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TREES
PLANTS
SHRUBS

GLEN BROTHERS
Glenwood Nurseries

ROCHESTER, N. Y.

Established a Third of a Century

DESCRIPTIVE CATALOGUE AND HAND-BOOK OF

Fruit and Ornamental Trees

GARDEN FRUITS, ROSES, SHRUBS, ETC.

(NEW EDITION)

GLEN BROTHERS

Glenwood Nurseries

Importers, Growers and Retailers

ROCHESTER, N. Y.

FOR nearly a third of a century "From Glen Brothers" has been a guarantee of first quality stock, true to name, handled and packed right, delivered to customers in best possible condition. We point with pride to the bearing orchards in every fruit locality; the ornamental trees and shrubs in private and public grounds, parks and streets; the roses and plants growing and blooming in garden and house for evidence in regard to how well we are succeeding in our endeavor to produce the best.

We take pleasure in presenting a new edition of our Descriptive Catalogue, carefully revised and corrected by the addition of descriptions of new and promising sorts and the omission of such as greater experience and progress in horticulture and floriculture have proved no longer worthy of general dissemination.

We have not attempted a full and complete description of all varieties named, but shall be pleased to answer by letter any inquiries sent with stamp for reply, as to planting, cultivating, etc., and as to the most desirable sorts for planting in different localities, and for different purposes.

Nothing better illustrates the progress of our country, the advance in civilization its people are making, and the fact that they are learning to live better, than the greatly increased and continuing demand for nursery stock, both fruit and ornamental.

To the planter or purchaser of nursery stock, at least three things are indispensable: first, varieties true to name; second, healthy, vig-

Remarks to Customers

orous, well-matured trees or plants; and third, careful and judicious packing, without which all may be lost.

We warrant our stock true to name and of quality represented, with the express understanding and agreement that should any prove not true to name, we will refund the money paid, or will replace it with other stock, but are not liable to damages other than herein named.

¶ **Good cultivation**—by which we mean keeping the ground sufficiently fertile and at all times mellow and free from weeds, together with thorough drainage, either natural or artificial—is absolutely necessary to success. This, with judicious pruning, and proper selection of varieties, suitable for the locality, will, in nearly all portions of the United States, produce gratifying results.

The soil about Rochester being of a character best suited to produce the healthiest conditions of growth, that solid, firm texture of the wood, with abundant fibrous root, so necessary to successful transplanting, we are enabled to offer the choicest nursery stock with entire confidence to planters in all sections of the country.

We give to our packing and shipping careful personal supervision, and still further to protect our patrons, as well as ourselves, against loss in this direction, we employ the most skilled and competent hands to assist us.

We aim to keep fully abreast of an enlightened and cultivated taste, in the introduction of new and valuable varieties of fruit, and novelties and valuable acquisitions in ornamentals; accepting with pleasure everything that has real merit, we shall with equal readiness discard and discountenance the sale of worthless humbugs.

By careful consideration of the wants of our trade and faithful attention to business, we are confident we shall continue to merit and receive a liberal share of the patronage of lovers and buyers of choice fruits and ornamentals.

Fruit Department

HOW OUR STOCK IS PROPAGATED

Apples, Pears, Plums and Cherries. Our one idea in propagating stock is to solve the question "how can we grow the healthiest and hardiest stock?" and not "how can we grow it cheapest?" By the process known as "root grafting" we could grow apple trees at much less cost than by budding, and for a time make a larger profit on them. If we sell to a man a second time we must please him the first time, and this we cannot do with root-grafted stock, as ordinarily done on piece roots.

We make this exception, however, to the rigid rule of Nurserymen of less experience, namely, a few and only a few varieties make just as strong roots and as straight, thrifty and in every way desirable trees by grafting on whole roots (not on piece roots) as by budding. Over thirty-five years experience and observation confirms this fact to us.

Root-grafting is done as follows: Apple and pear seedlings of one year's growth are dug in the fall and packed in sand. In the winter, the tops are cut off and the roots cut into small pieces about 3 or 4 inches long. A small piece of twig called a "scion," taken from a tree of the variety desired to be propagated, is grafted, by a series of cuts, on one of these small pieces of root. The wounds are then tied up with a string, and the grafts packed in sand ready to plant the next spring in nursery rows.

The budding process is as follows: Large one-year seedlings are used; those which fail to reach the size of one-fourth to seven-sixteenths of an inch in diameter the first year, are transplanted and grown a second year. The seedlings are dug in the fall, packed in sand in the cellar, and early in the spring set out in rows, in the nursery. Having strong roots and all of them, they make a good growth by midsummer, when they are "budded." This is done by cutting a perpendicular slit in the bark on the north side of the seedling (so that the bud is shaded by the seedling itself), a cross slit is made at the top of the perpendicular cut, and the two lower corners of bark carefully peeled back from the wood. Then a leaf bud, cut from the same season's growth of the variety desired to be propagated, is removed with both the bark and a thin slice of wood attached (Fig. 1, *a*), and slipped down into the cut on the seedling (Fig. 1, *b*), and the incision bound around with basswood bark or raffia (Fig. 2), so as to exclude air and water, until the bark of the "bud" has joined with the bark and wood of the seedling. The tie is then cut off, and the bud remains dormant until the following year, while the root continues growing. The following year the seedling is cut back to 3 or 4 inches above the bud (at *a*, Fig. 3), and all sprouts taken off and kept off, so as to throw all the strength into the "bud" which is to become the future tree.

FIG. 2.

FIG. 1.

The difference between root-grafts and budded stock will be apparent to anyone. The graft has a root only one year old; it is usually taken from a smaller and weaker seedling, and has only a piece of root after all. But the bud is inserted in a selected seedling either one or two years old, the entire root being retained; and as the bud is dormant the first year, the root gains another season's growth so that before the stem of the future tree begins to grow the root is two or three years old, firmly established, and prepared to throw the bud up into a straight growth of 4 or 5 feet the first season, so that it can be "headed;" namely, the top cut off about $3\frac{1}{2}$ to $4\frac{1}{2}$ feet from the ground, so that it can throw out branches the second year and make a "head," instead of spindling up into a mere whip.

The root of the budded stock has a big start and keeps it, so that when called upon to support the bud, it pushes it right along, and at the end of two or three years you have a perfect, smooth, symmetrical tree, with a fine strong root. It is not our aim to furnish a tree with a big stem, but with many roots. In buying trees you are not buying them for the amount of cord wood they will make. We start the tree for you, but you must develop it; with budded trees you have roots furnished which will enable you to do it.

Not only do we exercise the greatest care in propagating and growing our trees, but we even import the greater part of our seedlings. All our pear and quince seedlings, and a great part of our apple, cherry and plum seedlings, we get from France.

Our apple seedlings which are raised here, are raised from French crab seeds, so that from the very seeds up to the perfect tree nothing is omitted which will help to produce a tough, hardy tree. The advantage in using the French seedlings is that they are almost entirely free from blight. The same care is exercised in growing our plums and cherries as in growing our apples. Our cherries are budded on pure Mazzard and Mahaleb stock, and our plums on plum seedlings, not on peach seedlings, as do those who only wish to get trees into market quick. If the difference in the quality of the trees grown by the latter and those grown by us is taken into account, the planter would not be long in determining which trees to plant. Budded stock is not only longer-lived, but it bears earlier and heavier crops than root-grafted stock. Apples, Pears, Plums, Quinces, Cherries and Apricots are shipped at the age of two to four years from the bud.

FIG. 3.

Peaches.—In the mountains of Virginia, Tennessee and North Carolina, there is a wild variety of Peach. The fruit is of little value, but the trees are of strong constitution, free from disease and long-lived. For raising our seedlings we obtain the pits from this "natural" fruit, and plant them in nursery rows. This insures a perfectly healthy seedling to start with. The buds are selected from perfectly healthy young trees of the variety desired.

The disease known as the "yellows" may arise from careless cultivation, from contagion, and from using either seeds or buds affected with the disease. We carefully avoid danger from all these sources, and we do not hesitate to guarantee every peach we ship to be in a healthy condition and free from disease. The cheap trees offered by some growers are raised from pits of cultivated varieties taken from canning factories, wholly incapable of producing a strong healthy seed. All peach trees are shipped when "one year old," that is, one year from the bud.

HOW TO CARE FOR NURSERY STOCK WHEN RECEIVED

Soak the trees with water, and either place them in a cellar and keep wet, or bury them in a trench, until the holes are ready for transplanting. If at all dry and shriveled, the best plan is to bury them root and branch in wet earth. If frozen, they should be buried in earth until the frost is removed.

Planting.—Cut off the mutilated portions of the roots leaving the ends smooth and sound, and prune the ends of all the other roots. The soil should be in as good condition as for a crop of corn. When planting upon the lawn or grass plots remove the sod to a diameter of four or five feet and keep this space well worked and free from weeds. Dig the hole deeper and larger than is necessary to admit all the roots in their natural position, keeping the surface and subsoil separate. Cut off broken and bruised roots and shorten the top to half a dozen good buds, except for fall planting, when it is better to defer top pruning until the following spring. Work the best soil thoroughly among the roots and pack it hard about them. Severe pruning of the head of the newly set tree is absolutely necessary to make it correspond with the supply of new shoots that the shortened roots can give. See that they are all entirely free from any coarse manure, but in all parts packed in fine earth. Fill up the top of the hole with loose soil, so that the tree will stand about as in the nursery. Dwarf Pears, however, should be so set that the joint between the quince stock and the pear should be covered at least three inches. A covering of coarse manure, straw, marsh hay or loose chip dirt will be beneficial.

Fall Planting.—When planted in the fall, all trees should be banked up at least one foot high until spring. This overcomes the tendency of the trees to heave out, protects them from mice, and prevents the roots from freezing before they have taken hold of the soil. In planting roses, shrubs, vines and other delicate stock in the fall, the tops should be nearly or quite buried with mellow earth during the first winter. The surplus earth should be removed early in the spring.

Pruning.—As the tree increases in age a judicious thinning of the branches must be attended to, always remembering that none should be displaced that will in

Fruit Department • Propagation

any way mar its beauty. The best season for this operation is in the autumn, after the fall of the leaf, or early in the spring, but never during freezing weather. Some also adhere to summer pinching. **Never prune with a dull knife.**

Distance Between Trees and Plants in Plantations

Standard Apples, 30 to 40 feet apart each way. In poor soil, 25 feet may be enough.
Standard Pears and Cherries, 20 feet apart each way. Cherries will do at 18 feet, and the dwarf growing sorts, Dukes and Morellos, even at 16 feet.
Standard Plums, Peaches, Apricots and Nectarines, 16 to 18 feet apart each way.
Quinces, 10 to 12 feet apart each way.
Dwarf or Pyramidal Pears, Cherries and Plums, 10 to 12 feet apart each way. The greater distance is better where land is not scarce.
Dwarf Apples, on Paradise stock (bushes), 6 feet apart.
Currants, Gooseberries and Raspberries, 3 to 4 feet apart.
Blackberries, 6 to 7 feet apart. **Grapes**, 8 to 10 feet apart.

Number of Trees or Plants on an Acre at Various Distances

At 4 feet apart each way.....	2,729	At 15 feet apart each way.....	200
“ 5 “ “	1,742	“ 18 “ “	135
“ 6 “ “	1,200	“ 20 “ “	110
“ 8 “ “	680	“ 25 “ “	70
“ 10 “ “	430	“ 30 “ “	50
“ 12 “ “	325		

The number of plants required for an acre, at any given distance apart, may be ascertained by dividing the number of square feet in an acre (43,560) by the number of square feet given to each plant, which is obtained by multiplying the distance between rows by the distance between the plants. Thus, strawberries planted three feet by one foot gives each plant three square feet, or 14,520 plants to the acre.

How to Prepare Fruit Trees for Planting

Illustrations showing how they should be pruned before planting. In each case an example is given of an unpruned and pruned tree. No. 1. **Standard**, with stem or trunk three to four feet clear of branches. Standard Apples, Pears, Cherries and Plums have usually this form. No. 2. **Peach Tree**. No. 3. **Dwarf Pear**. The usual appearance of trees, two to three years from bud, prepared for training in pyramidal form. No. 4. **Quince Tree**.

SPRAYING

The calendar shown on the following page was prepared by Prof. E. G. Lodeman, of Cornell University Agricultural Experiment Station. The most important points regarding sprays have been selected and arranged in such a manner that the grower can see at a glance what to apply and when to make the applications. The more important insect and fungous enemies are also mentioned, so that a fairly clear understanding of the work can be obtained by examining the accompanying table. When making the applications advised, other enemies than those mentioned are also kept under control, for only the most serious ones could be named in so brief an outline. The directions given have been carefully compiled from the latest results obtained by leading horticulturists and entomologists, and they may be followed with safety.

NOTICE.—In this calendar it will be seen that some applications are italicized and these are the ones which are most important. The number of applications given in each case has particular reference to localities in which fungous and insect enemies are most abundant. If your crops are not troubled, when some applications are advised, it is unnecessary to make any. It should be remembered that in all cases success is dependent upon the exercise of proper judgment in making applications. Know the enemy to be destroyed; know the remedies that are most effective; and finally, apply them at the proper season. Be prompt, thorough and persistent. Knowledge and good judgment are more necessary to success than any definite rules which can be laid down.

FORMULAS

Bordeaux Mixture. Copper sulphate, 6 pounds; quicklime, 4 pounds; water, 40 gallons. Dissolve the copper sulphate by putting it in a bag of coarse cloth and hanging this in a vessel holding at least 4 gallons, so that it is just covered by the water. Use an earthen or wooden vessel. Slake the lime in an equal amount of water. Then mix the two and add enough water to make 40 gallons. It is then ready for immediate use. If the mixture is to be used on peach foliage it is advisable to add an extra pound of lime to the above formula. When applied to such plants as carnations or cabbages, it will adhere better if about a pound of hard soap be dissolved in hot water and added to the mixture. For rots, molds, mildews and all fungous diseases.

Ammoniacal Copper Carbonate. Copper carbonate, 1 ounce; ammonia (1 volume 26° Beaumé, 7–8 volume of water), enough to dissolve the copper; water, 9 gallons. The copper carbonate is best dissolved in large bottles, where it will keep indefinitely, and it should be diluted with water as required. For the same purposes as Bordeaux mixture.

Copper Sulphate Solution. Copper sulphate, 1 pound; water, 15 gallons. Dissolve the copper sulphate in the water, when it is ready for use. This should never be applied to foliage, but must be used before the buds break. For peaches and nectarines use 25 gallons of water. For fungous diseases.

Paris Green. Paris green, 1 pound; water, 200–300 gallons. If this mixture is to be used on peach trees, 1 pound of quicklime should be added. Repeated applications will injure most foliage, unless lime is added. Paris green and Bordeaux mixture can be applied together with perfect safety. Use at the rate of four ounces of the arsenites to 50 gallons of the mixture. The action of neither is weakened, and the Paris green loses all caustic properties. For insects which chew.

London Purple. This is used in the same proportion as Paris green, but as it is more caustic it should be applied with two or three times its weight of lime, or with the Bordeaux mixture. The composition of London purple is exceedingly variable, and unless good reasons exist for supposing that it contains as much arsenic as Paris green, use the latter poison. Do not use London purple on peach or plum trees unless considerable lime is added. For insects which chew.

Hellebore. Fresh white hellebore, 1 ounce; water, 3 gallons. Apply when thoroughly mixed. This poison is not so energetic as the arsenites, and may be used a short time before the sprayed portions mature. For insects which chew.

Kerosene Emulsion. Hard soap, $\frac{1}{2}$ pound; boiling water, 1 gallon; kerosene, 2 gallons. Dissolve the soap in the water, add the kerosene, and churn with a pump 5 to 10 minutes. Dilute 10 to 25 times before applying. Use strong emulsion for all scale insects. For insects which suck, as plant lice, mealy bugs, red spider, thrips, bark-lice or scale. Cabbage worms, currant worms and all insects which have soft bodies, can also be successfully treated.

SPRAY CALENDAR

PLANT.	First Application.	Second Application.	Third Application.	Fourth Application.	Fifth Application.	Sixth Application.
Apple (Scab, codlin moth, bud moth.)	When buds are swelling, copper sulphate solution.	Just before blossoms open, Bordeaux. For bud moth, Arsenites when left buds open.	When blossoms have fallen, Bordeaux and Arsenites.	8-12 days later, Bordeaux and Arsenites.	10-14 days later, Bordeaux.	10-14 days later, Bordeaux.
Cherry (Hot, aphids, slug.)	As buds are breaking, Bordeaux; when aphids appears, Kerosene emulsion.	When fruit has set, Bordeaux. If slugs appear, dust leaves with air-sifted lime. Hellebore.	10-14 days if rot appears, Bordeaux.	10-14 days later, Ammoniacal copper carbonate.		
Currant (Mildew, worms.)	At first sign of worms, Arsenites.	If leaves mildew, Hellebore.	If worms persist, Hellebore.			
Gooseberry (Mildew, worms.)	When leaves expand, Bordeaux. For worms as above.	10-14 days later, Bordeaux. For worms as above.	10-14 days later, Ammoniacal copper carbonate. For worms as above.	10-14 days later, repeat third.		
Grape (Fungous diseases, Flea beetle.)	In spring when buds swell, copper sulphate solution. Paris green for flea beetle.	When leaves are 1-1½ inches in diameter, Bordeaux. Paris green for larvae of flea beetle.	When flowers have fallen, Bordeaux. Paris green as before.	10-14 days later, Bordeaux.	10-14 days later, if any disease appears, Bordeaux.	10-14 days. Ammoniacal copper carbonate. Make later applications of this if necessary.
Peach, Nectarine, Apricot (Hot, mildew.)	Before buds swell, copper sulphate solution.	Before flowers open, Bordeaux.	When fruit has set, Bordeaux.	When fruit is nearly grown, Ammoniacal copper carbonate.	5-10 days later, repeat fourth.	5-10 days later repeat fourth if necessary.
Pear (Leaf blight, scab, psylla, codlin moth.)	As buds are swelling, copper sulphate solution.	Just before blossoms open, Bordeaux. Kerosene emulsion when leaves open, for psylla.	After blossoms have fallen, Bordeaux and Arsenites. Kerosene emulsion if necessary.	8-12 days later, repeat third.	10-14 days later, Bordeaux. Kerosene emulsion applied for psylla.	10-14 days later, repeat if necessary.
Plum (Fungous diseases, curculio.)	During first warm days of early spring, Bordeaux for black knot. When leaves are off in the fall, Kerosene emulsion for plum scale.	When buds swell, Bordeaux for black knot and other fungous diseases. During midwinter, Kerosene emulsion for plum scale.	When blossoms have fallen, Bordeaux. Repeat second if necessary.	10-14 days later, Bordeaux. For trees for curculio every 2-4 days. For San José scale, Kerosene emulsion when young appear in spring and summer.	10-20 days later, Bordeaux for black knot. For trees for curculio. When young plum scale insects first appear in summer, Kerosene emulsion.	10-20 days later, Bordeaux for black knot. Later applications may be necessary. To prevent leaf spot and fruit rot, use Ammoniacal copper carbonate.
Quince (Leaf and fruit spot.)	When blossom buds appear, Bordeaux.	When fruit has set, Bordeaux and Arsenites.	10-20 days later, Bordeaux.	10-20 days later, Bordeaux.		
Raspberry Blackberry Gooseberry (Anthracnose, rust.)	Before buds break, copper sulphate solution. Cut out badly diseased canes.	During summer, if rust appears on leaves, Bordeaux.	Repeat second if necessary.	Orange or red rust is treated best by destroying entirely the affected plants.		
Rose (Mildew black spot, red spider, aphids.)	For mildew. Keep heating pipes painted with equal parts lime and sulphur mixed with water to form a thin paste.	For black spot. Spray plants once a week with Ammoniacal copper carbonate, using fine spray.	For red spider. Spray plants twice a week with Kerosene emulsion. Apply to under side of foliage.	For aphids. Spray Kerosene emulsion when necessary.		(Kerosene emulsion must be used very dilute, as rose foliage is easily injured by it.)

Apples

NO other fruit occupies, in the north temperate zone, the commanding position of the Apple. Its period of use extends nearly or quite through the year. Whether it be in size, form or color; in flavor, sweet or sour, in infinite variety of shades; in crispness or tenderness, it will in some variety or other suit any taste. No ordinary farm crop will, on the average, produce one-fourth as much income per acre as a good Apple orchard. The fact that six to eight years must elapse before a newly planted orchard will begin to bear deters many from planting. But, as a matter of fact, land can be used a large part of the time for crops, and no great investment is required to plant at the rate of 30 to 50 trees to the acre. When once in bearing, with little actual time spent upon it each year, it will be an unfailing source of cash income, if properly selected from varieties recommended in our list.

Let no one be disappointed if he misses from our list some names familiar to his childhood, varieties which the glamour of years and the voracious appetite of youth cause to stand out in memory so delightfully. That memory is often a delusion. We still propagate only those varieties which, having stood the test of time, are at this day holding their own with the best. Some old varieties, after being eclipsed for years by fungous diseases which made them well nigh worthless, are now again made worth growing by the victory of science over those diseases.

Many varieties of Apples are known by different names in different sections, and are sometimes called for by names not known outside of particular localities. Fameuse, for instance, is called Snow by some people, and Fallawater, Tulpehocken.

"Ironclads." This term is applied nowadays to a class of trees that are extra hardy. Most of them are of Russian origin, adapted by their tough, leathery leaves and hardy constitution to withstand the extremities of the most severe climate. They will stand long, hot, dry summers, and extremely cold winters. Their parentage comes from lines long developed in the severe climate of the Russian plains. They are exceedingly fruitful, very early bearers, some of them, indeed, beginning to bear in the nursery row.

Codling Moth. This lays in the calyx end of the apple, the egg which produces the apple worm. To prevent, see page 7.

Apple Scab. Some varieties like Newtown Pippin and Fall Pippin, are especially subject to this, which frequently destroys the crop. Spray with Bordeaux mixture. See Spray Calendar, page 7.

Fruit Department · Apples

Distances for Planting. Vigorous growing varieties in strong soil forty feet apart. Moderate growing varieties 30 feet apart. Size when ready for shipment, five to seven feet; two to four years old from the bud.

SUMMER APPLES

Early Harvest (Yellow Harvest). Medium to large; pale yellow; fine flavor; tree a moderate, erect grower, and a good bearer. A beautiful and excellent variety for both orchard and garden. Middle to end of August.

Early Strawberry. Medium; striped deep red; tender, subacid and excellent. A poor grower, but productive. August.

Golden Sweet. Rather large, pale yellow; very sweet and good. Strong grower and good bearer. August.

Red Astrachan. Large, roundish; nearly covered with deep crimson, overspread with a thick bloom; juicy, rich, acid, beautiful. The tree is a vigorous grower, with large foliage, and a good bearer. August.

Sweet Bough. Large; pale, greenish yellow; tender and sweet. Moderate grower and good bearer. August.

Sops of Wine. Medium size, oblong, red; flesh white, often stained, mild and pleasant; productive. August and September.

Star. Large size, often 3 inches in diameter; rich green; sprightly subacid. August.

Tetofsky. A Russian Apple which has proved profitable for market-growing. The tree is an upright, spreading grower, forming an open head; comes into bearing extremely early, usually the second year after transplanting, and bears every year. Hardy as a crab. Fruit good size, nearly round, yellow, beautifully striped with red; flesh white, juicy, pleasant acid, aromatic. July and August.

Yellow Transparent. A new Russian variety. Unquestionably the most valuable early Apple ever introduced. Tree an upright grower and a very early and a abundant bearer. Fruit of good size; skin clear white, turning to a pale yellow; flavor acid, and very good. Ripens from ten days to two weeks earlier than Early Harvest.

Yellow Transparent.

AUTUMN

Alexander (Emperor). Of Russian origin. Large, deep red or crimson; flesh yellowish white, crisp, tender, with pleasant flavor. Very hardy. October.

Autumn Strawberry. Medium, streaked; tender, juicy, subacid, fine. Vigorous and productive. September and October.

Fruit Department • Autumn Apples

Duchess of Oldenburg. Of Russian origin. Large size, roundish, streaked with red and yellow; flesh whitish, juicy; flavor sprightly subacid. Tree a vigorous grower; very hardy, early, and abundant bearer. September.

Fall Jennetting. Large, oblate, pale greenish white, with a blush; tender, juicy, mild and subacid. Tree vigorous, spreading and productive. November.

Fall Pippin. Very large, yellow, tender, juicy and rich. Tree vigorous. October to December.

Fameuse (Snow Apple). Medium size, roundish oblate, whitish ground, striped with deep red; flesh very white, juicy and pleasant. Tree very hardy; one of the most valuable northern sorts. November and December.

Gravenstein. Large, striped and beautiful; tender, juicy and high-flavored. Vigorous and productive. September and October.

Jersey Sweet. Medium, striped red and green; very sweet, rich and pleasant. Good grower and bearer. September and October.

Maiden's Blush. Medium size, flat, quite smooth and fair, pale yellow with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. September and October.

Porter. Rather large, yellow; tender, rich and fine. Moderate grower, but productive. September.

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

Rolfe. Originated in Guilford Center, Maine, where it is grown very extensively and regarded as perfectly hardy. A good bearer and of fine quality. Subacid and very small core; excellent for cooking or the table, and classed as one of the most attractive and best selling varieties. October to November.

Red Bietigheimer. A rare German variety. Fruit large to very large; skin pale green color, mostly covered with purplish crimson; flesh white, firm, subacid, with a brisk, pleasant flavor. Tree a free grower and abundant bearer. This is one of the largest and handsomest of apples. September and October.

St. Lawrence. Large, yellowish striped and splashed with carmine; flesh white, lightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. Sept.

Sherwood's Favorite, or Chenango Strawberry. Medium size, oblong and indistinctly ribbed, of a light color, splashed with dark crimson; flesh white, juicy, very mild and tender, slightly subacid, good. September.

Smokehouse. Large; yellow, shaded with bright red; flesh firm, crisp, juicy and fine-flavored. Especially esteemed in Pennsylvania. October to November.

Twenty-Ounce (Cayuga Red Streak). Very large, nearly round; yellow, striped with red; quality good. Vigorous and good bearer. Popular as a market variety. November to December.

WINTER APPLES

Arkansas Beauty. Large to very large; deep red, tender, yet firm; one of the handsomest Apples grown; quality good. Tree hardy, vigorous and very productive. December to May.

Bismarck. Origin, New Zealand. Flesh yellow; perfectly hardy, wonderfully prolific; very early bearer; fair quality. November to February.

Boiken. Origin, Austria. Unexcelled for cooking; size large; rich yellow with bright red cheek in the sun; a late keeper; at its best in April and May; annual bearer; very hardy. A great acquisition, but not a strong grower.

Bailey Sweet. Large; deep red; tender, rich, sweet; vigorous, upright, good bearer. November to April.

Baldwin. Large, roundish; deep bright red; juicy, crisp, subacid, good flavor. Tree vigorous, upright, and very productive of fair, handsome fruit. In sections where it thrives, one of the best and most popular winter Apples. January to April.

Baxter. Originated in Canada. Fruit uniformly large, handsome; delicious, mild acid. Tree extremely hardy, vigorous and productive. December to May.

Bellefleur, Yellow. Large; yellow, with blush cheek; very tender, juicy, subacid. In use all winter. Very valuable. A moderate grower and good bearer.

Jonathan.

Belle de Boskoop. Pronounced one of the most beautiful and profitable of the Russian varieties. Large; bright yellow, washed with light red on the sunny side, sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly, subacid; quality very good; a late keeper.

Ben Davis (New York Pippin, Kentucky Streak, etc.). A large, handsome, striped Apple of good quality. Tree very hardy, vigorous and productive. A late keeper. Highly esteemed in the west and southwest.

Bottle Greening. Resembles Rhode Island Greening in size and flavor; but the tree is a better grower and much hardier. A native of Vermont. December to March.

Cooper's Market. Medium, conical; yellow, striped with crimson; flesh white, tender, brisk, subacid; vigorous, upright grower. December to May.

Delaware Red. Medium to large; bright red, highly colored; flesh fine grained, crisp, juicy, subacid; excellent; remarkable for its long keeping qualities. An early and abundant bearer. November to February.

Fallawater (Fornwalder, Tulpehocken). Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant subacid flavor. Tree a strong grower, very productive, even while young. November to March.

Gano. Originated in Missouri. Form conical, good size and smooth, deep red, shaded on sunny side to mahogany; very attractive; flesh pale yellow, fine-grained, tender, pleasant, mild, subacid; is a good shipper and keeper. Tree healthy, vigorous and hardy; an annual and prolific bearer. February to May.

Gideon. Raised in Minnesota. An upright grower; medium to large; color yellow, with vermilion blush on sunny side; mild acid; quality very good. December to March.

Golden Russet. Medium size; dull russet with a tinge of red on exposed side; flesh generally crisp, juicy and high-flavored. Tree a vigorous grower and a great bearer. Very popular. November to April.

Grimes' Golden (Grimes' Golden Pippin). An Apple of the highest quality; medium to large size, yellow. Tree hardy, vigorous and productive. January to April.

Hubbardston Nonsuch. Large; striped yellow and red; tender, juicy and fine; strong grower and good bearer. November to May.

Hurlbut. Medium size, conical; yellow, shaded with red stripes and splashed with a darker red; flesh white, crisp and tender, juicy, mild subacid; quality excellent; begins to bear while young and continues with regular and constant crops; very hardy and suited to the extreme north. In season during midwinter.

Jonathan. Medium size, deep red; flesh tender, juicy and rich; very productive; one of the very best varieties for the table, for cooking or market. November to March.

King (Tompkins County). Large and handsome, striped red and yellow. Tree vigorous and productive; one of the best. November to May.

Fruit Department • Winter Apples

Lady Apple. A beautiful little dessert fruit; flat, pale yellow with a deep red cheek; juicy, rich and pleasant. November to May.

Longfield. A Russian variety. Tree a free, upright grower, early and abundant bearer. Medium to large; yellow, with a flush on the sunny side like the Maiden's Blush; rich, sprightly, subacid; quality good. December to March.

Mann. Fruit medium to large, roundish; skin deep yellow when fully ripe; flesh yellowish, juicy, mild, pleasant, subacid, good. An early and annual bearer.

McIntosh Red. An exceedingly valuable, hardy, Canadian sort. Medium size; nearly covered with dark red; flesh white, fine, very tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but larger and more hardy and fully equal in quality to this standard sort. November to February.

Newtown Pippin. One of the most celebrated of American Apples on account of its long-keeping and excellent quality. November to June.

Northern Spy. Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red; flesh white and tender, with a mild, subacid, rich and delicious flavor. In perfection in January and keeps till June. The tree is a strong, upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely.

North Star (Dudley's Winter; Winter Duchess). Originated in Maine. Size and appearance of Duchess, but more solid and richer; flavor same, and keeps until spring. Tree thrifty, perfectly hardy, a good cropper. A very great acquisition.

Ontario. Large; yellow, nearly covered with bright red; juicy, subacid; quality of fruit very fine. Tree hardy. December to May.

Opalescent. New. All who have examined the Opalescent regard it as the handsomest Apple grown. It is not only highly colored, but susceptible of a very high polish, reflecting objects near it like a mirror. This feature makes it a highly prized sort for fruit stands. The flesh is yellowish, tender, juicy and good; size large to very large; color light, shading to very dark crimson. December to March.

Paragon. Large to very large; deep red; tender yet firm. One of the handsomest Apples grown; quality extra-good. Tree hardy, vigorous and very productive. December to May.

Pewaukee. A seedling from Duchess of Oldenburg. Fruit medium to large; surface bright yellow, partially covered with dull red; flesh yellowish white, breaking, juicy; flavor subacid, rich, aromatic, spicy, something like the Jonathan; quality good. Tree a strong grower and very hardy. January to June.

Rawle's Janet (Never Fail). Medium, roundish, ovate; greenish yellow, striped with red; crisp, rich and juicy. One of the best and longest keepers in the south and southwest.

Rome Beauty. Large; yellow, with red cheek; handsome, good quality, moderate grower. Great bearer on the Ohio river. December to May.

Rhode Island Greening. Large; greenish yellow; tender, rich, subacid. Tree grows crooked, strong and spreading; good bearer. December to April.

Russet, Roxbury or Boston. Medium to large; greenish or yellow russet; crisp, good, subacid flavor. Tree vigorous and productive. Keeps until June.

Seek-No-Further (Westfield). Medium to large, slightly russeted with dull red stripes; tender, rich, spicy and fine. Good grower and bearer. November to February.

Stark. Esteemed in Ohio as a long keeper and valuable market fruit. Fruit large, roundish; skin greenish yellow, much shaded with light and dark red, and sprinkled with brown dots; flesh yellowish, juicy and mild subacid. January to May.

Sutton Beauty. Fruit large, waxy yellow, striped with crimson; flesh white, tender, juicy, mild acid. Quality good and a remarkable keeper. Tree vigorous, a handsome grower, very productive. A new Apple that is proving as profitable as the Baldwin for orchard purposes.

Wagener. Medium to large; deep red in the sun; flesh firm, subacid and excellent; very productive; bears very young. December to May.

Walbridge. Medium size, striped with red; handsome and of excellent quality. Vigorous grower and productive. Very hardy and considered of value in the northwest. March to June.

Wealthy. A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of good size, red streaked with white; quality good. November to February.

Winesap. Medium; dark red; subacid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.

Winter Banana Apple.

Winter Banana. New; excellent. The name is most appropriate, as it has a delightful banana perfume. Fruit keeps well till spring; the color is a striking red blush on a deep yellow ground. It is of large size and very showy in appearance, roundish, inclining to conical, stalks three-fourth of an inch long, cavity moderate, apex shallow. Originated in Indiana.

Wolf River. A new and beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the ironclads. Skin greenish yellow, shaded with crimson; flesh white, juicy, tender, with a mild, subacid flavor. Tree a strong, stout grower and great bearer. January and February.

York Imperial. Of medium size, truncated, oval, angular; skin greenish yellow; flesh tender, crisp, aromatic. Highly esteemed in Pennsylvania, where it originated.

Extra-Hardy, or Ironclad Apples.

The opinion has prevailed that the attempt to produce valuable Apples in the northern sections of New York, New England, and the adjoining portions of Canada, Wisconsin, Minnesota, and other sections unfavorable for general fruit-growing, must prove a failure. While this is true as to many varieties successfully grown in more temperate or favorable regions its general application is quite erroneous. Experience in growing Russian or other varieties of northern origin, has shown that a limited variety of fine Apples can be grown as far north as Montreal, and that some of these varieties may be planted with equal profit in all sections, north and south.

Below we give a list of the most valuable extra-hardy Apples, with reference to the pages of this catalogue on which descriptions of them may be found:

Summer	PAGE	Winter	PAGE
Tetofsky	9	Arkansas Beauty	11
Yellow Transparent	9	Belle de Boskoop	11
		Gano	11
		Grimes' Golden	11
		Hurlbut	11
		Longfield	12
Alexander	9	Mann	12
Duchess of Oldenburg	10	McIntosh Red	12
Fameuse	10	Wealthy	13
Red Bietigheimer	10	Wolf River	13

CRAB APPLES

All our cultivated sorts of Apples came originally from a species of Crab which is found wild in most parts of Europe. There are several kinds of wild Crab native to this country, but our fine cultivated varieties do not arise from these. Certain fine varieties of Crab Apples are exceedingly valuable for the making of jelly and cider or vinegar. Other varieties are not suited to culinary purposes at all, but on account of their beautiful appearance, delicate texture and delicious flavor, are highly prized as dessert fruit.

They are extremely hardy, have all the vigor of the original Apple tree, and can be planted in any kind of soil in the most exposed situations with perfect safety. They come into bearing very early, bear regularly and abundantly. The size of the fruit varies from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches in diameter.

One familiar with only the small Siberian Crabs can have but a faint conception of the size, beauty and excellence of the new and improved varieties which have been introduced in recent years.

Bailey's Crimson. Fruit large, roundish; skin yellow, shaded over the whole surface with deep rich crimson, covered with a light bloom; flesh yellow, juicy, subacid. Tree vigorous, upright, very productive. September.

Excelsior. Extra hardy; red, striped. A valuable seedling of Mr. Gideon's, raised from the seed of the Wealthy, which is already known as one of the handsomest, hardiest and best-flavored of our newer fruits, and it partakes of many of the best characteristics of the parent variety. Ripens in early fall, a little later than Duchess of Oldenburg. Size of fruit about that of Fameuse, and very handsomely colored; is a shade or two lighter than the Wealthy, while it closely resembles it in quality and in the form and growth of the tree. October.

General Grant. Fruit large, round; red to very dark red; flesh white, tender, mild, subacid. Excellent for dessert, and one of the best Crabs introduced. Tree a vigorous and upright grower. October.

Hyslop. Almost as large as Early Strawberry Apple; deep crimson. Very popular on account of its large size, beauty and hardiness; vigorous. October to January.

Martha. A new variety; a seedling of the Duchess of Oldenburg. Resembles the Transcendant, but larger; a beautiful, showy fruit, and bears enormously. All things considered, we doubt if it has an equal among the Crabs; vigorous. September and October.

Hyslop Crab Apples.

Red Siberian. Fruit small, about an inch in diameter; yellow, with scarlet cheek, beautiful. Tree an erect, free grower; bears when two or three years old. September and October.

Transcendant. Skin yellow, striped with red; flesh crisp and juicy. An early and heavy bearer; vigorous. One of the best known varieties. September and October.

Van Wyck Sweet. An exceedingly valuable variety. Fruit very large; skin yellowish white, colored light red and covered with bloom; flesh yellowish white, very sweet and tender;

small core. Quite handsome; vigorous. October and November.

Whitney's Seedling (No. 20). Large; glossy green, striped and splashed with carmine; flesh firm, juicy, and flavor very pleasant. Ripe latter part of August. Tree a great bearer and very hardy; a vigorous, handsome grower, with a dark green, glossy foliage.

Yellow Siberian (Golden Beauty). Large; of a beautiful golden yellow color. Tree vigorous. September.

Dish of Worden-Seckel Pears, See page 17.

Pears

THIS fruit may now be had in varieties, which will be in good eating condition from August until early spring. It is a very profitable fruit to grow and will especially reward good cultivation and care. They should be gathered from ten days to two weeks before they are fully ripe, when, on gently lifting the fruit, the stem will readily separate from the limb. Only the most perfect specimens should be marketed to insure the highest price, and they should be handled and packed with care to avoid bruising. They should be kept in a dark place until fully matured. Winter Pears may hang on the trees until there is danger of frost, and then placed in a dry cellar to mature.

The Pear succeeds on most soils, but does best on a rather heavy loam. Budded on its own stock it makes what is called a standard tree; but on quince stock it makes a dwarf. Standards are best adapted to large, permanent orchards; but dwarfs will come into bearing very much sooner and may be planted much closer together. Dwarfs must always be planted sufficiently deep to cover the quince stock 2 or 3 inches.

The soil should be rich and well cultivated. A Pear orchard should not be permitted to "go to grass." They should be pruned every year, dwarfs especially. Dwarfs should have low heads and be trained in pyramidal form, one-half of the previous season's growth being cut off each spring.

Size when shipped, Standards 5 to 7 feet high; Dwarfs $3\frac{1}{2}$ to $4\frac{1}{2}$ feet. Plant Standards 20 feet apart and Dwarfs 12 feet apart.

SUMMER PEARS

Bartlett. Large size, with often a beautiful blush next the sun; buttery, very juicy and high flavored; bears early and abundantly; very popular. Vigorous. August and September.

Clapp's Favorite. Very large; yellowish green to full yellow when ripe, marbled with dull red in the sun, and covered with small russet specks; vinous, melting and rich. Should be gathered early. Vigorous. August.

Koonce. Medium to large, pyriform, very handsome; yellow, one side covered with bright carmine, sprinkled with brown dots; flesh juicy, sweet, spicy, good. Ripens with the earliest. Tree a remarkably strong grower; hardy, and very productive. August.

Manning's Elizabeth. Small to medium; bears in clusters; crimson and gold color; very beautiful, melting, rich, sugary, sprightly, perfumed flavor; excellent; very productive. One of the best early Pears. Vigorous. August.

Osband's Summer. Medium, yellow with red cheek; half melting, mild and pleasant; fine flavor and excellent; productive. Free grower. August.

Tyson. Medium size, bright yellow, cheek shaded with reddish brown, buttery, very melting; flavor nearly sweet, aromatic, excellent. Vigorous. August.

Wilder's Early. Medium, or rather small, regular in form; greenish yellow, with a brownish red cheek; handsome, melting, sweet, pleasant, very good; tree a vigorous grower and great bearer. First of August.

AUTUMN PEARS

Anjou (Beurre d'Anjou). A large, handsome Pear; buttery and melting, with sprightly, vinous flavor; tree a vigorous grower and good bearer. We have no hesitation in pronouncing it to be the most valuable Pear in the catalogue. Does equally well as a standard or dwarf. Keeps until the winter holidays, when it commands very high prices in the market.

Anjou Pear.

Bartlett-Seckel. A cross between Bartlett and Seckel, combines the finest qualities of each. Tree vigorous, hardy and productive; fruit good size, very rich, high color, handsome. September to October.

Columbia. See Bartlett-Seckel.

Belle Lucrative. Large size; yellowish green; melting and delicious; an upright grower and productive, bears while young. First quality in all respects. An altogether desirable variety. In season during Sept. and Oct.

Beurre Bosc. A large and beautiful russety Pear; very distinct, with a long neck; high flavored and delicious; a moderate grower and rather irregular; bears well. We top-graft in order to obtain good standard trees. September and October.

Beurre Clairgeau. Its size, early bearing, productiveness and beauty, render it a profitable market variety. It should only be grown as a standard. Very large; light yellow, shaded with crimson and russet; an early and abundant bearer.

Duchesse d'Angouleme. Very large, with rough and uneven surface; of a greenish yellow, with patches of russet and a dull red cheek; a vigorous and strong grower and a good bearer while quite young. It attains its greatest perfection on the Quince root. In season during October and November.

Flemish Beauty. Large size; greenish yellow and brown; rich and juicy. An old and highly esteemed variety; a strong grower and a great bearer; hardy and desirable. September and October.

Howell. Large size; light waxen yellow; sweet and melting, of excellent quality; a strong and hardy grower and good bearer. September and October.

Idaho. A new Pear. Originated in Idaho. Very large, nearly round; yellow, with brownish red on sunny side; flesh melting, juicy, vinous; quality best. Season September in Idaho, and said to be very hardy, vigorous and prolific.

Kieffer's Hybrid. The tree is a vigorous grower, an early and regular bearer and very productive; fruit large, rich yellow, tinged with red, somewhat russety and very handsome; flesh white, buttery and juicy. Ripens in October. Commands the highest price in the market.

Louise Bonne de Jersey. Large size, oblong, pyriform; pale green in the shade, but overspread with brownish red in the sun; very juicy and melting, with a rich and excellent flavor; a profitable market variety, succeeding better in the quince than on the Pear root. September and October.

Rutter. One of our most valuable Pears. Fruit medium to large, nearly globular. Skin rough, greenish yellow, sprinkled with russet. Flesh white, moderately juicy, nearly melting, sweet, slightly vinous. Good quality. Tree an upright grower and a young and abundant bearer. American origin. October and November.

Seckel. Small size; yellowish russet, with a red cheek; flesh whitish, buttery, very juicy and melting. The richest and finest variety known and extensively planted all over the country. A most prolific bearer. September and October.

Sheldon. Large size, roundish; greenish yellow, mostly covered with thin, light russet; very juicy, melting, sweet and vinous; a fine grower and good bearer, but does not succeed on the quince. October and November.

Vermont Beauty. A beautiful new seedling Pear that originated in northern Vermont. Fruit of medium size; flesh melting, sprightly and of the best quality; tree healthy, hardy and very productive. October.

Worden-Seckel. A seedling of the Seckel, which for many years has been conceded by pomologists to be the standard of excellence. Color golden yellow, one side bright crimson. Flesh dull white, very juicy, buttery, melting, fine-grained, with a flavor and aroma fully equal to that of its distinguished parent, which it far surpasses in size, beauty and keeping qualities. Ripens early in October, and can be kept in good eating condition till December. Bears in clusters, and is one of the most beautiful and attractive, and at the same time one of the best flavored Pears on the market. Prof. I. P. Roberts, of Cornell University, president of the New York society, says: "The Worden-Seckel is certainly a very beautiful Pear. I consider this a very valuable variety, and well worthy a place among the best in the country."

Rutter Pear.

WINTER PEARS

Easter Beurre. Large size; yellow, with a brownish red cheek; of excellent quality, rich and melting. A moderately strong grower and productive. One of the best keeping varieties. Succeeds best on the quince root.

Jones' Seedling. Medium size; yellow, shaded with russet; flesh buttery, sugary, vinous. One of the best. Frequently sells in the eastern market for \$15 per barrel. A free, upright grower.

Lincoln Coreless. Among the many new Pears offered to the public, there is none but this which possesses the wonderful quality of being practically coreless. In season it is late, and the fruit is picked when green, and laid away to ripen. It will keep for several months. Specimens have been known to keep until March in an ordinary cellar. Fruit large, quality very good, rich, luscious and juicy, and pronounced excellent by all who taste it. When ripe, the skin is of a rich golden tint, and the flesh is yellow. Tree a strong, healthy grower. They are hardy, enduring the same climate that Bartlett will.

Lawrence. Above medium size, yellow, tender and melting; quality best, and one of the best winter Pears. Midwinter.

Mount Vernon. Medium size; light russet, red in the sun; flesh inclined to yellow, juicy and aromatic. Tree a good grower, an early and abundant bearer. Midwinter.

President Drouard. A variety recently introduced from France, highly recommended for its rich flavor and great keeping qualities. Tree a vigorous grower. Fruit large and handsome; melting and juicy, with a delicious perfume. March to May.

Vicar of Winkfield. Large size; long, fine; rich yellow when fully ripe. Very vigorous and productive, and one of the best for general cultivation.

Winter Nelis. Medium size; greenish yellow, spotted with russet; melting and buttery, with a rich sprightly flavor. Tree of straggling growth; one of the very best early winter Pears.

DWARF PEARS

As certain varieties of Pears are not successful when grown as dwarfs, we herewith give a special list of such as are most suitable, and of which the Duchesse d'Angouleme is decidedly the best of all.

Beurre Clairgeau,
Beurre d'Anjou,
Clapp's Favorite,

Duchesse d'Angouleme,
Howell,
Kieffer's Hybrid,

Louise Bonne,
Lawrence,
Seckel.

Dikeman Cherries. (Reduced.)

Cherries

THE Cherry thrives best on a dry, sandy or gravelly soil, and there attains its highest perfection, but will do well in almost any situation except a wet one.

We divide them into two classes: (1) Hearts and Bigarreaus; (2) Dukes and Morellos. The former are strong and vigorous growers, making large, open, spreading heads; their fruit is large, heart-shaped, meaty and sweet. The Dukes and Morellos do not attain so large size, but are more hardy and less liable to injury from bursting the bark; their fruit is usually sour.

For dry soils we rate the Cherry, and particularly the Morello class, one of the most profitable fruits grown. The Hearts and Bigarreaus are profitable for home market, but for shipping (except the Dikeman) the Dukes and Morellos carry the best and yield the largest returns. Ordinary well grown trees produce from five bushels per tree upwards; the fruit brings one year with another two to three dollars per bushel.

Plant 16 to 18 feet apart. Size when ready to ship, Heart and Bigarreau 4 to 6 feet; Dukes and Morellos 3½ to 6 feet.

HEART AND BIGARREAU

Fruit heart-shaped, with tender, sweet flesh Tree of rapid growth, with large, soft, drooping leaves.

Black Eagle. Large, black, tender, rich, juicy and high-flavored. Tree a moderate grower and productive. Beginning of July.

Black Heart (Black Ox-Heart). A very old variety. Fruit medium size, heart-shaped, rather irregular; skin glossy, deep black; flesh tender, juicy, rich, sweet. Tree a rapid grower, hardy and productive. Early in July.

Black Tartarian. Very large; purplish black, half tender; flavor mild and pleasant. Tree a remarkably vigorous, erect and beautiful grower, and an immense bearer. Ripe last of June and beginning of July. One of the most popular varieties in all parts of the country.

Fruit Department · Heart and Bigarreau Cherries

Black Russian. European origin. Fruit large, deep black, glossy; flesh very solid and firm, yet juicy and delicious. The most valuable late sweet Cherry.

Coe's Transparent. Medium size; pale amber-red and mottled next the sun; tender, sweet and fine; one of the best. Tree vigorous and erect. End of June.

Dikeman. This gem among Cherries has the advantage of being the latest ripening sweet Cherry known, hence, placed on the market two or three weeks after other sorts are gone, it commands highest price. Black, good size, and in texture reminds one of Cherries from the Pacific Slope, being meaty and solid. It is this quality alone which makes it such a good shipper and keep so long.

Downer's Late. Rather large, light red, tender and juicy; slightly bitter before fully ripe. Tree a vigorous, erect grower, and productive. One of the best late Cherries.

Governor Wood. The finest of Dr. Kirtland's seedlings, of Ohio; clear, light red; tender and delicious. Tree a vigorous grower and most productive. Hangs well on the tree. End of June.

Knight's Early. Large; black, tender, juicy, rich

and excellent. Tree a free grower and very productive: branches spreading. Ripe a few days before the Black Tartarian.

Mercer. New; originated in New Jersey. Fruit large, dark red, fine-flavored, sweet. A good shipper. Tree very hardy and healthy; is an annual bearer and not liable to being wormy nor rot on the tree, and gives great promise of being one of the very best for orchard or family purposes. Early.

Napoleon Bigarreau. Fruit of the largest size, pale yellow, with a bright red cheek; flesh very firm, juicy, and when fully ripe of an excellent flavor. Tree vigorous and productive. Ripens early in July.

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

Windsor. New. A seedling originated at Windsor, Canada. Fruit large, liver-colored, resembling the Elkhorn, or Tradescant's Black Heart, nevertheless quite distinct; ripens three or four days after that variety; flesh firm and of fine quality. Tree hardy and very prolific. A valuable late variety for market and for family use.

Yellow Spanish. Large; pale yellow, with a bright red cheek in the sun; flesh firm, juicy and delicious; one of the best, most beautiful and popular of all light-colored Cherries. Tree erect, vigorous and productive. End of June.

DUKE AND MORELLO CHERRIES

These two classes of Cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varying from light red to dark brown.

The Dukes have stout, erect branches usually, and some of them, like Reine Hortense, quite sweet fruit, while the Morellos have slender, spreading branches and

Mercer Cherries.
(Reduced.)

Fruit Department · Duke and Morello Cherries

acid fruit invariably. These two classes are peculiarly appropriate for dwarfs and pyramids and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender.

Bay State. New. Of the Morello class. Fruit of largest size; dark red, juicy and of excellent flavor. The trees bear full crops, even when they are young. Season medium.

Dyehouse. Partakes of both the Duke and Morello in wood and fruit. A very early and sure bearer. Ripens a week before Early Richmond, of better quality and quite as productive. June.

Early Richmond. An early, red, acid Cherry; very valuable for cooking early in the season. Tree a free grower, hardy, healthy and very productive. Ripens through June.

English Morello. Large; dark red, nearly black; tender, juicy, acid, rich. Tree dwarf and slender. Makes a fine bush on the Mahaleb. Valuable.

May Duke. An old, well-known and excellent variety. Large; dark red; juicy, subacid, rich. Tree hardy, vigorous and fruitful. Ripens over a long period. Fine for dwarfs and pyramids. Middle of June.

Montmorency Large. Tree very hardy and an immense bearer; commences to fruit while young, and is loaded annually thereafter with fine crops. Fruit very large, fine flavor, and of bright, clear, shining red. Valuable everywhere. A week later than Early Richmond. The finest acid Cherry.

Olivet. This variety is of the greatest value. Fruit large; flesh red, with rose-colored juice, tender, rich and vinous, with mild, subacid flavor. As productive as the best of the Duke sorts, and probably the largest of this class.

Ostheim, or Russian. A hardy Cherry imported from the nurseries of Dr. Regel, of St. Petersburg, Russia. It has been tested in the severest winters of Minnesota and found to be perfectly hardy. Charles Downing thus describes it: "Fruit large, roundish, obovate; flesh liver color, tender, juicy, almost sweet, subacid; very good. Middle of July." Morello class.

Reine Hortense. A French Cherry of great excellence. Large; bright red; tender, juicy, nearly sweet and delicious. Tree vigorous and bears well. Makes a beautiful pyramid.

Montmorency Large Cherries. (Reduced.)

Abundance Plums.

Plums

MOST of the cultivated varieties of Plums are European, or descendants of European varieties. But in recent years certain extraordinarily good varieties of native Plums have been widely disseminated; and very recently we have received some extremely valuable varieties from Japan. Crosses from all these will from time to time bring out new and much improved varieties, especially securing Plums of the best quality of the European Plums united with the hardiness, or desirable season, or good shipping qualities of the others.

The finer kinds of Plums are beautiful dessert fruits, of rich and luscious flavor. For cooking and canning they are unsurpassed. For best flavor they should be allowed to remain on the tree until fully ripe; but for shipping to market, they must be gathered a very few days earlier, when they may be shipped long distances, arriving in good condition. Overbearing should not be allowed; but when the trees are over full, sometimes one-half should be removed, the remaining fruit thus having a chance to come to the finest perfection and bringing a much higher price than if all had remained on the tree.

Some varieties, especially of the native Plums, are extremely hardy and will stand the climate of the extreme northwest. Such are noted in our list as extra hardy, while all in the list are hardy and vigorous in all but the most severe climates.

Plums should be pruned sufficiently to prevent a straggling growth, and to keep the head from being too crowded. "Black knot" must be removed as soon as it is discovered. The only remedy is to cut off the diseased part and burn it. Permit no black knot to exist about your premises or your neighbor's, if you can help it, but have it removed and burned.

The Plum does best in heavy loam; but it will do extremely well on a shaly or gravelly loam, especially if there be some clay in the soil. They should be thoroughly cultivated and not allowed to stand in grass.

The **curculio** is a small, dark brown beetle, scarcely one-fifth of an inch long, which bites the fruit, leaving a semi-circular scar, where it has deposited its egg. They may be easily prevented from taking too large a share of the fruit, by faithful jarring of the trees, mornings, after the fruit has set till the fruit is half grown. Catch the curculios in a sheet and destroy them. All Plums that drop should be gathered and burned, to destroy eggs and larvæ.

Plant 16 to 18 feet apart. Size, when ready to ship, 4 to 6 feet, two to four years old.

Abundance (Botan). One of the best Japan Plums. The tree is a very rapid grower, healthy in limb and foliage, comes into bearing remarkably young, and yields abundantly. The fruit is full medium size, color a rich, bright cherry-red, with a distinct bloom, and highly perfumed; flesh light yellow, very juicy and tender, and of excellent quality. Vigorous. Last of July.

Bradshaw. Fruit very large, dark violet red; flesh yellowish green; juicy and pleasant; very productive. One of the most profitable for market. Comes at a good season, of fine appearance and brings a good price. Vigorous. Middle of August.

Fruit Department • Select Plums

Burbank. A valuable Japanese Plum, of deeper color and ripening later in the season than the Abundance. The fruit is large, nearly globular, clear cherry red with a thin lilac bloom; flesh a deep yellow, very sweet, with a peculiar and very agreeable flavor. The tree is a vigorous grower, with large and broad leaves; usually begins to bear second year after transplanting. August.

Chabot. Very large; pointed, tapering gradually from a heart-shaped base; color bright red purple, on a yellow ground; very showy. Tree a good grower, blooms two weeks later than Abundance, thus escaping the spring frosts, and a most abundant bearer. Ripens a little later than Burbank. One of the best Japans.

Coe's Golden Drop. Large and handsome; light yellow; firm, rich, sweet; one of the best late Plums. One of the best for family use.

Empire. Large oval, dark purple, fine quality; good shipper and keeper. Tree vigorous, hardy and productive. Early September.

Grand Duke. New. A valuable addition to late Plums; as large as the Bradshaw, of same color, and ripening latter part of September. Entirely free from rot. One of the best Plums for market.

German Prune. A large, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor. Vigorous. September.

Green Gage. Small, but of the highest excellence. Tree a moderate grower. We have to top graft it to get good trees. September.

Imperial Gage. Rather large; oval; greenish; flesh juicy, rich and delicious; parts from the stone. Tree a vigorous grower; very productive and one of the best of Plums. Middle of August.

Lombard. Medium size; oval; violet red; flesh yellow, juicy and pleasant. Tree very vigorous, a great bearer, and peculiarly well adapted to light soils. September.

Monarch. The largest size, even larger than Grand Duke; brilliant bluish purple. Free from rot and disease, and of extra good quality. One of the very best for home or market.

Burbank Plums.

Fruit Department · Select Plums

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 on the high lands of Aroostook county, Maine, where, unprotected and exposed to cold, it has for many years borne enormous crops. Tree healthy, vigorous; an early and abundant bearer."

Niagara. Of extra large size and first rate flavor; color dark blue. Good bearer; not liable to rot. Ripens about August 1. One of the best new varieties.

October Purple. A strong, vigorous grower; said to be one of the hardiest of the Japanese varieties; productive; good quality. Large, round, late purple Plum. Especially recommended for late market.

Pond's Seedling. A magnificent English Plum; form of Magnum Bonum; light red, changing to violet; flesh rather coarse. Tree a vigorous grower and most abundant bearer. One of the most attractive in cultivation. September.

Red June. Japanese origin. Prof. Bailey, of Cornell, says: "By all odds the best Japanese Plum;" ripening before Abundance, fruit good size, brilliant red, finest extra-early Plum.

Shipper's Pride. Originated in New York. An unusually thrifty grower, and stands our coldest winters. Very productive, the original tree having never failed to produce a good crop since it was old enough to bear. Fruit of large size and nearly round; color handsome dark purple; quality fine, juicy and sweet; excellent for canning and an unusually good shipper. Ripens from first to middle of September.

Shropshire Damson (Prune Damson). An English variety of great merit for preserving. Large, and much more desirable than the common Damson. Tree vigorous and hardy grower, and very free from attacks of *eucreulio*. October.

Stanton. Fruit medium size; color dark purple, with a beautiful bloom. Very productive. Ripens from September 15 to October 1, and has been kept two weeks after ripening with no tendency to decay. Superior for canning and for table.

Turkish Prune. The largest and decidedly the best of the Prune family, and very like the Italian Prune in most respects. Splendid for drying, canning or using fresh.

Washington (Bolmar's Washington). Fruit very large, roundish oval; skin yellow, with a slight crimson blush in well ripened specimens; flesh very sweet and luscious. Tree vigorous and very productive. Last of August.

Wickson Plum.

Weaver. Origin Iowa. Tree very hardy, thrifty, productive. Fruit large, purple, good. The best native sort.

Wild Goose. A variety of the Chickasaw; medium, roundish, oblong; reddish yellow; valuable and profitable at the south and southwest, where the European Plum will not succeed. Tree a free grower.

Wickson. A new Japanese Plum; a cross between Kelsey and Burbank. The tree grows in vase form, sturdy and upright, yet as gracefully branching as could be desired, and is productive almost to a fault. The fruit is evenly distributed all over the tree, and from the time it is half grown until a few days before ripening is of a pearly white color, but all at once soft pink shadings creep over it, and in a few days it has changed to a glowing carmine, with a heavy white bloom; the stone is small

and the flesh is of fine texture, firm, sugary and delicious, and will keep two weeks or more after ripening, or can be picked when hard and white and will color and ripen almost as well as if left on the tree. Ripens about September 1.

Yellow Egg (Magnum Bonum Yellow). Very large and beautiful; yellow; a little coarse but excellent for cooking. Vigorous and productive. August.

Yellow Gage (Prince's Yellow Gage). Fruit large, oval; skin golden yellow; flesh deep yellow, rich and good. Tree vigorous and productive. Middle of August.

Bokhara Peaches.

Peaches

THE Peach tree requires a well drained, moderately rich soil; warm, sandy loam is probably the best. In order to preserve the continued healthy growth of the tree and the fine quality of the fruit, the Peach should have the shoots and branches cut back to one-half the preceding season's growth every year, so as to preserve a round, vigorous head; this should be done the last of February, or as early in the spring as practicable. The land should not be seeded to grass, but kept in constant cultivation.

The following varieties have been selected out of hundreds, the best only being chosen. They furnish a succession for about two months, commencing the early part of August. Extremely early Peaches do not have a sufficient season to mature. But from early in August, the varieties named below are all luscious, beautiful fruit.

The trees are all shipped with a one-year top and two-year root. The size will vary greatly according to the season and variety. Plant 16 to 18 feet apart.

Alexander. Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet. Tree vigorous and productive. Ripens two weeks earlier than Hale's Early.

Amsden. Originated at Carthage, Mo., in 1882. Medium size; skin greenish white, nearly covered with purple in the sun; ripens with the Alexander and closely resembles that variety, but some think it a little higher flavored.

Barnard's Early (Yellow Alberge). Medium to large; yellow, cheek purplish red; flesh yellow, red at the stone; juicy, sweet and rich. First to middle of September.

Beer's Smock. Best of the Smock family.

Bokhara. Raised from seed procured from Bokara, Asia, a number of seedlings being produced that proved 30 per cent hardier than the old strain of Peach trees. One of the seedlings proved decidedly the best; it has been fruited in Iowa several years and found the hardiest and best Peach known there. Is highly recommended by prominent horticulturists, including Professor Budd and Silas Wilson. Tree has stood 28 degrees below zero with but little injury to tips, and produced fair crops after 21 below. Fruit large, yellow, with red cheek, of good quality; perfect free-stone; skin tough; a fine shipper. August.

Carman. Large; resembles Elberta in shape; color creamy white or pale yellow with deep blush; skin very tough; flesh tender, fine flavor and quite juicy. Ripens with Early Rivers. One of the hardiest in bud. In shipping qualities and freedom from rot it is unsurpassed. Promises to stand at the head for a general, long-distance, profitable market variety, in quality ranking superior to anything ripening at same time. August.

Fruit Department · Select Peaches

Champion. Beyond doubt this is the champion early Peach of America. Tree and fruit-buds extremely hardy; has stood 18 degrees below zero and produced a full crop the following summer. Fruit often ten inches in circumference; quality A 1; a free stone. Ripens just after Early Rivers.

Fitzgerald Peach.

Crosby. Has stood 22 degrees below zero without injury to the tree or fruit-buds, and in every other respect has proved a remarkably fine Peach for home use or market. Ripens just before Crawford's Late.

Crawford's Early. A magnificent large yellow Peach of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted. First of Sept.

Crawford's Late. Fruit of large size; skin yellow or greenish yellow, with dull red cheek; flesh yellow. Tree vigorous, moderately productive; one of the finest late sorts. Last of September.

Early Canada. Originated at Jordan, Canada. As early as the earliest. Of good size, of

fine quality and handsome appearance. Its earliness, origin, and the fact that the flesh cleaves from the stone almost as freely as with the later varieties, creates an unusual demand for trees of this variety.

Early Rivers. Large; color creamy white, with a delicate pink cheek; flesh melting, with a remarkable rich, racy flavor. Larger and ten days later than Alexander. One of the finest of all Peaches for home use or nearby market.

Early York (Serrated Early York, Early Purple). Medium size; greenish white, colored in the sun with dull red; flesh greenish white, very tender.

Elberta. The great market Peach of the south and southwest. It is perfectly hardy at the north, and is confidently believed by the most experienced fruit growers at the north to be one of the very best Peaches for home use or market. Ripens with Crawford Early.

Fitzgerald. Origin Canada. Fully equal to Crawford's Early in size, quality and color, with much smaller pit, a very early bearer, often when two years from bud, and extra hardy, succeeding in Canada and Michigan perfectly. Fruit very large, brilliant yellow with red cheeks, highest quality; ripens just after Crawford's Early.

Greensboro. The largest and most beautifully colored of the extra-early Peaches; double the size of Amsden June, ripens the same time, a freestone, flesh white, juicy and excellent.

Foster. Originated near Boston, Mass. Large; deep orange red becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with subacid flavor. Ripens with Early Crawford. Very handsome.

Globe. A rapid, vigorous grower, and an enormous bearer. Fruit very large; globular in form; flesh firm, juicy, yellow, shaded with reddish crimson toward the pit or stone; quality good; very rich and luscious. September and October.

Hance's Golden. Large, round; rich golden yellow, almost covered with deep crimson; flesh firm, yellow, juicy, rich and of the highest quality. Tree a strong grower, hardy and an annual bearer of immense crops of beautiful fair fruit. Ripens just after Crawford's Early.

Honest John. Medium to large; yellow; flesh yellow, of good quality. Tree vigorous and productive. First of September.

Fruit Department · Select Peaches

Large Early York. Large; white, with red cheek; fine-grained, very juicy, rich and delicious; vigorous and productive; one of the best. Last of August.

Lord Palmerston. Originated with the celebrated nurseryman, Thomas Rivers, of England. Fruit very large; skin whitish with a pink cheek; flesh firm, melting, rich and sweet. Last of September.

May's Choice. New. A large and beautiful yellow Peach of the highest quality, ripening immediately after the Early Crawford; in size and form closely resembling that variety, but superior to it in richness of color and high vinous flavor. Tree a good bearer; very desirable. Last of August.

Mountain Rose. Large; red; flesh white, juicy, rich and excellent; one of the best early Peaches, ripening with Troth's Early, and much larger and finer than that variety. Should be in every collection. First of August.

Morris White. Medium; straw color, tinged with red; juicy and delicious; productive. Middle of September.

Niagara. Originated in Niagara county, New York, where it has borne heavy crops of uniformly large, delicious Peaches every year the past six seasons. The original orchard has 200 trees, and not a tree has blighted or shown any sign of decay, although Peach trees of other varieties in the same orchard and in many nearby orchards have been decimated more or less by the yellows and have failed to produce crops oftener than two years out of three. Ripens just after Elberta.

Oldmixon Cling. Large; pale yellow, with red cheek; juicy, rich and high-flavored; one of the best clingstone Peaches. Last of September.

Oldmixon Free. Large; pale yellow, with a deep red cheek; tender, rich and good; one of the best. First to middle of September.

Salway. Fruit large, roundish, deep yellow, with a rich, marbled, brownish red cheek; flesh yellow, firm, juicy, rich and sugary. Very late.

Stevens' Rareripe. New, and producing remarkable crops in the vicinity of the Hudson river, which are sold at very high rates; fruit resembles our enlarged Oldmixon Free, being of very high color and very beautiful. Very productive and free from disease. Commences to ripen immediately after Late Crawford, and continues three or four weeks. Last of September and first of October.

Stump the World. Very large, roundish; skin white, with a bright red cheek; flesh white, juicy and highly flavored; very productive. End of September.

Triumph. Earliest yellow fleshed Peach known and almost a free stone; ripens with Amsden June; fruit good size, yellow with crimson cheek; the earliest good Peach for shipping.

Wager. Medium; yellow, colored in the sun; juicy, and of a fair flavor. The trees have remarkable vigor and vitality. Valuable for drying and canning. Last of August.

Niagara.

Fruit Department · Select Peaches

Waterloo. Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red; flesh greenish white with an abundance of sweet, vinous juice. Ripens about with Alexander.

Wheatland. Fruit large; color golden yellow, with crimson tint; flesh firm and of fine quality. Ripens between Crawford's Early and Late.

Willett. One of the largest and finest Peaches grown. Specimens have measured 12 inches in circumference, weighing $\frac{3}{4}$ of a pound each. Flesh yellow, juicy, rich and excellent. Skin yellow, covered with dark red. Last of September.

Wonderful. Introduced by Mr Lovett, of New Jersey, who says that it received the highest premium and a special silver medal at Mt. Holly, New Jersey, Fair last fall; that it is very beautiful, of high quality, and that its lateness insures the very highest price.

Yellow Rarripe. Large; deep yellow dotted with red, melting, juicy, with a rich flavor; ripens one week later than Crawford's Early. Closely resembles Jacques' Rarripe.

APRICOTS

The Apricot, in quality and appearance, is between the plum and the peach, combining qualities of both. Its very early season of ripening and delightful flavor make it one of the most valuable fruits. We are now able to offer varieties that are extremely hardy and will endure severest climates. The Apricot requires the same cultivation as the plum or peach, and for curculio the same treatment as the plum. Size, when shipped, $2\frac{1}{2}$ to 5 feet, according to variety. Plant 16 to 18 feet apart.

Harris Apricots.

Acme. A new Apricot originated from pits received from the Province of Shense, Northwest China. A free and vigorous grower, exceedingly hardy and productive. Fruit of large size, yellow, with red cheek, good quality; freestone. August.

Harris. Originated in Geneva. Free; perfectly hardy; comes into bearing young, and very productive. Fruit large, rich golden yellow. Ripens middle of July.

Moorpark. One of the largest; orange, with a red cheek; firm, juicy, with a rich flavor; very productive. August.

St. Ambrose. A good grower and very productive; of good quality; freestone. Excellent for drying or canning. Ripens about middle of July.

NECTARINES

This is a delicious, smooth-skinned fruit, much resembling the peach. It is subject to the attacks of the curculio, and the same treatment is recommended as is necessary to secure the plum in perfection. They are budded on the peach stock, and sold at the age of one year, being then from three to four feet in height.

Boston. Large size, bright yellow, with red cheek; flesh sweet and pleasant; a free stone variety. August.

Early Violet (Violet Hatve). Medium size; yellowish green, with a purple cheek; flesh pale green, melting, rich and highly flavored; free stone. Last of August.

Victoria. Very large; the finest of all the English varieties.

Rea Quinces.

QUINCES

The Quince is generally well known and highly esteemed for cooking and preserving. It thrives best in a deep rich soil, and is benefited by a clean, high cultivation. It is said to be improved by the application of salt in small quantities. The Quince is usually sold at the age of two or three years, and is from 3 to 4 feet in height.

Value for Market. The fruit is very profitable, as it requires but little space, and is very productive. Planted at 10 feet apart each way, we have 430 trees per acre. A low estimate of the yield of an acre of Quinces would be 200 to 250 bushels, which at a very low price would bring more than \$500.

Borgeat. New. The strongest and most distinct grower of all Quinces, with large foliage and very handsome fruit. Keeps longer than any other sorts. Very promising.

Meech's Prolific. A valuable new Quince, remarkable for its early and regular bearing and great productiveness. The fruit is of good size and form, and bright orange yellow; flesh very fragrant, delicious and tender. Unsurpassed for cooking.

Orange. Large; bright golden yellow. One of the best and most desirable Quinces in cultivation.

Pineapple. Fruit in size resembles the Orange, but smoother and more globular. Of large size, weighing about three-fourths of a pound each. A strong grower and very productive. Apple shape; clear yellow, and of so mild a flavor that it can be eaten like an apple. Jelly made from it is superior to that made from any other fruit—absolutely unapproachable—something that could not have been thought of until it was brought into existence. Will cook as tender in five minutes as the best of cooking Apples.

Rea (Rea's Mammoth). We consider this the best of all the Quinces. The largest and in every respect the finest variety of the Quince. A strong grower and very productive.

MULBERRIES

Downing's Everbearing. The beauty of this as a lawn or street tree is quite enough to commend it; but in addition it yields an abundant supply of its large, refreshing berries for about three months. "I speak what I think when I say I had rather have one tree of Downing's Everbearing Mulberry than a bed of strawberries."
—HENRY WARD BEECHER.

New American. A sport from Downing and precisely like that well-known sort, save that the tree is decidedly hardier.

Russian. A hardy, rapid growing tree; foliage abundant. Fruit of no value.

Grapes

THE vine comes quickly into bearing, yielding fruit usually the second year after planting; requires but little space, and when properly trained, is an ornament to the yard, garden or vineyard. The soil for the Grape should be dry; when not naturally so should be thoroughly drained. It should be deeply worked and well manured, always bearing in mind that it is an essential point to secure a warm, sunny exposure.

Campbell's Early.

The best grapevine trellis is probably the wire trellis, with four wires 18 inches apart. Pruning should be so done that each year two or three of last year's branches shall alone be left, at the spurs of which the present year's growth may start.

During the season, when the shoots have reached the upper part of the trellis, they may be pinched to prevent further growth. The following spring the canes should be cut back to two buds. Allow but one bud to throw out a shoot, and treat as in the previous year. This system of pruning should be followed each year.

CLASS I BLACK GRAPES

Champion. A large Grape of medium quality; a strong grower and very hardy; the earliest of all; succeeds in all sections, and this makes it a valuable market Grape.

Campbell's Early. The wonderful new seedling of the distinguished horticulturist, George W. Campbell, of Ohio. Vines healthy, hardy, vigorous and a profuse bearer, bunch and berry large and handsome, quality A 1, ripens with

Moore's Early, but keeps either on the vine or in the house for weeks after Moore's Early has decayed and gone. A very great acquisition.

Clinton. Bunches small and very compact; berries small with sprightly flavor; when thoroughly ripe is a good table Grape and keeps well.

Concord. A large, handsome Grape, ripening a week or two earlier than Isabella; very hardy and productive. Succeeds over a great extent of country, and although not of the highest quality, is one of the most popular market Grapes.

Eaton. Bunch very large, weighing 12 to 15 ounces; often double shouldered; berries very large, many one inch in diameter, round, black, covered with a heavy blue bloom; adhere firmly to the stem. Skin thin, but tough, with no bad taste when eaten close; pulp quite large, tender, dissolving easily in the mouth. Very juicy, good as Concord, with much less of the native odor. Ripens with Concord or a little earlier.

Early Victor. New extra-early Grape. In bunch and berry it is rather below the average, but ripens very early; it is very pure in flavor, with very little pulp and is exceptionally sweet, sprightly and vinous; black, with fine bloom. Last of August.

Hartford Prolific. Bunches rather large; berries large, globular, color almost black, covered with a beautiful bloom; of fair quality; ripens three weeks before the Isabella; valuable for its abundant bearing and early maturity.

Fruit Department • Red Grapes

Isabella. An old, standard sort, highly prized where it will thoroughly mature. Bunches long, large, loose; berries large, oval, sweet and musky; a good keeper.

Merrimac (Rogers' No. 19). Bunch medium to large; berry large, sweet and rich; vigorous and productive. One of the earliest and best of the Rogers' sorts.

Moore's Early. Bunch large, berry round, as large as the Wilder or Rogers' No. 4; color black, with a heavy blue bloom; quality better than the Concord. Vine exceedingly hardy; has never been covered in winter, and has been exposed to a temperature of more than 20 degrees below zero without any injury, and it has been entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, maturing as it does ten days before the Hartford and twenty before the Concord.

Wilder (Rogers' No. 4). Bunch very large; berry large, round, black; flesh tender, juicy, sweet. Ripens about with Concord; vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties and on account of its size and beauty is very valuable for market.

Worden. Said to be 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. Destined to become very popular for vineyard and garden.

CLASS II—RED GRAPES

Amber Queen. A new and promising variety, which originated in Massachusetts. Bunch and berry of medium size; color light amber; flesh tender to the center; juicy, sprightly and delicious. Larger than and as early as Delaware.

Brighton. Our experience with the vine and fruit of the Brighton has convinced us of its superiority as a family Grape. Its remarkable vigor and hardness of vine, large, compact bunches, rich wine shade of the ripened berry, delicate skin; tender, almost seedless pulp, sugary juice and rich flavor are combined qualities that are not united in such a degree in any other sort with which we are acquainted. It ripens a week to ten days before the Delaware, and bears most abundantly; it is enabled to stand the heat of the summer. We commend this sort especially as a standard variety for the vineyard or garden.

Catawba. Well known as the great wine Grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery red color, becoming purplish when well ripened; two weeks later than Isabella; requires the most favorable soils and situations, good culture and warm seasons, to mature in western New York.

Delaware. One of the finest Grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh juicy, with an exceedingly sweet and delicious flavor; vine moderately vigorous, hardy and productive. Ripens two weeks before Isabella.

Salem (No. 52). Bunch large and compact; berry large of a light chestnut or Catawba color, thick-skinned, perfectly free from hard pulp; very sweet and sprightly, with a most exquisite aromatic flavor; as early as the Delaware, never having failed to ripen in the most unfavorable season for the past six years; keeps well.

Wyoming Red.

ROCHESTER, N. Y.

Ulster Prolific. A native seedling grown by A. J. Caywood. A red Grape of fine quality, healthy growth and great productiveness. Will be found valuable for general use, as it has all the characteristics of our hardy and healthy native varieties. Sept.

Vergennes. Very productive; clusters large; berries large, holding firmly to the stems; color light amber; flavor rich and delicious; flesh meaty and tender. Ripens after Concord and is an excellent late keeper.

Wyoming Red. An extra-early red Grape, resembling the Delaware in appearance, but double its size and ten days earlier. Bunch compact and handsome; berry medium, bright red; skin thin and firm; flesh sweet.

CLASS III—WHITE GRAPES

Diamond. A vigorous grower; with dark, healthy foliage, entirely free from mildew. A prolific bearer; bunches large, handsome and compact, slightly shouldered; color delicate, greenish white, with rich yellow tinge when fully ripe. Skin smooth, free from specks; pulp tender, juicy and nearly transparent, with very few seeds. Berry about the size of Concord; quality best, rich, sprightly and sweet, resembling the foreign Chasselas. Ripens a few days before Concord.

Empire State. A good grower and fruiter in every respect. Bunches large, from 6 to 10 inches long, shouldered; berry medium size; roundish oval; color white, with very light tinge of yellow, covered with a thick, white bloom; leaf thick, smooth underside; flesh tender, juicy, rich, sweet and sprightly, continuing a long time in use; vine hardy.

Green Mountain. New. Found growing in a garden on the side of the Green Mountains in Vermont, at an altitude of 1,400 feet, where it ripened its fruit perfectly. Vine strong, vigorous, healthy, very hardy and productive. Bunch long, compact, shouldered. Color greenish white; skin thin; pulp exceedingly tender and sweet. Very early, being three weeks earlier than Concord.

Green Mountain.

Martha. Bunches and berries of medium size; greenish white, with a thin bloom; flesh tender, very little pulp, juicy, sweet and rich. Vine vigorous, hardy and productive. Ripens about with Concord.

Niagara. The vine is a strong grower and very hardy. Bunches very large and uniform and very compact; berries larger than Concord, and skin thin but tough, which insures their shipping qualities; quality good, very little pulp, melting and sweet to the center. Ripens before Concord.

Pocklington. Bunch large; berry large, round, of a rich yellow-white color; flesh pulpy, juicy, and of a good quality. Vines vigorous, healthy, very hardy and productive. It is considered a very valuable and reliable variety, south of Philadelphia. Quality good.

McKinley. Early Twentieth Century Grape. It is with intense satisfaction that we can at last introduce a new early white Grape of the Niagara type, which bids fair to add millions to the wealth of the state and nation, and which will be hailed with delight by fruit growers, dealers and consumers throughout the world.

Select Currants

RIPE just before raspberries are gone, and continuing in prime order for several weeks, there is no more useful fruit than the Currant, and it is among the easiest to cultivate. Plant in rows 4 feet apart each way, if practicable. Light and air will do as much to enhance the value of Currant bushes as with other plants. Keep the ground mellow, free from weeds, and in a good state of fertility, and prune freely every spring. Should the Currant worm appear, dust a little white hellebore powder, from a small coarse bag, over the bushes when the leaves are damp. In some instances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms are trifling, if the powder is applied as soon as the worms appear.

Black Champion. A new variety from England; the finest black Currant; abundant bearer. Berry large and fine.

Comet. New. This is claimed to be a novelty in red Currants, far ahead in all respects of all others in the market. It received an award of merit from the Fruit Committee of the Royal Horticultural Society of England, as being a superior new variety, which was confirmed later on, when shown again. Bunch long, frequently 8 inches in length, with from 20 to 26 berries of enormous size (like grapes) and of brilliant color. Quality good, refreshing and soft to the palate without acidity. It hangs well on the bush. Its growth is abnormally vigorous and satisfactory.

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

Fay's Prolific. Originated in Chautauqua Co., N. Y. A cross between Cherry and Victoria. Of large size, fine flavor and claimed to be twice as prolific as the Cherry. Universally commended by those who have seen or had experience with it. A great acquisition.

Magnum Bonum. New. An English variety of great promise, which has received a Certificate of Merit from the Royal Horticultural Society of England.

Fruit of the largest size, of a deep scarlet color and borne in the greatest profusion. Its quality is superb for canning, jellies and pastry. Its large size and attractive appearance recommends it and will soon make it a general favorite.

Prince Albert. Bush thrifty, hardy and enormously productive; fruit of large size, very handsome and of good quality. Ripens a little later than the Fay's Prolific, and planted in large numbers with Fay's by market-gardeners and orchardists.

Victoria. A splendid variety, ripening two or three weeks later than the others, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size; brilliant red and of the highest quality.

White Grape. Very large; yellowish white; sweet, or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very distinct from White Dutch, having low, spreading habit and dark green foliage; very productive.

Wilder Currants.
(See page 34.)

Wilder. A remarkable new variety for which we predict a great future both for table and market; strong grower, enormously productive; bunch and berry very large, of bright red and of highest subacid quality, making it unequaled for table, cooking or market.

White Imperial. New and of great value; fruit larger and stems longer than White Grape; enormously productive, quality mild, delicious, subacid; finest of all for table use.

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 and market use. It requires the same cultivation and treatment for worms as the currant. The American varieties, though not quite so large as the English, are of fine quality, and, unlike the latter, are not subject to mildew.

ENGLISH VARIETIES

The number of varieties of English Gooseberries is almost innumerable. The fruit is generally large and handsome.

Columbus. This is one of the most valuable introductions of recent years in small fruits, and it fully sustains the high opinion first formed of it. It was introduced by us a few years ago. The fruit is of largest size, handsome, of a greenish yellow color, and the quality is excellent. The plant is vigorous and productive and does not mildew. It merits a place in every garden.

Crown Bob. Large; roundish oval, red, hairy; of first quality.

Industry. An English variety; quite as free from mildew as our American sorts; very fine in quality; large size. Handsome, showy red fruit; wonderfully productive.

Columbus Gooseberries. ($\frac{1}{4}$ actual size.)

AMERICAN VARIETIES

Downing. Fruit larger than Houghton; roundish; light green, with distinct veins; skin smooth; flesh rather soft, juicy and very good. Vigorous and productive.

Houghton. A medium sized American variety, which bears abundant and regular crops, and never mildews; fruit smooth, red, tender and very good; valuable.

Pearl. An exceedingly prolific variety that has been well tested and ranks No. 1 in healthfulness, vigor of growth, freedom from mildew and productiveness. Same color as Downing; seems to possess all the good points of that variety with a little larger fruit and rather more prolific.

Red Jacket. An American seedling of large size; smooth, prolific and hardy, of best quality. Has been well tested over a wide extent of territory by the side of all the leading varieties, and so far the freest from mildew, both in leaf and fruit, of them all. A wonderful cropper, with bright, clean, healthy foliage.

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

Raspberries

COMING immediately after strawberries, when there is a dearth of other fresh fruits, Raspberries are equally desirable for planting in the garden for home use, and in the field for market. They are easily cultivated. Beds seldom require renewing. Their season of ripening is long. The fruit bears transportation well, and aside from the demand for it for immediate consumption, it brings highly remunerative prices for drying and canning.

Plant in good soil and manure from time to time freely. The hills should not be less than four feet apart each way, with two or three plants in a hill. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is so much exposed that the plants are 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.

RED AND YELLOW VARIETIES

Columbian. New. A most vigorous grower; canes 10 to 16 feet in length. Roots deep; hardy. Fruit very large, somewhat conical; color dark red, seed small; delicious; very valuable both for canning and table use. Fruiting season unusually long. July 12 to August 15. An excellent shipper. Wonderfully productive.

Cuthbert (Queen of the Market). Large, conical; deep, rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy and immensely productive.

Golden Queen. Rich golden yellow. The flavor is of the highest quality. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme northern latitudes. The desire for a yellow Raspberry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this variety.

Haymaker. New. The most vigorous grower of all Raspberries, and is very hardy. Fruit very large, conical; color brighter and more attractive than Columbian, to which it has some likeness. Flavor excellent for table use and a splendid canning variety. It is a prodigious bearer, of long season; fruit of fine texture; carries well and very promising.

Japanese Wineberry. Some value as a novelty, otherwise but of little value.

Marlboro. The best early red Raspberry for the north, ripening soon after the Hansell. Hardy and productive.

Strawberry Raspberry. One of the numberless frauds.

Shafer's Colossal. Fruit large; purple; soft, with a sprightly subacid flavor; plant very vigorous, hardy and productive. Much esteemed in some localities. Season medium to late. Valuable for canning.

BLACK RASPBERRIES

Cumberland Raspberry. Largest black Raspberry known: bush perfectly hardy, very productive, fruit enormous, far surpassing any other sort, quality unsurpassed. The great firmness of the berry makes it a splendid shipper; ripens just after the Palmer and before the Gregg; in other words a mid-season variety. A very great acquisition.

Munger Raspberries.

Gault. Origin Ohio. Said to bear a good crop in August and September after having produced a heavy crop in July; berry medium size, good quality, but save as a novelty we think it surpassed by several other varieties.

Early Canada. Bush thrifty, extra hardy and wonderfully productive. Berry large, bright black in color, of exquisite flavor, and ripens just before Gregg.

Gregg. Of great size; fine quality; very productive and hardy. It takes the same position among black caps as Cuthbert among the red sorts. No one can afford to be without it.

Mammoth Cluster. The old standard black cap, long since surpassed by newer sorts.

Munger Raspberry. The fruit of Munger is black, and resembles Gregg very much. It is a better flavored berry than Gregg, tougher in texture and therefore a better shipper. In size it excels Gregg by almost 25 per cent, being extra fine for canning and evaporating. The past season, when most others were dry and seedy, Munger ripened up sweet and juicy, and readily brought an advance of 50 cents per bushel over other kinds. The canes, too, resemble Gregg, are free from disease, upright in growth.

Ohio. A very strong growing, hardy sort; fruit as large as Mammoth Cluster; more productive; one of the most valuable for market; also much esteemed for drying.

Smith's Prolific. Originated on the farm of Mr. Smith, near Palmyra, N. Y. A 1 in every respect. Ripens just before Gregg.

Blackberries

Plant on good land, moderately manured. Rows seven feet apart, three feet in the rows for field; prune as with Raspberries. Form a hedge or tie to wire. Cultivate shallow.

Agawam. Of medium size; jet black; sweet, melting to the core. Plant hardy and very prolific. A fine early variety.

Early Harvest. A new variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and upright in growth, branching stout and vigorously. An enormous bearer. Berries sweet and of the highest quality.

Erie. This is a hardy Blackberry that originated near Lake Erie. The bush is healthy and very productive, as well as hardy; fruit large, round; jet black and good quality. Ripens very early and is a decided acquisition.

Fruit Department · Blackberries

Eldorado. A valuable new variety; fruit medium size; jet black; melting, sweet and rich; plant hardy and very productive.

Iceberg. This wonderful berry is the origination of the farm-famed Luther Burbank, whose remarkable success in the production of valuable new plants has given him the title of the "Wizard of Horticulture." The fruit is white transparent; the seeds, which are unusually small, can be seen in the ripe berries. The clusters are larger than those of Lawton; individual berries as large but earlier, sweeter and more melting than Lawton.

Minnewaska. The new coreless Blackberry. John Charlton, of this city, a very high authority, says: "In my opinion the Minnewaska will soon supersede all others."

Maxwell's Early. Fruit large; sweet, rich, delicious: no core. Ripens with Early Harvest and fruit twice as large. The best extra early Blackberry.

Rathbun. Origin, western New York. Bush perfectly healthy, vigorous, but not a high-growing sort, and very rarely suckers from the roots but propagates itself from the tips like the black raspberry. Fruit of largest size, highest quality, borne in wonderful profusion. Beyond question it is the grandest Blackberry either for home use or market.

Snyder. Extremely hardy; enormously productive; medium size; no hard sour core; half as many thorns as Lawton or Kittatinny.

Taylor's Prolific. A new variety of the greatest value. It is so extremely hardy as to have stood 30 degrees below zero unharmed. Berries large and of the highest quality. Canes of strong, spreading growth, and in productiveness it is simply remarkable. It ripens with Kittatinny.

Wachusett Thornless. Of fair size and excellent quality; canes hardy, of strong healthy growth. It is almost free from thorns, and is fairly productive.

Strawberries

Chas. Downing. Fruit large, conical, regular. Scarlet, juicy, sweet and rich with more of the wild Strawberry flavor and fragrance than any known sort. Valuable for home use.

Greenville. Origin Ohio. Berry large, fine quality, very productive. Season medium to late. Very popular wherever known.

Jesse. Large, handsome, roundish, conical, firm, of good quality. Plant vigorous and productive. One of the very best for home use or market. Season early to medium.

McKinley. Tested six summers and proved to be a superb variety in every respect; flesh firm, quality excellent, plant vigorous, healthy and a wonderful yielder; has few if any equals. The best.

Parker Earle. A splendid new berry, which originated in Texas, and is named in honor of Mr. Parker Earle. Berries uniformly large, regular, conical. Color glossy scarlet crimson, ripening to the tip. No hollow core. Quality good. Flowers perfect and always setting in perfect fruit. Plant extremely vigorous, healthy and enormously productive. It has yielded 15,000 quarts per acre, and all things considered, is beyond doubt the most valuable variety in existence.

McKinley Strawberry. (See page 37.)

Rough Rider. A Strawberry of great promise. There are good Strawberries in general cultivation now, but we believe this variety will occupy a position held by no other kind. It has a perfect blossom; the plants are vigorous and productive; it is the firmest Strawberry known and the very latest Strawberry. It is the best keeper and has the finest flavor; it is very large and attractive.

Sharpless. This grand old sort originated in Pennsylvania. Was introduced 14 years ago, and has been planted everywhere with very satisfactory results. Fruit largest size, showy and good. Season medium.

Wilson's Albany. The old standard sort for preserving and canning. Vines subject to blight in some sections, otherwise, a variety of great value.

ASPARAGUS

To make a good Asparagus bed, the plants may be set in the fall or early spring. Prepare a plat of fine loamy soil, to which has been added a liberal dressing of good manure. Select two-year, or strong one-year plants; and for a garden, set in rows 18 to 20 inches apart, with plants 10 to 12 inches in a row.

Make a small mound of the soil, over which the roots should be evenly spread, so that the crowns, when covered, shall be three inches below the surface of the ground. If planted in the fall, the whole bed should be covered before winter sets in, with 2 or 3 inches of coarse stable manure, which may be lightly forked in between the rows as soon as the ground is softened in the spring.

Columbian Mammoth White. Produces shoots which are white and remain so as long as fit for use. In addition to the marvelous advantage of its white color, the Columbian Mammoth White Asparagus is even more robust and vigorous in habit, and throws larger shoots and fully as many of them, as the Conover's Colossal. Market gardeners, growers for canners, and amateurs, should give this great acquisition a thorough trial.

Conover's Colossal. Very large size and of excellent quality; has superseded the old varieties.

Giant. This is the old and well-known popular variety, tender and very rich.

Palmetto. A very early variety; even, regular size, of excellent quality.

RHUBARB, or PIE PLANT

Deep, rich, moist soil is best, but it is such a strong, vigorous-growing plant, it will thrive almost anywhere. Plant in rows 4 feet apart and the plants 3 feet apart. Set the roots so that the crowns are about an inch below the surface. Rhubarb is a gross feeder; the more manure it is given, the larger and finer the yield.

Myatt's Linnaeus. Early, very large, tender and delicately flavored; requires less sugar than other sorts.

Victoria. This variety, if planted in a rich soil and properly cultivated, will produce tender stalks 3 feet long, and from 1 to 2 inches in diameter.

Wine Plant. The large size, fine texture and superior quality of this new variety over the old cultivated "Pie Plants" cannot be conceived by those who have never grown it. We have grown stalks frequently, with good cultivation, as thick as a man's wrist, and from 3 to 4 feet in length.

Nuts

ALMONDS

Hard Shell. A fine, hardy variety, with a large plump kernel.

Soft Shell. Not as hardy as above; kernels sweet and rich.

BUTTERNUT, or WHITE WALNUT

A fine native tree, producing a large, longish nut, which is prized for its sweet, oily, nutritious kernel.

CHESTNUT

American Sweet. A valuable native tree, useful and ornamental; timber is very durable, and possesses a fine grain for oil finish. Nuts sweet, of delicate flavor, and are a valuable article of commerce.

Japan. Very distinct from all other Chestnuts, dwarf grower; productive, usually producing nuts when two or three years old. Nuts of immense size, far surpassing all other kinds; of fair quality when outside skin is removed.

Spanish. A handsome round headed tree, producing abundantly very large nuts that find a ready market at good prices. Twenty-five dollars have been realized at one fruiting from the nuts of a single tree. Not as sweet as the American and tree not as hardy.

FILBERT

English. Of easiest culture, growing 6 to 8 feet high, entirely hardy, and one of the most profitable and satisfactory nuts to grow, succeeding on almost all soils, bearing early and abundantly, nuts nearly round, rich and of excellent flavor.

Kentish Cob. One of the best; large size, oblong, of excellent quality.

HICKORY

Shell Bark. To our taste no other nut that grows, either foreign or native, is superior to this in quality; it possesses a peculiar, rich, nutty flavor excelled by none. The tree is of sturdy, lofty growth. The wood, on account of its great strength and elasticity, is highly prized for making agricultural implements, and is unsurpassed for fuel.

PECAN

Not hardy in the north, one of the best and most profitable where it succeeds. Makes a very large, tall tree, producing its thin-shelled, delicious nuts in profusion.

WALNUT

Black. A native tree of large size and majestic form, beautiful foliage. The most valuable of all trees for its timber, which enters largely into the manufacture of fine furniture and cabinet ware, and brings the highest price in market. Tree a rapid grower, producing a large round nut of excellent quality.

English Dwarf Prolific (*Juglans Præparuriensis*). A dwarf variety of English Walnut; commences bearing very young; very prolific. Nuts like the parent.

French, English or Madeira Nut. A fine, lofty growing tree, with a handsome spreading head. Where hardy it produces immense crops of its thin-shelled, delicious nuts, which are always in demand at good prices; fruit in green state is highly esteemed for pickling. Not hardy enough for general culture in the north.

Japan Sieboldi. Perfectly hardy here, rapid grower, handsome form, immense leaves; bears young and abundantly; one of the finest ornamental trees. Nuts produced in clusters; resembles butternut in shape and quality; smaller, with smooth and thinner shell. Worthy of extensive planting.

English Walnut.

Ornamental Department

HILE most people appreciate well-arranged and well-kept grounds, large or small, many fail to realize that they can have equally fine grounds. They have tried a few shrubs or roses, perhaps, growing in thick turf, with no attention given to pruning or cultivating. Under such circumstances good results cannot be expected.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of a place. A purchaser having to decide between a house with bare, unkempt grounds, and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put on the market. Lots thus planted readily secure purchasers at good prices, when bare grounds go begging.

HOW TO PLANT

Do not make the mistake of planting at random. A fine, well-cut lawn is one of the handsomest features of a place. Trees may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from it. This will secure light and air with good views. When practicable, upright shrubs and roses should be planted in beds, each class by itself, about the borders of the grounds. These beds should be well cultivated and the plants annually pruned. When the growth of the plants has made them very thick some should be taken out. It will not do to plant so little that years must elapse before a fine effect will be produced. A surplus should be planted at first, and this gradually taken out. Vines should be planted near to and allowed to climb upon and about the house, or they may be trained on posts, arbors or stakes, placed in suitable locations on the lawn.

WHAT TO PLANT

A detailed list of desirable ornamental trees and shrubs would be little less than a recapitulation of our entire list, but as few have room for all, we here present a list of the most desirable in each class, and refer the reader to the proper places in the Catalogue for descriptions of them:

Flowering trees. **May**—White Dogwood, Magnolias in variety, Judas Tree, Horse-Chestnut, Double-Flowering Cherry. **June**—White Fringe, Laburnum, Mountain Ash, Thorns in variety, Catalpa syringæfolia, Lindens in variety. **July**—American Sweet Chestnut.

Trees valued for their form and foliage. White Fringe, Magnolias, Cut-Leaved Weeping Birch, Kilmarnock Willow, Weeping Mountain Ash, Oak-Leaved Mountain Ash, Camperdown Weeping Elm, European Linden, White-Leaved Weeping Linden, Salisburia, Norway Maple, Purple-Leaved Maple, Wier's Cut-Leaved Maple, Imperial Cut-Leaved Alder, Purple-Leaved Beech, Fern-Leaved Beech.

Evergreen trees. Norway Spruce, Austrian Pine, Irish Juniper, American Arborvitæ, Pyramidal Arborvitæ.

Upright flowering shrubs. **April**—Evergreen Honeysuckle (*Lonicera fragrantissima*). **May**—Forsythia, Japan Quince, Rhodotyus, Spiræa prunifolia, Lilacs in variety, Tartarian Honeysuckle, Cornus mascula variegata. **June**—Deutzia gracilis, Deutzia crenata flore pleno, Snowball (*Viburnum plicatum*), Weigelia in variety, White Fringe, Golden-Leaved and Plain Syringa, Calycanthus (at intervals during the summer), Exochorda grandiflora, Spiræa lanceolata, Golden-Leaved Spiræa, Halesia, Japan Globe Flower. **July**—Spiræa callosa, Spiræa callosa alba. **August and September**—Altheas in variety, Hydrangea paniculata grandiflora, Anemone.

Climbing and trailing shrubs. Clematis in variety (flowers from June to November), Ampelopsis Veitchii, American Ivy, Climbing Honeysuckle in variety (flowers all summer), Aristolochia Sipho (flowers in May and June), Akebia quinata, Bignonia or Trumpet Vine, Wistaria, Chinese Matrimony Vine.

Evergreen shrubs. Rhododendron in variety, Dwarf Box, Tree Box.

Roses. Climbing and Moss (blooms in June), Hybrid Perpetual and Perpetual Moss (blooms at intervals all summer), Tender Roses (blooms constantly).

UPRIGHT DECIDUOUS TREES

ALDER. *Alnus*

Imperial Cut-Leaved (*A. laciniatus imperialis*). A charming tree of stately, graceful growth, having large and deeply cut foliage; vigorous and hardy. One of the best lawn trees.

ASH. *Fraxinus*

This is a large family, but there are only a few varieties of especial merit.

European Flowering (*F. Ornus*). Flowers greenish white, fringe-like, appearing only on the ends of the branches; blooms early in June. 20 to 30 feet high when fully grown.

Gold-Barked (*F. excelsior aurea*). Conspicuous at all times, but particularly in winter, on account of its yellow bark and twisted branches. 15 to 20 feet high when fully grown.

BEECH. *Fagus*

Fern-Leaved (*F. heterophylla*). An elegant tree of symmetrical habit, having beautifully cut foliage.

Purple-Leaved (*F. 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 3 feet high are preferable.

BIRCH. *Betula*

Purple-Leaved (*B. populifolia purpurea*). A variety possessing the vigorous habit of the species, and having rich purple foliage.

CATALPA

C. Bungei. New, from China. Of dwarf habit, growing from 3 to 5 feet high.

C. speciosa. A variety originating in the west. More upright and symmetrical in its growth than the common Catalpa (*C. syriacaefolia*), and blossoms two or three weeks earlier. Very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability. A very ornamental and valuable tree.

C. syriacaefolia. A native of the south. A rapid-growing, beautiful tree, with very large, heart-shaped leaves, and pyramidal clusters of white and purple flowers a foot long. Late in July.

Teas' Japanese Hybrid. It has large, luxuriant foliage and large, handsome white flowers. In rapidity of growth it rivals the most luxuriant trees of temperate climates, while its hardiness has been demonstrated by its standing, uninjured, 25 degrees or more below zero.

CHERRY. *Prunus*

Of the easiest culture; very desirable because they flower so early in the season.

Chinese Double-Flowering (misnamed *P. humilis flore pleno*). A fine sort, with large, double, white flowers.

Dwarf White-Flowering (*P. humilis flore pleno*). Blooms in May. Flowers double white. A pretty little tree, 10 to 12 feet high when fully grown.

Large Double-Flowering. A beautiful and attractive tree. Blooms in May, and the flowers are so numerous as to completely hide the branches from view: blossoms white and very double. 15 to 20 feet high when fully grown.

Japanese Double Flowering (*P. pseudo-cerasus*). New. Now being introduced by us from Japan. The finest, and surpasses all other flowering Cherries. Flowers large, double, deep rose-pink, 2 inches in diameter. Very scarce and desirable.

CHESTNUT. *Castanea*

American. A well-known forest and nut-bearing tree. Of great value for ornamental purposes.

Japan. Tree medium-sized and decidedly ornamental. It fruits when very young; nuts are much larger than the Spanish, and equal to it in flavor. Believed to be a great acquisition. Not hardy north of Philadelphia, Pa.

Numbo. A New Jersey seedling of the Spanish Chestnut, and claimed to be as hardy as the American.

Spanish. A valuable species for both ornament and fruit. It forms a handsome lawn tree, and produces fruit three or four times as large as the American variety. Not hardy north of Philadelphia, Pa.

Bechtel's Double-Flowering American Crab.

American White Dogwood.

CRAB. *Pyrus*

Bechtel's Double-Flowered American (*P. coronaria*). 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. A great acquisition, and certain to become very popular as soon as known. Blooms when quite young.

DOGWOOD. *Cornus*

American White (*C. florida*). A native tree of fine form and beautiful foliage, growing from 20 to 25 feet high, producing white flowers 3 inches in diameter, early in the spring before the leaves appear. A very desirable tree.

Red-Flowering. First disseminated by the late Thomas Meehan and considered a great acquisition.

ELM. *Ulmus*

American White (*U. Americana*). The noble spreading, drooping tree of our own woods. One of the grandest and hardiest of park or street trees.

Purple (*U. scabra purpurea*). A beautiful variety; leaves of rich purple color when young.

Scotch, or Wych (*U. scabra*). A fine spreading tree of rapid growth; foliage large.

FRINGE. *Chionanthus*

White (*C. Virginica*). A small native tree or shrub, with dark, glossy leaves and drooping racemes of pure white flowers, having narrow, fringe-like petals. Its foliage, as well as its flowers, make it one of the most desirable lawn trees.

GINGKO. *Salisburia*

G. biloba (*S. adiantifolia*). One of the most beautiful of lawn trees. A native of Japan. Of medium size, rapid growth, and rich, glossy, fern-like foliage. Rare and elegant.

HORSE-CHESTNUT. *Æsculus*

White-Flowering (*Æ. hippocastanum*). A very beautiful, well-known tree with round, dense head; dark green foliage; an abundance of showy flowers in early spring.

Double White-Flowering (*Æ. hippocastanum flore pleno*). A superb variety with double flowers in larger panicles than the common sort, and of fine pyramidal habit. It is one of the best ornamental trees.

JUDAS TREE, or RED-BUD. *Cercis*

American (*C. Canadensis*). A small-growing tree, covered with delicate pink flowers before the leaves appear.

Japan (*C. Japonica*). A great improvement on the well-known American Judas Tree. It is of shrub-like growth, and about the first of May is covered with deep rose-colored flowers, a dozen or more in a bunch on the bare stem before the leaves appear. It has the trick of flowering from branches many years old, as well as from the new ones. The foliage is a lustrous green all summer. A great acquisition; very rare.

LABURNUM

L. vulgare (Golden Chain). Bears long, pendent racemes of yellow flowers in June; showy and beautiful. Should be in every lawn.

LINDEN. *Tilia*

American (*T. Americana*). Rapid-growing, beautiful native tree, with very large leaves and fragrant flowers.

European (*T. Europæa*). A very fine pyramidal tree, with large leaves and fragrant flowers. Only desirable on large grounds.

White, or Silver-Leaved (*T. argentea*). A handsome, vigorous-growing tree; large leaves, whitish on the under side, and having a beautiful appearance when ruffled by the wind. One of the best.

MAGNOLIA

One of the most beautiful of flowering trees. Being difficult to transplant, small trees 3 to 4 feet high are preferable.

M. acuminata (Cucumber Tree). A beautiful pyramidal-growing native species, growing to the height of 60 or 70 feet, with large, glossy leaves; flowers yellow, tinted with bluish purple.

M. conspicua (Chinese White). Tree of medium size and shrub-like growth. Flowers are large, pure white, very numerous, and appear before the leaves.

M. Lennei. Recently introduced. Foliage large; flowers purplish crimson or magenta, and although not a handsome grower, a superb variety; very expensive.

M. Soulangeana. A French hybrid. A rather irregular grower; foliage large, glossy and massive; flowers very large, 3 to 5 inches in diameter, white and purple. Very effective.

M. speciosa. A good grower of fine form. Flowers a little smaller and of a lighter color than those of *M. Soulangeana*, but are produced in wonderful profusion. This is the best variety.

MAPLE. *Acer*

Ash-Leaved (*A. negundo fraxinifolium*). A fine, rapid-growing variety with handsome light green pinnated foliage and spreading head. Very hardy.

Norway (*A. platanoides*). A native of Europe. Its large, compact habit, broad, deep green, shining foliage and its vigorous growth render it one of the most desirable species for streets, parks and lawns.

Purple-Leaved Sycamore (*A. pseudo-platanus purpurascens*). Strong, rapid grower; foliage deep green on the upper surface and purplish red underneath. Produces a fine effect with other trees.

Japan Maple.

MAPLE, continued

Schwedler's Norway (*A. Schwedlerii*). A beautiful variety, with the young shoots and green leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. One of the most valuable trees of recent introduction.

Silver-Leaved (*A. dasycarpum*). One of the most ornamental of the species; the under surface of the leaves a soft white. It is exceedingly rapid in its growth, often making shoots 6 feet long in a season. Valuable as a street tree.

Sugar, or Rock (*A. saccharinum*). The well-known native variety. Valuable both for the production of sugar and as an ornament in lining streets and avenues. A stately form and fine, rich foliage render it justly popular as a shade tree.

Wier's Cut-Leaved (*A. Wierii laciniatum*). A Silver Maple with remarkable and beautiful dissected foliage. Of rapid growth; shoots slender and drooping, giving a very graceful appearance. While it makes a large tree if undisturbed, it will bear any amount of pruning and may be easily adapted to small lawns.

JAPAN MAPLE. *Acer polymorphum*

This is the normal form or type. Growth slow and shrubby; foliage small, five-lobed, and of a bright cheerful green in spring and summer, changing to a lovely dark crimson in autumn. Perfectly hardy when well established. One of the most beautiful and valuable small-sized trees.

Dark Purple-Leaved (*A. polymorphum atropurpureum*). Forms a bushy shrub; foliage dark purple and deeply cut; very ornamental. The hardiest and altogether the best of the Japan Maples. One of the choicest small trees or shrubs.

Cut-Leaved Purple (*A. polymorphum dissectum atropurpureum*). One of the most striking and handsome varieties of the Japan Maples. Form dwarf and weeping; the leaves are of a beautiful rose color when young, and change to a deep and constant purple as they become older. They are also deeply and delicately cut, giving them an elegant fern-like appearance.

MOUNTAIN ASH. *Sorbus*

European (*S. aucuparia*). A fine hardy tree. Head dense and regular, covered from July till winter with large clusters of bright scarlet berries.

Oak-Leaved (*S. quercifolia*). A hardy tree of fine habit; height and breadth from 20 to 30 feet; foliage simple and deeply lobed. A very fine lawn tree.

MULBERRY. *Morus*

For description of several fine varieties, see page 29.

OAK. *Quercus*

Pin (*Q. palustris*). 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. As an avenue and street tree it is unequaled, and it is one of the best for park planting.

Pin Oak.

and considerably larger than the Double Red; fine rich foliage.

Double White (*C. alba flore plena*). Has small, double, white flowers.

Paul's Double Scarlet (*C. coccinea flore pleno Paulii*). Flowers large, deep carmine-scarlet. Superior to any other variety.

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.

WALNUT. *Juglans*

Black (*J. nigra*). A native species of large size and majestic form; foliage beautiful, being composed of from 13 to 17 leaflets.

English, or Madeira Nut (*J. regia*). A handsome tree which produces fine fruit. Should be more extensively, planted as it is quite hardy.

PEACH. *Prunus*

Double Rose-Flowering (*P. rosea flore pleno*). Flowers pale rose color, double, produced in great abundance and very handsome.

Double White-Flowering (*P. alba flore pleno*). Very ornamental pure white flowers. Hardy.

POPLAR. *Populus*

Bolles' (*P. Bolleana*). New. Pyramidal form; leaves dark green on upper side, brilliant silver beneath; very beautiful. 8 to 9 feet.

Carolina (*P. Carolinensis*). Pyramidal in form and robust in growth. Leaves large, serrated and pale to deep green in color.

Lombardy (*P. Italica*). Well known for its erect, rapid growth and commanding form. Very desirable in large grounds and along roads to break the average height and forms of other trees.

THORN. *Cratægus*

Double Scarlet (*C. coccinea flore pleno*). Flowers deep crimson, with scarlet shade, very double,

WILLOW. *Salix*

Gold-Barked. Origin, Russia. Bark rich golden, very conspicuous in winter. A fine grower, and of great value to give variety to the lawn.

Laurel-Leaved (*S. pentandra*). This is a beautiful small tree, with large, bright, shining leaves.

Rosemary-Leaved (*S. rosmarinifolia*). Budded 5 to 7 feet from the ground it makes a very handsome round-headed small tree; branches feathery, foliage silvery.

WEeping DECIDUOUS TREES

The superior grace and excellence of the weeping varieties render them especially adapted to the yard or lawn. In our list will be found all of the kinds which we deem particularly attractive. Customers will, however, be saved from disappointment if they will realize that it is impossible to deliver them from the nursery with the form and shape which they will attain with age. It can no more be done than fruit trees could be delivered with the fruit on.

ASH. *Fraxinus*

Golden-Barked Weeping (*F. aurea pendula*). During the winter the bark is as yellow as gold, making a striking effect. When fully developed it is about 8 feet high.

BEECH. *Fagus*

Weeping (*F. pendula*). Of wonderful grace and beauty when covered with its rich, luxuriant foliage, but quite ungainly in appearance when divested of its leaves. Grows to a height of 30 feet.

BIRCH. *Betula*

Cut-Leaved Weeping (*B. pendula laciniata*). This tree is indeed a picture of delicacy and grace. It presents a combination of attractive characteristics of which no other variety can boast. Mr. Scott, in his "Suburban and Home Grounds," 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 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." Makes a large tree. Of but little beauty when delivered from the nursery, but it develops into a thing of beauty.

Young's Weeping (*B. pendula Youngii*). Grafted on stems 5 to 6 feet high. The fine thread-like shoots droop to the ground, forming a novel and picturesque tree for the lawn. Requires but very little space.

CHERRY. *Prunus*

Japan Weeping Rose-Flowered (*P. Japonica rosea pendula*). Its branches are pendulous, and are covered with rose-colored flowers before the leaves appear. One of the finest weeping trees grown; very beautiful.

ELM. *Ulmus*

Camperdown Weeping (*U. Camperdownii pendula*). Beyond question one of the most satisfactory weeping trees in cultivation. The growth is rapid and the foliage is luxuriant; it forms a fine-shaped head, and is very hardy.

LILAC. *Syringa*

Japan Weeping (*S. Japonica pendula*). An exceedingly graceful new shrub from the mountains of Pekin, Japan. The flowers are borne in clusters and are very fragrant. It is especially adapted for planting in small yards or lawns, also among groups of shrubbery. It is very hardy, standing in the most exposed situations without injury.

LINDEN, or LIME. *Tilia*

White-Leaved Weeping (*T. alba pendula*). Slender, drooping branches and large foliage. One of the finest, and a good variety for a large lawn.

MOUNTAIN ASH. *Sorbus*

Weeping (*S. pendula*). One of the best known and most popular weeping trees. It is of easy culture, great hardiness and thrives in all soils. Its straggling branches,

twisting and turning in every direction, with no training whatever, make a most picturesque and novel sight. Covered during the autumn with bright red berries. It is budded on stems about 5 feet high.

Common Weeping Willow.

finer weeping ornamental trees. Its great hardiness, vigorous growth, adaptability to all soils, easy culture, fine form and unique appearance render it a general favorite. It does not grow in height, but the branches droop gracefully to the ground. It occupies very little space, and will thrive near larger trees, and is, therefore, invaluable for small inclosures. It is also well adapted for cemetery lots.

New American (*S. Americana pendula*). Grafted about 5 feet high. An interesting variety, with delicate leaves and slender branches. Quite graceful and ornamental. Never grows large.

Rosemary-Leaved (*S. rosmarinifolia*, or *petiolaris*). When worked 5 to 7 feet high, a very striking and pretty round-headed small tree. Also very desirable in shrubberies when worked low. Branches feathery: foliage silvery.

Thurlo's Weeping. A new variety of stately proportions with graceful drooping branches and bright, long, glossy leaves. The hardiest and best of the Willows, and a distinct ornament to the lawn.

Wisconsin Weeping. Similar to *S. Babylonica*, but hardier, and considered valuable on account of its ability to resist severe winters.

MULBERRY

Morus

Teas' Weeping. Perfectly hardy, forming a natural umbrella-shaped top or head; foliage handsome. A fine ornamental for the lawn.

WILLOW. *Salix*

Common Weeping (*S. Babylonica*). Our common and well-known weeping Willow.

Golden (*S. vitellina aurantiaca*). A handsome tree. Conspicuous at all seasons, but particularly in winter, on account of its yellow bark.

Kilmarnock (*S. caprea pendula*). The best known and most universally planted of the

EVERGREEN TREES

Evergreens are very desirable, but they are difficult to transplant, and both the time and manner of transplanting should be looked to. They should never be set in fall. They should be subjected to as little exposure as possible, and be set with great care. Small specimens are most likely to live.

ARBORVITÆ. *Thuya*

American (*T. occidentalis*). This is the very finest evergreen for hedge. It is very hardy, and if set at the proper time with care, and without undue exposure, it may be relied upon to live; but small plants, 12 to 18 inches high, which have been transplanted several times are preferable. It bears shearing better than any other variety, and may be made a very beautiful and dense hedge or screen to divide grounds, or for any purpose where it is not required to resist cattle or other animals.

Pyramidal (*T. pyramidalis*). Of upright, compact habit; similar to the Irish Juniper. Very desirable.

Siberian (*T. Sibirica*). Exceedingly hardy, keeping color well in winter; growth compact and pyramidal. Makes an elegant lawn tree.

Tom Thumb. Compact growth. Valuable for planting in cemeteries and small places.

FIR. *Abies*

White Silver (*A. concolor*). A distinct variety with yellowish bark on young branches; foliage long and light green. A handsome tree.

JUNIPER

Juniperus

Irish (*J. Hibernica*). Very erect and tapering in its growth, forming a column of deep green foliage. A pretty little tree or shrub, and for its beauty and hardiness is a general favorite.

PINE. *Pinus*

The following are very ornamental and well adapted to thrive in this country.

Austrian, or Black (*P. Austriaca*). A remarkably robust, hardy, spreading tree; leaves long, stiff and dark green; growth rapid. Valuable for this country.

Scotch (*P. sylvestris*). A dark, tall evergreen, with bluish foliage and rugged shoots. Hardy, and grows even on the poorest soils.

Colorado Blue Spruce. (See page 50.)

SPRUCE. *Picea*

American White. A tall tree; loose, spreading branches and light green foliage.

Colorado Blue (*P. pungens*). A most beautiful variety discovered and disseminated from the Rocky Mountains. It is the nearest blue of any evergreen; very distinct in foliage and growth; fine, compact habit. In great demand as a lawn tree throughout the eastern states, where fine specimens are established, proving it the best of all evergreen trees for the lawn. Foliage rich blue or sage color.

Douglas'. From Colorado. Large, conical form; spreading branches; horizontal; leaves light green above, glaucous below.

Hemlock (*Tsuga Canadensis*). Delicate dark-colored foliage and drooping branches. Good for the lawn, and also makes a good hedge.

Norway (*P. excelsa*). Of large and lofty appearance. Well adapted for large enclosures, and stands pruning well when used for hedges. It is exceedingly picturesque and beautiful. Very popular, and deservedly so.

YEW. *Taxus*

Erect English (*T. erecta*). A very fine pyramidal variety of the English Yew, with dark green foliage. Hardy and desirable.

T. elegantissima. A beautiful tree of small, dense habit; leaves striped with silver, frequently turning to light yellow.

T. Washingtoni. New. Vigorous in growth and rich in healthy green and yellow foliage. One of the best.

Althæa, or Rose of Sharon.

HARDY FLOWERING SHRUBS

We might extend our list of ornamental shrubs almost indefinitely, but as we desire to send out only the best of each class, we are necessarily confined to the following varieties. Our list is designed particularly for those who have small places, yet we feel confident that it embraces all the desirable kinds for the most extensive grounds. While we aim to give the merits of each one due attention, we do not intend to exaggerate in describing a single variety. We are positive that no one will meet with disappointment in selecting from our descriptions. Some of the very finest varieties are exceedingly ungainly when sent from the nursery, and customers must understand if one kind looks better than another when delivered, that it is not because we did not take as much pains with it in the nursery.

A bed of Hardy Azaleas.

ALTHÆA, or ROSE OF SHARON. *Hibiscus Syriacus*

The Althæas are fine, free-growing flowering shrubs of very easy cultivation. Desirable on account of flowering in August and September, when nearly every other shrub or tree is out of bloom. They are of good size, many-colored, trim and attractive. Tree Althæas are very desirable, and the handsomest flowering tree we know of. Perfectly hardy and can be had in various colors if desired. Entirely free from all insect pests; always give delight and satisfaction. Require pruning each spring.

Jeanne d'Arc. Superb new variety. Flowers pure white; a good grower; valuable.

Double Red (*H. rubra flore pleno*).

Single Red (*H. rubrum*).

Double Purple (*H. purpurea flore pleno*).

Single Purple (*H. purpurea*).

Double White (*H. alba flore pleno*).

Single White (*H. alba*).

Variegated-Leaved Double-Flowering (*H. flore pleno folia variegata*). A conspicuous variety, with foliage finely marked with light yellow; flowers double purple. One of the finest variegated-leaved shrubs.

ALMOND. *Prunus*

Dwarf Double-Flowering (*P. Japonica*). A well-known beautiful small shrub with handsome double pink flowers early in the spring.

Double White-Flowering (*P. Japonica alba*). A pretty sort with double white flowers.

ARALIA

A. Japonica. Of the same family as *A. spinosa*, but of Japanese origin. Very promising.

A. spinosa. Imported from Europe. A wonderful large shrub or small tree, which resembles the palm tree of the tropics. It has dark green, fern-like foliage of enormous size, and bears large panicles of white flowers in August. Perfectly hardy. Invaluable, as it gives a tropical appearance to the lawn or garden.

AZALEA

A. mollis. A race of Azaleas of excellent habit and good foliage, blooming quite early in the season, and producing large trusses of flowers of all shades of red, white, yellow and orange. The flowers surpass in size and perfection those of the Pontica varieties, and resemble the early rhododendrons. They are perfectly hardy.

A. Pontica, or Ghent. Natives of Asia Minor. Grow from 3 to 4 feet high. The Ghent hybrids which we offer combine nearly all colors, and possess a delightful perfume; they rank next to rhododendrons for decoration of lawns and pleasure grounds. Bloom through May and June.

BARBERRY. *Berberis*

European (*B. vulgaris*). A fine shrub with yellow flowers in drooping racemes, produced in May or June, followed by orange-scarlet berries.

Purple-Leaved (*B. purpurea*). A very handsome shrub, growing from 3 to 5 feet high, with violet-purple leaves and fruit. Makes a fine ornamental hedge.

Thunberg's (*B. Thunbergii*). A lovely species of dwarf habit and small bright shining foliage, which changes to intense coppery red in autumn. It is unsurpassed for making beautiful hedges.

CALYCANTHUS. Sweet-Scented Shrub

The wood is fragrant; foliage rich; flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June and at intervals afterwards.

CLETHRA. White Elder

C. alnifolia (Sweet Pepper-Bush). A desirable shrub with shining, deep green foliage. In August covered with spikes of sweet-scented white flowers, which perfume the atmosphere all around.

DEUTZIA

This valuable species of plants comes to us from Japan. Their hardiness, luxuriant foliage and profusion of attractive flowers render them, deservedly, among the most popular of flowering shrubs. The flowers are produced in June in racemes from 4 to 6 inches long.

D. corymbiflora. A new and very scarce variety which is remarkably interesting. Of long, slender growth, with large, long, dark green leaves and large corymbs of pure wax-white flowers, in appearance bouvardias. It blooms in spring and occasionally again in fall. A choice variety.

Double-Flowering (*D. crenata flore pleno*). Flowers double white, tinged with rose. One of the most desirable flowering shrubs in cultivation.

D. gracilis (Slender-Branched). A charming variety, introduced by Dr. Siebold. Flowers pure white; so delicate that they are very desirable for decorative purposes.

D. gracilis rosea. Of same habit of growth, etc., as *D. gracilis*. Its flowers, however, are double the size of that fine old variety. Is charmingly effective through being diffused with a delicate tint of rose color, which adds to its attractiveness.

D. gracilis venusta (Azalea-Flowered). This variety is a beauty. Its flowers are large and open, like small azaleas, and very attractive.

Lemoine's (*D. Lemoinei*). A choice new variety, which entirely supersedes *D. gracilis* for the garden or forcing. Plant of strong growth, with erect clusters of

very large flowers suitable for cutting. A decided acquisition and one of the finest.

Pride of Rochester. A new variety said to excel all others in size of flower, length of panicle, profuseness of bloom and vigorous habit. A charming acquisition.

D. scabra. Flowers bell-shaped, in small bunches; foliage oval, very rough underneath; dwarf habit.

Waterer's (*D. Watereri*). A cross between *D. gracilis* and *D. crenata*. Flowers large, of purest white, and borne in immense profusion.

Deutzia gracilis.

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DOGWOOD. *Cornus*

Red-Branched (*C. sanguinea*). A native species. Very conspicuous and ornamental in the winter, when the bark is blood-red.

Variegated (*C. elegantissima variegata*). One of the finest variegated shrubs; of rapid growth. Foliage beautifully marked with creamy white and tinged with red, while some leaves are entirely white. Should be in every collection.

ELDER. *Sambucus*

A well-known shrub which blossoms in the spring, and afterwards is covered with handsome berries. There are several varieties.

Cut-Leaved (*S. laciniata*). A strong grower, with elegant divided foliage. One of the desirable cut-leaved shrubs.

Golden (*S. aurea*). Beautiful variety with light yellow leaves, which hold their color well and render the plant very conspicuous and effective.

ELÆAGNUS

E. longipes (Japanese Silver Thorn). A remarkably new shrub from Japan. Foliage glossy, silvery tinge underneath; bark covered with peculiar brown spots which remain all winter. Flowers not large, but the bush is covered in July with large bright red berries, which are edible and of a sprightly and agreeable flavor. Foliage remains good until late in autumn. A very desirable acquisition.

EUONYMUS. Burning Bush; Strawberry Tree

A very ornamental and showy bush, whose chief beauty consists in its brilliant rose-colored berries, which hang in clusters from the branches until midwinter. Planted with a background of evergreen the effect of contrast is very fine.

EXOCHORDA

E. grandiflora (Pearl Bush). A vigorous-growing shrub from China, forming a compact bush 10 to 12 feet high; can be trimmed to any desired shape. The flowers are borne in slender racemes of eight to ten florets each, on light and wiry branches that bend beneath their load of bloom just enough to be graceful. It is perfectly hardy; flowers pure white. Very useful for cut-flowers.

FILBERT. *Corylus*

Purple-Leaved (*C. avellana atropurpurea*). A vigorous shrub with large, deep purple leaves; very ornamental. Produces good fruit.

FORSYTHIA

F. viridissima (Golden Bell). A very singular and quite ornamental shrub. Its branches in the early spring, before the leaves appear, are covered with bright golden yellow, pendulous flowers.

FRINGE. *Chionanthus*

Purple, or Smoke Tree. A very elegant and ornamental large shrub, with curious hair-like flowers, which, being of a pinkish brown color, give it the names Purple Fringe and Smoke Tree. The blossoms are in July, sometimes literally covering the tree, and remaining all summer.

White (*C. Virginica*). An entirely different plant from the preceding. Has handsome, large foliage and racemes of delicate white flowers that hang like finely-cut shreds or fringes of white paper.

GLOBE FLOWER. *Kerria Japonica*

A slender, green-branched shrub 5 or 6 feet high, with globular yellow flowers from July to October.

Hydrangea paniculata grandiflora.

HALESIA. Snowdrop Tree; Silver Bell

A beautiful large shrub, with handsome, white, bell-shaped flowers in May. Very desirable.

HELENIUM. Sneezeweed

H. autumnale superbum. A grand hardy perennial plant, throwing up increasing numbers of shoots from year to year, 6 to 8 feet wide, which in late summer and early autumn are covered with immense panicles of brilliant yellow blooms. Exceedingly beautiful and attractive.

HONEYSUCKLE. Lonicera

L. Bella albid. New upright Honeysuckle. Flowers sweet-scented, pure white; bush is red, with berries late in the season, of a translucent red, then a beautiful pink. An elegant desirable variety.

L. Bella rosea. Similar to preceding in growth, etc., with flowers deep rose.

Fragrant (*L. fragrantissima*). Almost an evergreen. A hardy, vigorous, bushy-growing shrub, reaching a height of 5 or 6 feet. Flowers bright red and exquisitely fragrant; foliage dark, rich green, which is retained in all its beauty until spring, when new flowers and new foliage appear. A great acquisition.

Large-Flowering (*L. grandiflora*). A beautiful shrub. Very vigorous, and produces large, bright red flowers striped with white, in June. One of the best.

Red Tartarian (*L. Tatarica*). A beautiful shrub. Vigorous, and produces large, bright red flowers striped with blue, in June.

White Tartarian (*L. Tatarica alba*). A large shrub, having white flowers in May and June.

HYDRANGEA

H. Otaksa. Foliage a beautiful deep green. Produces immense clusters of rose-colored flowers in profusion in July. Should be planted in tubs and protected in winter.

H. paniculata grandiflora. A fine, hardy shrub, growing to the height of 8 or 10 feet. Flowers white, in great pyramidal panicles a foot long, produced in August or September, when most other shrubs are out of bloom. Very elegant and showy.

H. paniculata grandiflora, Tree Form. Grown with great care and expense in tree form, making it immensely desirable where medium-sized flowering trees are wanted instead of bushy shrubs. Difficult to propagate. It will always be rare and costly.

Red-Branched. White flowers. This is similar to *H. paniculata grandiflora* in stem and foliage, with clusters of white flowers. Similar to Thomas Hogg.

Hydrangea paniculata grandiflora, Tree Form.
One of the finest lawn shrubs. (See page 54.)

Forsythia viridissima (Golden Bell).
A fine early-flowering shrub. (See page 53.)

Thunberg's Barberry (Berberis Thunbergii).
A superb hedge plant. (See page 52.)

IRIS

Japan (*I. Kämpferi*). These are fine border plants, bearing, in June and July, very large, showy flowers on stems 3 feet high. Colors are very brilliant and striking, in shades of azure-blue, royal purple, pale violet, yellow and white, and many of them closely resemble immense orchids.

LILAC. *Syringa*

Alphonse Lavalle. A desirable variety. Its panicles of flowers are very large, of a beautiful blue, shaded with violet. One of the very best Lilacs.

Frau Damman. New. Pure white, deliciously scented. A profuse and early bloomer.

Japan Tree. A remarkable new species from Japan, becoming a good-sized tree. Foliage dark green, glossy; flowers small, feathery, but formed in great panicles often 18 inches long; very light straw color. Blooms a month later than other Lilacs.

Large-Flowering White (*S. alba grandiflora*). Very large pure white tufts of flowers.

Leon Simon. New. Large, double, beautiful violet flowers. One of the best.

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

Madam Lemoine. New, and very promising. Flowers double white.

Marie Legraye. A free grower, producing magnificent large thyrses of purest white flowers, which are very fragrant and showy. Highly recommended as perhaps the best of the white Lilacs.

Persian Purple. Foliage resembles the privet more than the Lilac. Flowers are most abundant and very delicately tinted.

Persian White. Similar to the Purple, except that the flowers are pure white.

President Grevy. A lovely blue. Flowers large and double, measuring $\frac{3}{4}$ inch in diameter; its clusters are large, at least 10 inches in length and 5 inches across. A grand Lilac.

Purple, Common (*S. vulgaris*). The well-known sort.

Red (*S. rubra insignis*). New, and one of the choicest of its color.

S. villosa. Decidedly a valuable variety. It is a very free bloomer; flowers in large, branching panicles: color in bud flesh-pink, changing to white; very fragrant. A late bloomer. One of the very best Lilacs.

Weeping. New. A beautiful weeping tree. Produces large clusters of beautiful, intensely sweet flowers. A great acquisition.

Japan Iris.

MOCK ORANGE. *Philadelphus*

Boule d'Argent, or Ball of Silver. A lovely addition to these popular plants. Flowers very large, pure white, in immense quantities; fragrant. An extra-fine, charming variety.

Gerbe de Neige (*P. Lemoinei*). Sheaf of Snow. A good addition to the other varieties. Plant of good growth; flowers large, pure white, covering the plant in profusion. Perhaps the best *Syringa*.

Golden-Leaved. A beautiful new variety with bright yellow foliage, which affords pretty contrast with other shrubs, especially with the purple-leaved varieties.

Variegated. A magnificent new variety with beautiful foliage, somewhat similar to the Variegated *Althæa*. Very rare as yet. A great acquisition.

PLUM. *Prunus*

Purple-Leaved (*P. Pissardii*). The finest purple-leaved small tree or shrub of recent introduction. The young branches are very dark purple; the leaves when young are lustrous crimson, changing to dark purple, and retain this beautiful tint till they drop, late in autumn. Flowers small, white, single.

Double-Flowering (*P. triloba*). A very pretty little shrub, hardy and desirable. The flowers are upwards of an inch in diameter, semi-double, of a delicate pink color, appearing in May, and completely covering the branches.

PRIVET. *Ligustrum*

Box-Leaved. A variety of erect habit, with short, dark, thick green leaves, which remain on the plant until very late in autumn. One of the best for the lawn.

California (*L. ovalifolium*). Of great value as a hedge, and of such positive beauty as to be attractive when grouped with other shrubs. When planted singly it forms a very compact, dense, upright shrub of medium size. The leaves are so glossy as to have the appearance of having been freshly varnished. The foliage hangs on until late in the winter, making it nearly evergreen.

Laurel-Leaved. Leaves are the largest of any of this class. Distinct and fine.

QUINCE, JAPAN *Cydonia Japonica*

Scarlet. Has bright scarlet-crimson flowers in great profusion early in spring. One of the best hardy shrubs. Makes a beautiful ornamental hedge. For defense against boys and cattle it has no superior, and for ornament no equal.

Blush. A beautiful variety with white and blush flowers.

RUDBECKIA. Golden Glow

Offered for the first time in summer of 1896, and already immensely popular. A hardy perennial plant growing 6 to 8 feet high, freely branched, and bearing hundreds of exquisite golden yellow blooms on long graceful stems. Indispensable to lawn or garden.

Blue Spiræa. (See opposite page.)

Spiraea Anthony Waterer.

SNOWBALL. *Viburnum*

Guelder Rose (*V. opulus sterilis*). The common Snowball is a favorite with everyone, and, next to the lilac, the best known of all shrubs. It can be found everywhere, showing its popularity.

Japan (*V. tomentosum plicatum*). The Japan Snowball deserves to be planted as freely as the common variety. Its beautiful imbricated leaves make it attractive at all times, and when covered with its clusters of globular, white flowers, it is the most beautiful shrub we know of. It is suitable to any location where a fine shrub is wanted, and cannot be too extensively planted.

SPIRÆA

Anthony Waterer. A delightful new variety. Flowers dark crimson, and constantly in bloom. Grows to 3 feet in height. It is a superb variety and is very popular. The best shrub of recent introduction.

Arguta. A variety of great promise, with fine, delicate, drooping foliage. The plant is entirely covered in early spring with a profusion of wreaths of white flowers. Although of slender growth, it attains a height of 6 feet. A beautiful variety.

Blue (*Caryopteris mastacanthus*). Not really a *Spiraea*, but a fine autumn-blooming, half-shrubby plant, covered with clusters of beautiful blue, sweet-scented flowers. It dies to the ground during winter, but renews itself in spring; desirable.

S. Bumaldi. New, and considered one of the finest of this class. Flowers brilliant pink, with variegated foliage.

S. callosa alba. A white-flowering variety of dwarfish habit; very fine. Remains in flower all summer.

Golden-Leaved. A beautiful dwarf plant with golden yellow foliage. It keeps its color the entire season, and creates a very pleasing effect among other shrubs.

S. prunifolia flore pleno. A beautiful shrub from Japan, with double white flowers in May.

S. Reevesii, or Lance-Leaved. A charming shrub with narrow pointed leaves and large, round clusters of white flowers that cover the whole plant.

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SPIRÆA, continued

S. Reevesii flore pleno (Double Lance-Leaved). A beautiful double-flowering variety. One of the best, if not the best.

S. Van Houttei. The most showy of all the Spiræas, and one of the very best flowering shrubs in cultivation. The plant is a rather tall, upright grower, with long slender branches that droop gracefully with their weight of foliage and flowers. Flowers pure white in great clusters and whorls, forming cylindrical plumes 2 or 3 feet long. This is one of the hardiest of all the Spiræas.

STRAWBERRY TREE. See Euonymus

SUMACH. Rhus

Cut-Leaved (*R. glabra laciniata*). A very beautiful shrub of moderate size, and elegant deeply cut, fern-like foliage, which changes to a deep red in autumn.

TAMARIX

T. Africana. Dense-growing, upright shrubs, elegant feathery, beautiful foliage. One of the most beautiful shrubs grown. It has sprays of rosy flowers in May. It improves them to cut them back in early spring.

WEIGELA. Diervilla

W. amabilis, or splendens. Of robust habit; large foliage and pink flowers; blooms freely in autumn. A great acquisition.

W. candida. Thought by some to be the best of all. Of vigorous habit; an erect grower. Flowers pure white, produced in great profusion in June. The plants continue in bloom through the summer.

W. coccinea. A decided improvement upon *W. floribunda*, being of the same intense deep red color, and of strong, upright growth.

W. Deboish. A beautiful variety with deep rose-colored flowers resembling *W. rosea*, but much darker. One of the darkest and best.

W. hortensis nivea. Flowers pure white, retaining their purity during the whole time of flowering; foliage large.

W. rosea. An elegant shrub with fine, rose-colored flowers. Introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered. Quite hardy. Blooms in May.

Variegated-Leaved. Leaves bordered with yellowish white, finely marked. Flowers bright pink.

Japan Snowballs. (See page 59.)

Hardy Rhododendrons.

RHODODENDRONS

There is no more attractive feature of a fine country place than the rich bloom of Rhododendrons in the latter part of May and early June. The huge clusters of flowers in many shades of pink, violet, rose, purple, and delicate creamy white, give them right to the first rank among evergreen shrubs. The pride of every fine English home is a collection of these plants.

The American people ought to appreciate our native Rhododendrons more fully when every mountain glen displays effects summer after summer, which no outlay of money and care can produce. The rich green of the foliage in winter is most effective in contrast with the dull tints of deciduous shrubbery.

CULTURAL DIRECTIONS.—In choosing a location for a bed of Rhododendrons, care should be taken to select a place well sheltered. The earth should be dug out of the bed to the depth of $2\frac{1}{2}$ feet, being careful to lay aside the top soil and remove all clay. Procure, if possible, good surface soil from some old pasture, add this to the soil laid aside, mix thoroughly, and with this fill the excavation. After planting is done, cover the surface of the ground with well-rotted cow manure to the depth of 2 or 3 inches. This not only enriches the soil, but aids very much in keeping the earth damp during hot weather. This mulching should be dug into the bed every spring, and renewed every season about the middle of July. In the event of a severe drought, Rhododendrons should be liberally supplied with water, especially during the first season. Plant in the spring, and in the autumn cover with leaves to a depth of 10 to 12 inches. Rhododendrons are most effective in masses, but they should not be crowded, as each one, if given space, will form a shapely plant; so if the bed becomes crowded, it is best to transplant some of them, as they lift very easily and with perfect safety, even when large.

HERBACEOUS PÆONIES

It is surprising that so noble a flower, almost rivaling the rose in brilliancy of color and perfection of bloom, and the rhododendrons in stately growth, should be so neglected. Amateurs seem to have lost sight of the many improved varieties introduced within the last few years, and our finest gardens, perfect in other respects, are singularly deficient in specimens of the newer kinds. The first point in their favor is hardiness. It may be truly said of them that they are "hardy as an oak." In the severest climates the plants require no other protection than they afford themselves. Then their vigorous habit and healthy growth, freedom from all diseases and insects, are important arguments in favor of their cultivation. Growers of roses know well that their flowers are obtained by great vigilance and care. Not so with the Pæony, which, when once planted, all is done. Each succeeding year adds to their size and beauty. The foliage is rich and glossy, and of a beautiful deep green color, thus rendering the plants very ornamental, even when out of flower. No other flower is so well adapted for large, showy bouquets. The Pæony may be planted either singly on the lawn or in borders; when the lawn is extensive, a large bed makes a grand show, surpassing a bed of rhododendrons. It is really the flower for the million.

The following are the choicest of over 75 varieties.

P. alba lutea. Pure white, with yellowish center.

Alexander Dumas. Large, bright rose flowers. Very effective.

Belle Françoise. Clear bright pink. A charming variety.

P. carnea elegans. Flowers large, dark pink, yellowish center; petals fringed.

P. elegans. Large, pink. Extra fine; desirable.

P. humea alba. Deep lilac, salmon center. One of the very best.

P. lilacina. Lilac-rose; late bloomer. A good variety.

Louis Van Houtte. Dark purple-red; extra.

P. officinalis rubra. This is the deep crimson variety so much admired. It blooms just after *P. officinalis tenuifolia*. Flowers large and attractive, and very satisfactory.

P. officinalis tenuifolia flore pleno. New. The earliest to bloom. Foliage a beautiful fern-leaved; flowers large, double, brilliant scarlet. A lovely scarce variety.

P. rubicunda. Light red; fine flower. Attractive.

TREE PÆONIAS

P. Moutan. This is a class of hard-wooded plants which do not die down in winter like the others, hence are called Tree Pæonies. They are early to flower and are beautiful in bloom. The flowers are of large size and there is a variety of color. These plants cannot be too highly recommended.

P. Banksii. Large, fragrant flowers; rosy blush with purple center.

Herbaceous Pæonies.

ANEMONE JAPONICA. WIND-FLOWER

Double White-Flowering. New and beautiful, but rare as yet, and expensive.

Red-Flowering. A distinct and beautiful species. Flowers $2\frac{1}{2}$ inches in diameter, bright purplish rose with golden yellow centers, borne in great profusion from September to November. Height $2\frac{1}{2}$ 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. New. This is undeniably the finest of the Anemones. Of robust growth. Flowers very large, double, of a soft delicate rose-pink. A charming new variety.

White-Flowering, "Whirlwind." A distinct and beautiful variety of the preceding. Flowers $2\frac{1}{2}$ inches in diameter, pure white, center golden yellow, borne in great profusion from September to November. Very desirable and effective as a pot-plant, and in lines or masses in beds or mixed borders.

HARDY CLIMBING VINES

Ornamentals of this class are so hardy, so easily grown, and so beautiful that they deserve greater attention than they receive. No artist can produce pictures equal to the wealth of beauty displayed by the elegant Wistaria, the graceful Honeysuckle, or the charming and magnificent Clematis when in the glory of full bloom, and there is nothing in art that will in any degree compare with the gorgeous autumnal hues of the Ampelopsis.

AMPELOPSIS

Virginia Creeper

A. quinquefolia. A native vine of rapid growth, with large, luxuriant foliage, which in autumn assumes the most gorgeous crimson and purple coloring.

A. Veitchii. Japan. Leaves a little smaller and more ivy-like in form than the foregoing. Overlapping each other, they form a dense sheet of green. It grows rapidly and clings to the surface of even a painted brick wall with great tenacity. The foliage is especially handsome in summer, and changes to a scarlet-crimson in autumn. For covering walls, stumps of trees, rocks, etc., no plant is more useful or beautiful.

ARISTOLOCHIA

Dutchman's Pipe

A. siphon. A rapid-growing vine with magnificent foliage 10 to 12 inches in diameter, and curious, pipe-shaped, yellowish brown flowers.

CHINESE MATRIMONY VINE. *Lycium vulgare*

A vigorous, hardy climber. It will soon cover any desired space. It has dark green foliage and beautiful flowers and loads of small berries, which far surpass the holly berries, which are seen in all parts of the country at Christmas time. The Chinese Matrimony Vine is regarded as indispensable where a hardy climber is desired.

Chinese Matrimony Vine.

CLEMATIS

The different varieties and species of Clematis now in cultivation are of the highest beauty and utility. They vary greatly in their foliage and flowers, and are adapted to various uses. Some of them, such as our common native sort, *C. Virginiana*, and the European (*C. flammula*), and *C. paniculata* from Japan, are very fragrant, and are particularly attractive on this account. The large-flowered varieties, like the well-known *C. Jackmani*, are extremely showy and produce great numbers of their beautiful flowers. These plants are trained on trellises, and over porches and pillars. All are hardy, of easy growth, and will adapt themselves to nearly or quite all soils.

SMALL FLOWERING

C. coccinea. Distinct from other varieties; bright coral-scarlet flowers. July to October.

C. crispa. A handsome native variety, with nodding, bell-shaped, lavender-purple, fragrant flowers, which are an inch or a little more in length and breadth, with revolute sepals; very distinct.

C. flammula (European Sweet). The flowers of this variety are very fragrant; requires a slight protection in winter; very desirable.

C. paniculata. A native of Japan. A beautiful and rapid-growing climber, which in a very brief time will cover any ordinary veranda. The flowers are small, pure white and delightfully fragrant and are borne in enormous masses, almost concealing the foliage. Entirely free from blight and insects, and regarded as a great acquisition. Perfectly hardy and needs no protection whatever.

Clematis paniculata.

LARGE FLOWERING

Alexandra. This is one of the continuous blooming sorts of real merit. The flowers are large and of a pale, reddish violet color. Desirable. July to October.

Duchess of Edinburg. This is one of the best double white varieties. The flowers are pure white, 4 inches across; very deep. They are also remarkably sweet-scented.

Edward Andre. First seen in this country at the World's Fair at Chicago. Flowers large, abundant and a beautiful red. Beyond doubt the finest of its class, but scarce and very expensive.

Gem. A new and perpetual blooming variety. The flowers are of a deep lavender blue. June to October.

Henryi. This is the finest of all white Clematis, and should find a place in every collection. It is not only a vigorous grower, it is a remarkably free and continuous bloomer, beginning with the earliest and holding on with the latest. Flowers large, of a beautiful creamy white, with reddish chocolate anthers. Art cannot produce a picture corresponding in any degree to the wealth of beauty found in the flowers of this variety. Especially desirable. June to October.

Jackmani. This is, perhaps, the best known of the fine perpetual Clematis, and should have credit for the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successful bloomer, producing flowers until frozen up. The flowers are large, of an intense violet-purple, remarkable for its velvety richness. Introduced in 1862—since which time many new varieties have been brought forward—Jackmani has no superior, and very few, if any equals. July to October.

John Gould Veitch. Sent from Japan in 1862. The flowers are very handsome, distinct, large, double, and of light blue or lavender color. It is like Fortunei, except in the color of the flowers. June and July.

Lawsoniana. One of the finest of all; a vigorous grower and continuous bloomer. The flowers are very large, often 9 inches in diameter. Opening a rich, glistening rosy-purple, they gradually change to a mauve-purple. June to Oct.

Madame Grange. A remarkable and vigorous-habited variety; flowers 5 inches across; of a rich, deep velvety maroon-crimson, becoming purplish with age, having a red bar down the center of each sepal.

Miss Bateman. One of the most charming of the spring-flowering hybrids, having large white flowers with chocolate-red anthers, and somewhat fragrant. May and June.

Prince of Wales. This is one of the very profuse flowering varieties of vigorous habit; showy and free. The flowers are of a deep purple, with a red bar in the center of each flower leaf. First rate for bedding, as well as training up. July to October.

Ramona. Said to be an American seedling of the Jackmani type; one of the strongest growers; flowers lavender-blue, similar to the Gem. This variety invariably gives satisfaction.

Star of India. A very showy, very free-flowering sort, with large flowers, first of a reddish plum color, changing to a violet-purple, with turkey-red bar in the center of each flower leaf. A distinct variety of great merit. July to October.

Clematis Jackmani.

HONEYSUCKLE. *Lonicera*

Chinese Twining (*L. Japonica*). A well-known vine, holding its foliage nearly all winter. Blooms in July and September, and is very sweet.

Common Woodbine (*L. Periclymenum*). A strong, rapid grower, with very showy flowers; red outside, buff within. June and July.

Hall's Japan (*L. Halleana*). A strong, vigorous, evergreen variety, with pure white flowers changing to yellow. Very fragrant, covered with flowers from June to Nov.

Japan Golden-Leaved (*L. aurea reticulata*). A handsome variety, having foliage beautifully netted or variegated with yellow.

Monthly Fragrant (*L. Belgica*). Blooms all summer. Flowers red and yellow. Very sweet.

Scarlet Trumpet (*L. semperflorens*). A strong grower, and produces scarlet inodorous flowers all summer.

Wistaria Sinensis.

riety, with double blue flowers; very handsome when well grown.

Chinese Purple (*W. Sinensis*). A most beautiful climber of rapid growth, and producing long, pendulous clusters of pale blue flowers. When well established, makes an enormous growth; it is very hardy, and one of the most superb vines ever introduced.

Chinese White (*W. Sinensis alba*). Introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions.

W. frutescens magnifica. A fine variety with long clusters of pink or flesh-colored flowers.

Japan (*W. multijuga*). A rare species with purplish or lilac-colored flowers borne in immense clusters, sometimes 2 feet in length.

Tree Form. A most desirable novelty; grown with great care and expense. In two colors, white or purple. An elegant and showy shrub for lawn planting.

IVY. *Hedera*

American. See Ampelopsis.

English (*I. helix*). The Ivy, being an evergreen, not very hardy, and suffering from exposure to the winter sun, should be planted on the north side of buildings or walls. It is very effective grown in pots, for inside decoration.

TRUMPET VINE

Bignonia

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

B. radicans. An old-time favorite, grown in nearly every old garden. Flowers perfect trumpet-shaped, bright scarlet. A rapid grower. One of the finest vines for covering old stumps, fences, trellises, etc. Blooms almost continuously through the summer.

WISTARIA

American (*W. frutescens*). A smaller, more slender form than the Chinese, with smaller clusters of purple flowers.

Chinese Double-Flowered (*W. Sinensis flore plena*). A rare variety, with double blue flowers; very handsome when well grown.

Chinese Purple (*W. Sinensis*). A most beautiful climber of rapid growth, and producing long, pendulous clusters of pale blue flowers. When well established, makes an enormous growth; it is very hardy, and one of the most superb vines ever introduced.

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Tree Form. A most desirable novelty; grown with great care and expense. In two colors, white or purple. An elegant and showy shrub for lawn planting.

Bed of Hardy Phloxes.

NEW DWARF LARGE-FLOWERED PHLOXES

The New Dwarf-Flowered Perennial Phloxes have been so improved that they are now attracting the attention they deserve, and we know of no other class of hardy plants which will give so much satisfaction. They come into flower early in July, blooming the entire summer. They flower in large clusters or panicles, in many shades of pleasing colors, both "self" and variegated. They deserve, and do best, in rich soil, in full sunlight. They are entirely hardy, and increase in beauty and vigor from year to year, being improved by occasional transplanting. Below we give a grand assortment, the cream of a large collection.

- Aurora.** Flowers large, of a coppery-orange color; rich crimson center.
- Coquelicot.** Crimson-scarlet, striking and exceedingly attractive; extra.
- Eclairau.** Large carmine-rose, center shaded white. First in flower.
- Feu de Bengal.** Deep fiery-red; showy and effective.
- Hercule.** Deep carmine, crimson eye; large flower.
- Lustre.** Soft rose-pink, large crimson center; flowers large; extra fine.
- Miss T. Levavesseur.** White, tinted rose and marbled crimson; superior.
- Neptune.** A pure self pink. Favorite color.
- Pacher.** Pure pink. Flowers large; a lovely variety.
- Pluton.** Purple-erimson; truss large and fine; a desirable color.
- Purite.** Pure white, large open truss; grand habit; best white we have yet seen.
- Rosetta.** Large rose, shaded white center; showy, attractive, desirable.

FLOWERING BULBS TO BE PLANTED IN THE FALL

CROCUS

In various colors. Single and double.

HYACINTHS

Among the bulbs used for winter flowers, the Hyacinth stands foremost on the list. Two methods are employed in flowering the Hyacinth in winter, one in glasses filled with water, the other in pots or boxes of soil.

JONQUILS

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.

LILIUM. Lily

The Liliums are entirely hardy, and with a few exceptions quite fragrant, and most of the varieties are exceedingly beautiful.

Auratum (Golden-Banded Lily of Japan).

Candidum. Common white.

Lancifolium roseum. Rose spotted.

Lancifolium rubrum. Red spotted.

Harrisii (Bermuda Easter Lily). Pure white, trumpet-shaped flowers; very fragrant. The finest Lily grown.

Tigrinum, fl. pl. (Double Tiger Lily). Bright orange scarlet, with dark spots.

LILY-OF-THE-VALLEY

The Lily-of-the-Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase pretty rapidly. For the house we have what are called "pips"—young roots with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss, or potted. For the garden we can ship either in the spring or autumn.

TULIPS

Owing to the late spring frosts, bedding plants cannot safely be planted before the early spring-flowering bulbs are through blooming. Without these bulbs, for one or two months of beautiful spring weather, our gardens would present a bare appearance. We know of 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. They thrive well in almost any soil. Should be planted October and November.

Duc Van Thol. Single and double; early and late.

Mixed.

Parrots. Named varieties

Duc Van Thol Tulips.

Roses

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

Cultivation.—Roses require plenty of manure and good cultivation. Old and decayed branches and at least half the previous season's growth should be cut away early each spring, and a little cutting back after the first blooming will insure more late flowers. The so-called tender Roses must be carefully protected in winter by covering them with leaves and evergreen boughs; and the hardy sorts will be rendered more vigorous and productive of fine flowers, if they, too, are similarly protected.

Insects.—If the "thrip" or fly appears, syringe the plants daily with a strongly steeped solution of tobacco stems (one pound of stems to five gallons of water), or a solution of whale-oil soap (one pound of soap to eight gallons of water), until the insects are mastered. Rose bugs, which work at the flowers, must be picked off. The presence of the rose caterpillar can be detected by its glueing two or more leaves together to form a shelter. These leaves should be promptly pressed together with the thumb and finger. Insects which eat the leaves can be destroyed by applying white hellebore when the foliage is damp. The secret of success in destroying all species of insects lies in applying the appropriate remedy as soon as the insects appear.

Our Roses are strong plants, grown out-of-doors, well rooted, and every way desirable. They have already bloomed before being sent out, and are in every respect much better and stronger plants than the ones that are so fully advertised and sent out by mail, which are small, tender shoots, started in a greenhouse, and after a few weeks sent out before they have established growth and constitution enough to stand the shock of transplanting. A noteworthy feature of our soil is that it is not affected to any great extent by either drought or wet, and hence it produces a very healthy and hardy growth both in wood and root. It is a rich, heavy, black loam, underlaid with a porous clay. We frequently grow Roses six feet tall from the bud in one season. There is no disappointment in such plants.

HARDY HYBRID PERPETUAL, OR REMONTANT ROSES

In this class are included the so-called "Hybrid Noisettes," also a few of the "Hybrid Teas." These two groups contain some very beautiful varieties, which cannot be omitted from any good list of Roses for outdoor cultivation, but as they are much more tender than the others in this class, they must be thoroughly protected in winter by a covering of forest leaves or other light litter. We also include the Summer Roses (Hybrid China and others), blooming but once in a season, but very hardy and beautiful. As for the rest of this class, it comprises many of the most beautiful Roses in cultivation, and as they are hardy and easy of culture, with the desirable habit of producing a second crop of flowers in the autumn, they must be, as a class, the most popular and reliable for the multitude of planters. To insure their blossom-

Ornamental Department · Roses

ing freely in the autumn, however, they must be cut back in the summer, and a portion of the first crop of flowers sacrificed.

The most of our Roses are propagated on their own roots from cuttings. They are never liable to throw up suckers of an inferior kind.

Jubilee. (See page 71.)

larger flowers than the other. The strongest grower of the entire class.

Coquette des Blancches. Pure white, sometimes faintly tinged with pink; flowers of medium size, somewhat flat, but full and very pretty; growth more bushy and symmetrical than any of the others. One of the hardiest. Later than the rest in coming into flower, but continuing to produce immense quantities of beautiful white Roses in large clusters throughout the season until frost.

Earl of Dufferin. New and expensive. One of the finest Roses of recent years; red, velvety crimson, shaded with dark maroon. Large flower, finely formed, vigorous grower. One of the finest dark Roses; should be in every garden.

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

Francois Levet. Cherry-red; medium size, well formed; one of the Paul Verdier style; very free bloomer and vigorous grower.

Alfred Colomb. Brilliant carmine-crimson; very large, full, of fine globular form and extremely fragrant.

Anne de Diesbach. One of the best and most satisfactory Hybrid Perpetual Roses. A strong, vigorous grower; extremely hardy, producing very large, double flowers of a lovely shade of carmine, and delightfully fragrant.

American Beauty. Large, globular; deep pink, shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing in greenhouse.

Caprice. A true Hybrid Perpetual; perfectly hardy, a strong grower, a great bloomer. It has attracted a great deal of attention, both on the Pacific coast and at the east. No value save as a novelty.

Caroline de Sansal. Clear, delicate flesh color; fine form; a strong grower, and one of the best of its color.

Coquette des Alpes. White, slightly shaded with carmine; form semi-cupped; wood long-jointed;

Madam George Bruant. (See page 73.)

Margaret Dickson. (See page 72.)

General Jacqueminot. Brilliant crimson, large and very fine; one of the handsomest and most showy Roses of this color; beautiful in the bud; semi-double when full blown. Of fine free growth; a universal favorite.

General Washington. Fine crimson, very full and double; a moderate grower; one of the handsomest of Roses when well grown.

John Bright. Glowing crimson. Said to be the brightest Rose yet raised.

John Hopper. A seedling from Jules Margottin, fertilized by Mme. Vidot. Bright rose with carmine center, large and full; light red thorns, not numerous. A profuse bloomer and standard sort.

John Keynes. A strong grower, and as hardy as any of the perpetual family. Flowers very large and fine; brilliant carmine. A splendid Rose.

Jules Margottin. Bright cherry-red; large and full; free-flowering and hardy.

Jubilee. A grand new Rose, first offered to the public in the summer of 1897; as yet scarce and high. It is a true Hybrid Perpetual, perfectly hardy, blooming in fall as well as in early summer; bush vigorous; foliage dark green; an abundant bloomer, flowers very large, reaching 6 inches across under high culture; color purest and deepest red, shading to deep crimson and velvety maroon.

Marchioness of Londonderry. (See page 73.)

La France.

La France. Delicate silvery rose; very large and full; an almost constant bloomer; equal in delicacy to a Tea Rose; the most pleasing fragrance of all Roses; only a moderate grower, but most desirable.

La Reine. Brilliant glossy rose; very large, cupped and beautiful. A very hardy, useful Rose.

Lord Penzance (Sweet Brier). Foliage sweetly scented; strong grower, perfectly hardy; colors flesh white, pink white, pink, red.

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.

Mad. Gabriel Luizet. For loveliness in color, fragrance, size and freedom of blooming qualities, this Rose has no equal to-day; equally good as a bedding Rose outdoors. Pink, distinct, very large, cupped shape, somewhat fragrant. As an exhibition Rose will rank with its rival, Baroness Rothschild.

Margaret Dickson. New. Hardy, thrifty and a profuse bloomer. Flowers large, pure white. A grand sort.

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

Magna Charta. Bright pink, suffused with carmine; very large, full and fragrant, with magnificent foliage. A free bloomer. For the earliest deep color it is still the best.

Marshall P. Wilder. Raised from the seed of General Jacqueminot. It is of vigorous growth, with healthy foliage; flowers large, semi-globular, full, and well-formed; color cherry-carmine. In wood, foliage and form of flower, it resembles Alfred Colomb.

Marchioness of Londonderry. A new ivory white hybrid perpetual; flowers of great size, perfectly formed, and borne at the end of the branches, making it very desirable for cutting. One of the finest white Roses known.

Mrs. John Laing. New. As a bedding Rose this is undoubtedly one of the best varieties yet introduced, being hardly ever out of bloom all summer. Color a beautiful shade of delicate pink; of large size and very fragrant. It is also a good foreer from January onwards.

Madam George Bruant. A seedling from the Japan Rose, *Rosa rugosa*, and Tea Rose, Sombreuil. From these it gets its exquisite sweetness and its ever-blooming character. Considered by the best judges to be of great value.

Puritan.

Soliel d'Or, or Golden Sun. (See page 74.)

Paul Neyron. This magnificent Rose is by far the largest variety in cultivation; very double and full, of a beautiful deep rose color, and delightfully fragrant; borne upon vigorous upright shoots in great abundance throughout the entire season. We recommend this variety very highly for general planting, as it is calculated to give more satisfaction to the masses than any other known variety.

Puritan Rose. (New.) This charming and magnificent new red Rose is a cross between Paul Neyron and American Beauty. Its parentage speaks for itself. The plant is an exceptionally good grower, upright, with bright, heavy foliage and a most abundant bloomer. The flowers are extra-large, full and globular. Its rich crimson color, lighted with scarlet, together with its fragrance, makes it the most beautiful and desirable Rose yet introduced. In fact, it approaches nearer to perfection than any Rose we have ever seen, and we bespeak for it a wide popularity.

Persian Yellow. Deep, bright yellow; small, but handsome, double; a very early bloomer, and much the finest hardy yellow Rose.

Pierre Notting. Blackish red, shaded with velvet; globular in form, very large and full, and one of the finest dark Roses. Needs some winter protection.

Pius IX. Deep rose, tinged with carmine; large and full; a robust grower and profuse bloomer.

Prince Camille de Rohan. Deep velvety crimson, large, moderately full. One of the darkest in cultivation, and a splendid Rose.

Soliel d'Or, or Golden Sun. A very promising new Rose, the first of a new race of Roses, originated by M. Pernet-Ducher, and called *Rosa Pernetiana*. It is a result of

a cross between the well-known Persian Yellow and the hybrid perpetual, Antoine Ducher, and is characterized by M. Pernet as a perpetual flowering variety. We append the description of the originator: "This magnificent variety, like the Persian Yellow, is perfectly hardy. It retains a good deal of the character of the Persian Yellow. the bark of the wood being reddish, the thorns very fine, the foliage more ample, and the leaves of a beautiful clear green, are closer together. Its growth is robust, very vigorous, making plants 3 feet in height. The flowers are large, full and globular, measuring $3\frac{1}{2}$ inches across, and fragrant; buds conical shaped; color superb, varying from gold and orange-yellow to reddish gold, shaded with nasturtium-red. The color stands the sun well." This should be a very valuable Rose.

Persian Yellow.

lighted with scarlet; fragrant. We cannot recommend this variety too highly.

Victor Verdier. Fine bright rose, shaded with carmine; very hardy and a fine bloomer. A splendid Rose.

Ulrich Brunner. A superb Rose; a seedling from Paul Neyron; extra-large, bold flowers, full and globular; petals large and of good substance; color rich, glowing crimson, elegantly

MEMORIAL ROSE

There is nothing more handsome for covering rockeries, mounds or embankments; especially valuable for cemetery planting. It readily adapts itself to any soil, and will do well under any conditions. The pure white single flowers appear in greatest profusion during the month of July, after the June Roses are past, while its almost evergreen foliage makes it very desirable at all seasons of the year. Its natural habit is to creep like an ivy, but it may be trained to climb, and used to good effect in covering walls and trellises.

HARDY CLIMBING ROSES

Baltimore Belle. Pale blush, nearly white, double. The best white climbing Rose.

Crimson Rambler. A remarkable new Rose from Japan; very popular; vigorous, often growing 10 to 18 feet the first season, a splendid climber and unequaled as a pillar Rose tied to a stake; brilliant flowers in immense masses holding their color for a long time. Words fail to do it justice.

Dorothy Perkins. This magnificent new variety is the result of a cross of *Wichuraiana* with that grand old Rose *Madam Gabriel Luizet*. It is perfectly hardy, having withstood a temperature of 20 degrees below zero, and with no snow fall to protect. The flowers are a large size for this class of Rose, and are borne in clusters of from 10 to 30; very double. The petals are prettily rolled back and crinkled. The buds are remarkably well formed, being pointed in shape and just the right size for the buttonhole. Color clear shell-pink; does not fade, and is very fragrant, a quality not often possessed by other climbing Roses. There was a bed of this variety at the Pan-American Exposition, and Wm. Scott, superintendent of horticulture, expressed himself as follows in the "Florist's Review": "They have flowered splendidly; have been very brilliant. This seems to me to be a great acquisition. The individual flower is larger than the *Crimson Rambler*."

Gem of the Prairie. Carmine-crimson, occasionally blotched with white. A cross hybrid between *Mad. Laffay* and *Queen of the Prairie*.

Greville, or Seven Sisters. Crimson, changes to blush; flowers in large clusters; not as hardy as others.

Pink Rambler. Resembles *Crimson Rambler* in every respect but color, which is clear pink. One of the most attractive of the set. The mature buds often change to creamy white.

Queen of the Prairie. Bright rosy red, frequently striped white; large, compact, globular.

White Rambler. A remarkably free bloomer, producing medium-sized pure white flowers in large clusters.

William C. Egan. New Climbing Rose. Raised by Mr. Jackson Dawson, of the Arnold Arboretum, by crossing *Wichuraiana* and *Gen. Jacqueminot*. Flowers large, very full, in color resembling *Souv. de la Malmaison*, and produced in clusters. Although only an annual bloomer, it remains in flower several weeks. The habit of the plant is sub-climbing, vigorous and healthy; foliage bright and glossy.

Yellow Rambler. Has the same characteristics as the *Crimson Rambler*, but not as hardy.

Crimson Rambler.

MOSS ROSES

Countess de Murinais. Pure white; large, very desirable; the finest white Moss.

Crested. Deep pink buds, surrounded with mossy fringe and crest. Beautiful.

Glory of Mosses. A moderate grower. Flowers very large; appear to best advantage when full; color pale rose.

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 Nov.

White Bath. White, sometimes tinged with flesh; attractive in bud and open flower. This is by far the best white Moss.

Marechal Niel Roses.

PERPETUAL TENDER ROSES

Under this head we include all classes of Tender Roses—Bourbon, China, Noisette and Tea, and indicate the class to which each variety belongs with the letter B, C, N or T, respectively.

Agrippina. (C.) Red, velvety crimson, moderately double; fine in buds; valuable for planting out. One of the best.

Bon Silene. (T.) Rosy carmine, shaded with salmon; fragrant and very free flowering. Valuable for the buds.

Catherine Mermet. (T.) Bright flesh color, with the same peculiar luster possessed by La France. Large, full and beautiful. One of the finest Teas.

Cornelia Cook. (T.) Pale yellowish white, tinged with flesh. A superb Rose when well grown.

Douglass. (C.) Crimson; medium size; semi-double; fine buds.

General Tartas. (T.) Deep crimson; often mottled; of special value for its buds.

Gloire de Dijon. (T.) Climber. A combination of salmon, orange and buff; flower large and of good globular form; hardy.

Hermosa. (B.) Bright rose; a most constant bloomer; hardy; one of the best.

Madam Welch. (T.) Pale yellow, orange center. Large, full, of good form.

Marechal Niel. (N.) Deep yellow; very large; very full, globular; highly scented. Requires careful treatment. It should be severely pruned. The finest yellow Rose.

Niphetos. (T.) Pale yellowish white; often snowy white. Long, large buds. Very beautiful.

Papa Gontier. (T.) Rose, shaded yellow, reverse of petals crimson; large, semi-double, fragrant, free-growing, profuse flowering; very popular for winter forcing.

Perle des Jardins. (T.) A beautiful straw color, sometimes deep canary; very large, full, and of fine form; stiff shoots or stems, and very free-flowering. Now established as the most popular yellow Rose for forcing.

Safrano. (T.) Saffron and apricot. A very free bloomer. One of the oldest and best varieties, especially when used in the bud state.

Ornamental Department • Roses

Souvenir de la Malmaison. (B.) Pale flesh, with a fawn shade ; very large ; showy, beautiful. An old favorite.

Sunset. (T.) A sport from *Perle des Jardins*. Identical in every respect with that variety, except that its color, instead of being a canary-yellow, is of a rich tawny shade of saffron and orange.

The Bride. (T.) A lovely, pure white Tea Rose of large size. Admirable for forcing as well as for summer flowering. The buds have more substance than *Niphetos*, are full and double, and possess the good characteristics of *Catherine Mermet*.

POLYANTHA ROSES

This charming class is from Japan and of recent introduction. The foliage and flowers are very small, the latter being produced in clusters. They are of slender growth and produce extremely beautiful little flowers. They are quite as hardy as many well known varieties that are considered perfectly hardy. We offer four of the choicest.

Cecil Brunner. Salmon-pink, deep scarlet center. Very small flower, delicately scented.

Clothilde Soupert. Medium sized, very double, produced in clusters ; pearly white, with rose lake center, sometimes producing red and white flowers on the same plant. Considered one of the best, if not the best of this class.

Perle des Jardins. (See preceding page.)

Ornamental Department · Roses

Paquerette. An old standard white variety; flowers pure white, about an inch in diameter. Flowers in clusters from five to fifty blossoms.

Perle d'Or. Nankeen-yellow, with orange center. Bush very branching, blooming in clusters of twenty to thirty flowers.

ROSA RUGOSA. Japan Rose

This beautiful race of Roses was first introduced by Commodore Perry. Grows 4 or 5 feet high, beautiful, large, glossy foliage, distinctly wrinkled. The flowers are 3 inches across, produced in terminal clusters of ten to twenty flowers, and bloom all season, succeeded by large, handsome, orange-scarlet fruits. In two colors, red and white.

TRAILING OR CREEPING ROSE, WICHURAIANA

A low, trailing species, its stems creeping on the earth almost as closely as the Ivy. The flowers are produced in the greatest profusion, in clusters on the end of every branch, after the June Roses are past, from the first week in July throughout the month. They are pure white, $1\frac{1}{2}$ to 2 inches across, with yellow stamens, and have the strong fragrance of the Banksia Rose. It is quite hardy, with the exception of the latest immature growth, which may be cut back to some extent. This variety has proved valuable as a covering for banks, rockeries, etc., and for use in cemeteries. A distinct and valuable variety from Japan.

TREE ROSES

These are grafted on tall stems of the Dog Rose, forming a half weeping head 3 or 4 feet from the ground. They can be furnished by colors only; but the particular varieties grafted in the head cannot be named. Orders must be by color only. Red, White, Pink, Yellow.

Rosa Wichuraiana.

California Privet.

HEDGE PLANTS

Hedges are valuable as a defense against animals, as windbreaks to protect orchards, gardens or farms unduly exposed, and as ornamental fences or screens to mark the boundaries of a lawn or cemetery lot.

HEDGES FOR DEFENSE AND ORNAMENT

LOCUST, Honey. For turning cattle and as farm hedge, is much the best in the northern states. It is of vigorous growth, perfectly hardy; thrives with ordinary care, and is sufficiently thorny to be impenetrable. It bears the shears well.

QUINCE, Japan. See description, page 58.

ORANGE, Osage. In the south and southwest is in great favor. Too tender for this climate.

HEDGES FOR WINDBREAKS

SPRUCE, Norway, is the best. Its vigorous habit, rapid, dense growth, when properly sheared or pruned, large size and entire hardiness, are characteristics not easily obtained in any other evergreen.

ARBORVITAE, American, comes next. Belts of Pines are also useful as a protection.

ORNAMENTAL HEDGES OR SCREENS

American and Siberian Arborvitae, Norway Spruce, and especially **Japan Quince** and **Purple Berberry**, all described in their appropriate places in this catalogue, make beautiful screens and hedges.

PRIVET, California. A pretty shrub, with smooth, shining leaves and spikes of white flowers, also makes a beautiful hedge. Perfectly hardy.

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