesh is juicy, crisp and tender. Many persons prefer it to any other for

Hubbardston Nonesuch

table use or cooking. Always brings highest market prices. Tree very thrifty. Origin, Rochester, N. Y., about 1850. NC.

North Star.—(Dudley's Winter)—Large; very handsome; perfectly hardy, vigorous, quality fine; a seedling of Duchess, which it resembles, but less tart and better quality.

Northwestern Greening.—A greenish yellow apple sometimes faintly marked with red. One of the best winter apples for sections that are too cold for the R. I. Greening. Tree thrifty and very hardy. Fruit large and of good flavor. Season, Dec. to April. Origin, Wisconsin, about 1872, by E. W. Daniels. ENS.

Pewaukee.—A good commercial apple for cold sections. Can be grown either north or south. Medium size, bright yellow splashed with dull red. A good shipper. Season, Jan. to May. Origin, G. P. Peffer, of Pewaukee, Wis. Crossed Oldenburg and Spy. NCS.

Red Canada.—(Old Nonsuch of Mass., Steele's Red Winter)—Medium, oblate, red, tender, crisp, rich, sub-acid, refreshing and delicious. Tree, thrifty, but a slender grower. Productive. Jan. to May.

Russet.—(Roxbury or Boston)—A staple export variety. One of the best shippers and keepers. Medium size, dull green nearly covered with russet. Skin tough, flesh mild and appetizing. Good in all markets and all apple districts. As hardy as the Greening. Season, Jan. to June. Origin, Massachusetts. FNC.

Rome Beauty.—Large, yellow, shaded with bright red; flesh yellowish, tender, juicy, sub-acid. Nov. to Feb.

Delicious

BEST WINTER VARIETIES—Continued

King of Tompkins County

Spitzenburg (Esopus).—One of the finest apples for winter use. Widely planted by early settlers because of its fine flavor. Fruit medium size, conical, nearly covered with bright red. Season, Nov. to Feb. Origin, Esopus on Hudson River, 1798. NCS.

Stayman's Wine Sap.—Medium to large, smooth, thick skin, yellowish green often nearly covered with dull red. Taste juicy and pleasant. Season, Dec. to May. NCS

Stark.—A profitable winter apple for export. Better than Ben Davis. Good for cooking, poor for eating. Large fruit, dull red color on greenish ground. Keeps till late. Tree is a stout, vigorous grower and very productive. Season, Jan. to May. Origin, Ohio. NCS.

Sutton Beauty.—A large, roundish apple, yellow skin striped with crimson. Tender, crisp and juicy; just right for eating out of hand or for cooking. Dec. to Feb. NCS.

Tolman Sweet.—Tree will grow anywhere that apples can be grown and bears heavy crops. A good variety on which to top-graft more tender varieties. The apple is medium size, light yellow, firm, fine grained and very sweet. Keeps well through the winter. Season, Nov. to April. Origin, Rhode Isl. and, U. S. A. NCS.

Walbridge.—Medium size, striped with red; handsome, and of excellent quality; vigorous grower and productive; very hardy and considered of great value in the North and Northwest. March to June.

Wagener.—Fruit grows large, yellow, nearly covered with crimson. Tree bears early but is not long lived. Makes a good filler. Season, Dec. to May. Origin, A. Wagener, Penn Yan, N. Y., in 1796. NCS.

Northern Spy

Wealthy.—Will succeed anywhere that apples can be grown. Pale yellow with rich red cheek. None better for table use or cooking. Tender and juicy. Tree bears young. Season, Oct. to Jan. Origin, Peter Gideon, St. Paul, Minn. NCS.

Winesap.—Medium, dark red, sub-acid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. Dec. to May.

Winter Banana.—Very handsome, golden yellow with tint of red or sunny side. Takes its name from the fact that its rich flavor resembles that of a banana. An apple of fair quality. Season, Jan. to July. NCS.

Wealthy

BEST WINTER VARIETIES—Continued

McIntosh Dwarf (Doucín) 3 Years Old

Dwarf Apples can be supplied only in certain varieties. Write for special list.

CRAB APPLES

Within the past few years much attention has been given to improving this class of fruit, because of their adaptability to cold sections, where only a few varieties of apples can be successfully grown. These efforts have been attended with market success. Crab Apples succeed equally well in all sections, and are valuable for cider, preserving, jelly, ornament, and some of the improved sorts are excellent for eating. Sent to the Eastern markets, they command a very high price.

General Grant.—Tree an erect, vigorous grower; fruit in dense clusters; quality equal to Duchess of Oldenburg. Oct. to Dec.

Hyslop.—Very popular because of its large size, beautiful red color and hardness. Sharp acid flavor. Good for preserves, jellies and cider. Season, Oct. and Nov. NCS.

Large Red Siberian.—About an inch in diameter, grown in clusters; yellow, lively scarlet cheek. Tree, erect, vigorous, bears young and abundantly. Sept. and Oct.

Large Yellow Siberian.—Nearly as large as above; fine amber or golden yellow color.

Martha.—Another good variety for all sections. A rapid grower and a great bearer of handsome fruit. Bright, glossy

Wolf River.—Tree hardy and productive. Fruit large and handsome, rich red in color, flesh white and of exceedingly fine quality, sub-acid. Oct. to Dec. NCS.

York Imperial (Johnson's Fine Winter).—A good shipper and keeper, making it in demand for the export markets. Tree is a vigorous grower and a pretty regular bearer. Does best on heavy soils. Not at its best north of Pennsylvania. Apple is smooth, blushed and striped with red. Flesh is yellowish, tender and mildly acid. Ready to eat in January and keeps until April or May. Season, Jan. to April. Origin, York County, Pa. NCS.

DWARF APPLES

Standard Apple Trees are propagated by budding or grafting onto roots of French Crab, which produces the tall growing trees. Doucin and Paradise stocks render the tree dwarf in type. The Paradise stock produces trees which will not grow more than 8 to 10 feet high. On the Doucin stock they may attain a height of 15 or 20 feet, but can be kept lower.

yellow shaded with bright red. Fine tart flavor, surpassing all others for culinary purposes. Season, Oct. and Nov. NCS.

Transcendent.—All things considered, this is one of the most valuable varieties of crab apples grown. Tree remarkably vigorous and immensely productive. Makes a fine market apple. Golden yellow with rich crimson cheek. Good flavor. Season, Sept. and Oct. NCS.

Van Wyck.—A large, sweet crab. Skin mottled with bright red. Tree vigorous, exceedingly hardy. Season, Sept. NC.

Whitney.—A very hardy and prolific variety. Fruit is handsome and delicious. Excels for making fine jellies and preserves. Season, late Sept. and Oct. NCS.

Pear production is not in proportion to the demand. There is a vast undeveloped field for the grower who produces pears for his own enjoyment and disposes of his surplus in the home markets, and only in the last few years have orchardists realized the wonderful profits that come from a commercial pear orchard of good varieties. The pear tree will thrive on any kind of land and will bear profitable crops on a shallow soil, but does best on a loose, strong, clay soil. A dressing of coarse manure when the tree is planted is beneficial, but the pear requires very little fertilizer as compared with other trees. The young orchard after planting should have several years of clean, thorough cultivation, then it will thrive in soil, especially on richer soil, as the tree is naturally a vigorous grower.

Dwarf Pears must always be planted sufficiently deep to cover the junction of the Pear and Quince two or three inches—the soil made rich and well tilled, and about one-half the previous summer's growth cut off each spring. Under this treatment Dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height desired. Train in pyramidal form.

BEST SUMMER PEARS

Bartlett

Clapp's Favorite

Wilder

Bartlett.—No pear of the same season equals the Bartlett in flavor, either for eating or canning. Has first place in all markets and brings top prices. Fruit large and yellow, fine grained, buttery and juicy. Sweet, rich flavor. Tree is fairly hardy, grows very rapidly and bears young and heavily. Carefully cultivated and sprayed trees will produce enormous crops of perfect fruit. Season, Sept.

Clapp's Favorite.—The Clapp is a beautiful pear and of good quality, making it a profitable market variety. Must be picked early and shipped while firm, as it soon passes out of prime condition. Tree is an upright and very vigorous grower, and bears heavy crops of large, juicy pears with a very agreeable flavor. This is one of the hardest pears. Season, Aug. and early Sept.

Wilder.—(Summer) — A valuable early market pear. Regular in form, fair size and very handsome. Greenish yellow color with reddish cheek. Flavor sweet and very pleasant.

Best
Pear
Known

Bartlett

BEST AUTUMN PEARS

Anjou, Beurre D'Anjou
Beurre Clairgeau
Bosc, Beurre Bosc

Duchesse D'Angouleme
Flemish Beauty
Kieffer

Seckel
Sheldon

Vermont Beauty
Worden Seckel

D'Anjou

Anjou, Beurre D'Anjou.—A fine market pear, succeeding best on the quince root. Good size and melting, buttery texture make it a favorite in all markets for the month

of November. Tree is strong and productive. Fruit large and yellow at maturity, with a very small core. Hard to beat for table or cooking. Season, Nov.

Beurre Clairgeau.—Its large size and beautiful cheek, its excellent shipping and keeping qualities, all combine to make this a profitable variety. Tree is first class in vigor, hardiness and productiveness. Succeeds either as dwarf or standard and bears a long time, always sweet and juicy. Season, Oct. and Nov.

Bosc, Beurre Bosc.—A large russet pear with long neck; melting, high flavored and delicious. Bears well. Sept. to Oct.

Duchesse D'Angouleme.—For years this pear has been counted among the best and most profitable varieties, especially grown on quince stock. Excellent for export, cold storage, and for every use to which a pear can be put. Strong grower, productive, not subject to blight. Fruit large, light green patched with russet, melting, juicy, sweet and good. Oct. and Nov. Origin, Angers, France, 1812, chance seedling.

Flemish Beauty.—Where this variety succeeds well it is a most popular pear. In some sections it has of late been subject to

Seckel Pears

Kieffer

scab and cracking of the fruit. Large size, light yellow when ripe, with patches of brownish red; rich sugary flavor. Tree is first class in hardiness, productiveness and early bearing. Season, Sept. and Oct.

Kieffer—(Standard).—There is perhaps no pear about which a greater diversity of opinion exists. Some fruit men condemn it because of its lack of quality. Others insist that its beauty, productiveness and wonderful health make it valuable. Tree beats everything for hardiness and cropping. Fruit always large, uniform, golden yellow with bright cheek, not very fine, juicy; flavor moderately sweet, but poor for eating. A valuable pear for canning. Will grow almost anywhere. Season, Oct. to Jan.

Seckel.—The finest pear in cultivation and should never be omitted from the home garden. The richest flavored pear known. Very satisfactory as a dwarf. Tree is a good grower and bears heavy crops annually. Season, Sept. and Oct.

Sheldon.—One of the most delicious eating pears. Should be in every home garden. Tree is vigorous, erect, second rate in productiveness and last to come into bearing. Fruit large, creamy, sweet and aromatic. Thorough fertilizing and cultivation will aid in making this a profitable variety. Season, Oct. and Nov.

Vermont Beauty.—A most desirable pear. The fruit is of medium size, very handsome, being yellow with a bright carmine cheek. The flesh is rich, juicy, aromatic, of the best, and almost equal to the Seckel; ripens immediately after the Seckel.

Worden Seckel.—Originated in Oswego County, N. Y. It is a seedling of the Seckel, and is equally as good in quality as that variety and more juicy, with an aroma equally as rich and inviting, while in size, color, form and appearance it is decidedly superior. The color is yellow, with light red on the sunny side. The tree is very hardy and an enormous bearer, and the fruit is ripe just after the Seckel. All lovers of good pears should have trees of this variety.

Note.—Dwarf Pears can be supplied in certain varieties only. All varieties do not succeed on the Quince root. In dwarfs sell only those varieties listed in price list under Dwarf Pears.

**Big Profits Are Realized from
Pear Orchards. Our Trees
Produce Best Fruit.**

Dwarf Pear Tree

There are not many more desirable trees than the Cherry. It can be planted near the street along fence lines, avenues and many places where other fruit would not be prolific. Cherries always find a ready market at a profitable price. The trees thrive in any well drained soil. The Duke and Morello, or acid varieties, are hardy, while the Hearts and Bigarreaus, or sweet sorts, will resist cold weather and can be grown in most places.

A two-year-old Cherry tree will bear four quarts of fruit. A ten-year-old tree will produce from 100 to 300 pounds. An acre of Cherry trees well taken care of will produce 100 to 150 pounds to the tree or 6 to 9 tons to the acre. Six tons at 7 cents per pound would bring \$980.00.

Cherries are divided into two classes, sweet and sour; sweets being called Hearts and Bigarreaus, the sours Dukes and Morellos. The sweets attain a larger size than the sours but are not as hardy and are more likely to be injured by bursting of the bark.

HEART AND BIGARREAU CHERRIES—Sweet

Black Tartarian
Bing
Governor Wood

Lincoln
Napoleon

Schmidt's
Windsor
Yellow Spanish

HEART AND BIGARREAU CHERRIES

[Fruit heart shaped, with tender, sweet flesh. Tree of rapid growth, with large drooping limbs with abundance of foliage.]

Black Tartarian.—Large, purplish black, half tender, flesh firm, mild and pleasant. A large producer. Last of June to July.

Bing.—This is one of the most delicious Sweet Cherries that you can grow. The tree is very hardy and vigorous and has heavy foliage. It succeeds in the East better than most sweets. Fruit is large, dark brown or black and of very fine quality. Bing is a good shipper and should be planted with Lambert for commercial purposes.

Governor Wood.—Very large, rich; light yellow, with red cheek; juicy and sweet. One of the very best. Last of June.

Lincoln.—Fruit is very large, color is a glossy dark crimson, nearly black; tender, sweet and very meaty and solid. Ripens along after the middle of July.

Napoleon.—A magnificent cherry of the largest size; pale yellow, with a bright red cheek; very firm, juicy and sweet. Bears enormous crops; ripens late; valuable for canning.

Schmidt's Bigarreau.—A most promising cherry; fruit of immense size, of rich, deep black; flesh dark, tender, very juicy, with a fine flavor; bears abundantly and makes a toothsome dish for the table.

Windsor.—A seedling originated at Windsor, Canada, and a fine variety, too. Fruit large, liver-colored, flesh remarkably firm and of good quality. A very valuable late variety for market and for family use. Middle of July.

Yellow Spanish.—Large, pale yellow, with red cheek; firm, juicy and excellent; one of the best light colored cherries; vigorous and productive. Last of June.

DUKE AND MORELLO CHERRIES—Sour

Dyehouse
Early Richmond

English Morello
May Duke

Montmorency
Ostheime

Olivet

These, for the most part, are round-headed; fruit generally acid, though some varieties have a very rich, pleasant flavor. The trees are naturally of a smaller growth than the preceding class and well adapted for dwarfs or Pyramids. The Morellos are more slender and spreading in habit than the Dukes, which are of stocky, upright growth. Both are more hardy than the Hearts and Bigarreaus, and in large demand where the latter cannot be grown to advantage.

Dyehouse.—One of the best Sour Cherries for market or home use. It is larger, finer, of better quality and has a smaller pit than Early Richmond. The tree is hardy, is an upright grower and always productive. The great quality of this variety is its tendency to hang on the tree after it is ripe.

Early Richmond. — One of the most popular of all the acid Cherries. Cannot be surpassed for hardiness or for cooking purposes. Fruit is of medium size, round and dark red. The flesh is a wonderful bearer. Ripens in June.

English Morello.—Medium sized Cherry of a very dark red color, sometimes nearly black. It is very acid in flavor, the flesh is of good quality and it makes a fine canner. Tree is a small grower with light limbs and trunk. Ripens in July.

May Duke.—Large, red, juicy and rich; an old excellent variety; vigorous and productive. Middle of June.

Montmorency.—This is the best of all the sour varieties of Cherries. There is a greater demand on the market for this Cherry than for any other. The trees are the cleanest and best growers and are less subject to disease, less affected by wet weather, and are the best bearers of the best fruit of all other sour varieties. No matter how unfavorable the season may be, Montmorency can be depended upon for a full crop. The Montmorency is a good shipper, very attractive looking and always brings good prices. The canning factories are always calling for them and want them by the hundreds of tons. The fruit is good size, fine flavored and bright, clear shining red. The flesh is of fine quality and sub-

Early Richmond

acid. Fruit ripens 10 days after Early Richmond.

Ostheime.—This variety is known as the "Russian Cherry" as it was imported from St. Petersburg, Russia, and has been tested in the severest winters of Minnesota and found to be perfectly hardy. The fruit is large and roundish. Flesh is liver colored, tender, juicy and almost sweet, although a sub-acid Cherry. Quality is fine. Ripens the middle of July.

Olivet.—A new Duke of French origin. Unlike most others of this class, it is said to be very early and to ripen over a long period. Fruit very large, globular, and of a deep shining red.

The Plum does best on a clay soil, dry and well drained. It grows the most thriftily and with cultivation suffers least from "Curculio" or "Black Knot." There is little trouble in keeping the trees from insects and disease. After the blossoms have fallen spread a sheet on the ground under the tree. Then jar the tree so as to shake down the stung fruit and insects. These should be burned. This should be done every day for a week or more and it is important that it is done early in the morning.

The American varieties of Plums have not been prolific in recent years and besides the call for same does not warrant carrying stock, so that we are only supplying the European varieties.

BEST EUROPEAN SORTS

Beauty of Naples
Bradshaw
Coe's Golden Drop
Fellemborg
German Prune

Grand Duke
Green Gage
Imperial Gage
Lombard
Monarch

Moore's Arctic
Niagara
Pond's Seedling
Reine Claude

Shipper's Pride
Shropshire Damson
Yellow Egg

Beauty of Naples.—A new variety of the highest promise; size large, color greenish yellow, flesh firm, juicy and very fine flavored; tree very hardy and prolific. Middle of Sept.

Bradshaw.—Very large and fine; early; dark violet red; juicy and good. Very productive; valuable for market.

Coe's Golden Drop.—Large and handsome, oval; light yellow; flesh firm, rich and sweet; adheres to stone. Last of Sept.

Fellemborg.—(French or Italian Prune).—Large, oval; purple; juicy and delicious; parts from the stone; fine for drying. Sept.

Grand Duke.—As large as the Bradshaw, of same color, and ripening latter part of Sept. Entirely free from rot.

Green Gage.—Small; considered the standard of excellence, slow grower. Middle of August.

Plums are one of the best fruits for bringing in money to the farmers.

Bradshaw

Imperial Gage

Imperial Gage.—Large; oval; greenish; juicy, rich and delicious; parts from the stone. Very productive and one of the best. Middle of August.

Lombard.—Medium size; oval; violet red; flesh yellow, juicy and pleasant. Tree a great bearer, well adapted to light soils. Very hardy. Sept.

Monarch.—Very large, roundish oval; dark purplish blue; freestone; excellent. An abundant bearer.

Moore's Arctic.—Size medium or below; skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet and pleasant flavor. Charles Downing speaks of it as follows: "A new, hardy plum, which originated in the highlands of Aroostook County, Maine."

Niagara.—A vigorous, productive variety; valuable both for dessert and cooking; fruit large and handsome, remaining well on the tree; flesh juicy, rich and fine flavored. Last of August.

Pond's Seedling—(Hungarian Prune).—A magnificent English plum; light red, changing to violet; flesh rather coarse. Tree a good grower and an abundant bearer. One of the most attractive trees in cultivation.

Reine Claude—(Bavay's Green Gage).—Large, greenish yellow, spotted with red; firm, juicy, sugary, and of fine quality; very productive. Sept.

Shipper's Pride.—The fruit is of large size, it being no uncommon occurrence to find specimens measuring two inches in diameter each way, as it is nearly round; it is what Mr. Charles Downing calls a semi-cling, of a handsome, dark purple color; excellent for canning and a good shipper.

Shropshire Damson.—A medium sized, dark purple variety; steamed for preserving. Very productive. Oct.

Yellow Egg.—A very large and beautiful egg-shaped yellow plum; a little coarse, but excellent for cooking. Very productive. End of August.

BEST JAPAN SORTS

Abundance
Burbank

October Purple
Red June

Wickson

Abundance.—Large and beautiful; amber, turning to a rich, bright cherry; flesh light yellow, juicy, tender, sweet, exceedingly productive. Season, very early.

Burbank.—Large and beautiful; clear cherry red; an abundant bearer; valuable market variety. Ripens early in Sept.

October Purple.—One of Luther Burbank's Hybrids and considered by him one of his best. Large, purple, yellow flesh; very late.

Red June.—Medium to large, roundish, conical, purplish red, handsome; flesh yellow, quality good. Valued for market on account of its earliness.

Wickson.—Very large, glowing carmine, with a heavy white bloom; flesh firm, sugary, delicious; stone small.

All varieties of Plums, especially Japan sorts, make handsome ornamental trees as well as being rich in fruit.

October Purple

Peach growing is today a great industry. The ease with which these trees may be cultivated, their freedom from disease, the short period before they become productive, together with the immense demand for the fruit and the facility with which it may be shipped to markets, make Peach growing extremely profitable.

To secure healthy, vigorous and fruitful trees the ground must be kept clean and mellow, and should receive an occasional dressing of wood ashes.

To keep the trees in good shape it is necessary that they should be pruned yearly, all the dead and useless wood cut out and light and air let in.

BEST PEACH TREES TO PLANT

Belle of Georgia
Carman
Chair's Choice
Champion
Crawford's Early
Crawford's Late

Crosby
Elberta
Fitzgerald
Foster
Globe
Greensboro

Heath Cling
Mayflower
Mountain Rose
Niagara
Rochester
Salway

Stump the World
Smock
Triumph
Wonderful
Wheatland
Yellow St. John

Belle of Georgia.—A very large, white fleshed peach of excellent flavor. Pit free. Skin is white with a red cheek. Rapid grower and productive. A very showy peach when displayed for market. Ripens with Crawford Early. Sept. 1st to 5th.

Carman.—A moderately early white fleshed variety said to be absolutely rot-proof. Fruit is large, round, pale yellow color with red cheek. Freestone. Tree is extremely hardy. Aug.

Chair's Choice.—A very large, deep yellow peach with red cheek. Has yellow flesh that is firm and of fine flavor. Pit is free. Tree is a strong grower and good bearer. Ripens just before Smock. Oct.

Champion.—This variety may be classed as the best dessert peach of its season. White fleshed, sweet and delicious, but a little tender for distant shipping. The fruit grows very large, specimens often measuring ten inches in circumference. Tree is very hardy and productive; has stood 18 degrees below zero and produced a full crop the following summer. Freestone and ripens last of August. Originated in Illinois.

Crawford's Early.—Early Crawford has long held its place at the head of the list of peaches for home use or market. A magnificent, large yellow fruit of good quality. No other variety has been so widely planted for market purposes. Yellow flesh, free

pit, sweet and luscious. Tree vigorous and productive. Fruit ripens first of September. Origin, Middletown, N. J., by Wm. Crawford.

Crawford's Late.—A fine late September variety. Fruit is large and yellow with a flavor possibly not quite equal to Early Crawford. Still the peach has a big demand and is largely planted as a profitable market sort. Tree is vigorous; only fairly productive. Valued as first class in all markets. Origin, New Jersey.

Crosby.—A peach of good quality which was once extensively planted. Requires intensive cultivation to reach good marketable size. At its best the fruit is first class in every respect. Fine grained, tender, sweet and very agreeable. Freestone. Tree is vigorous, healthy, fairly hardy and very productive. Ripens Sept. Origin, Massachusetts, 1876.

Elberta.—The best peach of its season for all markets, as it has grand shipping qualities. Probably the greatest commercial peach on the market to-day. The fruit is large, yellow with red cheek, juicy and highly flavored. Flesh is yellow and fine. Pit perfectly free. Tree is vigorous, hardy and a good uniform cropper. Ripens about ten days later than Early Crawford, late September. Origin, Georgia; cross between Chinese Cling and Early Crawford.

Crawford's Early

Fitzgerald.—This is one of the hardiest varieties of peaches, and the quality resembles Early Crawford. Fruit runs medium to large, has yellow flesh. Freestone. Extra hardy, succeeding in Canada and in Michigan perfectly. Origin, in the garden of Mr. Fitzgerald, Oakville, Ont., about 1895.

Foster.—Originated in Medford, Mass. Large, deep orange red, becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with sub-acid flavor. Ripens with Early Crawford. Very handsome.

Globe.—A rapid, vigorous grower and enormous bearer; fruit very large, globular in form; flesh firm, juicy, yellow, shaded with reddish crimson towards the pit or stone; quality good; very rich and luscious. Sept. and Oct.

Greensboro.—The largest and most beautifully colored of all the early peaches. Of good quality; juicy; a freestone, but adheres slightly; ripens perfectly to the seed, and with the Alexander, which makes it of great value as a market peach.

Heath Cling.—(White Heath Cling)—Originated in Maryland, where it is much esteemed. Of large size and good flavor.

Mayflower.—Earliest peach known. Color red all over, beautiful appearance. Originated in Copiah Co., Miss.

Mountain Rose.—A favorite in New Jersey where it ripens early and grows to large size for so early a peach. A reliable cropper. Color white with carmine cheek, inside creamy white, abounding in rich, sweet juice. Early August. Origin, New Jersey.

Niagara.—A very large, yellow peach and a very popular one, especially in Niagara County, N. Y., where it originated. Bears a very close resemblance to Elberta, but is larger and finer in every way and ripens one week earlier than Elberta. The fruit is lightly flavored and luscious. Tree is vigorous, healthy, being seldom affected with leaf curl, and a productive, regular bearer. Season, Sept. first.

Rochester.—Has the habits and characteristics of the Crawford, but fully two weeks earlier. Yellow, freestone, good size, very sweet and fine flavor. Require only half the usual amount of sugar for canning. Do not rot on the trees. Since its introduction this splendid variety has brought each season from 20c to 30c a basket more than the prevailing market price. In a class by itself. Stock limited.

Salway.—Fruit large, roundish, deep yellow, with a rich marbled, brownish red cheek; flesh yellow, firm, juicy rich and sugary. An English variety; priced highly as a late, showy market sort.

Stump the World.—A showy, white fleshed peach with a bright red cheek. Very large, juicy, sweet and good. Tree is average grade as to vigor and productiveness. Is freestone and ripens near the end of Sept.

Smock.—A first class late market peach. Ripens in early October and is considered first quality for canning or evaporating. Not sweet for eating, but has a distinctive, agreeable flavor. Large, yellow, orange red cheek; freestone. Origin, New Jersey.

Triumph.—A valuable commercial variety, to follow the Alexander. The peach is yellow with red cheek, flesh not entirely free, with sweet, rich flavor. Early August.

Wonderful.—A variety noted for the great size and beauty of its fruit. Has a rich golden color nearly covered with bright crimson which shows up well in the basket. The flesh is yellow, firm and highly flavored. First grade for market and for eating and cooking. This variety has a very small freestone pit and ripens near the middle of October. Origin, United States.

Wheatland.—Originated with D. S. Rogers, near Rochester, N. Y. Mr. R., who has large orchards, including the leading sorts, thinks this is the finest of all. Fruit large; color golden yellow, with crimson tint; flesh firm and of fine quality. Ripens between Crawford's Early and Late.

Yellow St. John.—The best of its season. A perfect freestone. Tree is vigorous and productive. Last of August. Origin, North America.

This is a picture
of the Delicious
Rochester Peach.
Grows large
and sells for
more.

There has been a
steady demand
for this wonder-
ful Peach. Early
orders secure
good stock, as it
is limited.

THE ELBERTA

Last summer when we parted, sweet
Elberta!
You looked quite fair enough to eat,
Elberta!
Yet this for absence may atone,
Since last we met you've fairer
grown;
Yes, though you have a heart of stone,
Elberta, you're a peach!
I would devour you with my eyes,
Elberta!
But gazing never satisfies,
Elberta!
Soon in your flesh so rosy bright
I'll set my teeth most sharp and white,
For when you're peeled you're out of
sight;
Elberta, you're a peach!

Rochester Peach

QUINCES

Quince trees should be planted in rich, deep, moist, but well-drained clay soil. The tree responds quickly to good care and culture. Its greatest enemy is blight, which is combated with the same methods used with Pears. It is a dwarfish grower, and if not controlled will soon develop into shrub or bush, hence "suckers" and water spouts must be kept off and the tops open to sun and air. Quince can be planted 8 to 10 feet apart. Under proper conditions it bears heavily and regularly and is a highly profitable crop, since in all markets the demand for good Quinces is never fully supplied.

Orange or Apple.—One of the old varieties that always bear and give good satisfaction. Is large, bright golden yellow. Cooks very tender and has a great flavor. There is always a demand for this Quince.

Bourgeat.—This tree produces large crops of exceedingly large and handsome fruit, of a rich golden color. It ripens soon after Orange, but will keep until mid-winter. It is very hardy and free from leaf blight.

Champion.—Will bear more quickly than any other variety. Trees in the nursery row often bear when two years old. The fruit is large and handsome. Flesh cooks as tender as an apple and without hard spots or cores. Very fine for preserves, jellies, marmalades, etc. The tree is vigorous, hardy and very productive. Ripens in November.

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

Orange

APRICOTS

The Apricot ripens a month or more before the best early Peaches come in, which explains the reason for the great demand and prevailing high prices. It should be planted in deep, rich soil; and care should be taken to know that the sub-soil as well as the top-soil is dry.

Alexander.—A large, oblong, orange yellow fruit, spotted with red. Flesh is sweet, juicy and very good. It is a hardy, prolific bearer and very popular in the east. One of the best of the Russian varieties. Ripens early.

Early Golden.—An American variety of Apricot. Fruit is small, pale orange, juicy and sweet. The tree is hardy and prolific. Ripens first of July.

Montgamet.—A pale yellow Apricot, slightly tinged with red; flesh is firm, juicy and agreeably acid.

Moorpark.—The largest of fall Apricots;

orange in color with a red cheek. More money is made from these than from any other variety. Flesh is firm, juicy and very fine. Moorpark ripens in August.

NECTARINES

Boston.—Very large and handsome, deep yellow, with a bright blush, and mottles of red; flesh yellow to the stone, sweet, with a pleasant and peculiar flavor. Freestone.

Early Violet.—Medium size; yellowish green, nearly covered with dark purplish red; juicy, rich and highly flavored. Last of August.

PURPLE
BLUE
RED

GRAPES

WHITE
GREEN
YELLOW

THE BEST VARIETIES OF GRAPES

Agawam	Concord	Moore's Diamond	Salem
Brighton	Delaware	Moore's Early	Wilder
Catawba	Green Mountain	Niagara	Worden
Campbell's Early	Lindley	Pocklington	

Wherever you go, north, east, south and west, whether on hill or in valley, on poor soil or rich, you will find the grape generously giving of its bounty and loyal to its master whether he give care or neglect. If you plant but one fruit, plant the grape. Nothing is better for the money, nothing quite so sure to grow, nothing quite so sure to bear, nothing quite so sure to please every mouth. Plant it wherever you can find a spot six inches square. It has its likes, but it never insists on them. With its roots in any odd nook, you can lead it away in any direction to provide a grateful shade for a restful seat.

CROPS.—Crop moderately if you would have fine, well ripened fruit. A vine is capable of bringing only a certain amount of fruit to perfection, proportioned to its size and strength; but it usually sets more fruit than it can mature; reduce the crop early in the season to a moderate number of good clusters, and cut off all the small inferior bunches; the remainder will be worth much more than the whole would have been.

PRUNING.—Annual and careful pruning is essential to the production of good Grapes. If the roots are called upon to support too much wood, they cannot bring to maturity a fine crop of fruit. The pruning should be done in November, December, February or March, while the vines are entirely dormant.

TRAINING VINES.—There are many methods of training grape vines, but as trellises are more generally employed, we will confine our suggestions to a description of the trellis method. To construct a trellis take posts of oak, cedar or chestnut 8 to 10 feet long, set them 3 feet in the ground and about 12 feet apart. Stretch No. 9 galvanized wire tightly along the posts and fasten them to each. Let the first wire be 18 inches from the ground, and the distance between the wire 12 inches. Wooden slats about one by two inches may be substituted for wires. Trellises should be at least

10 feet apart, a greater distance preferable. Set the vines about 20 feet apart. Prune the vines to two canes each for two years after they are planted. In February or March these canes should be cut back to 5 or 6 feet each, and tied along the lower wire or slat of the trellis horizontally.

When the growth commences in spring the young shoots must be reduced by disbudding so that they may stand about a foot apart on the cane, selecting, of course, strong, healthy shoots: as they grow they are tied up to the second, third and fourth wire or slat, and all other superfluous ones removed, as well as the young laterals, which will appear on vigorous vines; but the first fruit-bearing shoots are allowed to extend themselves at will until September, when they may be pinched off at the end to assist the ripening of the wood. The next pruning, which may be done in November or December, if it is desirable to lay the vines down and cover them over for the winter; or in February or March if not laid down, consists in cutting back all the young wood of the previous year's growth (except such shoots as may be required to extend

the horizontal arms), to within one or two good buds of the bearing canes on the lower wire, giving the vine the appearance of the following cut:

Each season thereafter the vines are to be treated in the same manner, cutting back every year to the lower wire or slat, extending the vine only in a horizontal direction, thinning vines in the rows by digging up every other plant if necessary, but never growing any grapes above the second wire, and renewing the bearing canes by new shoots from the stumps when required.

GATHERING AND KEEPING.—Grapes for keeping, to be used in their fresh state, should be allowed to remain upon the vines until perfectly matured, but not much longer. Pick them when perfectly dry. Let them stand in open baskets or boxes for about ten days in a cool, dry room, and after sorting out all decayed and imperfect berries, pack them in shallow boxes and cover closely. Use no paper, but basswood or elm boxes if convenient. Pine and other resinous woods should not be used, as they flavor the fruit disagreeably. After packing, keep the boxes where it is both cool and dry. Under careful management some varieties may be kept until spring.

The letters following descriptions indicate color of fruits, B (black); R (red or purplish); W (white).

Agawam.—(Rogers' No. 15)—One of the best of the red varieties; bunch variable in size; flesh tender and juicy. A good grower and bearer. R.

Brighton.—Flesh rich, sweet, and of the best quality, equal if not superior to Delaware; ripens early. Productive and vigorous. R.

Catawba.—Bunches large and loose; berries large, of coppery red color, becoming

purplish when well ripened; vinous, rich; requires the most favored soils and situations, good culture and warm seasons to mature perfectly in Western New York. R.

Concord.—Large and handsome, very hardy, productive and reliable; succeeds well over a great extent of country, and is one of the most popular market grapes. B.

A Vine of Brighton Grapes

Campbell's Early.—Clusters large and handsome; berries large, nearly round, black, with light purple bloom; flesh rather firm, but tender; quality rich, sweet, slightly vinous; a strong and vigorous grower; very early; the berries do not drop easily from the clusters, and the fruit keeps a long time in perfection. B.

Delaware.—One of the finest of our native grapes. Ripens early. Bunches small and compact; berries small, light red, with a violet bloom, beautiful; sweet, sugary and vinous, with a musky aroma. R.

Green Mountain.—A very early and delicious grape; pulp tender and sweet, with but one or two seeds; bears young and profusely, and ripens from the 25th of August to the 1st of September. The only grape thus far tested that ranks first, both in earliness and quality. W.

Lindley.—(Rogers' No. 9)—Bunch medium, somewhat loose; berry medium to large, round; a rich shade of red; very

Niagara

Concord

handsome and attractive; flesh tender, sweet, with a rich aromatic flavor; ripens soon after the Delaware; vigorous and productive. One of the best red grapes. R.

Moore's Diamond.—Bunch large, compact; berry medium size; color greenish white with a yellow tinge; juicy and almost without pulp; vigorous and productive. W.

Moore's Early.—Bunch large, berry round; color black, with a heavy blue bloom; quality better than the Concord. Vine exceedingly hardy; has been exposed to a temperature of more than 20 degrees below zero without injury, and is entirely exempt from mildew or disease. B.

Niagara.—Bunch medium to large, compact, occasionally shouldered; berry large, roundish, uniform; skin thin but tough, pale green, changing to pale yellow, with a thin whitish bloom; flesh slightly pulpy, tender, sweet. Remarkably vigorous, healthy and productive; foliage thick and leathery. Ripens with the Concord. Most valuable white grape in cultivation. W.

Pocklington.—Is a seedling from Concord; fruit a light golden yellow, clear, juicy and sweet to the center, with little or no pulp; bunches very large, sometimes shouldered; berries round, very large and thickly set. First of Sept. W.

Salem.—(Rogers' No. 22)—This is regarded as the best of Mr. Rogers' hybrids. Bunch large, berry large, round; flesh tender, juicy, with a rich, aromatic flavor; slight pulp; a good keeper. R.

Wilder.—(Rogers' No. 4)—Large and black; bunches generally shouldered; berry round and large; flesh buttery, with a some-

what fibrous center; sweet, rather sprightly; ten days earlier than the Isabella. B.

Worden.—A seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Very popular for the vineyard and garden. B.

CURRENTS

[The United States Government does not permit the sale or distribution of black fruited varieties, claiming they cause a rust injurious to other plant life.]

Currents are the most profitable of smaller fruits. An acre yields from 200 to 250 bushels of fruit. Plants should be set in rows four feet each way, allowing plenty of light and air. For protection against the currant worm dust a little white hellebore powder over the bushes when the leaves are damp. Do this as soon as worms appear.

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

Fay's Prolific.—Originated in Chautauqua County, N. Y. A cross between Cherry and Victoria; of large size, fine flavor, and claimed to be five times as prolific as the Cherry. A great acquisition.

La Versailles.—Very large, red; bunch long, of great beauty and excellent quality; one of the finest and best and should be in every collection. Very productive.

Perfection.—A cross between Fay's Polific and White Grape. Color is a beautiful bright red. Size as large as the Fay's or larger, the clusters averaging longer. It is the most productive large red currant of which we have any knowledge. Season of ripening is about the same as that of Cherry or Fay. Quality rich, mild, sub-acid, plenty of pulp with few seeds. Less acid and of better quality than any other large red currant in cultivation. A good grower, with very large, healthy foliage. Awarded the Barry, Fifty Dollar Gold

Fay's Prolific

Medal of the Western New York Horticultural Society, July, 1901, after three years' trial. The first fruit to receive this grand prize. Received Highest Award given any new fruit at the Pan-American Exposition, also received prize at Louisiana Purchase Exposition, St. Louis, 1904.

White Grape.—Very large, yellowish white, sweet, of very mild acid. Excellent quality; very productive. Best of the white varieties.

Wilder.—It is one of the strongest growers and very productive. Bunches of berries very large, bright, attractive red color, and hang on bushes longer than any other variety.

Wilder

Perfection

GOOSEBERRIES

This fruit is so useful for cooking, when green or ripe, and it may be canned with such facility that it is beginning to be cultivated very extensively for both home use and market.

It requires the same cultivation and treatment for worms as the currant. The worms attack the Gooseberry before the currant bushes, and if a few of the former are set near a currant plantation, and the worms exterminated on these, there will be little if any trouble from them on the currant bushes.

The American varieties, though not quite so large as the English sorts, are of fine quality and are not subject to mildew.

Downing.—Medium size. Whitish green; juicy. Soft and good. Very prolific. A great market berry.

Golden Prolific.—A remarkably strong, vigorous and upright grower, with dark green glaucous foliage, which resists mildew perfectly, and persistently hangs on until the end of the season. The fruit is of the largest size oblong. Color, golden yellow; flavor decidedly good; very productive.

Houghton.—Roundish, medium in size; sweet, very productive.

Josselyn.—Berry smooth; very prolific and hardy; quality and foliage the best.

Smith's Improved.—From Vermont. Large oval, light green with bloom; flesh moderately firm, sweet and good. Vigorous grower.

RASPBERRIES

Plant in good soil and manure it from time to time freely. The hills should be not less than four feet apart each way. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is much exposed and the plants inclined to kill down seriously, they may be bent over in the fall on mounds of earth formed at one side of the hills and covered sufficiently to keep them down until spring. Surplus suckers take strength from the bearing plants. They should be cut away or hoed up frequently. Raspberries may be made very profitable with cultivation.

BLACK RASPBERRIES

Black Diamond.—A large, handsome berry of great productiveness and splendid keeping and evaporating qualities; sweet; excellent.

Cumberland.—The largest of them all. Good quality, hardy and productive. Fruit firm, similar to Gregg. Keeps and ships well. One of the most profitable varieties. Ripens mid-season.

Gregg.—A very large berry of excellent quality. Produces larger crops and is fine for evaporating or canning. Makes juicy, rich pies.

Gault.—(The Greatest Novelty in small Fruits)—Fruit immense size; commences to ripen with Gregg, continuing two or three weeks longer, when fruit on young canes commences to ripen, continuing until frost. Young canes frequently produce clusters of 80 to 100 perfect berries.

Kansas.—One of the best blackcaps. Hardy, handsome, juicy and firm. An excellent field or garden variety.

Ohio.—A very strong growing hardy sort; fruit nearly as large as Mammoth Cluster, more productive than any other variety, and one of the most if not the most valuable for market.

Gregg

Plum Farmer.—This wonder new Black Raspberry has been thoroughly tested and is a great favorite for home use, and one of the best commercial sorts for all sections. A vigorous grower, hardy and very productive; one of the best to withstand drought. Fruit enormously large, covered with a grayish bloom like the bloom on a grape; matures early, easily picked, ships well, sells at highest prices.

Red and Purple Raspberries

Columbian.—The greatest Raspberry of the age. It is a seedling of the Cuthbert, grown near the Gregg, and is believed to be a cross between the two. It is enormously productive, of large size and excellent quality. Season of fruiting, from July to August 15th. It has stood 28 degrees below zero without injury, is propagated from the tips and does not sucker. The color is dark red; adheres to the stem, does not crumble in picking and is a splendid shipper. It has yielded over 8,000 quarts per acre.

Cuthbert.—Medium, conical, hardy variety, of deep, rich crimson. Very luscious and highly flavored. One of the best market varieties.

Plum Farmer

Herbert.—Very hardy, canes strong and vigorous; bright red, the largest of all red Raspberries; sweet, juicy. Fine for table use. Enormously productive.

Marlboro.—One of the best early reds. Hardy and a good producer. Ripens together.

St. Regis.—This everbearing red Raspberry bears the first season. One of the greatest raspberries ever introduced. Plants of the St. Regis put out in the Fall or early April gave ripe berries on the 20th of June. For four weeks thereafter the yield was heavy and the canes continued to produce ripe fruit without intermission until late October. The berries were large and beautiful and full flavored to the very last. The St. Regis is the only raspberry, as far as known, that is practically sure to produce a crop of fruit the season planted. Awarded the highest certificate of merit by the American Institute of New York.

Raspberries make a good hedge or dividing line between property.

St. Regis

BLACKBERRIES

Nearly all of the Blackberries will bear on good fruit land, particularly good on sandy soil. They require the same culture as Raspberries. Keep soil free from weeds and grass. Plant in rows of seven feet apart if in field and five feet apart for garden. When the canes reach the height of three feet in summer pinch off top; this will cause them to throw out laterals. Setting plants 7x3 feet apart you can get 2,078 plants to an acre. 5x3 feet apart will allow 2,904 plants to acre.

Ancient Briton.—One of the best old varieties. Vigorous, healthy and hardy. Producing large crops with fine quality, bringing highest market price. Will bear in far North, Central or South.

Blower.—The largest of the blackberry family. Plant is upright and hardy. One of the most productive, a single plant producing over two thousand berries. Jet black. A good shipper. Ripens about July 15 and continues for six weeks.

Eldorado.—Vigorous and hardy. Stands the severe winters of the Northwest without injury. Jet black. Bears in clusters and ripens together. Sweet and juicy. Free from hard core.

Erie.—Very large and very hardy. A strong grower and great bearer, producing larger, sweeter berries; earlier in ripening than any other sort.

Rathbun.—Origin, Western New York. A strong erect grower with strong stem, branching freely; will root from tip of branches like a raspberry. Hardy, having endured 20 degrees below zero, and produced a good crop. Forms a neat, compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious, without hard core, of extra high flavor, jet black, small seeds; firm enough to ship and handle well. Very large size, resembling the Wilson and fully equal to that grand variety, with the addition of hardness.

Snyder.—Extremely hardy. Very productive. Bears every year. Free from hard core. Grows upright. Fruit easy to pick.

DEWBERRY

Lucretia.—A low-growing, trailing blackberry. Hardy, and very productive with fine foliage and white flowers. The fruit ripens early; is many times one and one-half inches long by one inch in diameter. Soft, sweet and luscious. Free from hard core. Ripens before late raspberries are gone. Should be mulched to keep berries off from soil.

Plum Farmer

Blower

ASPARAGUS

Barr's Mammoth.—(Barr's Philadelphia Mammoth) — Originated with Crawford Barr, a prominent market gardener of Pennsylvania. It is one of the earliest varieties, very productive and grows to the largest size.

Columbia Mammoth White.—Produces shoots that are white and remain so as long as fit for use, very robust and vigorous in habit.

Conover's Colossal.—Immense size, remarkably tender and high flavored, vigorous grower, sending up from fifteen to twenty sprouts each year, from one to two inches in diameter, color deep green and crown very close. Can be cut one year sooner than the other varieties.

Palmetto.—Until recently we believed that the Conover's Colossal was the best

sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder, and more even and better in growth, and it will eventually supersede the old favorite. The average bunches contain fifteen shoots, measuring $13\frac{1}{2}$ inches in circumference and weighing nearly two pounds. It has been tested both North and south and has proved entirely successful in every instance.

RHUBARB OR WINE PLANT

The plants should be set four feet apart each way, and the stalks will be fit for use the second season after planting.

Myatt's Linnaeus.—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie

Plant." It is an early, tender variety, without being in the least tough or stringy, with a mild, sub-acid flavor.

STRAWBERRIES

SPRING DELIVERY ONLY

WE CANNOT FILL ORDERS FOR STRAWBERRIES
FOR CUSTOMERS SOUTH OF VIRGINIA
OR WEST OF KANSAS

Strawberry Plants are sent direct to the customer by Parcel Post or Express, depending on size of order. We guarantee delivery in good shape, as plants are dug and shipped the same day. No plants carried over night. Every plant shipped fresh and in perfect order.

DESCRIPTION OF BEST SORTS

Americus (P) Thrifty grower, fruit good quality, medium to large in size, rich red in color, delicious flavor.

Brandywine (P) A strong grower. Will thrive on any soil. Berries rich dark red with bright yellow seeds on surface. Spice flavor. A delightful table berry.

Bushel-Basket (P) This veritable giant is creating a genuine sensation. We realized it must have unusual merit when it was awarded the Barry Gold Medal, but we are frank to state we did not expect to have it prove so remarkably fine as it has. It is an immense plant, fruiting in mid-season and the fruit, though unusually large, is freely produced and of high quality.

Dunlap (P) A prolific grower on any soil and under all conditions. Berries large size, bright glossy red. A strictly high class berry.

Great Scott (P) A veritable giant among strawberries. GREAT in size, beauty, yield and quality.

Taken premiums everywhere on account of large size and rich flavor.

Glen Mary (P) A popular sort among market gardeners. Berries rich, dark, clear all through, high flavor, ripening mid-early to mid-season. A great market variety.

MONROE (P) Awarded Barry Gold Medal. Dark red, large, very smooth, extra firm and fine grained. High quality, uniform in shape. Brings fancy prices, much above ordinary berries. Mr. Joseph A. Morgan, the originator, says: "BEST of 50 tested varieties. Yield double that of any of the others and my best seller." Another grower says: "I find it hard to sell other varieties of strawberries to my customers after they have had some of the MONROE."

Oregon (P) Originated in Oregon and our stock came direct from the parent plants. It is a vigorous grower, adapted to all soils and locations. Berry very juicy. Strictly hardy, free from blight and recommended to all growers.

Progressive (P) Big producer, good size, good color, good quality. A popular variety.

Ryckman (P) A very early big berry, leader of 15 varieties. Attracted wide attention at St. Louis exhibition. A perfect shipper and valuable market sort.

Sample (Imp.) Very productive and grows freely on any soil. Is a wonder for productiveness. Berries large to very large, globular, bright red, moderately firm and good. It has yielded 500 bushels per acre.

Superb (P) Best and most profitable Fall bearing variety. Yields heavy crops. Large berries, of good quality and appearance wherever grown.

Warfield (Imp.) Very productive, medium size, dark glossy red. A fine canning berry. Will ship long distances. A well known variety that needs no recommendation.

Wilson (P) A well known variety that has for years been the standard of excellence. Very large, dark red, firm, rather acid. A good market sort and superb for canning.

DIRECTIONS FOR PLANTING

We advise planting strawberries in rows five feet apart and the plants one foot apart. This would require 8,700 plants to the acre, or a trifle over 50 plants to the rod of land. In small gardens it is often advisable to plant them one foot apart each way. With good care, one can reasonably estimate one pint of fruit to the plant. A number of the varieties we have listed produced from ten to fifteen thousand quarts per acre last year. There is a permanent demand nowadays for all the strawberries that a man can raise. The canning factories will take all they can get at a fair price which will net the farmer from \$250 to \$800 an acre, depending on the care given to the plants and crop.

NUT TREES

(Not desirable to plant. Have tap roots and transplant badly.)

Butternut.—A rapid growing native tree, producing edible nuts.

Chestnut, American.—A well known forest and nut-bearing tree, of great value for ornamental purposes.

Filbert, American.—Smaller, and with a thicker shell than the English, but of good flavor; hardy and productive.

WALNUT—Juglans

Black.—The well known native species; hardy, prolific and valuable; timber in point of durability is difficult to excel.

English.—(Madeira Nut)—This rich and fine flavored nut is moderately hardy, and makes a vigorous growth.

Japan.—Perfectly hardy here, rapid grower, handsome form, large leaves, bears young and abundantly.

TREES and SHRUBS THAT HARMONIZE

The growing custom of bringing the home and its surroundings into more complete harmony by a well planned arrangement of trees, shrubs and flowers is one that cannot be too highly commended. Flowering shrubs for borders of walks and roadways, screens of bushes to shut off objectionable views; gardens of old-fashioned flowers, intermingled with trailing vines, enhance not only the beauty and cheerfulness of the home, but we should consider that the actual value of the property has increased largely.

For City Street and Avenue.—Sugar Maple, Norway Maple, American Elm, American Ash, Pin Oak, Red Oak, White Oak, American Linden, Oriental Plane.

Quick-growing Street Trees.—Silver Maple, Ash-leaved Maple, Bolleana Poplar, Carolina Poplar, Lombardy Poplar.

Best Lawn Trees.—Norway Maple, European White Birch, Cut-leaved Weeping Birch, Catalpa Speciosa, Purple-leaved Beech, Tulip Tree, Maiden Hair, Cucumber Tree, European Larch, European Mt. Ash, the Oaks, English Elm, Lindens.

Low-growing Lawn Trees.—Aralia, Catalpa Bungei,

Japan Weeping and Flowering Cherries, the Dogwoods, the Double-flowering Thorns, Fern-leaved Beech, Weeping Mulberry, Bechtel's Flowering Crab.

Trees for Damp Places.—Pin Oak, Swamp White Oak, Red Maple, Silver Maple, the Willows, American Elm, American White Birch.

Trees for Dry Places.—Scarlet Oak, Red Oak, Aralia, White Birch, Sugar Maple, Beeches.

Trees for Seashore Planting.—Norway Maple, Oriental Planes, Carolina Poplar, Lombardy Poplar, Bolleana Poplar, Pin Oak, Red Oak. Willow, Honey Locust, Tamarix.

FLOWERING TREES

Named in the order in which they flower:

MAY.—Almond, Cherry, Double-flowered; Judas Tree, Magnolia, in variety; Cornus Florida, Horse Chestnuts; Crabs, flowering; Peach, double-flowered; Bird Cherry.

JUNE.—Mountain Ash, Thorns, in variety; Laburnum, White Fringe, Locust, white; Virgilia Lutea, Catalpa, Lindens, in variety.

JULY.—Chestnut, American, Catalpas.

Trees which produce ornamental fruit succeeding the flowers: Celtis occidentalis, dull red fruit as large as peas.

Cornus Florida—Oval fruit in a head.

Crataegus—(Thorns)—Scarlet and yellow fruit in September and October.

Pyrus (Crab), Mountain Ash—Scarlet fruit in September and October.

Trees for Spring Planting Only.—While most kinds of trees can be safely transplanted in the Fall, there are a few that are rarely successful unless carefully moved in the Spring; the Birches, the Beeches, the Larches, Magnolias, Tulip Trees, Flowering Cherries and Peaches, Judas Tree, the Oaks, Sweet Gum and all Nut-bearing trees.

Deciduous Trees, Shrubs and Vines can be planted in Spring or Fall. In the far north, where the weather is too severe, plant in the Spring. Evergreens should be set out in Spring.

CARE IN PLANTING

Preparation of the Roots.—Cut off smoothly all bruised or broken roots up to the sound wood. This prevents their decaying and hastens the emission of new roots and fibres.

Preparation of the Top.—This consists in cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots as follows: Trees with branching heads should have the small branches cut clean out, and the larger ones, intended for the framework of the tree, cut back to within two or three buds of their base.

In cases where there is an abundant root and small top or few branches, the pruning need be very light, but where the roots are small and the top heavy, severe pruning will be necessary. This is applicable to all deciduous Trees and Shrubs. Evergreens seldom require pruning, but *Arbor Vitae* and other Evergreens planted in hedge rows may be shorn immediately after planting.

Pruning.—Pruning has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly conifers, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shapes we destroy their identity. The pruning knife should be used to assist nature, and operated with good judgment; to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood.

Each shrub has peculiarities of habit and

foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. *Wiegels*, *Deutzias*, *Forsythias* and *Mock Orange* flower on the wood of the preceding year's growth, hence the shrubs should not be pruned in Winter or Spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood, which is to flower the following season.

Spiraeas, *Lilacs*, *Altheas* and *Honeysuckles* may be trimmed during the Winter or early in Spring, but the branches should only be reduced enough to keep them in good shape. The old growth should be occasionally thinned out and the suckers and root sprouts removed when they appear. The best time, however, for pruning all shrubs is when they have done flowering. The *Hydrangea paniculata grandiflora* should be severely cut back and thinned early in Spring.

Pruning Evergreens.—Use the knife occasionally to thicken the growth and preserve the shape. This can be done in April or May, just before the trees start to grow.

For Lawns and Small Places.—Whatever specimens are planted should be of the finest species, of moderate size, of graceful habits of growth and handsome foliage.

A pendulous tree or one with variegated foliage may be occasionally introduced, and will add to the beauty of the grounds. Depend mainly upon dwarf shrubs for small places, and in selecting, aim at securing a succession of bloom.

UPRIGHT DECIDUOUS TREES

ASH—*Fraxinus*

There are many varieties of Ash and all are clean, healthy and vigorous.

American White Ash—A well known native tree. Desirable for lawns or streets.

BEECH—*Fagus*

The Beeches are noted for their rich, glossy foliage and large size at maturity. They are fine for lawn decorations.

European Beech — (*Sylvatica*) — Like American variety, darker bark and more compact habit.

Purple-leaved—(*Purpurea*) — Discovered in a German forest. An elegant, vigorous tree, growing 40 to 50 feet high. Foliage deep purple, changing to crimson. Like all varieties of the Beech, this is difficult to transplant, hence small trees three feet high are preferable.

Weeping Beech—(See Weeping Trees).

BIRCH—*Betula*

American White Birch — An American species of rapid growth with triangular, taper pointed, smooth and glossy leaves.

Cut-leaved Weeping Birch—(See Weeping Trees).

European White (Alba)—A fine tree of moderate size, with silvery bark and slender branches.

Young's Weeping—(See Weeping Trees).

CATALPA

The Catalpas flower in July. The blossoms are showy, large and fragrant. Leaves large, heart-shaped and yellowish green. They are effective, tropical-looking lawn trees, some varieties producing long seed pods, that remain on all winter.

Bungei (Umbrella Catalpa)—Grafted on stems 5 to 6 feet high, it makes an umbrella-shaped top without pruning. Perfectly hardy, and flourishes in almost all soils and climates. Leaves large, glossy, heart-shaped, deep green; lay like shingles on a roof; always make a symmetrical head. One of the most unique trees; a valuable acquisition, desirable for lawn, park and cemetery planting.

Speciosa—This early-blooming, upright variety is much harder than the syringa-leaved, having proved itself able to stand the severe winters of Wisconsin and Iowa, making when planted in groves, straight symmetrical trees, suitable for posts or railway ties, for which purpose it is one of the most useful trees known, lasting in many instances nearly or quite a century.

A suggestion for planting a lawn: Blue Spruce, Catalpa, Purple Leaved Beech, American White Ash, Bechtel's Crab, Elm, White Flowering Dogwood, Thunbergii, etc.

The house herewith shown has a very pleasing planting and meets with the approval of the majority. The front contains Spirea. Thunbergi, Flowering Dogwood, Japan Snowball, etc.

ELM—Ulmus

The Elms are so well known that it is unnecessary to refer to their beauty and value for ornamental planting. We grow the American. There is no finer tree for street and park planting.

American White Elm—The noble spreading and drooping tree of our own forests.

CRAB—Pyrus

Bechtel's Double Flowering—One of the most beautiful of the many fine varieties of flowering Crabs. Tree of medium size, covered in early Spring with large, beautiful, double, fragrant flowers of a delicate pink color. From a distance the flowers have the appearance of small roses. Blooms when quite young.

CHERRY—Cerasus

Double Flowering (Flore alba Plena)—A tree of medium growth, producing clusters of double white flowers in May. Blooms so profusely as to completely hide the branches from view.

DOGWOOD (Cornus)

Red Flowering (Flore rubra)—A valuable variety, producing beautiful carmine flowers; of great value.

White Flowering (Florida)—A fine American tree, growing from sixteen to twenty-five feet high. Foliage of a grayish green color; very glossy and handsome, turning in the autumn to a deep red, rendering the tree one of the most beautiful objects at that season. The flowers appear before the leaves in the spring and about three inches in diameter; white and very showy. It is one of the most valuable ornamental trees.

Camperdown Weeping Elm—(See Weeping Trees).

HORSE CHESTNUT—Aesculus

European or White Flowering Horse Chestnut—A beautiful well-known tree of roundish form with dark green foliage and abundance of spikes of white flowers, slightly marked with red. Hardy.

PLAN TO PLANT ANOTHER TREE

A Row of Norway and Silver Leafed Maples

JUDAS TREE, OR RED BUD—*Cercis*

American Judas—A very ornamental native tree, of medium size, irregular rounded form, with perfect heart-shaped leaves of a pure green color, glossy surface above and grayish green beneath. The tree derives the name of Red Bud from the profusion of delicate reddish purple flowers with which it is covered before the foliage appears. Flowering at the same time with the Chinese Magnolias, it may be planted among them in groups with fine effect. Grown as single specimens they are also beautiful and attractive and deserve to be classed among our finest ornamental trees.

LARCH—*Larix*

European Larch—A beautiful, rapid-growing tree, of irregular, pyramidal form, with small drooping branches; valuable for timber.

LABURNUM—*Cytisus*

Common, or Golden Chain—Bears long, pendent racemes of golden flowers in June; smooth and shiny foliage. Very showy and beautiful, and valuable for every lawn. When fully grown, fifteen to twenty feet high.

LOCUST OR ACACIA—*Robinia*

Rose or Moss Locust—A native species of spreading, irregular growth, with long elegant clusters of rose-colored flowers in June, and at intervals all the season.

LINDEN OR LIME TREE—*Tilia*

The Lindens are all beautiful. In addition to many other valuable qualities which they possess, their flowers yield a delicate perfume.

American Linden or Basswood—A rapid growing, large-sized, beautiful native tree, with very large leaves and fragrant flowers.

European Linden—A very fine pyramidal tree of large size, with large leaves and fragrant flowers.

MAPLE—*Acer*

Very valuable for shade. Vigorous and free from disease. Hardy and adapted to all soils. Recommended for street planting.

Ash-leaved, or Box Elder (*Negundo*)—A native tree, maple-like in its seeds and ash-like in foliage; of irregular spreading habit.

Norway Maple—A native of Europe. Now planted very largely, on account of its clean, broad foliage of rich deep green. Stout, vigorous grower, of spreading rounded form. Very hardy and makes dense shade. One of the most popular maples.

Red or Scarlet Maple.—Conspicuous in Spring for its masses of red blossoms, and in Fall for its glowing crimson foliage.

Silver-leaved Maple.—Hardy, rapid grower. Foliage bright green above and silver beneath. Quick shade producer.

Wier's Cut Leaf Maple

Sugar or Rock Maple—Probably the most generally used of all shade trees. Its Autumn tints are familiar to all.

Wier's Cut-leaved Maple—One of the most rapid and graceful growing of weeping trees, forming beautiful specimens in a short time. Foliage deeply cut and borne on long recurving, pendulous branches; can be pruned severely. Perfectly hardy.

MOUNTAIN ASH—Sorbus

American—A favorite, erect-growing tree, of medium size, producing white flowers early in spring, followed by clusters of bright scarlet berries, which remain on the tree through the winter months.

European—Similar in appearance to American, with finer foliage, and smaller, deeper-colored berries from July to Winter, much more desirable than the American and everywhere very popular. When fully grown, 20 to 35 feet.

Weeping European—(See Weeping Trees).

THE TREE

By Joyce Kilmer

Who Gave His Life in France

I think that I shall never see
A poem lovely as a tree.
A tree whose hungry mouth
is prest
Against the earth's sweet
flowing breast.
A tree that looks at God all
day

And lifts her leafy arms to
pray.
A tree that may in summer
wear
A nest of robins in her hair.
Upon whose bosom snow has
lain;
Who intimately lives with
rain.
Poems are made by fools like
me,
But only God can make a
tree.

Oriental Plane Tree

MULBERRY—Morus

The Mulberry is valuable both as an ornamental shade tree and for its fruit. It is of easy culture, requiring little or no pruning.

Downing's Everbearing—A rapid grower, bearing large, black, edible fruit from June until September. Leaves larger than other varieties.

Russian—A very hardy, rapid-growing timber tree of great value, especially in the West. Foliage abundant and is desirable in the culture of silk worms. Fruit of good size and produced in great abundance.

Tea's Weeping Russian Mulberry—(See Weeping Trees).

OAK—Quercus

The Oaks, when they attain size, are our most picturesque trees. The species and varieties are numerous, and the majority are adapted to ornament large grounds where they can have an abundance of room.

Pin—The Pin Oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, finely divided, of a beautiful shining green that colors to sparkling red and yellow in fall. The tree is easily transplanted and grows well on wet or dry ground; is, in fact, the quickest growing of all the Oaks and is one of the best for street or park planting.

OLIVE

Russian — (Eleagnus) — A very large shrub, or small tree; leaves narrow and silvery white, flowers, yellow and fragrant; very hardy.

PEACH—Persica

The double flowered varieties are distinguished for their showy and beautiful bloom. At the blossoming season in May every branchlet is covered with a mass of beautifully formed, highly colored flowers, rendering the trees most interesting objects and attracting notice from a distance. The double red, double rose, and double white varieties, planted in a group, produce a charming effect.

Double White-flowered Peach—Very ornamental. Flowers pure white and double; superb. Perfectly hardy.

Double Red-flowered Peach. — Flowers semi-double, bright red; superb.

Double Rose-flowered Peach.—Flowers double, pale rose-colored, like small roses. Very pretty.

PLANE TREE—Platanus

Oriental Plane — (*Orientalis*) — Leaves heart shape at base, deeply cut. Is among our tallest trees, growing rapidly into massive proportions. Hardy and free from disease. It does well in cities and near the seashore, and is not affected by insects.

POPLAR—Populus

Carolina Poplar—Pyramidal in form and robust in growth; leaves large, glossy, serrated, pale to deep green. Valuable for street planting, also for screens. Very rapid grower.

Lombardy or Italian 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.

WEeping POPLAR

(Populus Tremuloides Pendula)

Weeping Poplar—(*Populus Tremuloides Pendula*)—A splendid weeping tree of recent introduction is the weeping poplar illustrated above. Has all the good qualities of other weeping trees, but grows much more rapidly than any other weeper. Though grafted on standard stems five feet high, its branches grow to the ground in a single season. As in the case of practically all weeping trees propagated by grafting, the new or past season's growth should be cut back severely each Spring. By so doing, a large umbrella shaped top is formed.

White or Silver Poplar, or Silver Abele—From Europe. A tree of wonderfully rapid growth, and wide spreading habit. Leaves glossy green above and white as snow beneath.

Lombardy Poplar

PRUNUS

Pissardii—(Purple Leaved Plum)—The tree is a decided contrast in itself. The leaves as they first appear, on the tips are a beautiful orange color, and they mature to a rich purple, clear and distinct, growing darker as the season advances. The leaves remain until late in the fall—a decided contrast to other shrubs.

SALISBURIA, MAIDEN-HAIR TREE OR GINKGO

A rare, beautiful tree from Japan, with remarkable fern-like foliage, distinct and fine. Especially desirable for planting on lawns or in dooryards. A rapid grower.

THORN—Crataegus

The Thorns are among the most beautiful flowering trees. They are generally dense, low growers, occupying comparatively little space and well adapted to beautify small grounds. The foliage is varied and attractive, flowers very showy and often highly perfumed. The fruit is very effective and ornamental in autumn.

Double Scarlet—(Coccinea fl. pl.)—Flowers deep crimson with scarlet shade; very double and considered larger than the double red; fine rich foliage.

Double White—(Alba flore pleno)—Has small double white flowers.

Paul's Double Scarlet—(Coccinea fl. pl. Paulii)—Flowers larger, deep carmine scarlet. Superior to any other variety.

TREE OF HEAVEN—Ailanthus

A Japanese tree, with long, feathery foliage, rapid grower, producing a tropical effect. Free from all diseases.

TULIP TREE—Liriodendron

Tulipifera—A magnificent native tree with broad, glossy, fiddle-shaped leaves and beautiful tulip like flowers; allied to the Magnolias, and like them difficult to transplant unless of small size.

WILLOW—Salix

The Willows are a most useful and ornamental class of trees. Of rapid growth, fine habit, hardy, adapted to a great variety of soils, and easily transplanted, they can be used by planters to great advantage.

Willow, Wisconsin Weeping—Of drooping habit and harder than *Babylonica*. Valuable on account of its ability to resist severe cold.

Golden—(*Vitellina aurantiaca*)—Very conspicuous on account of its yellow bark.

Kilmarnock Weeping Willow—(See Weeping Trees).

Laurel-leaved Willow—A fine ornamental tree, with very large, shining leaves.

WALNUT—Juglans

Black—English—(See Nuts).

Wisconsin Weeping Willow

Weeping or Drooping Deciduous Trees

Much attention is now given to this interesting class of trees, and we therefore place them separately for the greater convenience of our friends. For the benefit of those unacquainted with their habit, we would say that they should be divided into two separate classes, namely: those which are grafted where the top or head commences to form, as in the case of the Kilmarnock Willow, and those having long, slender branches which droop naturally, like the Cut-leaved Birch; the first assumes that conspicuous, umbrella-like form so well known, and so excellently adapted for planting in cemeteries, small yards and gardens. The latter have tall-growing trunks, with long slender branches, and are really handsome. They are adapted for larger places, where they can have sufficient room. In such situations, the elegance and grace of their branches in motion, or at rest, are so graceful to the eye that among ornamental shrubbery they have few if any superiors.

BIRCH—*Betula*

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

Young's Weeping — (*Youngii*) — Originated near Milford, England, where it was found trailing on the ground. Grafted into stems at some height, it forms pendulous heads drooping to the ground in fine, thread-like shoots; very beautiful.

CHERRY—*Cerasus*

Japan Weeping, Rose-flowered—One of the finest pendulous trees for lawns or small grounds. The branches are slender, and fall gracefully to the ground, and the flowers are rose-colored, appearing before the

leaves. Undoubtedly one of the finest weeping trees.

ELM—*Ulmus*

Camperdown—(*Pendula*)—Grafted six or eight feet high, this forms one of the most picturesque drooping trees. It is of rank growth, the shoots often making a zigzag growth outward and downward of several feet in a single season. The leaves are large, dark green and glossy, and cover the tree with a luxuriant mass of verdure.

MOUNTAIN ASH—*Sorbus*

Weeping—(*Aucuparia pendula*) — The branches of this distinct variety are of a straggling, pendent character, turning and twisting in all directions and producing a very pleasing effect. Covered during the autumn with bright red berries.

MULBERRY—*Morus*

Tea's Weeping—The most graceful and hardy Weeping tree in existence. Wholly unlike anything heretofore introduced.

WEeping POPLAR

Weeping Poplar—(Popular Tremuloides Pendula)—Splendid weeping tree of recent introduction and a rapid grower. Although grafted on standard stems six to seven feet high, its branches grow to the ground in a single season. To form the tree into an umbrella shape, cut back all of the previous season's growth.

WILLOW—Salix

Babylonica — Our common, well known weeping variety; forms a large, round-headed, graceful tree; requires plenty of

room, and where space can be spared, is quite desirable.

Kilmarnock—(Caprea pendula)—A distinct variety, having reddish shoots and large, glossy foliage; grafted at a proper height, about four feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, with the branches drooping gracefully to the ground. It is well suited for planting in cemetery lots or small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and of vigorous growth.

EVERGREENS—Coniferae

WE ADVISE SPRING DELIVERY ONLY
WE PLACE NO GUARANTEE ON EVERGREENS

They carry more than the ordinary risk in shipping and transplanting.

ARBOR VITAE—Thuya

American Arbor Vitae—A native tree of extreme beauty. Known as the white cedar; especially valuable for hedges.

Pyramidal Arbor Vitae—Grows upright with compact habit. Very desirable.

Siberian Arbor Vitae—Claimed to be the best. Exceedingly hardy, grows compact and pyramidal, keeping its color all winter. Extra fine for hedges or screens.

FIR—Abies

Balsam Fir—Erect, pyramidal tree with dark green sombre foliage. Grows rapidly and is very hardy. A pretty tree for lawns, cemeteries, parks, etc.

HEMLOCK—Tsuga

Hemlock Spruce—A beautiful and graceful native tree with drooping branches and dark delicate foliage of green. It makes a fine lawn tree or ornamental hedge.

JUNIPER—Juniperus

Irish Juniper—A distinct and beautiful variety, erect and dense. Resembles a pillow of green. Very fine.

Juniper Virginiana (Red Cedar).

Red Cedar — A well-known American tree, with deep-green foliage; makes a fine ornamental hedge plant.

SPRUCE—Picea

White Spruce—A native tree of medium size and of pyramidal form. Foliage silver gray and light colored bark. Leaves needle-shaped. Hardy.

Norway Spruce—An elegant tree; extremely hardy, of lofty, rapid growth and pyramidal form. The branches assume a

graceful, drooping habit when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees, or in masses for effect or shelter. It is one of the best evergreen hedge plants. A European tree.

Colorado Blue Spruce—One of the hardiest and most beautiful of all the Spruces; in form and habit similar to the White Spruce; foliage of a rich blue or sage color.

Colorado Spruce

PINE—Pinus

Austrian or Black Pine—Tree remarkably robust, hardy and spreading; leaves long, stiff and dark green; growth rapid. The most valuable for this country.

YEW—Taxus

Canadian Yew D.—A native Yew of low spreading habit; quite hardy.

Japanese Yew—One of the hardiest; habit spreading; foliage light green.

HEDGING

To secure a good hedge it is necessary to plant well. Dig a wide, deep trench, and work the soil thoroughly into the roots. Stamp the ground firmly so that each plant will be set as solidly as a post, then much heavily with loose manure for a distance of one to two feet on either side, according to the size of the plants. This is especially necessary with Evergreens, and all exposure of the roots to the sun and air must be strictly avoided. Evergreens should not be planted in the Fall.

HONEY LOCUST

Very hardy and the cheapest and the best for defensive hedges; also very ornamental.

JAPAN QUINCE

Unquestionably the finest of all plants for an ornamental hedge. Grows very compact; will submit to any amount of pruning, while the brilliant and showy scarlet flowers make it very attractive.

California Privet

Irish Juniper

OSAGE ORANGE

Highly esteemed at the West and South. Not hardy enough for the Northern States.

PRIVET—Ligstrum

California—(Ovalifolium) — This is the most glossy-leaved and rapid growing of all the half-evergreen plants used for low hedges around private lawns, and is the universal favorite at Newport and other fashionable seaside resorts.

Amoor River—A distinct type which has been hardy in the North. Foliage and habit of growth almost identical with the variety grown in the South. Flowers white, fruit black.

The following are also very desirable for ornamental hedging, description of which will be found under the proper headings in this catalogue:

Altheas, Barberry, Honeysuckle, Tartarian, Hydrangea Paniculata, Roses, Spireas.

EVERGREEN HEDGE PLANTS

All described in their appropriate places in this catalogue:

Arbor Vitae, American; A r b o r Vitae, Siberian; Hemlock Spruce; Norway Spruce (especially adapted for wind-breaks).

**Flowering
Trailing**

SHRUBS

**Evergreen
Climbing**

Those who desire flowers about their home lawn and garden during the summer—blooming from April to October—may select from the following list. The varieties flower in the order named.

APRIL—*Dehne mezereum*.

MAY—*Forsythia* in variety, *Japan Quince*, *Prunus Pissardi*, *Prunus triloba*, *Almond*, *Spirea prunifolia flore pleno*, *Lilacs*, *Spirea Van Houttei*, *Ciburnus lantana*, *Mahonia*, *Honeysuckle*, *Wistaria*.

JUNE—*Deutzia gracilis*, *Deutzia Lemoinei*, *Spirea lanceolata*, *Viburnum opulus*, *Weigela*, *Cornus alba*, *Lilac Japonica*, *Hydrangea arborescens grandiflora alba*, *Syringa*, *Rhododendrons*, *Paeonies Herbaceous*, *Clematis*, *Jackmanni*, *Elder*, *Deutzia*, *Pride of Rochester*.

JULY—*Spirea Billardii*, *Spirea Anthony Waterer*.

AUGUST AND SEPTEMBER—*Althea*, *Hydrangea paniculata grandiflora*, *Clematis paniculata*.

The following shrubs will grow well in shady places: *Barberry*, *Box*, *Ceanothus*, *Cornus*, *Deutzia*, *Forsythia*, *Honeysuckle*, *Kalmia*, *Mahonia*, *Myrtle*, *Privet*, *Rhododendron*, *Rhus*, the *Virburnums*, *Yew*.

ALMOND—*Amygdalus*

Double Rose Flowering—(*Japonica rubra fl. pl.*)—A beautiful small shrub, bearing in May, before the leaves appear; small, double, rose-like flowers, closely set upon the twigs.

Double White Flowering—(*Japonica alba fl. pl.*)—Produces beautiful white flowers in May.

ALTHEA OR ROSE OF SHARON

These are fine, hardy, free-growing and flowering shrubs, blooming in August and September, when few plants are in blossom. They attain a height of 6 to 10 feet.

Double Pink.

Double Red—(*Rubra flore pleno*).

Double Purple — (*Purpurea flore pleno*).

Double White—(*Alba flore pleno*).

ANGELICA TREE—*Aralia Spinosa*

A pretty Japanese shrub, of medium size and rapid growth; branches furnished with spines; leaves pale green.

BERBERIS—*Barberry*

The *Barberries* are a most interesting family of shrubs, varying in size from 2 to 6 feet high, rich

Almond, Double Flowering

in variety of leaf, flower and habit. The orange and yellow flowers in May or June are succeeded by bright and vari-colored fruit; very ornamental in the fall.

Thunberg's Barberry—From Japan. A pretty species, of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.

Butterfly Bush, or Summer Lilac—(*Buddleia Variabilis Magnifica*)—The name Butterfly Bush was applied to it because it seems to attract butterflies in large numbers. This shrub from a young plant set out either in the spring or fall, will mature to full size the first summer, producing a handsome bush, which the first year often maintains a height of four feet. It produces long, graceful stems, which terminate in tapering panicles of beautiful lilac-colored flowers. A single plant the first season will throw out as many as 50 flower spikes, which increase greatly in number during the succeeding years. Flowers in June and continues each season until the frosts nip it. The foliage and blooms are exceedingly fine. Is semi-herbaceous. We recommend covering the roots with manure, leaves or other suitable material as winter approaches, as this will produce a heavy growth the following season.

CALYCANTHUS OR SWEET-SCENTED SHRUB

The Calycanthus is one of the most desirable shrubs. The wood is fragrant, foliage rich, flowers of a chocolate color, having an agreeable odor. They blossom in June and at intervals afterwards.

Flowers Make Home
Grounds Pleasant

Deutzia—Pride of Rochester

Well
named
“Pride
of
Rochester.”
Excels
in
many
ways.

Thunberg's Barberry

CLETHRA

Alnifolia — (White Alder)—A native shrub of low and dense growth; leaves abundant and light green; has numerous spikes of small, white fragrant flowers. Blooms abundantly in July.

DOGWOOD—Cornus

Red-branched Dogwood—Very ornamental in winter while the bark is blood red.

Elegantissima Variegata—A variegated shrub of rapid growth with broad leaves with white margins. Bark red in winter.

DEUTZIA—Deutzia

Their hardihood, fine habit, luxuriant foliage, and profusion of attractive flowers, render the Deutzia among the most beautiful and deservedly the most popular of flowering shrubs.

Crenata.—(Double-flowered Deutzia) — Flowers double white, tinged with rose. One of the most desirable flowering shrubs.

Lemoinei.—A hybrid obtained by crossing the well-known Deutzia fracilis with Deutzia parviflora. Flowers pure white, bordering on stout branches, which are of upright growth. Habit, dwarf and free-flowering.

Gracilis.—(Slender-branched) — A charming species of dwarf habit. Flowers pure white. Fine for pot culture, as it flowers freely in a low temperature. The first to flower, about the middle of June.

Pride of Rochester.—A variety producing large double white flowers, the back of the petals being slightly tinted with rose. It excels all the older sorts in size of flower, length of panicle, profuseness of bloom and vigorous habit; blooms nearly a week earlier than *Deutzia crenata flore pleno*.

ELDER—*Sambucus* (Elderberry)

Common American Elder.—Broad panicles of white flowers in June; reddish purple berries in autumn. A well-known native shrub. Fruit fine for pies and makes an excellent drink.

Cut-leaved American Elder.—A beautiful variety, with deeply and delicately cut dark green foliage. It is valuable on account of its beauty, hardiness, and rapid growth, and the ease with which it is transplanted. We consider it one of the best cut-leaved shrubs in cultivation.

Golden.—(*Aurea*)—A beautiful variety with light yellow leaves, which hold their color.

EUONYMUS

Burning Bush or Strawberry Tree.—A very ornamental and showy bush, whose chief beauty consists in its brilliant berries, which hang in clusters from the branches until mid-winter; berries, rose-colored; planted with a background of Evergreens, the effect of contrast is very fine.

ELEAGNUS LONGIPES

A well-known shrub of spreading habit, dark green foliage, silver-white beneath, with yellow flowers and bright red fruit that is beautiful as an ornament on the bush and is esteemed very highly by many for use in place of cranberries.

Hydrangea

Hydrangea paniculata grandiflora

FRINGE—*Rhus*

Purple Fringe, or Smoke Tree.—(*Rhus Cotinus*)—A small tree or shrub, very much admired on account of its peculiar fringe or hair-like flowers, covering the whole surface of the bush in mid-summer.

White — (*Chionanthus Virginica*) — One of the finest shrubs with large leaves and racemes of delicate fringe-like greenish white flowers, in May and June.

GOLDEN BELL—*Forsythia*

These are pretty shrubs of medium size. All natives of China and Japan. The flowers are drooping, yellow, and appear very early in spring before the leaves. The best very early flowering shrubs.

Fortune's Forsythia.—Growth upright, foliage deep green, flowers bright yellow.

Viridissima.—A fine hardy shrub. Leaves and bark deep green, flowers deep yellow, very early in spring.

HALESIA

Halesia (Snow Drop Tree).—Silver Bell. A beautiful large shrub with handsome white bell-shaped flowers in May. Very desirable.

HONEYSUCKLE, UPRIGHT—

Lonicera

The following species and varieties are of erect, shrubby habit, and form beautiful specimens when properly trimmed.

Pink Tartarian.—A well-known old-fashioned sort which blooms in May. Slender and upright branches, with small bright pink flowers followed by red or orange yellow berries.

White Tartarian.—Same as the Red Tartarian, except in its beautiful white flowers, for reason of which it is fine for planting with other varieties for contrast.

A Brick Walk to a Residence can be Artistically Bordered with Spirea,
Iris, Hydrangea and Lilacs

HYDRANGEA

Beautiful free flowering shrubs, bearing immense panicles or trusses of flowers. *Paniculata* and *Arborescens* are hardy and require no protection; the other varieties require protection in winter and should be grown in pots or boxes and wintered in the cellar.

Arborescens Grandiflora Alba.—(Hills of Snow)—This 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, lacking entirely the coarseness found in *Hydrangea paniculata grandiflora*. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring shrubs. Perfectly hardy, standing 20 degrees below zero. The form of the panicle is much like that of *Hydrangea Hortensia*.

Otaksa.—A splendid variety from Japan. Flowers large, bright pin, tinted with blue; produced very freely. Not hardy.

Paniculata Grandiflora.—This is one of the most valuable hardy shrubs. It attains a height of three or four feet, and is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one-half of last season's growth, as the flowers are borne on new wood and are much finer when the plant is treated this way.

KERRIA—Corchorus

Japonica.—(Japan Corchorus)—A slender green-branched shrub, with globular, yellow flowers from July to October.

Flore Pleno—(Double-flowered Corchorus)—Of medium size; double yellow flowers.

LILAC—Syringa

Well-known, beautiful shrubs, indispensable in every collection. They flower in May.

Charles X.—Reddish purple.

Frau Dammann.—This is the best white lilac grown. The panicle or truss is immense, flowers of medium size and pure white. This and Ludwig Spaeth are the two best lilacs of recent introduction.

Ludwig Spaeth.—New, and believed to be the finest of its class. Color purplish red. A great acquisition.

Large Flowering White.—(Alba Grandiflora)—Very large; pure white tufts of flowers.

Marie Le Graye.—A free grower, producing magnificent large trusses of purest white flowers, which are very fragrant and showy. Highly recommended as perhaps the best of the white lilacs.

Madame Lemoine.—New and very promising. Flower double white.

Persian, Purple.—Foliage resembles the Privet more than the lilac. Flowers are most abundant.

SNOWBALL—Viburnum

Common (Op. Sterilis)—A large-sized shrub, with globular clusters of pure white, sterile. Flowers the latter part of May.

Japan.—(Virburnum Plicatum)—A rare and exceedingly beautiful species from Japan, surpassing the Common Snowball in many respects, as its habit is much better, foliage much handsomer, flowers whiter and more delicate. Very valuable.

Jap. Snowball

Opulus.—(High Bush Cranberry)—Flowers in large, flat heads in latter part of May, followed by brilliant scarlet fruit in showy pendulous branches that remain on the plant all winter.

SNOWBERRY—Symphoricarpus

Racemosus.—A well-known shrub with pink flowers and large white berries that remain on the plant through part of the winter.

Vulgaris.—(Indian Currant. Coral berry)—Graceful, small shrub, small flowers fol-

lowed by persistent deep-red berries along the under side of branches.

PLUM—Prunus

Double-flowered.—(*Prunus Triloba*)—Native of China. A highly interesting and desirable addition to hardy shrubs; flowers double, of a delicate pink, upwards of an inch in diameter, thickly set on the long, slender branches; flowers in May.

QUINCE—Cydonia

There are several flowering varieties, differing only in their color. Although of straggling growth, they can be pruned to desirable shapes without injury. Their large brilliant blossoms appear early in the spring in great profusion. Foliage bright green and glossy all through the summer. It is sufficiently thorny and strong to make a valuable hedge, and its beautiful flowers make it very handsome for that purpose.

Scarlet.—(*Japonica*)—One of the best known, and a very handsome, hardy shrub.

SPIRAEA

The Spiraeas are all elegant, low shrubs, of the easiest culture, and their blooming extends over a period of three months.

Anthony Waterer.—A beautiful variety with broad heads of deep pink flowers. Grows two to three feet high, making a shapely bush. Blooms almost continuously from June throughout the season.

Billard's Spirea.—Rose colored. Blooms nearly all summer.

Callosa Alba.—A white flowering variety of dwarf habit; remains in flower all summer.

Privet Hedge, Colorado Spruce, Junipers, Rambler Roses

Prunifolia, or Bridal Wreath.—Very desirable, having double, daisy-like flowers of pure white in the greatest profusion. Very hardy and in every way desirable, as it keeps in flower a long time.

Reevesii.—A charming shrub, with narrow, pointed leaves, and large round clusters of white flowers that cover the whole plant.

Thunberg's Spiraea.—Of dwarf habit and rounded, graceful form; branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring, being one of the first Spiraeas to flower.

Van Houtte.—Without doubt the finest variety in the collection. At the flowering season in May and early June the plant is covered with a mass of large, white flowers, presenting a beautiful appearance. Very hardy.

SUMAC—Rhus

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

Staghorn Sumach.—A large shrub or tree, brilliant foliage and scarlet fruit in autumn.

Mock Orange

SYRINGA OR MOCK ORANGE— Philadelphus

The Syringa is of vigorous habit, very hardy, with large, handsome foliage, and white flowers, produced in the greatest profusion at the blossoming season. Most of the varieties, except those of dwarf habit, form large sized shrubs. They can be kept smaller by pruning. The dwarf sorts are such pretty, compact plants as to be very useful where small shrubs are desired.

Coronarius (Common Syringa).—Pure white, highly scented flowers. One of the first to flower.

Golden-leaved Syringa.—This is a very pretty, medium size plant, with golden yellow foliage. It keeps its color the entire season; valuable for striking contrasts with purple-leaved shrubs.

TAMARIX

This is a hardy shrub, with small leaves, similar to the Juniper; the flower is small and delicate and borne in spikes; does well by the seaside, where other plants cannot live.

WEIGELA—Diervilla

Very desirable, hardy, easily grown and great bloomers. As these shrubs grow older they gradually spread and droop; flower in June and July; in borders and groups of trees they are very effective; bloom after lilacs in June. The following are the most desirable varieties:

Amabilis.—Of robust habit, large foliage and pink flowers, blooms freely in the autumn; distinct and beautiful.

Candida—Of vigorous habit, an erect grower; flowers pure white and produced in great profusion in June, and the plants continue to bloom throughout the summer, even until autumn.

Weigela—Candida

Boston Ivy

Floribunda.—(Crimson Weigela) — The flowers are dark crimson, with white stamens projecting from them, reminding one somewhat of Fuschia flowers. It blooms in the spring.

Rosea.—An elegant shrub, with fine rose-colored flowers; of erect, compact growth; blossoms in June.

Variegated-leaved.—Of dwarf habit, and possessing clearly defined silvery variegated leaves; flowers nearly white. It stands the sun well, and is one of the best dwarf variegated-leaved shrubs.

Eva Rathke.—A charming new Weigela; flowers, a bright crimson. Very choice.

CLIMBING VINES

AMPELOPSIS

Engelmanni.—Similar to Quincefolia. A good climber, growing from six to ten feet in a season.

Quincefolia, American Ivy, Virginia Creeper or Woodbine.—Has beautiful digitate leaves that become rich crimson in autumn. A very rapid grower. Like the ivy, it throws out roots at the joints, by which it fastens itself to anything it touches.

Veitchii, or Japan Ivy (Boston Ivy).—Leaves smaller than those of the American, and overlap one another, forming a dense sheet of green. The plant is a little tender while young, and requires protection the first winter; but once established, there is

no further risk. It grows rapidly and clings to the wall or fence with the tenacity of ivy; the foliage is very handsome in summer, and changes to crimson scarlet in autumn. For covering walls, stumps, trees and rockeries, etc.

BIGNONIA, OR TRUMPET FLOWER

A vigorous and hardy climber, with clusters of scarlet trumpet-shaped flowers in August.

THE EVERGREEN BITTERSWEET

Climbing *Euonymus Radicans* Vegetus
Beautiful Year Around.

Particularly adapted to cover garden walls, old stumps or embankments with any exposure, but the fruiting is best when the plants receive the warm sun; the plants are strong, robust climbers and in fall and winter bear a profusion of bright red berries. The vine is covered the whole year with green foliage, and absolutely holds the color even in the hottest summer or the coldest winter. The vines show many clusters of bright red berries that carry them through the winter months.

Clematis—Henryii

CLEMATIS

Mme. Edward Andre.—A vivid crimson flower, large side and borne as freely as the Jackmanni. The habit is vigorous and the plant is popular on account of its exceptional brilliancy and persistency as a bloomer.

Paniculata.—A sweet-scented Japan Clematis. This variety is now quite generally planted throughout the country. It is a vine of very rapid growth, quickly covering trellis and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets and of a most delicious and penetrating fragrance.

Coccinea.—Very hardy; bears thick, bell-shaped flowers, bright red coral; blooms very profusely during June and until frost. One of the best of the older sorts. Valuable for foliage, being a peculiar green and elegantly cut and variegated.

Duchess of Edinburgh.—A double pure white variety which is very popular; requires some protection; deliciously scented.

Henryi.—One of the best perpetual Hybrids; of robust habit and a very free bloomer. Flowers white, large and very showy.

Jackmanni.—One of the most popular varieties, a free grower and abundant and successful bloomer, producing flowers until frozen up. Color an intense violet purple, remarkable for its velvety richness.

Ramona.—This magnificent new Clematis is an American seedling, and consequently extremely hardy. The Ramona is a strong, rampant grower, fully three times as strong as the Jackmanni, often growing ten or twelve feet the first season. It is a perpetual bloomer, giving an abundance of flowers through the season. In color it is a very deep sky-blue.

Matrimony Vine

Chinese Purple Wisteria

HONEYSUCKLE—Lonicera

Monthly Fragrant, or Dutch Honeysuckle.—Blooms all summer. Red and yellow, very fragrant flowers.

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 December; holds its leaves till January. The best bloomer of all.

Scarlet Trumpet Honeysuckle.—A strong, rapid grower, and produces scarlet inodorous flowers.

MATRIMONY VINE—Lycium

Chinese.—A superb variety, which has been a favorite for many years. It is a most vigorous, hardy climber in any position. It continues flowering, and new berries remain on the vine until late into the winter.

WISTERIA

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

Chinese White Wisteria.—Pure white flowers; beautiful.

EVERGREEN SHRUBS

Beautify your home by planting shrubs, vines and flowers. The property increases in value and in case you desire to sell you can realize a large percentage on the investment.

MAHONIA

Holley-leaved (Aquifolium).—A beautiful Holly-like shrub, with showy, golden yellow flowers and purplish leaves. Very ornamental.

MOUNTAIN LAUREL—Kalmia

Latifolia.—Broad, glossy-green, shining foliage, flowers in large and showy clusters of elegant shape, and most beautifully colored. Few broad-leaved evergreens are as beautiful in foliage, and none can excel the beauty and delicate form of its flowers.

RHODODENDRON

Maximum, white to light pink. **Carolinianum,** coral light rose. **Catawbiense,** reddish purple.

HARDY PERENNIALS

AMERICAN SENNA (Cassia Marilandica)

Perennial, glabrous or nearly so, stems nearly simple; leaflets 6-10 pairs, oblong or lance-oblong and entire, short-acuminate or nearly obtuse; flowers in axillary racemes near the tops of the stems and often appearing as if paniced, bright yellow, wide open. Grows 3 to 4 feet high and has attractive light green foliage. This is a very desirable, hardy perennial. It has pleasing light Nile green foliage right from the ground up with large panicles of bright yellow curiously shaped flowers in abundant axillary clusters from July to August. We have used it in prominent places during the past year. It reaches perfection the first season. This plant delights in a sunny exposure. While it grows wild in some parts of the country, it is something that is very little known and when more widely planted we believe it will become very popular, as it does remarkably well with little or no care. It transplants with absolute certainty and is most desirable in beds, borders, about walls of houses and other buildings and makes a beautiful light, feathery hedge or dividing line between lawns, gardens or other places where something comparatively low is wanted during the Summer season.

ANCHUSA

Dropmore.—This is the most important hardy border plant introduced in many years. The best blue flowered plant we have. It is hardy, growing to a height of 3½ feet, making a bushy plant which is literally covered with pure blue flowers one inch in diameter, and is then a paragon of beauty.

ANEMONE—Wind Flower

Japonica.—A distinct and beautiful species; flowers 2½ inches in diameter; bright purplish rose, with golden yellow centers, borne in great profusion from September to November. Height 2½ feet; habit neat and compact; very desirable and effective as a pot plant, and in lines or masses, in beds or mixed borders.

Queen Charlotte.—A new variety producing double rose colored flowers in great profusion in the autumn. Very valuable.

Whirlwind.—A variety producing double white flowers in great profusion in the autumn. One of the finest fall-flowering.

White.—A distinct and beautiful variety of the Japonica; flowers 2½ inches diameter; pure white, center golden yellow, borne in great profusion from September to November; effective as a pot plant, and in lines or masses, in beds or mixed borders.

Delphinium
(Larkspur)

AQUILEGIA—Columbine

Long spurred mixed Hybrids, a choice strain. 2 to 3 ft. June and July.

BLUE BIRD FLOWER

Veronica longifolia subsessilis).—Is destined to create as much furor in the floral world as did the Golden Glow. Aside from Larkspur, some varieties of Altheas and Perennials, there are few true Blue Flowered Plants. The Blue Bird Flower is the handsomest blue flowered plant we know of, growing to a height of two feet and completely studded with its spikes of blue flowers, that at a distance resemble blue birds perched in the foliage. Its flowers are fine for cutting. It makes the ideal and very best blue flowered hardy border plant obtainable.

CHRYSANTHEMUMS

The small flowered, hardy Chrysanthemum is the only variety we offer. We can supply them in pink, red, rose, white and yellow.

COREOPSIS

Lanceolata.—One of the best perennials in cultivation with large, lemon yellow flowers on long stems; all summer. Two to three feet.

Grandiflora.—A free flowering, desirable species, with rich golden yellow flowers in profusion; early summer until fall; eighteen inches.

DAISY

Shasta.—Probably no hardy plant has been so highly spoken of in the American Horticultural Press as this production of Luther Burbank, the result of crossing our native field Daisy with some of the choicer European varieties, and bearing beautiful clear glistening white flowers, and bloom continuously from early summer until late fall.

DELPHINIUM—Larkspur

A remarkably showy class of tall growing plants, producing magnificent spikes of blue flowers in summer. We know of no plants which will afford greater satisfaction than these.

DIANTHUS

Barbatus (Sweet William).—Flowers in various colors, in flat heads. An old favorite.

DIELYTRA

(Bleeding Heart).—Rosy, heart-shaped flowers hanging in great profusion from a graceful curved stem. May and June.

DIGITALIS—Fox Glove

Flowers purple, yellowish or white, in long terminal racemes; two to three feet. June to August.

EULALIA

These beautiful hardy grasses are deserving of the highest commendation. For the garden they are invaluable, being very showy and ornamental and of easy cultivation. They should be in every collection.

Gracillima.—A beautiful ornamental grass with narrow graceful foliage. Very valuable; four feet.

Japonica.—A vigorous grower with large plumes; four feet.

Variegata.—Handsomely variegated leaves; four feet.

Zebrina (Zebra-striped Eulalia).—One of the most beautiful or ornamental grasses; foliage marked crosswise with bands of white and green.

FUNKIA—Plantain Lily

Undulata Var.—(Day Lily).—One of the easiest plants to manage, doing well either in shady or very sunny places. Foliage variegated green and white, purple lily-like flowers.

GAILLARDIA—Blanket Flower

Grandiflora.—One of the most effective and showiest hardy flowering plants, with gorgeous flowers of bright yellow and orange, with deep crimson centers; blooming from early summer until late autumn.

GOLDEN GLOW OR SUMMER

CHRYSANTHEMUM

Laciniata fl. pl..—A large, showy plant, attaining in good soil a height of six to eight feet the same season planted. Flowers 3½ inches in diameter, double, well formed, and of deep golden yellow color, resembling yellow chrysanthemums, and borne on long stems which render them suitable for cutting. Plants bloom from July till September.

Japan Iris

Gypsophila Paniculata (Baby's Breath)—2 to 3 feet. White. July and August. Fine for dried flower bouquets, especially when used in connection with Chinese Lantern pods. Stems should be cut before the flowers are too far advanced and hung upside down until dried.

HIBISCUS—Rose Mallow

The Hibiscus are valuable border plants, having handsome broad leaves and large showy blossoms.

Albus (Crimson Eye)—Large, showy, white flowers, crimson eye, blooming in August four to five feet.

HOLLYHOCK

A fine collection of colors.

IRIS—Fleur de Lis

Germanica (German Iris)—These are among the most desirable early spring flowering plants. Flowers are large and of the most exquisite coloring. Every garden and border should have a liberal planting of these beautiful plants, of which we have the following colors: Blue, lavender, maroon, purple, white and yellow.

Kaempferi (Japan Iris)—Flowers differ from the German Iris, in being broad and flat. They exhibit a wonderful variety of colors and shades and appear later than the others. They rank among the most desirable of hardy plants; succeed best in a moist soil; three to four feet. July.

PAPAVER—Poppy

Showy perennials with large flowers of rich and striking colors.

Orientalis—Deep scarlet; large; very showy; eighteen inches. June.

PAEONIES

"The King of Flowers"

The Paeonia is a noble flower and is being planted very extensively of late years. It was always popular. The new and choice varieties introduced of late years almost rival the rose in beauty and fragrance.

The Paeonia can be planted either in the fall or spring. If planted in the fall they flower earlier in the season, on account of being well established. They require no protection, come up every season, can be left in the ground indefinitely, and will thrive in any soil. They prefer a sunny position and respond promptly to good treatment.

Couronne d'Or. — This is the famous Crown of Gold. Snow-white reflecting golden yellow stamens. Extra fine.

Duc de Wellington.—One of the largest of white Paeonies. A grand cut flower variety, having fine stems. Try it.

Paeonia Festiva Maxima

Duchess De Nemours. — Bloom several days after Festiva Maxima. Cup-shaped, sulphur white blooms. Fine for cut flowers.

Edulis-Superba.—Color a beautiful, bright clear-pink with silvery reflex.

Francis Ortegat.—Deep crimson.

Festiva Maxima (Mieliez, 1851). — For enormous size combined with wondrous beauty this variety has stood unsurpassed for over sixty years. Pure paper white flaked with purplish carmine on some of the center petals. Early, very fragrant, rose type bloom. Of vigorous growth, with very long, heavy stems.

Marechal Vaillant (Calot, 1867)—Blood red, one of the largest, of fine form; fragrant; a good keeper; strong, rather spreading growth; a very showy flower. Rose type; very late.

Madam De Verneville.—One of the most charming varieties on the market. We have counted sixty-five large, perfect blooms on one plant open at the same time, fine cut-flower variety.

Marie Lemoine. — Color, Ivory-white. Blooms of gigantic size. Fine cut-flower variety. Comes after Festiva Maxima and is as fine as that standard sort. We can supply fifteen thousand Marie Lemoine at popular prices, guaranteeing every plant true to name.

Meissonier.—Very brilliant crimson or reddish-purple. In some cut-flower markets known as the American Beauty Peony on account of its resemblance in color to the Rose of that name; good cut-flower variety. Mid-season.

Monsieur Dupont.—Semi-rose type, mid-season. Very large, well built, cup-shaped bloom, ivory-white, center petals bordered with tracing of lively carmine and lit up with golden stamens at base of petals. A truly royal flower. A great cut-flower Paeonie.

(PHYSALIS FRANCHETI)

Also Called

CHINESE LANTERN PLANT

"Without doubt the most attractive and valuable hardy plant introduced in many years. A novelty of sterling merit introduced from Japan by the English horticulturist, Mr. James H. Veitch, this alone being a sufficient guarantee of its excellence. It is a gigantic species of the showy Winter Cherry and is of the easiest possible culture. It is of sturdy, upright habit and grows from 1½ to 2 feet high and is perfectly hardy. It is also highly appreciated as a winter house plant, grown in pots or boxes, and in the spring it can be transferred to the open ground. It blooms early and produces the first season a large number of balloon-like husks 2 to 3 inches across. These first appear light green, then gradually change to bright yellow and finally to orange scarlet. At this period they resemble miniature lighted Chinese lanterns, hence the name."

PHLOX

One of the finest autumn flowers. It is of vigorous habit, easy culture, and produces in great profusion during a long season; flowers of fine form and substance, and of bright and varied colors. As regards their culture they succeed in any good garden soil, but they are greatly improved by being liberally manured, and an occasional supply of liquid manure during the growing season will greatly increase the size of their trusses. When in flower they should be watered freely every evening. The Phlox usually flowers in July and August. The best time to plant them is in the autumn.

Aguillon.—Deep rose, carmine center; fine.

Amabalis (Carand Ache)—Deep cherry.

Coquelicot—Scarlet crimson; the best red Phlox.

Eclaireur—Bright carmine rose; large flowers.

Eiffel Tower—A new variety of the clear-est salmon with purple eye. There is at present nothing equal to it in Phlox.

General Van Heutz—Brilliant salmon-red with white center. Very large heads, free bloomer, extra fine, medium height.

Jeanne d'Arc—Pure white, large flowering variety, very late; tall.

King of Purple—Deep glowing purple; extra fine.

Lothair—Salmon; crimson eye.

Phlox

Miss Lingard—Fine white, free bloomer, begins flowering after the middle of June and continues throughout the season.

Pantheon—Flowers large, beautiful; pink, salmon, rose; fine.

Purity—Pure white, large trusses; the best white.

Richard Wallace—White; rosy center.

Rynstrom—A great improvement on the popular variety Pantheon; of the same carmine-rose color as Paul Neyron rose.

RUDBECKIA

Purpurea (Giant Cone Flower)—3 ft. Purple. July to October.

TRADESCANTIA

Virginica—(Spider-wort)—18 inch. Blue. Does well in partly shaded places. June.

TRITOMA—Red Hot Poker

Pfitzerii—(The Ever-blooming Flame Flower)—The freest flowering variety in cultivation, with spikes from 3 to 4 feet high and heads of bloom over 12 inches long, of a rich orange scarlet; needs protection in winter.

YUCCA—Spanish Bayonet

Filamentosa—(Adam's Needle)—Thread-leaved creamy white; three to four feet. July.

Bulbs and Tuberous Rooted Plants

CANNA. (Spring Planting)

Stately and highly ornamental plants, for both flowers and foliage. They attain a height of 2 to 5 feet, and may be grown single or in masses. Leaves green or brownish red; flowers scarlet, crimson, yellow, cream, etc., variously marked.

CROCUS. (Fall Planting)

An universal favorite and one of the earliest garden ornaments; should be planted about 2 inches deep. Colors, blue, white, yellow and striped.

DAHLIAS. (Spring Planting)

There is nothing that, with the same amount of money invested, will give more show of flowers than Dahlias. We offer dry bulbs or tubers.

GLADIOLUS. (Spring Planting)

The gladiolus is the most attractive of all the summer flowering bulbs, and deserves a place in every garden, as it is sure to flower and do well with very little care. Set the bulbs from 6 to 9 inches apart, and about 4 inches deep. Plant from middle of March to first of June.

White and Purple Hyacinths

HYACINTHS. (Fall Planting)

The most beautiful and fragrant of early spring flowering bulbs, much used for winter forcing. Pink, Red, Purple, Violet, White.

BEST HARDY LILIES

(Fall Planting)

No class of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance. They thrive best in dry, rich soil, where water will not stand in winter. After planting they require very little care, and should not be disturbed for several years. Established plants bloom more freely than if taken up annually.

Candidum—The old-fashioned pure white garden lily. One of the hardiest.

Tiger Lily—Bright orange scarlet with dark spots; a strong growing, showy variety, and entirely hardy. Succeeds well everywhere.

NARCISSUS—Jonquils

(Fall Planting)

Pretty varieties of the Narcissus, having a very agreeable fragrance; adapted to either pots or outdoor culture. The bulbs being small, six or eight may be put in a 6-inch pot.

TULIPS. (Fall Planting)

Without these bulbs, for one or two months of beautiful spring weather, our gardens would present a bare appearance. We know nothing that for the money invested will give a more gorgeous show during early spring and there is nothing more easily grown than the Tulip. Should be planted in October or November.

To aid those unfamiliar with the few cultural directions necessary to insure success we have prepared the above chart.

Bulbs indoors do not require the deep planting indicated in this diagram, there being no danger from frost to guard against.

BEST VARIETIES OF ROSES

The Rose has rightfully earned for itself the name "Queen of Flowers," one of the most useful as well as ornamental varieties are the climbers. They are admirably adapted for covering arbors, porches, etc., and bloom profusely.

The varieties of Roses which we describe and illustrate are considered to be the leading kinds. They are the ones which the public buy and have given the best satisfaction. We are on the lookout for best new varieties and spare no pains in obtaining them when satisfied of their real merit.

When properly planted and cared for, they will give perfect satisfaction and will bloom almost immediately after planting. Many varieties need to be well pruned, which insures an abundant growth of new wood on which the blooms appear. Each class of Roses has growth peculiar to that class; hence, customers should not expect that all varieties will grow alike. Some are dwarf by nature; others slender growing; some produce low shape bushes; others are upright and vigorous.

Those who appreciate the beauties of nature, prize Roses above all other flowers. Hot house roses are not as hardy as our field-grown. They are slow to grow and hard to keep alive.

HOW TO GROW ROSES

Soil and Planting—Most varieties may be planted in the fall as well as in the spring. The ground should be well spaded to a depth of from twelve to twenty inches and liberally fertilized, as also well drained. Roses on their own roots should be planted just as they stood in the nursery. There is usually a dark earth line to go by—set even with this. Budded or grafted roses must be set so that the junction of stock and graft is two inches below the surface of the soil. As soon as the Roses are received, put the roots of the plants in water, allowing them to remain for from six to twelve hours before planting.

Pruning and Cultivation—Practically all varieties of Roses should be cut back from one-third to one-half when planted and it is also advisable to trim the roots a little. Remove any weak or decayed wood in the top. Varieties which show a vigorous growth may be pruned a little less than others. Many of the Hybrid Perpetual varieties will continue to bloom through the summer, if pruned in July. Stir the soil frequently about the roots. They require all of the nourishment they can possibly get. Good results are sure to follow.

Protection—Mulch your Rose bed in autumn and for winter protection, cover with evergreen boughs, if possible. A light mulching during the summer is desirable, as it keeps the ground from drying out too rapidly.

Insect Remedies—If proper attention is given to soil, planting, watering, etc., and a few simple directions heeded, your Roses will never be seriously troubled with any kind of insects or plant diseases. We find that a strong stream of water from a hose applied once a day, will keep the insects from doing any harm. Where this is impossible, we would suggest the following

remedies, which will usually keep the Roses free from any insects:

Boil for ten minutes four ounces of quassia chips in a gallon of soft water. Drain off the chips and add four ounces of whale-oil soap, which should be dissolved in it as it cools. Stir well before using. Apply with a clean painter's brush to every leaf and shoot that is infested. After fifteen or twenty minutes, the plants should be washed or syringed with pure water. For mildew, sprinkle lightly with flour of sulphur.

For Rose Bugs—Dissolve $\frac{1}{4}$ pound hard soap in two quarts of boiling water, add 1 pint of kerosene oil, and stir violently for from three to five minutes, until the ingredients are thoroughly mixed; then dilute to twice its bulk with water, apply with a spraying syringe, or sprinkle it on the plants with a whisk broom, and repeat as often as necessary.

Rose Caterpillar appears in May, or about the time the leaves have pushed forth. It can be readily detected, as it glues a leaf or two together to form its shelter. The bushes should be gone over and the glued leaves pinches between the finger and thumb.

Saw Fly, larva and other insects later than the caterpillar may be prevented by an occasional syringing, vigorously applied. When they have appeared a sprinkling of powdered white hellebore over the plants will often destroy and disperse them. The plants should be well moistened before applying the hellebore, so that it will remain.

The Red Spider seldom attacks the plants in the open air, but confines itself to plants under glass. It may be kept off by daily syringing the plants with water. When plants are once infested with the insect, the fumes of sulphur will alone destroy it. This causes the foliage to drop off, but is the best remedy.

HYBRID PERPETUAL ROSES

This class thrives the best in a rich soil. The pruning should be regulated by the habit of growth, the weak shoots should be closely cut in, those which are vigorous left longer. Most of the varieties are fragrant.

Although they are styled perpetual bloomers, they are not such in reality. However, many of them yield a fair second crop of flowers in the autumn, which is very acceptable. Aside from this, there is no class, take it all in all, so popular and which gives such general satisfaction.

Alfred Colomb—Brilliant carmine crimson; very large, full, and of globular form; extremely fragrant, and in every respect a superb sort; foliage large and handsome. One of the most useful of all sorts for general cultivation.

American Beauty—Large, globular; deep pink, shaded with carmine; delicious odor; especially desirable for forcing. Not a desirable variety for outdoors.

Anne de Diesbach—Carmine, a beautiful shade; very large. A superior garden sort; fragrant; one of the hardiest. Valuable for forcing.

Baron de Bonstetten—Rich velvety maroon; large, full. A splendid sort.

Black Prince—Dark velvety crimson, almost black. A good grower and most magnificent rose.

Clio—Flowers large, in clusters, of fine globular form, flesh-color shaded in the center with rosy pink; growth vigorous; handsome foliage. One of the best roses.

Conrad F. Meyer—This rose has Rugoso blood in its makeup, and is classed as a hybrid. A vigorous grower and free bloomer. Flowers large, double, cup shaped. Color deep, bright, vivid, intense pink with a fragrance of June roses.

Coquette des Alps—White, slightly shaded with carmine; form semi-cupped; wood long jointed; large, handsome flowers. The strongest grower of the entire class.

Earl of Dufferin—Rich, brilliant, velvety crimson, shaded with dark maroon; large, full, finely formed; delightful fragrance. A vigorous grower.

Fisher Holmes—One of the choicest of perpetual roses. Bush is vigorous and produces freely of superb blossoms. Color brilliant carmine crimson.

Frau Karl Druschki—(Snow Queen)—Flowers very large, beautiful, pure white. This is the best white Hybrid Perpetual.

General Jacqueminot—Brilliant crimson; not full, but large and extremely effective; fragrant, and of excellent hardy habit.

John Hopper—Bright rose with carmine center; large and full. A profuse bloomer and standard sort.

Lady Helen Stewart—Bright crimson scarlet; large, full, and of perfect form; produced on long, stiff stems, highly perfumed; distinct and fine. A beautiful and valuable variety.

Louis Van Houtte—Crimson, maroon, medium size, sometimes large, full. A tender sort, but very free blooming and altogether the best crimson rose we have. A moderate grower.

Madame Plantier—Pure white, medium size, full; flowers produced in great abundance early in the season.

Magna Charta—Pink, suffused with carmine, full, globular. Foliage and wood light green, with numerous dark spines. A fragrant, excellent rose. Valuable for forcing.

Madame Gabriel Luizet—Pink, distinct, very large, cupped-shaped; somewhat fragrant. One of the choicest.

Margaret Dickson—Of magnificent form; white, with pale flesh center; petals very large; shell shaped, and of great substance; fragrant, a fine variety; foliage very large, dark green.

Baron de Bonstetten

Paul Neyron

Marshall P. Wilder—Of vigorous growth, with healthy foliage; flowers large, semi-globular, full, well formed; color cherry carmine, very fragrant. It continues to bloom profusely long after the other Hybrid Perpetuals are out of flower.

Mrs. John Laing—Soft pink; large and of fine form, produced on strong stems; exceedingly fragrant; one of the most valuable varieties for forcing, and flowers continuously in the open ground.

Mrs. R. G. Sherman Crawford—Color deep rosy pink, outer petals shaded with pale flesh, white at base of petals; flowers large, of perfect imbricated form, and freely produced, flowering from early summer until late in autumn. Growth vigorous.

Paul Neyron—Deep rose color; good tough foliage, wood rather smooth; by far the largest variety in cultivation. A free bloomer; very desirable as a garden rose; valuable for forcing.

Prince Camille de Rohan—Deep velvety crimson, the nearest approach to a black rose; large, moderately full. A splendid rose.

Soleil d'Or—(Golden Sun)—New. Hardy yellow rose; foliage glossy. Moderate in growth and is sure to be popular.

Ulrich Brunner—Brilliant cherry red, a very effective color; flowers of fine form and finish, carried well upon the plant; petals of great substance; plant vigorous, hardy, and resists mildew. One of the best varieties for forcing and open air culture.

HYBRID TEAS—Half Hardy

The roses included in this section are valued especially for their free and continuous blooming qualities which render them particularly useful to plant in beds and groups for the ornamentation of the lawn or to grow in the garden for a supply of cut flowers or decorative purposes.

Betty—Coppery rose, shaded golden yellow, vigorous; very long petals; large flowers, fairly full and of splendid form; deliciously perfumed. Without doubt a sterling rose. Gold Medal N. R. S.

Columbia—This new rose has proved a universal favorite. It is a strong grower, making long, straight stems. Color a pleasing shade of rose-pink.

Dean Hole—An intense salmon-pink, with bud of extraordinary length opening into a mammoth bloom of splendid substance. An English gold medal rose.

Duchess of Albany, or Red La France—(Hybrid Tea)—Resembling the La France, but is much deeper in color. Is a free bloomer, producing an abundance of lovely buds and flowers throughout the season. Very double and full. Color brilliant, rose pink.

Edward Mawley—A very thrifty grower and of good foliage; bloom is large, full, color velvety crimson, marvelous in richness.

Etoile de France—The gold medal rose of France. Flowers are large, and borne on long, stiff stems; color a lovely shade of clear red-crimson velvet; very fragrant and keeps well.

Francis Scott Key—Named in honor of the writer of the "Star Spangled Banner." Flowers large to very large, very full and handsomely formed. A most magnificent red rose of easy culture. Awarded Silver Medal.

General MacArthur—A rose that is already a fixture in many gardens. The shape is fine, color brilliant glowing crimson-scarlet. Very sweet scented.

Geo. Ahrends—Also known as Pink Druschki. A large and beautiful pink rose, resembling in size and shape of flower the wonderful white Frau Karl Druschki.

Gruss an Teplitz—Color scarlet, shading to velvety crimson, very fragrant, a free grower and most profuse bloomer; handsome foliage, especially valuable as a bedding rose.

Hadley—A deep velvety crimson, retaining its brilliancy at all seasons of the year. Strong rapid grower, flowers borne on long stiff stems. Its fragrance is unsurpassed.

Hoosier Beauty—A large full flower with well shaped buds; color is an exceptionally attractive, glowing crimson, sweetly scented.

Jonkheer J. L. Mock—This grand rose is the strongest grower in the Hybrid Tea class. Blooms are produced with the greatest freedom on stiff, erect stems, and are of the largest size, of perfect formation and highly perfumed. Color, clear imperial-pink; a glorious flower.

Kaiserin Augusta Victoria — A distinct and very beautiful variety. Soft pearly white, tinted with lemon in the center; very fragrant, producing beautifully formed flowers on long graceful stems.

Killarney—Color flesh, shaded white, suffused pale pink flowers; large buds, long and pointed; and blooms profusely throughout the season.

Lady Alice Stanley—Garden rose of great value, having won many friends. Petals shell shaped, forming a perfect flower. Outside of petals deep coral rose; inside, delicate flesh, often flushed with bright pink.

Lady Ashtown—Another grand garden rose. Flowers large, full and fine form, free and constant bloomer. Deep rose, shading to silver pink, with touches of yellow at base of petals.

La France—(Hybrid Tea)—Raised from seed of a tea rose. Delicate silvery rose, changing to silvery pink; very large; full, of fine globular form; a most constant bloomer.

Lady Hillingdon—The wonderful color of this beautiful rose is equalled by none. It has long, willowy stems that are in no sense weak, as the buds are held upright; has a

long, slender pointed bud of brilliant deep golden yellow, improving in color as the flower matures. Awarded gold medal.

Lieutenant Chauré—Velvety, crimson-red, shaded with garnet; large petals of great depth and nicely cup formed.

Los Angeles—The following is the originator's description: "Los Angeles is, by all odds, one of the finest roses ever introduced. The growth is very vigorous, and produces a continuous succession of long stemmed flowers of luminous flame-pink, toned with coral and shaded with translucent gold at the base of petals. In richness of fragrance it equals in intensity the finest *Maréchal Niel*. The buds are long and pointed, and expand into a flower of mammoth proportions, while the beauty of form and ever increasing wealth of color is maintained from the incipient bud, until the last petal drops." We have this rose on our grounds and we can truthfully say the above description is no exaggeration. To see a bed of *Los Angeles* in bloom is to see a wonderful blaze of color. No other rose like it.

Lyon—Shrimp pink at edge of petals; center coral red shaded with chrome-yellow.

Madame Caroline Testout—Large and double, color clear bright rose, very sweet, resembling *La France*, but of more sturdy habit, very free flowering; one of the best roses.

Madame Edouard Herriot—Buds coral red, shaded with yellow at the base, the open flowers of medium size, semi-double, are coral red shaded with yellow and bright rosy-scarlet.

Madam Ravary—Long pointed buds of beautiful golden yellow, opening to large, double flowers with orange yellow centers; very free flowering.

Margaret Dickson Hamill—A magnificent rose; its globular blooms are produced in great profusion on vigorous, erect wood with bronzy-crimson leaf stalks, bearing leathery bronze-green foliage; deliciously fragrant and a great acquisition. Flowers delicate straw color. Awarded gold medal.

Mrs. Aaron Ward—A remarkably free flowering variety of strong, vigorous compact growth; the flowers are full double and of splendid form; in color a distinct Indian-yellow, shading lighter towards the edges; a color that catches the eye at once; one of the most beautiful roses in existence. To see it is to fall in love with it at first sight.

Mrs. Arthur Robert Waddell—A good upright grower combined with good foliage. Flowers semi-double, reddish-salmon, at times shaded orange.

Margaret Dickson

Mrs. Charles Russell—One of the popular varieties of the day. Buds long and pointed. Stems long and stiff, surmounted by grand rosy-pink blooms of large size.

My Maryland—Strong, vigorous grower and extremely free flowering. Flowers double, of perfect form, fragrant. Color, glowing intense pink.

Opelia—A variety which has made such a record for itself that qualifies it to be classed with the very best, a rose greatly admired by everyone. Its flowers are held erect on long, stiff stems, are of perfect form, good size, and of a most pleasing delicate tint of salmon-flesh, shaded with rose. Very free flowering.

Pharisaeer—Exceptionally free flowering, producing long buds, which open into large, double flowers of rosy-white, shading to a pretty soft salmon. A fine garden rose.

Richmond—Pure rich scarlet; very free and continuous flowering.

Radiance—An ideal bedding rose, producing large flowers of a brilliant carmine-pink, with salmon pink and yellow shadings at the base of the petals. This rose should be in every garden.

Sunburst—A superb rose of good vigorous habit; flowers of fair size of elongated cup form, and fine in the bud or half open orange yellow center. One of the finest yellow sorts.

HARDY CLIMBING ROSES

Baltimore Belle — Pale blush, nearly white, compact. A fine flower.

Blue Rambler (Veilchenblau) — (Violet Blue)—A seedling of the Crimson Rambler. The blossoms are semi-double, of medium size, massed in large numbers. The color on first unfolding is a reddish, purplish pink, turning to amethyst and finally steel blue. Plant is vigorous and hardy.

Climbing American Beauty—Color rosy crimson, similar to its pollen parent; flower about four inches in diameter, finely formed on long stems. Blooms very freely in May and June, and occasionally during the summer. The plant is a strong grower, making shoots ten to twelve feet in a season, and perfectly hardy. Foliage deep glossy green; does not mildew; is not subject to black spots, and remains on until frost.

Crimson Rambler—The wonderful climbing Rose, by far the most important and valuable acquisition of recent years. A rose of vigorous habit, strong and rapid grower with handsome foliage, and produces in marvelous abundance clusters of the brightest crimson roses.

Dorothy Perkins—Very large for a climber. Double, of a beautiful shell pink color; fragrant.

Dr. W. Van Fleet.—(Hybrid Wichuriana)—Climbing. One of the most beautiful of climbing roses. Flowers when open run four inches and over in diameter, borne in clusters on long stiff stems. Buds long, pointed, compactly formed, resembling those of a tea rose. The center is built high, petals beautifully undulated and cupped. In color it is a remarkable shade of flesh pink on the outer surface, deepening to rosy-flesh in the center. As deliciously fragrant as a tea rose. It is perfectly hardy, a strong grower, with fine glossy green foliage.

Flower of Fairfield.—From the Crimson Rambler, similar in color and more brilliant. Flowers on young wood first year. Vigorous.

Paul's Scarlet Climber—Winner of gold medal as the best new climbing rose at the National Rose Society's Exhibition. For brilliancy of color, which is a vivid scarlet, no other rose, in any class can compare with it. The flowers are semi-double of good size and are produced very freely in clusters of from 3 to 20 flowers each on much-branched canes, the plants being literally covered from top to bottom with bloom. In size, shape and habit it corresponds with Dr. Van Vleet and Climbing American Beauty. It surpasses the latter variety in intenseness of color, which it holds until the petals fall, in fact, it is an improvement on this variety. Blooms over a longer period, holding in flower after many June bloomers have dropped their petals. Of strong climbing habit and perfectly hardy. A wonderful rose for trellis, arbor or pergola use. Bound to be one of the most popular climbing roses of the day.

Tausendschon, or Thousand Beauties—Cannot be too highly recommended on account of its free flowering qualities and beautiful white and delicate pink blossoms. It has already been recognized by the leading florists and is grown in large quantities now for winter forcing, and for garden decoration it cannot be surpassed.

White Rambler—Small or medium, daisy-like, pretty white flowers in large clusters.

Wichuriana—Single, white, in large clusters, with orange red stamens.

Yellow Rambler — Yellow in bud, but white when fully open; when half open the flowers are tinged with yellow, slightly fragrant. Plant vigorous and free-blooming; hardy, very pretty and desirable.

Thousand Beauties

MOSS ROSES

The Moss Roses are favorites with every one, on account of the beautiful buds, which, for bouquets and cut flowers, are invaluable.

Blanche Moreau—Pure white, large, full and of perfect form; the buds and flowers produced in clusters and freely furnished with a deep green moss. A valuable variety.

Crested—Deep pink buds, surrounded with mossy fringe and crest; very beautiful and fragrant; growth slender.

Princess Adelaide—A vigorous grower, pale rose and of medium size and good form.

Perpetual White—Pure white.

Salet—A vigorous grower and perpetual bloomer. Light rose, large, full. The best of the class. A true perpetual moss, blooming at intervals from June until November.

DWARF POLYANTHA ROSES

This is a novel, distinct and charming class of roses. The plant is of dwarf habit and bears abundantly and continuously clusters of dainty, small flowers, of perfect form and of various shades of color. While they are admirably suited to cut for bouquets and boutonnières, they are ideal bedding roses, and supply a long felt want among rose culturists for that purpose.

Baby Dorothy—(Maman Levavasseur)—This latest introduction of the well-known

raisers of the now famous **Crimson Baby Rambler** (Mme. Nobert Levavasseur) is similar in all respects to that variety except that the flowers are of a clear, brilliant pink and very freely produced.

Baby Rambler Pink—(Anny Muller)—Large clusters of brilliant rose-colored flowers in great profusion. A splendid bedding variety. Blooms all season until buds are killed by severe frost.

Baby Rambler Crimson—(Madame Norbert Levavasseur)—A dwarf form of the widely known and popular climbing rose, **Crimson Rambler** being hardy, vigorous and perpetual flowering. The flowers are large, well formed, of a crimson red color, and borne in clusters.

Baby Rambler White—(Katherine Zeimet)—Pure white in large clusters; very freely flowering.

RUGOSA ROSES

This is a very interesting group, of Japanese origin. The flowers are mostly single. The plant is highly ornamental on account of its good habit and beautiful glossy foliage.

New Hybrid Rugosa Everblooming Rose

F. J. Grootendorst—This is an entirely new type of rose, being a cross between **Rugosa** or Japanese rose and the well known **Crimson Baby Rambler**. Its habit of growth is similar to **Rugosa**, forming a shrub-like bush, with true **Rugosa** foliage; while the flowers of bright crimson are borne in clusters exactly like the dwarf **Crimson Baby Rambler**. Produces a wealth of bloom all summer or until stopped by frost. Perfectly hardy. The uses to which this beautiful everblooming rose can be put are many. It can be used as an individual specimen, or in a group or mass planting in the shrubbery border; or as a permanent hedge or line fence. For the latter purpose there is nothing to equal it.

The introduction of this new everblooming type of rose is a step in advance in the rose line. As soon as it becomes better known to the public we predict there will be a heavy demand for it.

Rugosa alba—A species from Japan. Single, pure white flowers of five petals; highly scented.

Rugosa rubra—Another Japan variety. Flowers single, of a most beautiful bright rosy crimson, succeeded by large berries of a rich rosy red color.

TREE ROSES

Colors only. Pink, Red, White and Yellow. Spring delivery only.

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