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SELECT LIST of TESTED VARIETIES of

TREES

FRUIT AND ORNAMENTAL

SMALL FRUITS, SHRUBS,
VINES, HARDY PLANTS,
BULBS, ROSES, ETC.

WESTERN NEW YORK
NURSERY COMPANY
ROCHESTER, NEW YORK

CATALOGUE
OF
Fruit and Ornamental Trees,
Small Fruits, Shrubs, Vines,
Hardy Plants, Bulbs,
Roses, Etc.

IN FOUR PARTS :

PART I.—Fruit Trees and Small Fruits.

PART II.—Ornamental Trees, Shrubs, Paeonies, Hardy Border Plants.

PART III.—Bulbs, Etc.

PART IV.—Roses.

FOR SALE BY
WESTERN NEW YORK NURSERY CO.
ROCHESTER, N. Y.

PREFACE.

In presenting this, the second edition of our Descriptive Catalogue, illustrated with many half-tone engravings, we wish to state that it includes such of the old varieties as are still considered desirable, and such new varieties from home and abroad as have been most thoroughly tested here at great expense and found worthy of wide dissemination. Our collections of tested stock embrace varieties suited to the different soils and climates of this great country.

The greatest possible care is exercised so that customers will receive healthy, vigorous trees or plants, true to name. The lifting, handling, packing and shipping receive our personal attention, so that we can promise our patrons that their orders, large or small, will be properly executed.

It is our aim and intention to supply only the best stock at the lowest prices consistent with the quality of the goods offered.

Our traveling Agents employed in soliciting orders are men of well-known integrity, who are bound to act faithfully and impartially for the interest of their customers as well as of their employers. Parties entrusting orders to them may depend upon their being filled in the best manner as far as possible. It often happens, however, that certain varieties of fruits and other articles are ordered, which cannot be supplied, in consequence of the stock being exhausted by previous orders, or of some other unforeseen cause. IT IS NOT REASONABLE TO SUPPOSE THAT WE CAN SUPPLY EVERYTHING CALLED FOR; WE DO ALL IN OUR POWER, AND TRUST THAT OUR CUSTOMERS WILL BE SATISFIED WITH THIS.

We are very grateful for the liberal patronage bestowed upon us by the public, and solicit a continuance of the same.

April, 1902.

WESTERN NEW YORK NURSERY CO.

Where the orders are filled and packed. The house at the left, in which the trees are packed is 136 feet by 25 feet. The cellar "p" is 100 feet by 36 feet. Beyond the row of Lombardy Poplars, are the Genesee River and the tracks of the Lehigh, the Erie and the Pennsylvania R. Rs.

A partial view of the heeling-in grounds at the Nursery, showing selected trees trenched, ready to be used in filling orders.
Notice row of Lombardy Poplars with the Genesee River in the rear.

PART I.

FRUIT DEPARTMENT.

HINTS ON TRANSPLANTING, ETC.

We cannot attempt to give complete directions on all points connected with Tree Planting, but simply a few hints on the more important operations. Every man who purchases a bill of trees should put himself in possession of some treatise on tree culture, that will furnish him with full and reliable instructions on the routine of management. Transplanting is to be considered under the following heads :

1st. THE PREPARATION OF THE SOIL.—For fruit trees the soil should be *dry*, either natural or made so by thorough drainage, as they will not live or thrive on a soil constantly saturated with stagnant moisture. It should also be well prepared by twice plowing, at least, beforehand, using the subsoil plow after the common one at the second plowing. On new, fresh lands, manuring will be unnecessary; but on lands exhausted by cropping, fertilizers must be applied, either by turning in heavy crops of clover, or well decomposed manure or compost. To ensure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn or potatoes.

2d. THE PREPARATION OF THE TREE.—In regard to this important operation, there are more fatal errors committed than in any other. As a general thing, trees are planted in the ground precisely as they are sent from the Nursery. In removing a tree, no matter how carefully it may be done, a portion of the roots are broken and destroyed, and consequently the balance that existed in the structure of the tree is deranged. This must be restored by a proper pruning, adapted to the size, form and condition of the tree, as follows :

STANDARD ORCHARD TREES.—These, as sent from the Nursery, vary from five to seven feet in height, with naked stems or trunks, and a number of branches at the top forming a head. These branches should all be cut back to within three or four buds of their base. This lessens the demand upon the roots, and enables the remaining buds to push with vigor. Cut off smoothly all bruised or broken roots up to the sound wood. In case of older trees, of extra size, the pruning must be in proportion; as a general thing it will be safe to shorten all the previous year's shoots to three or four buds from their base, and where the branches are very numerous some may be cut out entirely.

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

YEARLING TREES INTENDED FOR PYRAMIDS.—Some of these may have a few side branches, the smallest of which should be cut clean away, reserving only the strongest and the best placed. In other respects they should be pruned as directed for trees of two years' growth. Those having no *side branches* should be cut back so far as to insure the production of a tier of branches within twelve inches of the ground. A strong yearling, four to six feet, may be cut back about half, and the weaker ones more than that. It is better to cut too low than not low enough, for if the first tier of branches be not low enough the pyramidal form cannot afterwards be perfected.

3rd. PLANTING. Dig holes in the first place large enough to admit the roots of the tree to spread out in their natural position; then, having the tree pruned as before directed, let one person hold it in an upright position, and the other shovel in the earth, carefully putting the finest and the best from the surface in among the roots, filling every interstice, and bringing every root in contact with the soil. When the earth is nearly filled in, a pail of water may be thrown on to settle and wash in the earth around the roots; then fill in the remainder and tread gently with the foot. The use of water is seldom necessary, except in dry weather early in fall or late in spring. Guard against planting *too deep*; the trees, after the ground settles, should stand in this respect as they did in the nursery. Trees on Dwarf stock should stand so that *all the stock* be under the ground, and *no more*. In very dry, gravelly ground the holes should be dug twice the usual size and depth, and filled in with good loamy soil.

4th. STAKING.—If trees are tall and much exposed to winds, a stake should be driven in the ground close to the tree, to which it should be tied in such a manner as to avoid chafing. A piece of matting or cloth may be put between the tree and the stake.

5th. MULCHING.—When the tree is planted throw around it as far as the roots extend, and a foot beyond, five or six inches deep of rough manure or litter. This is particularly necessary in dry ground, and is highly advantageous everywhere both in spring and fall planting. It prevents the ground from baking or cracking, and maintains an equal temperature about the roots.

6th. AFTER-CULTURE.—The grass should not be allowed to grow around young trees after being planted, as it stunts their growth. The ground should be kept clean and loose around them until, at least, they are of bearing size.

TREATMENT OF TREES THAT HAVE BEEN FROZEN IN THE PACKAGES OR RECEIVED DURING FROSTY WEATHER.—Place the Packages, unopened, in a cellar or some such place, cool, but free from frost, until perfectly thawed, when they can be unpacked, and either planted or placed in a trench until convenient to plant. Treated thus, they will not be injured by the freezing. Trees procured in the fall for spring planting, should be laid in trenches in a slanting position to avoid the winds; the situation should also be sheltered and the soil dry. A mulching on the roots and a few evergreen boughs over the tops will afford good protection.

DISTANCE BETWEEN TREES OR 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 (bushes), 6 feet apart.

CURRENTS, GOOSEBERRIES AND RASPBERRIES, 3 to 4 feet apart.

BLACKBERRIES, 6 to 7 feet apart.

GRAPES, 8 to 10 feet apart.

STRAWBERRIES. (See under Strawberries.)

NUMBER OF TREES OR PLANTS ON AN ACRE AT VARIOUS DISTANCES.

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

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.

TREES PRUNED AND UNPRUNED.

HOW TO PREPARE FRUIT TREES FOR PLANTING.

Illustrations showing how they should be pruned before planting. (See above cut.) In each case an example is given of an unpruned and pruned tree. No. 1. Standard, with stem or trunk 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.

TERMS USED IN DESCRIBING THE HABIT OF GROWTH.

Referring to young trees of two to four years' growth.

VIGOROUS.—Being those varieties of strong, rapid growth. FREE.—Varieties which rank next to above in growth. MODERATE.—Varieties which make a fair growth, some being slender growers, others slow growers.

THE PACKING SEASON.

The spring packing and shipping season usually opens here about the 1st of April. The planting season is not regulated by any particular month or day, nor by the state of vegetation where the planting is to be done, but *by the condition of the trees to be planted*. Hence, trees can be sent with safety from Rochester to localities several degrees south, even if they do not arrive until the ordinary transplanting season in that locality has passed. In the autumn, we usually commence digging and packing the first week in October.

FALL PLANTING.

The spring planting season is often of such short duration that much intended work is necessarily omitted or postponed. In the fall there is abundance of time to plan and plant, and the work therefore can frequently be done as satisfactorily as in the spring.

The once prevalent notion that fall planting is not advantageous, has proved to be erroneous, and with the exception of evergreens, almost everything called hardy can be planted successfully in the autumn, except in some regions where the winters are extremely severe, or in exposed situations, in which case spring planting is absolutely necessary.

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 italicised 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, moulds, 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 upon 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 for 5-10 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.	<i>Just before blossoms open, Bordeaux. For bud moth, Arsenites when leaf buds open.</i>	<i>When blossoms have fallen, Bordeaux and Arsenites.</i>	<i>8-12 days later, Bordeaux.</i>	<i>10-14 days later, Bordeaux.</i>	<i>10-14 days later, Bordeaux.</i>
CHERRY..... (Roi, aphid, slug, curculio.)	As buds are breaking, Bordeaux; when aphids appear, Kerosene emulsion.	When fruit has set, Bordeaux; if slugs appear, lime. Heliothere.	<i>10-14 days if not appears, Bordeaux.</i>	<i>10-14 days later, Ammoniacal copper carbonate.</i>		
CURRENT..... (Mildew, worms.)	<i>At first sight of worms, Arsenites.</i>	<i>10 days later, heliothere. If leaves mildew, Bordeaux.</i>	If worms persist, Heliothere.			
GOOSEBERRY..... (Mildew, worms.)	<i>If leaves expand, Bordeaux. For worms as above.</i>	<i>10-14 days later, Bordeaux. For worms as above.</i>	<i>10-14 days later, Ammoniacal copper carbonate. For worms as above.</i>	<i>10-14 days later, repeat third.</i>		
GRAPE..... (Fungous diseases, Flea-beetle.)	In Spring, when buds swell, copper sulphate solution.	<i>When leaves are 1-1½ inches in diameter, Bordeaux. Paris green for larvae of flea-beetle.</i>	<i>When flowers have fallen, Bordeaux. Paris green as before.</i>	<i>10-14 days later, Bordeaux.</i>	<i>10-14 days later, if any disease appears, Bordeaux.</i>	<i>10-14 days, Ammoniacal copper carbonate. Make later applications of this if necessary.</i>
PEACH, NECTARINE, APRICOT..... (Roi, mildew.)	<i>Before buds swell, copper sulphate solution.</i>	<i>Before flowers open, Bordeaux.</i>	<i>When fruit has set, Bordeaux.</i>	<i>When fruit is nearly grown, Ammoniacal copper carbonate.</i>	<i>5-10 days later, repeat fourth.</i>	<i>5-10 days later repeat fourth if necessary.</i>
PEAR..... (Leaf blight, scab, psylla, codlin moth.)	As buds are swelling, copper sulphate solution.	<i>Just before blossoms open, Bordeaux. Kerosene emulsion when leaves open, for psylla.</i>	<i>After blossoms have fallen, Bordeaux and Arsenites. Kerosene emulsion if necessary.</i>	<i>8-12 days later, repeat third.</i>	<i>10-14 days later, Bordeaux. Kerosene emulsion applied forcibly for psylla.</i>	<i>10-14 days later, repeat fourth if necessary.</i>
PLUM..... (Fungous diseases, curculio.)	<i>During first warm days of early spring, Bordeaux for black fly. When and other fungous diseases are off in the fall, Kerosene emulsion for plum scale.</i>	<i>When buds are swelling, Bordeaux for black fly. During mid-winter, Kerosene emulsion for plum scale.</i>	<i>When blossoms have fallen, Bordeaux. Begin before buds start in spring. Kerosene emulsion for plum scale.</i>	<i>10-14 days later, Bordeaux. For trees for curculio every 2-4 days. For San Jose scale, Kerosene emulsion when young appear in spring and summer.</i>	<i>10-20 days later, Bordeaux for black knot. Later applications may be necessary to prevent leaf spot and fruit rot.</i>	<i>10-20 days later, Bordeaux. Ammoniacal copper carbonate.</i>
QUINCE..... (Rust and fruit spot.)	When blossom buds appear, Bordeaux.	When fruit has set, Bordeaux and Arsenites.	<i>10-20 days later, Bordeaux.</i>	<i>10-20 days later, Bordeaux.</i>		
RASPBERRY..... BLACKBERRY..... HAWBERRY..... (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.	<i>Orange or red rust is treated best by destroying entirely the affected plants.</i>		
Rose..... (Mildew, black spot, red spider, aphid)	For mildew. Keep head-lime pipes painted with equal parts lime and sulphur. For aphid. Ammoniacal copper carbonate mixed with water to form a paste, using fine spray.	For black spot. Spray plants once a week with Kerosene emulsion. Apply to under side of foliage.	For red spider. Spray plants twice a week with Kerosene emulsion. Apply to under side of foliage.	For aphid. Spray affected parts with Kerosene emulsion when necessary.		(Kerosene emulsion must be used well diluted, as rose foliage is easily injured by it.)

SELECT APPLES.

Our principal stock of Apples consists of the following varieties, which have been well proved, and can be recommended as the *best* now in cultivation:

STANDARD TREES are those intended for Orchards; these are about five to six feet in height, with a proportionate thickness. *Some varieties are larger and more handsome than others, owing to the natural difference of growth, so that it is unreasonable to expect all varieties to be equally large and straight.* We can furnish Standard Trees of all the varieties described.

DWARF TREES for *Bushes* and *Espaliers* can be supplied of several sorts on *Paradise* stock. We propagate only those varieties which produce large, handsome fruit, mostly summer and autumn kinds; *a list of varieties furnished on application.* On the *Paradise* stock the trees are small, prolific, bear early, and are therefore desirable for small gardens or experimental orchards. They can be planted 5 or 6 feet apart, and will bear abundantly the third year after planting.

SUMMER APPLES.

CAROLINA JUNE (Red June)—Small or medium; deep red; good; productive, hardy, a *free* grower; popular at the South and West. August.

EARLY HARVEST—Medium to large size; pale yellow; tender, with a mild, fine flavor. Tree a *moderate* erect grower and a good bearer; a beautiful and excellent variety for both orchard and garden, being one of the first to ripen. Middle to end of August.

GOLDEN SWEET—Large; yellow; a very fair, fine sweet apple. Tree a *free* grower, spreading, irregular and productive. August and September.

KESWICK CODLIN—Large, oblong, pale yellow; pleasant acid; quality fair. Tree erect and very *vigorous*; bears when quite young, and abundantly; excellent for cooking. July to October.

PRIMATE—Medium size; pale yellow, with a blush on the sunny side; tender, fine grained, juicy; fine quality, mild and good; excellent dessert sort. Tree a *moderate* grower and good bearer. August and September.

RED ASTRACHAN—Large, roundish; nearly covered with deep crimson, overspread with a thick bloom; very handsome; juicy, good, though rather acid. The tree is very hardy, a *free* grower, with large foliage and a good bearer; highly esteemed on account of its fine appearance, earliness, and hardness. August.

SOPS OF WINE—Medium size, oblong; dark crimson, flesh stained with red; juicy, sub-acid. Tree a *free* grower, distinct and quite productive. August and September.

SWEET BOUGH—Large; pale yellow, sweet, tender and juicy. Tree a *moderate*, compact grower, and abundant bearer. August.

TETOSKY—A handsome Russian apple, medium size, with a yellow ground, handsomely striped with red, and covered with a whitish bloom; flesh juicy, sprightly, acid and agreeable. Tree, a *moderate*, stocky grower, very hardy and productive. July and August.

WILLIAMS' FAVORITE—Large, oblong, red; rich and excellent; a *moderate* grower and good bearer. Very highly esteemed in Massachusetts, especially around Boston, where it originated. A handsome dessert apple. August.

YELLOW TRANSPARENT—A Russian apple, medium size, roundish, oblate, slightly conical; skin pale yellow when fully mature; flesh tender, juicy, sprightly sub-acid; good; a *free* grower. August.

AUTUMN APPLES.

ALEXANDER—Origin Russian. A very large and beautiful deep red or crimson apple, of medium quality. Tree very hardy. September and October.

CHENANGO—(Sherwood's Favorite)—Large, oblong; red and yellow; very handsome; highly valued as a table or market fruit on account of its handsome appearance and fair quality. Tree a *vigorous* grower and very productive. September.

DUCHESS OF OLDENBURG—See OLDENBURG.

- FALL PIPPIN**—Very large, roundish, oblong; flesh tender, rich, and delicious. Tree a *free* grower, spreading and fine bearer; one of the most valuable varieties for table or market. An admirable baking apple. October to December.
- FAMEUSE**—(Snow Apple)—Medium size; deep crimson; flesh snowy white, tender, melting and delicious. Tree *vigorous*; one of the *finest dessert fruits*, and valuable for market; succeeds particularly well in the North. November to January.
- GRAVENSTEIN**—A very large, striped, roundish apple, of the *finest quality*. Tree remarkably rapid, *vigorous*, and erect in growth, and very productive. One of the finest fall apples. September to October.
- HAAS, OR FALL QUEEN**—Large, flat, ribbed or quartered; skin yellowish green, streaked and nearly covered with dull, brownish red; flesh white; tender, juicy, sub-acid, good. Tree very hardy and *vigorous*. Highly esteemed at the West and Southwest as a profitable market fruit and for family use. September to November.
- HURLBUT**—Fruit medium size, oblate, angular, skin yellow with red stripes, and splashed with red; flesh white, crisp, tender, juicy, sub-acid; quality good to very good. Tree *very vigorous* and a great bearer. October to December.
- JERSEY SWEET**—Medium size; striped red and green; tender, juicy and sweet; a *free* grower and good bearer; very popular, both for table and cooking. September and October.
- MAIDEN'S BLUSH**—Large, flat; pale yellow with red cheek; beautiful; tender and pleasant, but not high flavored. Tree an erect *free* grower, and a good bearer. A valuable market apple. September and October.
- OLDENBURG**—(Duchess of Oldenburgh)—A large, beautiful Russian apple; roundish; streaked red and yellow; tender, juicy, and pleasant. Tree a *vigorous*, fine grower and a young and abundant bearer. September. Succeeds well in the Northwest, where most varieties fail.
- PORTER**—Medium to large; oblong; yellow; flesh tender and of excellent flavor. Tree a *poor grower*; very popular in Massachusetts. September.
- PUMPKIN SWEET**—(Pumpkin Russet)—A very large, round, yellowish, russet apple, very sweet and rich. Tree a *vigorous*, rapid, upright grower; valuable. October and November.
- RED BIETIGHEIMER**—A rare and valuable German variety. Fruit large to very large, roundish, skin pale, cream-colored ground, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a *free* grower and abundant bearer. This is one of the largest and handsomest apples. September and October.
- ST. LAWRENCE**—Large, round; streaked red and greenish yellow; quality moderate; a productive and popular market apple in Canada. Tree hardy and a *free* grower. October.
- SNOW APPLE**—See FAMEUSE.
- STUMP**—Fruit medium size, conical; skin yellow, striped and shaded with light red; resembles Chenango; flesh firm, crisp, juicy, tender, sprightly, sub-acid. *Very prolific*. September and October.
- WALTER PEASE**—Originated in Massachusetts. Fruit very large, nearly round; color, deep red on sunny side, with splashes and stripes of red on yellow ground on the other side. Core very small; flesh white, very fine grained; quality best, mild, juicy, slightly sub-acid, with a rich, aromatic flavor. Tree very productive. September to January.
- WEALTHY**—Originated near St. Paul, Minn. Fruit medium, roundish; skin smooth, oily, mostly covered with dark red; flesh white, fine, juicy, vinous, sub-acid, very good. Tree very hardy, a *free* grower, and productive. A variety of much value on account of its great hardiness and good quality. October.

WINTER APPLES.

- BALDWIN**—Large, bright red, juicy and rich. Tree *vigorous*, upright and productive. In New England, New York, Ontario and Michigan this is one of the most popular and profitable sorts for either table or market. December to March.
- BEN DAVIS**—(New York Pippin)—A large, handsome, striped apple of good quality. Tree very hardy, *vigorous*, and productive; a late keeper; highly esteemed in the West and Southwest.

COOPER'S MARKET—(Cooper's Redling)—Medium size, conical; red, handsome; quality good; *one of the latest keepers*, and therefore very valuable. Tree hardy, a *slender* grower and productive. December to May.

DOMINIE (Wells of Ohio)—A large, fine striped apple, resembling the Rambo; a *vigorous* grower, and a profuse bearer; succeeds very well in nearly all the Western States. December to April.

ESOPUS SPITZENBURG—Large, deep red with gray spots, and delicately coated with bloom; flesh yellow, crisp, rich and excellent. Tree rather a *feeble*, slow grower, and moderate bearer; esteemed in this state as one of the very best. November to April.

FALLAWATER—A very large and handsome apple from Pennsylvania; quality good. Tree *vigorous*, bears young and abundantly. November to March.

GANO—Large, deep red; tree hardy and vigorous; an early and prolific bearer. February and March.

GIDEON—Hardy as a crab apple, vigorous, early and prolific bearer. Medium to large; rich golden yellow; flesh fine, juicy, sub-acid. Good keeper. February.

GOLDEN RUSSET—Medium size, dull russet, with a tinge of red on the exposed side; flesh greenish; crisp, juicy and high flavored. Tree a *vigorous* grower, with light colored speckled shoots, by which it is easily known; hardy, bears well; popular and extensively grown in Western New York. November to April.

GRIMES' GOLDEN—Medium to large size; skin golden yellow sprinkled with gray dots; flesh crisp, tender, juicy, sprightly; quality very good to best. Tree hardy, *vigorous*, productive. January to April.

HUBBARDSTON—Large; striped yellow and red; tender, juicy and fine; a *free* grower and great bearer. November to January.

JONATHAN—Medium size; red and yellow; flesh tender, juicy and rich; a *moderate* grower; shoots light colored, slender and spreading; very productive. One of the best varieties either for table or market. November to March.

KING—See TOMPKINS KING.

LADY APPLE—A beautiful little dessert fruit; flat, pale yellow, with a brilliant red cheek; flesh crisp, juicy and pleasant. The tree is a *moderate* grower, forms a dense, erect head, and bears large crops of fruit in clusters; the fruit sells for the highest price in New York and Philadelphia. November to May.

LONGFIELD—A new Russian variety and one of the best. Tree a strong grower and an early, abundant and annual bearer. Flesh white, fine, tender and juicy, with a rich, sprightly, sub-acid flavor. Season December to April. *Valuable for cold climates.*

LYMAN'S PUMPKIN SWEET—(Pound Sweet)—A very large, round, greenish apple, excellent for baking. Tree a *free* grower and productive. October to December.

MANN—Medium to large; deep yellow, often with a shade of brownish red where exposed; juicy, mild, pleasant, sub-acid. Tree hardy and an upright grower; an early and annual bearer, and a late keeper. January to April.

McINTOSH RED—Very hardy, *vigorous* and productive; fruit handsome and of good quality; regarded as valuable for the North. November to February.

NEWTOWN PIPPIN—One of the most celebrated of American apples, on account of its long keeping and excellent qualities, and the high price it commands abroad; but its success is confined to certain districts and soils. It attains its greatest perfection on Long Island and the Hudson. In Western New York and New England it rarely succeeds well. It requires rich and high culture, and it makes such a slow, *feeble* growth, that it has to be top grafted upon a strong growing variety. November to June.

NEW YORK PIPPIN—See BEN DAVIS.

NORTHERN SPY—Large; striped, and quite covered on the sunny side with dark crimson, and delicately coated with bloom. Flesh juicy, rich, highly aromatic, retaining its freshness of flavor and appearance till July. The tree is a remarkably rapid, erect grower, and a great bearer. Like all trees of the same habit it requires good culture and an occasional thinning out of the branches, to admit the sun and air fully to the fruit. *One of the finest late keeping apples.*

NORTHWESTERN GREENING—New, originated in Waupaca County, Wis. Fruit medium to large, averaging from seven to eight ounces each and very uniform in size. Color greenish yellow, flesh juicy, firm and fine grained, very fine quality and flavor. Tree is *very hardy* and a thrifty grower, an early and continuous bearer; one of the longest keepers known; with proper care can be kept throughout the entire year. January to June.

PECK'S PLEASANT—Large; pale yellow, with brown cheek; very smooth and fair; flesh firm and rich, approaching the flavor of a Newtown Pippin. Keeps well. Tree a *moderate*, erect grower and good bearer. November to April.

PEWAUKEE—Origin Pewaukee, Wis. Raised from the seed of the Duchess of Oldenburgh. Fruit medium to large, roundish, oblate; skin bright yellow, striped and splashed with dark red; flesh white, tender, juicy, sub-acid. *Esteemed especially for cold climates, on account of its hardiness.* Tree *vigorous.* January to May.

RAMBO—Medium size; streaked and mottled yellow and red; tender, juicy, mild flavored. Tree a *vigorous* grower and good bearer. A widely cultivated and esteemed old variety. Autumn in the South; October to January in the North.

RED CANADA (Steele's Red)—Medium size; red with white dots; flesh rich, sub-acid and delicious. Tree a *moderate*, slender grower. A superior fruit for table or market. November to May.

RHODE ISLAND GREENING—Everywhere well-known and popular; tree spreading and *vigorous*; always more or less crooked in the nursery; a great and constant bearer in nearly all soils and situations; fruit rather acid, but excellent for dessert and cooking. Toward the South it ripens in the fall, but in the North keeps well until March or April.

ROME BEAUTY—Large; yellow and bright red; handsome; medium quality; a *moderate* grower; good bearer. December to March.

ROXBURY RUSSET—Medium size to large; surface rough; greenish, covered with russet. Tree a *free* grower, spreading, and a great bearer; keeps till June. Its great popularity is owing to its productiveness and long keeping.

SEEK-NO-FURTHER—Medium to large; striped with dull red and slightly russeted; flesh tender, rich, and excellent. Tree a *free* grower, and fruit always fair. November to February.

SMITH'S CIDER—Large, handsome, red and yellow; juicy, acid; quality medium; a *moderate* grower and good bearer; succeeds well in the South and West—not so well here. November to February.

SMOKEHOUSE—Origin, Lancaster Co., Pa. Fruit rather above the medium, roundish, oblate, skin yellow, shaded and splashed with crimson, and sprinkled with large gray and brown dots. Flesh yellowish, firm, juicy, rather rich, sub-acid. Valued for culinary uses. December to February.

SPITZENBURG—See ESOPUS SPITZENBURG.

STARK—An early and abundant bearer. Fruit large and valued for its long keeping; skin greenish yellow, shaded, sprinkled and striped with light and dark red, nearly over the whole surface, and thinly covered with light brown dots; flesh yellowish, moderately juicy, mild, sub-acid. Good. January to May.

SUTTON BEAUTY—Fruit medium to large, roundish; skin waxen yellow, striped with crimson; flesh whitish, tender, juicy, sub-acid; quality very good; keeps remarkably well. Tree a *free*, handsome grower, and productive.

SWAAR—Large, pale lemon yellow, with dark dots; flesh tender, rich and spicy. Tree a *moderate* grower with dark shoots and large gray buds; with good culture it is one of the very best of apples. November to May.

TOLMAN'S SWEET—Medium size; pale, whitish yellow, slightly tinged with red; flesh firm, rich and very sweet; excellent for cooking. Tree a *free* grower, upright and very productive. November to April.

TOMPKINS KING—A superb red apple of the largest size and finest quality. Tree a *vigorous* grower and a good bearer; hardy. November to March.

TWENTY-OUNCE—A very large, showy, striped apple, of fair quality. Tree a *free*, spreading grower, and a fine bearer; excellent for baking, and of pleasant flavor, though not rich; very popular in the markets. October to January.

VANDEVERE (Newtown Spitzenburg of the West)—Medium size; yellow, striped with red, and becoming deep crimson next the sun; flesh yellow, rich and fine. Tree a *free* grower and good bearer; succeeds best on light, warm, dry soils. October to March.

- WAGENER**—Medium to large size; deep red in the sun; flesh firm, sub-acid and excellent. Tree a *vigorous*, handsome, upright grower, and very productive; an excellent variety. December to May.
- WALBRIDGE**—Medium size, oblate regular; skin pale yellow shaded with red; flesh crisp, tender, juicy. *Esteemed, especially in cold climates, for its hardiness and productivity.* Tree *very vigorous*. January to May.
- WHITE PIPPIN**—A fine apple resembling the Newtown Pippin. Much grown and highly esteemed in some parts of Ohio and other Western States. Tree a *vigorous* grower and good bearer. January to March.
- WINE SAP**—Large; roundish; deep red; medium quality; keeps well. Tree a *moderate* grower and good bearer; succeeds well in the West, and is there valuable and popular. Not grown here in orchards. December to May.
- WOLFE RIVER**—Very large; beautiful red in the sun, on a yellow ground; strong grower and a good bearer. Original tree in Wisconsin is 30 years old, very healthy and *extremely hardy*. December to March.
- YELLOW BELLFLOWER**—Large; yellow, with a tinge of red on the sunny side; flesh crisp, juicy, with a sprightly, aromatic flavor; a beautiful and excellent fruit. Valuable for baking. The tree is a *free* grower and a good bearer. November to April.
- YORK IMPERIAL**—Medium; whitish, shaded with crimson in the sun, firm, crisp, juicy, pleasant, mild, sub-acid. Tree moderately vigorous and productive. Very popular in Pennsylvania. November to February.

THE BARRY APPLE.
[REDUCED.]

VALUABLE NEW VARIETIES.

BARRY—We take great pleasure in offering this fine new seedling apple. It has been thoroughly tested, so that we have no hesitation in recommending it to our customers as a novelty of sterling merit. Fruit oblate conical, yellow ground marbled with carmine on sunny side; flesh firm, crisp, acid; quality good. A great keeper, lasting in perfection till June. Tree a *vigorous* grower.

BISMARCK—Introduced from New Zealand. Comes highly recommended. Described as follows: Very large, remarkably handsome and showy; flesh yellow, tender, juicy; quality good; extremely hardy and prolific, and bears early. Season November to February.

COX'S ORANGE PIPPIN—Medium size, roundish, ovate; color yellow, suffused with red streaks; flesh crisp, juicy, sweet, and best in quality. This is regarded by the English as the finest apple in cultivation, either as a dessert fruit or for culinary purposes. Tree a moderate, stocky grower. October to April.

CRAB APPLES.

HYSLOP'S—Large; deep crimson; very popular at the West on account of its large size, beauty, and hardness; October. Tree remarkably *vigorous*.

LARGE RED SIBERIAN—Nearly twice as large as the Red Siberian, but similar in appearance and quality. Tree a *free* grower. September and October.

LARGE YELLOW—Large, pale yellow, with a tint of red in the sun. Tree a *vigorous*, rapid grower. September and October.

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.

TRANSCENDENT—A beautiful variety of the Siberian Crab, red and yellow. Tree a remarkably *strong* grower. September.

VAN WYCK—Large, handsome; skin mottled with bright red; flesh white, firm, sweet. Tree a *free*, upright grower.

WHITNEY—Large, averaging one and a half to two inches in diameter; skin smooth, glossy green, striped, splashed with carmine; flesh firm, juicy, and flavor very pleasant. Tree a great bearer and *very* hardy; a *vigorous*, handsome grower, with dark green glossy foliage. Ripe latter part of August.

YELLOW SIBERIAN (Golden Beauty)—Large, and of a beautiful golden yellow color. Tree *vigorous*. September.

SELECT PEARS.

The following list includes those which have been well tested and prove valuable.

A special list of those which we find particularly well suited to the Quince stock will be found at the end of the general list.

GATHERING PEARS.—One of the most important points in the management of Pears, is to gather them at the proper time.

Summer Pears should be gathered at least ten days before they are ripe, and Autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

THIN THE FRUIT.—We cannot urge too strongly the following suggestion: When Pear trees are heavily laden, the fruit should be thinned when about *one-third* grown; else the fruit will be poor and the trees injured.

STANDARD TREES, for Orchards, are on Pear stocks, and generally of two to three years growth from the bud. The size varies from four feet upwards, according to the growth of the variety.

DWARF AND PYRAMIDAL TREES.—These are on Quince stocks, and can be supplied from two to three years old, from the bud. Those of three years growth bear the first or second year after planting.

SUMMER PEARS.

BARTLETT—One of the most popular pears; large, buttery, and melting, with a rich musky flavor. A *vigorous*, erect grower; bears young and abundantly. Middle to last of September.

CLAPP'S FAVORITE—A splendid pear, resembling the Bartlett and ripening a few days earlier; a cross between that variety and the Flemish Beauty; the tree is hardy and *vigorous* either on the pear or quince. Care should be taken to pick the fruit at least ten days before it would ripen upon the tree.

- GIFFARD** (Beurre Giffard)—A beautiful and excellent variety. Tree slender but healthy; hardy; a *moderate* grower and very productive. Middle of August.
- KOONCE**—Medium to large, very handsome, spicy, juicy, sweet, very good. Season very early. Tree *vigorous*, free from blight, and a better grower than Kieffer.
- MANNING'S ELIZABETH**—Below medium size; bright yellow, with a lively red cheek, dotted with brown and red dots; flesh juicy and melting. A beautiful dessert fruit. Tree a *moderate* grower. Last of August.
- MARGARET** (Petite Marguerite)—Medium size; skin greenish yellow, with brownish red cheek, and covered with greenish dots. Flesh fine, melting, juicy, vinous, and of *first quality*. Tree a *vigorous*, upright grower, and an early and abundant bearer. The finest pear of its season. Last of August.
- SOUVENIR DU CONGRES**—Large to very large, larger than Bartlett or Clapp's Favorite; skin smooth, bright yellow when the fruit is fully matured, with the parts exposed to the sun brilliant red or carmine. The flesh, while it is like that of the Bartlett, is free from its strong musky aroma, and is firm to the core. August and September. *Moderate* grower.
- SUMMER DOYENNE** (Doyenne D'Ete)—A beautiful, melting, sweet pear, rather small. Tree a *vigorous* grower and good bearer. First of August.
- TYSON**—Rather above medium size; melting, juicy, sweet, and pleasant. Tree very *vigorous* and rapid grower; bears abundantly every year; one of the best summer varieties. August.
- WILDER 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.

- ANGOULEME** (Duchesse d'Angouleme)—The largest of all our good pears. Succeeds well on the pear, but it attains its highest perfection on the quince, and it is a beautiful and *vigorous* tree. October and November.
- BOSC** (Beurre Bosc)—A large and beautiful russet pear; very distinct, with a long neck; melting, or nearly so, high flavored and delicious. A *moderate* grower and rather irregular; bears well. We top-graft in order to get good standard trees. It does not succeed on the quince, and in order to obtain dwarf trees it must be double-worked. September to October.
- BOUSSOCK**—A large pear of good quality, resembling the White Doyenne. Tree a very *vigorous*, rapid grower and abundant bearer. September.
- DOYENNE WHITE**—A well known and almost universally esteemed variety of the highest excellence. Tree a *vigorous* grower, productive and hardy; succeeds best in most parts of the West. October.
- FLEMISH BEAUTY**—A large, beautiful, melting, sweet pear. Tree very hardy, *vigorous* and fruitful; succeeds well in most parts of the country. September and October.
- FREDERICK CLAPP**—Size above medium; form generally obovate; skin thin, smooth, clear lemon yellow; flesh fine grained, very juicy and melting, flavor sprightly, acidulous, rich and aromatic; season October 15 to November 1; quality *very good to best*. Tree a *vigorous* or *free* grower, and somewhat spiny. Does best as a standard.
- HARDY** (Beurre Hardy)—A large pear; cinnamon russet; melting and fine. Tree a *strong* grower and good bearer. *One of the finest pears*. October.
- HOWELL**—One of the finest American pears; large, handsome; sweet, melting. Tree very *vigorous*, hardy and productive. September and October.
- KIEFFER**—Said to have been raised from seed of the Chinese Sand Pear accidentally crossed with Bartlett or some other kind. Large; skin rich golden yellow, sprinkled thickly with small dots and often tinted with red on one side; flesh slightly coarse, juicy, melting, with a pronounced quince flavor. Tree very *vigorous* and an early and great yielder. October and November.

LOUISE BONNE OF JERSEY—A large, beautiful, first-rate pear; yellow with a dark red cheek; melting, buttery and rich. Tree a *vigorous*, erect grower and most abundant bearer; *best on the quince*. September and October.

SECKEL—The standard of excellence in the pear; small, but of the highest flavor. Tree a stout, *slow*, erect grower. September and October.

SHELDON—A pear of the very first quality; large, round, russet and red; melting, rich and delicious. Tree *vigorous*, erect and handsome, and bears well when grown on the pear. It must be *double-worked* on the quince. October.

SUPERFIN—A large, fine pear, very juicy and melting, with a rich, pleasant and sprightly sub-acid flavor; all things considered, one of the best pears known to cultivators. Its valuable qualities are not sufficiently appreciated. Tree *vigorous*. September and October.

VERMONT BEAUTY—Medium size; yellow, covered on sunny side with bright carmine red; rich, juicy, sub-acid. Ripens immediately after Seckel. Very hardy.

WORDEN SECKEL—A seedling of Seckel. Fruit medium size, borne in clusters, juicy, buttery, fine-grained, with a flavor and aroma fully equal to that of its parent, which it surpasses in size, beauty, and keeping qualities. Ripens in October, but will keep in good condition till December.

LATE AUTUMN AND EARLY WINTER PEARS.

DISH OF ANJOU.

[REDUCED.]

ANJOU (Beurre d'Anjou)—A large, handsome pear, buttery, and melting, with sprightly vinous flavor; keeps into midwinter. 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 a dwarf. Keeps until the winter holidays, when it commands very high prices in the market.

The Rural New Yorker says: There are few lovers of pears that, after they have eaten their first well-grown, well-ripened Anjou, do not ask its name with a view to buying more for immediate use, or planting Anjou trees in their own gardens or orchards. If a vote among all the judges of pears in the country were taken as to which is the best variety of its season, we think that the Anjou would be elected by an overwhelming majority.

CLAIRGEAU (Beurre Clairgeau)—Very large; pyriform; yellow and red; handsome and attractive; flesh yellowish; nearly melting; keeps sound a long time after being gathered. Tree a *free* grower, and an early abundant bearer; a magnificent market fruit.

DANA'S HOVEY—Small, but of very fine quality, and keeps well. The tree has much the habit of the Seckel, and is a *moderate* grower.

DISH OF DORSET PEARS.

[REDUCED.]

DORSET—A very handsome and showy late-keeping pear. Large, golden yellow ground, with bright red on sunny side; flesh juicy, melting, sweet, of good quality. Keeps and ships well and is a valuable late pear. Ripe in February, but keeps in perfection till May. Tree a *vigorous* grower.

LAWRENCE—Size medium to large, obovate; golden yellow; flesh melting, with a pleasant aromatic flavor. Tree a *moderate* grower and an abundant bearer; *one of the most valuable early winter pears*.

WINTER NELIS—One of the best early winter pears; medium size; dull russet; melting and buttery, with a rich, sprightly flavor. Tree a *slender, straggling*, but free grower. Bears heavy crops regularly. Top-grafted trees.

LATE WINTER PEARS.

EASTER BEURRE—A large, roundish, oval fruit, yellow with a red cheek; melting and rich. Tree a *moderate* grower and most abundant bearer; best *on the quince*; keeps *all winter*.

JOSEPHINE OF MALINES—Medium to large, roundish; pale straw color; flesh rose-colored, melting and delicately perfumed; first quality; tree a *moderate*, irregular grower, with small leaves; fruit borne in clusters; succeeds well on the quince, though not a handsome grower. This variety improves as the tree advances in age. One of the most delicious of our long-keeping table pears, and it deserves extensive culture.

P. BARRY—One of the long-keeping Fox seedlings. Large, pyriform; skin orange yellow, covered with russet dots and blotches; flesh very juicy, buttery, fine grained; flavor sprightly, rich, excellent. The best late winter pear. Resembles Anjou in texture of flesh, and Winter Nelis in color of skin and juiciness of flesh. Tree a poor grower and must be top-grafted. Ripe in April.

POUND—A monstrous fruit, and very beautiful; yellow with red cheek. For stewing. Tree a *moderate* grower and productive.

PEARS OF RECENT INTRODUCTION.

B. S. FOX—May be compared as to texture and quality with Anjou, but ripening in October. Stem short; color a beautiful yellow russet when ripe; flesh fine grained, very juicy, vinous; sound to the core. One of the most valuable introductions in pears of recent years.

COL. WILDER—One of the longest keeping pears. Large, pyriform, oblong, inclining to oval; skin yellow, profusely dotted and marbled with russet; flesh melting, full of juice, sweet; a delicious pear; keeps till March. A fair grower.

SPECIAL COLLECTION OF PEARS.

For Cultivation on the Quince.

Our dwarf Pear Trees are budded on Quince stock. Dwarf trees of the following varieties set out here thirty-five years ago are still in a flourishing condition. Dwarfs must always be planted sufficiently deep to cover the quince stock two or three inches. We specially recommend:

SUMMER—Clapp's Favorite, Margaret.

AUTUMN—Angouleme, Boussock, Louise Bonne of Jersey, Superfin.

WINTER—Anjou, Easter Beurre, Lawrence, Josephines of Malines.

SELECT CHERRIES.

The cherry succeeds well on dry soils, and is susceptible of being trained in any form that taste or circumstances may require.

For orchards where there is ample room for large trees, and in climates where it is not subject to the bursting of the bark, standards with four or five feet of clean trunk are preferable.

For door-yards, where shade and ornament are taken into account, standards of the free growing sorts, with erect habit and large foliage, are the most suitable.

For fruit gardens, and particularly those of moderate extent, and in localities where the bark of the trunk is liable to burst, the pyramidal or conical trees, dwarfs or low standards, with two or three feet of trunk, and the dwarfs, branching within a foot of the ground, are the most appropriate and profitable.

STANDARD TREES are on Mazzard stocks. The Heart and Bigarreau Cherries are rapid, erect growers, and make large and beautiful trees. The Duke and Morello varieties *grow slowly, and do not attain a large size*, but are very suitable for dwarfs, and generally more hardy.

HEART CHERRIES.

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. Ripe beginning of 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.

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.

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.

ELTON—Large pointed; pale yellow, nearly covered with light red; half tender, juicy, rich and delicious. Tree very *vigorous*, spreading and irregular. End of June.

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

BIGARREAU CHERRIES.

These are chiefly distinguished from the preceding class by their firmer flesh. Their growth is vigorous, branches spreading, and foliage luxuriant, soft and drooping.

NAPOLEON—A magnificent cherry of the largest size; pale yellow, with a bright, red cheek; flesh very firm, juicy and sweet. Tree a *vigorous*, erect grower, and bears enormous crops, ripens late; valuable for canning.

ROCKPORT—Large; pale amber in the shade, light red in the sun; half tender, sweet and good. Tree *vigorous*, erect and beautiful. Ripe same time as Black Tartarian.

SCHMIDT'S BIGARREAU—This noble cherry originated in Belgium. The tree is remarkably vigorous, hardy and productive. Fruit grows in clusters, and is of the largest size; skin deep black color; flesh, dark, tender, juicy, with a fine rich flavor; stone small. A decided acquisition to our list of cherries. June.

WINDSOR—A seedling originated at Windsor, Canada. Fruit large, liver-colored, quite distinct; flesh *remarkably firm* and of fine quality. Tree hardy and very prolific. A *very 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 acid fruit invariably. These two classes are peculiarly appropriate for Dwarfs and Pyramids on the Mahaleb stocks and their hardiness renders them well worthy of attention in localities where the Hearts and Bigarreus are too tender.

ARCH DUKE—Large, bright red, but becomes very dark when fully ripe; flesh melting, juicy, rich, sub-acid. Tree rather more *vigorous* and upright than the May Duke; hardy and prolific. Ripe first and second weeks in July.

BELLE MAGNIQUE—Large, late, red, excellent for cooking and fine for table when fully ripe; rather acid, tender, juicy and rich. Tree a slow grower, but a most profuse bearer. Last of July.

DYEHOUSE—Partakes of both the Duke and Morello in wood and fruit; a very early and sure bearer; ripens a week before Early Richmond, and as productive. June.

EARLY RICHMOND—An early red, acid cherry; very valuable for cooking early in the season. Ripens through June. Tree a *free* grower, hardy, healthy and very productive.

EMPRESS EUGENIE—Large, dark red; flesh juicy, rich; tree *robust* and moderately productive.

LATE DUKE—Large; light red, late and excellent. Tree *robust*, and makes a nice dwarf or pyramid. Valuable. End of July.

MAY DUKE—An old, well known, excellent variety; large; dark red; juicy, sub-acid, rich. Tree hardy, *vigorous* and fruitful; ripens a long time in succession; fine for dwarfs and pyramids. Middle of June.

MONTMORENCY ORDINAIRE—A beautiful, large, red acid cherry; larger and finer than Early Richmond, and fully ten days later. Being extraordinarily prolific and very hardy, it can be recommended as a variety of great value. Valuable for canning and preserving. Tree a *free* grower.

MORELLO ENGLISH—Large; dark red, nearly black; tender, juicy, acid, rich. Tree dwarf and slender; makes a fine bush on the Mahaleb. If trained on a north wall it may be in use all the month of August. Valuable.

OLIVET—Large; very shining, deep red; tender, rich and vinous, with a very sweet, sub-acidulous flavor.

OSTHEIM—A very hardy cherry, imported from St. Petersburg, Russia. Color dark red; flesh very dark, juicy with a sub-acid flavor. Its hardiness and productiveness render it valuable. Middle of July.

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.

ROYAL DUKE—One of the largest and finest of this class; ripens after May Duke.

SELECT PLUMS.

HOW TO MAKE PLUM CULTURE PROFITABLE.

DISEASES AND ENEMIES OF THE PLUM.

The prevalence of that disease of the Plum commonly called "black knot," and of the insect known as *curculio*, has of late discouraged people generally from giving to the Plum its merited share of attention. It is not to be denied that these are obstacles of considerable magnitude to indifferent, slovenly cultivators; but we are satisfied from actual experience, that nothing more than ordinary industry and perseverance is required to overcome them entirely.

Nothing is more favorable to the growth of the black fungus, or knot, than *neglect*. We have seen trees growing in grass in some uncultivated dooryards transformed into a mere mass of black knots, while trees in neighboring gardens under good cultivation were entirely exempt. The preventative and remedies are, *good clean culture and prompt amputation*.

As for the *curculio*, there is no difficulty in protecting the crop from it by merely employing a little extra labor. When the trees blossom, and as the fruit begins to set, dress the ground about the Plum Trees, and make it very clean and smooth. Then, as soon as the *curculio* commences its operations, spread a large sheet prepared for the purpose around each tree, and jar it so as to shake down all fruits that have been stung, as well as all the *curculios*. Both insects and stung fruits are destroyed. This work performed daily, ensures a full crop. The work can be done quickly; a dozen trees in a garden can be attended to daily in less than half an hour's work of a man. Let those who really desire to grow fine crops of delicious plums try this system *follow it up rigidly*, and they will be successful.

BAVAY'S GREEN GAGE (Reine Claude de Bavay)—One of the best foreign varieties; as large as the Washington, and of fine flavor; roundish oval; greenish, marked with red in the sun. Tree a *free* grower and remarkably productive. Middle to end of September. Hangs long on the tree.

BRADSHAW—A very large and fine early plum; dark violet red; juicy and good. Tree erect and *vigorous*; very productive.

COE'S GOLDEN DROP—Large and handsome, oval; light yellow; flesh firm, rich and sweet; adheres to the stone. Tree a *moderate* grower and very productive. Valuable not only on account of its large size and fine appearance, but its lateness. Last of September.

FELLEMBERG (French or Italian Prune)—A fine late plum; oval, purple; flesh juicy and delicious; parts from the stone; fine for drying. Tree a *free* grower and very productive. September.

GENERAL HAND—Very large; yellow, handsome; parts freely from the stone. Tree *stocky*, vigorous and productive. September.

GERMAN PRUNE—Medium; oval; purple or blue; juicy, rich, fine. Tree *vigorous* and very productive. September.

GIANT PRUNE—Raised by Mr. Luthur Burbank of California. Large, firm, rich, sweet, delicious; prolific. Tree a strong handsome grower.

A YOUNG BEARING TREE OF THE GRAND DUKE PLUM.
[REDUCED.]

GRAND DUKE—A valuable addition to late plums; as large as the Bradshaw, of same color, and ripening latter part of September. One of the best plums for market. (See preceding page.)

GREEN GAGE—Small, but of the highest excellence. Tree a *moderate* grower. We have to top-graft it to get good trees. September.

GUEII—Fruit very large, deep bluish purple; covered with thick bloom; flesh yellowish green, coarse, sweet and pleasant; great bearer and very early; tree a hardy and rapid grower. One of the most profitable for market. Vigorous. First to middle of September.

IMPERIAL GAGE—Rather large; oval; greenish; flesh juicy, rich and delicious; parts from the stone. Tree a *vigorous* grower; very productive. 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 (New)—Fruit dark purple covered with a thin bloom; large size, specimens measuring six inches in circumference; flesh pale greenish yellow, parting freely from the stone; juicy with a pleasant flavor. It is confidently predicted by well known authorities that this variety will surely be a leading market sort. The tree is a *vigorous* grower. September.

MOORE'S ARCTIC—A hardy plum. Tree healthy, *vigorous*, an early and abundant bearer. Fruit medium; skin purplish black, thin blue bloom; flesh greenish yellow; a little coarse, juicy, sweet. Ripens early in September.

PETER'S YELLOW GAGE—Large, nearly oval; bright marbled yellow; flesh rich and juicy; very good. Tree a *free* grower. September.

POND'S SEEDLING OR FONT HILL—A magnificent English plum; form of Yellow Egg; light red changing to violet; flesh rather coarse. Tree a *vigorous* grower and most abundant bearer. One of the most attractive in cultivation. September.

PRINCE ENGELBERT—Very large and long; deep purple; rich and excellent. Tree very *vigorous*. One of the best. End of August.

QUACKENBOSS—Large, deep purple covered with a dense bluish bloom; flesh greenish yellow, sprightly, juicy, a little coarse-grained; will rank good in quality. Tree *vigorous* and a great yielder. Valuable for market. Middle of September.

A COMPARISON OF SIZES OF FIVE LEADING VARIETIES.

SHIPPER'S PRIDE—Fruit large; color dark purple, handsome and showy; flesh firm, of excellent quality; very productive and is a valuable market variety.

SHROPSHIRE DAMSON—A medium size, dark purple variety; esteemed for preserving. Tree *vigorous* and very productive. October.

TATGE—An Iowa seedling of the Lombard which it resembles in all respects, claimed to be much hardier. August.

VICTORIA (Sharp's Emperor)—One of the most magnificent plums in cultivation; of the largest size, fair quality; purplish red color. Tree a *free*, irregular grower and most abundant bearer. September.

WASHINGTON—A fine large plum; roundish; green, usually marked with red; juicy, sweet and good. Tree *robust* and exceedingly productive. End of August.

WILD GOOSE (Native)—A good variety of the Chickasaw; medium, roundish, oblong; reddish yellow; flesh juicy and flavor pleasant. Tree a *free* grower. Ripens here middle of August.

YELLOW EGG—A very large and beautiful egg-shaped yellow plum; a little coarse, but excellent for cooking. Tree a *free* grower and very productive. End of August.

YELLOW GAGE—Rather large, yellow, oval; flesh yellow, juicy and rich. Tree remarkably *vigorous* and productive. An excellent and profitable variety. Middle of August.

JAPANESE PLUMS.

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

BURBANK—Large and beautiful; clear cherry red; an abundant bearer. Valuable market variety. Ripens early in September.

OGON—Large, nearly round, bright golden yellow, with faint bloom; flesh firm, sweet, rich and dry. Tree *vigorous* and hardy. First of August.

RED JUNE—An early ripening plum; medium to large roundish conical, purplish red, handsome; flesh yellow, quality good.

SATSUMA (Blood)—Large, globular with sharp point. Color, purple and red with bloom; flesh firm, juicy, dark red or blood color, fine quality; stone very small. August.

WICKSON—One of Mr. Burbank's celebrated hybrids and considered by him one of the finest. Very large, glowing carmine, with a heavy white bloom; flesh firm, sugary, delicious; stone small. Remarkable for its long-keeping qualities. Tree of *vigorous*, upright growth.

WILLARD—Medium size, dark red, freestone, quality fair. Tree a strong grower, hardy and productive.

SELECT PEACHES.

To secure healthy, vigorous, and fruitful trees and fine fruit, the following points must be well attended to in peach culture: 1st.—Keep the ground clean and mellow around the trees, and give it an occasional dressing of wood ashes. 2nd.—Keep the heads low, the trunks ought not to exceed three feet in height. 3rd.—Attend regularly every Spring to pruning and shortening the shoots of the previous year's growth. This keeps the head round, full, and well furnished with bearing wood. Cut weak shoots back about one-half, and strong ones one-third; but see that you have a sufficient supply of fruit buds. Sickly and superfluous shoots should be cut out clean.

It should always be born in mind that the fruit is produced on wood of the last season's growth, and hence the necessity for keeping up a good supply of vigorous annual shoots all over the tree.

NOTE.—In planting peaches, it is of the highest importance to cut back the trees severely. The stem should be reduced about one-third, and the side branches cut back to one bud. This lessens the demand upon the roots and enables the remaining buds to push more vigorously. Most failures in newly planted orchards may be ascribed to a non-observance of these directions.

THE VARIETIES MARKED (C) ARE CLINGSTONES, THE OTHER VARIETIES ARE FREESTONES.

ALEXANDER (C)—Medium to large size; skin greenish white, nearly covered with deep, rich red; flesh melting, juicy, sweet. Tree *vigorous* and productive; ripens two weeks before Hale's Early; one of the largest and best of the extra early varieties, and valuable for market as well as for home use.

AMSDEN (C)—Medium to large, greenish white, nearly covered with purple in the sun; of very good quality; an exceedingly early sort. July.

BARNARD'S YELLOW RARERIPPE—Large; deep yellow, with a dull red cheek; flesh yellow, juicy, sweet, and of moderate flavor. Tree *vigorous*, hardy and productive. Beginning of September.

- 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.
- CHAIR'S CHOICE**—Deep yellow, with red cheek; firm; few days earlier than Smock. September.
- CHAMPION**—A new early peach; large, handsome, creamy white with red cheek; sweet, rich, juicy. Hardy and productive.
- CONKLING**—Large and handsome; yellow, marbled with crimson; flesh pale yellow, very juicy, sweet, vinous, and very good; equal to any yellow peach we know of. Tree *vigorous*, and yields heavy crops; succeeds Crawford's Early.
- COOLIDGE'S FAVORITE**—A most beautiful and excellent peach of medium size; skin white, delicately mottled with red, flesh pale, juicy and rich. Tree *vigorous* and productive. End of August.
- CRAWFORD'S EARLY**—A magnificent, large, yellow peach, of good quality. Tree exceedingly *vigorous* and prolific; its size, beauty and productiveness make it one of the most popular varieties. Beginning of September.
- CRAWFORD'S LATE**—A superb yellow peach; very large, productive and good; ripens here about the close of the peach season. Last of September.
- CROSBY**—Fruit medium, roundish, slightly flattened; bright orange-yellow, splashed with streaks of carmine on sunny side; good in quality. Ripens between Crawford's Early and Late.
- EARLY YORK (Early Purple, Serrate Early York, etc.)**—Medium size; greenish white, covered in the sun with dull purplish red; flesh juicy, rich, and excellent. Tree a *fair* grower and very prolific; one of the best early orchard varieties. Middle of August.
- ELBERTA**—Originated in Georgia a few years ago, and has proved to be one of the most valuable of the newer varieties. The fruit is large, handsome, with golden yellow skin, covered with a bright crimson blush. Flesh yellow, juicy; quality good, though not quite equal to Crawford. A peculiarity of the Elberta is that the fruit can be gathered before it is ripe, and it will ripen up without rotting. It bears transportation well, and, taken all in all, is a variety of great promise.
- FITZGERALD**—A chance seedling found in Ontario, outside the peach belt, where it has produced regular crops. The fruit is of very large size, stone very small. This promising *new peach* is of the Crawford type but excels that famous variety in size, hardness and productiveness. Season same as Early Crawford.
- FOSTER**—A large yellow peach resembling Crawford's Early, but of better quality. Ripe about the same time as Crawford's Early, or a little earlier.
- GLOBE**—Large, flesh firm, juicy, yellow, quality good, pleasant, rich, vinous and luscious. October.
- HALE'S EARLY (C)**—Medium size; flesh white, first quality; ripens middle of August.
- HILL'S CHILI**—Medium size; skin deep yellow, shaded with dark red; of medium quality. Tree hardy, *vigorous*, very productive; a good market sort; ripens between Crawford's Early and Late.
- LARGE EARLY YORK (C)**—A large and beautiful variety; white, with a red cheek; flesh juicy and delicious. Tree *vigorous* and productive. End of August.
- LORD PALMERSTON**—Very large; skin creamy white, with a pink cheek; flesh firm, yet melting; very juicy and rich. End of September.
- MORRIS WHITE**—Medium size; dull creamy white, tinged with red in the sun; flesh white to the stone, juicy and delicious. Tree a moderate bearer; highly prized for preserving on account of the entire absence of red in the flesh. Middle of September.
- MOUNTAIN ROSE**—Large, roundish; skin whitish, nearly covered with dark red; flesh white, juicy, very good. Tree *vigorous* and very productive. An excellent early market variety.
- OLDMIXON FREE**—Large; greenish white and red; flesh pale, juicy and rich. Tree hardy and productive; a most valuable variety. Middle of September.

RED CHEEK MELOCOTON—A famous, old, well-known and popular variety; large, oval; yellow with a red cheek; flesh yellow, juicy, rich, and vinous. Tree *very hardy* and productive. Succeeds Crawford's Late.

RIVERS—Large; color creamy white, with a delicate pink cheek; flesh melting, or rather dissolving, with a rich racy flavor, most remarkable. One of the finest of the early peaches for amateur's use and market.

SALWAY—An English peach; large, roundish; skin creamy yellow; flesh deep yellow, juicy, melting, rich. A valuable late peach for market, where it will ripen. It is grown successfully at Keuka Lake in this State.

SMOCK—Large size, light orange-yellow, with red cheek, flesh yellow, juicy and rich. October.

STUMP THE WORLD (C)—Large; red and white, handsome; good size and fair quality. Very productive. End of September.

SUSQUEHANNA—A very large and superb yellow peach; melting, rich, and fine. Succeeds Crawford's Late.

WAGER—Medium, yellow, good quality. Tree *hardy*, healthy, long-lived, productive. Early September.

WARD'S LATE—A fine late peach, resembling the Oldmixon; flesh nearly white; flavor excellent. Ripens with Crawford's Late.

WATERLOO (C)—Medium to large, round, with a deep suture on one side; skin pale whitish-green in the shade, marbled with red and crimson in the sun; flesh greenish white, juicy, vinous. Ripens about with Alexander.

WHEATLAND—Large, roundish; skin golden yellow, shaded with crimson on the sunny side; flesh yellow, rather firm, juicy, sweet, and of fine quality. Ripens between Early and Late Crawford. Tree *vigorous* and healthy.

SELECT APRICOTS.

The Apricot is one of the most beautiful and delicious fruits we possess, and its value is greatly enhanced by the season of its ripening—between cherries and peaches.

In a selection of choice garden fruits, it is quite indispensable. It succeeds admirably trained in Espalier form, which will be found advantageous in small gardens, as it may occupy a house wall, fence or trellis, leaving the open ground for other trees. In cold sections, too, where the trees get winter killed, or the blossoms injured by the late Spring frosts, these Espalier trees can easily be protected by mat or board screens. To protect against the curculio, see directions for the Plum.

ALBERGE DE MONTGAMET—Medium size; very early; juicy and excellent; very hardy; one of the best. Ripe in July.

EARLY MOORPARK—Medium size; rich, juicy, very fine.

LARGE EARLY MONTGAMET—Large, early; firm, juicy, excellent.

MOORPARK—One of the largest and finest Apricots; yellow, with a red cheek; flesh orange, sweet, juicy, and rich; parts from the stone; very productive.

PEACH—Very large, handsome, rich and juicy; one of the best.

ST. AMBROISE—One of the largest and finest Apricots, ripens beginning of August.

SELECT NECTARINES.

The Nectarine requires the same culture and management as the peach, from which it differs only in having smooth skin like the plum. It is peculiarly liable to the attacks of the curculio. The same remedy must be applied as recommended for the plum.

Our collection embraces the finest varieties.

BOSTON—Large, bright, yellow, with a red cheek; flesh yellow, sweet and pleasant flavor; freestone. First of September.

DOWNTON—Large, greenish white, with a dark red cheek; flesh greenish white, rich, and high flavored; one of the best. Freestone.

EARLY NEWINGTON—Large, pale green, red in the sun; flesh pale red at the stone, juicy, and rich; adheres to the stone.

EARLY VIOLET—Medium size; yellowish green, with a purple cheek; flesh pale green, melting, rich, and high flavored; freestone. Last of August.

ELRUGE—Medium size; greenish yellow, with a dark red cheek; flesh greenish white, juicy, and high flavored; excellent. Beginning of September.

HARDWICKE—Large, pale green, with a violet red cheek; flesh pale green, juicy, melting, and rich. End of August.

LATE MELTING—Greenish white, and red; medium quality. Very late.

LORD NAPIER—Earliest large Nectarine known.

MILTON—Very large; finely flavored. September.

NEWTON—Very large and fine. September.

PITMASTON ORANGE—Large; orange and yellow; flesh orange, rich, and fine; freestone. An excellent English sort. September.

RED ROMAN—Greenish yellow and red; flesh greenish yellow, rich, and good; freestone. September.

RIVER'S ORANGE—An English variety, raised from Pitmaston; hardy and prolific.

SPENSER—Very large; rich and fine; freestone. Late.

STANWICK—An English variety that has attracted much attention. Ripened under glass there, it is pronounced fine.

VICTORIA—Very large; one of the finest of the English varieties,

SELECT QUINCES.

APPLE OR ORANGE—Large, roundish, with a short neck; of a bright golden yellow color; tree has rather slender shoots and oval leaves; very productive. This is the variety most extensively cultivated for the fruit. Ripe in October.

BOURGEAT (A Golden Prolific Quince)—A new variety, of the best quality, tender and good. Ripening shortly after Orange, and keeping till past mid-winter. Largest size, rich golden color, smooth, no creases. Rich velvety skin, with delicious quince odor. Foliage healthy. The strongest grower of the quinces, making a tree as large and thrifty as plums and pears, and yielding an immense crop, often fruiting at three and four years.

CHAMPION—A variety which ripens late. The tree bears early and abundantly, and is *vigorous*.

MEECHE'S PROLIFIC—Fruit said to be larger than the Orange, resembling the Champion in shape and general appearance, though not averaging quite so large; of great beauty and delightful fragrance. Productive and ripens early.

REA (Rea's Mammoth)—A very large and fine variety of the Orange Quince. A *strong* grower and productive. We consider this the *best of all quinces*.

HARDY NATIVE GRAPES.

BLACK GRAPES.

BARRY (Rogers' No. 43)—Bunch large but rather short; berries large, roundish, much like Black Hamburg; delicate, sweet and tender. Ripens with Concord. Vine vigorous and productive. One of the largest and finest of the Rogers' Hybrids.

CAMPBELL'S EARLY—A fine new grape raised by the late George W. Campbell of Delaware, Ohio. Bunches large, compact and handsome; berries large, nearly round, black, with light purple bloom; flesh rather firm, but tender; the seeds are few and easily separated from the pulp; quality rich, sweet, slightly vinous; a strong and *vigorous* grower, with healthy foliage; it ripens very early; the berries do not drop easily from the bunches, and the fruit keeps a long time in perfection; promises to be of great value.

CHAMPION—A large grape, of medium quality. Its chief value consists in its earliness, rendering it a valuable sort to plant where the seasons are short.

CLINTON—Bunches small and very compact; berries small, sprightly; when thoroughly ripe is a good table grape and keeps well; valuable for wine. A free, rapid grower and profuse bearer; ripens earlier than the Isabella.

CONCORD—A large, handsome grape, ripening a week or two earlier than the Isabella; very hardy and productive; succeeds well over a great extent of the country, and is one of the most popular market grapes.

EATON—Bunch large, compact. Berries very large, round, black, covered with a thick blue bloom. In general appearance of the bunch and berry it strongly resembles Moore's Early. Skin thick; very juicy with some pulp. A large, showy grape.

- HARTFORD**—A hardy, profuse bearing, and tolerably good grape, ripening very early, and a valuable market variety on this account.
- HERBERT (Rogers' No. 44.)**—Bunch rather long, but compact; berries large, tender, sweet, and rich; early and productive. A handsome variety and one of the best of the Rogers' in quality.
- ISABELLA**—Bunches long, large, loose; berries large, oval, juicy, sweet, and musky. A *vigorous* grower, hardy, an immense bearer; a good keeper.
- McPIKE**—A new black grape said to be a seedling of the Worden, and to produce berries of great size.
- MERRIMAC (Rogers' No. 19)**—Bunches medium to large; berry large, sweet, and rich; *vigorous* and productive; one of the earliest of the Rogers' varieties.
- MILLS**—Bunch very large, compact, shouldered, some bunches weighing over twelve ounces. Berry large, round, jet black, covered with a thick bloom; flesh firm, meaty, juicy, breaking with a rich, sprightly flavor. Skin thick; berries adhere firmly to the peduncle. Vine *vigorous* and productive; foliage large and healthy. Ripens about with the Concord, or a little later, and is a long keeper.
- MOORE'S EARLY**—Bunch medium; berry large, round, black, with a heavy blue bloom; flesh pulpy and of medium quality; vine hardy and moderately prolific; ripens with the Hartford. Its large size and earliness render it desirable for an early crop.
- WILDER (Rogers' No. 4)**—Bunch very large, compact, shouldered; berry large, round, black; flesh tender, slight pulp at center, 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 the vineyard and garden.

RED AND REDDISH PURPLE GRAPES.

- AGAWAM (Rogers' No. 15)**—One of the best of the red varieties; bunch variable in size; sometimes large and handsome; flesh tender and juicy. Vine a good grower and bearer.
- BRIGHTON**—Resembles Catawba in color and in size and form of bunch and berry. Flesh rich, sweet, and of the best quality, equal if not superior to Delaware; ripens early. Vine *vigorous*, but in some locations is subject to mildew.
- 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 the Isabella; requires the most favored soils and situations, good culture, and warm seasons to mature perfectly in Western New York.
- DELAWARE**—This variety has fully maintained its reputation as one of the finest of our native grapes. The vine is comparatively slender, but grows freely. It proves quite hardy in this climate, and ripens two or three weeks before the Isabella. Bunch small and compact; berries small, light red with a violet bloom; beautiful. Sweet, sugary, and vinous, with a musky aroma. It justly claims a place in every garden.
- GÆRTNER (Rogers' No. 14)**—Bunch large; berry very large, round; skin thick; color a beautiful light red with bloom; fruit almost transparent; pulp tender, sweet, pleasant, rich. The most showy grape in our collection. Vine *vigorous* and productive. Desirable either for the garden or vineyard.
- IONA**—Bunch medium to large, shouldered; flesh soft, tender, juicy, brisk, sub-acid; high-flavored, refreshing; keeps till midwinter with its freshness unimpaired. In this locality one of the finest table grapes. Should be in every garden where the climate admits of it being ripened. It must not be allowed to overbear.
- LINDLEY (Rogers' No. 9)**—Bunch medium, somewhat loose; berry medium to large, round, color a rich shade of red, rendering it a very handsome and attractive grape; flesh tender, sweet, with a rich aromatic flavor; ripens soon after the Delaware; vine *vigorous* and productive. It sometimes fails to set a full crop. We regard it as one of the best red grapes in our collection.
- LUCILE**—Said to be a most promising new red market grape, as large as Worden in bunch and berry; good quality, ripening early between Moore's Early and Worden; very *vigorous*, hardy, and productive.

MASSASOIT (Rogers' No. 3)—Bunch medium, rather loose; berry medium; flesh tender and sweet; very good; one of the best flavored of the Rogers'. Early as Hartford. A desirable garden variety.

ROCHESTER—Bunch large, shouldered, frequently double shouldered, very compact. Berries medium to large, round, dark purple or purplish lilac, peculiar, with thin, white bloom. Flesh very sweet, vinous, rich, and aromatic. Vine a *remarkably vigorous* grower; wood short-jointed and hardy; foliage large, thick, healthy; has never been known to mildew here. It requires ample room and rather long pruning. Ripe usually first week in September. The fruit always sets well, and it has never failed to ripen in the worst of seasons since it first bore.

SALEM (Rogers' No. 53)—Bunch large; compact; berry large, round, coppery red; flesh tender, juicy; slight pulp; in quality one of the best. Ripens with Concord. Vine healthy, *vigorous*, and productive. One of the most popular of the Rogers'.

WHITE GRAPES.

DUCHESS—Bunch medium to large, long, shouldered, compact; berries medium, roundish; skin thick, generally dotted with small black spots about the size of a pin's head; color light green at first, becoming greenish yellow when ripe, fruit almost transparent; flesh tender without pulp, juicy, sweet, crisp, rich, and in quality ranks as best. Vine *vigorous* and productive here. The foliage is said to mildew in some localities. Ripens early before the Concord.

LADY—Bunch medium; berry medium to large; skin thin; color light greenish yellow, with white bloom; pulp tender, sweet, and pleasant, with much character. Vine hardy and *vigorous*. A valuable early white grape.

MARTHA—Bunch medium, moderately compact, shouldered; berry medium, roundish; flesh somewhat pulpy; a little foxy, but good; ripens earlier than Concord. Vine hardy and *vigorous*.

MOORE'S DIAMOND—A pure native, bunch large, compact; berry medium size; color greenish white with a yellow tinge when fully ripe; flesh juicy and almost without pulp; quality very good. Vine *vigorous* and productive.

NIAGARA—Bunch medium to large, compact, occasionally shouldered; berry large, roundish, uniform; skin thin but tough, pale green at first, changing to pale yellow when fully ripe, with a thin whitish bloom; flesh slightly pulpy, tender, sweet, not quite equal to the Concord. Before it is fully matured it has a very foxy odor, which disappears to a great extent later. Vine *remarkably vigorous*, healthy, and productive; foliage thick and leathery. Ripens with the Concord. All things considered, probably the most valuable white grape in cultivation.

POCKLINGTON—A seedling of the Concord. Bunch medium to large, generally shouldered; berry large, roundish, light golden yellow when fully mature; flesh pulpy, juicy, of fair quality; vine very hardy, healthy, *vigorous* and productive; leaves large, tough, and downy; ripens after the Concord. It requires favorable seasons, and good locations to ripen it satisfactorily in this region.

WINCHELL—The earliest white grape (*identical with Green Mountain*). This white grape has been thoroughly tested here for several years, and it has proved so satisfactory in all respects that we can recommend it with the utmost confidence to our customers. It combines hardiness, fruitfulness, vigor, good size, and excellent quality. Though not the largest, yet both berry and bunch are of good size, and the flavor is excellent, ranking in this respect as a grape of the first class. In time of ripening it may be described as very early, being the first white grape to ripen, and maturing about the same time as Champion, or about a week earlier than the Hartford. This qualification insures its ripening even in the worst of seasons, a consideration which will be appreciated by all planters. Its habit of growth is *vigorous* and the foliage clean and healthy, while its bearing quality is all that can be desired. It can be said to be a most valuable white grape, either for the amateur or professional grower.

BLACKBERRIES.

In the garden, plant in rows about five feet apart, and four feet apart in rows. In the field, plant in rows 6 feet apart and 3 feet in the rows. Treat the same as Raspberries. They may be planted in the Fall or Spring.

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

ANCIENT BRITON—Medium size, melting, without core. Hardy and prolific. One of the best.

EARLY KING—Fruit of medium size and good quality, plant hardy and productive. The first variety to ripen here, and particularly valuable on that account.

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

ERIE—Fruit large of good quality; plant hardy, *vigorous* and productive. Early.

ICEBERG—A novelty from California producing white berries.

KITTATINNY—Large, roundish, conical, glossy black, juicy, sweet, excellent when fully ripe; one of the most valuable sorts for general planting. Requires protection in some localities.

LAWTON OR NEW ROCHELLE—Large, oval, black, juicy, sweet, excellent when fully ripe; well known.

RATHBUN.
[REDUCED.]

RATHBUN—A promising new variety. Berries extra large, jet black, quality good. Said to be perfectly hardy.

SNYDER—Medium size, sweet and melting to the core; very hardy and wonderfully productive; valuable for home use and market.

TAYLOR—As hardy as the Snyder; large and of excellent quality.

WILSON, JR.—Large, luscious, and sweet, as soon as colored. Plant hardy; ripens early; productive.

DEWBERRY.

LUCRETIA—A trailing variety of the Blackberry, ripening between the Raspberry and Blackberry. Fruit large and handsome.

CURRENTS.

This is a very profitable and desirable crop, both for market and family use. None of the small fruits will remain so long on the bushes without injury as the Currant, and since the introduction of the newer varieties and the easy method of destroying the *Currant worm* by the use of powdered *White Hellebore*, it is justly attracting more attention than before. The Cherry, Fay's or Versailles is from three to five times larger than the old sorts and far more productive. Four tons, or 200 bushels per acre, selling in market for over \$800, have been realized from this fruit. They can be successfully grown among orchard trees where the ground is kept clean and in a good state of cultivation.

BLACK CHAMPION—A variety from England. The bunches are large and the fruit of good quality.

BLACK NAPLES—Similar in appearance and flavor to Black English, but larger and every way finer.

CHERRY—One of the largest red currants; bunches short; plant *vigorous* and productive.

FAY'S PROLIFIC—A fine red currant, larger than the Cherry, and with longer bunches.

LEE'S PROLIFIC—Larger than Black Naples and very productive.

POMONA—A new red currant of good size; very productive, sweet, of excellent quality.

PRINCE ALBERT—Berry large, light red, bunch long; an erect grower and immense bearer; foliage distinct; ripens late; valuable.

RED CROSS—A fine new red currant of large size; long bunches; mild, pleasant flavor; a vigorous grower and very productive.

RED DUTCH—An old, well-known sort; berry of medium size and of good quality; bunch long, plant an upright grower and very prolific.

SHORT BUNCHED RED OR LONDON RED—A strong, upright grower, with large berries and short bunches; grown for market around London. A good sort.

VERSAILLAISE (La Versaillaise)—A French variety, resembling the Cherry; of very large size, great beauty, and productiveness.

VICTORIA—Large, bright red; bunches very long; an erect grower; late, productive, and very valuable. This and Prince Albert extended the currant season into September.

WHITE DUTCH—Well known, of medium size and excellent quality.

WHITE GRAPE—Very large, mild, and excellent; the best table variety. This is very distinct from the White Dutch.

WILDER—A new red currant, fruit large, fine flavored, great yielder, very profitable for market.

GOOSEBERRIES.

The Gooseberry wants annual manuring to sustain its vigor. The American varieties need close pruning every year. The English kinds require but little pruning. They may be planted in the Fall or Spring.

ENGLISH VARIETIES.

CROWN BOB—Large, roundish, oval, red, hairy; of first quality.

INDUSTRY—Large, oval, dark red, hairy; rich and agreeable. Although this is a foreign variety, it has succeeded admirably here, where it has fruited extensively for several years. We confidently recommend it, both for the garden of the amateur and the market plantation. The plant is remarkably vigorous and productive, and the fruit large, beautiful, and of excellent quality. Where shoots are left long, they fruit to the very tips. We regard it, on the whole, as the *best* foreign Gooseberry ever introduced.

WHITESMITH—Large, roundish, oval; yellowish white, slightly downy; of first quality.

AMERICAN VARIETIES.

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, as will be seen from the report given below from high and competent authority. It was introduced 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.

The editor of *Rural New-Yorker* says: "It is the *best* variety yet introduced and seems close to a perfect Gooseberry for our climate."

DOWNING—A seedling of Houghton. Fruit large, two or three times the size of Houghton; whitish green; flesh soft, juicy, good; plant *vigorous* and prolific; excellent for family use, and very profitable for market.

HOUGHTON—A *vigorous* grower; branches rather slender; very productive; not subject to mildew; fruit of medium size; skin smooth, pale red; flesh tender and good.

SMITH'S (Smith's Improved)—Grown from the seed of Houghton; fruit large, oval; light green; flesh moderately firm, sweet, and very good; plant *vigorous* and productive.

TRIUMPH—An American seedling of the English type; large golden yellow; hardy, and an immense bearer. A fine variety.

LOGAN BERRY.

A decided novelty, being a hybrid between a blackberry and raspberry. Fruit as large as the blackberry and of same shape; color dark red when fully ripe; partakes of the flavor of the blackberry and raspberry; pleasant, mild, vinous.

RASPBERRIES.

To keep a raspberry bed, in good productive condition, the old, weak, and dead wood should be cut out every season, to give strength to the young shoots for the next year's bearing. In spring the weakest suckers should be removed, leaving five or six of the strongest in each hill. The ground should be spaded and a top dressing of manure given.

PROTECTION.—To guard against injury by the winter, the canes may be tied to stakes and covered with straw, or they may be laid down in the autumn and covered with a few inches of earth, leaves, litter, or branches of evergreens.

They can be planted in the fall or spring with success. **Black Caps** should not be planted in the fall.

FOREIGN VARIETIES AND THEIR SEEDLINGS OF AMERICAN ORIGIN.

All the varieties in this class require protection in winter.

CHAMPLAIN (New)—Originated from seed of the White Antwerp, which it resembles in color and size of fruit. A stronger grower and more prolific than the parent. In quality ranks as best; superior to Golden Queen. Valuable for the amateur.

CLARKE—Large, light red; moderately firm; *high flavored*; a strong grower; productive and very hardy. One of the best red raspberries for home use.

HERSTINE—Fruit large; oblong; crimson; moderately firm; juicy; flavor sub-acid and very good; an abundant bearer; season early to medium; *one of the best*.

NEW RED RASPBERRY.

SUPERLATIVE—A splendid new foreign red raspberry. Very large, fine color, firm and of best quality. We have tested it here, and commend it to all who desire the *largest, handsomest and choicest fruit*. One of the best novelties in this line. Liable to injury during severe winter.

COLUMBIAN.
[REDUCED.]

AMERICAN SPECIES AND VARIETIES.

COLUMBIAN—Fruit very large, dark red, bordering on purple; plant a very strong, robust grower, hardy and wonderfully productive.

CUMBERLAND (Black Cap)—A new variety said to be of very large size, good quality, hardy and productive; mid-season.

CUTHBERT (Queen of the Market)—Medium to large, conical; deep, rich crimson; very firm; a little dry, but sweet and good nevertheless; very hardy. Season medium to late: unquestionably *one of the best varieties for market*.

EUREKA (Black Cap)—Very large, glossy black, juicy, rich; hardy and very productive. We regard it as a valuable, very early variety.

GAULT (Black Cap)—Large and firm; rich flavor. Plant a vigorous grower and extremely hardy. Said to be a true perpetual.

GOLDEN QUEEN—Large, beautiful amber color; firm and of fine quality. Plant *vigorous*, hardy, and remarkably productive.

GREGG (Black Cap)—One of the most valuable varieties; fruit large; hardy; a *vigorous* grower and great yielder.

KANSAS (Black Cap)—A splendid new variety; very large, handsome, firm, and of excellent quality; early, very hardy, and productive. One of the best.

LOUDON—A new red raspberry which originated at Janesville, Wis. Said to be a seedling of the Turner crossed with Cuthbert. Large, broadly conical, beautiful red. Ripens about with Cuthbert, continuing later, and in quality fully as good as that variety.

MARLBORO—The best early red raspberry for the North; hardy and productive.

MILLER—A variety from New Jersey. Berry as large as Cuthbert, round, bright red, does not fade; very firm. Begins to ripen with the earliest. Perfectly hardy.

MUNGER (Black Cap)—A new variety very large, productive. Ripens late.

OHIO (Black Cap)—A variety much esteemed for drying; plant hardy and prolific; fruit of good quality.

SHAFFER'S COLOSSAL—Fruit large, purple, soft, with a sprightly sub-acid flavor; plant very *vigorous*, hardy, and productive. Much esteemed in some localities. Season medium to late.

STRAWBERRIES.

DIRECTIONS FOR CULTURE.

The Soil and its Preparation.—The Strawberry may be successfully grown in any soil adapted to the growth of ordinary field or garden crops. The ground should be *well* prepared by trenching or plowing, at least eighteen or twenty inches deep, and be *properly enriched* as for any garden crop. It is unnecessary to say that, if the land is wet, it must be thoroughly drained.

To Cultivate the Strawberry.—For family use, we recommend planting in beds four feet wide, with an alley two feet wide between. These beds will accommodate three rows of plants, which may stand fifteen inches apart each way, and the outside row nine inches from the alley. The beds can be kept clean, and the fruit can be gathered from them without setting the feet upon them.

Culture in Hills.—This is the best mode that can be adopted for the garden. To obtain fine, large, high-flavored fruit, pinch off the runners as fast as they appear, repeating the operation as often as may be necessary during the summer and early autumn. Every runner thus removed produces a new crown in the center of the plant, and in the fall the plants will have formed large bushes or stools, on which the finest strawberries may be expected the following season. In the meantime, the ground among the plants should be kept clear of weeds, and frequently stirred with a hoe or fork.

Covering in Winter.—Where the winters are severe, with little snow for protection, a slight covering of leaves or litter, or the branches of evergreens, will be of great service. This covering should not be placed over the plants until after the ground is frozen, usually from the middle of November till the first of December in this locality. Fatal errors are often made by putting on *too much* and *too early*. Care must also be taken to remove the covering in the spring, just as soon as the plants begin to grow.

Mulching to Keep the Fruit Clean.—Before the fruit begins to ripen, mulch the ground around the plants with *short* hay or straw, or grass mowings from the lawn, or anything of that sort. This will not only keep the fruit clean, but will prevent the ground from drying or baking, and thus lengthen the fruiting season. Tan bark can also be used as mulch.

A bed managed in this way will give two full crops, and should then be spaded or plowed down, a new one in the meantime having been prepared to take its place.

TO ASCERTAIN THE NUMBER OF PLANTS REQUIRED FOR AN ACRE.

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, give each plant three square feet, or 14,520 plants to the acre.

LAYER PLANTS.

The plants which we usually furnish are well rooted layers from the open ground, and regarding which we have never had any reason to think that this mode of growing was not a success.

STANDARD WELL-TRIED VARIETIES.

Those marked (P) have pistillate or imperfect flowers, and must be planted near perfect-flowering kinds, in order that the flowers may be fertilized. The varieties not so marked are bi-sexual or perfect-flowering, and can be planted alone.

BEDER WOOD—Large, roundish conical, bright scarlet, moderately firm, fair quality; plant *vigorous* and very productive. A valuable early sort for home use or near market, following Michel's Early.

BRANDYWINE—Large, roundish conical, of fine quality; moderately firm; prolific; season medium to late; a valuable late variety.

BUBACH (No. 5) (P)—Fruit large and handsome, roundish conical, bright scarlet, moderately firm, of fair quality; plant a strong grower, with large, healthy foliage, and very productive; succeeds on light or heavy soil. Desirable for home use and near-by market. This has proved to be one of the best Strawberries. Season early to medium.

HAVERLAND (P)—Large, long, light red; moderately firm, medium quality, ripens all over. Very *vigorous* and healthy, and a great yielder; a valuable variety for home use or near market; needs to be well mulched to keep fruit clean; season early.

LOVETT—Large, roundish conical, uniform, seldom ill-shaped, bright crimson, quality good. A variety of merit, continuing good through the season.

MARSHALL—Very large, roundish, dark, rich crimson; quality very good, firm; plant *vigorous*, productive; season medium to late. One of the largest and finest Strawberries of recent introduction. We consider this one of the very best varieties for all purposes.

McKINLEY—This variety has been thoroughly tested here, and we consider it a superior Strawberry, being remarkable for its size, shape, color, and quality. Berry large, roundish, inclining to conical, but sometimes flattened or coxcombed; color crimson; flesh firm and quality very good. The plant is *vigorous*, healthy, and a great yielder. Season medium to late. We can confidently recommend it for garden and market culture.

MICHEL'S EARLY—This is the first variety to ripen here; berry medium to large, roundish, bright crimson, firm, fair quality; plant a strong grower and good bearer. We consider this valuable on account of its earliness and productiveness.

PARKER EARLE—Uniformly large, regular, conical, with a short neck; color glossy scarlet-crimson; ripens all over; flesh moderately firm, no hollow core, quality good. Plant *very vigorous*, healthy, and remarkably productive.

SHARPLESS—We regard it as one of the very largest and best Strawberries in cultivation. Plant very hardy, enduring both heat and cold without injury here. To secure the best results, we advise "hill culture."

FIGS.

Figs may be grown as bushes in the garden, in the Northern States, if they are taken up annually, the first week in November, with a ball of earth attached to the roots, and placed in a cellar till about the middle of May, when they should be taken out and replanted. Most all of them ripen in August.

Angelique—Medium; skin yellow; flesh rose colored; very good.

Black Ischia—Medium; skin deep purple; flesh sweet, rich.

Brown Ischia—Medium size; rich and excellent.

Castle Kennedy—Very large.

Early Violet—Brownish purple; small; very hardy and bears abundantly.

Madeline—Medium size; pale greenish yellow; flesh rose colored; bears abundantly.

Turkey—Brownish purple; large, rich and excellent.

White Genoa—Large; yellowish white; flesh tinted with red; very rich and good.

MISCELLANEOUS FRUITS.

ALMOND—Sweet Hard Shell.

Soft Shell.

CHESTNUT—Common American.

Japan.

Spanish, or Marron.

For descriptions of these three varieties, see page 43.

FILBERT—English.

Kentish Cob.

HICKORY—Shell Bark.

MULBERRY—Downing's Everbearing—Large, purplish black fruit.

New American—One of the best; hardy, fruit of excellent quality.

White—Mostly cultivated to feed the silk-worm; fruit small and white.

PECAN—Not hardy in the North.

WALNUT—American Black.

American Butternut.

English or Madeira Nut.

English Dwarf Prolific (*Præparturiens*).

For descriptions of the Walnuts, see page 53.

ESCULENT ROOTS.

ASPARAGUS—Barr's Mammoth.

Columbian Mammoth White.

Conover's Colossal.

Palmetto.

RHUBARB—Myatt's Linnæus, the largest and best of all.

DIRECTIONS FOR PLANTING ASPARAGUS.

Prepare the ground by trenching to the depth of two feet, mixing each layer of soil, as turned over, with two or three inches of well rotted manure. For private use or for marketing on a small scale, beds should be formed five feet wide, with three rows planted in each; one in the middle, and one on each side, a foot from the edge; the distance of the plants in the rows, nine inches; the alleys between the beds should be two feet wide. In planting, a line is set and a cut made, a little slanting, to the depth of six or eight inches, according to the size of the plants. The plants are then laid against the side of the trench, at the distance already named—nine inches—care being taken to properly spread the roots. The crown or top of the plant should be covered about two inches. In a week or so after planting the beds should be touched over lightly with a sharp steel rake, which will destroy the germinating weeds.—*Gardening for Profit*.

PART II.

ORNAMENTAL DEPARTMENT.

BRIEF SUGGESTIONS TO PLANTERS.

WHAT TO PLANT.

In this and similar climates, where great extremes of temperature are experienced, it is necessary to employ only the most hardy ornamental trees and shrubs. Impressed with the importance of this fact, and in order that our customers may be spared much disappointment and expense, we have omitted from our catalogue, as far as possible, everything which is liable to suffer from severe cold.

For Parks and Extensive Grounds.—No difficulty can be experienced by any one in making selections for this purpose. But we cannot impress too strongly upon planters the importance and value of flowering shrubs for effective masses and groups. There are many who imagine that the *Rhododendron* and *Azalea* are indispensable. This is a great error. In this latitude both *Rhododendron* and *Azalea* require prepared soil and protection, while hardy shrubs like the *Weigela*, *Deutzia*, *Spiræa*, *Hardy Hydrangea*, *Japan Quince*, *Double-flowering Almond*, *Lilac*, *Viburnum*, *Althæa*, and plants like the *Pæony*, *Phlox*, etc., when planted in masses, produce a magnificent effect, need no protection, and demand little skill or care in their management. What grand mass of bloom can be had throughout the season by a proper use of the various families! Then the purple and variegated-leaved trees and shrubs may also be planted in such a manner as to afford a rich and striking contrast.

Groups of flowering trees form superb objects at the blossoming season, and it is strange that planters do not employ them more.

Highly effective groups can be formed of trees and shrubs possessing bright-colored bark in winter.

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

A pendulous tree or one with variegated foliage may be occasionally introduced, and will add to the beauty of the grounds. Depend mainly upon dwarf shrubs for small places, and in selecting aim at securing a succession of bloom. Dwarf evergreens are very useful, and in small grounds hardy herbaceous border plants can be used with the most satisfactory results; a proper selection will afford as much bloom as ordinary beddingplants, and at half the trouble and expense.

WHEN TO PLANT.

Deciduous Trees, Shrubs and Vines can be planted either in Spring or Fall. In localities where the winters are very severe we recommend Spring planting. Spring is the best time for evergreens generally.

HOW TO PLANT.

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

Preparation of the Top.—This consists in cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots, as follows:

Trees with branching heads should have the small branches cut clean out, and the larger ones intended for the frame work of the tree, cut back to within two or three buds from their base.

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

Directions for planting, mulching, staking and after culture, same as for fruit trees (see Hints in Fruit Department).

PRUNING.

Pruning, as practiced by some people, has the effect of rendering trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly conifers, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shape we destroy their identity. The pruning knife, therefore should be used to assist nature and handled with judgment and care; to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood. Sometimes it becomes necessary to prune severely to keep a tree from attaining too great size.

Shearing may be practiced on hedges, but never on trees or shrubs.

PRUNING SHRUBS.

Many persons trim and shear them into regular shapes, imagining that regular outline adds to their effect and beauty. While symmetry and regularity of form are to be admired in a shrub, this quality should never be gained at the expense of health and natural grace.

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

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

PRUNING EVERGREENS.

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

RARE AND CHOICE
DECIDUOUS ORNAMENTAL TREES,
SUITABLE FOR
LAWNS, AVENUES, PARKS, CEMETERIES, ETC.

ALDER (*Alnus*,) **European**—A remarkably rapid growing tree; foliage, roundish, wedge-shaped and wavy. This species is specially adapted to moist situations.

AMELANCHIER, *Botryapium*—An American species; flowers white, produced in great profusion, early in April. One of the finest very early flowering trees.

ASH (*Fraxinus*,) **American White**—A well known native tree.

Aucuba-Leaved—Beautiful gold-blotched foliage; as the variegation is permanent the tree is valuable for grouping with purple-leaved trees.

European—A lofty tree of rapid growth.

Silver-Margined Leaved—A medium sized tree; leaves deep green, with margins silvery white.

CATALPA BUNGEI—STANDARD AND DWARF.

[REDUCED.]

ALMOND (*Amygdalus*,) **Large Double-Flowered**—A vigorous, beautiful tree, covered in May with double rose-colored blossoms ; like small roses.

BEECH (*Fagus*,) **Cut-Leaved**—A fine, erect tree, with deeply incised foliage ; a variety of rare beauty and excellence.

Purple-Leaved—In spring, foliage is deep purple, later in season changes to crimson, and again to a dull purplish-green in the fall.

Rivers' Smooth-Leaved Purple—A compact, symmetrical grower ; crimson foliaged in early spring, changing to dark purple in summer. The finest of all purple-leaved trees.

BIRD CHERRY (*Cerasus Padus*,) **European**—A rapid growing beautiful tree, with glossy foliage and long bunches of white, fragrant flowers in May, succeeded by clusters of fruit like black currants.

BOX ELDER—See **ASH-LEAVED MAPLE**.

BUCKEYE—See **HORSE CHESTNUT**.

CATALPA, **Bungei**—A species from China, of dwarf habit, growing only from three to five feet high. Foliage large and glossy ; a shy bloomer. Top-grafted on tall stems it makes an effective umbrella-shaped tree. See cut on page 41.

CATALPA SPECIOSA.

[REDUCED.]

Speciosa—A showy, rapid growing, spreading, irregular tree, with large heart-shaped leaves, and pyramidal clusters a foot long, of white and purple fragrant flowers. Blooms in July. Hardy and fine.

CHERRY (*Cerasus*.) **Large Double-Flowered**—A remarkable and beautiful tree. At the period of flowering it is literally a mass of bloom, and each bloom represents a miniature white rose.

LARGE DOUBLE-FLOWERED CHERRY.
[REDUCED.]

CHESTNUT (*Castanea*.) **American**—The well-known native variety. A stately tree with broader leaves than the Spanish, and producing smaller fruit. When in full bloom, one of the handsomest trees.

Japan—Habit and foliage like Spanish Chestnut ; fruit very large.

Spanish, or Marron—Originally introduced from Asia Minor into Europe. A valuable species both for ornament and fruit. It forms a handsome lawn tree, and produces much larger fruit than the American variety.

BECHTEL'S DOUBLE-FLOWERED
AMERICAN CRAB.
[REDUCED.]

CRAB (*Pyrus*,) **Bechtel's Double-Flowered American**—One of the most beautiful of the many fine varieties of flowering Crab. 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.

Chinese Double White-Flowered—Produces double white fragrant flowers in clusters.

Chinese Double Rose-Flowered—Has beautiful double, rose-colored, fragrant flowers nearly two inches in diameter in May. The best of all the Crabs for ornamental planting, should be in every collection.

Floribunda Atrosanguinea—Single flower; beautiful carmine. A charming variety. May.

Fragrant Garland-Flowered—Single blush flowers with the fragrance of sweet violets; blossoms appear about a week after those of the Double Rose-Flowered; very desirable. May.

CYPRESS (*Taxodium distichum*,) **Deciduous or Southern**—A beautiful stately tree, with small feathery, light green foliage.

DOGWOOD (*Cornus*,) **White-Flowered**—An American species, of spreading, irregular form, growing from sixteen to twenty-five feet high. The flowers produced in spring before the leaves appear are from three to three and one-half inches in diameter, white and very showy. They begin to appear just as the Magnolia flowers are fading.

They also are very durable, lasting in favorable weather more than two weeks. Besides being a tree of fine form, its foliage is of a grayish green color, glossy and handsome, and in the autumn turns to a deep red, rendering the tree one of the most showy and beautiful objects at that season.

Red-Flowered—Recently introduced. A variety producing flowers suffused with red; blooms when quite young.

ELM (*Ulmus*,) **American White or Weeping**—The noble spreading and drooping tree of our own forests, peculiarly adapted for street and park planting.

Belgica—A choice variety of the English, of large size, rapid growth, and fine spreading shape. Valuable for street planting.

Dovæi—A very fine European variety, of rapid growth, and with handsome foliage, valuable for any purpose. Specially adapted for street planting.

English—An erect lofty tree, of rapid, compact growth with smaller and more regularly cut leaves than those of the American, and darker colored bark.

Huntingdon—Of very erect habit, and rapid vigorous growth. Bark clean and smooth. One of the finest Elms for any purpose.

Purple-Leaved, English—A striking variety, with erect branches and purple leaves.

Scotch—A fine spreading tree, of rapid growth and large foliage.

Superba (Blandford Elm)—A noble tree of large size and quick growth; foliage large and dark green, bark smooth and grayish. A superb shade tree, and highly ornamental.

Variegated English—Small leaves, sprinkled over with silvery spots; variegation constant.

HORSE CHESTNUT (*Aesculus*), **White-Flowered**—This well-known species forms a large-sized tree, of handsome, regular outline, is very hardy, and free from all diseases. In May it is covered with magnificent erect spikes or panicles of white flowers lightly marked with red. As a single lawn tree, or for the street, it has no superior.

Double White-Flowered—A superb variety, with double flowers in larger panicles than the common sort, and of fine pyramidal habit. The absence of fruit by which much litter is avoided, is an important argument in favor of its employment. It is one of the best ornamental trees.

Ohio Buckeye—A native of the Western States forming a large sized tree; leaves smooth; flowers yellow; blooms before the others.

Red-Flowered—One of the finest trees in cultivation; form round, flowers showy red; blooms a little later than the white, and the leaves are of a deeper green. One of the most valuable ornamental trees. The White-Flowered and this contrast well when planted together.

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

Japan—Of medium size, rounded form, foliage deep shining green, and heart-shaped; flowers larger than those of the *American*, and of a rich, reddish purple color; a valuable addition to the list of choice small trees.

KENTUCKY COFFEE TREE (*Gymnocladus*)—A fine native tree of secondary size, rapid upright growth, with rough bark, stiff, blunt shoots, and feathery foliage, of a bluish green color.

KÖELREUTERIA, Paniculata—From China. A hardy, small, round-headed tree, with fine lobed leaves and large panicles of showy golden yellow flowers, in the latter end of July; leaves change in autumn to a fine yellow. One of the most desirable trees, particularly valuable for its brilliant, golden blossoms, which are produced so late in the season, when few if any trees are in bloom.

LABURNUM (*Cytisus*), **Common Laburnum, or Golden Chain**—A native of Europe with smooth and shining foliage. The name "Golden Chain" alludes to the length of the drooping racemes of yellow flowers, which appear in June.

Alpine, or Scotch—A native of the Alps of Jura. Also said to be found wild in Scotland. Of irregular, picturesque shape, smooth, shining foliage, which is larger than the common, and yellow flowers in long racemes. Blooms later than the common.

LARCH (*Larix*), **European**—An elegant, rapid growing pyramidal tree; valuable for shelter and timber.

LINDEN, or LIME (*Tilia*), **American (Basswood)**—A rapid growing, large-sized beautiful native tree, with very large leaves and fragrant flowers.

Dasystyla—A vigorous tree with cordate, dark green, glossy leaves, and bright yellow bark in winter. A superb tree.

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

Red Fern-Leaved—An elegant tree, of pyramidal compact habit. Bark on young wood rose-colored, and foliage deeply cut. One of the finest trees for the lawn.

White-Leaved European—A vigorous growing tree of medium size and pyramidal form. It is particularly noticeable among trees by its white appearance. Its handsome form, growth and foliage, render it worthy of being classed among the finest of ornamental trees.

MAGNOLIA, Acuminata (Cucumber Magnolia)—A beautiful pyramidal growing tree, attaining from sixty to ninety feet in height. Leaves six to nine inches long, and bluish green; flowers yellow, tinted with bluish purple; fruit when green resembles a cucumber; hence the name. June.

MAGNOLIA IN BLOOM.

[REDUCED.]

MAGNOLIA Conspicua—A Chinese species of great beauty. The tree is of medium size, shrub-like in growth while young, but attains the size of a tree in time. The flowers are large, pure white, very numerous, and appear before the leaves.

Lennei—Foliage large, flowers dark purple. A superb variety.

Soulangeana—Shrubby and branching while young, but becoming a fair-sized tree. Flowers white and purple, cup-shaped, and three to five inches in diameter. Foliage large, glossy and massive. One of the hardiest and finest of the foreign Magnolias.

Speciosa (Showy-Flowered)—Resembles the *Soulangeana* in growth and foliage, but the flowers are a little smaller and of a lighter color, fully a week later, and remain in perfect condition upon the tree longer than those of any other Chinese variety. These qualities, combined with its hardiness, render it in our estimation one of the most valuable sorts.

Stellata (Halleana, or Hall's Japan)—It is of dwarf habit and produces its pure, white, semi-double fragrant flowers in April, earlier than any other Magnolia.

Tripetela (Umbrella Tree)—A hardy, medium-sized tree, with immense leaves and large white flowers four to six inches in diameter, appearing in June.

MAIDEN HAIR TREE (*Salisburia*)—A remarkable tree from Japan, combining in its habit characteristics of the conifer and deciduous tree. The tree is of medium size, rapid growth, with foliage resembling the form of the Maiden Hair Fern. Rare and elegant.

MAPLE (*Acer*), **Ash-Leaved (Box Elder)**—A native tree, maple-like in its seeds and ash-like in foliage; of irregular spreading habit and rapid growth.

English or Cork-Barked—A native of Central Europe. It is a slow-growing, stocky tree, of compact, roundish habit, with corky bark, and small, handsome foliage; hardy and very ornamental.

JAPAN MAPLE.

[REDUCED.]

Japan (*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 of small-sized trees.

Japan Blood-Leaved—Of dwarf habit and rounded form; foliage five-lobed and serrated; reddish crimson in June. A charming variety and one of the best of the Japanese Maples.

Japan Cut-Leaved Purple—One of the most striking and handsome varieties; 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. The young growth is long, slender and pendulous and like the leaves, has a deep, crimson hue. Besides being an elegant and attractive lawn tree, it is also very useful for conservatory decoration in Spring.

MAPLE Japan Dark Purple-Leaved—Of dwarf habit and rounded form; foliage five-lobed and serrated; reddish crimson in June, changing to dark purple, which it retains all Summer. A charming variety, and one of the best of the Japanese Maples.

Japan Palm-Leaved—Leaves five to seven-lobed, deep green, changing to crimson in Autumn; habit upright, very compact.

Manitoba—See **ASH-LEAVED MAPLE**.

Montpelier—Native of Central Europe; forms a handsome small tree with rounded head, leaves small, palmately three-lobed.

Negundo—See **ASH-LEAVED MAPLE**.

Norway—A large handsome tree, of spreading rounded form, with broad, deep green, shining foliage. Its compact habit, and stout, *vigorous* growth, render it one of the most desirable species for the street, park or garden. The young trees are not as smooth and straight as those of the Silver and Sugar varieties.

SCHWEDLER'S NORWAY MAPLE.

[REDUCED.]

Norway Curled-Leaved—A curious variety of the above, with leaves the lobe of which curl and turn inwards, giving the tree a novel and distinct aspect.

Norway Cut-leaved—A compact growing tree, with dense, dark green foliage, which is regularly and deeply cut, so as almost to divide the leaf into three parts. One of the best of the cut-leaved varieties; rare.

Norway Geneva—A purple-leaved variety of Norway Maple, quite distinct from Reitenbach's or Schwedler's.

Norway Reitenbach's—An excellent and striking variety, with handsome foliage; green in Spring, changing to purple as the season advances.

Norway Schwedler's—A beautiful variety, with the young shoots and 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. Specially adapted for lawn planting. Straight, smooth growing specimens of this variety can seldom be furnished.

MAPLE Red or Scarlet—A native species of medium size and rounded head; produces deep red blossoms which appear before the leaves. In Autumn the foliage changes to a brilliant scarlet.

Round-Leaved or Vine—A rare and pretty species from Oregon, of slow growth; forms a low, round-headed, branching tree. Resembles the Japanese varieties. The autumn coloring is fine.

Silver-Leaved or Soft—A well-known native tree of rapid growth, large size, and irregular rounded form; foliage bright green above and silvery white beneath; tree very hardy and easily transplanted. One of the most useful trees for street and lawn planting.

Silver Cut-Leaved—A distinct variety, raised here from seed of the Silver-leaved. It is a luxuriant, erect grower of fine appearance, and has handsomely cut or dissected leaves, which are extremely variable in form, some being only slightly lobed and others deeply cleft and laciniated. It differs from Wier's in being of upright habit and in having the foliage more deeply cut. An occasional cutting back will be of advantage to the tree.

Silver Three-Parted-Leaved—A choice variety, which originated here. It is a vigorous, upright grower, with deeply lobed foliage, the leaves being cut nearly to the midrib and are three-parted. The young growth is conspicuously marked with white spots, which are particularly noticeable in winter.

WIER'S CUT-LEAVED SILVER MAPLE.

[REDUCED.]

Silver Wier's Cut-Leaved—This is one of the most remarkable and beautiful trees with cut or dissected foliage yet offered. Its growth is rapid, shoots slender and drooping, giving it a habit almost as graceful as the Cut-Leaved Birch. The foliage is abundant, silvery underneath, and on the young wood especially, deeply and delicately cut.

MAPLE Silver, Yellow-Leaved—A variety of the Silver-leaved of vigorous growth, with bright yellow leaves. Its rich bronze shoots in Spring, and tender yellow-green foliage in Summer, will render it a valuable tree for the landscape.

Striped Barked—A native tree growing 20 to 30 feet high; rounded form; bark dark green marked with stripes, foliage light green.

Sugar, or Hard—A well known native tree, of elegant pyramidal form; valuable both for the production of sugar and for its wood; its stately growth, fine form and foliage make it desirable as an ornamental and shade tree.

EUROPEAN SYCAMORE MAPLE.
[REDUCED.]

Sugar Monumental—A fine variety of pyramidal, compact habit; the foliage of the second growth is of a brilliant crimson, which, contrasted with the rich green of the older foliage, produces a charming effect. Distinct and handsome.

Sycamore, European—A handsome tree, of rapid, upright growth, with large foliage, and smooth, ash-gray colored bark.

Sycamore, Purple-Leaved—Tree of fine robust habit. Foliage deep green on the upper surface, and purplish red underneath. Produces a fine effect planted with golden-leaved trees.

Sycamore, Tricolor-Leaved—A variety of the European Sycamore, having its leaves distinctly marked with white, red, and green, and retaining their variegation all summer.

Sycamore, Worle's Golden-Leaved—In the spring the foliage is of a golden yellow color, which changes, to a duller shade as the season advances. The young growth continues brilliant throughout the summer. A valuable and effective variety for grouping with purple-leaved trees.

MOUNTAIN ASH (*Pyrus*), European—A fine, hardy tree, head dense and regular; covered from July till winter with great clusters of bright scarlet berries.

Oak-Leaved—A hardy tree of fine pyramidal habit. Height and breadth from 20 to 30 feet. Foliage simple and deeply lobed, bright green above and downy beneath. One of the finest lawn trees.

OAK (*Quercus*), American Red—An American species, of large size and rapid growth; foliage purplish red in the fall.

American White—One of the finest American trees, of large size and spreading branches.

Cut-Leaved—A tree of fine habit and elegant deeply cut foliage. One of the best cut-leaved trees.

English—The Royal Oak of England; a well known tree of spreading, slow growth.

Golden—A superb variety, with orange-yellow leaves, which retain their golden tint throughout the season; one of the finest golden-leaved trees.

Mossy Cup, or Burr Oak—A native tree, of spreading form. Foliage deeply lobed, and the largest and most beautiful among Oak leaves. Cup bearing, acorn fringed and burr-like. Bark corky. One of the noblest of the family.

Pin—Foliage deep green, finely divided; assumes a drooping form when it acquires age. A valuable tree.

OAK Purple-Leaved—A magnificent variety, with dark purple leaves which retain their beautiful tint the entire summer.

Scarlet—A native tree of rapid growth, pyramidal outline, and especially remarkable in autumn, when the foliage changes to a bright scarlet.

Turkey—A very handsome South European species, of rapid, symmetrical growth; foliage finely lobed and deeply cut; leaves change to brown in autumn, and hang on the tree during a great part of the winter. Fine for the lawn.

PAULOWNIA IMPERIALIS (*Empress Tree*)—A magnificent tropical looking tree from Japan; of extremely rapid growth, and surpassing all others in the size of its leaves, which are twelve to fourteen inches in diameter. Blossoms trumpet-shaped, formed in large upright panicles, and appearing in May. Quite hardy here, but the flower buds are killed during severe winters.

DOUBLE-FLOWERED PEACH.
[REDUCED.]

PEACH (*Persica*) **Double Red-Flowered**—Flowers semi-double, bright red. Superb. May.

Double Rose-Flowered—Flowers double, pale rose-colored, like small roses; very pretty. May.

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

Purple, or Blood-Leaved—Foliage of a deep blood-red color in spring, fading to a dull green as the season advances, but the young growth preserves its dark color the entire summer. Very valuable on account of its rapid growth and handsome foliage. The tree should be severely cut back every spring.

The double-flowered Peaches are distinguished for their showy and beautiful bloom. At the blossoming season every branchlet is covered with a mass of beautifully formed, highly-colored flowers, rendering the trees most interesting objects and attracting notice from a distance. The double red, double rose and double white varieties planted in a group produce a charming effect. We cannot too highly recommend these superb flowering trees, which are now sadly neglected.

PLANE (*Platanus*), **American** (Sycamore or Buttonwood)—A well known tree, leaves heart-shaped at base, the short lobes sharp-pointed.

Oriental—Similar to the above, but leaves more deeply cut.

POPLAR (*Populus*), **Balsam**—A native species of remarkably rapid, luxuriant growth, with large glossy foliage.

Bolleana—A very compact upright grower, resembling the Lombardy Poplar, with leaves glossy green above and silvery beneath.

AN AVENUE PLANTED WITH CAROLINA POPLARS.

POPLAR Carolina—A remarkably rapid, luxuriant grower; leaves large, glossy, pale to deep green. Valuable as a street or shade tree when shade is desired quickly. It will also be found useful for planting as a screen to hide unsightly buildings, etc.

Cottonwood, or Canadian—A tall native tree growing 80 feet high, with broadly deltoid, glabrous shining serrate leaves.

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

Van Geert's Golden—Has fine golden yellow foliage, retaining its brilliancy throughout the season; effective in masses.

White, or Silver (*Abele*)—A tree of wonderfully rapid growth and wide-spreading habit; leaves large, lobed, glossy green above and white as snow beneath. Prefers a moist soil, but flourishes anywhere.

SWEET GUM (*Liquidambar*)—One of the finest American trees. Of medium size and moderate growth; form round-headed, or tapering; leaves resemble somewhat those of the Maple, but are star-shaped, and of a beautiful glossy green color in summer, turning to a deep purplish crimson in autumn; bark corky. Beautiful in all stages of growth, it is particularly handsome and striking in autumn.

THORN (*Crataegus*) Double-Red—Bright double-red flowers.

Double-Scarlet—A charming variety; flowers deep crimson, with scarlet shade, and very double.

Double-White—Has small double-white flowers.

Paul's Double-Scarlet—Flowers bright carmine red. Superior to any of its color.

The Thorns justly deserve to be classed among the most beautiful flowering trees. They are generally dense, low growers, occupying comparatively little space and well adapted to beautify small grounds. If judiciously pruned, they can also be trained to assume picturesque tree forms. The foliage is attractive, flowers very showy, and fruit of single flowering varieties very ornamental. They flower in May and June.

TULIP TREE [REDUCED.]

TULIP TREE (*Liriodendron*)—A magnificent native tree, of tall, pyramidal habit, with broad, glossy, fiddle-shaped leaves of a light green color and beautiful tulip-like flowers; allied to the Magnolias, and, like them, difficult to transplant, unless of small size.

WALNUT (*Juglans*,) **Black**—A native species, of great size, and majestic habit. Bark very dark and deeply furrowed. Foliage beautiful, each leaf being composed of from thirteen to seventeen leaflets. Nut round.

Butternut—A native tree, of medium size, spreading head, grayish-colored bark. Nut oblong and rough.

Dwarf English—A dwarf variety that bears when quite small.

European, or Maderia Nut—A native of Persia. Loftier and larger in its native country than our Butternut is with us. Nut oval and very fine.

WILLOW (*Salix*) **Britzensis**—Very attractive in winter, when the bark turns red.

Laurel-Leaved—A fine ornamental tree, with large, glossy leaves.

Rosemary-Leaved—One of the prettiest round-headed small trees; branches feathery; foliage silvery. Deserving of more attention than it has hitherto received.

Royal—An elegant tree, with rich, silvery foliage. Very effective in groups.

Russian Golden—A rare and valuable variety, particularly attractive in winter on account of its bright golden bark.

Siebold's—A tree of elegant habit, with long, graceful branches, and narrow, deep green leaves.

YELLOW WOOD (*Virgilia lutea*)—One of the finest American trees. Of moderate growth, broadly rounded head; foliage light green, turning to a warm yellow in autumn; flowers pea-shaped, white, sweet-scented, appearing in June in great profusion, in long, drooping racemes covering the tree.

SELECT PENDULOUS OR

WEeping DECIDUOUS TREES.

ASH (*Fraxinus*) **European Weeping**—The common, well-known sort; one of the finest lawn and arbor trees; covers a great space, and grows rapidly.

BEECH (*Fagus*) **Weeping**—A remarkably vigorous, picturesque tree, of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight with the branches tortuous and spreading; quite ungainly in appearance divested of their leaves, but when covered with rich, luxuriant foliage, of wonderful grace and beauty.

CUT-LEAVED WEEPING BIRCH.
[REDUCED.]

BIRCH (*Betula*) **Cut-Leaved Weeping**—Beyond question one of the most popular of all weeping or pendulous trees. Its tall, slender, yet vigorous growth, graceful, drooping branches, silvery-white bark, and delicately cut foliage, present a combination of attractive characteristics rarely met with in a single tree.

European White—A graceful tree of moderate size, with silvery bark and slender branches. After four or five years' growth the trees assume an elegant drooping habit.

CHERRY (*Cerasus*) **Dwarf Weeping**—Grafted standard high, this makes a curious and beautiful little, round-headed drooping tree.

Japan Weeping—Feathery and graceful; flowers single white; fruit red. One of the finest of the small-headed pendent cherries.

Japan Weeping Rose-Flowered—One of the finest pendulous trees for lawns or small grounds. The branches are slender, and fall gracefully to the ground, and the flowers are rose-colored, appearing before the leaves. Undoubtedly one of the finest weeping trees. See Cut, page 55.

Among trees of drooping habit there is none more beautiful than the one represented by the illustration. The beauty of the tree consists not only in its graceful pendulous habit, but it has besides the merit of producing quantities of flowers in the blossoming season, and the branches when covered with these give the tree a novel, interesting and charming effect, as will be seen from the picture. The foliage of the tree, too, is handsome. This tree is well suited for either large or small places, and should be planted by itself, where it can have room to develop. By cutting it can be confined to a small place, and if permitted to grow it will cover considerable ground in the course of time. No drooping tree of recent introduction has more merits than this.

DOGWOOD (*Cornus*)—A variety of *C. Florida*, with decidedly drooping branches.

ELM (*Ulmus*) **Camperdown**—Grafted 6 to 8 feet high, this forms one of the most picturesque drooping trees. It is of rank growth, the shoots often making a zigzag growth outward and downward of several feet in a single season. The leaves are large, dark green and glossy, and cover the tree with a luxuriant mass of verdure.

LILAC (*Syringa*), **Chinese Weeping**—A variety of graceful drooping habit.

MOUNTAIN ASH (*Pyrus*), **Weeping**—A beautiful pendulous French variety; fine for arbors.

MULBERRY (*Morus*), **Teas' Weeping Russian**—Forms a perfect umbrella-shaped head, with long, slender branches drooping to the ground, parallel to the stem; very hardy. A new weeper, destined to become very popular when better known.

WILLOW (*Salix*), **American Weeping**—Grafted 5 or 6 feet high, it makes one of the most ornamental of small weeping trees. Hardier than Babylonian.

Babylonian—The common well-known weeping willow.

JAPAN WEeping ROSE-FLOWERED CHERRY.

[REDUCED.]

WILLOW Kilmarnock Weeping—Forms a perfect umbrella-head; unique in form, and exceedingly graceful.

Thurlo's (New)—A graceful weeping tree, with leader of erect growth, and side branches drooping. Said to be very hardy.

Wisconsin Weeping—Of drooping habit and hardier than Babylonian. Valuable on account of its ability to resist severe cold.

TREES POSSESSING REMARKABLE CHARACTERISTICS OF FOLIAGE.

IN THREE SECTIONS.

SECTION. 1.

CUT-LEAVED TREES, COMPRISING THOSE WITH CURIOUSLY-LOBED OR SERRATED FOLIAGE.

BEECH—Cut-leaved.

BIRCH—Cut-leaved Weeping.

LINDEN—Red Fern-leaved.

MAPLE—Japan.

“ “ Blood-leaved.

“ “ Cut-leaved Purple.

“ “ Dark Purple-leaved.

“ “ Palm-leaved.

MAPLE—Montpelier.

“ Norway, Curled-leaved.

“ “ Cut-leaved.

“ Silver Cut-leaved.

“ “ Three-parted-leaved.

“ “ Wier's Cut-leaved.

MOUNTAIN ASH—Oak-leaved.

OAK—Cut-leaved.

SECTION 2.

TREES HAVING CURIOUSLY VARIEGATED FOLIAGE.

ASH—Aucuba-leaved.	MAPLE—Sycamore, Worle's Golden-
“ Silver-Margined leaved.	leaved.
ELM—Variegated English.	WILLOW—Rosemary-leaved.
MAPLE—Sycamore, Tricolor-leaved.	“ Royal.

SECTION 3.

TREES WITH COLORED FOLIAGE.

BEECH—Purple-leaved.	MAPLE—Silver Yellow-leaved.
“ Rivers' Smooth-leaved Purple.	“ Sycamore Purple-leaved.
MAPLE—Japan Blood-leaved.	“ “ Tricolor-leaved.
“ “ Cut-leaved Purple.	OAK—Golden.
“ “ Dark Purple-leaved.	“ Purple-leaved.
“ Norway Geneva.	PEACH—Purple or Blood-leaved.
“ “ Reitenbach's.	POPLAR—Van Geert's Golden.
“ “ Schwedler's.	

TREES WITH BRIGHT-COLORED BARK IN WINTER.

BIRCH—Cut-leaved Weeping.	WILLOW—Britzensis.
“ European White Weeping.	“ Russian Golden.
LINDEN—Dasystyla.	

FLOWERING TREES.

Named in the order in which they flower; embracing some of the choicest species.

MAY.

ALMONDS—Large, Double-flowered.	DOGWOOD—White-flowered.
AMELANCHIER.	HORSE-CHESTNUTS.
BIRD CHERRY.	JUDAS TREE.
CHERRY—Large, Double-flowered.	MAGNOLIAS.
CRABS.	PEACH—Double-flowered.

JUNE.

CATALPA.	THORNS—In variety.
LABURNUM.	WHITE FRINGE.
LINDENS—In variety.	YELLOW WOOD.
MOUNTAIN ASH.	

JULY.

CHESTNUTS—American.	KÆLREUTERIA.
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TREES WHICH PRODUCE ORNAMENTAL FRUIT SUCCEEDING THE FLOWERS.

DOGWOOD, White-flowered—Oval fruit in a head.
MOUNTAIN ASH—Scarlet fruit in September and October.
THORNS, Single Flowering Varieties—Scarlet fruit in September and October.

SELECT EVERGREEN TREES.

We recommend planting Evergreens in the Spring only.

ARBOR VITÆ (*Thuja*.) **American**—A fine, erect tree with horizontal branches and flat foliage. Excellent for screens and hedges. Commonly known as White Cedar.

Compact—A variety of the preceding, of dwarf, compact form.

Douglas' Golden—Golden foliage; fine.

Globe-Headed—Forms a dense, round shrub. Very desirable.

Geo. Peabody—Of dwarf compact growth, foliage bright golden color, which it retains throughout the summer; the best golden variety.

Hovey's—A seedling from the American; of dwarf habit, globular outline, and bright green foliage. Fine and hardy.

Little Gem (Douglas)—Very dwarf and compact; foliage a beautiful dark green.

Nootka Sound (*Plicata*)—A handsome hardy variety from Nootka Sound. Foliage plaited, massive, and of a rich, dark green color.

ARBOR VITÆ PYRAMIDAL.—[REDUCED].

Pyramidal—Of upright, compact habit, like the Irish Juniper; very desirable.

Siberian—Exceedingly hardy, keeping color well in winter; growth compact and pyramidal; makes an elegant lawn tree. Of great value for ornament, screens and hedges.

Tom Thumb—A dwarf variety of the American Arbor Vitæ, remarkable for its slow growth and compact, symmetrical habit. Valuable for the decoration of gardens, lawns or cemeteries, where large trees may not be admissible. Will be found useful for small evergreen hedges.

Vervæne's—A distinct and handsome yellow marked variety.

CYPRESS (*Cupressus*.) **Lawson's**—A rare evergreen from California. One of the most graceful; elegant drooping branches; half hardy here.

Nootka Sound—A desirable species from Nootka Sound. It is pyramidal in habit, with light, glossy green foliage, sometimes with a bluish shade.

JUNIPER (*Juniperus*.) **Chinese**—Native of China and Japan. A handsome, dense shrub with dark green foliage, and somewhat drooping branches.

English—A handsome, compact, small tree.

Irish—A distinct and beautiful variety, forming a column of deep green foliage.

Irish Robust—More vigorous than the preceding and no doubt hardier, but not quite so regular in form, nevertheless handsome.

Japanese—Native of China and Japan. A dwarf, dense, bushy evergreen, with light, lively green foliage.

Prostrate—A beautiful native species, trailing and densely branched, foliage delicate and shining dark green. Well adapted for covering rockwork. One of the best.

Red Cedar—A well-known American tree; varies much in habit and color of foliage, some being quite stiff, regular, and conical, and others loose and irregular. It makes a fine ornamental hedge plant.

Savin—A dwarf, spreading shrub, with trailing branches. Thrives in the poorest soils. Very suitable for rockwork.

Swedish—A small-sized, handsome pyramidal tree, with bluish green foliage.

Venusta—A rapid grower, of erect habit and fine silvery foliage; very ornamental and perfectly hardy.

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

Mountain (Dwarf Mugho)—An upright, small pine; found on the Pyrenees and Alps. Its general form is that of pine bush, but it has been found growing as high as forty feet.

Scotch—A native of the British Isles. A fine, robust, rapid-growing tree, with stout, erect shoots, and silvery green foliage. Very hardy; valuable for shelter.

Swiss Stone (Cembra)—A handsome and distinct European species, of compact conical form; foliage short and silvery; grows slowly when young.

White or Weymouth—The most ornamental of all our native pines; foliage light, delicate, or silvery green. Flourishes in the poorest light sandy soil. Very valuable.

RETINISPORA Pisifera—A beautiful shrub, of a bright green color, pyramidal in form. **Plumosa**—An exceedingly handsome small evergreen from Japan, with feathery, light green foliage.

Squarosa—A tree of small size with graceful drooping branches and glaucous green foliage.

NOTE.—The Retinisporas require slight protection during winter in cold sections.

SILVER FIR (*Picea*), **Balsam**—A very erect, regular, pyramidal tree, with dark green somber foliage. Grows rapidly and is very hardy.

Cephalonian—From Europe. A remarkable and beautiful species, very broad for its height, leaves silvery and dagger-shaped, with a spine on the point. Quite hardy and vigorous.

Colorado (Concolor)—Without doubt the finest of the Rocky Mountain evergreens. Tree of graceful habit; broad, handsome foliage, bluish above, silvery beneath. A grand tree, very distinct and exceedingly rare as yet.

Nordmann's—A noble fir of majestic and symmetrical form, found on the Crimean Mountains. Hardy; one of the best evergreens.

COLORADO BLUE SPRUCE (PUNGENS)—[REDUCED].

SPRUCE (*Abies*) **Colorado Blue** (*Pungens*)

—One of the hardiest and most beautiful of all the spruces; in form and habit similar to the White Spruce; foliage of a rich blue or sage color; an important acquisition.

Compact—A dense grower, with light green foliage.

Conical — A dwarf variety, of compact, conical habit; becomes perfectly symmetrical without pruning. *One of the best.*

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

Eastern (Orientalis)—From the shores of the Black Sea. A handsome tree, tall and compact, and remarkable for its graceful habit and slender foliage. Needs protection here while young.

SPRUCE Black (Nigra)—A fine native tree, of compact growth, with smooth blackish bark and bluish leaves; very hardy.

Hemlock—A remarkably graceful and beautiful native tree, with drooping branches, and delicate, dark foliage, like that of the Yew; distinct from all other trees. It is a handsome lawn tree, and makes a highly ornamental hedge.

Norway—An elegant tree, extremely hardy, of lofty, rapid growth, and pyramidal form. The branches assume a graceful, drooping habit, when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees, or in masses for effect or shelter. It is one of the best evergreen hedge plants.

White—A native tree of medium size, varying in height from 25 to 50 feet, of pyramidal form. Foliage silvery gray, and bark light colored. Very hardy and valuable.

YEW (*Taxus*.) Elegantissima—One of the most valuable golden-leaved evergreens which we have. In June and July the leaves of the new growth are of a bright straw color, rendering the plant highly effective, either by itself or in connection with other conifers. One of the hardiest of the Yews.

English—A large bush or tree, 30 to 40 feet when fully grown. It is densely branched and can be trimmed into any shape.

Erect—An erect-growing variety, with small dark, shining leaves. One of the hardiest of the Yews.

Irish (*Fastigiata*)—Upright in growth, with dense foliage of a dark, somber hue; not quite hardy here; valuable at the south for cemeteries or small yards.

Washington's Golden—Foliage handsomely variegated with yellow spots and stripes.

EVERGREEN SHRUBS.

For Spring delivery only.

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

BOX (*Buxus*) Broad-Leaved—Broad foliage; distinct.

Common—A handsome shrub, with deep green foliage.

Dwarf—For edging.

Handsworth's—An upright, vigorous variety, with oval leaves; very hardy and ornamental; one of the best.

Rosemary-Leaved—Forms a beautiful small bush; foliage glaucous.

The species and varieties of the Tree Box are beautiful lawn shrubs or small trees, well adapted to small places. They flourish best when partially shaded. In this climate they require protection.

DAPHNE Cneorum (Garland Flower)—A pretty dwarf, evergreen shrub, bearing a profusion of rosy lilac flowers in May; fine for rockwork.

Hardy Laurel (*Prunus Laurocerasus Schipkensis*)—This is a valuable new evergreen shrub, with large, broad, shining, deep green leaves, similar in appearance to the beautiful Laurel or Bay Tree, so highly prized for house decoration. We have had this new shrub in our nurseries for some years, and it has withstood the severest winters without injury, and we regard it as a very valuable addition to the list of choice shrubs. Small plants.

Mountain Laurel or Calico Bush (*Kalmia latifolia*)—A beautiful native evergreen shrub, with shining foliage and dense clusters of pink or nearly white flowers in spring. Requires same treatment as the Rhododendron.

MAHONIA, Holly-Leaved—A native species of medium size, with purplish, shining, prickly leaves, and showy, bright yellow flowers in May, succeeded by bluish berries. Its handsome, deep green, glossy foliage and neat habit, render it very popular for decorative planting.

Japan—Large distinct leaves, and yellow flowers in May.

RHODODENDRON, Catawbiense Seedlings—Round clusters of lilac and violet flowers; plants about 18 or 24 inches in height, set with flower buds.

Named Varieties—Set with flower buds. Fine assortment of colors. Plants 18 to 24 inches in height.

HARDY ORNAMENTAL FLOWERING SHRUBS.

ALMOND (*Amygdalus*.) Dwarf Double White-Flowered—Produces beautiful double white flowers in May.

ALTHÆA BUSH IN BLOOM.

Dwarf Double Red-Flowered—A beautiful small shrub, bearing an abundance of small double rose-like flowers, in May, closely set upon twigs before the leaves appear.

ALTHÆA (*Rose of Sharon* or *Hibiscus*)—

The Althæas are fine, free-growing flowering shrubs of the easiest cultivation. Very desirable on account of blooming in autumn months, when scarcely any other tree or shrub is in blossom. August and September.

Double-Blush.

Double-Purple.

Double-Red—Clear color; one of the best.

Double-Rose.

Double - Variegated, or Painted Lady—White, with purple outside. Petals shaded pink.

Double-Violet.

Double-White.

Single-Blue.

Single-Purple.

Single-White.

Variegated-Leaved — A conspicuous variety, with the foliage finely marked with light yellow, and producing double purple flowers. One of the finest variegated-leaved shrubs.

AMORPHA (False Indigo) *Fragrans*—A fine large hairy shrub, with small dark purple flowers, in dense terminal panicles. June and July.

ARALIA *Pentaphylla*—A pretty Japanese shrub, of medium size and rapid growth; branches furnished with spines; leaves palmate, five-lobed, and pale green. September.

Spinosa (*Hercules Club*)—A noble appearing plant with very large bi-pinnate leaves, and large trusses of white flowers; valuable for producing tropical effects.

AZALEA *Mollis*—A splendid hardy species from Japan, and one of the most valuable flowering shrubs. Flowers large and showy, in fine trusses and of various colors including shades of pink, yellow, orange and carmine.

Pontica—Deep yellow flowers, very fragrant.

Pontica (*Ghent Varieties*)—Native of Asia Minor. A species growing three to four feet high, with small hairy leaves, and yellow, orange and red flowers, and possesses a delightful perfume. May and June. In this latitude plants are improved by slight protection.

BARBERRY (*Berberis*) **American**—A native species, with handsome, distinct foliage and yellow flowers from April to June, succeeded by red berries.

European—A handsome shrub with yellow flowers in terminal drooping racemes in May or June, followed with orange scarlet fruit.

PURPLE-LEAVED BARBERRY.
[REDUCED.]

Purple-Leaved—An interesting shrub, growing three to five feet high, with violet purple foliage and fruit; blossoms and fruit beautiful; very effective in groups and masses or planted by itself.

Thunbergii (Thunberg's)—From Japan. A pretty species of dwarf habit, small foliage, changing to a beautiful red in autumn, making it very attractive. See cut on page 62.

CALYCANTHUS Floridus (Sweet-Scented Shrub)—A native species, with double purple, very fragrant flowers.

CARAGANA Arborescens (Siberian Pea Tree)—A shrub or low tree. Native of Siberia and China. Pea-shaped yellow flowers in May.

CEANOTHUS Americanus (New Jersey Tea or Red Root)—A low growing shrub, flowers white in June. Valuable for shady places.

CHINESE CHESTNUT (*Zanthoceras Sorbifolia*)—From Central China. Forms a shrub or small tree, foliage resembling that of the Service Tree or Mountain Ash; flowers five petaled, white, reddish, copper-colored at base, disposed in racemes about eight inches long; flowers expand in April or May with the leaves. It is very floriferous, young plants flowering freely. Requires protection until established.

CLETHRA Alnifolia (Sweet Pepper Bush)—Spikes of clear white, fragrant flowers in August. Dwarf habit.

COLUTEA Arborescens (Bladder Senna)—A large shrub, with small delicate foliage, and yellow pea-blossom-shaped flowers, followed by reddish pods or bladders.

CORNUS, OR DOGWOOD, Alternate-Leaved—Flowers creamy white in large bunches, very fragrant; foliage large. Distinct and curious in its habit of growth.

Mascula (Cornelian Cherry)—A small tree, producing clusters of bright yellow flowers, early in spring before the leaves.

BARBERRY THUNBERGII.

[REDUCED.]

Mascula Var. (Variegated Cornelian Cherry)—Foliage beautifully variegated with white: one of the prettiest variegated shrubs in cultivation.

Panicled (*Paniculata*)—Smooth ash colored bark; pointed leaves, light green above, whitish beneath; flowers greenish white; fruit white.

Red-Branded (*Sanguinea*)—A native species, very conspicuous and ornamental in winter; when the bark is blood red.

Red-Branded Variegated-Leaved (*Elegantissima* Var.)—This variety of the well-known red Dogwood has silver-margined leaves, which render it a very showy shrub. We consider it to be an addition of great merit.

Red Siberian—A rare and remarkable variety with bright red bark in winter.

Round-Leaved (*Circinata*)—A native species with round leaves, downy beneath. Flowers small, white, in flat cymes in June and July; fruit light blue.

Spæth's Golden Variegated—A charming variety, with golden variegated foliage.

Stolonifera (Wild Red Osier)—A native species, with smooth, slender branches, which are usually red in winter.

CURRENT (*Ribes*) Crimson-Flowered—An American species, with deep red flowers, produced in great abundance in early spring.

Gordon's—A hardy and profuse blooming shrub. Flowers crimson and yellow in pendant bunches in May.

Yellow-Flowered—A native species, with shining leaves and yellow flowers.

DAPHNE Mezereum (Common Mezereum)—A native of Northern Europe. A shrub with small, erect branches, and clusters of pink flowers in March. The earliest flowering shrub we have.

Mezereum Album—White flowers.

DEUTZIA Corymbiflora—This is a new and remarkably interesting variety. It is of long, slender growth, with large, long, dark-green leaves, and large corymbs of pure white flowers. It blooms in May, and occasionally in the Fall.

Double-Flowered (*Crenata fl. pl.*)—Flowers double; white tinged with rose. One of the finest flowering shrubs in cultivation.

Double White (*Alba pl.*)—Similar to the preceding, but has pure white double flowers.

DEUTZIA GRACILIS.
[REDUCED.]

Gracilis (Slender-branched)—A charming species; flowers pure white. Fine for pot culture and cemetery planting. Of dwarf habit.

Gracilis Rosea—Of same general habit of growth as *Deutzia Gracilis*. Its flowers, however, are double the size of that fine old variety. It is charmingly effective through being diffused with a delicate tint of rose color, which adds to its attractiveness. It will become popular for forcing as soon as its merits become known.

Gracilis Venusta or Azalea-Flowered.—This variety is a beauty. Its flowers are very large and open, like small Azaleas, flower pure white of great beauty and very attractive.

Lemoine's—A hybrid obtained by Mons. Lemoine of France, by crossing the well-known *Deutzia gracilis* with *Deutzia parviflora*. Flowers pure white, borne on stout branches which are of upright growth. Habit dwarf and free flowering. A decided acquisition.

Pride of Rochester—A variety raised from the double-flowered and producing large, double white flowers, the back of the petals being slightly tinged with rose. It excels all of the older sorts in size of flower, length of panicle, profuseness of bloom and vigorous habit, and blooms nearly a week earlier than the parent. See cut, page 64.

Scabra (Rough-leaved)—One of the most beautiful profuse flowering shrubs; flowers single white.

ELÆAGNUS Longipes—This is a remarkably beautiful new shrub from Japan. In July the plant is covered with bright red berries of large size and edible, the flavor being pungent and agreeable. Laden with fruit the bush is highly ornamental, and the fact that its leaves remain fresh till late in the autumn gives it additional value for garden decoration.

DEUTZIA—PRIDE OF ROCHESTER.

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

Black-Berried—A native of Europe, of medium size, with purplish black berries in September.

Common—Broad panicles of white flowers in June; reddish purple berries in autumn. A well known native shrub.

Cut-Leaved (*Laciniata*)—A valuable variety with elegantly divided leaves; one of the best cut-leaved shrubs.

Fern-Leaved (*Filicifolia*)—Luxuriant grower, with deeply and delicately cut foliage.

Golden (*Aurea*)—A handsome, vigorous rapid-growing variety, with golden yellow foliage, the brilliancy of which is retained throughout the season. A valuable plant for enlivening shrubberies.

ELDER Golden Cut-Leaved (*Aurea laciniata*)—New. A beautiful cut-leaved shrub, with bright golden-yellow foliage.

Variegated-Leaved—Of strong healthy growth; foliage mottled with yellow and white. One of the best variegated-leaved shrubs.

EUONYMUS (Burning Bush or Spindle Tree) **European Red-Fruited Strawberry Tree**—Forms a tree sometimes 30 feet in height. Fruit rose colored.

White-Fruited Strawberry Tree—A variety with white fruit.

EXOCHORDA Grandiflora (Pearl Bush)—A rare shrub, producing in remarkable profusion large white flowers in May. *One of the finest shrubs of the season.* Difficult to propagate and always scarce.

FILBERT (*Corylus*) **Cut-Leaved**—A very ornamental shrub, with deeply cut foliage.

Purple-Leaved—A very conspicuous shrub, with large dark purple leaves. Distinct and fine.

FORSYTHIA (Golden Bell) **Fortune's**—Growth upright; foliage deep green, flowers bright yellow.

HYDRANGEA PANICULATA GRANDIFLORA.

[REDUCED.]

FORSYTHIA Intermedia—A valuable new variety ; flowers bright golden ; foliage glossy green like *viridissima*, but hardier than that variety.

Suspensa (Weeping)—A shrub resembling *Fortune's* in its flowers, but the growth is somewhat drooping.

Viridissima—Leaves and bark deep green, flowers deep yellow ; one of the earliest flowering shrubs ; very conspicuous.

HONEYSUCKLE UPRIGHT (*Lonicera*) Bella Albida—A new upright honeysuckle of great merit. Its flowers are pure white, in the greatest profusion, and very sweet. The flowers are succeeded by large translucent red berries, making the plant more attractive than any flowers.

Bella Rosea—Similar to the Albida, in growth, etc. ; its flowers, however, are a bright lively rose color. Very desirable.

Fragrantissima—A spreading shrub with deep green foliage and very fragrant small flowers, which appear before the leaves ; foliage almost evergreen ; very desirable.

Morrowii—A fine variety from Japan ; valuable for its handsome red fruit.

Pink Tartarian (*Grandiflora*)—A beautiful shrub, very vigorous, and producing large, bright red flowers, striped with white in June.

Red Tartarian—Pink flowers which contrast beautifully with the foliage. June.

White Tartarian—Forms a high bush, with creamy-white, fragrant flowers. May and June.

HOP TREE (*Ptelea*)—A large shrub or small tree, of rapid growth and robust habit. Fruit winged and in clusters. June.

Aurea (*Golden-Leaved*)—Beautiful glossy, golden foliage, holds its color well.

DOUBLE FLOWERING LILAC.
[REDUCED.]

HYDRANGEA Hortensis or Garden—Native of Japan, introduced in 1790. An elegant well-known plant, with large leaves and large globular heads of rose-colored flowers; usually grown in pots or boxes; in the North requires protection out of doors in winter.

Oak-Leaved—A hardy native shrub, remarkable for its large leaves, which are lobed like those of the Oak, and downy beneath; flowers cream colored in medium sized panicles; August. Very desirable.

Paniculata Grandiflora—A fine shrub, perfectly hardy, growing from eight to ten feet high, flowers in August and September, white, in great pyramidal panicles a foot long. Decidedly one of the finest flowering shrubs. See cut on page 65.

Red Branched—A very free bloomer, producing large and magnificently formed trusses of deep rose-colored flowers from every shoot. The best variety for forcing and pot culture.

Thomas Hogg—This belongs to the *Hortensis* section of the family, but it is a far more free and abundant bloomer than any other; for the florist and for all decorative purposes it is invaluable; the flowers are of the purest white, of very firm texture, and are produced from July to September. It is as hardy as the old *Hortensis*; requires some protection in winter.

HYPERICUM (St. John's Wort) Aureum—One of the finest in flower and foliage; continues in bloom from August to October.

Kalmianum—A fine native, low spreading shrub with gay, bright yellow flowers in August. Succeeds well in the shade.

Moserianum—A charming shrub of dwarf habit, producing large single yellow flowers in great profusion during the summer.

JAPAN QUINCE—See QUINCE.

KERRIA (Corchorus) Japan—A slender, green-branched shrub, 5 or 6 feet high, with globular, yellow flowers from July to October.

Double-Flowered—Of medium size; double yellow flowers.

Variegated-Leaved—A dwarf variety from Japan, with small green foliage, edged with white; very slender grower. One of the prettiest and most valuable of dwarf shrubs.

LILAC (Syringa)—Well-known, beautiful shrubs, indispensable in every collection. They flower in May.

Albert The Good—An erect, vigorous grower, with large spikes of reddish purple flowers.

Charles X—A strong, rapid growing variety, with large, shining leaves; trusses large, rather loose, reddish purple.

Common Purple—Bluish purple flowers.

Common White—Cream-colored flowers.

Cærulea Superba—Flowers light purple in bud, but when fully open a clear blue; trusses very large. One of the best.

Dwarf (Nana)—Distinct, large, and compact spike of dark reddish purple, fragrant flowers.

Josikæa—A fine, distinct species, of tree-like growth, with dark shining leaves, and purple flowers in June, after the other Lilacs have done flowering. Esteemed particularly for its fine habit and foliage.

Marie Legraye—Large panicles of white flowers. Valuable for forcing. The finest white Lilac.

Persian—Small foliage and bright purple flowers; grows from 4 to 6 feet high.

Persian White—Delicate white fragrant flowers, shaded with purple. A superb variety. Rare.

Princess Alexandra—A variety with pure white flowers; panicles medium to large; one of the finest white.

Prince of Wales—Panicles medium to large, flowers purplish lilac, the petals slightly curling near the edge, giving the flowers the appearance of being striped.

Rouen (Rothomagensis)—A distinct hybrid variety, with reddish flowers; panicles of great size, and very abundant. One of the finest.

LILAC Siberian White—A vigorous grower, foliage small and narrow, flowers white with a bluish tint, fragrant and handsome.

NEW LILACS.

Double-flowered and single-flowered, the latest introductions. We have taken great pains to secure the choicest, and can now offer fine plants. We advise every one of our patrons to secure these acquisitions, and most remarkable and valuable additions to the list of hardy flowering shrubs made in many years.

Frau Dammann—Pure white; very large panicle; one of the finest white lilacs. Single.

Japan Tree Lilac (*Japonica*)—A new species from Japan, becoming a good-sized tree. Foliage dark green, glossy, leathery; flowers single, creamy white, odorless in great panicles. A month later than other lilacs.

Lamarck—Very large panicle; individual flowers large, very double, rosy lilac; superb when open.

Leon Simon—Double. Panicle compact, flowers bluish crimson.

Ludwig Spæth—Very dark purplish red, distinct, large panicle; single; the finest of its color.

Madame Casimer Perrier—Best double white, large truss, extra fine.

Madame Lemoine—Superb double white.

President Grevy—A beautiful blue, individual flowers very double and very large, the panicle is magnificent, one of the finest lilacs. See cut on page 69.

LILAC VILLOSA.

[REDUCED.]

Villosa—Another new species from Japan. Large branching panicles; flowers single, light purple in bud, white when open; fragrant; foliage resembles that of the *White Fringe*. Especially valuable, as its flowers appear two weeks after those of other Lilacs.

LILAC PRESIDENT GREVY.
[REDUCED.]

MOCK ORANGE—See SYRINGA.

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

Purple-Leaved (*Prunus Pissardi*)—The finest purple-leaved small tree or shrub of recent introduction. The young branches are a very dark purple; the leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in autumn; no other purple-leaved tree or shrub retains its color like this. It transplants easily and is worthy of wide dissemination. Flowers small, white, single, covering the tree.

PRUNUS TRILOBA.
[REDUCED.]

PRIVET California—A vigorous, hardy shrub of fine habit and foliage; valuable for hedges.

Ibota—A valuable new shrub, native of China and Japan. Flowers large, white, very fragrant, produced in great profusion; leaves long and shining; one of the hardiest of the Privets and distinct. A charming shrub which will be prized for its fragrant flowers, as well as for its handsome foliage.

PURPLE FRINGE OR SMOKE TREE (*Rhus Cotinus*)—A much admired shrub for its curious fringe, or hair-like flowers, that cover the whole surface of the plant in the latter end of July. It grows ten or twelve feet high, and spreads so as to require considerable space.

QUINCE—The flowering varieties of the Japan Quince rank among our choicest shrubs. Although of straggling growth, they bear the knife well, and with proper pruning may be grown in any form. As single shrubs on the lawn they are very attractive. Their large brilliant flowers are among the first blossoms in spring and they appear in great profusion, covering every branch, branchlet and twig, before the leaves are developed. Their foliage is bright green and glossy, and retains its color the entire summer, which renders the plant very ornamental. *Special attention is invited to this plant for ornamental hedges. It is sufficiently thorny to form a defense, and at the same time makes one of the most beautiful flowering shrubs. See Hedge plants.*

Blush—A very beautiful variety of the scarlet, with delicate white and blush flowers.

Scarlet—Has bright scarlet-crimson flowers.

SPIRÆA ARGUTA.
[REDUCED.]

SPIRÆA Anthony Waterer—A fine new dwarf Spiræa with dark crimson flowers, darker than Spiræa Bumalda. One of the finest shrubs of recent years.

Arguta—Of dwarf habit; flowers clear white. The best very early flowering white Spiræa. Early May.

Billardi — Rose-colored. Blooms nearly all summer.

Bumalda—A very handsome species from Japan. Habit dwarf, but vigorous; foliage narrow, flowers rose-colored, appearing in great profusion during midsummer and autumn.

Callosa—Large panicles of deep rosy blooms; grows freely; blooms nearly all the summer.

Callosa Alba—A white flowering variety, of dwarf, bushy, symmetrical form. Keeps in flower all summer.

SPIRÆA BILLARDI.
[REDUCED.]

QUINCE Umbelicata—Flowers brilliant rosy red, succeeded by large, showy fruit; forms a large shrub. One of the finest.

RHODOTYPUS Kerrioides—From Japan. A very ornamental shrub of medium size, with handsome foliage and large, single, white flowers in the latter part of May, succeeded by numerous small fruit.

ROSE OF SHARON OR HIBISCUS—See ALTHEA.

SNOWDROP TREE OR SILVER BELL (Halcsia)—A unique and beautiful large shrub, with pretty white bell-shaped flowers in May. It is distinguished by the four-winged fruit, which is from one to two inches long. One of the most desirable shrubs.

SPIRÆA Double-Flowered Plum-Leaved or Bridal Wreath (*Prunifolia fl. pl.*)—A beautiful shrub with pure white flowers like daisies in May. Keeps in flower a long time.

Golden-Leaved (*Opulifolia Aurea*)—An interesting variety, with golden yellow tinted foliage and double white flowers in June. Very conspicuous.

Hawthorn-Leaved (*Crataegifolia*)—A handsome sort. Flowers greenish white in May. Superb.

Lance-Leaved (*Lancifolia*)—A charming shrub with narrow pointed leaves, and large, round clusters of white flowers that cover the whole plant, and render it exceedingly effective. Blooms in June.

Lance-Leaved Double (*Lancifolia fl. pl.*)—A beautiful double-flowering variety.

SPIRÆA CALLOSA ALBA.
[REDUCED.]

SPIRÆA VAN HOUTTEI.
[REDUCED.]

Thunbergii—Of dwarf habit, and rounded, graceful form; branches slender and somewhat drooping, foliage narrow and yellowish green; flowers small, white, appearing early in spring.

Van Houttei—One of the finest flowering shrubs; flowers large white appearing in great profusion in early spring. Its ability to endure extremes of cold, together with its beauty of flower and remarkable freedom of bloom, commend it to all planters.

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

SUMACH Cut-Leaved (*Rhus Glabra Laciniata*)—A very striking plant, of moderate size, with deeply cut leaves resembling fern leaves; dark green above and glaucous below, and turning to a rich red in autumn. See cut, page 74.

SYMPHORICARPUS RACEMOSUS (Snowberry)—A well known shrub, with small pink flowers, and large white berries that hang on the plant through part of the winter.

Vulgaris (Indian Currant)—A shrub of very pretty habit. Foliage, flowers, and fruit small; fruit purple; hangs all winter.

SYRINGA GRANDIFLORUS.
[REDUCED.]

**SYRINGA, OR
MOCK OR -
ANGE** (*Philadelphus*)

Boule d'Argent (New)

—This we consider a great acquisition. The plant is a good grower and free bloomer; flowers large, white, very full, double and fragrant.

Double-Flowered

—A variety with partially double, very fragrant flowers.

Dwarf (*Nana*)—

Of low habit; makes a dense, compact bush, rarely produces flowers; useful as a dwarf shrub.

Garland—Flowers

pure white, highly scented. One of the first to flower.

Gerb de Neige

(New)—Perhaps the best of all the mock oranges. Flowers

large, pure white and fragrant. A very free bloomer; flowers last a long time.

Golden-Leaved (*Aurea*)—A very pretty plant of medium size, with golden yellow foliage. It keeps its color the entire season, and will be found valuable for creating pleasing and striking contrasts with purple-leaved shrubs. Very effective in masses.

Gordon's—A vigorous grower and profuse bloomer; flowers slightly fragrant; blooms late, and valuable on that account.

Hoary-Leaved—A beautiful shrub with large, downy leaves, and large white flowers; blooms late.

Large-Flowered—Has very showy large flowers, slightly fragrant, branches somewhat straggling.

Laxus—Very large, white, fragrant flowers; upright habit; very free flowering; a valuable sort.

Lemoine's Erect—A charming variety of upright growth; flowers small, yellowish-white, fragrant, completely covering the plant.

Nivalis—The stamens of this variety are cream-colored, thus rendering the whole flower snowy white. Flowers inodorous.

Speciosus—Very showy flowers; late; distinct habit.

Zehyr's—A large-flowered, odorless variety; flowers very late.

TAMARIX African—Handsome foliage; upright habit; flowers in May.

TAMARIX Chinese—A vigorous, upright grower, with delicate foliage, of a lively green color; flowers rose-colored in September.

These are very beautiful shrubs, with small leaves, somewhat like those of the Juniper, and delicate small flowers in spikes. They are invaluable for planting by the seaside, where scarcely anything else will grow.

VIBURNUM High, or Bush Cranberry (*Opulus*)—Both ornamental and useful. Its fruits is esteemed by many; resembles the Snowball in wood and foliage.

Lantana—A large, robust shrub, with soft, hoary leaves, and large clusters of white flowers in May; retains its foliage very late; quite ornamental in all respects.

Plicatum (Japan Snowball)—Of moderate growth; handsome plicated leaves, globular heads of pure white, neutral flowers, early in June. It surpasses the common variety in several respects. Its habit is better, foliage much handsomer, flowers whiter and more delicate. One of the most valuable flowering shrubs.

CUT-LEAVED SUMACH.
[REDUCED.]

Rough-leaved (*Rugosum*)—Has larger and rougher leaves than the Lantana, and terminal cymes of white flowers in May. Very ornamental in foliage and fruit.

Sterilis (Common Snowball)—A well-known favorite shrub of large size, with globular clusters of pure white sterile flowers the latter part of May.

WEIGELA Candida—A valuable variety. It is of vigorous habit, an erect grower becoming in time a large-sized shrub; flowers pure white, and produced in great profusion in June, and the plants continue to bloom throughout the summer, and even until autumn.

Desbois—A beautiful variety, with deep, rose-colored flowers, resembling *rosea*, but flowers much darker. One of the best.

WEIGELA, EVA RATHKE.

[REDUCED.]

WEIGELA Eva Rathke—A charming new Weigela, flowers brilliant crimson; a beautiful, distinct, clear shade.

Floribunda—A fine variety, flowers dark red. A profuse bloomer.

Gustave Mallet—Flowers deep red; habit good; very free-flowering.

Hendersonii—Of fine compact habit; rather slender, erect growth; flowers medium size; outside of petals red; interior a lighter shade.

Lavallei—A fine variety, producing dark reddish purple flowers; one of the darkest varieties; habit straggling.

P. Duchartre—Branches erect; flowers clear amaranth color.

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

Variegated-Leaved Dwarf—Of dwarf habit, with clearly defined silvery variegated leaves which stand the sun well. Flowers nearly white. One of the best dwarf variegated-leaved shrubs in the catalogue.

Another valuable genus from Japan, introduced as late as 1843. Shrubs of erect habit while young, but gradually spreading and drooping as they acquire age. They produce in June and July superb large trumpet-shaped flowers, of all shades and colors, from pure white to red. In borders and groups of trees they are very effective, and for margins the variegated-leaved variety is admirably suited, the gay-colored foliage contrasting finely with the green of other shrubs. They flower after the Lilacs in June.

WHITE FRINGE (*Chionanthus Virginica*)—A small native tree or shrub, of roundish form, with large glossy leaves and drooping racemes of pure white flowers, having narrow, fringe-like petals; blossoms in May or June. A superb lawn shrub.

XANTHOCERAS Sorbifolia—See CHINESE CHESTNUT.

STANDARD SHRUBS.

The practice of training shrubs in tree form is comparatively new, and has proven unsurpassed for the pleasing effect produced in formal gardening work. As centres for beds, groups, etc., or for straight lines bordering walks, they are especially appropriate. A collection of assorted colors of the *Althæa* will prove much more reliable and satisfactory than Tree Roses, while being equally as attractive when in bloom.

STANDARD SHRUBS should be supported by stakes to prevent injury from wind or heavy snowfalls. Two strong stakes should be driven firmly in the ground, one on either side of the shrub, which should be securely fastened to these stakes with soft rope or other such substance that would not injure the bark of the shrub.

ALTHÆA—Finest double-flowering varieties of the following colors, viz.: Red, purple, variegated, white and pink. Stems 3 to 4 feet. See Cut, Page 76.

DEUTZIA—*Candida* and *Pride of Rochester*—Stems 3 to 4 feet.

FORSYTHIA Fortune's—Stems 3 to 4 feet.

HYDRANGEA *Paniculata Grandiflora*—Stems 2 to 2½ feet.

PRIVET *Californica*—Stems 3 to 4 feet.

Sinense—Glaucous foliage. Stems 3 to 4 feet.

STANDARD or TREE ALTHÆA—[REDUCED.]

SNOWBALL—See VIBURNUM.

SPIRÆA Opulifolia—White flowers. Stems 3 to 4 feet.

SYRINGA Grandiflora or large-flowered—Stems 3 to 4 feet.

Nivalis fl. pl.—Double. Stems 3 to 4 feet.

VIBURNUM Plicatum—Certainly a grand shrub in tree form. Stems 2 to 3 feet.

WEIGELA Candida—Stems 3 feet.

WISTARIA Frutescens or shrubby—Stems 3 to 4 feet.

FLOWERING SHRUBS WITH VARIEGATED OR COLORED FOLIAGE.

Althæa, variegated-leaved double purple
flowered.

Barberry, purple.

Cissus, variegated.

Cornus, elegantissima variegata.

“ mascula variegata.

“ Spæth's golden variegated.

Elder, variegated-leaved.

Elder, golden.

Filbert, purple-leaved.

Hop Tree, golden.

Kerria, variegated-leaved.

Prunus, Pissardi.

“ Triloba.

Syringa, golden.

Weigela, variegated dwarf.

STANDARD or TREE HYDRANGEA.
[REDUCED.]

A LIST OF FLOWERING SHRUBS, Etc.

NAMED IN THE ORDER IN WHICH THEY BLOOM.

APRIL.

DAPHNE MEZEREUM.

MAY.

FORSYTHIA, in variety,

JAPAN QUINCE, in variety,

PRUNUS Pissardi,

“ Triloba,

ALMOND, Dwarf Double-Flowered,

SPIRÆA, Double - Flowered, Plum-
Leaved,

SPIRÆA Arguta,

LILACS, in variety,

SPIRÆA Van Houttei,

VIBURNUM Lantana,

“ Rough-Leaved,

MAHONIA,

HONEYSUCKLE Tartarian,

WISTARIA,

TREE PÆONIA.

JUNE.

HALESIA,

DEUTZIA Gracilis,

SPIRÆA, Lance-Leaved,

VIBURNUM, High or Bush Cranberry,

VIBURNUM Plicatum,

WEIGELA, in variety,

CORNUS, Red-Branded,

LILAC, Josikæa,

“ Japonica,

“ Villosa,

SYRINGA, in variety,

RHODODENDRONS, in variety,

PÆONIES, Herbaceous, in variety,

CLEMATIS, Jackmanni and others,

ELDER,

DEUTZIA, Double-Flowered.

JULY.

SPIRÆA, Billardi,

“ Anthony Waterer,

“ Bumalda,

“ Callosa Alba,

“ Callosa.

AUGUST AND SEPTEMBER.

ALTHÆA, in variety,

HYDRANGEA, Paniculata Grandiflora,

CLEMATIS, Paniculata.

SHRUBS WHICH PRODUCE ORNAMENTAL FRUIT SUCCEEDING THE FLOWERS.

BARBERRY, Scarlet and violet fruit in September.	ELDER, Black fruit in August and September.
CORNUS Sanguinea, White berries in September.	SYMPHORICARPUS Racemosus, White berries all winter.
CORNUS Mascula, Fruit red, very large and showy, in August.	SYMPHORICARPUS Vulgaris, Red fruit.
ELÆAGNUS Longipes, Red fruit.	VIBURNUM Lantana, Dark purple, nearly black, in September.
EUONYMUS, Red fruit.	VIBURNUM Rough-leaved, very showy, fruit in September.
“ White fruit.	VIBURNUM High, or Bush Cranberry, Red fruit, very ornamental.
HONEYSUCKLE Upright, in variety, showy red and yellow fruit.	MAHONIA, Bluish berries in July.
SUMACH, Red fruit.	

SHRUBS SUITABLE FOR PLANTING IN SHADY PLACES.

BARBERRY,	DEUTZIA Scabra,
BOX, In variety,	MAHONIA Aquifolia,
CORNUS Paniculata,	PRIVET,
“ Red-branched,	RHODODENDRON,
“ Stolonifera,	SYMPHORICARPUS Racemosus,
CLETHRA Alnifolia,	“ Vulgaris.
DEUTZIA Gracilis,	

CLIMBING AND TRAILING SHRUBS.

A most useful class of plants for this country for covering cottages, verandas, walls, trellises, etc.

- ACTINIDIA Polygama**—A climbing plant from Japan. The flowers are white with a purple center, and sometimes cover the whole vine. The fruit is round, edible and has a fine flavor. Foliage dark green, handsome.
- AKEBIA Quinata**—A singular Japanese climbing shrub, with fine foliage, purple flowers and ornamental fruit.
- AMPELOPSIS American Ivy, or Virginian Creeper**—Has beautiful digitate leaves, that become rich crimson in autumn. A very rapid grower. Like the Ivy, it throws out roots at the joints, by which it fastens itself to anything it touches.
- Roylei**—From Japan. Resembles the American, but is more vigorous; foliage larger, and remarkably high-colored in autumn.
- Veitchii, or Japan Creeper (Boston Ivy)**—Leaves smaller than those of the American, and overlap one another, forming a dense sheet of green. The plant is a little tender while young, and requires protection the first winter; but once established, there is no further risk. It grows rapidly and clings to the wall or fence with the tenacity of Ivy; the foliage is very handsome in summer, and changes to crimson-scarlet in autumn. For covering walls, stumps of trees, rockeries, etc., no plant is so useful. For the ornamentation of brick and stone structures, it can be specially recommended.
- Bitter Sweet, or Wax Work (Celastrus Scandens)**—A native climbing or twining plant, with fine large leaves, yellow flowers, and clusters of orange-capsuled fruit. It grows 10 to 12 feet in a season.
- CISSUS Variegated**—A handsome running vine like a grape, with variegated three-lobed leaves, and small clusters of dark colored fruit.

CLEMATIS PANICULATA.
[THREE YEARS AFTER PLANTING.]

CLEMATIS Barillet des Champs—Double purple.

Coccinea—Very hardy, bears thick, bell-shaped flowers, bright red coral; blooms very profusely from June until late in the Autumn. Valuable for foliage, being a peculiar green and elegantly cut and variegated.

Duchess of Edinburgh—Double White.

European Sweet (*Flammula*)—Flowers small, white, and very fragrant.

Henryi—Very large, fine form; free grower and bloomer; creamy white.

Jackmanni—Large, intense violet purple; remarkable for its velvety richness; free in growth and an abundant and successive bloomer.

Madame Edouard André—A grand novelty. Flowers large, of a beautiful bright velvety red, very free-flowering, and continuous bloomer.

Paniculata—A great novelty from Japan. It has proved to be one of the most desirable, useful, and beautiful of hardy garden vines, being a luxuriant grower, profuse bloomer, and possessing fine foliage. It is particularly useful for covering verandas, pillars, fences, where a trellis or support can be provided for it to climb on. The flowers are of medium size, very pretty and fragrant, and produced in the greatest profusion in late summer. We can recommend this novelty in the strongest manner as one of the best vines to grow near the house; it makes a growth of from 25 to 30 feet in a single season, and should be cut back to the ground each spring. See cut, page 79.

Sieboldii (Ramona)—Large, bright blue flowers; fine.

None among hardy perennials exceed in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors, in masses on rock work or cultivation in pots, it has no rival among strong-growing, blossoming plants. The Clematis should be grown in rich, deep, sandy loam, and be well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots. After many years' experience we have come to the conclusion to grow only a few varieties which have proved worthy of general cultivation.

DUTCHMAN'S PIPE (*Aristolochia Sipho*)—A native species of climbing habit and rapid growth, with magnificent light green foliage 10 to 12 inches in diameter, and curious pipe-shaped, yellowish-brown flowers.

EUONYMUS radicans—An evergreen vine; clings to walls after the manner of Ivy.

Variegated—A variety of the above with variegated leaves.

HONEYSUCKLE (*Lonicera*), **Canadian** (*Canadensis*)—A very robust, rapid grower, with large glaucous leaves and yellow flowers.

Chinese Twining—A well known vine, holding its foliage nearly all winter. Blooms in July and September, and is very sweet.

Hall's Japan—A strong, vigorous, almost evergreen sort, with pure white flowers changing to yellow. Very fragrant, and is covered with flowers from July to December; holds its leaves till January. The best of all. See Cut, page 81.

Japan Golden-Leaved—Foliage beautifully netted or variegated with yellow. A handsome and very desirable variety.

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

Scarlet Trumpet—A strong, rapid grower, producing scarlet, inodorous flowers all the summer.

Yellow Trumpet—A well known native vine, with yellow trumpet flowers.

IVY English (*Hedera Helix*)—A well known, old and popular sort.

Irish (*Hedera Canariensis*)—The well known old sort.

MATRIMONY VINE (*Lycium Barbarum*), **Chinese**—A vigorous climber, branching freely, and covered with bright purple, star-shaped flowers, succeeded by brilliant scarlet berries almost an inch long; the contrast between the glossy, dark green foliage and shining scarlet fruit being exceedingly beautiful. Flowers and fruit continue forming throughout the summer, when the fruit ripens and remains on the vine until winter. Of the easiest culture, thrives everywhere and in any soil.

SILK VINE (*Periploca Gracca*)—A rapid-growing, beautiful climber. Will climb around a tree or other support to the height of 30 or 40 feet. Foliage glossy, and purple brown axillary clusters of flowers.

TRUMPET FLOWER (*Bignonia*), **American Climbing** (*radicans*)—A splendid hardy climbing plant, with large trumpet-shaped scarlet flowers in August.

Large-Flowered (*Grandiflora*)—A rare and beautiful variety of the Trumpet Creeper. Flowers very large, salmon color, center yellow, striped red; fine.

HALL'S JAPAN HONEYSUCKLE.

[REDUCED.]

CHINESE WISTARIA.
[REDUCED.]

WISTARIA Brachybotrys—Flowers light blue and fragrant; clusters short.

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

Chinese Double-Flowered—A strong grower when established; flowers in racemes; purple, very double, rather a shy bloomer.

Chinese White—Pure white flowers. Introduced by Mr. Fortune from China, and regarded as one of his greatest acquisitions.

Magnifica—Flowers in dense drooping racemes of the same size as the Chinese, and of a pale lilac color; vigorous and perfectly hardy.

Shrubby, or Clustered-Flowered (American)—Resembles the Chinese in general appearance, but the flowers are smaller and paler.

Shrubby, White-Flowered (American White)—Flowers clear white; bunches short; free bloomer.

HEDGE PLANTS

WHICH MAY BE EMPLOYED

FOR ORNAMENT, SHELTER, SCREENS AND DEFENSE.

For these purposes we recommend Evergreens like the *American* and *Siberian Arbor Vita*, *Norway Spruce*, *Austrian* and *Scotch Pines*, and many of the Deciduous and Evergreen shrubs, such as the *Japan Quince*, *Deutzias*, *Spiræas*, *Thunberg's Barberry*, *California Privet*, etc., and for defensive hedges, the *Honey Locust* and *Osage Orange*.

FOR ORNAMENT.

The *Siberian Arbor Vita*, in our opinion, takes the precedence among Evergreens as an Ornamental Evergreen Hedge Plant. Its thrifty, compact growth, fine form, great hardihood, and deep green color, which its foliage retains throughout the year, adapt it specially for dividing lines between lawns and gardens, or for hedges along streets or avenues.

The *American Arbor Vita*, though not quite so ornamental in character, being less dense in growth and spreading in habit, forms a handsome hedge. It may be obtained at less cost than any other Evergreen hedge plant.

With careful pruning the *Norway Spruce* may be kept low and in good shape, and grown in this manner it is highly ornamental.

The flowering shrubs are ornamental hedge plants *par excellence*; among them the *Japan Quince*, *California Privet* and *Thunberg's Barberry* are particularly desirable, on account of their good habit and handsome foliage. We are growing them largely for hedges.

FOR SHELTER AND SCREENS.

For planting in belts to afford shelter from violent winds, or for concealing unsightly objects or views, or for boundary lines, we recommend the *Norway Spruce* and *Austrian* and *Scotch Pines*. Their robust habit, rapid dense growth, and entire hardiness, are characteristics not easily to be found in other Evergreens.

The *American Arbor Vita* also is particularly valuable, either for shelter or screens, and for a deciduous screen the *Carolina Poplar* cannot be excelled.

DEFENSIVE HEDGES.

For turning cattle, and as a farm hedge for general purposes, the *Honey Locust*, in this locality and farther north, is the most valuable. It is of vigorous growth, perfectly hardy, and thrives with ordinary care, and is sufficiently thorny to be impenetrable. It bears the shears with impunity, and can be grown in any desired form. South of us, the *Osage Orange* is in great favor, but it is not hardy enough to be serviceable here.

DIRECTIONS FOR SETTING.

The plants should be carefully handled, Evergreens more particularly, so as not to allow the roots to become dried by the wind. In planting hedges it is preferable to use young plants, and to be effective, should be planted as undernoted. In case of large plants being used, they would then need to be planted further apart.

Althæas	9 inches apart.	Lilacs	12 inches apart.
Arbor Vitæ	12 " "	Osage Orange, in double rows.....	9 " "
Barberries	9 " "	Privet California.....	6 " "
Buckthorn	6 " "	Rosa Rugosa	12 " "
Deutzias	12 " "	Spiræas	9 " "
Elder Golden	9 " "	Spruce Norway	12 " "
Honey Locust, in double rows.....	9 " "	Syringas.....	12 " "
Japan Quince.....	9 " "	Tree Box.....	12 " "

If Honey Locust or Osage Orange is planted in a single row, then plant 6 inches apart.

PRUNING.

Evergreens should be pruned in spring just before they commence growing. Summer pruning may be practiced on the *Arbor Vita* should the growth be too rapid.

The following varieties and sizes can be supplied:

EVERGREEN.

ARBOR VITÆ, American—Plants 18 to 24 inches high.

Siberian—Plants 18 to 24 inches high.

NORWAY SPRUCE—Plants 18 to 24 inches high.

TREE BOX, in variety.

DECIDUOUS.

ALTHÆAS, in variety.

BARBERRY, Common.

BARBERRY, Purple.

BARBERRY, Thunbergii.

BUCKTHORN, 2 years.

CALIFORNIA PRIVET HEDGE.

[REDUCED.]

CALIFORNIA PRIVET—Plants 18 to 24 inches high, and 2 to 3 feet high.

DEUTZIAS, in variety.

ELDER, golden.

HONEY LOCUST—Plants 1 year old; 2 years old.

JAPAN QUINCE—Plants 18 to 24 inches high.

LILACS, in variety.

OSAGE ORANGE—Plants 1 year old; 2 years old.

ROSA RUGOSA.

SPIRÆAS, in variety.

SYRINGAS, in variety.

Remarks.—Some of the most effective hedges we have seen, from decorative points of view, were composed of *Althæas*, *Spiræas*, *Japan Quince*, *Lilacs*, *Syringas*, etc.

TREE PÆONIES (*Pæonia Arborea*).

BANKSII, Chinese Double Blush—Flowers of monstrous size; rosy blush with purple center. A magnificent shrub.

A CLUSTER OF PÆONY FLOWERS.

[REDUCED.]

HERBACEOUS PÆONIES (*Pæonia Sinensis*).

These do best planted in the Fall.

It is surprising that so noble a flower, almost rivaling the Rose in brilliancy of color and perfection of bloom, and the Rhododendron 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 climate the plants require no other protection than that which 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. 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. Where the lawn is extensive a large bed makes a grand show, surpassing a bed of Rhododendrons. It is really a flower for the million.

CHINESE VARIETIES.

A large collection of the best varieties of the following colors :

Blush,
Crimson,
Dark Purplish Crimson,
Lilac,
Pink,
Purple,

Red,
Rose,
Straw,
Tricolor,
White,
White with yellow center.

FRINGE-LEAVED PÆONY.

[REDUCED.]

Fringe-leaved (*Tenuifolia flora plena*)—Double, fennel-leaved; flowers of a bright scarlet-crimson, and quite double and globular; rare and fine.

SELECT PHLOX.

This, when properly grown, is unquestionably one of the finest autumn flowers—like the Pæony, a flower for the million. It is of vigorous habit, easy culture, and produces in great profusion, during a long season, flowers of fine form and substance, and of bright and varied colors. Just as the roses are fading, the Phlox puts forth her first flowers, producing a fine succession of bloom, and prolonging an interesting season at least six weeks. As regards their culture it may be briefly stated that they succeed in any good garden soil, but they are greatly improved by being liberally manured, and an occasional supply of liquid manure during the growing season will greatly increase the size of their trusses. When in flower they should be watered freely every evening. The Phlox usually flowers in July and August, and in order to render it autumnal flowering it is necessary to pinch the shoots about the first of June and again in July. The plants will then flower in September. For early flowers some of the plants may be left unpinched. When two years old the finest trusses are produced. The third year the plants flower tolerably well, but they will not keep thrifty and healthy after that. The old plants should then be lifted in the fall, divided, and transplanted. But the better plan is to keep up a succession of young plants by securing a fresh collection every year.

BED OF PHLOX.

[REDUCED.]

PHLOX DECUSSATA (Late Flowering)—With erect flower stems growing three to four feet high. Choice distinct varieties selected from one hundred sorts.

Aguilon—Deep rose, carmine center; large truss. Attractive.

Aurora—Coppery orange-red, crimson center. Effective.

Coquelicot—Deep crimson-scarlet. One of the most showy and desirable.

Eclairer—Carmine rose; large truss; good habit. The earliest in bloom. Recommended.

Embracement—Large flower, coppery-red, purple eye.

Hercule—Deep carmine, crimson eye; large flower.

Lothair—Large flower; rich salmon color, crimson eye; large spreading spike. One of the finest.

Lustre—Large flower; soft rose pink, crimson center. One of the most desirable.

Miss Theresa Levavasseur—Rose tinted white, and marbled crimson; large flower. Showy and attractive.

Pacher—Pure pink, large flower; large truss. Extra fine.

Pantheon—Flowers large, beautiful pink or salmon-rose. One of the best and most distinct.

Purity—Best white. Of good habit; large truss of pure white flowers. Superb variety.

Queen—Pure white. Fine.

Richard Wallace—White with violet centre. A good sort.

Rosetta—Deep rosy crimson, distinct. Showy and attractive.

William Robinson—Deep rosy salmon, purple center; large flower. Desirable.

HARDY HERBACEOUS FLOWERING PLANTS.

The following collection embraces the most desirable species and varieties. They are all showy and beautiful plants, of easy cultivation and of various seasons of flowering, from May to November. By a judicious selection, a continuous display of flowers may be produced in the borders from early spring to the end of autumn.

ACHILLEA (Yarrow) Ptarmica The Pearl—Small, double-white flowers, covering the plant in July. Invaluable for borders. One of the prettiest flowering plants and should be in every garden. 1 foot.

ACONITUM (Monkshood)—Erect growing plants, with palmately divided foliage. Flowers in racemes.

Uncinatum—Deep purple flowers, extra fine; 4 feet long. June and July.

ADONIS Vernalis—One of the finest early spring flowering plants, with finely divided leaves, and growing about six inches high. Flowers bright yellow, about 2 inches in diameter. May.

AJUGA (Bugle)—Pretty dwarf plants, with flowers in whorls in the axils of the leaves.

Reptans alba—White flowers; May.

Reptans rubra (Red-Leaved Bugle)—Flowers blue; foliage purple; May.

AGROSTEMMA (Lychnis) coronaria—A useful border plant, with bright magenta flowers. June and July. 3 feet.

Coronaria alba—A white flowered form of the preceding. June and July. 3 feet.

ALTHÆA ROSEA (Hollyhock)—A collection of fine double sorts, of the following colors, viz: Dark red, pink, red, white, yellow.

ALYSSUM (Madwort)—Fine for rockwork and edges of borders.

Argenteum—Yellow flowers in clusters; early summer; dwarf, silvery foliage; 1 foot.

Saxatile—Clear golden yellow flowers, fragrant and very showy; one of the choicest perennials. May. 1 foot.

Saxatile compactum—Similar to the preceding, except that the plant is dwarfer, flowers more freely and is, if anything, more beautiful. May. 1 foot.

ANEMONE (Wind Flower) Japonica—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. $2\frac{1}{2}$ feet.

Japonica alba (Honorable Foubert)—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.

Japonica Queen Charlotte—A new variety of the well known Japan Anemone, and a novelty which we have no hesitation in recommending as one of the best of recent years. The flowers are very large, well-formed, semi-double, and of a beautiful rosy flesh color on the upper side and of darker shade underneath. They are produced on strong stems in great profusion in the autumn. The plant is vigorous, with large luxuriant foliage and very ornamental.

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

ANTHEMIS (Chamomile) Tinctoria—Flowers golden yellow, 1 to 2 inches across, from July to November; valuable. 12 to 18 inches.

ANTHERICUM Liliastrum (St. Bruno's Lily)—A beautiful plant with narrow, grass-like foliage, and spikes of small, white, fragrant, lily-like flowers. Valuable. May to August.

AQUILEGIA Columbine (Alpina)—A native of the higher parts of the European Alps. Stems 9 to 18 inches high, bearing showy blue flowers.

Cœrulea—Flowers large, blue sepals, white petals, long recurved spurs. One of the choicest; 1 foot. June and July.

Chrysantha—Bright golden yellow flowers with long spurs; 3 feet.

Formosa Hybrida (Californica Hybrida)—The sepals and petals yellowish, tinged orange and orange-red spurs; 2 to 4 feet. May to September.

Glandulosa—A Siberian species with large white flowers, with sepals bright lilac-blue and petals white; very pretty; 12 inches. April and May.

Olympica—Flowers red and yellow.

Skinnerii (Mexican Columbine)—Crimson sepals lined with light green; light green petals and long straight crimson spurs; 3 feet. June to September.

ARMERIA (Sea Pink) maritima—Rosy lilac; one of the best for edging; 6 inches; June and July.

ARUNDINARIA (Ribbon-Grass) variegata—One of the prettiest hardy grasses, with handsomely striped foliage.

ARUNDO DONAX.
[REDUCED.]

ARUNDO (The Reed)
—Valuable for creating tropical aspects in a garden.

Donax (Great Reed)—A handsome reed, growing from 10 to 15 feet high. Its attractive foliage renders it very effective on lawns.

Donax Variegata (Variegated Arundo)—A magnificent variety of the preceding; leaves striped with white; 6 to 8 feet.

A S T E R (Michaelmas Daisy)—Blooming in the fall when flowers are scarce.

Amellus (Italian Starwort)—Light blue; 3 feet. September.

Coccineus Nevadensis—Red, yellow center.

Floribundus—Light blue; 2 feet.

Himalayensis—Small white flowers; 2 feet. September.

Novæ-Angliæ (New England Aster)—Bluish purple; 4 feet.

Novæ-Belgii—Blue; 3 to 5 feet.

ASTILBE (Japan Spiræa) Japonica—Known generally as *Spiræa Japonica*. A handsome plant, with small, pure white flowers, in large branching panicles. Blooms in May, in the open air, but is cultivated chiefly for forcing in winter.

Japonica Grandiflora—Compared with the type, the individual flowers are much more numerous, and the flower spikes are larger, borne more freely and are more compact.

BOCCONIA (Plume-Poppy) *cordata*—An attractive plant, growing 6 to 8 feet high, with large foliage and long spikes of white flowers in August. Well adapted for single lawn specimens, or for the sub-tropical gardens.

CAMPANULA (Bellflower)—An elegant genus of plants, rich in color, profuse in bloom, and of easy culture.

Grandis—Forms a bush 2 to 3 feet high, composed of a number of spikes set with large blue salver-shaped flowers. June and July.

Lamarqueii—Pale azure; 3 feet. June and July.

Latifolia—Purplish blue; large leaved; 18 inches. July and August.

Medium rosea—A pleasing variety of the Canterbury Bell.

Persicifolia alba—Single white; 2 to 3 feet. June.

Persicifolia cœrulea plena—Double blue; valuable; 2 feet. June.

Pyramidalis—Erect stalk, pyramid shaped; flowers large and of a handsome blue.

Versicolor—Purple, tinged with white; 2 feet. July.

CENTAUREA (Centaury) *macrocephala*—A showy border plant with large yellow, thistle-shaped flowers. July and August; 3 feet.

CENTRANTHUS (Valerian)—Very showy free-flowering perennials, with flowers in handsome corymbose panicles.

Ruber (Red)—Flowers red in dense cymes; 2 feet. June.

Ruber alba—A variety with white flowers; 2 feet. June.

CEMICIFUGA (Bugwort) *racemosa*—A very effective plant with erect divided leaves, and drooping racemes of white flowers. August and September; 3 feet.

CONVALLARIA (Lily of the Valley) *majalis*—Large luxuriant foliage; flowers small, bell-shaped, in pretty racemes and very fragrant.

COREOPSIS (Tickseed)—Showy and valuable free flowering perennials.

Grandiflora—Large yellow flowers on long stems; fine for cutting; early summer until frost; 3 feet.

Lanceolata—Large golden yellow flowers; profuse bloomer; keeps in flower throughout the summer; one of the best hardy plants; 1 to 3 feet; very handsome. June.

Palmata—Lemon yellow flowers; 2 feet. June.

Rosea—Flowers pink; 1 foot. June to September.

DELPHINIUM (Larkspur)—A remarkable showy class of tall growing plants, producing magnificent spikes of blue flowers in various shades in summer. We know of no plants which will afford greater satisfaction than these.

DICENTRA or **DIELYTRA** (Bleeding Heart) *spectabilis*—A handsome, most curiously formed, rosy-crimson flower, with white and blue tinged protruding stamens; one of the finest border plants; is quite hardy; well adapted for blooming indoors in the winter; 1 to 2 feet. May and June.

DICTAMNUS (Gas Plant)—A choice perennial, forming a bush about 2 feet high, and bearing spikes of curious red and white flowers, which are fragrant.

Fraxinella alba—White; 12 to 18 inches. June.

Fraxinella rubra—Red; 12 to 18 inches. June.

DODECATHEON (American Cowslip) *media*—Handsome plant thriving best in damp soil, purple flowers. May. 1 foot.

DORONICUM (Leopard's Bane)—Beautiful showy early yellow flowering perennials. Indispensable in any collection.

Clusii—A fine perennial, flowers yellow, 2 inches across; 2 feet. May.

Plantagineum excelsum—Yellow flowers larger than the type; 2 feet; April to June.

ERIANTHUS (Ravenna Grass) *Ravennæ*—Resembles the Pampas Grass, but blooms more abundantly. Attains a height of from 9 to 12 feet. Being perfectly hardy, it is a valuable grass for the decoration of lawns.

ROW OF EULALIAS.
[REDUCED.]

ERYNGIUM (Sea Holly) *amethystinum*—Flowers in globular heads, amethystine blue; foliage spiny and lacinated; 3 feet. July and August.

EULALIA—Showy, beautiful, tall and perfectly hardy grasses.

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

Japonica—The type; a vigorous grower with large plumes; 3 feet.

Japonica gracillima univittata—A new and beautiful ornamental grass, with narrow graceful foliage. Very valuable.

Japonica variegata—Handsomely variegated leaves; 4 feet.

Japonica zebrina—Zebra-striped leaves.

FUNKIA (Plantain Lily)—A very interesting and beautiful genus, with luxuriant foliage and handsome lily-like flowers.

Cærulea—Light blue, with dark green, glossy foliage; 1 foot. June and July.

Grandiflora alba—Pure white, fragrant flowers in summer.

Grandiflora fol. aureo var.—Leaves variegated with yellow.

Lancifolia—Lavender flowers, lance-like foliage. July and August.

Sieboldiana—Silver-gray foliage; one of the most distinct; light purple flowers.

GAILLARDIA *Aristata compacta* (New)—Very showy perennial, petals of flowers orange, with crimson disk; very free flowering; a decided improvement on the old varieties. July to September; 1 foot.

GENTIANA (*Gentian*) *Andrewsii*—A very showy North American species, with deep blue-purple flowers, useful for cutting. August and September; 1½ feet.

GEUM (*Avens*) *triflorum* (*Apache Plume*)—Clusters of bright red flowers followed by silvery feathery heads of seeds; 9 inches. May and June.

HELIANTHUS (*Sunflower*) *decapetalus*—Flowers yellow in large panicles, valuable late flowering plant; 5 feet. September.

Multiflorus fl. pl. (*Double Sunflower*)—A blaze of gold in late summer and early autumn, and altogether one of the showiest of hardy perennials.

Rigidus (*Prairie*)—Flowers large, golden yellow; produced abundantly; 3 to 5 feet; August.

HELLEBORUS (*Christmas Rose*)—Very desirable border plants, flowering out doors at the dullest portion of the year; January and February; 1 foot.

Niger—Beautiful white flowers.

Niger major—Flowers larger than the preceding.

HEMEROCALLIS (Day Lily)—Fine tall growing plants, with large, lily-shaped, sweet-scented flowers.

Flava (Yellow Day Lily)—One of the finest hardy plants; flowers large in clusters, golden yellow, and very fragrant; plant vigorous; 3 feet. June.

Fulva (Common Day Lily)—Orange flowers in large clusters; 2 feet. July.

Kwanso fl. pl.—Double flowers of a rich, orange-copper color.

Thunbergii—Lemon-yellow; late.

HEUCHERA (Satin Leaf) **Sanguinea**—A very pretty border plant with bronzy foliage, and long, slender panicles of bright red flowers; 1 foot. June and July.

IBERIS (Perennial Candytuft) **Sempervirens** (Evergreen)—Flowers pure white, completely covering the plant with bloom. One of the finest border plants. April or May.

GERMAN IRIS.

[REDUCED.]

IRIS (Fleur de Lis), **German Varieties**—We can supply in the following colors, viz., yellow, purple, lavender, creamy white, white tinged with blue, maroon, white, spotted purple, buff and purple, salmon tinged purple.

Japan Varieties can be supplied in either single or double flowering varieties and of the following colors, blue, white, violet, purple, rose. See cut, Page 92.

LATHYRUS grandiflorus (Perennial Pea)—A showy climbing or rambling perennial with bright pink flowers, very free blooming, and useful for cutting; 6 to 8 feet. June to September.

Grandiflorus albus—A white variety of the above; most useful for cutting; 6 to 8 feet. June to September.

JAPAN IRIS.
[REDUCED].

LOBELIA (Cardinal Flower), *cardinalis*—Spikes of fiery cardinal flowers; very effective; 3 to 4 feet. August and September.

LYCHNIS (Lamp Flower)—Very effective plants in the mixed border.

Chalcedonica—Brilliant scarlet; large truss, 3 feet. July and August.

Chalcedonica alba—A form of the preceding with white flowers.

Diurna fl. pl. (Red Campion)—Deep red flowers in clusters; from early spring until late summer; 2 feet.

OENOTHERA (Evening Primrose), *glauca Fraserii*—Golden yellow flowers; very showy; 15 inches. June to August.

PÆONIES Herbaceous. See Pages 84 and 95.

PAPAVER (Poppy)—Showy perennials with large flowers, of rich and striking colors.

Nudicaule—A fine dwarf kind, with deeply lobed and cut leaves, and pretty yellow flowers on hirsute stems. Excellent for the rockery.

Nudicaule album—A pretty white variety of the preceding, and equally free-flowering.

Orientalis (Oriental Poppy)—Deep scarlet; large; very showy; 18 inches. June.

PLATYCODON (*Campanula*)—Ornamental showy plants, of erect habit of growth and showy bell-shaped flowers.

Grandiflorum—Large, fine blue flowers; 1 to 2 feet. June and July.

Grandiflorum album semi-pleno—White; 18 inches to 2 feet.

PLUMBAGO (Lead Wort) *Larpenæ*—A useful dwarf-growing border plant, with pretty bright blue flowers; 1 foot. July and August.

POLEMONIUM (Greek Valerian) *cæruleum*—Terminal spikes of blue flowers; 2 feet.

Richardsonii—A showy plant, with light blue flowers which are produced in great abundance; one of the best of the species; 1½ feet. June to August.

POTENTILLA (Cinquefoil) *hybrida*—Double named varieties, with bright red and orange-colored flowers; very useful for border decoration; 1½ feet. June to August.

PRIMULA (Primrose)—All very desirable plants for the garden.

Acaulis (Common European)—Can be supplied in various colors.

Elatior (Ox-lip)—Flowers bright yellow, in large clusters.

Veris (Cowslip)—Flowers bright yellow in terminal umbels, in spring and early summer.

PYRETHRUM—A most valuable class of hardy plants. Flowers of good size and form, both single and double varieties resembling asters; very useful for bouquets or cut flowers. The plants make showy specimens in the garden. Can be supplied in the following colors, viz.: white, rose, pink, crimson. May or June.

RANUNCULUS (Buttercup)—These are among the best of early spring flowers, being very effective.

Aconitifolius luteo pleno—Double orange-yellow crowfoot; 2 feet. May and June.

Amplexicaulis—Flowers snowy white; 6 to 9 inches. April and May.

Speciosus fl. pl.—Large, double orange-yellow flowers.

RUDBECKIA (Cone-flower)—Among the most valuable hardy plants, producing showy golden yellow flowers.

Laciniata fl. pl. (Golden Glow, or Summer Chrysanthemum)—A large, showy plant, attaining in good soil a height of 6 to 8 feet the same season planted. Flowers three and one-half inches in diameter, double, well formed, and of a deep golden yellow color, resembling the yellow Chrysanthemums, and borne on long stems, which render them suitable for cutting. Plants bloom profusely from July till September. One of the best novelties in hardy flowering plants.

Nitida—Large light yellow flowers; a splendid late flowering plant; 3 to 4 feet. September.

SAXIFRAGA (Saxifrage) *crassifolia*—A strong growing variety, producing large leaves and large trusses of pink flowers, one of the earliest blooming border plants; 1 foot. March to April.

GOLDEN GLOW.

[REDUCED.]

SCABIOSA (Scabious) *caucasica*—The finest of the tribe, forming a large, spreading plant, growing from 1½ to 3 feet high. Flowers pale lilac-blue on long, slender stalks. June to September.

SPIRÆA (Meadow Sweet)—Among the most ornamental and valuable of herbaceous plants, and of easy culture.

Astilboides—White flowers in panicles; fine; 2 feet. June.

Ulmaria fl. pl. (Double White)—A very desirable hardy plant; 2 feet. June.

TRADESCANTIA (Spiderwort)—Showy native plants, forming erect bushes 18 to 24 inches in height; flowers produced in the greatest profusion all summer.

Virginica—Blue; 18 to 24 inches.

Virginica alba—White; 18 to 24 inches.

TRITOMA (Flame-flower)—Splendid late blooming plants; flower stems 3 to 5 feet in height, with racemes a foot or more in length, of rich, pendent, orange-red and scarlet tubulous flowers. Requires a slight covering in winter.

TROLLIUS (Globe Flower) **Europæus**—Flowers yellow; very pretty; 18 inches. June.

VERONICA (Speedwell) **gentianoides**—Pale blue, with azure; 1 to 2 feet. May and June.

Longifolia subsessilis—Flowers of a beautiful amethystine blue; extra fine; 2 feet. August to October.

Virginica—White spikes; 3 to 5 feet. August and September.

YUCCA.
[REDUCED.]

YUCCA (Spanish Bayonet)—Has a fine appearance; the stem is 2 feet above the ground, covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

Filamentosa (Adam's Needle)—Thread-leaved, creamy-white flowers; 3 to 4 feet. July.

ALPINE PLANTS.

A large collection of these, suitable for rockery, can be supplied, including Aubretias, Campanulas, Phlox subulata, Saxifraga, Sedum, Veronica, Vinca, Viola odorata. Prices on application.

BED OF HERBACEOUS PEONIES.

PART III.

MISCELLANEOUS BULBOUS AND TUBEROUS ROOTS.

DIRECTIONS FOR PLANTING BULBS BOTH IN AND OUT OF DOORS.

In planting bulbs such as Crocus, Hyacinths, Lilliums, Narcissus, Scillas, Snowdrops, Tulips, etc., while they will grow in almost any soil, they do best in light fibrous loam, to which should be added some well decomposed manure, and the bed should be thoroughly drained, for, while they like a liberal supply of water when growing, they do not thrive well in soil where the water becomes stagnant, hence the need for beds being well drained. When planted in beds or borders in the garden, they should be placed at least from 3 to 4 inches below the surface, and it is an advantage to place a layer of sand at the base of the bulbs. In very cold sections it is also a benefit to cover the beds during winter with a covering of short litter, which can be removed in the spring as soon as the tops make an appearance through the soil. When grown in boxes or pots, these should be thoroughly well drained, and then filled up with soil, as described above, to within 2 or 3 inches of the top, according to size of bulbs, then put in a layer of sand in which set bulbs firmly, and then fill up with soil to within half or three-quarters of an inch from top, leaving the tops of the bulbs just visible through the soil. After being well watered, they should then be placed in a frame, where practicable, or on a hard piece of ground, and covered with fine ashes or sand to the depth of from 4 to 6 inches, there to remain until well started into growth, when the covering can be removed, and the pots or boxes placed in a moderately light place until the growths, which will then be blanched, assume a light green color, when they should be placed in a light airy position, to prevent them being drawn up weakly.

When Hyacinths are grown in water in glasses, they should be placed in a dark cupboard until the glass is partly filled with roots, and the tops begin to grow, then gradually remove into the light, as in the case of those in boxes or pots.

When the bulb is first placed in the glass, the water should be kept about one-eighth of an inch from base of bulb, until the roots appear, when the water should be allowed to touch them, and do not change the water unless it becomes thick or muddy.

FOR SPRING PLANTING ONLY.

CANNAS—A useful section of border plants, either for grouping or planting singly, many of the dark foliage varieties being very handsome. We can supply plants producing flowers in the following colors, viz:

Crimson,	Orange-scarlet,
Golden yellow,	Pink,
Orange.	Scarlet,

DAHLIAS—They are amongst the most useful and showy of the autumn flowering border plants, the variety of colors, and the various forms in which the flowers can be produced, make them desirable for all classes of decoration. They can be supplied in the following classes:

Show and Fancy varieties for exhibition purposes.

Cactus varieties, the general favorites at present, many of the forms being very striking.

Pompon varieties admired on account of the small beautifully formed flowers, fine for vase decoration.

Single varieties. These are much admired, and are amongst the most useful for cut-flower decorations.

TUBEROSE.

LILIUMS (*Lilies*).

These require a good mellow soil. In the open ground they should be planted five inches deep, in as warm a situation as possible. Nothing can exceed the beauty of this well known flower. The following are choice sorts which will improve from year to year. They should be planted in clumps of six to eight, and thus become very effective.

LILY AURATUM.

ATROSANGUINEUM—Orange-red.

AURATUM (Gold-Banded Japan Lily)—Magnificent Japan Lily.

BATEMANNI—Flowers rich apricot color; easy of culture, and very floriferous.

CANDIDUM (The Madonna Lily)—The well known white garden Lily.

HARRISII (Bermuda Easter Lily)—Flowers large, trumpet-shaped; in general appearance resembling *L. longiflorum* and possessing a delightful fragrance. It is a remarkably free bloomer, and is valuable either for forcing or for outdoor planting. See cut, page 98.

JAPONICUM LONGIFLORUM (Easter Lily)—Trumpet-shaped, snow-white, fragrant.

LANCIFOLIUM RUBRUM—Rose, spotted with crimson.

LANCIFOLIUM ALBUM—White spotted, fragrant.

SUPERBUM—Our native lily, and one of the finest of them all.

TIGRINUM (Tiger Lily)—Orange-salmon.

TIGRINUM FLORE PLENO (Double Tiger Lily).

LILY HARRISII.

HOLLAND BULBS.

FOR FALL PLANTING ONLY.

CROCUS, Fine Named Varieties—White, blue and yellow.

Unnamed or Mixed—White, blue, and yellow.

GLORY OF THE SNOW (*Chionodoxa*)—One of the earliest and most charming of spring flowering bulbs. Flowers of a lovely blue.

GRAPE HYACINTH (*Muscaria*)—Slender spikes of blue flowers.

HYACINTHS—Early Roman White.

Named Varieties—Double and single; various shades of red, white, blue and yellow.
Our selection of varieties.

Unnamed Varieties—Double and single, red, white, blue, and yellow, our selection.

JONQUILS—Double and single.

NARCISSUS Garden—An extensive and one of the most useful class of Hardy Bulbs for decorating the garden in Spring, and as the time of flowering is varied, a succession of cut flowers can be had, which are much admired for decorations.

SINGLE VARIETIES.

Bicolor Empress—White with long yellow trumpet corolla, a very fine variety.

Bicolor Horsfieldii—White with long yellow trumpet corolla, an extra large flowered variety.

Biflorus—White with short yellow corolla, sweet-scented, a useful variety.

Bulbocodium (Hoop Petticoat)—A fine distinct species, with yellow petals and wide trumpet corolla.

Emperor—Deep yellow; one of the finest of the large trumpet varieties.

Incomparabilis—Yellow; medium corolla.

Incomparabilis Sir Watkin—Yellow; a great improvement on incomparabilis; much larger; one of the best varieties.

Incomparabilis Stella—White, with yellow corolla.

Obvallaris maximus (Tenby Daffodil)—Yellow, with trumpet corolla.

Poeticus (Poet's, or Pheasant Eye)—White, with short yellow corolla, edged with red, sweet-scented; a general favorite.

Poeticus ornatus—A large form of the above; very fine.

Scoticus (Garland Lily)—White, with yellow trumpet corolla, nicely fringed.

Trumpet major (Daffodil)—Yellow, with medium-sized trumpet corolla.

DOUBLE VARIETIES.

Incomparabilis albidus plenus (Sulphur Phœnix)—White and lemon; a useful variety.

Incomparabilis plenus (Orange Phœnix)—Pale yellow and orange; a useful variety.

Poeticus flora plena (albus plenus odoratus)—White; flowers resemble the Gardenia or Cape Jasmine, very sweet-scented; useful for all purposes.

Van Sion—Yellow, largest double trumpet variety, one of the best for cutting.

NARCISSUS POLYANTHUS

—Specially adapted for house culture. Not hardy in this climate. A choice collection.

SCILLA Siberica—Small blue flowers; blooms early in the spring; very pretty.

Campanulata—Producing fine spikes of blue flowers, from 9 to 12 inches in height; flowers April and May; very pretty.

SNOWDROP—Single and double. The first spring flower.

TULIPS Duc Van Thol—Single. Crimson, Rose, Scarlet, White, Yellow.

DucVan Thol—Double. Crimson, striped with yellow.

Early Double—Named varieties of our selection.

Early Single—Named varieties of our selection.

For bedding purposes, single and double varieties, colors separate, can be supplied in white, red and yellow.

Unnamed or Mixed—Double and single.

NARCISSUS POLYANTHUS [REDUCED].

PART IV.

SELECT ROSES.

We grow Roses in two ways; viz., on their own roots from cuttings, and budded low on the Manetti.

We find many varieties of Roses grown on this stock adapt themselves to a greater range of climate and soil, bloom more profusely, endure better the heat of the summer, and make far stronger plants than if grown on their own roots. Many object to budded Roses on account of the suckers they sometimes throw out; but if proper attention is paid to the planting, this will rarely be an annoyance.

Budded Roses should be planted sufficiently deep so that the junction of the bud with the stock is from two to three inches below the surface of the earth. We cannot too forcibly direct attention to the above rule.

SUCKERS—The shoots or branches that start from below the junction of the bud with the stock are termed suckers, and ought to be immediately removed.

The plants which we offer are dormant from the open ground, two years old on own roots or one year old budded on the Manetti.

BRIEF DIRECTIONS FOR PLANTING, Etc.

WHEN TO PLANT.

Roses can be planted both in the Fall and the Spring. If the situation be not too much exposed where the Roses are to be set out, we prefer *Fall planting for all hardy kinds*. Dormant plants set out in the Spring should be planted early, for no plant suffers more from being set out late than the Rose. The plants should be put in friable, rich soil, and *firmly pressed in with the foot*, taking care not to bruise the roots.

PRUNING.

This operation is best performed during March. Most Roses do better if moderately pruned; some sorts require two-thirds of the past year's growth removed; for others, to remove one-half to one-third is sufficient. *All must be more or less pruned when planted; do not neglect this.* As a general rule the more vigorous the variety the less it should be pruned. All weak or decayed wood should be entirely cut out, and also any shoots that crowd the plant and prevent free entrance of light and air. Besides Spring pruning, many kinds of Hybrid Perpetuals require to be pruned as soon as their first blossoming is over, in order to induce a free display of flowers in Autumn.

PROTECTION.

All Rose bushes need protection if left out during the winter in this and similar climates. One of the best methods is by hilling up with earth; or by strewing leaves or straw lightly over the plants and securing them with evergreen branches, oftentimes the latter are in themselves sufficient. Where the weather is extremely severe, of course, greater precautions must be adopted.

INSECTS.

If proper attention is paid to soil, planting, watering, etc., and a few simple directions heeded, you will not often be greatly troubled.

In the month of May, or as soon as the leaves have pushed forth, the rose caterpillar makes its appearance; he can readily be detected, for he glues a leaf or two together to form his shelter. Every day the bushes should be gone over, and these glued leaves pinched between the finger and thumb, so as to crush the caterpillar; let no fastidious grower neglect this, or be induced to try other remedies; this is the only one that is simple and effective. For other insects, such as the saw-fly, larvæ, and all such as come at a later date than the caterpillar, an occasional syringing vigorously applied, will prove an excellent preventive. When they have made their appearance, a sprinkling of powdered white hellebore over the plants will often destroy or disperse them; but the plants should be well moistened before the hellebore is applied, so that it will remain.

For the rose bug, hand-picking must be resorted to; it is proof against hellebore, whale-oil soap, and all such applications.

MILDEW.

This disease is generally caused by extremes of heat and cold, and by a long continuance of damp, cloudy weather. The best remedies are sulphur and soot; one of these should be applied the moment the disease makes its appearance. It is a good plan to previously sprinkle the plants with water, so that the substance applied will adhere.

ABBREVIATIONS USED, DESCRIBING THE HABIT OF GROWTH.

Vig.—For vigorous, being those varieties which are most rampant in growth and produce long, strong shoots.
Free.—Varieties which rank next to the above in growth.
Mod.—Moderate; these make a fair, compact growth, but less strong than the preceding.
Dwarf.—Dwarf; these are the most delicate or slow-growing sorts. Among hardy Roses, those marked *Dwarf*, are almost invariably budded

MANNER OF DESCRIPTION.

- 1st.—**Habit of Growth.**—Vig., free, mod., dwf.
 2d.—**Color.**—The prevailing shade in the most perfect development of the flower.
 3d.—**Size.**—Small. Flowers from one to two inches in diameter.
 Medium. Flowers from two to three inches in diameter.
 Large. Flowers from three to four inches in diameter.
 Very large. Flowers from four to five inches in diameter.
 4th.—**Fullness.**—SEMI-DOUBLE: With two to four rows of petals. DOUBLE: Having more than four rows of petals, but which show the stamens when fully blown. FULL: When the stamens are hid.
 5th.—**Form.**—CUPPED: Inner petals shorter than the outer ones; the latter stand erect and are generally somewhat incurved. GLOBULAR: Outer petals are concave with convex edges, folding richly one above the other, tapering from the center. FLAT: The surface of the flower is level or nearly even, and all the petals are exposed to view.
 6th.—Peculiarities of foliage, thorns, number of leaflets, fragrance, etc.
 It is hoped the above will make intelligible the terms used to describe the different varieties.

HARDY ROSES.

CLIMBING ROSES (PRAIRIE, Etc.)

The Prairies are much the most valuable of all the non-remontant climbers. The foliage is rough, large, with five leaflets generally of a dark color; they surpass all climbers in hardiness. The flowers are produced in large clusters late in the season, when other Summer Roses are gone. When it is desired to cover walls, unsightly buildings, etc., with Roses, none will be found to do the work so efficiently.

- BALTIMORE BELLE, *vig.*—Pale blush, becoming nearly white; compact and fine.
 CLIMBING JULES MARGOTTIN, *vig.*—Carmine rose; fine in open flower and in bud; the best of all the climbing sports. It may be grown either as a Pillar Rose, or by pruning, kept in bush form; it should be in every collection.
 CLIMBING CLOTHIDE SOUPERT (NEW)—In color and form it is similar to its parent, the well known Clothilde Soupert, but the flowers are larger. It is a vigorous grower and constant bloomer after the first year, as it flowers best on old wood. This promises to be a very valuable Climbing Rose.
 CRIMSON RAMBLER, the Wonderful New Japanese Rose—By far the most important and valuable acquisition of recent years. The Crimson Rambler is unquestionably an acquisition, a novelty of high order, and most distinct in its characteristics. It is a running or climbing rose of vigorous habit, strong and rapid growth, with handsome, shining foliage, and produces in marvellous abundance, clusters of the brightest crimson semi-double roses. Its clustered form, its brilliancy, the abundance of its bloom, and the great length of time the flowers remain on the plant without falling or losing their brilliancy, are qualities which will make this new claimant for admiration an assured favorite. For verandas, walls, pillars, and fences, it is a most suitable plant. If grown in beds and pegged down it produces marvellous heads of bloom, or it can be grown in bush form and thus become a most striking object. We planted this rose out doors along with Hybrid Perpetuals and other hardy roses, and the plants came through the winter even better than many of the hardy varieties, remaining fresh and green to the very tips. But it is not only for out-door use that it is valuable; it can also be employed most satisfactorily for decorating in-doors when grown in pots. We are satisfied that this is the greatest rose novelty of recent years. See Cut, page 102.
 ELECTRA (NEW)—“Supposed to be a cross between Rosa Multiflora Simplex and W. A. Richardson Rose.” Flowers semi-double, of a lemon-yellow color, changing to a paler hue with age, and produced in great profusion from short side shoots; foliage deep green.
 GEM OF THE PRAIRIES, *free*—Red, occasionally blotched with white, large, flat flowers; the only variety in the class which is fragrant.
 HELENE, *vig.*—A seedling of the *Crimson Rambler*; delicate violet color, buds carmine-red, flowers large, single, from twenty to fifty on a truss.
 PAUL'S CARMINE PILLAR, *vig.*—Flowers very large, single, bright rosy carmine, and produced abundantly. Grows ten to twelve feet in a season.
 PHILADELPHIA RAMBLER (NEW)—This novelty is described as being an improvement on the famous *Crimson Rambler*.
 PINK RAMBLER (*Euphrosine*)—Flowers medium size, pink, in clusters, very pretty.
 PSYCHE—A seedling from *Crimson Rambler*. Color pale rosy pink, suffused at base with salmon and yellow; blooms freely in bunches of eight to twenty-five blooms each.

CRIMSON RAMBLER ROSE.

[REDUCED.]

QUEEN ALEXANDRA (New)—"This new rose is a cross between the well known Crimson Rambler and *Rosa Multiflora Simplex*. It produces, with great freedom, clusters of flowers of a rich rose color. A most desirable companion for the Crimson Rambler." Awarded a Gold Medal by the National Rose Society of England, at the Temple Gardens, July 4, 1901.

QUEEN OF THE PRAIRIES, *vig.*—Bright rosy red, frequently with white stripe. Foliage large and quite deeply serrated.

SETIGERA, Michigan or Prairie Rose—This is not a new rose by any means, but it seems to have been lost sight of for a number of years. Now that single roses are so popular, this variety will be much sought after. It is a climber and when trained over a veranda makes a beautiful display. Large single flowers, of a deep rose color.

WHITE RAMBLER (*Thalia*)—Small or medium, daisy-like, pretty white flowers in large clusters; fragrant, very ornamental.

WILLIAM C. EGAN—Entirely new and distinct. The habit of the plant is sub-climbing, but vigorous and healthy, with bright glossy foliage. The flower is large and very full, resembling in shape as well as color the *Souvenir de la Malmaison*. Although only an annual bloomer, it remains in flower several weeks, and the large trusses of superb blooms are unusually attractive. Perfectly hardy.

YELLOW RAMBLER (*Aglaia*)—Flowers are two and a half inches in diameter, in clusters of six to ten. Yellow in bud, but white when fully open; when half open the flowers are tinged with yellow, slightly fragrant. Plant vigorous and free-blooming; hardy, very pretty and desirable.

WICHURIANA AND HYBRIDS OF THIS SPECIES.

WICHURIANA OR MEMORIAL ROSE, Japanese Trailing Rose—A distinct and valuable variety from Japan; it is 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, 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.

MANDA'S TRIUMPH—Large clusters of double pure white flowers, 2 inches in diameter, and sweetly scented. Growth free; luxuriant foliage.

PINK ROAMER—Flowers single in close heads, nearly 2 inches in diameter; color bright rich pink, orange-red stamens; fragrant.

SOUTH ORANGE PERFECTION—Perfectly formed double flowers in great profusion; about $1\frac{1}{2}$ inches in diameter; color soft blush-pink at the tips, changing to white.

UNIVERSAL FAVORITE—Double flowers of a beautiful rose color, about 2 inches in diameter; fragrant. The most vigorous of the set.

LORD PENZANCE'S HYBRID SWEET BRIARS.

Apart from their extreme beauty they are most interesting, being crosses between common Sweet Briar and various other roses. It is certain they are a great acquisition. Like their parent, the common Sweet Briar, the foliage is deliciously scented. The flowers are single and of the most beautiful tints.

AMY ROBSART—Lovely deep rose.

BRENDA—Maiden's blush or peach.

EDITH BELLENDEN—Pale rose.

GREEN MANTLE—Bright pink.

JULIA MANNERING—Porcelain pink.

LORD PENZANCE—Soft shade of fawn or ecru.

LUCY BERTRAM—Deep crimson.

MEG MERRILEES—Crimson.

ANNE OF GEIERSTEIN—Dark crimson.

CATHARINE SEYTON—Rosy pink.

FLORA M'IVOR—Pure white blushed rose.

JEANIE DEANS—Scarlet-crimson.

LADY PENZANCE—Beautiful soft tint of copper.

LUCY ASHTON—Pretty white blooms with pink edges.

MINNA—Pure white.

ROSE BRADWARDINE—Beautiful clear rose.

MOSS AND PERPETUAL MOSS ROSES.

The Moss Roses are favorites with every one, on account of the beautiful buds, which, for bouquets and cut flowers, are invaluable. They are subject to mildew, require close pruning and high culture, but amply repay careful attention by the increased size and beauty of the flowers. They are all very hardy. The foliage is generally somewhat crimpled, and has mostly seven leaflets.

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

COMTESSE DE MURINAIS, *vig.*—White, tinged with flesh.

CRESTED MOSS.

[REDUCED.]

CRESTED MOSS, *free*.—Deep pink-colored buds, surrounded with a mossy fringe and crest; free from mildew. A fragrant, very beautiful rose.

GRACILIS, *free*.—Deep pink buds, surrounded with delicate fringe-like moss. The most beautiful of all the Moss Roses.

PRINCESS ADELAIDE, *vig.*—Pale rose, of medium size and good form. Foliage often blotched or variegated. Good in bud and flower. Do not prune this variety severely.

SALET, *free or vig.*—Light rose, large, full; pretty in bud.

WHITE BATH, *mod.*—White, sometimes tinged with flesh; attractive in bud and open flower. The best white Moss.

HYBRID NOISETTE ROSES.

— This is a modern group of considerable importance, obtained chiefly from crosses between Remontant, Bourbon, and Noisette Roses. They generally flower in small clusters and bloom freely throughout the year. The flowers are mostly white, and though small, are generally of good form. They are of about the same hardiness as the Bourbons and Hybrid Teas, requiring a little more care in their protection than the Hybrid Perpetuals.

COQUETTE DES ALPES, *vig. or free*.—White, slightly shaded with carmine; medium size; form semi-cupped; wood long-jointed; larger flowers than the others. The strongest grower of the entire class.

COQUETTE DES BLANCHES, *vig. or free*.—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.

ELIZA BOELLE, *mod.*—White, delicately tinged with pink; medium size; full, beautiful circular form. An exquisite rose.

HYBRID REMONTANT OR HYBRID PERPETUAL ROSES.

This class thrives the best in a rich soil. The pruning should be regulated by the habit of growth, the weak shoots closely cut in, those which are vigorous left longer. Most of the varieties are fragrant; some of them, like *Alfred Colomb*, *Mme. Victor Verdier*, etc., are most deliciously perfumed.

Although they are styled *perpetual* bloomers, none of them are such in reality. However, many of them yield a fair second crop of flowers in the autumn, which is very acceptable. Aside from this, there is no class, take it all in all, so popular and which gives such general satisfaction.

ALFRED COLOMB, *free.*—Raised from *Jacqueminot*. Brilliant carmine-crimson; very large, full, and of fine globular form; extremely fragrant, and in every respect a superb sort. Green wood with occasional pale greenish thorns; foliage large and handsome. One of the most useful sorts for general cultivation.

AMERICAN BEAUTY, *vig.*—Large, globular; deep pink shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing.

ANNE DE DIESBACH, *vig.*—Raised from *La Reine*. Carmine, a beautiful shade; very large. A superior garden sort; fragrant; one of the hardiest. Valuable for forcing.

BARON DE BONSTETTEN, *vig.*—Rich velvety maroon; large, full. A splendid sort.

BARONESS ROTHSCHILD, *mod. or dwarf.*—Light pink; cupped form; very symmetrical; without fragrance. Very distinct and beautiful; one of the finest exhibition varieties. The wood is short-jointed; very hardy and a late bloomer.

CHARLES LEFEBVRE, *free or mod.*—Reddish crimson; very velvety and rich, but fading quickly; large, full and beautifully formed. Foliage and wood light reddish green; few thorns of light red. A splendid rose.

CLIO—Raised by William Paul & Son, the celebrated English rose growers. Flowers large, of fine, globular form, flesh color, shaded in the center with rosy pink; growth vigorous; handsome foliage. One of the finest new roses. See Cut, page 106.

COUNTESS OF OXFORD, *mod.*—Bright carmine, fading in the sun; very large and full; not fragrant. Wood almost thornless; foliage very handsome, large and distinct. Fine in the bud; valuable for forcing.

EARL OF DUFFERIN.
[REDUCED.]

CLIO ROSE.
[REDUCED.]

- EARL OF DUFFERIN**, *vig.*—One of the finest roses of recent years. Rich, brilliant, velvety crimson, shaded with dark maroon; large, full, finely formed; delightful fragrance. A vigorous grower. One of the finest dark roses. It should be in every collection. See Cut, page 105.
- EUGENE FURST**, *vig.*—Velvety crimson, shaded with deep crimson; large and full, of good shape; fragrant. A fine dark Rose.
- FISHER HOLMES**, *free or vig.*—Deep, glowing crimson; large, moderately full, and of fine imbricated form. A superb rose.
- FRANCOIS LEVET**, *vig.*—Cherry-red; medium size; well formed; free bloomer. Valuable on account of its vigorous habit.
- FRANCOIS MICHELON**, *free*—Deep carmine-rose; very large, full, and of fine globular form; fragrant and a free bloomer. Habit very erect. A distinct choice sort; excellent late in June and July, when other varieties are gone, and also in the autumn.
- GENERAL JACQUEMINOT**, *vig.*—Brilliant crimson; not full, but large and extremely effective; fragrant, and of excellent hardy habit; forces well.
- HELEN KELLER**, *vig.*—Flowers large, of most perfect form, and fragrant. Color brilliant rosy cerise. A vigorous grower and very free bloomer. A most distinct and lovely rose.
- HELEN PAUL**, *vig.*—A perfectly hardy and very desirable rose; color a deep satiny rose; large and full. Opens its flowers during the hottest weather. It is a finer flower than Jeannie Dickson. A splendid grower.
- JEAN LIABAUD**, *free*—Crimson maroon, illumined with scarlet; large, full, fragrant. A very beautiful dark rose.
- JEANNIE DICKSON**, *vig.*—Color rosy pink, entire margin of petals edged with silvery pink, base of petals having a pale yellow zone. A new shade of color. Flowers large, full, with a very high center which stands up prominently.
- JOHN HOPPER**, *free*—Bright rose with carmine center; large and full. A profuse bloomer and standard sort.
- JUBILEE**, *vig.*—Flowers very large; color described as intense crimson-maroon red; fragrance strong and lasting. Plant very vigorous; large, dark green foliage.
- LADY HELEN STEWART**, *vig.*—Bright crimson-scarlet; large, full, and of perfect form, produced on long stiff stems, highly perfumed; distinct and fine. A beautiful and valuable variety.
- MABEL MORRISON**, *mod.*—White, sometimes tinged with blush; in the autumn the edges of the petals are often pink. In all, save color and substance of petals, this variety is identical with *Baroness Rothschild*. A very valuable white rose.
- MADAME GABRIEL LUIZET**, *vig. or free*—Pink, distinct, very large, cupped shape; somewhat fragrant. One of the finest roses in the Catalogue.
- MADAME VICTOR VERDIER**, *mod.*—Carmine-crimson; large, full, very fragrant; excellent.
- MARCHIONESS OF LONDONDERRY**, *vig.*—A new White Hybrid Perpetual, and one of the best introductions of the Messrs. Dickson & Sons of Newtownards, Ireland. Flowers of great size, measuring seven inches across, perfectly formed and carried on stout stems. Color ivory white; petals of great substance, shell-shaped and reflexed; free-flowering; highly perfumed; growth vigorous, and foliage very handsome. One of the finest roses. Awarded the Gold Medal of the National Rose Society of England. We have had this variety in flower for several seasons, and regard it as a decided acquisition to the list of hardy white roses. See Cut, on page 108.
- MARGARET DICKSON**, *vig.*—Of magnificent form; white, with pale flesh center; petals very large, shell-shaped and of great substance; fragrant; a very promising variety, foliage very large, dark green.
- MARGUERITE DE ST. AMANDE**, *free*—Bright rose, very beautiful in the bud state; this variety will give more fine blooms in the autumn than almost any other in the class. One of the most valuable roses.
- MARIE BAUMANN**, *mod.*—Brilliant carmine-crimson; large, full, of exquisite color and form; very fragrant. Extra fine.

MARCHIONESS OF LONDONDERRY.

[REDUCED.]

MARIE RADY, *free*—Vermilion, shaded with crimson; large, very full, of fine globular form. A fragrant, superb sort, but a shy bloomer in autumn.

MARSHALL P. WILDER, *vig.*—Raised from the seed of *Gen. Jacqueminot*. It is of vigorous growth, with healthy foliage; flowers large, semi-globular, full, well formed; color, cherry-carmine, much like a light-colored *Marie Baumann*, or a shade deeper than *Marie Rady*, and very fragrant. In wood, foliage, and form of flower, it resembles *Alfred Colomb*, but the seedling excels that famous variety in vigor, hardiness, and freedom of bloom. It continues to bloom profusely long after the other Remontants are out of flower. In brief, it may be described as an improved *Alfred Colomb*, and as good a rose as has been raised by anyone. It is undoubtedly the finest of its color.

MAURICE BERNARDIN, *vig. or free*—Bright crimson; large, moderately full; a good free blooming sort, generally coming in clusters. Perhaps the most prolific of all crimson roses in the spring.

MRS. JOHN LAING, *vig.*—Soft pink; large and of fine form, produced on strong stems; exceedingly fragrant; one of the most valuable varieties for forcing, and flowers continuously in the open ground. One of the most beautiful roses of recent introduction.

MRS. R. G. SHARMAN CRAWFORD, *vig.*—Raised by Dickson & Sons of Newtownards, Ireland. Color deep, rosy pink, outer petals shaded with pale flesh, white at base of petals; flowers large, of perfect imbricated form, and freely produced, flowering from early summer until late in autumn. Growth vigorous. Awarded Gold Medal of the National Rose Society of England, and many first-class certificates. A valuable addition.

PAUL'S EARLY BLUSH, *vig.*—Flowers large, double; color light silvery blush. Vigorous and free flowering. A beautiful and valuable rose.

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

PIERRE NOTTING, *free*—Deep maroon, illumined with bright crimson, often suffused with velvet; large, or very large; globular form, pointed buds; highly scented. A superb dark rose, often at its best in the autumn.

PRINCE CAMILLE DE ROHAN, *free*. Deep velvety crimson; large, moderately full. A splendid rose.

REV. J. B. M. CAMM, *mod.*—Carmine-rose; a fine enduring shade; medium size, semi-globular form; one of the most fragrant and free blooming sorts; superb.

ULRICH BRUNNER.
[REDUCED.]

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

VICTOR VERDIER, *mod.*—Bright rose, with carmine center, a very fresh shade of color; not fragrant; free bloomer; wood nearly smooth. This variety, with its numerous progeny, is more tender than any of the other types in the class. A beautiful rose.

RUGOSA ROSES AND HYBRIDS OF THE SPECIES.

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

AGNES EMILY CARMAN—A rugosa hybrid obtained by crossing the common pink rugosa with *Harrison's Yellow*. Flowers in clusters; brilliant crimson, of the shade of *Gen. Jacqueminot*; very free blooming, and continuing in bloom nearly all summer; a rampant grower, handsome foliage, and very hardy.

BLANC DOUBLE DE COUBERT, *vig.*—A new variety with double, pure white flowers, possessing a delightful fragrance. A distinct and beautiful rose.

MADAME G. BRUANT, *vig.*—The first of a new race of hybrids. In the bud state, the flowers are long and pointed; when open, semi-double; pure white, and fragrant, and produced freely in clusters at intervals throughout the summer; exceptionally hardy and vigorous; forms a handsome bush.

RUGOSA ALBA, *mod.*—Single, pure white flowers, of five petals; highly scented; a splendid shrub.

RUGOSA RUBRA, *vig.*—Flowers single, of a most beautiful bright rosy crimson, succeeded by large berries, of a rich rosy red color, and are a great addition to the ornamental character of the plant.

MISCELLANEOUS ROSES.

CLOTHILDE SOUPERT (Polyantha) *vig.*—Medium size; very double and beautifully imbricated like an aster; produced in clusters; pearly white, with rosy lake centers, liable to vary, producing often red and white flowers on same plant. Valuable for florists for designs, or as a market pot plant, being a remarkably free and constant bloomer, and of easy culture. One of the most valuable roses.

DAWSON, *vig.*—A vigorous and hardy plant with a tendency to climb high. Flowers are clustered like those of the *Rosa Multiflora*. They are quite full, of a deep pink color, and very fragrant.

GRUSS AN TEPLITZ, (Hybrid Tea) *vig.*—Color scarlet shading to velvety crimson, very fragrant, a free grower and most profuse bloomer; handsome foliage, especially valuable as a bedding Rose. We have had this grand new variety in bloom in our nurseries and can recommend it as one of the very choicest new Roses.

HARRISON'S YELLOW, *free*—Golden yellow; medium size; semi-double. A freer bloomer than Persian.

HERMOSA (Bourbon) *mod.*—Bright rose; a most constant bloomer. One of the very best.

LIBERTY (Hybrid Tea)—Color pure crimson-scarlet; a steady and constant bloomer; flowers of large size, beautiful elongated form. A remarkable keeper when cut, preserving its brilliancy of color without change.

LA FRANCE.
[REDUCED.]

LA FRANCE (Hybrid Tea)—Raised from seed of a Tea Rose. Delicate silvery rose, changing to silvery pink; very large; full, of fine globular form; a most constant bloomer; the sweetest, and one of the most useful of all roses. See Cut, page 110.

MADAME PLANTIER, *free*—Pure white, above medium size; full. Produced in great abundance early in the season. Foliage rather small, seven leaflets. One of the best white roses for hedges and for massing in groups.

MAGNA CHARTA, *vig.*—Pink, suffused with carmine; full, globular. Foliage and wood light green, with numerous dark spines. A fragrant, excellent rose. Valuable for forcing.

MULTIFLORA JAPONICA—A charming species, introduced from Japan more than a century ago, but only recently brought to notice. It is exceedingly free-blooming, and towards the end of June the plant is covered with great clusters of small white, single, sweetly fragrant flowers, in which the golden colored anthers make a charming contrast with the snowy-white petals. It is extremely hardy and grows rapidly, and is a valuable shrub.

PERSIAN YELLOW, *free*—Bright yellow, small, nearly full. It is desirable to grow more than one plant, and by pruning one this year in the usual way, and the other plant the next year, annual crops of flowers may be had.

SOLIEL D'OR (GOLDEN SUN)—[REDUCED.]

SOLIEL D'OR (Golden Sun)—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 three 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. The following prizes, among others, have been awarded it: Gold Medal, at International Exhibition, Lyons, France, 1898; Certificate of Merit, from the National Society of France, 1899; First Prize, at the World's Exposition, Paris, 1900; the Diploma of Honor, at Vienna, Austria, 1900.

SOUVENIR DE LA MALMAISON (Bourbon) *mod.*—Delicate flesh, tinted with fawn; flat form; very large and full, with rich foliage. A superb rose.

WHITE DAWSON—A sport from the well known Dawson Rose, which was originated by Mr. Jackson Dawson of the Arnold Arboretum. Flowers in clusters of twenty to twenty-five, single and of beautiful form, two inches in diameter, pure white with yellow anthers, forming a pleasing contrast, fragrant, covering the plant with a mass of bloom; foliage shining and smooth. Quite distinct and very ornamental. A great acquisition; plant very vigorous.

NEW EVERGREEN ROSES.

EVERGREEN GEM, *vig.*—Foliage fine, rich bronze color, closely matted, remains green in winter; flowers yellow, buff in bud, opening to almost white, two or three inches in diameter, perfectly double, and of a delightful sweet brier fragrance.

GARDENIA, *vig.*—Flowers bright yellow, and when open cream color, three to three and a half inches in diameter, delightfully fragrant, and produced freely.

JERSEY BEAUTY, *vig.*—Foliage leathery. Flowers large, single, three inches in diameter, pale yellow, fragrant, and produced in great profusion.

TREE ROSES.

We offer the finest hardy sorts in a variety of colors, *but only for Spring delivery.*

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RUGOSA RUBRA ROSES.