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ILLUSTRATED and DESCRIPTIVE

U.S. DEPT. OF AGRICULTURE
Washington, D.C.
Catalogue

Fruit and Ornamental Trees

ROSES GRAPE VINES SHRUBS
SMALL FRUITS ✿ ✿ PLANTS

The Standard Nursery Co.

INCORPORATED 1890

Rochester, - - N. Y.

Twenty-Ounce Apple

ILLUSTRATED

DESCRIPTIVE CATALOGUE

—OF—

Fruit and Ornamental Trees,

SMALL FRUITS,

Vines, Roses, Shrubs,

ETC., ETC.

PRESS OF
VREDENBURG & COMPANY, INC.
ROCHESTER, N. Y.

PREFACE.

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

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

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

To the planter or purchaser of nursery stock, at least three things are indispensable; first, varieties true to name; second, healthy, vigorous well matured trees or plants; and third, careful and judicious packing, without which all may be lost.

We give the most careful scrutiny to the genuineness of varieties, endeavoring by all methods known to us, to protect our customers from error or imposition. By such careful and constant watching and attention, we are warranted in offering our stock as pure, and absolutely true to name.

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

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

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

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

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

USEFUL TABLES.

Suitable Distances of Trees, etc., in Planting.

Apples—Standard	30 to 40 feet apart, each way.		
“ Pyramidal	15 to 18	“	“
“ Dwarf (bushes)	10	“	“
Pears—Standard	20 to 25	“	“
“ Pyramidal	16 to 18	“	“
“ Dwarf	10	“	“
Cherries—Standard	18 to 20	“	“
“ Dukes and Morellos	16 to 18	“	“
Plums—Standard	16 to 18	“	“
“ Pyramidal	10 to 14	“	“
Peaches	16 to 18	“	“
Apricots	16 to 18	“	“
Nectarines	16 to 18	“	“
Quinces	10 to 12	“	“
Currants	3 to 4	“	“
Gooseberries	3 to 4	“	“
Raspberries	3 to 4	“	“
Blackberries	6 to 8	“	“
Strawberries	1½ to 3	“	“
“ For cultivation for market, with horse- hoe or cultivator	3 to 4	“	“
Grapes	8 to 10	“	“

Number of Plants on One Acre, at Various Distances.

At 3 feet apart, each way	4,840
“ 4 “ “	2,729
“ 5 “ “	1,742
“ 6 “ “	1,200
“ 8 “ “	680
“ 10 “ “	430
“ 12 “ “	325
“ 15 “ “	200
“ 18 “ “	135
“ 20 “ “	110
“ 25 “ “	70
“ 30 “ “	50

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

Directions for Transplanting Trees and Shrubs.

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, remanuring 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 insure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn or potatoes.

Preparation of the Trees—This is one of the most important operations to be performed, and one in which the most fatal errors are liable to be committed. The object of pruning is two-fold. First, to secure a head properly shaped and sufficiently open to the sun and air for the successful ripening of the fruit; and second, to preserve the natural balance between the roots and branches of the tree, that a healthy growth may be secured.

When young trees are removed from the Nursery and many of the roots are broken and destroyed, as will be the case however careful the packing and transportation may be performed, it becomes very necessary that the balance should be preserved by a proper and judicious pruning. This pruning should be adapted to the size and condition of the tree, and at the same time the form should not be forgotten. It should be so close as to enable the roots to supply the demand for sap from the remaining branches, and at the same time no growth already secured should be wasted.

In both standard and dwarf trees, it will be usually found a safe rule to cut back in pruning at transplanting one-half the growth of the previous season. The ends of the larger roots should be made smooth with a sharp knife where they have been roughly cut by the spade in digging, as new roots will form and the injured parts heal more readily with this attention.

Planting—The holes should be dug large enough in the first place to receive the roots of the tree without cramping or bending them from their natural position. The tree having been properly pruned, should be held upright and the earth filled in about the roots, the finest and best soil from the surface being worked in among them, filling every space and bringing every root fully in contact with it. In extremely dry weather a pail of water may be poured upon the earth, to settle it about the roots, but this is seldom necessary. Finish the planting by placing soil enough about the tree to raise it somewhat higher than elsewhere, and press the soil carefully down with the foot. Care must be taken against planting too deep; when the earth settles about the tree it should stand at the same height as when in the Nursery. When set in Autumn it is well to raise a mound of earth about the trees a foot or more in height. This will keep them from being swayed by the winds or thrown out by the frost during the winter. It should be removed in the spring. In planting dwarf trees the stock on which they are budded, and no more, should be under ground. They will then stand firmly and will not lose their dwarf character by the rooting of the standard stock.

Staking—If trees are tall or in exposed situations, they should be supported by stakes to prevent injury from the action of the wind. Staking is done in the best manner by driving two strong stakes firmly in the ground, one on each side of the tree about a foot distant from it, and fastening the tree between them with bands of straw or other soft material, so that it may be kept in an upright position without chafing until the roots obtain a firm hold upon the soil.

Mulching—This is properly done by placing a layer of coarse manure or litter from three to six inches about the tree, extending one or two feet further in each direction than the roots. This keeps the ground moist and of equal temperature, renders watering unnecessary, and is in all respects preferable to it. Trees properly mulched are more certain to live and make much greater growth than those which are not so treated.

Cultivation after Planting—Here is the grand opportunity for the success of the skillful fruit grower. It is not enough for him that his trees are of the choicest sorts, selected with regard to the climate and adaptation to the uses for which they are designed, that they are properly pruned and planted in dry, mellow soil, thoroughly enriched and prepared for their reception, protected from the winds by proper staking, and that they are perfect in shape and thriftiness. He knows very well that all this may be properly and well done at great expense, and without further care be followed by an entire failure. So he watches their growth and defends them from their enemies, that the cankerworm and caterpillar do not find safe lodgment among their branches, nor the borer cut its way into their trunks, that the grasses do not form a close turf about them, or the cattle obtain access to them by neglected gates or fence corners, and break down the tender branches. He is well repaid, for they thrive and grow rapidly, the shoots are vigorous, the bark clean and smooth, and soon a most abundant crop of superior fruit testifies to his wisdom and care. His neighbor, perhaps with better soil, and equal care and experience in planting, having at the outset neglected these apparently trivial, but really important matters, sees instead of thrifty trees loaded with luscious fruit, the wreck of his hopes in a few mossy, scraggy, mis-shapen specimens of what he considers his ill-fortune, and hastens to remove. He, too, is justly rewarded for his neglect, as is his more prosperous neighbor for his care.

Those who are obliged to plant trees in a field of grain or grass, should see that all such are carefully mulched with rough manure, and that the ground is kept loose and moist about the tree. A hoed crop is greatly preferable in such plantation for the first five years. After a growth for this time, standard apple, pear, cherry and plum trees will grow and produce fairly in turf. The dwarf trees should always be well mulched every year with loose manure, and the ground thoroughly cultivated. They will amply repay for this attention in the increased quantity and improved quality of the fruit.

Treatment of Trees that have been Frozen in the Packages, or Received during Frosty Weather, or after long Exposure—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. If dried from long exposure, bury entirely in the ground, or place in water from 12 to 14 hours. When ready to plant prune more closely.

Pruning—Pruning after the first year should be varied according to the purpose of the planter and the variety of the tree. It should be trimmed as early as possible up to the height it is intended the future head should be, and the cutting off of large limbs may not in future be necessary. The removal of large branches should be avoided in all cases, whenever it is possible to do so, as decay is liable to commence at the point of separation and extend into the trunk; and whenever it is done, the wound should be carefully pared smooth, and a coating of paint or grafting wax applied to protect it from the action of the weather. After the removal of lower branches until the head has reached the desired height, the only pruning needed is to remove such branches as are crossing or interfering with each other; and to keep the head in symmetrical shape and well open to the sun and air. Trees should receive proper shape by judicious pruning and attention early in the spring of each year while they are young, and very little pruning will be needed afterward. When trees are to be pruned and trained for specific purposes and in a special manner, the orchardist will find full directions in the standard works on horticulture, which may be read with great benefit and followed with success, but are beyond the scope of an ordinary Catalogue.

Grape Vines—Require a dry, mellow, well-drained soil, deeply worked and well enriched, with a warm, sunny exposure. In planting give the roots plenty of room, and settle the soil firmly about them. A strong vine may be allowed to grow the first season without pruning; in November or December following, the growth should be cut back to three or four buds; the next season allow but two buds to grow, which should make canes seven to ten feet long and be cut back four to five feet, ready for fastening to the trellis. For the subsequent pruning of vines as well as trees, planters would do well to consult some practical work on the subject.

Berries—Should have a strong soil and be kept under constant cultivation. Mulching is of especial value. Raspberries and Blackberries should have old wood cut out each year, and new canes pinched off when three feet high. Strawberries should be mulched late in the fall; uncover the crown early in spring; remove mulch after fruiting and spade in light dressing of manure. If set for fruit, keep the runners cut off.

Currants and Gooseberries—Need heavy mulching and pruning, so that new wood will have room to grow.

Roses—Should have a deep, rich, well-drained soil, and should be severely pruned every spring before the buds start, cutting back all the last growth to three or four buds, except Climbing Roses, which may be first allowed to partly cover the space desired. Old decayed branches should never remain. Every Autumn compost should be placed around the stems of the plants, and spaded into the ground in the following Spring.

Wintering Nursery Stock Procured in the Fall.

In sections where the winters are very severe, it is not advisable to set out young trees and plants in the fall, but the practice of procuring them in the fall, covering them with earth during the Winter, and planting them in the Spring is becoming more and more popular, as experience has demonstrated its advantages. In the Fall Nurserymen are not hurried in their own planting; the season for shipping them is comparatively long, and the weather not nearly so changeable as in the Spring. Railways are not so much hurried and there is much less chance for injurious delays than in the Spring. It being practicable to plant trees so procured as soon as the frost is out, they become thoroughly established the first season.

Some have an impression that trees dug in the Fall and trenched in over Winter are worthless. This is a great mistake. Peach and some other young trees, if left standing during their first Winter, are frequently killed or injured by frost. While if dug in the Fall and treated as below described, they come through bright and uninjured.

To insure success, select a spot where no water will stand during the Winter, having no grass near to invite mice. Dig a trench deep enough to admit one layer of roots, and sloping enough to permit the trees to lie at an angle of not more than 30° with the ground. Having placed one layer of the roots in this trench, cover them with mellow earth, extending well up on the bodies, and *see that this is firmly packed*. Then add another layer of trees overlapping the first, and continuing as at first until all are heeled in. As soon as this is done, cover the tops so well with evergreen boughs that they will be thoroughly protected from winds.

FRUIT DEPARTMENT.

SELECT APPLES.

The first fruit, both in importance and general culture, is the Apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By planting judicious selections of summer, autumn and winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard.

As fruit has become cheaper on account of the increased supply, a large and constantly increasing European export has sprung up, which affords highly remunerative prices for the best selected specimens of our orchards, while the process of "evaporation" of fruit has become a recognized auxiliary to the horticulture of the land.

If apples are planted at the rate of fifty trees per acre, rows of peach trees can be planted between the apples, which, growing more quickly than the apple trees, soon protect them from the winds, and thus are a great benefit to them. After eight or ten years of productiveness, as the space is needed for apples, the peach trees may be removed, leaving the orchard better for the protection, and at the same time having yielded the planter a large return for his trouble.

Our list embraces a most careful selection of the best sorts for the several seasons, and few, if any, are omitted, that have proved worthy of general culture.

DWARF APPLES.

Where space is limited, dwarf apples may be advantageously planted. Of these we grow a limited number of best varieties.

SUMMER VARIETIES.

Astrachan Red—Large, roundish, nearly covered with deep crimson, overspread with a thick bloom; juicy, rich, acid; a good bearer. July and August.

Benoni—Rich flavor and of a deep red color; not successful everywhere. July and August.

Carolina June—A popular variety for the South and West; small to medium; deep red; productive, hardy and a free grower. June and July.

Early Harvest—Medium size, round, straw color; tender, sub-acid and fine; productive. July and August.

Early Strawberry—Medium, roundish; handsomely striped with red; excellent; productive. July and August.

Golden Sweet—Large; pale yellow; sweet and good. August and September.

Keswick Codlin—Large, oblong; pale yellow; pleasant acid. Tree erect, vigorous; bears young and abundantly. Excellent. July to October.

Primate—Hardy, good grower and productive. Fruit above medium, roundish; pale yellow, with blush on sunny side. Flesh fine-grained, tender, juicy, excellent. A fine dessert apple. August to October.

Sops of Wine—Medium, oblong; deep crimson. Fine dessert apple. August.

Sweet Bough—Large; pale greenish-yellow; tender and sweet; good bearer. July and August.

Totofsky—A handsome Russian apple, very hardy and productive; an early bearer; fruit medium to large; yellow, striped with red; acid flavor. July and August.

YELLOW TRANSPARENT.

William's Favorite—Medium size, roundish; flesh yellowish-white; flavor very mild and agreeable; bears abundantly. August and September.

Yellow Transparent—A very early Russian apple of good quality and decided merit; color when ripe pale yellow; quality good. July and August.

AUTUMN VARIETIES.

Alexander (Russian origin)—Very large; deep red or crimson; medium quality. October.

Autumn Strawberry—Medium; streaked; tender, juicy, sub-acid, fine. Vigorous and productive. September and October.

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

Colvert—Of large size; striped; sub-acid; tender; a strong grower and great bearer. September and October.

Duchess of Oldenburg—Russian; medium to large size; skin yellow, streaked with red, and somewhat blushed, sometimes with a faint blue bloom; flesh juicy and good, with a rich, sub-acid flavor; productive. September.

Fall Jenetting—Large, oblate; pale greenish-white, with a blush; tender, juicy, mild and sub-acid. Tree vigorous, spreading and productive. Sept. to November.

Fall Pippin (Pound Pippin)—Very large; yellow; tender, juicy and rich. Fine in all localities. Tree vigorous. September and October.

Fall Wine—Above medium. Tree healthy, but rather slender growth; annual bearer. Flesh juicy, tender, rich, aromatic. Very good. September to November.

- Fameuse** (Snow Apple)—Medium size, roundish; very handsome; deep crimson; flesh snowy white, tender, juicy, high flavored and delicious. Tree vigorous, productive and very hardy. October and November.
- Gravenstein**—Large; striped and beautiful; tender, juicy and high flavored; productive. September and October.
- Haas** (Gros Pommier, Fall Queen)—Medium size; pale greenish-yellow, shaded and striped with red; tender, juicy, sub-acid. Tree vigorous and very hardy; upright grower; bears early and abundantly. September to November.
- Hurlbut**—Medium size, conical; yellow, shaded with red, striped and splashed with darker red; flesh white, crisp and tender, juicy, mild sub-acid; quality excellent; begins to bear while young and continues with regular and constant crops; very hardy and suited to the extreme North. October to December.
- Jefferis**—Medium to large; yellow, mostly covered with red stripes; flesh tender and delicious. One of the finest dessert apples. September and October.
- Jersey Sweet**—Medium; striped red and green; very sweet, rich and pleasant. Good grower and bearer. August to October.
- Maiden's Blush**—Medium size, flat, quite smooth and fair; pale yellow, with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. August to October.
- Munson Sweet**—Medium to large; pale yellow, with red cheek; tender, juicy, good; vigorous grower and heavy bearer. September to November.
- Porter**—Rather large; yellow; tender, rich and fine. Moderate grower, but productive. September.
- Pumpkin Sweet** (Pumpkin Russet, Pound Sweet)—A very large, round, yellowish-russet apple; very sweet and rich. Tree a *vigorous*, rapid, upright grower; valuable. September to November.
- Rambo**—Medium size, flat; yellowish-white in the shade, streaked and splashed with pale red in the sun; flesh greenish-white, very tender, rich and mild. Not suitable for all sections. October to December.
- Red Bietigheimer**—A rare German variety. Fruit large to very large; skin pale green color, mostly covered with purplish-crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a free grower and an abundant bearer. This is one of the largest and handsomest of apples. September and October.
- Rolf**—Originated in Guilford Center, Me., where it is grown very extensively and regarded as perfectly hardy. A good bearer and of fine quality. Sub-acid and very small core; excellent for cooking or the table, and classed as one of the most attractive and best selling varieties. October to December.
- Smokehouse**—Large; yellow, shaded with bright red; flesh firm, crisp, juicy and fine flavored. Especially esteemed in Pennsylvania. September to November.
- Stump**—A well-tried apple of good size; roundish-conical; flesh firm, crisp, tender, sprightly sub-acid, good; greenish-yellow, shaded with red; beautifully fair and has commanded the highest prices wherever shown. September to December.
- St. Lawrence**—Large; yellowish, striped and splashed with carmine; flesh white, lightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. September and October.

WINTER VARIETIES.

- Akin**—In size and color much like Jonathan, but a better keeper. The best, by far, of the late keepers and the apple for the fancy trade. A regular bearer, of great beauty and excellent quality. The ideal winter apple.
- Arctic**—This new seedling is unquestionably one of the hardiest of the ironclads, the original tree having stood for years uninjured in the least in one of the most exposed situations on the St. Lawrence river, where the thermometer falls to 45 degrees below zero. The fruit is unsurpassed in size, beauty and quality by any late keeping winter apple yet introduced; being very large, of a deep, dark rich red color, of firm texture, brisk sub-acid flavor, it is an attractive and delicious dessert apple of highest excellence. The tree is a rapid, vigorous grower, and an early, annual and good bearer.

- Arkansas Beauty**—Large to very large; deep red, tender, yet firm; one of the handsomest apples grown; quality good. Tree hardy, vigorous and very productive. December to May.
- Arkansas Black**—Originated in Northwest Arkansas, and is an enlarged and improved Winesap. Fruit almost black; flesh firm, rich, crisp, with a rich, high flavor. November to February.
- Bailey Sweet**—Large; deep red; tender, rich, sweet. Vigorous, upright, good bearer. November to April.
- Baldwin**—Large, roundish; deep bright red; juicy, crisp, sub-acid, good flavor. Tree vigorous, upright and very productive of fair, handsome fruit. In sections where it thrives, one of the best and most popular winter apples. January to April.
- Baxter**—Originated in Canada. Fruit uniformly large, handsome, delicious, mild acid. Tree extremely hardy, vigorous and productive. December to May.
- Beach** (Apple of Commerce)—One of the most valuable market sorts, commanding the highest price by reason of its size and beauty; owing to its firmness and long-keeping qualities it is one of the most popular for export purposes. Bears young and prolifically. December to June.
- Belle de Boskoop**—Pronounced one of the most beautiful and profitable of the Russian varieties. Large; bright yellow, washed with light red on the sunny side, and sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly sub-acid; quality very good. February to April.
- Bellefleur** (Yellow Bellflower)—Large, irregularly oblong; rich yellow color; flesh tender, juicy, crisp, with a very sprightly flavor. Tree a moderate grower. November to March.
- Ben Davis** (New York Pippin, Kentucky Streak, etc.)—Large, handsome, striped and of good quality; productive: a late keeper; highly esteemed in the West and Southwest. December to March.
- Bismarck**—Originated in New Zealand, showing wonderful productiveness and early fruiting. A stocky grower, making a small, low tree, which sends out fruiting spurs and buds at a very early age. A large, handsome apple, of greenish-yellow ground overspread and streaked with crimson and carmine; excellent for cooking. October to January.
- Blenheim Pippin**—Large, uniform and handsome, with crimson blush on sunny side; brisk sub-acid. Tree healthy and vigorous in nursery and orchard; heavy bearer. Valuable for market. December to April.
- Boiken**—A handsome Austrian variety. Fruit medium to large; light yellow, shaded with red, resembling Maiden's Blush; flesh snow white and fine grained. Tree remarkably healthy and vigorous, requiring no spraying to produce perfect fruit. January to June.
- Bottle Greening**—Resembles Rhode Island Greening in size and flavor, but tree is a better grower and much hardier. A native of Vermont. December to March.
- Buckingham or Winter Queen**—A popular and profitable variety, valuable for table or market. Fruit medium to large; flesh yellowish, breaking, tender, juicy and excellent; small core. November to February.
- Clayton**—Originated in Indiana. A large, handsome apple of good quality. Flesh yellow, breaking, sub-acid. Good for both kitchen and market. January to March.
- Collins** (Champion)—A valuable apple on account of its productiveness and keeping qualities. Tree healthy and a good grower. Fruit large, uniform and perfect. Flesh yellowish, crisp, moderately juicy, sub-acid, good. December to March.
- Cooper's Market**—Medium, conical; yellow, striped with crimson; flesh white, tender, brisk sub-acid; vigorous, upright grower. December to May.
- Delaware Winter**—Closely resembling and perhaps identical with Lawver; large; bright red; flesh crisp, juicy, rich, sub-acid. This variety is highly recommended for its admirable keeping qualities, having been preserved into August (ten months). January to July.

- Domine**—A fine grower and profuse bearer. Succeeds in nearly all Western States. In Illinois and Iowa, especially, it attains an immense size. It will stand long-distance shipping and is a good keeper. December to April.
- Fallawater**—Very large, roundish; yellow, with generally a red cheek; mild sub-acid; a popular Pennsylvania apple. October to February.
- Gano**—Originated in Missouri. Form conical, good size and smooth; deep red, shaded on the sunny side to mahogany; very attractive; flesh pale yellow, fine grained, tender, pleasant, mild sub-acid; is a good shipper and keeper. Tree healthy, vigorous and hardy; an annual and prolific bearer. January to May.
- Gideon**—Raised in Minnesota. An upright grower; medium to large; color yellow, with vermilion blush on sunny side; mild acid; quality very good. December to March.
- Grimes' Golden**—Medium; rich golden-yellow; flesh crisp, tender, juicy, with a peculiar aroma; tree a good grower and early bearer; origin, Virginia. December to April.
- Hibernal**—A northern variety of superior excellence. Introduced from Russia; a perfect ironclad. Quality and appearance somewhat like Duchess, but larger. A good keeper. October to February.
- Hubbardston Nonsuch**—Large; striped yellow and red; tender, juicy and fine; strong grower and good bearer. October to April.
- Ingram**—A new variety, grown from the seed of Rawles' Janet. Tree productive, and the fruit especially valued for its long keeping. Flesh yellowish-white, moderately juicy, crisp, mild sub-acid. February to June.
- Iowa Blush**—Medium size, roundish-conical; whitish, with red cheek; quality fine, tart. Tree vigorous and hardy; most excellent for the prairies. November to January.
- Jacob's Sweet**—A large, handsome, showy apple, originating near Boston, Mass. Almost round, greenish-yellow, with red cheek. Excellent quality and good keeper; strong grower and heavy bearer. One of the best sweet apples. December and January.
- Jonathan**—One of the most beautiful of dessert apples. Its great beauty, uniform size, fine flavor and productiveness in all soils, unite to recommend it to orchard planters. It succeeds wherever grown and proves one of the best for either table or market. Tree hardy, forming an upright, spreading round head. Flesh white, tender, juicy, with a mild, sprightly, vinous flavor; of the Spitzenburg class. November to April.
- King (Tompkins County)**—Large and handsome; striped red and yellow; tree vigorous and productive; one of the best. November to May.
- Kinnaird's Choice**—Originated in Tennessee. Tree a thrifty, vigorous, irregular grower, similar to Winesap; an early and annual bearer. Flesh yellowish, fine, crisp, tender, juicy, mild, rich sub-acid, slightly aromatic; core small. Very good. January.
- Lady Apple**—A beautiful little dessert fruit; flat; pale yellow, with a deep red cheek; juicy, rich and pleasant. November to May.
- Lankford Seedling**—Originated in Kent County, Md. Tree a stout grower, bears young and every year. Flesh firm, juicy, mild sub-acid. January to May.
- Limbortwig (James River)**—An apple much cultivated South and West. Tree hardy and very productive, roundish, spreading, somewhat drooping. Fruit above medium and handsome. Flesh whitish, tender, juicy, with a brisk sub-acid flavor. Very good. January to April.
- Longfield**—A Russian variety. Tree a free, upright grower, early and abundant bearer. Medium to large; yellow, with a flush on the sunny side like the Maiden's Blush; rich, sprightly sub-acid; quality good. December to March.
- Magog Red Streak**—Origin, Vermont. Bears annually large crops; valuable for its extreme hardness, vigor, productiveness and long keeping; fruit medium, roundish; skin yellow, shaded with light red; flesh yellowish, a little coarse, moderately juicy, mild sub-acid. November to March.
- Mammoth Black Twig**—One of the most profitable and valuable for market. Resembles Winesap, except that it is from a third to a half larger. December to April.

- Mann**—An upright grower, forming a round head; fruit medium to large; roundish-oblate; skin deep yellow when fully ripe, with sometimes a shade of brownish-red where exposed; flesh yellowish, juicy, mild, pleasant sub-acid; good to very good. January to June.
- McIntosh Red**—An exceedingly valuable, hardy Canada sort. Medium size; nearly covered with dark red; flesh white, fine, very tender, juicy and refreshing. A good annual bearer of fair handsome fruit. Resembles the Fameuse, but larger and more hardy and fully equal in quality to this standard sort. October to February.
- McMahon's White**—Origin, Wisconsin. Has endured extreme cold in that section, forty degrees below zero. Flesh white, fine grained, excellent quality. One of the best hardy American apples. January to March.
- Milding**—Origin, New Hampshire. Tree hardy, strong, vigorous, upright grower, forming a large, round head; very productive; alternates years of large, fine fruit, which is excellent for market or family use. December to January.
- Missouri Pippin**—Large size; very handsome and of fair quality. An early and abundant bearer and a good keeper. A very profitable market variety. Tree upright, spreading, forming a very large head. Largely grown in the South and West. December to April.
- Monmouth Pippin** (Red Cheek Pippin)—Large; greenish-yellow, with a fine red cheek; juicy, tender and good. Tree erect, vigorous and productive. Dec. to April.
- Newtown Pippin**—One of the very best apples; high quality. Very juicy, crisp and delicious flavor; requires high culture for the best fruit; fine keeper. December to May.
- Northern Spy**—Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish-red; flesh white and tender, with a mild sub-acid, rich and delicious flavor. The trees should be kept open by pruning, so as to admit the air and light freely. January to June.
- North Star** (Dudley's Winter, Winter Duchess)—Originated in Maine. Tree thrifty, perfectly hardy; a good cropper. Fruit, size and appearance of Duchess, but more solid and richer flavor; keeps until spring. A very great acquisition.
- Northwestern Greening**—Originated in Waupaca County, Wisconsin. Tree a straight, thrifty grower, hardy and an early and continuous bearer. Fruit large to very large, smooth, yellowish-green and attractive. Flesh is of a mild, pleasant sub-acid and slightly aromatic. Will keep in an ordinary cellar until July, and two seasons' growth has been exhibited side by side. Notwithstanding its late-keeping qualities it is in good eating condition by November.
- Oliver Red** (Senator)—A fine, large apple of uniform shape and size and exquisite quality. Flesh yellowish-white, stained with pink; core small; quality high, with an agreeable blending of acid and sweet and a pronounced apple flavor; juicy and sprightly. Tree good annual bearer and healthy. Dec. to February.
- Ontario**—Large; whitish-yellow, nearly covered with bright, rich red; flesh tender, juicy, sub-acid and slightly aromatic. January to April.
- Opalescent**—One of the handsomest apples grown. Highly colored and susceptible of a very high polish, thus making it greatly prized for fruit stands. Flesh yellowish, tender, good. Large size, oblong; light red, shading to very dark crimson. December to March.
- Paragon**—Large to very large; deep red; tender, yet firm; one of the handsomest apples grown; quality extra good. Tree hardy, vigorous, very productive. Season December to May.
- Peck's Pleasant**—Large; pale yellow; very tender and rich, with a Newtown Pippin flavor; fine bearer. November to March.
- Peter**—Origin, Wealthy seed, and in form, size and color an exact duplicate of the parent, but differing in flavor and season, keeping from four to six weeks longer. The tree is perfectly hardy. November to March.
- Pewaukee**—A seedling from Duchess of Oldenburg. Fruit medium to large, surface bright yellow, partially covered with dull red; flesh yellowish-white, crisp, juicy; flavor sub-acid, rich, aromatic, spicy, something like the Jonathan; quality good. Tree strong grower and very hardy. December to May.

- Pomme Grise**—Small size; grayish-russet; flesh tender, rich and high flavored. Tree good grower, productive and extremely hardy. Profitable for European shipment. December to February.
- Rawle's Janet** (Never Fail)—Medium, roundish, ovate; greenish-yellow, striped with red; crisp, rich and juicy; one of the best and longest keepers in the South and Southwest. January to April.
- Red Canada**—Medium size; red, with white dots; flesh rich sub-acid, delicious; slender grower. November to May.
- Regan** (Black Ben Davis)—Said to be a seedling of Ben Davis; closely resembles Gano. Similar to Ben Davis, but is darker in color, better in quality, a surer bearer and a better keeper. Will largely supersede that popular variety as it becomes better known. December to April.
- Rhode Island Greening**—Large; greenish-yellow; tender, juicy and rich, with rather an acid flavor; grows strong and spreading; an abundant bearer. Dec. to April.
- Rome Beauty**—Large; yellow, striped and mixed with light red; flesh yellow, breaking, sub-acid; valuable for market on account of its productiveness, size and beauty, as well as for its certain bearing. November to January.
- Russet, English**—Medium; pale yellow, nearly covered with russet; firm and crisp, with a mild sub-acid flavor; very valuable on account of its long-keeping properties. Tree a very upright and vigorous grower; produces enormous crops. Very desirable. Keeps till June.
- Russet, Golden**—Medium size; dull russet, with a tinge of red on exposed side; flesh generally crisp, juicy and high flavored. Tree a vigorous grower and a great bearer. Very popular. November to April.
- Russet, Roxbury** (Boston Russet)—Rather large; greenish-yellow, mostly covered with bright russet; a pleasant sub-acid flavor. January to June.
- Salome**—Tree a strong grower; equals Wealthy in hardiness; an early and annual bearer; fruit of medium and uniform size; quality very good, which it retains even into the summer; keeps well with ordinary care until July.
- Scott's Winter**—This is a very hardy variety and has been long tested. An early and profuse bearer; flesh yellowish-white, slightly red near the skin. Sub-acid in quality. December to June.
- Seek-no-Further** (Westfield)—Medium to large; slightly russeted, with dull red stripes; tender, rich, spicy and fine; good bearer. November to February.
- Shackleford**—Tree entirely hardy, vigorous and prolific. Fruit large; fine flavored; well colored, purplish-red next the sun, with a delicate bloom. December to June.
- Smith's Cider**—A handsome fruit; large, oblong, somewhat flattened; skin yellow, changing to red; flesh tender, juicy, crisp, with pleasant sub-acid flavor. December to March.
- Spitzenburg, Esopus**—Medium to large; deep red; flesh yellow, crisp, sub-acid, high flavored. Bears and grows well transplanted in rich soil. November to April.
- Stark**—Esteemed as a long keeper and valuable market fruit. Fruit large, roundish; skin greenish-yellow, much shaded with light and dark red, and sprinkled with brown dots; flesh yellowish, juicy and mild sub-acid. January to May.
- Stayman's Winesap**—One of the finest apples in cultivation; much superior to its parent, the old Winesap, in size, flavor, color and keeping qualities, and now attracts attention everywhere as a profitable market variety. It has size, color, productiveness and quality to commend it. Tree vigorous, irregular and drooping in habit and adapts itself readily to varying soils and situations. Truly a great apple. December to May.
- Sutton Beauty**—Fruit large; waxy-yellow, striped with crimson; flesh white, tender, juicy, mild acid; quality good and a remarkable keeper. Tree vigorous, a handsome grower, very productive. One of the most valuable market sorts. October to February.
- Tolman Sweeting**—Medium; pale yellow, slightly tinged with red; firm, rich and very sweet; the most valuable baking apple; productive. November to April.
- Twenty Ounce** (Cayuga Red Streak)—Very large, nearly round; yellow, striped with red; quality good. Vigorous and good bearer. Popular as a market variety. October to January.

- Wagener**—Medium to large; deep red in the sun; flesh firm, sub-acid and excellent; very productive; bears very young. November to February.
- Walbridge**—A handsomely striped, medium-sized apple, of good quality; very hardy. February to May.
- Walter Pease**—Fruit very showy and attractive, and as a dessert or fancy market apple has no superior. Core very small; flesh white, fine grained; quality best; mild, juicy, slightly sub-acid, with a rich, sweet, aromatic flavor. Tree vigorous and very productive. September to February.
- Wealthy**—Originated in Minnesota. Hardy, vigorous and very productive. December to February.
- Western Beauty**—Tree a strong, vigorous grower, forming a large, spreading head. Fruit large, greenish-yellow, nearly covered with pale, dull red, striped with darker red. Flesh tender, mild, sub-acid. Good. November to February.
- Willow Twig**—Tree hardy and very productive. Fruit medium size, light yellow, shaded and marbled with dull red; very tender, pleasant sub-acid. Good. December to May.
- Winesap**—Medium; dark red; sub-acid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. November to May.

WINTER BANANA.

WINTER MAIDEN BLUSH.

- Winter Banana**—Large, golden-yellow, shaded and marbled with bright crimson; flesh lemon-yellow, fine grained, with rich, aromatic, sub-acid flavor. Tree a strong grower, hardy and a very early bearer. A beautiful and valuable apple. November to May.
- Winter Maiden Blush** (Greenville)—This fine winter apple was produced from seed of the fall Maiden Blush. Flesh yellowish, crisp, tender, juicy, with a very pleasant, mild, sub-acid flavor. It has a very pleasant odor. Tree a good grower and a regular bearer. December to April.
- Wolf River**—A beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the ironclads. Skin greenish-yellow, shaded with crimson; flesh white, juicy, tender, with a peculiar, pleasant, mild, sub-acid flavor. Tree a strong, stout grower and great bearer. January and February.
- York Imperial**—Of medium size, truncated, oval, angular; skin greenish-yellow; flesh tender, crisp, aromatic. Highly esteemed. November to January.

EXTRA HARDY, OR IRON-CLAD APPLES.

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

Below we give a list of the most valuable extra hardy apples.

SUMMER.		
Primate.	Red Bietigheimer.	Mann.
Tetofsky.	St. Lawrence.	McIntosh Red.
Yellow Transparent.	WINTER.	Peter.
AUTUMN.	Arkansas Beauty.	Pewaukee.
Alexander.	Baxter.	Salome.
Duchess of Oldenburg.	Belle de Boskoop.	Scott's Winter.
Fameuse.	Delaware Red.	Stark.
Hurlbut.	Gano.	Walbridge.
Hibernal.	Gideon.	Wealthy.
Rolfe.	Grimes' Golden.	Winter Banana.
	Longfield.	Wolf River.

SELECT CRAB APPLES.

As an ornamental fruit, and for jellies, preserving, etc., the Crab Apple is unequalled. All are very hardy and prolific, come into bearing when very young, and command a ready and profitable market. We name the best sorts.

Excelsior—Raised from seed of Wealthy, in Minnesota. Very hardy, productive and one of the best flavored varieties. This is not a Crab, but a very choice eating apple. September.

Gen. Grant—Large, round; yellow, striped with dark, almost black, red on the sunny side; flesh white, fine-grained, mild sub-acid. October.

Hyslop—Large, roundish-ovate; dark red, with a blue bloom; flesh yellowish; excellent for cider; tree hardy. October to December.

Lady Elgin—Fruit beautiful, resembling the Lady Apple; flesh yellowish, mild sub-acid. Tree a vigorous grower and very productive. November and December.

Martha—Immensely vigorous, hardy, producing every year. Mr Gideon says: "For sauce it surpasses any apple we ever grew." A great acquisition. October.

Montreal Beauty—Large; yellow, shaded with rich red; flesh yellowish, rich, firm, acid. One of the handsomest Crabs. October and November.

Orange—Tree moderate grower, an annual and abundant bearer. Fruit larger than Transcendent; flesh firm, crisp, juicy and delicious. October to December.

Quaker Beauty—A hardy, strong-growing sort; bears large crops of fine fruit. December to May.

Siberian, Red—About an inch in diameter, grown in clusters; yellow, lively scarlet cheek; bears young and abundantly. September and October.

Siberian, Yellow—Nearly as large as the above; fine amber or golden-yellow color. September and October.

Transcendent—Tree immensely productive, bearing after second year, and producing good crops by the fourth season. Fruit from one and a half to two inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies, both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating apple. Skin yellow, striped with red. September and October.

Van Wyck—Large; skin mottled with bright red; *sweet*. Tree vigorous. Oct. and Nov.

Whitney's Seedling—Large; splashed with carmine; flesh firm, juicy and rich. A great bearer and very hardy. Tree a vigorous, handsome grower. Has no superior, if an equal. August.

PEARS.

Standard Pears prefer a strong loam, but succeed well in a great variety of soils, and upon almost any land that will produce good crops of vegetables or grain.

DWARF 'DUCHESS.

Pears will keep longer and their flavor be greatly improved by picking before they are quite mature, and ripening them in the house. By a judicious selection of varieties their season can be extended from July to February.

Dwarf Pears are suited to garden culture, or where space is limited. Can be planted 8 or 10 feet apart, and deep enough to cover the union of the stock and scion, and be trained low by proper shortening of the terminal branches. These conditions being observed, they will be found very satisfactory, though we urge, where space is ample, that Standard trees be planted.

The letters "D" and "S" appended to the description of varieties, indicate favorable growth, either as "Dwarfs" or "Standard," or both. Those designated as "moderate growers" are usually smaller trees.

SUMMER VARIETIES.

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

Brandywine—Medium size; dull greenish-yellow, with a little russet; high flavored and good quality; tree a vigorous, upright grower and uniformly productive. In season during August and September. D. and S.

Clapp's Favorite—Large size; pale lemon yellow; flesh fine grained, juicy, melting, rich and buttery; a cross between Bartlett and Flemish Beauty; earlier than Bartlett and resembling the Flemish Beauty in growth. It is equally hardy with Flemish Beauty; a good grower and productive. In season during August and September. *Care should be taken to pick the fruit at least ten days before it would ripen upon the tree.* August and September. D. and S.

- Doyenne d'Ete**—Small size; yellow, with a blush on sunny side; melting and sweet, with pleasant flavor. Tree a strong grower and very productive. In season during August. D. and S.
- Early Harvest** (Chambers or Kentucky)—Originated in Maryland and valued as a profitable early variety. Fruit medium to large; rich golden-yellow, with red cheek, thickly covered with gray dots. D. and S. August.
- Koonce**—Tree vigorous, free from blight, upright. Fruit medium to large; yellow, one-half nearly covered with red; does not rot at the core; very productive. July.
- Lawson or Comet**—Tree is a vigorous, upright grower and productive; foliage clean and healthy. Fruit good size; yellow, flushed with the most beautiful crimson; flesh crisp and juicy; a firm, good shipper. August. S.
- Le Conte**—Tree very vigorous and productive. Fruit large; skin smooth, pale yellow; quality poor; ripens about with Bartlett. Worthless when grown north of Georgia.
- 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. August. S.
- Margaret** (Petite Marguerite)—Medium size; skin greenish-yellow, with a brownish-red cheek; flesh fine, melting, juicy, vinous and of *first quality*. Tree a vigorous, upright grower and an early and abundant bearer. Ripens latter part of August. D. and S.
- Osband's Summer**—Medium size, inclining to round; juicy and melting, with a rich, sugary flavor, and often slightly perfumed. Tree moderately vigorous, an erect grower and very productive. In season during August. D. and S.
- Souvenir du Congress**—A remarkably fine variety of very large size and most showy appearance. August and September. S.
- Tyson**—Above medium size; deep yellow at full maturity, slightly russet, with a crimson cheek; melting, juicy and fine flavored; a vigorous and rapid grower. One of the finest summer varieties. In season during August. D. and S.
- Wilder**—Small to medium; greenish-yellow, with red cheek; handsome, sweet, delicious. July and August. D. and S.

AUTUMN VARIETIES.

- Bartlett-Seckel**—Seedling from Bartlett and Seckel. New and highly prized by good judges. September to October. S.
- Belle Lucrative**—Large size; yellowish-green; melting and delicious; an upright grower and productive; bears while young; first quality in all respects. In season during September and October. D. and S.
- Bessimianka**—A hardy Russian variety. Fruit medium to large; green, slightly russeted, with blush on sunny side. Flesh tender, juicy, melting, excellent. Tree upright grower, with dark green foliage that never rusts or mildews. Oct. S.
- Beurre Bosc**—A large and beautiful russeted pear; very distinct, with a long neck; high flavored and delicious; a *moderate* grower and rather irregular; bears well. Top graft in order to obtain good standard trees. September and October. S.
- Beurre Clairgeau**—Its size, early bearing, productiveness and beauty render it a profitable market variety. It should only be grown as a standard. Very large; light yellow, shaded with crimson and russet; an early and abundant bearer. November to January. S.
- Buffon**—An orchard pear of the first quality; strong, upright grower. Skin deep yellow, with red cheek; very good. September. S.
- Duchesse d'Angouleme**—Very large, with rough and uneven surface; of a greenish-yellow, with patches of yellow and a dull red cheek; a vigorous and strong grower and a good bearer while quite young. It attains its greatest perfection on the quince root. In season during October and November. D.
- Flemish Beauty**—Large size; greenish-yellow and brown; rich and juicy. An old and highly esteemed variety; a strong grower and a great bearer; hardy and desirable. In season during September and October. S.

SHELDON.

Frederick Clapp—A very fine pear. Tree a vigorous grower; fruit medium to large, roundish; skin smooth, bright yellow; flesh whitish-yellow, fine, very juicy, melting, rich, highly vinous and slightly aromatic. October. S.

Garber—Noted for vigor, freedom from blight and heavy bearing. Fruit nearly round, large and yellow. Excellent for canning. October.

Hoosic—Originated in Williamstown, Mass. Fruit large size; skin greenish-yellow; flesh fine grained, melting and juicy, with a rich almond flavor. In quality it ranks among the best. An erect, fine grower, hardy and a great bearer. October. S.

Howell—Large size; light waxen-yellow; sweet and melting; excellent quality; a strong and hardy grower and good bearer. September and October. D. and S.

Idaho—Origin, Idaho. Large, round; yellow, with brownish-red on sunny side; flesh melting, juicy, vinous; hardy and prolific. Sept. and Oct. D. and S.

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

- Louise Bonne de Jersey**—Large size, oblong-pyriform; pale green in the shade, but overspread with brownish-red in the sun; very juicy and melting, with a rich and excellent flavor; a profitable market variety, succeeding better on the quince than on the pear root. September and October. D. and S.
- Onondaga** (Swan's Orange)—Very large; melting, sprightly, vinous. Tree *vigorous*, hardy and extremely productive. October and November. D. and S.
- President**—A very large, handsome pear. Greenish-yellow, with red in the sun; flesh juicy, with an excellent vinous flavor. Popular in New England. November. D. and S.
- Rossney**—Medium to large size; fine grained, melting, juicy, very sweet; excellent keeper and shipper. Tree much stronger than Kieffer. October. S.
- Rutter**—Originated at Westchester, Pa. Tree moderate grower, but good bearer. Flesh, white, melting, juicy, sweet, vinous, somewhat gritty; very good. October and November. D. and S.
- Seckel**—Small size; yellowish-russet, with a red cheek; flesh whitish, buttery, very juicy and melting. The richest and finest variety known and extensively planted all over the country. A prolific bearer. September and October. S.
- Sheldon**—Large size, roundish; greenish-yellow, mostly covered with thin, light russet; very juicy, melting, sweet and vinous; a fine grower and good bearer, but does not succeed on the quince. October and November. S.
- Vermont Beauty**—A beautiful new seedling pear that originated in Northern Vermont. Fruit of medium size; flesh melting, sprightly and of the best quality. Tree healthy, hardy and very productive. October. S.
- Worden-Seckel**—A seedling of the Seckel, which it much resembles in flavor; is equally as luscious, more juicy, with an aroma fully as rich and inviting, while in size, form, color and appearance it is far superior to its parent. Color, bright red on one side and light golden-yellow on the other. Very hardy; bears young, and is an enormous producer; ripens just after Seckel; a splendid keeper.

WINTER VARIETIES.

- Anjou** (Beurre d'Anjou)—A large, handsome pear; buttery and melting, with sprightly, vinous flavor; tree a vigorous grower and good bearer. We have no hesitation in pronouncing it to be *the most valuable pear in the catalogue*. Does equally well as a standard or a dwarf. Keeps until the winter holidays, when it commands very high prices in the market. D. and S.
- Dorset**—A very handsome late keeper; large golden-yellow, with bright red on sunny side; flesh melting, sweet and good; excellent for shipping. Tree a good grower. Ripens in February and keeps perfectly until May. S.
- Easter Beurre**—Large size; yellow, with a brownish-red cheek; of excellent quality, rich and melting. A moderate grower and productive; keeps all winter. Succeeds best on the quince root. D.
- Josephine De Malines**—Medium to large, roundish; pale straw color; flesh rose colored, melting and delicately perfumed; first quality. Tree a *moderate* grower, succeeds well on the quince. Deserves extensive culture. D. and S.
- Lawrence**—Above medium size; yellow, tender and melting; quality best; one of the best winter pears. In season during mid-winter. D. and S.
- Lincoln Coreless**—Originated in Tennessee and much prized by all who have fruited it. Tree healthy and vigorous; an annual and abundant bearer. Fruit large; yellowish-green, slightly bronzed, red on one side; season, mid-winter; coreless. S.
- Mount Vernon**—Medium size; light russet, red in the sun; flesh inclined to yellow; juicy and aromatic. Tree a good grower and abundant bearer. Mid-winter. S.
- President Drouard**—A variety recently introduced from France, highly recommended for its rich flavor and great keeping qualities. Tree a vigorous grower. Fruit large and handsome; melting and juicy. March to May. S.
- Vicar of Wakefield**—Large size, long, fine; rich yellow when fully ripe; very vigorous and productive; one of the best. November to January. D. and S.
- Winter Nelis**—Medium size; greenish-yellow, spotted with russet; melting and buttery, with rich, sprightly flavor. Tree of straggling growth. Dec. and Jan. S.

SELECT CHERRIES.

The Cherry thrives best on a sandy or gravelly soil, and there attains its highest perfection, but will do very well in almost any situation except a wet one. It is one of the most ornamental of all fruit trees, which, with its delicious and refreshing fruit, makes it very desirable for planting near the dwelling, where beauty and shade, as well as fruit, are so desirable.

We divide them into two classes, Hearts and Bigarreaus, and Dukes and Morellos. The first being strong and vigorous growers, making large, open, spreading heads or tops, are best suited for the purpose of shade, and produce large, heart-shaped, sweet fruit. The Dukes and Morellos are all of slower growth, and do not ever attain so large a size, and are more hardy, less liable to get injured by bursting the bark, and generally produce acid fruits, and make the most beautiful dwarfs. One and two year old trees are the most desirable for transplanting, and are usually from four to six feet high.

HEART AND BIGARREAU CHERRIES.

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

Bing—A new and handsome cherry. Originated at Milwaukie, Oregon. Very large, black, juicy, rich, slightly vinous, delicious flavor; excellent for shipping. Tree thrifty, upright grower, hardy and productive.

Black Eagle—Large; black; tender, rich, juicy and high flavored. Tree a moderate grower and productive. Ripe beginning of July.

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

Black Tartarian—Very large; purplish-black; half tender; flavor mild and pleasant. Tree a remarkably vigorous, erect and beautiful grower, and an immense bearer. Ripe last of June and begin-

ning of July. One of the most popular varieties in all parts of the country.

Centennial—A new variety from California. Remarkable for its firmness and splendid shipping and keeping qualities. Very large; amber, shaded with red; sweet, rich and luscious. Tree a straight and handsome grower. Mid-season.

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.
- Dyckman** (Dikeman)—Tree vigorous and good grower. Large, sweet, solid and meaty. Its lateness and excellency for transportation make it most desirable.
- Early Purple**—Small to medium size; purple; tender, juicy and sweet. Growth *free*, slender and spreading. First to middle of June.
- Elkhorn**—Very large; black; flesh firm, juicy and good. Tree vigorous, hardy and a great bearer. July.
- 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; clear, light red; tender and delicious. Tree *vigorous* and productive. Hangs well on the tree. End of June.
- Ida**—Tree hardy and good grower. Flesh tender, juicy, rich, excellent; pit very small. June.
- Knight's Early**—Large; black; tender, juicy, rich and excellent. Tree a *free* grower and very productive; branches spreading. Ripe a few days before the Black Tartarian.
- Mercer** (New)—A remarkable cherry, which is destined to become very popular. Tree a good grower, very hardy and profuse bearer. Fruit dark red, larger than Black Tartarian and much finer flavor. Season early. Highly recommended.
- Napoleon Bigarreau**—Fruit of the largest size; pale yellow, with a bright red cheek; flesh very firm, juicy, and when fully ripe of an excellent flavor. Tree vigorous and productive. Ripens early in July.
- Rockport**—Fruit large, obtuse heart-shaped; skin pale amber, light red in the sun; flesh rather firm, sweet and excellent. Tree vigorous, erect, and produces well.
- Schmidt's Bigarreau**—A most promising cherry; fruit of immense size, of a rich, deep black; flesh dark, tender, very juicy, with a fine flavor; bears abundantly and makes a most noble dish for the table.
- Windsor** (New)—A seedling originated at Windsor, Canada. Fruit large, liver-colored, resembling the Elkhorn, or Tradescant's Black Heart, nevertheless quite distinct; ripens three or four days after that variety; flesh firm and of fine quality. Tree hardy and very prolific. A *valuable late variety* for market and for family use.
- Yellow Spanish**—Large; pale yellow, with a bright red cheek in the sun; flesh firm, juicy and delicious; one of the best, most beautiful and popular of all light-colored cherries. Tree erect, *vigorous* and productive. End of June.

DUKE AND MORELLO CHERRIES.

These two classes of cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varies 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 stock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender.

Archduke—Tree vigorous, upright, hardy and prolific. Fruit large, bright red, very dark when fully ripe; flesh juicy, rich, sub-acid. July.

Baldwin—Tree upright, vigorous, forming a round head. Fruit large, round, very dark. Flesh the sweetest and richest of the Morello type. Unexcelled in earliness, vigor, hardiness, quality and productiveness.

Belle de Choisy—Medium size, round; amber, shaded with red; very tender and fine. Last of June.

- Belle Magnifique**—A magnificent large, red, late cherry, excellent for cooking and fine for table when fully ripe; rather acid, tender, juicy and rich. Tree a slow grower, but a most prolific bearer; makes a fine dwarf or pyramid on the Mahaleb. Very valuable. 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, of better quality and quite 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**—This fine cherry should be in every collection. Fruit large, obtuse heart-shaped; rich, dark red color; tender, juicy, sub-acid. Last of July.
- Lieb**—A new Morello variety from Northern Illinois; resembles early Richmond, but a little later, and much prized in the Northwest for its large size and extreme hardness.
- Louis Phillippe**—Extra hardy; a vigorous grower and very productive; large size; rich, dark red; flesh red, tender, juicy, with mild sub-acid flavor. July.
- Lutovka**—Tree of Morello type, a vigorous grower, young branches rather slender; fruit firm, good quality, sprightly acid; as large as English Morello or larger, more nearly round, very similar to that variety in color, but the flesh is not so dark as that of English Morello; clings tenaciously to the long stem. So far as tested the tree has proved to be very productive, ripening its fruit as late as, or later, than the English Morello.
- May Duke**—An old, well known, excellent variety; large; dark red; juicy, sub-acid, rich. Tree hardy, *vigorous* and fruitful; ripens over a long period; fine for dwarfs and pyramids. Middle of June.
- Montmorency, Large**—Tree *very hardy* and an *immense bearer*; commences to fruit while young, and is *loaded annually* thereafter with fine crops. Fruit very large, fine flavor and of bright, clear, shining red; valuable everywhere: a week later than Early Richmond. The finest acid cherry.
- Morello, English**—Large; dark red, nearly black; tender, juicy, acid, rich. Tree dwarf and slender; makes a fine bush on the Mahaleb. Valuable.
- Olivet**—This variety is of the greatest value. Fruit large; flesh red, with rose-colored juice, tender, rich and vinous, with mild, sub-acid flavor. As productive as the best of the Duke sorts and probably the largest of this class.
- Ostheim or Russian Cherry**—A hardy cherry, imported from the nurseries of Dr. Regel, of St. Petersburg, Russia. It has been tested in the severest winters of Minnesota, and found to be perfectly hardy. Charles Downing thus describes it: "Fruit large, roundish, obovate, flesh liver color, tender, juicy, almost sweet, sub-acid; very good. Season middle of July. Morello class."
- Reine Hortense**—A French cherry of great excellence; large; bright red; tender, juicy, nearly sweet and delicious. Tree *vigorous* and bears well.
- Rocky Mountain Dwarf**—The most remarkable and productive fruit now grown; a distinct species and entirely hardy; never affected by insects or disease. Flavor excellent.
- Vladimir**—A native of North Central Russia. Color black, juicy, sweet when ripe; size medium to large; excellent quality; perfectly hardy in North and Northwestern climates, and absolutely free from black knot. The Vladimir is a wonderful and prolific bearer, grown by the train load in Northern Russia, thereby attesting its superiority as a cold climate cherry of great commercial value.
- Wragg**—Origin, Iowa. Medium to large, juicy and rich. Tree a good grower, hardy and immensely productive. Well adapted to the Northwest.

ABUNDANCE.

SELECT PLUMS.

The Plum attains its greatest perfection on a strong, clay soil, where they grow the most thriftily, and suffer the least from the "curculio" and "black knot," and, as is the case with all other fruits, they are greatly benefited by thorough cultivation.

There is no difficulty in protecting the crop of plums from the attacks of the *curculio* by giving it a little extra care. This should be done as follows: Immediately after the trees have done blossoming, and when the fruit is in its first stages of growth, make the ground clean and smooth under each tree, and spread a sheet upon it, so that it will extend as far as the outside edge of the outer branches, and then suddenly jar the tree, so as to shake down all the stung fruit and insects, which should be destroyed. If this operation be carried on daily for a short time, it will insure a full crop of this delicious fruit, and will well repay the daily attention given it. It is very important that this should be done early in the morning.

Standard trees are generally from 4 to 6 feet, and should be encouraged after planting to form branches low down, or near the ground, and by this means low-headed trees will be secured.

Abundance (Botan)—The popular new Japanese plum. Tree thrifty, hardy and beautiful; fruit large, showy and good, richly perfumed. First of August.

Aitkin—A new plum of excellent merit. Fruit large, dark red; flesh firm, rich, yellow, good flavor. Tree good grower and very hardy. August and September.

America—This giant plum is a cross between Robinson and Botan, combining the quality and size of the Japanese with the hardiness of our native. Fruit larger than the average Japanese, and four to six times as large as the popular native sorts, and is not surpassed in beauty by any, being a glossy coral-red color. Flesh light yellow, moderately firm and of excellent quality. Ripens very early and is a splendid keeper. Tree vigorous, hardy and productive. One of the best in cultivation.

- Apple**—Tree a fine strong, somewhat spreading grower. Fruit, which is about seven inches in circumference, is striped and mottled until nearly ripe when it turns to a deep reddish-purple. The highly-flavored sub-acid flesh is rather firm, of a pinkish color, nearly freestone. Ripens soon after Burbank and keeps for a month.
- Arch Duke**—Very large; black; prolific; of first quality. An excellent shipper. Oct.
- Bartlett**—This plum in quality, flavor and fragrance is exactly like the Bartlett pear. Light salmon-colored flesh, rather firm, yet juicy; semi-free. It bears the second year. Tree upright like the Bartlett pear. Ripens just before the Burbank.
- Beauty of Naples**—A new variety of the highest promise; large; greenish-yellow; flesh firm, juicy, fine flavored. Tree very hardy and prolific. Middle of Sept.
- Berckman's**—A fine Japan plum. Tree of remarkable vigor, with long, spreading, willowy branches. Exceedingly productive, and when well thinned grows to large size; obtuse-conical; deep blood-red when ripened in the sun; moderately juicy, excellent quality. Ripens with Abundance.
- Botan**—See Abundance.
- Bradshaw**—A very large and fine early plum; dark violet-red; juicy and good. Tree erect and *vigorous*; very productive. Valuable for market and home use. Aug.
- Burbank**—The largest, handsomest and best of the wonderful new Japanese plums. Tree thrifty, free from black knot and other diseases and perfectly hardy. Fruit is not attacked by the curculio and ripens just after Abundance.
- Chabot (Yellow Japan)**—Tree strong, upright, somewhat spreading; very productive of medium to large oblong-conical plums, slightly pointed; yellow, with blush on sunny side, becoming when fully ripe nearly overspread with bright cherry-red. Flesh yellow, firm, sweet and excellent. September.
- Chalco**—A cross between Simoni and Burbank. A remarkable grower and of unsurpassed productiveness. Flesh sweet, firm, fragrant. Fruit is almost stemless and completely surrounds the older branches. A superior shipping plum, as it ripens well when picked green and keeps nearly a month. August.
- Climax**—Tree extremely vigorous, upright, with strong branches and very large leaves. Productive as Burbank, about four or five times as large, two or three weeks earlier and more richly colored. The most wonderful plum ever grown and one which will change the whole business of early fruit shipping.
- 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.
- Damson**—Large; fine quality; excellent for canning; hardy and productive. October.
- De Soto**—Very hardy; extremely productive; medium size; bright red; good quality.
- Duane's Purple**—Large and handsome; oval; reddish-purple; flesh juicy and sweet; adheres to the stone. Tree moderate grower and very productive. September.
- Empire State**—Tree thrifty, healthy and hardy; a regular and profuse bearer; fruit of extra large size, good quality; unsurpassed for home or market. Early Sept.
- Felleberg (French or Italian Prune)**—Oval; purple; flesh juicy and delicious; parts from stone; fine for drying. Tree a *free* grower and very productive. Sept.
- Field**—Tree an upright, strong grower; an early and abundant bearer. Large, reddish fine fruit. Very valuable. August.
- Forest Rose**—Tree a rapid, erect grower, free from thorns; bears early and continuously, never fails to mature a crop, being exempt from the curculio. Fruit round, large; excellent quality; stone small; skin thick. September and October.
- French Damson**—One of the largest of the Damson family. Dark copper color. A very valuable market variety. 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; rich, juicy, fine. Tree *vigorous* and very productive. September.
- Giant Prune (California)**—The fruit averages 1½ to 2 ounces each. Its unequaled size, handsome appearance, rare keeping qualities, great productiveness and high quality place it at the head of the prunes for home use or market.

- Grand Duke** (New)—A valuable addition to late plums; as large as the Bradshaw, of same color, and ripening latter part of September. Entirely free from rot.
- Green Gage**—Small, but of the highest excellence. Tree a *moderate* grower. Should be top-grafted to get good trees. September.
- Guii**—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. Valuable for market. September.
- Hale**—The most vigorous of all the Japans; an upright, compact grower, that requires an annual thinning out of head for best results. Fruit large, bright orange, mottled with cherry-red; superb quality, fully equal to Imperial Gage. Sept.
- Hawkeye**—A native of Iowa. Firm, good quality, large size; color light mottled red; hardy, thrifty and an annual bearer. September.
- Imperial Gage**—Rather large; oval; greenish; flesh juicy, rich and delicious; parts from the stone. Tree a *vigorous* grower; very productive. August.
- Jefferson**—A fine variety; yellow, with a red cheek; flesh orange colored, juicy and rich; parts from the stone. Tree a slow, *poor* grower, but productive. August.
- Kelsey**—Fruit large to very large, heart-shaped; rich yellow, nearly overspread with light red, with a lovely delicate bloom; flesh firm and melting; small pit. Sept.
- Kingston**—Large; oval; purplish-black; good for either kitchen or market. Tree good grower. September.
- Lincoln**—Reddish-purple, with delicate bloom. Flesh light yellow, exceedingly juicy, rich and sweet; parts freely from stone. Exceedingly prolific. Season medium.
- 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.
- McLaughlin**—Very hardy, vigorous and productive. Large; greenish-yellow; sugary and luscious; a first-rate variety. August.
- Miner**—Tree vigorous and very productive; an improved variety of the Chickasaw plum, originated with Mr. Miner, Lancaster, Pa. Fruit medium oblong; skin dark purplish-red, with fine bloom; flesh soft, juicy, vinous. October.
- Monarch**—The largest size, even larger than Grand Duke; brilliant bluish-purple. Free from rot and disease and of extra good quality. Last of September.
- Monroe**—Tree very vigorous and healthy; bears abundantly; medium size; greenish-yellow; flesh firm, rich and sweet. September.
- Moor's Arctic**—Medium; skin purplish-black, with a thin blue bloom; flesh greenish-yellow, juicy, sweet and pleasant flavor; claimed to be the hardest plum grown and free from black knot. Tree healthy, vigorous; an early and abundant bearer.
- Niagara**—Of extra large size and first rate flavor; color dark blue. Good bearer; not liable to rot. We regard it as one of the best new varieties. August.
- October Purple**—This plum was originated by Burbank, who regards it as one of the best ever introduced. Fruits every season on the old wood and frequently measures over seven inches in circumference. Flesh yellow and of superb quality; stone small. Tree a strong, erect grower, forming a shapely head. September.
- Ogon**—Above medium, round, clear lemon-yellow, with light bloom; flesh meaty and firm; a long keeper; excellent for canning; freestone. Early.
- Pacific Prune**—Originated at Mt. Tabor, Oregon. Tree hardy and very prolific; fruit freestone, large and handsome; flavor the finest, rich, sugary and luscious. Excellent for shipping and drying.
- Pond's Seedling** (Fonthill, Hungarian Prune)—A magnificent English plum; light red, changing to violet; flesh rather coarse. Tree a *vigorous* grower and most abundant bearer. One of the most attractive in cultivation. September.
- Pottawattamie**—Yellow, overspread with bright pink and prominent white dots; flesh yellow, luscious, good. Tree hardy, early and an annual bearer.
- Prince Englebert**—Very large and long; deep purple; rich, excellent. One of the best. End of August.
- Prince of Wales**—One of the most popular of the new plums of European origin. Round; reddish-purple; medium size. Tree hardy and prolific. Early September.

- Prunus Simoni**—A distinct species from China. Growth erect, flowers small, white, appearing early in Spring; fruit large, flattened, of the size and appearance of a Nectarine and of a brick-red color; flesh yellow, with aromatic flavor.
- Purple Egg or Red Magnum Bonum**—Large and handsome; flesh greenish, with a pleasant sub-acid flavor, separating freely from the stone. Season medium.
- Quackenboss**—A popular Hudson River variety. Large; deep purple; flesh greenish-yellow, juicy and sweet, with a sprightly flavor; good. September.
- Red June**—For market value, Red June is, perhaps, unequaled among Japanese plums. Ripens two weeks earlier than Abundance, equals Lombard in quality, of larger size; color deep vermilion red. Pre-eminent among plums for its freedom from rot, due, no doubt, to its ripening before the plum-rot begins.
- Reine Claude de Bavay** (Bavay's Green Gage)—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.
- Robinson**—A seedling from Lancaster, Pa. It has the hardiness and vigor of the Chickasaw varieties. Skin brilliant red; flesh juicy, sugary and fine flavored. Valuable for canning and preserving. September.
- Satsuma**—One of the celebrated Japanese plums. Fruit large; color reddish-purple, with blue bloom; flesh blood color; quality fine; pit remarkably small. Perfectly hardy and a vigorous grower. September.
- Shipper's Pride**—Originated in New York. An unusually thrifty grower, and stands our coldest winters. Very productive; fruit of large size and nearly round; color handsome dark purple; quality fine, juicy and sweet; excellent for canning and an unusually good shipper. A splendid market plum. September.
- Shiro**—Tree a strong grower; wood very hard and wiry. The fruit, which is produced in great profusion, is large, uniform in size, clear light yellow, and so transparent that the pit can be seen through the flesh, which is firm yet juicy; rich, pleasant sub-acid; clingstone. Will keep in good condition for a month. Sept.
- Shropshire Damson** (Prune Damson)—An English variety of great merit for preserving. Large and much more desirable than the common Damson. Tree vigorous grower, hardy and an abundant bearer. October.
- Smith's Orleans**—Very large; reddish-purple; flesh yellow, firm and juicy, with a rich, brisk, vinous flavor. Grows well and bears abundantly; very fine. August.
- Stanton**—Fruit medium size; color dark purple, with a beautiful bloom; very productive. Has been kept two weeks after ripening, with no tendency to decay. For a canning fruit it has no superior, and has fine quality as a table fruit. Oct.
- Sugar Prune**—An extremely early prune, ripening Aug. 1st. Cures superbly rich, with a yellow flesh, tender and rich in sugar juice, one-third more than French Prune; the tree is far superior to that variety, better grower and bearer, requires less pruning and will mature a larger crop. It is of priceless value for the table. Raised by Luther Burbank.
- Sultan**—Said by Luther Burbank, the originator, to be one of the most attractive of plums. It is a cross between Wickson and Satsuma. Its huge size, deep purplish-crimson color, render it most valuable for market. Flesh firm, fragrant, sweet, dark crimson. This plum can scarcely be equaled. August.
- Surprise**—A native of Minnesota. Tree hardy, excellent grower; fruit large, sweet and juicy; highly recommended. September.
- Tatge**—Evidently a seedling of the Lombard. Is larger, more nearly round, darker color and finer quality than that well-known and excellent variety. Claimed to be the hardiest, most productive and longest-lived plum known.
- Tennant Prune**—Originated in Whatcom County, Washington, where it has been thoroughly tested for a number of years and has not failed to produce a good crop. Flavor of highest quality, rich, sugary and delicious. Tree hardy and productive. Bears transportation well and is considered the best drying prune in cultivation.
- Tragedy**—This most valuable of all plums, for early eastern shipment, appears to be a cross between the German Prune and Purple Duane. Skin dark purple; flesh yellowish-green, very rich, sweet; freestone. July.

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

Washington (Bolmar's Washington) — All things considered, this is one of the finest and most popular plums. Fruit very large, roundish-oval; skin yellow, with a slight crimson blush in well ripened specimens; flesh very sweet and luscious. Tree vigorous, with broad, handsome foliage; very productive. Last of Aug.

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

Wickson—Originated by Mr. Burbank, who says: "Among the many thousand Japan plums I have fruited so far, this one stands pre-eminent. A sturdy, upright grower, productive almost to a fault. Fruit remarkably handsome, deep maroon-red, covered with white bloom; stone small; flesh fine texture, firm, sugary and delicious. Excellent keeper and shipper." August and September.

WICKSON.

Wild Goose—A variety of the Chickasaw; medium; roundish-oblong; reddish-yellow; valuable and profitable at the South and Southwest, where the European plum will not succeed. Tree a *free* grower. Middle of August.

Willard (Japan)—Earliest of all plums. Hardy and on account of earliness brings a high price. Quality inferior to other Japan plums. Grand shipper and valuable as a first market plum. Middle of July.

Wick—Large; dark red; good quality; extra fine for cooking and canning; freestone. Tree vigorous, hardy and an abundant annual bearer. August.

Wyant—This fine new variety originated at Crescent City, Iowa, in 1884. It was a chance seedling found growing wild among the hills. Flesh rich and of excellent flavor; freestone. The earliest hardy plum in cultivation. July.

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

Yellow Gage—(Prince's Yellow Gage)—Fruit large, oval; skin golden-yellow; flesh deep yellow, rich, sugary and melting. Tree very vigorous and productive. Aug.

SELECT PEACHES.

The ease with which Peach trees may be cultivated, their comparative freedom from disease, the short period before they become productive, with the immense demand for the fruit and the facilities with which it may be shipped to distant markets, make peach growing extremely profitable.

To secure healthy, vigorous and fruitful trees, the ground must be kept clean and mellow, and it should receive an occasional dressing of wood ashes. It should be remembered that peaches are all borne on wood of the previous season's growth, and that this makes it absolutely necessary to prune the trees yearly, to remove dead branches and let in light and air, and keep the trees in good shape to produce bearing wood. (*f.*) for freestone; (*c.*) for cling.

Admiral Dewey—The greatest triumph in the history of peaches; beautiful in color and most delicious flavor; nearest perfection in both tree and fruit yet attained. June. (*f.*)

Alexander—Medium size; skin greenish-white, nearly covered with rich red; flesh melting, juicy, sweet. Tree vigorous and productive. July. (*c.*)

- Amsden**—Originated at Carthage, Mo. Medium size; skin greenish-white, nearly covered with purple in the sun. July. (c.)
- Barnard's Early** (Yellow Alberge)—Medium to large; yellow, cheek purplish-red; flesh yellow, red at the stone; juicy, sweet and rich. First to middle of Sept. (f.)
- Beer's Smock**—Large to very large; yellow, with red cheek; flesh yellow and of the very best quality for the season; a regular and enormous bearer, making it very desirable for market purposes. September. (f.)
- Bokara**—The best of Prof. Budd's importations from Bokara; said to be the hardiest peach grown. Large, fine quality, immensely productive. Last of Aug. (f.)
- Captain Ede**—Origin Southern Illinois. Tree an upright grower. Fruit large, beautiful yellow, with delicate carmine on one side; remarkable for its freedom from rot and good shipping qualities. September. (f.)
- Carman**—A new, hardy, rot-proof peach, ripening at same time as Early Rivers, yet almost as large and fine as Elberta; skin pale yellow with blush on sunny side; flesh white, tender, melting, with rich, sweet, superior flavor. By far the finest early peach in cultivation. Ships well. August. (f.)
- Chair's Choice**—Originated in Maryland. Fruit large, beautifully colored, flesh yellow, firm and good. Tree a strong grower and good bearer. One of the very best medium late peaches, and fast growing in popular favor; by some considered superior to Elberta. September. (f.)
- Champion**—Beyond doubt this is the champion early peach of America. Tree and fruit buds extremely hardy—has stood 18° below zero and produced a full crop the following summer. Fruit often ten inches in circumference; quality A 1; a remarkably good shipper. August. (f.)
- Chinese Cling**—Fruit large and showy; skin creamy-white, with pink cheek; flesh white, red at the stone, juicy, melting, with rich, excellent vinous flavor. Ripens at the North in September, at the South in August.
- Connecticut**—A New England peach of great excellency. Tree vigorous and heavy annual bearer. Fruit large and handsome; flesh rich, fine flavored. Aug. (f.)
- Coolidge's Favorite**—Medium to large; clear white, mottled with red in the sun; melting, juicy and rich; very productive. Middle of August. (f.)
- Crosby**—Has stood 22 degrees below zero without injury to the tree or fruit buds, and in every other respect has proved a remarkably fine peach for home or market. September. (f.)
- Crawford's Early**—A magnificent large, yellow peach of good quality. Tree vigorous and productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted. First of September. (f.)
- Crawford's Late**—Fruit large; skin greenish-yellow, with red cheek; flesh yellow. Tree vigorous; moderately productive; one of the finest late sorts. Last of September. (f.)
- Early Canada**—Origin. Jordan, Canada. Early as the earliest. Good size, fine quality and handsome appearance. Its earliness, hardiness and the fact that the flesh clings but slightly to the stone, create an unusual demand for this variety. July. (c.)
- Early Rivers**—Large; color creamy-white, with a delicate pink cheek; flesh melting, with a remarkably rich, racy flavor. Larger, and ten days later than Alexander. One of the finest of all peaches for home use or near-by market. Middle of August. (f.)
- Early York** (Serrate Early York, Early Purple)—Medium size; greenish-white, colored in the sun with dull red; flesh greenish-white, very tender. Middle of August. (f.)
- Elberta**—The great market peach of the South and Southwest. It is perfectly hardy at the North, and is confidently believed by the most experienced fruit growers at the North to be one of the very best peaches for home or market. Middle of September. (f.)
- Emma**—Origin, North Carolina. Very large; yellow, with red cheek; flesh yellow, firm, juicy; best quality. Last of September. (f.)

- Everbearing**—This is one of the most remarkable of peaches. Combines many desirable qualities which make it of great value for family use. Begins to ripen early in July and continues until September, fruit in all stages of development being seen upon the tree at the same time. Fruit creamy-white, mottled and streaked with purple and pink. Flesh white, with red veins near the skin; juicy, vinous and excellent flavor. (f)
- Family Favorite**—Large, clear waxen skin, with blush; prolific, firm; valuable for shipping, canning or drying. August. (f)
- Fitzgerald**—Origin, Canada. Fully equal to Crawford's Early in size, quality and color, with much smaller pit; a very early bearer, often when two years from bud; extra hardy, succeeding in Canada and in Michigan perfectly; fruit large, brilliant yellow, with red cheek; highest quality; ripens after Crawford's Early. (f)
- Foster**—Originated near Boston, Mass. Large; deep orange-red, becoming very dark on the sunny side; flesh yellow, rich and juicy, with sub-acid flavor. September. (f)
- Garfield**—A good yellow peach; valuable, hardy and productive. September. (f)
- Globe**—A rapid, vigorous grower and an enormous bearer. Fruit very large; globular in form; flesh firm, juicy, yellow, shaded with reddish-crimson towards the stone; quality good; very rich and luscious. September. (f)
- Golden Drop**—A large and handsome peach of transparent golden color, rendering it very attractive and commanding the highest price. Flesh yellow, juicy, rich and good. Tree hardy and good bearer. September. (f)
- Greensboro**—The largest and most beautifully colored of the extra early peaches; double the size of Amsden's June; flesh white, juicy and excellent. August. (f)
- Hale's Early**—Medium size; greenish-white, with red cheek; first quality. Tree healthy, good grower and productive. Middle of August. (f)
- Heath Cling**—The most satisfactory clingstone known. Very large, oblong, with suture; creamy-white, with blush; flesh tender, juicy, melting, exceedingly rich and luscious. October.
- Henrietta (Levy)**—A magnificent yellow cling. Large; mostly covered with bright crimson; productive, sure bearer. October.
- Hill's Chili**—Tree very hardy, slow grower, great bearer; excellent. Early September. (f)
- Honest John**—Medium to large; flesh yellow and of good quality. Tree vigorous and productive. First of September. (f)
- Hynes' Surprise**—A valuable new early variety, entirely exempt from rot. Skin almost entirely red; flesh white, juicy, melting, delicious. July. (f)
- Jacques' Rareripe**—Very large; deep yellow; has a high reputation. Last of August. (f)
- Kalamazoo**—Origin, Michigan. Unsurpassed in bearing and quality of fruit. Ripens between Early and Late Crawford. (f)
- Lemon Cling**—This is one of the most beautiful of all yellow-fleshed clings. Flesh firm, yellow, slightly red at the stone, adhering firmly, with a rich, sprightly, sub-acid flavor. September.
- Lemon Free**—Shape and color almost like a lemon. Large and of excellent quality; immensely productive. October.
- Lord Palmerston**—Originated with Thomas Rivers, of England. Fruit very large; skin whitish, with a pink cheek; flesh firm, melting, rich and sweet. Last of September. (f)
- Mathews' Beauty**—Originated in Georgia, and stands unparalleled for size and beauty, many specimens weighing 18 to 20 ounces each. In color, texture and shipping qualities equal to the best. Flesh yellow, firm and rich; excellent flavor; perfect freestone. Tree a thrifty grower and an abundant bearer. August.
- Morris White**—Medium; dull white; flesh white, juicy and delicious; productive. Middle of September. (f)
- Mountain Rose**—Large; red; flesh white, juicy, rich and excellent; one of the best early peaches; should be in every collection. First of August. (f)

- New Prolific**—One of the most popular of the newer varieties for market. Fruit large, rich golden-yellow, with crimson cheek; flavor rich and spicy; flesh deep yellow and firm; pit small. Withstands the severe winters of Northern Michigan better than any other variety. Tree a strong grower and very productive. Ripens just before Late Crawford. (t.)
- Old Mixon Cling**—Large; pale yellow, with red cheek; juicy, rich and high flavored; one of the best clingstone peaches. Last of September.
- Old Mixon Free**—Large; pale, yellow, with a deep red cheek; tender, rich and good; one of the best. First to middle of September.
- Red Check 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; valuable for the orchard. Last of September. (f.)
- Reeves' Favorite**—Origin, Salem, N. J. Hardy and very productive; flesh deep yellow at the stone, juicy, melting, with a good vinous flavor. September. (f.)
- Salway**—Fruit large, roundish; deep yellow, with a rich, marbled, brownish-red cheek; flesh yellow, firm, juicy, rich and sugary. October. (f.)
- Schumaker**—One of the earliest peaches known. Of very large size, some samples measuring eight or nine inches in circumference; stands the winters as well as the Early Crawford; flesh yellowish-white and quality good. August. (f.)
- Smock**—Large size; light orange-yellow, with red cheek; flesh yellow, juicy and rich. October. (f.)
- Sneed**—From seed of Chinese Cling. Ripens ten days earlier than any other peach. Flesh sweet and delicious. (c.)
- Stevens' Rareripe**—Quite large; yellowish-white, deep red cheek; flesh white and juicy. Very productive and free from disease. Commences to ripen immediately after Late Crawford, and continues three or four weeks. Sept. and Oct. (t.)
- Steadley**—Large, round; of a greenish-white color; flesh white to the stone and of delicious flavor; very hardy. First of October. (f.)
- Stump of the World**—Very large, roundish; skin white, with a bright red cheek; flesh white, juicy and good. End of September. (f.)
- Susquehanna**—A very large and superb yellow peach from Pennsylvania; melting, rich and fine. September. (f.)
- Thurber**—A new variety from seed of Chinese Cling. Large, handsome and carries well; a valuable acquisition for market and general use. Tree vigorous, healthy and symmetrical. Flesh white, red at the stone, fine grained, juicy, melting, slightly vinous, rich and delicious. July. (f.)
- Triumph**—The tree is a strong grower and perfectly hardy; fruit large, skin yellow, red and crimson, very attractive; flesh bright yellow; great bearer and shipper; flavor excellent; the earliest yellow freestone peach. July.
- Waddell**—Large, oblong; creamy-white, with blush. Flesh white, firm, rich and sweet; long keeper; a valuable market peach. August. (f.)
- Wager**—Medium; yellow, colored in the sun; juicy, fair flavor. The trees have remarkable vigor and vitality; valuable for drying and canning. August. (f.)
- Waterloo**—Origin, Waterloo, N. Y. Medium to large; color whitish-green, marbled with red; flesh greenish-white, juicy and sweet. July. (c.)
- Wheatland**—Fruit large; color golden-yellow, with crimson tint; flesh firm and of fine quality. September. (f.)
- Willett**—One of the largest and finest peaches grown, specimens having measured 12 inches in circumference, weighing $\frac{3}{4}$ of a pound each; flesh yellow, juicy, rich and excellent; skin yellow, covered with dark red. Last of September. (f.)
- Wonderful**—Large, uniform in size and shape; rich golden-yellow, largely overspread with vivid carmine; flesh yellow, rich, high-flavored and delicious; exceedingly firm; bright red at pit, which is very small. Middle of October. (f.)
- Yellow Rareripe**—Large; deep yellow, dotted with red; melting, juicy, with a rich flavor; closely resembles Jacques' Rareripe. First of August. (f.)
- Yellow St. John**—Large; yellow, with handsome blush; early and productive. Flavor equal to the Crawford. Profitable market variety on account of its earliness. July. (f.)

SELECT APRICOTS.

A delicious fruit of the plum family, valuable for its earliness. It is liable to be attacked by curculio, and requires the same treatment as the plum; it bears immense crops, ripening in July and August.

Acme—A new and remarkable variety. Tree a stout, healthy grower, with handsome foliage; very hardy and productive. Fruit very large and sweet; rich yellow with red cheek. Very desirable.

Breda—Small; dull orange, marked with red; juicy, rich and vinous; productive and hardy. First of August.

Early Golden (Dubois)—Small; pale orange; juicy and sweet; hardy and productive. First of July.

Harris—Remarkable for size, beauty and productiveness. Is extremely hardy, standing the severest winters. Fruit of rich golden yellow and of the finest quality. Season early.

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

Montgamet—Large, early, extra fine. Ripens about July 20th.

St. Ambrose—New; very large; free stone; yellow, with red cheek; excellent; ripens July 15th.

RUSSIAN APRICOTS.

These are quite distinct from other European varieties. Their leading characteristics are extreme hardness, early bearing, productiveness, and freedom from disease. The following are the best that have been thoroughly tested:

Alexander—An immense bearer. Fruit yellow, flecked with red; very beautiful. July.

Alexis—An abundant bearer; yellow, with red cheek; slightly acid. July.

Catherine—Vigorous and productive. Medium sized, yellow, mild, sub-acid. July.

Gibb—Tree grows symmetrical; productive. Fruit medium, yellowish, sub-acid; the best early variety, ripening soon after strawberries. Last of June.

J. L. Budd—Tree a strong grower and profuse bearer. Fruit white with red cheek; sweet; the best late variety. August.

Nicholas—Tree prolific. Fruit medium to large; white; sweet and melting. A handsome variety. July.

NECTARINES.

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

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

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

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

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

QUINCES.

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

VALUE FOR MARKET.

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

Apple or Orange—Large; bright golden-yellow. One of the best and most desirable quinces in cultivation.

Champion—Fruit very large, fair and handsome. Tree very productive; bears abundantly while young. Scarcely early enough north of Philadelphia.

Bourgeat (New)—The strongest and most distinct grower of all quinces, with large foliage and very handsome fruit. Keeps longer than most other sorts. Very promising.

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

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

SELECT GRAPES.

The Grape is the most healthful of all fruits, and the most highly esteemed for its many uses. It can be grown by everyone who has a garden, a yard, or a wall. It can be confined to a stake, bound to a trellis, trained over an arbor, or extended until it covers a large tree or building, and still it yields its graceful bunches of luscious, blooming fruit. Capable of most extraordinary results under wise management, it is prone also to give the greatest disappointment under bad culture or neglect. Other fruits may be had from plants that know no care; but grapes are to be had only through attention and forethought.

Soils.—Good grapes are grown on various soils, sandy, clayey, loamy, etc. The soil must be well drained, and there should be a free exposure to the sun and air. Hillsides unsuitable for other crops are good places for grapes.

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

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

Training Vines.—There are many methods of training grape vines, but as trellises are more generally employed, we will confine our suggestions to a description of the trellis method. To construct a trellis, take posts of oak, cedar or chestnut, 8 to 10 feet long; set them 3 feet in the ground and about 12 feet apart. Stretch No. 9 galvanized wire tightly along the posts, and fasten them to each. Let the first wire be 18 inches from the ground, and the distance between the wires about 12 inches. Wooden slats about 1 x 2 inches may be substituted for wires. Trellises should be at least 10 feet apart; a greater distance is preferable. Set the vines about 20 feet apart. Prune the vines to two canes each for two years after they are planted. In February or March these canes should be cut back to 5 or 6 feet each, and tied along the lower wire or slat of the trellis, horizontally.

When the growth commences in spring, the young shoots must be reduced by disbudding, so that they may stand about a foot apart on the cane, selecting, of course, strong, healthy shoots; as they grow they are tied up to the second, third and fourth wire or slat, and all superfluous ones removed, as well as the young *laterals* which will appear on vigorous vines; but the fruit-bearing shoots are allowed to extend themselves at will until September, when they may be pinched off at the ends to assist the ripening of the wood.

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

CLASS I.—BLACK GRAPES.

- Barry** (Rogers' No. 43)—Bunch large but rather short; berries large, roundish, much like Black Hamburg; delicate, sweet and tender. Ripens with the Concord. Vine vigorous and productive. One of the largest and finest of the Rogers' Hybrids.
- Campbell's Early**—Clusters large and handsome; berries large, round, black, with purplish bloom; flesh firm but tender; seeds few and easily separated from the pulp; flavor rich, sweet and slightly vinous. A strong and vigorous grower and ripens its fruit early. Berries do not drop from the clusters, and fruit keeps a long time in perfection.
- Champion**—A large grape of medium quality; a strong grower and very hardy; the earliest of all; succeeds in all sections and makes a valuable market grape.
- Clinton**—Bunches small and very compact; berries small with sprightly flavor; when thoroughly ripe is a good table grape and keeps well.
- Columbian**—A strong grower, with thick leathery foliage. Regarded with favor on account of its large size, showiness and early ripening.
- Concord**—A large, handsome grape, very hardy and productive. Succeeds over a great extent of country; is one of the most popular market grapes. Medium early.
- Early Ohio**—Fine; hardy, thrifty and productive. Very early and of better quality than most early grapes. Very black, a little smaller than the Concord. Spicy, pleasant flavor. A good early home-use and market grape.
- Early Victor**—This extra early grape, of Kansas origin, is gaining a good reputation throughout the country. Bunch and berry below the average, but ripens very early.
- Eaton**—Bunch very large, weighing 12 to 20 ounces; compact, often double shouldered; berries very large, many one inch in diameter; round, black, covered with a heavy blue bloom; adheres firmly to the stem. Skin thin, but tough; pulp tender, dissolving readily in the mouth. Very juicy; good as Concord, with much less of the native odor. Ripens with Concord or a little earlier.
- Hartford Prolific**—Bunches rather large; berries large, globular; color almost black, covered with a beautiful bloom; of fair quality; ripens three weeks before the Isabella; valuable for its abundant bearing and early maturity.
- Isabella**—An old, standard sort, highly prized where it will thoroughly mature. Bunches long, large, loose; berries large, oval, sweet and musky; a good keeper.
- McPike**—Originated by Judge McPike, of Mt. Lookout Park, Alton, Ill. A seedling of Worden, with all its good qualities, but larger in size, berries often measuring over three inches in circumference. Considered by many as the best grape grown.
- Merrimac** (Rogers' 19)—Bunch medium to large; berry large, sweet, and rich; vigorous and productive. One of the earliest and best of the Rogers' sorts.
- Mills**—Originated at Hamilton, Ont. Berry large, jet black with heavy bloom. Flesh firm with a rich sprightly flavor. Skin thick, bunch large, compact, shouldered.
- Moore's Early**—Bunch large, berry round; color black, with a heavy blue bloom; quality better than the Concord. Vine exceedingly hardy; has been exposed to a temperature of more than 20° below zero without injury, and is entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, maturing as it does ten days before the Hartford, and twenty before the Concord.
- Wilder** (Rogers' No. 4)—Bunch very large; berry large, round, black; flesh tender, juicy, sweet. Ripens about with Concord; vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties, and on account of its size and beauty is very valuable for market.
- Worden**—Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large, larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Very popular for vineyard and garden.

CLASS II.--RED GRAPES.

- Agawam** (Rogers' No 15)—Bunches large; berries large, round; color dark red or maroon; flesh quite tender, juicy, vinous; vine vigorous and productive. Not suited to the extreme north.
- Alice**—A new red grape, originating in Ulster Co., N. Y., remarkable for its frost-resisting and long-keeping qualities, retaining their plumpness and flavor in an ordinary cellar until February. Bunch and berry medium; pale red with lilac bloom. Pulp meaty and tender, with few and small seeds; sweet to the center; skin thick and tough, without astringency. Ripens about with Concord.
- Amber Queen**—Originated in Massachusetts. Bunch and berry of medium size; color light amber; flesh tender to the center; juicy, sprightly and delicious. Larger than Delaware and quite as early.
- Brighton**—A superior family grape. Its remarkable vigor and hardness of vine, large, compact bunches, rich wine shade of the ripened berry, delicate skin, tender, almost seedless pulp, sugary juice and rich flavor, are combined qualities that are not united in such a degree in any other sort. It ripens a week or ten days before the Delaware, and bears most abundantly. Especially commended as a standard variety for the vineyard or garden.
- Catawba**—Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery-red color, becoming purplish when well ripened; two weeks later than Isabella; requires the most favorable soils and situations, good culture and warm seasons to mature perfectly.
- Delaware**—One of the finest grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, with an exceedingly sweet and delicious flavor; vine moderately vigorous, hardy, and productive. Ripens two weeks before the Isabella.
- Iona**—Bunch large, shouldered; flesh soft, tender, juicy, brisk sub-acid, high flavored; keeps till mid-winter. One of the finest table grapes. A little earlier than Catawba.
- Jefferson**—Bunch large, shouldered, often double shouldered, compact; berry medium to large, roundish, oval; skin rather thick, light red, with a thin lilac bloom; flesh meaty, yet tender, juicy, sweet, slightly vinous, aromatic and rich. A handsome, excellent grape where the season is long enough for it to mature.
- Indley** (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.
- Moyer**—A new grape originating in Canada. In habit of growth and hardness it resembles the Delaware very much, but ripens earlier. Flavor sweet, delicious; skin tough but thin; pulp tender and juicy. Berry and bunch small. Free from rot and mildew.
- Poughkeepsie**—Somewhat larger than Delaware, but resembling it in general appearance. It is fully equal to the Delaware in quality, ripens early and keeps well.
- Salem** (Rogers' No. 53)—Bunch large and compact; berry large, of a light chestnut or Catawba color, thick skinned, perfectly free from hard pulp; very sweet and sprightly, with a most exquisite aromatic flavor; as early as the Delaware.
- Ulster Prolific**—A red grape of fine quality, healthy growth and great productiveness. Will be found valuable for general use as it has all the characteristics of our hardy and healthy native varieties. September.
- Vergennes**—Very productive; clusters large; berries large, holding firmly to the stem; color light amber; flavor rich and delicious; flesh meaty and tender. Ripens with Concord and is an excellent late keeper.
- Woodruff Red**—A large, handsome red grape, of medium quality. Vigorous, hardy and prolific. Esteemed as a market grape.
- Wyoming**—An extra early red grape, resembling the Delaware in appearance, but double its size and ten days earlier. Bunch compact and handsome; berry medium, bright red; skin thin and firm; flesh sweet. A valuable market grape.

CLASS III.—WHITE GRAPES.

GREEN MOUNTAIN.—($\frac{1}{4}$ size.)

parent; flesh tender, without pulp, juicy, sweet, rich, crisp and in quality ranks as best. Foliage subject to mildew in some localities. Ripens before Concord.

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

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

Lady—Said to be a seedling of the Concord. Bunch medium; berry medium to large; skin thin; color, light greenish yellow, with white bloom; pulp tender, sweet and pleasant. Vine hardy and vigorous. A valuable early white grape. Ripens with Hartford Prolific.

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

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

Pocklington—Bunch large; berry large, round, of a rich yellow color; flesh pulpy, juicy and of good quality; ripens at the time of the Concord. Vines vigorous, healthy, very hardy and productive. Quality good.

Colerain—A new white grape from Ohio. Green, with delicate white bloom; flesh juicy and remarkably sweet, and generally but one small seed to the berry. Ripens with Moore's Early, and hangs on the vine until frost without dropping berries from bunch; free from rot and mildew. Vine vigorous and hardy.

Diamond (Moore's Diamond)—A cross between Concord and Iona. A vigorous grower, with leaf resembling Concord, very free from mildew. Bunch large, well filled, moderately compact, berry about the size of Concord; flesh melting and juicy, sweet to the center, and free from foxiness; skin thin, but sufficiently tough to bear packing and handling well. Ripens about with Delaware. Very productive.

Duchess—Bunch medium to large, long shouldered, compact; berries medium, roundish; skin thick, generally dotted with small black dots; color light green at first, becoming greenish yellow when fully ripe, and almost trans-

SELECT CURRANTS.

Ripe just before raspberries are gone, and continuing in prime order for several weeks. There is no more useful fruit than the currant, and it is among the easiest to cultivate.

Plant in rows four feet apart each way, if practicable. Light and air will do as much to enhance the value of currant bushes as with other plants. Keep the ground mellow, free from weeds, and in a good state of fertility, and prune freely every spring. Should the currant worm appear, dust a little white hellebore powder, from a small coarse bag, over the bushes when the leaves are damp. In some instances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms is trifling, if the *powder is applied as soon as the worms appear*.

Champion (Black)—A new variety from England; pronounced to be the finest black currant ever brought to notice. The bushes are very large and the flavor of the fruit excellent.

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

Comet (Red)—An English variety of remarkable size and excellent quality. Very attractive and remains a long time in perfect condition.

Crandall—Distinct from the European black varieties and without their odor; wonderfully productive, large size, easily picked, and will keep longer and ship farther than other small fruit. Free from attacks of all insects. Poor quality.

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

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

Lee's Prolific (Black)—A new English variety. The fruit is large and of superior quality; the bush is a vigorous grower and productive.

Naples (Black)—Large, rich and tender; excellent for jellies and wine.

North Star (Red)—Originated in the Northwest. Bush a vigorous grower and very hardy.

Perfection—A new red variety of highest excellence. Received the Wilder Silver Medal and other first prizes. Well merits its name.

Pomona—A new red currant from Indiana; claimed to be more prolific, with fewer seeds and sweeter than the common sorts. Color a beautiful clear, bright red; about the size of Victoria; easily picked and hangs a long time after ripe.

Prince Albert (Red)—Bush thrifty, hardy and enormously productive; fruit of large size; very handsome and of good quality. Grown extensively for market by experienced and successful fruit growers. Ripens a little later than the Fay's.

Red Cross—A new red currant of large size and superior quality; exceedingly vigorous and productive, with long fruit stems.

Red Dutch—An old well known sort. Medium size, good quality and very productive.

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

Victoria—A new black currant of superior merit. Vigorous habit and of unequalled productiveness. Fruit very large and of fine flavor.

White Dutch—An excellent and well known sort.

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

White Imperial—New and of great value; fruit larger and stems longer than White Grape; enormously productive; quality mild, delicious, sub-acid.

Wilder—A remarkable new variety for which is predicted a great future both for table and market; strong grower; enormously productive; bunch and berry very large, bright red and of highest sub-acid quality.

GOOSEBERRIES.

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

It requires the same cultivation and treatment for worms as the currant.

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

AMERICAN VARIETIES.

Chautauqua—One of the most prolific large gooseberries grown. Bush strong and vigorous, berries light yellow, free from spines and hair; veined and transparent; sweet and delicious.

Columbus—A new American seedling of English type; large size; skin greenish yellow, smooth and high quality; bush strong, robust grower, and has never shown a trace of mildew, and is believed to be the best American gooseberry yet introduced.

Downing—Large size, oval, greenish-white; plant very vigorous and hardy, with stiff, strong shoots; foliage heavy, covering the fruit from the sun, and resisting mildew; bears most abundantly and is profitable for market and home use.

Golden Prolific—Originated at Rochester, N. Y.; thrifty, productive and absolutely blight-proof. Fruit is large, brilliant yellow, and of good quality.

Houghton's Seedling—A vigorous American sort; very productive; free from mildew. Fruit medium, roundish, smooth, of a pale red color; tender, sweet, and of delicious flavor.

Pearl—A new white variety originated in Canada. A wonderful cropper, strong grower, and free from mildew. Similar to Downing in size.

Red Jacket—A new red berry of large size and good quality; hardy and productive.

Smith's Improved (Smith's Seedling)—One of the largest American varieties of value; oval form; light green when ripe; sweet and excellent; plant vigorous, healthy and hardy.

Trump—An American seedling of English type; large, golden yellow, hardy; an enormous bearer, and very promising. Desirable.

ENGLISH VARIETIES.

There are few of these that succeed here on account of their liability to mildew. The following varieties are believed to be exempt from this drawback, and we therefore offer them, believing that they will meet every requirement.

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 in this country. We can 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 as, on the whole, the best foreign gooseberry ever introduced.

Keepsake—One of the earliest and finest of the English varieties. Straw color, excellent flavor, and a large cropper. Foliage early and dense, giving protection to bloom and fruit.

Lancashire Lad—Bright clear red, almost smooth and very large; very early. Bush vigorous and productive and not disposed to mildew. A fine dessert sort.

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

SELECT RASPBERRIES.

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

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

CLASS I --RED AND YELLOW VARIETIES.

- Brandywine**—Large, bright red; very firm. Valuable for market on account of its fine shipping qualities.
- Cardinal**—This new variety originated in Kansas. It is said to be quite as vigorous and productive as Columbian, and quite equal to it in quality. Highly recommended.
- Caroline**—A seedling from Brinckle's Orange, combining the peculiarly melting and luscious flavor of that variety, with canes of great vigor, entire hardiness, and fair productiveness. Color pale salmon; berries large and of fine quality.
- Columbian**—A vigorous grower; canes often ten to fifteen feet in length and over an inch in diameter. Never suckers from the roots. Very hardy, enduring 28° below zero. Fruit very large, dark red, bordering on purple; adheres firmly; rich, sprightly flavor; the best for canning and evaporating, and one of the most productive.
- Cuthbert** (Queen of the Market)—Large, conical; deep, rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy, and immensely productive.
- Golden Queen**—Rich golden yellow. The flavor is of the highest quality, pronounced by some superior to Brinckle's Orange. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme northern latitudes.
- Hansell**—Medium to large; bright crimson; firm, flavor fine. Earliest of all.
- Loudon**—Canes strong and hardy and wonderfully productive. Berries large, beautiful and of fine quality. Very desirable for home or market.
- Marlboro**—The best early red raspberry for the North, ripening soon after Hansell. Hardy and productive.
- Miller**—Bush stout and healthy and well calculated to bear up the immense crops of fruit with which it is annually laden. Early, good quality and fine shipper.
- Royal Church**—Exceedingly delicious, aromatic and sprightly. Canes large and vigorous, thorns small and few. Perfectly hardy wherever tested. Earlier than Cuthbert and continues longer in bearing.
- 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. Valuable for canning.
- Superlative**—Large, conical, handsome, red. Canes are stout, supporting themselves and a heavy crop. Esteemed by some as a decided advance on all of the older sorts in this class. Perfectly hardy.
- Turner**—A red variety from Illinois. Very productive and hardy; of good size, light handsome red, and fine flavor. Its success in extreme localities renders it of great value.

CLASS II.—BLACK CAPS.

Black Diamond—A large handsome berry of great productiveness and splendid keeping and evaporating qualities. Sweet and excellent. One of the most profitable to grow.

Conrath—A very reliable early sort, especially valuable for evaporating.

Cumberland—Bush perfectly hardy; very productive; fruit enormous; quality unsurpassed. The great firmness of the berry makes it a splendid shipper; ripens just after the Palmer and before the Gregg. *A great acquisition.*

Earhart (Everbearing)—Good quality, robust grower and very hardy.

Eureka—Large, glossy black, juicy and rich; hardy and productive. Early.

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

Gault—The only perpetual raspberry known. A chance seedling from Ohio. Canes thrifty and hardy. The first crop ripens about with the Gregg, is more abundant, and continues in bearing for three or four weeks, by which time the new canes begin to fruit and continue until checked by frost.

Hilborn—Originated in Canada; large, jet black, best quality; ripens nearly a week later than Souhegan and bears a long time.

Johnston's Sweet—Smaller than the Gregg. A good strong grower, healthy and hardy; ripens early; stands up well in picking and handling.

Kansas—Jet black, firm and delicious; as large or larger than Gregg. The hardest black cap known, successfully withstanding the winters of Canada. A little later than Souhegan, and more prolific. One of the very best.

Mammoth Cluster—Large size, black or dark purplish black; very juicy, high-flavored and delicious; perfectly hardy, and sufficiently firm to bear transportation to the most distant market.

Munger—Very large and productive. Late.

Ohio—A very strong growing hardy sort; fruit as large as Mammoth Cluster and more productive; valuable for market and much esteemed for drying.

Palmer—Medium size, firm and good; exceedingly prolific and very early.

GREGG RASPBERRY.

BLACKBERRIES.

This excellent and profitable fruit should be planted for garden use in rows five feet apart, with plants three feet apart in rows ; for market, in rows six feet apart, with plants three feet apart in the rows. Give the plants the same cultivation as for raspberries. May be planted either Fall or Spring.

Agawam—Ripens earlier than other kinds, and has a flavor similar and equal to the wild berry. Perfectly hardy.

Ancient Briton—Medium size; melting; without core. Bush hardy, and very prolific. One of the very best old sorts.

Early Harvest—The earliest blackberry and consequently valuable for market. The canes are strong and upright in growth and enormously productive. Berries sweet and of the highest quality, though not as large as some others.

Early King—Good quality, hardy and productive ; one of the first to ripen, and valuable on that account.

Eldorado—A new seedling from Ohio, claimed to be the best all-round berry yet produced, combining nearly all the good qualities found in a blackberry.

Erie—A variety from Northern Ohio; plants vigorous; berry large, round; good quality. Early and productive. An excellent market sort.

Gainor—Originated in Canada, and valuable for its extreme hardiness. Berries large and good.

Iceberg Blackberry—This remarkable berry was originated by Luther Burbank. The fruit is not only white, but so transparent that the seeds, which are unusually small, can be seen in the ripe berry. Is quite up to the average in hardiness and productiveness. Sweet and melting. A great novelty.

Kittatinny—Large, black, sweet ; soft when black ; very hardy ; ripens up gradually like the Lawton. One of the best.

Lawton—Very large, excellent quality and an abundant bearer.

Lucretia (Dewberry)—A trailing form of the blackberry with large, beautiful, luscious fruit. It matures in advance of the ordinary varieties.

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

Mercereau—A new berry of sterling qualities, which will doubtless become very popular as it becomes better known. Large size, good quality, hardy and productive.

Minnewaska—The new coreless blackberry; very early, hardy and productive. Highly recommended.

Rathbun—Berry exceedingly large, sweet and luscious, without hard core; jet black. Does not sucker, but roots at the tips like the black raspberry; hardy and prolific. The finest blackberry known.

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

Taylor's Prolific—A new variety of the greatest value. It is so extremely hardy as to have stood 30° below zero unharmed. Berries large and of the highest quality. Canes of strong, spreading growth, and productive.

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

Wilson's Early—Very large size, oblong oval, black, quite firm, rich, sweet and good. Ripens early and matures its fruit rapidly; retains its color well after picking.

Wilson's Junior—This is a noble variety and continues to yield enormous crops of large fruit. Among its good qualities are size, earliness and productiveness. Its capacity for yielding is extraordinary. A little tender in some sections.

STRAWBERRIES.

Those marked (P) have pistillate flowers and must be planted near perfect flowering kinds. First of the small fruits comes the beautiful and wholesome Strawberry, and the profits resulting from its wise cultivation will satisfy any reasonable expectation.

Plant in March, April, May, September or October, in good soil deeply worked and well manured with muck, leaf mould, wood ashes or bone dust. Set 15 inches apart in rows 3 feet apart for field culture, and 15 inches each way for garden culture, leaving a pathway at every third row. Keep runners cut and cultivate clean. Mulch late in the fall and uncover early in spring, drawing about the plants to keep fruit from coming in contact with the ground.

Beder Wood—Large, roundish-conical, bright scarlet, moderately firm, fair quality; vigorous and productive. A valuable early sort for home use or nearby market.

Belmont—Oblong, crimson, firm and high quality. Season medium.

Bisel—A fine market variety. A seedling of Wilson and partaking of its general characteristics, but showing an improvement on that fine old variety in size and flavor. Mid-season.

Bismarck—Plant resembles Bubach, but more robust and stocky and a better yielder. Shape obtuse, conic, and are the heaviest, most solid berries ever produced; flavor good, season medium to late.

Bubach—(P)—Fruit uniformly large and handsome; conical, bright scarlet, moderately firm and of fair quality. Valuable for home use and nearby market. Season early to medium.

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

Clyde—A new berry that is making a record wherever grown. Berries medium to large, firm, dark scarlet, and fine flavor. Season early to medium.

Crawford—A luxuriant grower and abundant bearer; berries very large and usually regular; beautiful bright red color. Handles and carries well.

Crescent—(P)—Medium, uniform, conical; bright scarlet; ripens with Wilson but continues longer. Plants are wonderfully rank growers. Succeeds on all soils.

Cumberland—Very large, conical and uniform; handsome and showy. Color beautiful light red. Moderately firm, pleasant, agreeable. Plant vigorous and productive. Splendid sort for home use or nearby market. Season medium.

Gandy—The old reliable, very late berry; berries are regular, even size and firm. Commands a big price when other varieties are running out.

Greenville—(P)—Large size, good quality, and very productive. Medium to late. Plants vigorous and free from rust.

Haverland—(P)—Large, long, bright red; a great yielder. One of the best of recent introduction.

Jess—Large, handsome, roundish-conical; firm; of good quality. Plant vigorous and productive. One of the best for home or market. Season early to medium.

Jewel—(P)—Planted in deep rich soil and given the highest culture, they produce enormous crops of very large berries of deep, glossy scarlet color, of most attractive appearance.

Lovett—A business berry, doing well on all soils, from heavy clay to light sand. Large, uniform, bright crimson, good quality. A variety of merit.

Marshall—Dark rich crimson; flesh fine grained and delicious, with the peculiar aroma of the wild berry. Especially valuable as a market variety.

Michel's Early—One of the first to ripen; berry medium to large, roundish, bright crimson, firm, fair quality. Valuable on account of its earliness and productiveness.

Nick Ohmer—Plant large and stocky, fruit the very largest, a giant among strawberries, and never misshapen; dark glossy red, firm, and of excellent flavor.

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

Rough Rider—A seedling of Eureka fertilized by Gandy; enormously productive, hardy and free from disease. Berries very large, mostly round, but somewhat irregular, and of deep red color. The latest and best shipping berry known, bringing nearly double the price of other varieties. Blossoms perfect.

Ruby—Believed to be one of the best ever offered. Fruit large, somewhat irregular, and dark red clear through. Rich flavor, firm; abundant bearer. A fine keeper and shipper.

Seaford—(P)—As large as Bubach, but ripens its fruit faster and is several days earlier.

Sharpless—This grand old sort originated in Pennsylvania and has been planted everywhere with very satisfactory results. Fruit large size, showy and good. Season medium.

Splendid—A beauty, and quality unsurpassed by any berry that is firm enough to ship well.

Timbrell—(P)—Claimed by originator to be superior to all other sorts. A thrifty grower, with strong, rank foliage. Fruit large, symmetrical, dark crimson; quality unsurpassed.

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

Other good varieties are James Vick, Margaret, Michigan, Kentucky, and Triumph de Gand.

MULBERRIES.

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

DOWNING'S EVERBEARING.

Downing's Everbearing—The beauty of this as a lawn or street tree is quite enough to commend it, but in addition it yields an abundant supply of its large refreshing berries for about three months. "I regard it as an indispensable addition to every fruit garden; I had rather have one tree of Downing's Everbearing Mulberry than a bed of strawberries."—Henry Ward Beecher.

New American—A sport from Downing and precisely like that well known sort, but decidedly hardier.

Russian—A hardy, rapid-growing tree, introduced from Russia by the Mennonites; foliage abundant; valuable for wind-break. Fruit of little value.

White—Mostly cultivated for silk and honey. Fruit small and very sweet.

ASPARAGUS.

This earliest and finest of spring vegetables is among the easiest cultivated and most profitable. A bed once planted suffers no deterioration for thirty years or more, if it is properly attended to and well manured.

See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well rotted barn-yard manure. Place the plants eight inches apart in rows three feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and, except near the sea shore, three pounds of salt per square yard early every spring. Do not cut for use until the second season.

Conover's Colossal—This variety is much superior in size and quality to any of the old common sorts, being remarkably tender and fine flavored.

Palmetto—Until recently we believed that the Conover's Colossal was the best sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder.

Mammoth White—Plant even more robust and vigorous, and throws larger shoots, and fully as many of them, as Conover's Colossal or Palmetto, and the shoots remain white above ground as long as they are fit for cutting.

RHUBARB OR PIE PLANT.

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep, as recommended for Asparagus. Plant four feet apart each way.

Early Scarlet—Smaller than Myatt's, but extremely early and very highest quality. The best extra early sort for home or market.

Myatt's Linnæus—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early, tender variety without being in the least tough or stringy, with a mild sub-acid flavor.

NUTS.

Almond, Hard-Shell—A fine, hardy variety with large, plump kernel, and exceedingly ornamental when in bloom.

Almond, Soft-Shell—This is the Almond of the shops, and though preferable to the former is not so hardy; kernel sweet and rich.

Butternut (WHITE WALNUT)—A rapid-growing native tree, producing edible nuts.

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

Gumbo—A New Jersey Seedling of the Spanish Chestnut, and claimed to be as hardy as the American.

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

SPANISH CHESTNUT.

Spanish—A valuable species for both ornament and fruit. It forms a hand-

some lawn tree, and produces fruit three or four times as large as the American variety. Not hardy at the north.

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

Filbert, English—The fruit of this being so much larger and better flavored than our native species, gives it the preference for cultivation over the latter in localities where it will succeed.

Filbert, Kentish Cob—One of the largest and finest of Filberts; oblong, meaty, and of excellent quality.

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

Pecan—This is a native nut belonging to the (Carya) Hickory-nut family. The tree is of tall growth, and bears abundantly; not entirely hardy at the north, but should be planted wherever it will succeed. The shell is very thin, the kernel sweet and delicious.

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

Walnut, English (MADEIRA NUT)—This rich and fine-flavored nut is moderately hardy, and makes a vigorous growth. Well worthy of cultivation.

FIGS.

Although not quite hardy in the Northern States, figs will survive the winter by merely bending the tops to the ground and covering them with soil. In the protected yards of our cities these plants need only wrapping in straw to insure a crop of fruit. The most certain plan is to grow them in large boxes and place in cold greenhouses or cellars during the winter months.

Brown Turkey—Large; oblong or pyriform; dark brown, covered with a thick blue bloom; flesh red and of a delicious flavor. Very reliable.

Celestial—Small; pale violet, with a beautiful bloom; very sugary and excellent; tree prolific and easily grown.

Marseilles—Small; roundish-obovate; almost white or yellowish green; flesh sweet and rich. Valuable for forcing.

White Ischia—Quite small; roundish-obovate; pale yellowish green; flesh purplish, and high-flavored. One of the hardiest varieties.

Ornamental Department.

Brief Suggestions to Planters.

What to Plant.—Impressed with the importance of planting only the most hardy ornamental trees and shrubs, and in order that our patrons may be spared much disappointment and expense, we have, as far as possible, omitted from our catalogue everything that is liable to suffer from severe cold.

We have with great pains secured, both at home and abroad, all valuable hardy material, so as to render our assortment of this class as complete as possible. An examination of the catalogue shows what an extensive variety of stock is offered, enabling the planter by a judicious use of the same to accomplish any desired result with perfectly hardy trees, shrubs and plants.

For convenience we have grouped the trees under the following heads: Upright Deciduous; Weeping or Drooping Deciduous, and Evergreen. The shrubs have been similarly arranged, and parties desiring to make selections for particular purposes will find this classification useful.

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 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, Snow-Ball, Althæa, Pæony, Phlox and Japan Anemone, when planted in masses, produce a magnificent effect, need no protection, and demand little skill or care in their management. What grand masses of bloom can be had throughout the season by 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 bedding plants, and at half the trouble and expense.

When to Plant.—Deciduous Trees, Shrubs and Vines can be planted either in Spring or Fall. 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 till within two or three buds of their base.

In cases where there is an abundant root, and small top or few branches, the pruning need be very light, but where the roots are small and the top heavy, severe pruning will be necessary. 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.

Pruning, as practiced by some people, has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly evergreens, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shapes we destroy their identity. The pruning knife, 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 appre-

cision 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 the 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 spouts 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.

The weeping or drooping varieties will be found further on under heading "Weeping or Drooping Deciduous Trees."

UPRIGHT DECIDUOUS TREES.

ALDER (*Alnus*).

The cut-leaved varieties are among the finest ornamental trees, and are rapid and robust growers.

European or Common (*Glutinosa*)—Rapid growing; when matured 30 to 60 feet high; specially adapted to moist situations.

Imperial Cut-Leaved (*Laciniata Imperialis*)—A very striking and beautiful tree, with delicately and deeply cut foliage; hardy, and of vigorous growth, forming an open and handsomely shaped head, fifteen to twenty feet high when fully grown. One of the finest cut-leaved trees in cultivation.

Linden-Leaved (*Tiliacea*)—Medium size, large, handsome, cordate dark green leaves; very distinct.

ASH (*Fraxinus*).

This family comprises many varieties of great value.

American Black (*Sambicifolia*)—A small medium-sized tree, with fine foliage.

Cut-Leaf (*Lentiscifolia*)—A rare and elegant lawn tree.

European Flowering (*Ornus*)—Flowers

Ash

greenish white, fringe-like, produced in June; grows from 20 to 30 feet.

Golden Barked (*Amea*)—Particularly conspicuous in winter.

White (*Alba*)—Our own noble native ash.

BEECH (Fagus).

A very elegant lawn tree, and when it attains age, can hardly be surpassed. Noted for rich, glossy foliage.

American Beech.

American (Ferruginea)—A well-known native sort, attaining a height of 50 feet and upwards.

European (Sylvatica)—Similar to the American variety in height.

Fern-Leaved (Heterophylla)—An elegant tree of symmetrical habit, having beautifully cut, fern-like foliage, and a graceful, wavy aspect. When fully grown, 25 to 35 feet high.

Purple-Leaved (Purpurea)—A remarkable variety, with very dark purplish foliage, changing to crimson, and again in the fall to dark purplish green, making a striking contrast with the green of other trees. Highly ornamental and desirable. When fully grown, 40 to 50 feet high.

BIRCH (Betula).

Graceful and suitable for any lawn. Hardy and thrifty in all soils.

Black Birch (Lenta)—Looks like a cherry tree.

Canoe, or Paper Birch (Papyracea)—This magnificent tree has gathered about it more poetic associations than any other native tree.

Common White (Alba)—A well-known variety, making a vigorous, erect growth, and having long, slender branches. Very desirable. Fifteen to thirty feet when fully grown.

Purple-Leaved (Foliis purpureis)—A variety possessing the vigorous habit of the species, and having rich purple foliage. Twenty to twenty-five feet when fully grown.

Pyramidal (Fastigiata)—Habit like Lombardy Poplar. Very picturesque.

Red, or River Birch (Nigra)—Satinny shreds of reddish bark. Very striking.

Yellow Birch (Excelsa)—Few know how beautiful this native Birch is.

CATALPA.

This is a tropical looking tree, and flowers in July, when few trees are in bloom. A very attractive lawn tree.

Flowers of the Catalpa.

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

Syringa-Leaved (Syringafolia)—A rapid-growing tree, with large, heart-shaped leaves, producing clusters of white and purple flowers in July, when few trees are in bloom. Twenty-five to thirty-five feet high when fully grown.

PURPLE-LEAVED BEECH.

CHERRY (Cerasus).

A handsome ornamental tree, especially adapted for small grounds.

Chinese Double Flowering (*Sinensis flore plena*)—A valuable variety, with large, double white flowers.

Double Flowering (*Flore alba plena*)—A tree of medium growth, producing clusters of double white flowers in May. Blooms so profusely as to completely hide the branches from view. Fifteen to twenty feet high when fully grown.

LARGE DOUBLE-FLOWERING CHERRY.

Ranunculus-like Flowering Cherry (*Caproniana ranunculiflora*)—An important addition.

Seibold's Double Red Flowering (*Seiboldii rubra plena*)—A valuable red blossoming variety.

CRAB (Pyrus).

Chinese Double White Flowering (*Spectabilis flore albo pleno*)—Fragrant flowers in clusters.

Chinese Double Rose Flowering (*Spectabilis flore rosea pleno*)—Most ornamental of all crabs.

Double Flowering American (*Augustifolia*)—New; a sturdy grower; hardy, and of medium size. Flowers resemble delicate pink roses, and are very fragrant. When in bloom looks like a mammoth rose-bush. Blooms while very young. Suitable for almost all soils.

WHITE-FLOWERING DOGWOOD.

DOGWOOD (Cornus).

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

White Flowering (*Florida*)—A fine American tree, growing from 16 to 25 feet high. Foliage of a grayish green color; very glossy and handsome, turning in the Autumn to a deep red, rendering the tree one of the most beautiful objects at that season. The flowers appear before the leaves in the Spring and are about three inches in diameter; white and very showy. It is one of the most valuable ornamental trees.

ELM (Ulmus).

Noble trees for street or lawn planting.

American White (*Americana*)—A native tree of large size, with open, spreading head and graceful drooping branches. Very popular in nearly all sections, and valuable for street planting. Succeeds admirably even where the soil is somewhat heavy and damp.

Belgica—Large size; valuable for street planting.

Blandford (*Superba*)—A superb shade tree, and highly ornamental.

English (*Campestris*)—A native of Europe, forming a tall, erect tree, with slender branches and small leaves. When fully grown, 40 to 50 feet high.

Golden-Leaved (*Wredei aurea*)—Beautiful golden yellow foliage; should be planted in half-shade.

Huntingdon (*Huntingdoni*)—One of the most desirable elms for any purpose; of very erect habit and a rapid, vigorous grower. Bark clean and smooth. When fully grown, 40 to 50 feet high.

Monumental (*Monumentalis*)—A dwarf variety, forming a straight and dense column.

Purple Filbert-Leaved (*Corylifolia purpurea*)—A desirable variety.

Purple-Leaved (*Purpurea*)—A very beautiful and distinct variety; leaves of rich purple when young. When fully grown, 15 to 25 feet high.

Purple Myrtle-Leaved (*Myrtifolia purpurea*)—Small, elegant foliage.

Red, or Slippery (*Fulva*)—A well known native variety.

Scotch (*Montana*)—A fine spreading tree, of rapid growth and large foliage. When fully grown, 40 to 50 feet high.

Serrated-Leaved (*Serratifolia*)—Valuable and much esteemed.

Siberian Evergreen (*Sibirica*)—Holds its foliage later than any other Elm.

Slippery Elm—See RED ELM.

Variegated (*Macrophylla punctata*)—Foliage distinctly variegated with silvery blotches and stripes.

Variegated English (*Variegata argentea*)—Variegation constant; very fine.

HORSE CHESTNUT (*Æsculus*).

Very desirable for lawn or street.

Double White Flowering (*Alba flora pleno*)—A very fine and rare variety, having double flowers, in larger spikes or panicles than the common sort; one of the best. When fully grown, 40 to 50 feet.

European, or White Flowering (*Hippocastanum*)—A very beautiful, well-known tree, forming a round, compact head, with dark green foliage and an abundance of showy flowers early in Spring. Very desirable on account of its hardy, healthy habit. When fully grown, 40 to 50 feet high.

Memminger's (*Memmingerii*)—A handsome variety, with foliage mottled with white.

Ohio Buckeye (*Glabra*)—A popular variety in the west.

Red Flowering (*Rubicunda*)—A splendid tree, producing showy red flowers a little later in the season than the white; foliage a deeper green. When fully grown, 40 to 50 feet. The white and the red flowering contrast well when planted together.

White Flowering—See European.

JUDAS TREE OR RED BUD (*Cercis*).

American (*Canadensis*)—A very ornamental tree, medium in size, with heart-shaped leaves of pure green color and glossy surface. Before the foliage appears, it is covered with a profusion of delicate pink flowers, from which it derives its name, *Red Bud*. It is a very beautiful and effective tree. It flowers at the same time as the Chinese *Magnolias*, and when planted with them produces a very beautiful effect. It makes but a small tree.

Japan (*Japonica*)—A small variety of value.

LABURNUM (*Cytisus*).

Alpine, or Scotch (*Alpinus*)—A valuable variety, producing long clusters of yellow blossoms.

Common, or Golden Chain—Bears long, pendant racemes of golden flowers in June; smooth and shiny foliage. Very showy and beautiful, and valuable for every lawn. When fully grown, 15 to 20 feet high.

LARCH (*Larix*).

Larch.

European (*Europæa*)—A beautiful, rapid-growing tree, of irregular, pyramidal form, with small, drooping branches. Very desirable and universally sought in all sections. When fully grown, 30 to 40 feet.

LINDEN, OR LIME (*Tilia*).

Very beautiful and desirable. The flowers yield a delicate perfume.

American, or Basswood (*Americana*)—A rapid-growing, open-head or spreading tree, with large leaves and fragrant flowers. Very desirable on account of its fine, luxuriant foliage. When fully grown, 40 to 60 feet.

Cut, or Fern-Leaved (*Laciniata*)—A very attractive variety.

European (*Europæa*)—A very fine pyramidal tree, with large leaves and fragrant flowers; smaller in all its parts than the preceding, and more valuable for street or lawn planting. When fully grown, 30 to 50 feet.

Pyramidalis—A compact growing and valuable sort.

Red Fern-Leaved (*Laciniata rubra*)—One of the finest for lawn purposes.

White-Leaved European (*Alba*)—A vigorous growing tree, with large, handsome

foliage, quite downy and whitish underneath; smooth above; very valuable. When fully grown, 20 to 25 feet.

Chinese White Magnolia.

(CONSPICUA.)

From photograph, showing the peculiarity of the tree, being a mass of bloom and buds, while the leaf buds are but just unfolding.

MAGNOLIA (*Magnolia*).

Very beautiful, but exceedingly difficult to transplant with success.

Chinese White (*Conspicua*)—A small tree, quite hardy, producing large, pure white flowers—very numerous—and appearing before the leaves.

Cucumber Tree (*Acuminata*)—A magnificent tree, growing very rapidly, and often attaining from 60 to 90 feet in height, producing in June yellow flowers, tinted with bluish purple. Very desirable on account of its fine, luxuriant foliage, rapid growth, and fine flowers.

Glaucous-Leaved, or Swamp Laurel, Sweet Bay (*Glauca*)—A small tree, producing fragrant white flowers in May.

Lenne (*Lennei*)—A very showy flower; cup-shaped; crimson-purple outside and pearl-colored within. One of the finest of the purple Magnolias.

Norberts (Norbertiana)—Flowers large, reddish purple. A valuable variety.

Showy Flowered (Speciosa)—Flowers a little smaller than Soulange; bloom a week later and remain longer on the tree than any other variety; hardy and valuable.

Soulange (Soulangiana)—A variety of the Conspicua, with showy white and purple flowers, cup-shaped and three to five inches in diameter; foliage large and glossy. One of the finest and hardiest.

MAPLE (Acer).

Very valuable and highly ornamental. Vigorous growers; free from diseases; hardy, and adapted to all soils. Beautiful in street or park. We name below a few of the best sorts.

Ash-Leaved (Negundo Fraxinifolium)—A rapid-growing tree, with leaves and branches of a light green. Very hardy.

English, or Cork-Barked (Campestre) — An attractive variety; hardy and valuable.

Cut-Leaved Purple Japan Maple.

Cut-Leaved Purple Japan (Dissectum atropurpureum)—One of the most striking and handsome varieties of the Japanese Maples. Form dwarf and weeping.

Leaves are of a beautiful rose color, and are also deeply and delicately cut, giving them an elegant fern-like appearance. Besides being an elegant and attractive lawn tree, it is also very useful for conservatory decoration in spring; 2 feet.

Scarlet Maple.

Japan (Polymorphum)—The normal form or type; growth shrubby; foliage small and of a cheerful green in spring and summer, changing to a lovely crimson in autumn. Hardy when well established; 2 feet.

Norway (Platanoides)—A distinct foreign variety, now very popular here on account of its clean, broad foliage of rich, deep green. Stout, vigorous grower. Very desirable and universally planted. When fully grown, 40 to 50 feet.

Purple-Leaved Sycamore (Purpurea)—A strong, rapid grower. Foliage deep green on the upper surface and purplish red underneath. Produces a fine effect with other trees. When fully grown, 15 to 20 feet.

Scarlet, or Red (Rubrum)—A very beautiful and distinct variety, with flowers of a fine purplish red, appearing very early in the spring, changing to a brilliant scarlet in the autumn. Very desirable for lawn or street planting. When fully grown, 30 to 40 feet.

Schwedler's Norway (*Schwedlerii*)—A valuable tree, recently introduced: young shoots and leaves of a purplish crimson color.

Silver-Leaved, or White (*Dasycarpum*)—A hardy, rapid-growing native variety of the largest size; foliage bright green above and silvery underneath. Valuable for producing a quick shade. Excellent for street planting. When fully grown, 50 to 60 feet.

Striped-Barked Maple (*Pennsylvanicum*)—A desirable native tree; very attractive bark; rapid grower.

Sugar, or Rock (*Saccharinum*)—A well-known native tree, valuable alike for its production of sugar and wood. Its stately form and rapid growth make it desirable as an ornamental shade tree. When fully grown, 50 to 60 feet.

MOUNTAIN ASH (*Pyrus Sorbus*).

Very ornamental, especially when covered with their bright, scarlet berries.

American (*Americana*)—A favorite, erect-growing tree, of medium size, producing white flowers early in Spring, followed by clusters of bright scarlet berries, which remain on the tree through the Winter months.

European (*Aucuparia*)—Similar in appearance to the above, with finer foliage, and smaller, deeper-colored berries; much more desirable than the American, and everywhere very popular. When fully grown, 20 to 35 feet.

Oak-Leaved (*Quercifolia*)—A very distinct and desirable tree, with compact, pyramidal head and dark-lobed leaves, downy underneath; producing the same flowers and berries as the preceding. Very hardy and desirable for planting on lawns or in dooryards. When fully grown, 20 to 25 feet.

MULBERRY.

See MULBERRIES, page 43.

OAK (*Quercus*).

American White Oak (*Alba*)—One of the finest American trees; of large size, and spreading branches; leaves lobed, pale green above and glaucous beneath. Makes an immense tree.

Burr, or Mossy Cup (*Macrocarpa*)—One of the noblest varieties; foliage the largest and most beautiful.

Scarlet Oak (*Coccinea*)—A native tree, of rapid growth; pyramidal outline, and especially remarkable in Autumn, when the foliage changes to a bright scarlet.

PEACH (*Persica*).

The double flowering varieties are very striking and handsome when in bloom, as every branch is a mass of beautiful, highly-colored flowers.

Purple, or Blood-Leaved (*Vulgaris foliis purpureis*)—Valuable on account of its handsome foliage.

Rose-Flowering, Double (*Rosea fl. pl.*)—A small-sized tree, with beautiful, delicate rose-colored flowers. Blooms in May. When fully grown, 8 to 10 feet.

White-Flowering, Double (*Alba fl. pl.*)—Similar to the preceding, with white flowers. Blooms in May. When fully grown, 8 to 10 feet.

POPLAR (*Populus*).

Desirable where rapid growth is wanted.

Balsam (*Balsamifera*)—Large, glossy leaves; tree grows rapidly.

Cotton Wood, or Canadian (*Canadensis*)—A well-known sort.

Carolina—Pyramidal in form and robust in growth. Leaves large, serrated and pale to deep green in color.

Lombardy (*Fastigiata*)—Well known for its erect, rapid growth and commanding form. Very desirable in large grounds or along roads, to break the average height and forms of other trees. When fully grown, 50 to 75 feet.

Silver-Leaved, or White (*Alba*)—A tree of wonderfully rapid growth and spreading habit; leaves large, dark, rich green above, and white as snow beneath. When fully grown, 40 feet.

SALISBURIA, MAIDEN-HAIR TREE, OR GINGKO (*Adiantifolia*).

A rare, beautiful tree from Japan, with remarkable fern-like foliage, distinct and fine. Especially desirable for planting

on lawns or in door-yards. A rapid grower.

Sweet Gum (Liquid Amber)—A striking tree in the Autumn, with its deep crimson foliage.

TULIP TREE, OR WHITE WOOD
(*Liriodendron Tulipifera*).

One of our largest native trees, with large, glossy leaves, shaped like a violin, and beautiful tulip-like flowers. Very desirable for planting on lawns, or where trees are desired that will make a rapid growth. When fully grown, 50 feet.

Double-Flowering Thorn.

THORN (*Cratægus*).

Dense, low-growing trees, and very ornamental when in bloom. Hardy and adapted to all soils.

Common Hawthorn (*Oxyacantha*)—The celebrated English Hedge Plant.

Double Crimson (*Flore punicea pleno*)—Producing fine double crimson flowers.

Double White (*Alba pleno*)—Flowers small; clear white and desirable.

Paul's New Double (*Coccinea flore pleno Paulii*)—A new variety and desirable; producing bright crimson and very double flowers. One of the best.

Single Scarlet (*Punicea*)—Flowers highly perfumed.

TREE OF HEAVEN, OR AILANTHUS
(*Glandulosus*).

Long, feathery foliage; rapid grower.

YELLOW WOOD, OR CLADRASTIS
(*Virgilia lutea*).

One of the finest native trees. Flowers very fragrant, pure white, and produced in long drooping racemes in June.

Yellow Wood.

WALNUT (*Juglans*).

See NUTS, page

WILLOW (*Salix*).

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

Laurel-Leaved (*Laurifolia*)—A fine tree, with large shiny leaves.

Rosemary-Leaved (*Rosmarinifolia*)—Branches feathery, with small, silvery foliage; makes a striking, pretty, small-sized tree when grafted standard high. This, and the Kilmarnock and New American Weeping, should always find a place in every yard and garden, and will produce a pleasing effect. When fully grown, 10 feet.

Royal (*Regalis*)—Beautiful silvery foliage.

WEEPING, OR DROOPING, DECIDUOUS TREES.

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

Camperdown Weeping Elm.

ASH (*Fraxinus*).

European Weeping (*Excelsior pendula*)—One of the finest lawn or arbor trees; covers a great space and grows rapidly; well adapted for covering arbors.

BEECH (*Fagus*).

Weeping (*Pendula*)—Quite ungainly in appearance, divested of its leaves, but

when covered with rich, luxuriant foliage, of wonderful grace and beauty. Attains 30 feet.

BIRCH (*Betula*).

Cut-Leaved Weeping (*Laciniata pendula*)—One of the most desirable and beautiful trees for planting in door-yards or on lawns, having white or silvery bark,

and branches of a graceful, drooping habit, with foliage delicately cut and very fine. It makes a rapid growth and is perfectly hardy, as is shown by the fact that we have lately seen perfect, full-grown specimens in Minnesota, where the mercury drops to 40° below zero.

was found trailing upon the ground Grafted into stems of some height, it forms pendulous heads, drooping to the ground in fine, thread-like shoots; very beautiful.

Tristis—Of pendulous habit.

Young's Weeping Birch.

European White Weeping (Alba)—A graceful tree, with silvery bark and slender branches.

Pendula Elegans—The branches run directly toward the ground, parallel with the stem. Its elegant pendulous habit, beautiful foliage and branches, entitle it to be regarded as one of the greatest acquisitions of many years in this class.

Young's Weeping (Pendula Youngii)—Originated near Milford, Eng., where it

CHERRY (Cerasus).

Dwarf Weeping (Semperflorens pendula)—This makes a curious and beautiful round-headed, drooping tree, having long, slender branches and producing double white flowers.

Japan Weeping (Japonica pendula)—Flowers single white; fruit red. One of the finest of the small-headed, pendant cherries.

Japan Weeping, Rose-Flowered (Japonica rosea pendula)—One of the finest pen-

Japan Weeping Rose-Flowered Cherry.

dulous trees for lawns or small grounds. Branches slender, drooping gracefully to the ground.

DOG-WOOD (Cornus).

Weeping (Pendula)—A weeping form of the White Flowering, distinct from all other weeping trees. Possesses the abundant bloom, handsome foliage and fruit of the White Flowering and makes a magnificent specimen, either Summer or Winter.

ELM (Ulmus).

Camperdown (Camperdown pendula)—One of the most graceful of all weeping trees, having large, luxuriant and deep green foliage; well adapted for planting on lawns and covering arbors; very desirable; a rapid grower.

Scotch Weeping (Pendula)—A graceful weeping tree.

LINDEN, OR LIME (Tilia).

White-Leaved Weeping (Alba pendula)—A very beautiful tree, having large foliage, silvery-white underneath, and slender, drooping branches.

MAPLE (Acer).

Weir's Cut-Leaved (Weirii laciniatum)—A silver maple with remarkable and beautifully dissected foliage. Of rapid growth; shoots slender and drooping, giving it a very graceful appearance. Should be in every collection. While it makes a large tree if undisturbed, it will bear any amount of pruning and may be easily adapted to small lawns

MOUNTAIN ASH (*Pyrus Sorbus*).

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

MULBERRY (*Morus*).

Teas Weeping—The most graceful and hardy Weeping tree in existence. Wholly unlike anything heretofore introduced. Forms perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion, it is without a rival. It will undoubtedly take the foremost place among Weeping trees; it has beautiful foliage; is wonderfully vigorous and healthy; is one of the hardiest, enduring the cold of the North and heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. Trees are four to six feet high.

WILLOW (*Salix*).

New American Weeping (*Americana pendula*)

—An American dwarf variety, which, when grafted on a standard stem, five or six feet high, makes one of the most ornamental of small weeping trees, having long, slender shoots and delicate leaves of great beauty and very graceful.

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

Siebold's Weeping (*Sieboldii pendula*)—Very graceful and ornamental.

Wisconsin Weeping—Valuable on account of its hardiness.

Weeping (*Babylonica*)—Our common, well-known weeping variety; forms a large, round-headed, graceful tree; requires plenty of room, and where space can be spared, is quite desirable.

WEeping MOUNTAIN ASH.

(CONIFERÆ.)

In the following list we confine ourselves strictly to perfectly hardy species and varieties, such as are most useful for general planting. In transplanting Evergreens, so much depends on the care of the planter in protecting roots from air and sun, that we cannot guarantee them further than that delivery shall be made in first-class condition. We recommend Spring planting for Evergreens.

ARBOR VITÆ (Thuja).

American (*Occidentalis*)—A well-known variety of great value; it forms an upright, conical tree of only medium size, and is, all things considered, the finest Evergreen for screens, being hardy and more easily transplanted. It grows rapidly, and with little care, or rather by easy management, it soon forms a most beautiful hedge, very dense, and perfectly impervious to the sight. It is not adapted to turn stock, but forms a most desirable and ornamental screen to divide the lawn from other parts of the ground, or for any similar purpose.

Hovey's Golden (*Hoveii*)—A hardy variety of rich golden shading.

Pyramidal (*Pyramidalis*)—Of upright, compact habit, resembling Irish Juniper; desirable.

Siberian (*Siberica*)—Well known and deservedly popular on account of its hardiness, being able to endure the changes of our climate, and retains its dark green color; makes an excellent lawn tree, and is of great value for ornamental screens and hedges.

Tom Thumb—Remarkable for its low, compact habit; valuable for planting in cemeteries and small places, where large trees are not admissible.

FIR (*Picea*).

Balsam (*Balsamea*)—A well-known and popular tree; very handsome while young, assuming the upright or conical form; leaves dark green above, silvery beneath; retains its color throughout the severest winters; grows rapidly, and every way desirable.

Siberian Arbor Vitæ.

Nordman's Silver (*Normanniæ*)—Considered one of the finest silver firs.

JUNIPERS (*Juniperus*).

Irish (*Hibernica*)—A very pretty little tree or shrub, forming a neat, tapering column of deep green foliage; very hardy, and desirable for planting on lawns or in cemetery lots, where larger evergreens are not admissible.

Red Cedar (*Virginiana*)—A common American tree.

Sabin (*Sabina*)—A common low, wide-spreading and thickly-branched shrub, suitable for rock-work.

Swedish (*Svecica*)—Small pyramidal tree; quite handsome.

PINE (*Pinus*).

Austrian, or Black (*Austriaca*, or *Nigricaus*)—From Central Europe, where it grows over 100 feet high; remarkably robust, with long, stiff leaves and deep green foliage; hardy everywhere, and valuable for planting as wind-breaks, screens, etc.

Scotch (*Sylvestris*)—A rapid-growing, hardy variety, with short, light green leaves; valuable for screens and for planting in clumps, etc.

White, or Weymouth (*Strobus*)—Our common White Pine, and the handsomest of all the native species.

SPRUCE (*Abies*).

Colorado Blue, or Rocky Mountain (*Picea pungens*)—A magnificent evergreen from the Rocky Mountains. Very hardy; foliage a handsome blue.

Douglass (*Douglassii*)—Conical form, branches spreading. A very desirable variety.

Hemlock (*Canadensis*)—An elegant tree with drooping branches and fine yew-like foliage; perfectly hardy and quite distinct; of undoubted worth and beauty. Makes a fine ornamental hedge.

Norway Spruce.

Norway (*Excelsa*)—Of very rapid growth and gracefully drooping habit when of some size; dense in structure; regular in outline, and perfectly hardy; will bear shearing or cutting well, and hence is well adapted for planting in hedges or screens. Very popular, and deservedly so, and is largely planted.

Weeping (*Inverta*)—A beautiful variety, somewhat resembling the Norway, except that its branches are pendulous. The lateral branches of large trees as drooping as the Willow.

EVERGREEN SHRUBS.

ASHBERRY (*Mahonia*).

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

BOX (*Buxus*).

Dwarf (Nana)—The well-known sort used for edging.

Tree Box (*Semper virens*)—A shrub of the largest size, succeeding well in the shade.

DAPHNE.

Cneorum—A beautiful evergreen shrub with fragrant pink flowers. Blossoms in June and October.

RHODODENDRON.

Rhododendrons are superb evergreen shrubs, producing dense clusters of magnificent flowers, being white; red, pink and purple. We can supply all colors, and offer a large list of named varieties. We would suggest that planters leave selections to us, specifying shades of color only, when we will select sorts adapted to the section in which they are to be planted. We make a specialty of hardy varieties. Very ornamental and desirable, especially when grouped.

HEDGE PLANTS.

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

DECIDUOUS HEDGE PLANTS.**AMERICAN HORNBEAM (*Carpinus*).**

A native species, growing from fifteen to twenty feet high. In its mode of growth quite similar to the Beech, but the foliage is thinner, and more irregular in form. Makes a very ornamental and useful hedge.

HONEY LOCUST.

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

OSAGE ORANGE.

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

JAPAN QUINCE.

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

CALIFORNIA PRIVET (*Ligustrum ovalifolium*).

This is the most glossy-leaved and rapid-growing of all the half-evergreen plants used for low hedges around private lawns and is the universal favorite at

Newport and other fashionable seaside resorts. Entirely hardy and adapted to all parts of the country.

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

Althæas,
Purple Berberry,
Roses,
Spiræas,
Tartarian Honeysuckle.

EVERGREEN HEDGE PLANTS.

All described in their appropriate places in this Catalogue.

American Arbor Vitæ,
Dwarf Box, for Edging,
Hemlock,
Norway Spruce (especially adapted for wind-brakes),
Siberian Arbor Vitæ,
Tom Thumb Arbor Vitæ, for borders.

Our Shrubs are all strong, well-rooted, transplanted stock from open ground. Once carefully planted in suitable positions they increase in size and beauty from year to year, and require but little further care. The time of bloom of the different sorts extends over nearly the whole season, though the greatest show is to be expected in Spring and early Summer.

UPRIGHT DECIDUOUS SHRUBS.

We can supply many Flowering Shrubs in addition to those described, but confine ourselves to those having the greatest merit, and especially to such as possess some distinct qualities, either of foliage or of flower.

Should any of our professional patrons desire to experiment on their testing grounds with varieties not named herein, we shall be pleased to fill any orders therefor. But to the general planter we advise a selection from the following choice list:

ALTHÆA, or ROSE OF SHARON (Hibiscus).

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

Double Purple (*Purpurea flore pleno*).

Double Red (*Rubra pleno*).

Double White (*Alba*)—Very large and double, with reddish-purple center.

Leopoldii Flore Pleno—Flowers very double; flesh color.

Pæoniflora—Rosy purple flowers.

Single Purple (*Purpurea*).

Althæa, or Rose of Sharon.

Hardy Hibiscus.

Single Red (*Rubra*).

Single White (*Alba*).

Var Violacea Flore Pleno—Flowers double violet.

Variegated-Leaved Double Purple-Flowered (*Flora plena fol. var.*)—A conspicuous variety with leaves distinctly marked with light yellow, and having double purple flowers; showy and desirable.

ALMOND. See PLUM, page 70.

AZALEA.

Ghent—This class is hardy and will thrive in any good, rich garden soil, but will do best in a light, moist soil, in which a liberal quantity of leaf-mould is mixed.

Mollis—A beautiful specie from Japan; perfectly hardy, with large flowers and varied in color. The colors run through all the shades of orange, yellow and carmine.

BERBERRY (*Berberis*).

The Berberries are a most interesting family of shrubs, varying in size from two to six feet high, rich in variety of leaf, flower and habit. Their showy orange and yellow flowers in May or June are succeeded by bright and various-colored

fruit; very ornamental in Autumn and Winter.

American (*Canadensis*)—Yellow flowers, succeeded by red berries.

European (*Vulgaris*)—Yellow flowers in terminal racemes, followed with scarlet fruit.

Fortunei—Foliage turns red in autumn dwarf habits.

Purple-Leaved (*Purpurea*)—A very handsome shrub, growing from three to five feet high, with violet-purple leaves and fruit. Makes a fine ornamental hedge.

Thunberg's (*Thunbergii*)—Dwarf habits; small foliage, changing to red in the fall; very pretty.

CALYCANTHUS, SWEET-SCENTED SHRUB OR CAROLINA ALLSPICE (*Floridas*).

This is very desirable on account of the peculiarity and very pleasing fragrance of its wood; its foliage is rich and flowers of a rare chocolate color, with an agreeable odor. The Calycanthus blossoms in June and at intervals through the summer; very desirable. When full grown, 6 to 8 feet.

Clethra Alnifolia.**CLETHRA ALNIFOLIA, OR SWEET PEPPER BUSH.**

Very hardy; blooms every season without fail; cold never harms it; flowers pure white, in spikes 3 to 6 inches long. A bed of Clethras will perfume the air for a long distance around. A single sprig will fill a room with its delightful fragrance. It is a neat, upright-growing shrub, and is not only valued for its beauty and sweetness, but is now in demand for the honey-bee to feed upon. The honey is almost white, thick and fine flavor. The plant is very easy of cultivation; never fails to bloom after a hard winter, and is worthy of a front place in every garden.

CORCHORUS (Kerria).

Slender shrubs, four to five feet high, with beautiful yellow blossoms from July to Oct.

Double-Flowered (Flore pleno) — Double yellow flowers.

Folias Variegatis — One of the prettiest dwarf shrubs.

Globe Flower, or Japonica — A neat small shrub, with green, pointed leaves and yellow blossoms.

CURRENT (Ribes).

A gay flowering shrub in early spring; very easy to cultivate.

Deutzia Gracilis.

Double Crimson-Flowering (*Flore pleno*)—Flowers in July; very pretty.

Gordons (*Gordonianum*)—Flowers crimson and yellow in May; very hardy and a profuse bloomer.

Yellow-Flowering (*Aureum*)—A valuable variety, producing small yellow flowers in early spring. Blossoms have a delicate spicy fragrance.

COLUTEA (Bladder Senna).

A large shrub, with small delicate foliage and yellow pea-blossom-shaped flowers in June, followed by reddish pods or bladders.

CORNUS (Dogwood).

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

Mascula Var. (*Variegated Cornelean Cherry*)—Foliage beautifully variegated with white.

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

Variegated-Leaved Red-Branched (*Elegantissima* Var.)—This variety has silver margined leaves, which render it very showy.

DEUTZIA (Deutzia).

This valuable plant comes from Japan. Its hardihood, fine habit, foliage and beautiful flowers, render it the most popular of flowering shrubs. Flowers are produced in long racemes during the latter part of June.

Candida (*Candidissima*)—Flowers double white; excellent for floral decoration.

Double-Flowering (*Crenata flore pleno*)—Flowers very double, white, tinged with rose.

Golden Variegated (*Aurea variegata*)—A new variety, with golden variegated leaves. A choice acquisition.

Lemoine—Flowers pure white, borne on stout branches of upright growth. Dwarf and free flowering. Although comparatively new is already very popular.

Pride of Rochester—A variety raised from *Deutzia Crenata* and producing large, double white flowers, the back of petals

being tinged with rose; flowers large; habit vigorous, and a profuse bloomer.

Rough-Leaved (*Scabra*)—One of the finest of this interesting class of shrubs, producing white flowers in June.

Slender-Branded (*Gracilis*)—A dwarf variety, covered with a profusion of white flowers in June. This is well adapted to planting in cemetery lots or small door-yards. Fine for pot culture, as it flowers freely in low temperature during the winter.

ELDER (*Sambucus*).

A large, showy shrub, blossoming in June. Require frequent pruning.

Cut-Leaved (*Laciniata*)—One of the best cut-leaved shrubs.

Fern-Leaved (*Heterophylla*)—A fine new variety, with delicate foliage.

Golden (*Aurea*)—From Holland. New and rare. When the leaves first appear they are bright green, but if planted where they will have plenty of sun they soon change to a golden green. The blossom, which resembles the common Elder bloom, appears in July. The best effect is produced when they are planted with other shrubs, so that the foliage may be rendered more conspicuous by the contrast.

ELEAGNUS LONGIPES.

A handsome, shapely, silver-leaved shrub, with ornamental reddish-brown bark in winter; perfectly hardy and easy to grow. The bright yellow flowers appear in June on long stalks, but the greatest value of the shrub is in the fruit, which is produced in the greatest abundance along the whole length of the branches; oval in shape and about one-half inch long. Color deep orange red; very showy and attractive. The fruit is not only very ornamental, but has a sprightly, sharp, pleasant flavor, and makes a delicious sauce when cooked. *Eleagnus* is one of the most valuable ornamental berry-bearing shrubs, and should be largely planted.

EXORCHORDA GRANDIFLORA, OR PEARL BUSH.

A fine shrub, producing large white flowers in May. One of the best shrubs of recent introduction.

FRINGE, OR SUMACH (*Rhus*).

Very popular among the large-growing shrubs; hardy, and adapted to almost any soil.

Cut-Leaved (*Glabra laciniata*)—Fern-like leaves, changing to rich red in the Autumn.

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

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

FORSYTHIA, OR GOLDEN BELL.

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

Fortunei—Growth upright; foliage deep green; flowers bright yellow.

Viridissima—A free, hardy shrub; a native of Japan, with deep yellow flowers early in spring.

HONEYSUCKLE, UPRIGHT (*Lonicera*).

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

Cærulea—Flowers cream-colored; May.

Honeysuckle.

Hydrangea Paniculata Grandiflora.

Fragrant Upright (*Fragrantissima*)—Small flowers, appearing before the leaves. Very desirable.

Ledebour's (*Ledebouri*)—Red flowers.

Pink - Flowering (*Grandiflora*)—Large, bright red flowers, striped with white; in June.

Red Tartarian (*Tartarica rubra*)—Beautiful flowering shrub, blossoming early in spring; bright pink flowers.

Standish's (*Standishii*)—Flowers creamy white, in May, before the leaves.

Tartarian (*Tartarica*)—Pink flowers; in June.

Variegated Grandiflora Alba—Very large, pure white flowers.

White Tartarian (*Tartarica alba*)—Similar to the Red Tartarian in growth; producing white flowers very abundantly.

HYDRANGEA (*Hydrangea*).

The native species are handsome shrubs

of medium size, with fine large leaves, generally of a light green color, and perfectly hardy. The introductions from Japan and China, are interesting and valuable. *Hydrangea paniculata grandiflora* is remarkable in foliage and flower, and, being perfectly hardy, is of great value. The other Japanese varieties, like the *Hydrangea Hortensia*, require protection in winter. They should be grown in pots or boxes and wintered in the cellar, and in summer placed along walks in the shade of trees. *Hydrangea Otaksa* is especially adapted for this purpose.

Those marked with a * require to be wintered in the house.

***Garden or Changeable** (*Hortensia*)—Large globular heads of rose-colored flowers.

***Japonica** (*Alba variegata*)—Leaves margined with white.

***Otaksa**—Immense trusses of rose-colored flowers; foliage deep green; a free bloomer; season, July.

Paniculata Grandiflora, or Large Panicle-Flowered—A fine shrub, growing from 8 to 10 feet high; flowers produced in great pyramidal panicles a foot long, are at first pure white, then changing to pink. Begins to bloom early in August, continuing several weeks. It is valuable for planting either singly or in beds. Pronounced "decidedly the finest flowering shrub of recent introduction." While everyone is familiar with the tender *Hydrangea*, which is common everywhere as a pot-plant, yet many are still unaware of the existence of a perfectly hardy variety known as the *Hydrangea Paniculata Grandiflora*. It is recognized wherever known, in all latitudes, as decidedly the finest acquisition to the list of hardy shrubs made in the past twenty years. It is as hardy as a native oak, and produces at the ends of the branches great masses of flowers, the individual clusters often being nearly a foot in length

Hydrangea Otaksa.

and the same in width. Unequalled for lawns and cemeteries. In short, it is appropriate and much needed everywhere. Is planted singly and in groups. Give it a trial and you would not part with it next year for three times its cost. Our stock is well grown and of extra size, being far superior to that of con-

cerns doing a mail and express business. With fair care our plants will bloom the first season. We would like everyone to try this because we know it will be very satisfactory, and satisfaction to our customers must be the real foundation of our success.

***Red-Branched**—New. A sterling novelty. The plant is of robust habit, with red-colored branches, and produces freely immense heads of deep, rose-colored flowers.

Tree Hydrangea.

***Rosea**—Red flowers; freely produced.

***Thomas Hogg**—Flowers pure white.

Tree Hydrangea (*Paniculata Grandiflora*)—This is beautiful as a tree, growing in loveliness as it acquires age and size. It is as hardy as a native oak, producing at the end of the branches great masses of flowers, the individual clusters often being nearly a foot long.

LILAC (*Syringa*).

Well-known and beautiful hardy shrubs, flowering in May.

Alphonse Lavalle—Violet-blue.

Charles X—Magnificent clusters of dark red flowers, produced in the greatest profusion. A splendid variety.

Chinese Weeping (New)—A beautiful weeping tree, producing large clusters of intensely sweet flowers.

Frau Dammann—This produces the largest clusters of white lilacs, of the common species, in cultivation.

Jacques Calot—Rosy-pink.

Japan Tree—A new species; flowers small and feathery, in great panicles, often eighteen inches long; light straw color; blooms a month later than all others.

Josikæa—A species found in Transylvania; leaves long; flowers blue.

Lamarck—Rosy-lilac.

Leon Simon—Thyrser, attaining 14 inches in circumference; 4-parted; compact; crowded with blossoms. These flowers, which are piled one on another, are very double, perfectly round; color bluish-crimson; buds, clear coral.

Ligustrina Pekinensis—Creamy-white.

Linne—Double reddish lilac.

Louis Van Houtte—Dark red.

Lovaniensis—Silvery-pink.

Ludwig Spath—The most beautiful variety of the old purple lilac ever produced. The single blossoms, as well as the clusters, are very large, and of splendid dark purple-red color, not only as buds, but even when the blossoms are fully expanded.

Mad. Lemoine—Double white.

Marie Legraye—White.

Michael Buchner—Dble. pale lilac.

Persian (Persica)—Purple.

Persian (Persica)—White.

Pres. Carnot—Lilac, white center.

President Grevy—Magnificent spikes, attaining more than a foot in length, with proportionate width, individual flowers over an inch, with two or three rows of rounded petals of a cobalt blue, with the centers more brilliant and the edges rosy; the fine blue of the center show strongly by the contrast.

Prince of Wales—Purple.

Princess Alexandra—White.

Rothomagensis (Rouen)—Violet.

Villosa—Another new species from Japan, with foliage like that of the White Fringe and rosy-pink blossoms, changing to white. A distinctly new color in lilacs and valuable for late blooming.

HARDY ORANGE.

Limonia Trifoliata—A very ornamental shrub; hardy, large plants having stood for years in Central Park, New York City. Handsome foliage and white fragrant flowers, succeeded by bright orange-red fruit. Excellent for hedges.

Otaheite—Well known and extensively grown. In pot culture it makes a sturdy little tree, with glossy leaves and little, bright yellow edible oranges, which hang on with great persistency. Blossoms have true orange odor.

Kumquat—Dwarf species, similar to above; fruit much better quality; delicious flavor. Trees, less than two feet high, have borne as many as 100 fruits.

PÆONIA—TREE.

A handsome flowering shrub, growing from 6 to 8 feet; free bloomer; gorgeous flowers of immense size; season May.

Chinese Double Blush (Banksii)—One of the finest; very desirable.

Leon Simon.

Tree Pæonia.

Double White (*Alba plena*)—A white variety shaded with purple at center.

Double Red (*Rubra plena*)—Bright Rose; almost single, but fine.

Moutan—The parent species. It is a native China. The varieties are handsome flowering shrubs, attaining from 6 to 8 feet in height in about 10 years, with proper care. The flowers are remarkably striking, of gorgeous colors, very numerous and enormous in size, often measuring from 6 to 9 inches across. All are very effective among shrubs, or on the margins of borders. Although hardy, the plants are greatly improved by slight protection in winter. We can furnish white, red, crimson and pink.

Rosea Superba—Dark rosy violet; very fine.

PLUM (*Prunus*.)

A most charming early spring flowering shrub. *Prunus Triloba*, or Double-flowered Plum, as it is commonly called, and the Double-flowered Almonds, produce in remarkable profusion, perfectly double, finely-formed flowers of most attractive colors. At the blossoming season each little tree appears like one mass of bloom, forming a most beautiful interesting object, whether planted singly upon the lawn or in groups. As the Almond and Plum flower at the same time, they can be massed very effectively. Both are hardy and of fine habit.

Dwarf Double White-Flowering Almond (*Japonica flore alba pleno*.) Double white flowers in May.

Dwarf Double Red-Flowering Almond (*Japonica flore rubra pleno*.) Double red flowers in May.

Double Flowering (*Prunus Triloba*)—Flowers delicate pink, thickly set on branches in May.

Prunus Triloba.

Purple-Leaved (*Prunus Pissardi*)—The finest purple-leaved small tree of recent introduction; retains its color throughout the season. Flowers small, white, single.

Tomentosa—A handsome dwarf shrub.

Virgata Flore Roseo Pleno—Flowers appear about a week before those of *Triloba*.

QUINCE (*Cydonia*).

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

Blush (*Alba*)—A desirable variety, with delicate pink blossoms.

Japan Quince.

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

SNOWBALL, OR ARROW-ROOT (*Viburnum*).

Common, or Guerder Rose (Sterilis)—The well-known sort, and a general favorite on account of its large clusters of white flowers in June. Very handsome and desirable, and should be in every collection.

Common Snowball.

Early White Lantana-Leaved (Lantanoides)—Large clusters of white flowers, succeeded by red fruit.

High, or Bush Cranberry (Opulus)—Red berries resembling cranberries; esteemed by many.

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

Japan Snowball.

Plum-Leaved (Prunifolium)—White flowers, in May.

Pear-Leaved (Pyrifolium)—Flowers white; the last of all to flower.

Rough-Leaved (Rugosum)—Very ornamental in foliage and fruit.

SPIRÆA.

Hardy and easily grown; of low growth, requiring but little room; long bloomers; in season about three months.

Arguta—Dwarf; flower clear white. Best very early flowering Spirea.

Anthony Waterer—A beautiful variety, with broad heads of deep pink flowers. Grows 2 to 3 feet high, making a shapely bush. Blooms almost continuously from June throughout the season.

Billardi—Rose-colored; flowers in spikes; blooms nearly all summer.

Callosa (Fortunei)—Very fine and distinct; having bright, rose-colored flowers, in flat clusters, blossoming throughout the summer.

Callosa Alba—A dwarf variety of the above, having pure white flowers in the greatest profusion. Very desirable on account of its dwarf habit and free flowering; keeps all summer.

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

Douglass (*Douglassii*)—Very handsome; having spikes of rose-colored flowers in July and August.

Golden, or Golden-Leaved Ninebark (*Aurea*)—This is one of the most effective shrubs for a lawn; foliage green, bordered with a rich golden yellow; very distinct and beautiful, particularly in June, when the branches are covered with a double white flower.

Spiræa, Lance-Leaved.

Lance-Leaved, Double (*Lanceolata flore pleno*)—A variety having double white flowers; distinct and desirable.

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

Thunberg's (*Thunbergii*)—Extremely neat and graceful in its habits; dwarfish and rounded; drooping branches; narrow, yellowish green foliage; white flowers, early in spring. One of the best and deserves a place everywhere.

Van Houtte—The grandest of all the *Spiræas*; it is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing. Clusters of twenty to thirty flat, white florets make up the raceme, and these clusters are set close along the drooping stems. Perfectly hardy, and an early bloomer.●

Spiræa Van Houtte.

STRAWBERRY, OR SPINDLE TREE.

(*Euonymus*).

American (*Americanus*)—This is a very beautiful small tree, or shrub, when covered with its red berries through the winter.

European (*Europæus*)—A well-known and favorite large bush; producing large quantities of showy, brilliant pods.

White-Fruited (*Fructu alba*)—Similar to the American, having white fruit; when planted with the American, it forms a pleasing contrast.

SYRINGA, OR MOCK ORANGE.

(*Philadelphus*).

The *Syringa* is an invaluable shrub. Of vigorous habit, very hardy, with large, handsome foliage, and beautiful white flowers, produced in the greatest profusion at the blossoming season. It merits a prominent place in all collections of shrubbery. Most of the varieties, except those of dwarf habit, form large-sized shrubs, 12 to 15 feet high. They can, of course, be kept smaller by pruning. The dwarf sorts do not yield many flowers, but are such pretty, compact plants as to be very useful where small shrubs are desired. All of the varie-

ties flower in June, after the Weigela. By planting the late-flowering sorts, the season may be considerably extended.

Double Flowering—(Flore Pleno)—Very fragrant.

Dwarf (Nanus)—Rarely produces flowers.

Garland (Coronarius)—Highly scented; one of the first to flower.

Syringa, or Mock Orange.

Golden-Leaved (Foliis aureis)—Keeps its color the entire season; very showy and pretty.

Philadelphus Speciosissimus.

Gordon's (Gordonianus)—Blooms late.

Large-Flowered (Grandiflorus)—A desirable sort.

Microphylla—A very pretty small shrub.

Var. Speciosissimus—Dwarf; flowers very large.

Zehry's (Zeyheri)—Flowers very late.

TAMARIX.

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

Africana—Flowers in May; very handsome foliage.

Chinensis—Rose-colored, flowers in Sep.

WEIGELA (Diervilla.)

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

Weigela.

Hortensis Nivea—Flowers pure white, retaining their color, and being clear enough for the choicest bouquets; foli-

age large; habit vigorous, and a profuse bloomer. Very distinct and desirable; 3 to 4 feet.

Hortensis Rubra—Flowers deep red when in bud, and rose-colored when in bloom.

Isoline—Flowers clear, mossy white when first open, changing to blush as they become older; foliage light green. Very desirable.

Rose Colored (Rosea)—A hardy and beautiful shrub, bearing in May a profusion of rose-colored flowers. Introduced from China, and justly considered one of the finest shrubs we have. 4 to 6 feet.

Variegated Leaved—Very desirable on account of its finely variegated foliage, which is yellowish white, and lasts the entire season, and contrasts finely with its rose-colored flowers.

White (Candida)—A valuable variety.

While the white varieties heretofore known have been lacking on some important point, this, we think, has every valuable quality. It is of vigorous habit, an erect grower, becoming in time a large sized shrub; flowers pure white, and produced in great profusion during June, and the plants continue to bloom through the summer and even until autumn.

Xanthoceras Sorbifolia (Chinese Chestnut)—A large growing shrub from Central China, foliage resembling that of the Service Tree or Mountain Ash. Flowers white, copper colored at base of petals, in racemes about 8 inches long; flowers expand in early spring with the leaves. Should be severely pruned when transplanted.

AMPELOPSIS VEITCHII (BOSTON OR JAPAN IVY).

CLIMBING AND TRAILING SHRUBS.

The Climbing Shrubs are useful to adorn and embellish the yard and grounds, and to hide whatever may be unsightly, and when trained over verandas, arbors and trellises they, or so many of them as can be well located, cannot fail to challenge admiration by the beauty of their flowers, and the elegance of their foliage. They are all desirable where space and time can be given to their culture.

AKEBIA.

Quinata—A charming Japanese climber with shining foliage and chocolate-colored flowers in June; very desirable; leaves remain on into the winter, something like Hall's Japan Honeysuckle.

ACTINIDIA.

Arguta—A climber from Japan, having white flowers with purple centre and handsome foliage. Fruit is edible and has a fine flavor. A most desirable climber.

Polygama (Silver Sweet Vine)—A hardy Japanese climber of remarkable beauty; foliage at end of flowering shoots is of silvery white color. Flowers, which appear in June, are creamy white with Lily-of-the-Valley fragrance. Growth rapid and vigorous.

AMPELOPSIS.

Dissecta—A variety having a finely cut leaves. Highly ornamental.

Virginia Creeper or American Ivy (Quinquefolia)—A native climber of vigorous growth with digitate leaves; fine green, changing to rich crimson in Autumn.

Veitchii, Boston or Japan Ivy (Veitchii)—A beautiful, hardy, climbing plant, of Japanese origin. One of the finest climbers for walls, covering it evenly with overlapping leaves, which form a perfect mass of foliage. Color a fresh deep green in Summer, changing to the brightest crimson and yellow in Autumn.

BIGNONIA, OR TRUMPET FLOWER.

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

BIRTHWORT, OR DUTCHMAN'S PIPE.

(*Aristolochia Sipho*).

A very rapid climber with large, dark green foliage, and curious, pipe-shaped, yellowish-brown flowers.

Chinese Matrimony Vine—See Matrimony Vine.

CINNAMON VINE, OR CHINESE YAM.

A fine, hardy climber, well known in some parts of the country as Chinese Yam. The tubers grow very large, and are edible, like a sweet potato. The vine is a beautiful, rapid grower, producing sweet-scented flowers.

CLEMATIS, OR VIRGIN'S BOWER.

We give much attention to this magnificent family of climbers, and keep in stock most of the leading and more ornamental sorts. Nothing can be more satisfactory than vigorous plants of these showy climbers, which are adapted to any situation, either on verandas, trellis, or as individual specimen pillar plants in the garden. Grown in the latter manner, they are seen at their best, their immense flowers covering the entire plant, and the bloom often being prolonged until late fall. Clematis need the richest soil which can be given them, and are benefited by heavy mulchings in summer and fall.

We have arranged the varieties now on hand in three classes; first, those that flower from shoots of the current year's growth; second, those that flower only on last year's wood; third, the Double-Flowering sorts.

PERPETUALS.

Summer and Autumn bloomers, flowering on shoots of the same year's growth.

Albert Victor—This is one of the early-flowering hybrids, having large flowers of a deep lavender, with a paler bar in the center of each sepal. The flowers are produced freely from the last of May to the first of July.

Alexandria—This is one of the continuous-blooming sorts of real merit; has a vigorous habit of growth, and in flower is remarkably showy and ornamental. The flowers are large and of a pale reddish violet color. July to October.

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

Clematis Paniculata.

Crispa—Very hardy and a free bloomer; flowers blue, with center of petals an opaque white; *very fragrant*; useful for festooning.

Duchess of Edinburgh—This is without doubt the best of the double pure whites. Deliciously scented.

Earl Beaconsfield—A rich, royal purple, splendid form. First-class certificate Royal Horticultural Society.

Flammula—An old and well-known variety, which is highly prized for the fragrance of its small white flowers and its remarkably dark-green leaves, which remain on the plant very late. A vigorous grower. July to October.

Henryii—New, and one of the best perpetual hybrids; of robust habit and a very free bloomer. The flowers are white, large and very showy. July to Oct.

Imperatrice Eugenie—This is one of the best, if not *the best*, white Clematis. The plant is vigorous and produces flowers profusely, which are of fine form, large and of a pure white. July to Oct.

Jackmanni—This is perhaps the best known of the newer fine perpetual Clematis, and should have credit of the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successional bloomer, producing flowers until frozen up. The flowers are large and of intense violet purple; remarkable for its velvety richness. July to Oct.

Jackmanni Alba—Similar to the Jackmanni in habits, etc., except that flowers are a pure white; a very attractive sort and a profuse bloomer.

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

Kermesina Splendida—A splendid variety of the utmost profusion of bloom; flowers of medium size and of bright wine-red color, without a touch of purple. A strong, free grower, producing shade in a comparatively short time; a perfect sheet of fine red color.

Louis Van Houtte—A strikingly showy variety, with bluish purple flowers. First-class certificate Royal Horticultural Society.

Lanuginosa Candida—A variety of the above, having large, delicately tinted grayish white flowers, which become white after the flowers are fully expanded. One of the best. July to Oct.

Lawsoniana—A hybrid variety; showy and free, with very large, beautiful rosy-purple flowers, which are produced profusely and in continuous succession. July to Oct.

Lucie Lemoine—New; flowers white, double, large, and well formed; composed of 75 to 90 petals; very showy. June.

Mme. Baron Veillard—A superb new Clematis of the Jackmanni type, but of a delicate lavender pink color. Very beautiful.

Mad. Ed. Andre—Plant a strong, vigorous grower and very free bloomer. Color a distinct crimson red.

Marie Lefebvre—A new vigorous growing variety, with large flowers of a pale silvery mauve, with a deeper mauve-colored bar. July to Oct.

Montana—Flowers white, with a dash of pink and tuft of straw-colored stamens. Sweet-scented. The branches literally become converted into floral garlands.

Paniculata (A new sweet-scented Japan Clematis)—A Japanese plant possessing unusually attractive merits. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance. These flowers appear in September, at a season when very few other vines are in bloom. The extreme rapidity of its growth, the showy foliage, beautiful and fragrant flowers borne so very freely, and its late blooming nature, united with an entire hardihood, serve to make this one of the very choicest of recent introductions.

Princess of Wales—A deep bluish-mauve with a satiny surface. An exceedingly fine Clematis.

Prince of Wales—This is one of the very profuse flowering varieties, of vigorous habit, showy and free. The flowers are of deep purple with a red bar in the center of each floral leaf. July to October.

Ramona—This magnificent new Clematis is an American seedling, and consequently extremely hardy. The Ramona is a strong, rampant grower, fully three times as strong as the Jackmanni, often growing ten or twelve feet the first season. It is a perpetual bloomer, giving an abundance of flowers through the season. In color it is a very deep sky-blue, distinct from any other kind, and very attractive. In size of flower it surpasses anything we have ever seen, many flowers being six and seven inches in diameter.

Rubella—One of the finest of the Jackmanni class, having the same habit of abundant and continuous blooming until frozen up. The flowers are large and of a deep, velvety claret color; showy and effective. June and October.

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

Virginiana—A very strong grower, having fragrant white flowers, followed by woolly tufts. Valuable for screens.

Viticella Rubra Grandiflora—Crimson, with green stamens. July to October.

HONEYSUCKLE (*Lonicera*).

This includes some of the most desirable climbing plants that can be used for covering arbors and porches.

Chinese Twining (*Japonica*)—A well-known vine, which holds its leaves nearly all winter. Blooms in July to September, and very sweet.

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

Hall's New Japan (*Halleana*)—An almost evergreen variety, with pure white flowers, changing to yellow; very fragrant; a constant bloomer.

Hall's Japan Honeysuckle.

and a vigorous grower. Covered with flowers from July to December. Best blooming of all.

Golden-Leaved (*Aurea reticulata*)—A Japanese variety; moderately strong grower, with leaves veined and spotted with bright golden yellow.

Monthly Fragrant (*Belgicum*)—Flowers red and pale yellow; sweet scented; blooms through the summer.

Scarlet Trumpet Monthly (*Sempervirens*)—Flowers deep red, trumpet-shaped flowers all summer; a native climber; and appropriate for trellises and rock-work. One of the handsomest.

IVY (*Hedera*.)

The evergreen sorts often suffer in winter if exposed to the sun, and should be planted on the north side of the building.

Broad-Leaved Variegated (*Latimaculata*)—Leaves large and distinctly variegated.

Canariensis, or Hiberica (*Irish*)—The well-known sort used in covering the north side of buildings; leaves deep green.

CHINESE MATRIMONY VINE.

MATRIMONY VINE (*Lycium*.)

Barbarum—A well-known and pretty fast-growing vine, used for covering screen

and ledges or any object, at short notice.

Chinese—A superb variety, far surpassing the variety above named, which has been a favorite for many years. It is a most vigorous, hardy climber in any position. It continues flowering and new berries are forming from late spring until frost. The berries remain on the vine until late into the winter. Beautiful and easy of culture.

WISTARIA SINENSIS.

WISTARIA.

Chinese Purple (*Sinensis*)—One of the most magnificent hardy climbers, producing racemes of pale purple flowers early in Spring and Autumn, and growing at the rate of fifteen or twenty feet in a season, attaining an immense size.

Chinese White (*Sinensis Alba*)—Introduced from China. A beautiful climber differing from the above only in color, being a pure white.

Soil and Planting—As soon as you have placed your order, attention should be turned to the soil in which you expect to plant. Roses require a rich soil, and while they will do well in any good garden mould, they will do much better if a liberal supply of manure is furnished. Spade up the ground to a depth of from twelve to twenty inches, mixing in some well rotted cow manure. Do not plant in a low spot where drainage is poor; but if you must do so, see that some broken bricks, crockery, cinders, etc., are put at the bottom of the bed to act as an underdrain. Roses on their own roots should be planted just as they stood in the nursery. There is usually a dark earth line to go by—set even with this. Budded or grafted roses must be set so that the junction of stock and graft is two inches below the surface of the soil. Keep the roots of your roses in water until you are ready to plant them, then dig a hole the required depth, set in the plant, spread out the roots naturally, fill it with fine soil, and press it down firmly with hand or foot, water well and shade for a day or two, if the weather is warm and sunny. The distance apart for your roses must be decided by their habit of growth. Strong growers will need a distance of three feet, weaker ones only one or two.

Pruning and Cultivation—At time of planting, all roses should be cut back more or less. After becoming established, pruning should be done in March. It is always best to cut out weak and decayed wood, and such shoots as crowd the plant or prevent light and air from gaining free access. Let what pruning you do be carefully done, and with a sharp knife or pruning shears. The more vigorous varieties may be pruned less than others. The old rule and the best one is, "for weak growing, delicate plants, severe pruning; for vigorous, strong ones, shorten the branches only a little, but thin them out well." To make Hybrid Perpetuals bloom twice in summer, give them a second pruning after their first bloom has fallen in June. Prune for shapeliness of plant and promotion of bloom buds, instead of slashing recklessly among them. Stir the soil frequently about the roots of your roses, and do not plant annuals among them. They must have all the nourishment for themselves if you want them to do their best. Do not let them blossom too much

the first year. Let them gather strength into root and stem for next summer, when they will make a grander display.

Protection—Mulch your rose bed heavily with manure in autumn, and for winter protection cover with evergreen boughs. We prefer to stack these about tall roses rather than bend them down. Small ones may be laid over. In hot summer weather give them a light mulch of strawy manure to keep the soil from drying out too rapidly. The rains will wash its nutriment down to the roots.

Hardy Roses include Hybrid Perpetuals, Remontants, which usually bloom profusely during June, and occasionally through the summer and autumn; Austrian, those varieties of yellow roses which bloom but once in a season, and all other kinds which live out of doors without protection through the winter. These are all suited for the garden, and thrive the best in the open air. None of them require winter protection.

The Tender Roses include Teas, Bourbons, Bengals or Chinas, Noisettes, and all of those sorts which are suited for either the open ground or house culture, not named among the Hardy class. They are all tender and must be removed to the house during the winter, although the Hybrid Teas can be left in the ground if they are protected by a covering of straw, leaves, evergreen boughs, or something of that kind. They do well in the garden during the summer, and if planted in good soil, most of the varieties will bloom continually.

Climbing Roses are all hardy, and should be planted out of doors. They bloom profusely in June, and some varieties show an occasional blossom during the summer and fall. They are valuable for covering trellises, porches, rocks, etc.

Moss Roses are extremely hardy; most of them are very fragrant; they are excellent June bloomers, and some varieties bloom occasionally during the summer and autumn. The distinctive feature of the class is the "mossy" covering of the green outer leaves of the bud, which gives them an exquisite beauty to be found in no other rose.

Polyantha Roses—A class of roses of much value for bedding purposes, as they form a mass of bloom. They are of a dwarf habit, and are continuously in flower during the entire season. The flowers are produced in numerous clusters, the single ones being about one and a half inches across. The clusters produce from twenty-five to one hundred flowers. The Polyantha Roses are hardy with slight protection. They are especially valuable for planting on the borders of beds of taller growing kinds, or on the edge of foliage beds, as they are constantly in bloom, and rarely attain a height of more than ten or twelve inches. They are also very useful in cemeteries where they at once command close attention.

Rosa Rugosa—A Japanese species, undoubtedly one of the handsomest hardy shrubs in cultivation. It forms a sturdy bush four to five feet high, covered with large, dark green pinnate, glossy foliage, crowned with terminal clusters of ten to twenty flowers, three inches in diameter. It is now well known. Both its rosy crimson and white varieties are found in all good collections and its *large, handsome scarlet fruit*, is most showy during the autumn months. Excellent for cemeteries. Very hardy.

Pruning Hybrid Perpetual and Moss Roses—These bloom best on strong, new wood, and should be cut back severely (say one-half of the last season's growth) in the Spring, before growth has commenced. As these roses are hardy, and remain from year to year, they will gradually attain considerable size and the pruning should be done in a way to keep the plant well balanced and in good shape. Liberal manuring and thorough cultivation add much to the beauty and profusion of bloom of these roses.

INSECTS.

GUARANTEED REMEDIES.

Roses which are strong and vigorous are not likely to be attacked by insects, or, if attacked, are not easily injured. It is highly important, therefore, to keep your plants healthy and in good growing condition by liberal manuring and thorough cultivation. When insects appear, apply the proper remedies promptly and vigorously, and in bad attacks stir the ground deeply with the hoe and rake every day. A little perseverance to resist the present attack is all that is needed; next year you may not be troubled with insects at all. We find that a strong stream of water from a hose applied once a day, either morning or night, will keep our roses free from insects. Where this is impossible, we would suggest the following remedies, which we will guarantee to keep your roses free of any insects, if properly applied and followed up. It is not an experimental remedy, but one that from many years' experience we find is an absolute insect destroyer. It is very inexpensive and can be procured at any drug store. Remember we guarantee these remedies.

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

The Rose Bug and other kindred pests are most effectually vanquished by a Kerosene Emulsion, made as follows: Dissolve $\frac{1}{4}$ pound Hard Soap in two quarts of boiling water, then add 1 pint of Kerosene Oil, and stir violently for from three to five minutes, until the ingredients are thoroughly mixed; then dilute to twice its bulk with water, and apply with a spraying syringe, or sprinkle it on the plants with a small whisk broom, and repeat as often as necessary.

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

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

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

Mildew is best cured by sulphur and soot. One of these should be applied the moment the disease appears. It is a good plan to previously sprinkle the plants with water, so that the substance applied will adhere.

HYBRID PERPETUAL AND REMONTANT ROSES.

Alfred Colomb—Bright carmine-crimson; very large, full, fine globular form.

American Beauty—This variety has been rightly described an ever-blooming hybrid perpetual. Very large, beautiful form and very double; deep pink shaded with carmine. The fragrance is delightful, resembling *La France* or the old-fashioned *Damask*.

Anne de Diesbach—Bright rose color; very large and showy; particularly fine in bud; flower slightly cupped. A vigorous grower; one of the best.

Baron de Bonstetten—Flowers large; very double and full; rich dark red, passing to deep velvety maroon; highly scented.

Baronne Prevost—Brilliant rose; large and full; a vigorous grower and free bloomer. Fragrant.

Baroness Rothschild—A beautiful, clear pale rose, shaded with white; large and double; this does best budded.

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

Caprice—A strong-growing variety, with petals beautifully striped pink and white; a decided novelty.

Caroline de Sansal—Pale flesh color, turning to blush; large and full; vigorous grower; justly a popular rose; very fine.

Charles Lefebvre—Reddish-crimson; very velvety and rich; large, full and beautifully formed; a splendid sort.

Charles Margottin—Rosy-crimson; flowers large, double and well formed; fragrant; good grower.

Clemence Raoux—Color deep rosy-pink; flowers large, very double and lasting; a good, sturdy grower.

Clio—Large, fine globular form; flesh color, shaded with rosy-pink in the center. Vigorous growth; handsome foliage. One of the finest.

Comtesse de Serenye—Beautiful, large, flesh-colored; reverse of petals salmon-rose; a free bloomer; full and sweet.

Countess of Oxford—A superb rose; extra large flowers; full, perfect form; exceedingly sweet; color bright carmine-red; elegantly shaded.

Dinsmore—A true perpetual, flowering very freely the whole season; flowers large and very double; color deep crimson. Dwarf, bushy habit, every shoot producing a bud.

Duke of Albany—Dark crimson; very full and large; a free bloomer.

Duke of Edinburgh—Brilliant scarlet-crimson, shaded maroon; very fine.

Earl of Dufferin—Fine velvety crimson, beautifully shaded with dark rich maroon; very large, full and fragrant; hardy and free.

Fisher Holmes—Shaded crimson-scarlet; large, globular, with pointed center; vigorous and free-flowering. Resembles *General Jacqueminot*, but fuller, darker and a more constant bloomer.

Francois Levet—A splendid rose; flowering freely; full; fresh cherry-red; large.

Francois Michelin—Deep carmine; large, full and globular form; a free bloomer and fragrant.

GENERAL JACQUEMINOT.

General Jacqueminot—Bright, shining crimson; rich and velvety; exceedingly brilliant and handsome; makes magnificent buds, and is highly esteemed as one of the best and most desirable for open ground and forcing.

General Washington—One of the best hardy perpetuals for general planting; bright shining crimson; rich and beautiful; large and perfectly double; blooms first season and constantly.

Giant of Battles—Very deep brilliant crimson center; dwarf habit; free bloomer.

Gloire de Margottin—Rich, dazzling crimson; makes beautiful, long pointed buds; flowers, when open, large and of good shape; a vigorous grower and remarkably free-flowering.

Helen Gould—Large, beautiful, rosy-crimson, with long pointed buds. It will live through the most severe winters without protection and entirely free from insects. A most constant and profuse bloomer.

Her Majesty—Originated in England and named in honor of the Queen; it is one of the largest and most beautiful hybrid perpetual roses ever grown; large and perfectly double; a lovely pink.

Jean Liabaud—Flowers large, full and fragrant and of the most intense dark, rich, velvety crimson imaginable.

John Hopper—Flowers large, regular and full; color brilliant rose; very sweet.

John Keynes—Brilliant red, shaded with velvety crimson; magnificent buds; a variety that is very satisfactory to all lovers of roses; good grower; hardy.

Jubilee—A true hybrid perpetual, perfectly hardy, blooming in fall as well as in early summer; bush vigorous; foliage dark green; an abundant bloomer; very large, reaching six inches across under high culture; color purest and deepest red, shading to deep crimson and velvety maroon.

Jules Margottin—Bright cherry-red; large, well formed; fragrant flowers.

La Reine—Bright rosy-pink; very large, double and sweet.

Louis Van Houtte—Rich crimson, heavily shaded with maroon; a beautifully formed double flower.

Mabel Morrison—A sport from *Baroness Rothschild*. Flesh white, changing to pure white; in the autumn tinged with rose; double, cup-shaped flowers, freely produced.

Madame Charles Wood—Flowers large; dazzling crimson; a constant bloomer.

Madame Gabriel Luizet—A beautiful and distinct shade of silvery-pink; large, fine form and fragrant; vigorous grower and free bloomer. As an exhibition rose it is unsurpassed.

Madame Plantier—Above medium size; produced in great abundance early in the season. One of the best hardy white roses.

Magna Charta—A splendid sort; bright clear pink, flushed with violet-crimson; very sweet; flower extra large; fine form; very double and full; a free bloomer.

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

Marchioness of Lorne—Large; of an exceedingly rich and fulgent rose color, slightly shaded in center with vivid carmine; sweet, full, finely cup-shaped; petals large; long-pointed buds.

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

Marshall P. Wilder—Bright cherry-carmine; very fragrant and one of the finest bloomers.

Mrs. John Laing—This we consider one of the finest roses that has been sent out in years. It is very free-flowering, commencing to bloom early in the season and continues to bloom profusely until late autumn. Color a soft delicate pink, with a satin tinge; very fragrant.

MARSHALL P. WILDER.

NIPHETOS.

Mrs. R. G. Sharman Crawford—Deep rosy-pink, shaded with pale flesh; flowering from early summer till late fall. Very valuable.

Paul Neyron—Flowers immense; one of the largest roses grown; deep shining rose, fresh and pretty. Strong grower and remarkably free bloomer.

Perle des Blanches—Pure white; medium size, good full form; very double and fragrant.

Pierre Notting—Deep maroon, illuminated with crimson; velvety; very large and full; one of the finest dark roses.

Pius IX.—Deep rose, tinted with crimson; vigorous grower and profuse bloomer. One of the best and most desirable.

Prince Camille de Rohan—Deep velvety crimson; large; moderately full.

Silver Queen—Silvery blush, shaded in the center with delicate rosy pink; large, full, beautifully cupped and produced in great abundance; very distinct.

Soleil d'Or, or Golden Sun—This magnificent new rose is perfectly hardy, making plants three feet high; full and globular, measuring three and one-half

inches across and delightfully fragrant; color superb, varying from gold and orange-yellow to reddish-gold shaded with nasturtium-red. Buds pointed and beautifully formed. A grand rose, destined to be immensely popular.

Ulrich Brunner—Large, full, with exceedingly large, shell-shaped petals. Cherry. One of the best varieties for forcing and open air culture.

Victor Verdier—Rose with carmine center; good size; free grower; very beautiful.

AUSTRIAN ROSES.

This class flowers on extreme ends of wood of previous season's growth; very little pruning is therefore required.

Harrison's Yellow—Double; bright yellow; very showy and fine.

Persian Yellow—Deep, bright yellow; small but handsome; double; a very early bloomer, and much the finest hardy yellow rose. This does best when budded.

TEA ROSES.

Agrippina—Rich velvety crimson. Beautiful buds. A fine bedding variety and one of the best for pot culture. Almost constant bloomer.

Bon Silene—Valuable for summer or winter blooming. Buds of beautiful form; free bloomer; deep rose, shaded with carmine.

Bridesmaid—An exquisite rose both in bud and open flower; bright clear pink, large and very double; stem long and stiff; foliage handsome and glossy. Excellent for summer and winter flowering.

Catherine Mermet—One of the finest roses grown. The buds are very large and globular, petals being recurved and showing to advantage the lovely bright pink of the center, shading into light creamy pink, like La France in its silvery shading. A strong grower and fine bloomer.

Devoniensis—On account of its whiteness and sweetness often called the Magnolia Rose. Creamy white, delicately flushed in the center with pink.

Duchesse de Brabant—Few roses equal this in freedom of flowering; none surpass it in either fragrance or vigor; rather loose when open, but are rich and peculiarly colored; color rose, heavily shaded with amber and salmon.

Etoile de Lyon—One of the finest yellow bedding roses, and one of the hardiest in the Tea section. Flower very large and double and deliciously fragrant; chrome yellow, deepening in center to pure golden yellow.

Niphetos—Snowy white; long, pointed buds; no use for outdoor planting, but for winter forcing the best, as no rose blooms freer and finer under glass. Remains in the bud state a long time.

Papa Gontier—A magnificent red Tea. Strong grower, with fine healthy foliage; buds large and long, with thick, broad petals of dark carmine-crimson, changing to a lighter shade in the open flower. Excellent winter-blooming variety; one of the best for outdoor planting, opening up its flowers beautifully.

Perle des Jardins—Beautiful straw color, sometimes canary; large, full, fine form; stiff shoots or stems; free flowering.

Safrano—Saffron, shaded with rose. One of the oldest varieties and in the bud state scarcely to be excelled.

Sombreuil—Large, finely-formed flowers; white, tinted with delicate rose; blooms in clusters.

Sunrise—Buds long and pointed, tinted with scarlet and yellow; flowers dark peachy-red, shaded with orange and crimson.

Sunset—Saffron and orange; very double and handsome; beautiful rich foliage; one of the best roses of recent introduction; excellent for forcing.

The Bride—Pure white and large size. Admirable for forcing and summer flowering. The buds have more substance than Niphetos, are full and double and possess the good characteristics of Catherine Mermet.

HYBRID TEA ROSES.

A beautiful class of half-hardy roses, combining the free-flowering qualities of the Tea class with the rich coloring and, to some extent, the hardiness of Hybrid Perpetuals. Though not as hardy as the Hybrid Perpetuals, they are much harder than the Teas, and will stand out during the winter wherever the Bourbon will, and where the Tea would be killed to the ground.

Augustine Guinoisseau (White La France)
—White, slightly tinted with flesh.

Baldun—Glowing carmine; continuous bloomer; delightfully fragrant.

Belle Siebrecht—Cross between La France and Lady Mary Fitzwilliams. Flowers large, forming a beautiful bud. Color deep rich pink; fragrant.

Captain Christy—Delicate flesh color, shaded rose in the center; large, finely formed.

Duchess of Albany, or Red La France—This variety is a sport from La France, deeper in color, more expanded in form and larger in size. Large and full, highly perfumed, and of first quality in every respect. Flowers are produced in extraordinary profusion.

Gruss an Teplitz—Large, rich scarlet, shading to velvety crimson; fragrant, and flowers in great abundance all summer. Valuable for bedding.

La France—Delicate silvery rose, shaded with cerise pink, often silvery pink with peach shading. Very large, double and superb form. Flowers continuously throughout the season. None can surpass the delicacy of its coloring; in fragrance, incomparable; in form perfect. Sweetest and most useful of all roses.

Liberty—A grand new rose, surpassing Meteor in brilliancy and purity of color. A free bloomer and retains its brilliancy of coloring a remarkably long time after being cut. Resembles Jacqueminot in size and fragrance. (See cut, page 86)

Meteor—A rich, dark, velvety crimson, ever-blooming rose, as fine in color as the best of the hybrid perpetuals; good size, very double, perfect in shape, either as buds or when fully opened; the plant is vigorous and remarkably free-flowering. A splendid sort for pot culture, and the best of all the hybrid teas as a bedding variety for summer cut flowers, as it retains its color well, even in the hottest weather.

Souv. du President Carnot—Large and full, bud long; rosy flesh, shaded white at the edges of the petals; form perfect. Growth vigorous; very free flowering; a valuable variety.

Souv. de Wootton—A beautiful shade of rosy-crimson; delightfully fragrant; a constant and most prolific bloomer, every new shoot being crowned with one or more buds. One of the most satisfactory roses for either the amateur or commercial florist to grow.

William Francis Bennett—Rich glowing crimson. Very fragrant.

BOURBON ROSES.

Hermosa—Always in bloom and always beautiful. Flower cupped, finely formed and full; the most pleasing shade of pink; very fragrant.

Mrs. Degraw—A fine ever-blooming, hardy garden rose; strong, vigorous growth; medium size; rich glossy pink; fragrant.

Souvenir de la Malmaison—Extremely large and double. Color flesh-white,

LIBERTY.

clear and fresh. Has been considered the finest Bourbon rose for many years. Its great beauty in the fall makes it the finest of all roses at that season. Universally popular.

HYBRID NOISETTE ROSES.

This group is obtained by crossing Noisette with the hardy sorts. They generally flower in clusters and bloom freely throughout the season, and are of about the same hardiness as the Bourbons and Hybrid Teas.

Coquette des Alps—One of the finest pure white hybrid perpetuals; large, full; finely formed; pure white, sometimes faintly tinged with pale blush; profuse bloomer; very hardy and beautiful.

Coquette des Blanchés (sometimes called **BALL OF SNOW**)—Pure snowy white, sometimes faintly tinged with pale rose; blooms in large clusters; medium size; full; blooms the first year and all through the season.

Madame Alfred Carrier—Flesh white with salmon yellow at base of petals. One of the best pillar roses.

NOISETTE ROSES.

Caroline Marniesse—Pure white; medium size; double; tea fragrance; a constant bloomer.

Cloth of Gold (*Chromatella*)—Rich, deep yellow; large, double, fragrant, and a vigorous grower.

Gloire de Dijon—Noted for its large-sized flower, its delicate tea scent, and its exquisite shades of color, being a blending of amber, carmine and cream.

Marechal Niel—A beautiful deep yellow; large and globular; fragrant; free flowering; one of the finest yellow tea-scented roses; a good climber.

Solfaterre—Bright sulphur yellow; large and globular.

CLIMBING ROSES.

Baltimore Belle—Pale blush, nearly white; very double. Flowers in large clusters, the whole plant appearing a perfect mass of bloom.

Carmine Pillar Rose—A valuable and sterling variety, quite hardy, and with qualities equal to *Crimson Rambler*. The single flowers are very large, brilliant, rosy-carmine, and produced so abundantly that shoots ten feet long are covered with them. The flowers open for a long time in succession.

Climbing Clothilde Soupert—This is considered one of the finest of the Hardy Climbing Everblooming Roses, and is unequaled for quick and abundant bloom and healthy vigorous growth.

Flowers are 2½ to 3 inches across and perfectly double. Color rich creamy-white, sometimes tinted with blush, and borne in the greatest profusion from June to November.

Climbing Jules Margottin—Carmine rose; fine in open flower and in bud; the best of all climbers. It may be grown as a pillar rose, or by pruning, kept in bush form; it should be in every collection.

Climbing La France—Of vigorous habit, and all the beauty of its parent, La France, is claimed for it.

Climbing Victor Verdier—Resembles Victor Verdier, of which it is a seedling, but having a decided climbing habit. Bright rose with carmine center.

Crimson Rambler—This is the most decided novelty in roses we have had in years. Introduced from Japan in 1893, it has been a source of wonder and admiration wherever exhibited. The plant is a vigorous grower, making shoots from eight to ten feet long in a season. The flowers are grown in great pyramidal panicles, each carrying thirty to forty blooms; the individual flowers are one to one and one-half inches in diameter, and remain in perfect condition a long time. Bright, vivid crimson, showing none of the purplish tint so common in crimson roses.

Cumberland Belle (New Climbing Moss)—A grand true Climbing Moss. A sport from Princess Adelaide—the original plant in one season having attained a height of over fifteen feet, and had on it one hundred and eighteen buds and flowers at one time. Planted side by side with Crimson Rambler, it fully equaled it in vigor of growth. Bright silvery rose, very double, nicely mossed and exquisitely fragrant.

Dawson—A new hybrid. This most interesting and novel rose is a cross between Rosa Multiflora and the well-known General Jacqueminot. As an open-air rose it is especially desirable; blossoms are a deep pink color, quite full, moderate in size, very fragrant. It is a vigorous climber, and as many as sixty flowers are developed in a single panicle.

Dorothy Perkins—A most beautiful new shell-pink Rose, having the same strong habit of growth as the Crimson Rambler. Very double, sweetly scented; absolutely hardy.

Empress of China—The only strictly perpetual blooming climber now known. Extremely hardy; blooms early in the spring, and continues until the ground

freezes solid. Very fragrant; beautiful form; especially valuable for button-hole bouquets. Deep red in the bud, changing to pink and red, like an apple bloom. Nearly double.

Gem of the Prairies—Flowers large and double; light crimson, sometimes blotched with white.

Helene—A seedling of Crimson Rambler; delicate violet-red; large, single; from thirty to fifty on a single truss.

May Queen—A new rose of a decided climbing habit. Flowers three to four inches in diameter, double and full; delicate blush or shell pink, deepest in center, changing to pure white with flushed center. Delicately scented after manner of the Banksii rose and quite as fragrant as La France. Buds perfect. A rank grower, most profuse bloomer, and a perfect gem among roses.

Mary Washington—New, perpetual blooming, hardy, climbing rose. Long, pointed buds; blooms from early spring until late autumn; of unsurpassed fragrance.

Philadelphia—Blooms in clusters. Flowers two to two and one-half inches across, perfectly double to the center; excellent substance and very durable. Color, pure deep rich crimson, far brighter and more intense than any other rose of its class. Does not fade or wash out, but holds its bright dazzling color to the last. Has handsome foliage, does not mildew, and is an early and abundant bloomer. Undoubtedly the brightest and best of all hardy crimson climbing roses to date.

Queen of the Prairies—Bright rosy red; large, compact and globular flowers; blooms in clusters; one of the best.

Ramblers—PINK, WHITE and YELLOW. These are similar to the Crimson Rambler, except not quite as rampant growers, nor quite as hardy, but make very desirable companions.

Reine Marie Henriette—Large, full, fine form; beautiful cherry-red, with a shade of violet; somewhat flat and highly scented. An extra climber.

Ruby Queen—Originated at the trial grounds of the Rural New Yorker. A strong grower of pronounced climbing habit, producing a profusion of clusters of bright crimson flowers, quite double, three inches across and opening out flat and perfect. Center clear white, producing a pleasing contrast.

Seven Sisters (Greville)—Crimson, changing to white.

MOSS ROSES.

Blanche Moreau—Pure white, large, full and perfect form; one of the best.

Blanch Robert—White.

Captain Ingram—Brilliant carmine; very bright and attractive; medium-size flowers, nicely mossed; good bloomer.

Comtesse de Murinais—Pure white; large; very desirable; the finest white moss.

Crested—Deep pink buds, surrounded with mossy fringe and crest. Very beautiful and fragrant; growth slender; does best when budded.

Glory of Mosses—A moderate grower. Flowers very large; pale rose.

Gracilis—Deep pink buds, surrounded with delicate fringe-like moss. The most beautiful of all the Moss Roses.

Luxembourg—Deep crimson; fine grower.

Princess Adelaide—Vigorous grower; pale rose; medium size, good form; good in bud and flower. One of the best.

Salet—Light rose; large, full. The best of the class; blooming at intervals from June until November.

White Bath—White, sometimes tinged flesh; attractive in bud and open flower. The finest white moss.

Wm. Lobb—Large; double red.

POLYANTHA, OR FAIRY ROSES.

Cecile Brunner—Larger flowers than most of the others; perfectly double; delightfully fragrant; rosy-pink, on rich creamy-white ground; a great bloomer; satisfactory for bedding.

Clothilde Soupert (the new Tea Polyantha)—This lovely rose comes from the Garden of Luxembourg, France. It belongs to the polyantha class, but resembles the tea roses so closely that it is called a tea polyantha, and is undoubtedly the finest rose of its class. The flowers are borne in clusters, and are of large size, round, flat form, with beautifully imbricated petals; perfectly full and double and deliciously sweet; color beautiful pinkish-amber or pale creamy-yellow, delicately flushed with silvery-rose, sometimes ivory-white, exquisitely tinted with pale salmon, and sometimes both red and white flowers are produced on the same plant. Recommended for bedding in open ground and also for window and house culture; moderately hardy if given a good covering of leaves and litter before winter begins.

Etoile d'Or—This elegant rose is a great acquisition; full, round flowers, perfectly double, borne in large clusters; pale chrome yellow, with rich citron-red center; blooms quickly and profusely.

Little Gem—A very charming fairy rose; flowers of perfect form, very double and full; pure creamy-white, sometimes delicately tinged with salmon-rose.

Mignonette—A splendid variety; one of the very best; full regular flowers; perfectly double and deliciously perfumed; color clear pink, passing to white, tinged with pale rose.

RUGOSA ROSES.

Alba—A splendid white variety; highly scented.

Carman—A hybrid obtained by crossing the Pink Rugosa with Harrison's Yellow. Flowers the color of Gen. Jacqueminot and bloom in clusters, continuing nearly all summer. A strong grower, handsome foliage; hardy.

Rubra—Bright rosy-crimson; flowers succeeded by red berries; a very handsome shrub.

Madame Georges Bruant—This novel variety is the result of crossing Rosa Rugosa and tea rose Sombreuil. Flowers in clusters, semi-double; buds long and pointed, similar to Niphetos in shape; pure white; remarkably free flowering; hardy where the thermometer does not go below zero.

LORD PENZANCE HYBRID SWEETBRIER ROSES.

These hybrids result from a cross between the fragrant Sweetbrier and various old-fashioned roses, and have attracted great attention in England, where they originated. They should be grown in every garden. Their foliage retains all the delicious scent of the Eglantine, and the single and semi-double flowers are produced in wonderful profusion, varying in color from pale yellow and terra-cotta to crimson. These are followed by bright scarlet seed pods, which are very ornamental until quite late in autumn.

WICHURIANA, OR MEMORIAL ROSE.

Will creep over the ground like an Ivy, or can be trained up to a post or trellis. Hardy as grass, and will grow in sun or shade, poor ground or rich. Needs no protection, will take care of itself and bloom profusely every season, without

attention. The flowers are single and very large, frequently five or six inches around, pure satiny-white, with bright golden center. They are borne in large clusters, covering the bush with a sheet of snowy blossoms during the early summer months.

HYBRID WICHURIANA ROSES.

Manda's Triumph—The flowers are medium-sized, perfectly double to the center, pure white and very fragrant. The plant is an erect grower, has handsome dark green foliage, is entirely hardy, and bears its lovely flowers in large clusters.

Pink Roamer—The flowers are single and from two to three inches in diameter; rich pink, with silver-white center and orange-red stamens; exceedingly fragrant and picturesque.

South Orange Perfection—Belongs to the same class as the above; blooms freely in clusters. Color, rosy-blush, changing to white; the flowers are perfect rosettes in form.

Universal Favorite—Same as the double white, except in color, which is clear, bright pink, and equally as beautiful as the double white.

WICHURIANA HYBRIDS—CLIMBERS.

Edwin Lonsdale—A strong grower and profuse bloomer. Flowers two to three inches in diameter, quite double, pale lemon-yellow, with a delicate tea fragrance. Makes a charming bud.

John Burton—A strong grower with small but pretty foliage. Flower medium in size, of a delicate pink color, similar to La France. Remains perfect for a long time; possesses a pleasing fragrance.

Prof. C. S. Sargent—In this new rose has been secured what florists have long desired, a perfectly hardy climbing yellow rose. It is a very strong grower, having deep green shining foliage, branches and young shoots deep red or mahogany colored. Very rich deep golden-yellow in bud; open flower, very double, two and a half inches in diameter; delicate buff shading to deeper tone at center.

Robert Craig—One of the most beautiful and desirable grown. An extra strong grower with rich glossy deep green foliage. Bud extremely pretty and similar to a tea rose, of a yellowish or light apricot tint; open flower, very full, double and perfect. 2½ inches in diameter; yellow, shaded with apricot, deepening to the center.

Wm. F. Dreer—Very distinct and beautiful; strong grower, with rather small foliage; blooms freely in clusters. Buds creamy white, bordered with bright rosy-pink; open flowers pure white, double; two and one-half inches in diameter and exceedingly fragrant.

Wm. K. Harris—Has a peculiar and most charming fragrance; a vigorous grower. Flowers pale flesh, double to the center; about two inches in diameter, blooming freely in clusters.

TREE ROSES.

These beautiful novelties are without question the most pleasing and beautiful of anything ever offered in the rose line. There is nothing in the history of horticulture that is more beautiful than the Tree Rose.

The Tree Rose is grown by budding strong growing varieties of the best H. P. roses on what is known as cinnamon stock, or Dutch Dog roses. They are budded from three and a half to four feet from the ground, thus forming a beautiful small tree. With proper care, pruning and cultivation, they succeed well. We know of nothing in the entire catalogue that will attract more attention than the Tree Rose.

In addition to the Crimson Rambler, we offer them in pink, red, white and yellow.

MISCELLANEOUS ROSES.

Baby Rambler—This interesting novelty originated in France and is as popular as the well known Crimson Rambler. Foliage deep glossy green. Flowers brilliant ruby rose; produced in clusters and is a constant bloomer from early summer until frost; also valuable for pot culture, blooming continuously in the house all winter. 24 to 30 inches.

Pink Baby Rambler—Same as above, except blooms are pink.

Lady Gay—A handsome hardy climbing rose, very similar to Dorothy Perkins, but of deeper color, being brilliant cherry pink. A strong grower and perfectly hardy.

Lady Helen Stewart—Bright crimson-scarlet; large, full, long stiff stems; highly perfumed; valuable; hardy.

Multiflora—Rapid and vigorous growth, forming a round, drooping shrub. Its blossoms are produced in immense quantities, single, pure white, and followed by great numbers of scarlet hips.

York and Lancaster—A much sought for semi-double rose, striped with white. A most beautiful and unique rose.

MISCELLANEOUS.

HARDY HERBACEOUS PLANTS, INCLUDING BULBS, ETC.

For Either Spring or Fall Planting.

We offer a fine assortment of the best varieties of these useful plants, which are exceedingly valuable on account of their hardiness, easy culture and showy appearance. Most of these will live all winter in the open ground and bloom freely every year. The leading varieties for this purpose follow:

Anemone—Double and single white, pink and scarlet; single the most brilliant. Plant five inches apart and cover three inches deep. They flower after the Hyacinths and continue a long time in bloom. Excellent as cemetery plants or for borders.

QUEEN CHARLOTTE—We consider this the greatest acquisition in this class of plants for many years. The flowers, which are semi-double, frequently measure four inches across and are of a very pleasing shade of pink. The plant is of strong, robust growth, much more vigorous than any of the old varieties and commences to flower at least four weeks earlier than these.

WHIRLWIND—A distinct and beautiful species, with flowers two and one-half inches in diameter, borne on stems ten to twelve inches long. Blooms profusely from September until frost. Habit neat and compact. Effective as a pot plant or for borders or in masses and very desirable for cut flowers.

Arundinaria (Ribbon Grass)—One of the prettiest hardy grasses, with handsomely striped foliage.

Arundo (Reed)—Invaluable for creating tropical effects in a garden. Foliage both plain and striped.

Asters—Tall perennials, blooming in the fall when flowers are scarce. Flowers white, light blue, blue, azure, lilac, red, purple and variegated.

Astilbe (*SPIREA JAPONICA*)—A handsome plant, with small, pure white flowers in large, branching panicles. Blooms in May in the ground, but is used largely as a pot plant to bloom in the house in winter.

GRANDIFLORA—An improved variety of the foregoing.

Boltonia (False Chamomile) (*ASTEROIDES*)—One of the finest late-flowering perennials; aster-like white flowers.

LATISQUAME—Flowers clear, lavender-lilac; most beautiful.

Campanula (Bellflower)—An elegant genus of plants, rich in color, profuse in bloom and of easy culture.

Candytuft, Perennial (*Iberis*)—Profusely blooming evergreen shrubby plants, of dwarf habit, well suited for rockeries, stumps, edgings, etc.

Centranthus (Valerian)—Very showy, free-flowering perennials, with flowers in handsome, corymbose panicles.

Daisy (*MARGUERITES*, or *PARIS DAISIES*)—Fine, hardy perennials, thriving in open ground, blooming profusely and continuing over a long period. Blue, white and yellow.

SHASTA—One of the most marvelous productions in the flower line that has ever been brought to the notice of floriculturists. It is the first of a new type, which has been obtained by hybridization and rigid selection through a series of years. Its first qualification is extreme hardiness. Second, it is perennial, blooming better and more abundantly each season. Third, it can be multiplied rapidly by simple division and it is not particular as to soil. Fourth, it blooms for several months. Fifth, the flowers are extremely large and graceful, averaging about four inches in diameter, with petals of the purest glistening whiteness, and are borne on single, long, stiff, wiry stems. Sixth, the blooms when cut remain perfectly fresh and in good condition for two weeks or more. No other flower can compare with it in usefulness.

Daisy—SWAN RIVER—Beautiful dwarf plants flowering all summer. Suitable for edging or pot culture.

Columbine (*Aquilegia*)—Interesting and beautiful flowering plants in white, yellow, blue, crimson and variegated.

Dicentra Spectabilis, or **Dielytra** (Bleeding Heart)—A beautiful, hardy border plant, with brilliant, rosy heart-shaped flowers, hanging in great profusion from a gracefully curved stem. May and June.

Erianthus Ravenna—Resembles the Pampas Grass, but blooms more abundantly. Attains a height of from nine to twelve feet and is perfectly hardy.

Eulalia (JAPONICA)—A hardy perennial from Japan, with long, narrow leaves striped with green and white, throwing up stalks four to six feet high, terminating with a cluster of flower spikes, on which the individual flowers are arranged; the flowers are surrounded with long, silky threads, which when fully ripe, or when placed in a warm room, expand, giving the whole head a most graceful and beautiful appearance, not unlike that of an ostrich feather curled.

JAPONICA ZEBRINA—One of the most striking and distinct plants in cultivation.

Funkia (Plantain Lily)—An interesting and beautiful genus, with luxuriant foliage, both plain and variegated, and handsome lily-like flowers, ranging in color from light blue to light purple.

Gaillardia (Blanket Flower)—Very ornamental hardy plants, bearing freely yellow or purple flowers two inches across. A fine border plant.

Golden Glow, or **Summer Chrysanthemum** (*Rudbeckia laciniata* fl. pl.)—A large, showy plant, attaining a height of six to eight feet and bearing a profusion of very double, deep golden-yellow flowers three and one-half inches in diameter, on long graceful stems, from July till September. One of the finest novelties in hardy flowering plants.

Helenium (Superba)—A grand, hardy, perennial plant, throwing up increasing numbers of shoots from year to year, six to eight feet, which in late summer and early autumn are covered with immense panicles of brilliant yellow blooms; exceedingly beautiful and attractive.

Hemerocallis (Day Lily)—Fine, tall growing plants, with large, lily-shaped, sweet-scented yellow or orange-colored flowers. Foliage both plain and variegated.

Hibiscus (Mallow)—Magnificent hardy decorative plants with immense, snowy white or rose-colored blossoms, four to six inches across, of which the most popular is "Crimson Eye," being pure satiny white, with rich, velvety crimson center. (See cut, page 63.)

Hollyhock—There are very few plants in the world so grand and yet so perfect and delicate as the Hollyhock. Its flowers are quite as double and almost as pure and perfect as those of the Camellia, and when we remember that they mass around a column from three to five feet in height, we get some idea of their beauty. Plants set out in the spring will flower about mid-summer and for several years. The colors range from white to purple.

Iris (German)—Taken as a whole, this group of plants is unparalleled in beauty; nothing in creation can vie with them unless it be the orchid of the tropics. Every shade of color may be found among them, and as they thrive in almost any soil or situation without care, they should be considered indispensable in every garden. For the wild garden, shrubbery border, margin of water, rock-work, etc.; they are admirably adapted; in fact, hardly any place can be found where these cannot be used to advantage.

KEMPFERI (Japanese)—A new group of Iris totally distinct from all others, and without question producing the most gorgeous flowers known, not excepting the orchid. Many of the flowers are ten inches across, with an aggregation of brilliant colors impossible to describe or illustrate. They form strong tufts of lovely bright green foliage from three to four feet in height, surmounted by their massive flowers, both single and double, of every conceivable shade of color, splashed, striped and veined in the most exquisite manner. They prefer sunny, moist situations, planted in heavy loam or clay. They cannot be kept too wet during summer.

- Larkspur, Perennial**—The perennial Larkspur, like their relatives, the annuals, are valuable plants, and in no other way can we get such a grand and constant display of flowers.
- Lathyrus (Perennial Pea)**—Very attractive and desirable climbers, producing a profusion of white or rose-colored flowers, in clusters, from June to September. Especially suitable for cut flowers.
- Lily of the Valley**—The Lily of the Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase rapidly.
- Pæonia**—A noble flower, rivaling the rose in brilliancy of coloring and perfection of bloom and the Rhododendron in stately growth, and at same time are as hardy as the oak, requiring no protection in the severest climates, and when once planted all is done, and each succeeding year adds to their size and beauty. Apart from their gorgeous flowers the foliage is rich and glossy, of a beautiful deep green color and nicely formed. The newer varieties produce very large, handsome, regularly formed blooms, resembling immense roses, and no other flower is so well adapted for large, showy bouquets. The Pæony may be planted singly on the lawn, in beds, or borders, and in any case will afford the greatest satisfaction. It is the flower of all flowers. Our selection has been made with the greatest care and includes the best and most distinct varieties, ranging in color from purest white to deep purplish-crimson and variegated, and many of them quite fragrant. Named varieties can be furnished.
- FRINGE-LEAF (Tenuifolia)**—A very beautiful and distinct variety of the above, having handsome fern-like foliage and lovely satiny-crimson flowers, both single and double.
- Pampas Grass**—The finest ornamental grass in cultivation; long, narrow, graceful dark-green foliage and silvery plumes or stems, six to ten feet high. These plumes, when dried, make handsome parlor ornaments.
- Phlox (Perennial)**—This glorious family of hardy perennials is the most widely known and popular of all garden plants, and each year adds new and showier varieties through the hybridizer's skill. No perennial is more worthy of culture or more satisfactory in every situation or more effective, either as individual plants, borders, or grouped in masses.
- Pinks (Hardy Dianthus)**—Highly valued for the great beauty and fragrance of their flowers. They make splendid bushy plants from one to two feet high that will grow anywhere and increase in beauty from year to year. Unrivalled for permanent beds and borders.
- Poppy (Papaver)**—Exceedingly showy perennials with large satiny flowers in yellow, white and scarlet. The Oriental is one of the most popular varieties.
- Primula (Primrose)**—Very desirable garden plants, and may be had in a variety of colors.
- Pyrethrum**—A valuable class of hardy plants, with flowers of good size and form, somewhat like an aster. Very useful for bouquets or cut flowers. Spring flowering. Single and double.
- Ranunculus (Buttercup)**—These are among the best of the early spring flowers and are very effective.
- Salvia (Sage)**—Very ornamental and desirable. Colors range from light blue to reddish-purple.
- Tritoma (Flame Flower)**—Splendid late blooming plants with flower stems three to five feet in height, with racemes a foot or more in length of rich pendent orange, red and scarlet tubulous flowers. Require a slight covering in winter.
- Viola Odorata (Sweet Violet)**—These lovely little fragrant flowers, which have always had a warm spot in "my lady's" heart, have been greatly improved, and can be furnished in either single or double, in white, blue, purple and variegated.
- Yucca Filamentosa (Spanish Bayonet)**—A magnificent flowering plant with large, bell-shaped, creamy-white flowers, borne on stems two feet high. Foliage ever-green.

*For Spring Planting Only.***Require Taking Up in the Fall and to be Kept From Freezing.**

Amaryllis—FORMOSISSIMA (Jacobean Lily)—Flowers large, deep red.

JOHNSONIA—Dull brick red, with a white star center.

Begonias (Tuberous)—No class of plants has been so greatly improved during the past few years as the Tuberous Begonias. The flowers are very brilliant and handsomely formed and of wonderful size, often measuring four to six inches in diameter. They bloom freely all summer and are of the easiest culture, but succeed best in a partially shaded situation and should be protected from severe winds. After the blooming season is past, dry the tubers and place in boxes or dry sand, and keep from freezing until the following spring. Colors are white, crimson, scarlet, rose and yellow, and both double and single.

Caladium (Elephant's Ear)—A grand tropical-looking plant, a favorite for grouping on the lawn, bordering sub-tropical groups, or banking against buildings with high foundations. In deep rich soil, frequently watered, they produce enormous leaves, frequently four feet long by three wide. Height, four to seven feet.

Cannas—For a brilliant show all summer there is no plant excelling the Canna, blooming continuously from time of planting till cut down by frost.

AUSTRIA—Large, spreading about seven inches. Canary color.

BURBANK—Giant orchid-like flowers of rich canary color, with carmine spots in throat, the upper petals measuring fully seven inches across. It is a vigorous grower, attaining a height of five to six feet, with large and shiny leaves.

FLAMINGO—Large, red; very beautiful.

GIANT ITALIA—Enormous size; the center a brilliant red, with a wide irregular band of clear yellow on outer edge.

LARGE FRENCH FLOWERING—These range from the deepest crimson-orange, scarlet and salmon to light yellow, many being beautifully mottled and streaked; frequently compared to orchid flowers.

MONT BLANC (New White)—The largest, most magnificent white Canna known.

Carnations—White, carmine, rosy-pink and striped; very beautiful and fragrant, continuing in flower a long time. Transplant in pots in fall, and grow in conservatory or window. One of the best house plants.

Chrysanthemums—The prettiest of the late autumn and early winter flowering plants. In November and December there is nothing that will make such a cheerful display. Plant in pots and place them in the house where they will have the sun. The prevailing colors are white, yellow and red.

Dahlias—The Dahlia is the grandest autumn flower we have. Nothing is its equal in any respect in September and October. It is in its glory when everything else is faded or fading, and surrenders only to the frost king. Put Dahlia tubers in the ground when the season becomes warm, covering the neck some three inches. If many shoots start thin them out. After flowering, and before hard frosts, take up the plants, remove the tops, dry the bulbs a little, and put in the cellar until spring, when they can be divided and replanted.

Gladiolus—These are among the most showy and brilliant of all bulbous plants. Nature is nowhere more lavish of her paint than upon the flowers of the Gladiolus. They should be planted out of doors in the spring—never in the fall, as the bulbs will not stand freezing. They are, however, excellent for window culture, planted in vases, either singly or in groups.

Gloxinias—Gloxinias are among the handsomest of our summer blooming plants. The flowers are gorgeous, and the foliage has a velvety appearance. Bulbs should be started in the spring in a warm place. They require partial shade and a liberal supply of water when growing. After blooming water should be withheld and the bulb remain dry through the winter.

Tuberose—DOUBLE, WHITE AND SINGLE—Flowers very fragrant. Stems from three to four feet. Late autumn.

PEARL—Its value over the common variety consists in its flowers being nearly double in size, imbricated like a rose, and its dwarf habit, growing only eighteen inches to two feet. The fragrance and color same as common sort.

For Fall Planting Only.

Calanthus (Snow Drop)—This, the earliest of spring-flowering bulbs, is universally admired for its elegant snow-white drooping blossoms.

Crocus—One of the earliest and hardiest spring flowers in all shades of coloring. Planted in borders, beds, clusters, or scattered through the lawn, are very showy and beautiful.

Crown Imperial (*Fritillaria Imperialis*)—Very showy plants; quite hardy and when the bulbs are once planted they need no further culture. Plant five inches deep, one foot apart.

Hyacinths—Among the bulbs used for winter flowers, the Hyacinth stands foremost on the list. Two methods are employed in flowering the Hyacinth in winter—one in glasses filled with water, the other in pots or boxes of soil. Double and single varieties can be supplied.

Jonquils—Pretty varieties of the *Narcissus*; very fragrant; adapted to either pot or out-door culture. Bulbs being small, six or eight may be put in a six-inch pot.

Lilium (Lily)—The *Liliums* are extremely hardy, and with few exceptions quite fragrant, and most of the varieties are exceedingly beautiful.

AURATUM—Gold-banded Lily of Japan.

BATEMANNI—Orange-apricot.

CANDIDUM—Common white.

CANDIDUM, fl. pl.—Double white-flowering.

ELEGANS—Tulip-shaped, in great variety of colors.

HARRISH (Bermuda Easter Lily)—Flowers large, trumpet-shaped; pure waxy-white; fragrant.

LANCIFOLIUM ALBUM—White Japan.

LANCIFOLIUM PUNCTATUM—Pink and white.

LANCIFOLIUM ROSEUM—Rose spotted.

LANCIFOLIUM RUBRUM—Red spotted.

LONGIFLORUM—Snow-white; trumpet-shaped.

SPECIOSUM MELPOMENE—White, spotted, clouded and bearded with pink and rich blood-crimson.

TENUIFOLIUM—One of the earliest flowering lilies; foliage slender and flowers brilliant scarlet. This is a little beauty.

TIGRINUM, fl. pl. (Double Tiger Lily)—Bright orange-scarlet, with dark spots.

UMBELLATUM—Vivid orange.

Narcissus.—*Garden Varieties.*

Admirably adapted for garden decoration in early spring. They are easily cultivated; hardy; very showy and fragrant.

Single Varieties.

BILFLORUS—White, with yellow cup.

NANAS MAJOR.

POETICUS—White, with red cup.

TRILOBUS.

Double Varieties.

ALBA PLENO ODORATA—White and fragrant.

INCOMPARABLE—Yellow and orange.

ORANGE PHENIX—Orange and lemon.

VAN SION (Double Daffodil)—Yellow.

Tulips—We know of nothing that for the amount of money invested will give a more gorgeous show during early spring, and there is nothing more easily grown than the Tulip. They thrive well in almost any soil. Should be planted during October and November.

DUO VAN THOL—Single red; early.

DUO VAN THOL—Double red.

DUO VAN THOL—Single white.

DUO VAN THOL—Single yellow.

PARROTS—Named varieties.

TOURNESOL—Orange and red; double; early.

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ADDENDA.

GRAPES.

- Gærtner** (Rogers' No 4)—Bunch and berry large; skin thick; pulp tender and sweet; vigorous and productive.
- Goethe** (Rogers' No. 1)—A fine variety, tinged and nearly covered with red when fully ripe. It has more the flavor of its foreign parent than any of the others, being tender to the center. Bunch and berry large. Ripens with Catawba.
- Ives**—Bunch and berry medium size, compact and sometimes shouldered; flesh sweet, pulpy and slightly foxy; should hang on vine some time after coloring; hardy, vigorous and bears well. Deservedly popular. Early.

CURRENTS.

- Tree Currant**—While the tree currant is a great novelty, it is none the less useful and desirable. Fruit large and of best quality. Grown in tree form the fruit is kept clean and is easy to pick. Bears abundantly.

GOOSEBERRIES.

- Josselyn**—A magnificent American gooseberry, being very hardy and prolific. Berry smooth and of excellent quality. Never known to mildew.
- Tree Gooseberry**—This interesting addition to the gooseberry family is very desirable. Large size, sweet and excellent. Being in tree form the fruit is kept clean and easy to gather.

RASPBERRIES.

- Clark**—Large, slightly conical; bright crimson; juicy, sweet and of very excellent quality, highly flavored; a strong grower, productive and hardy.
- Souhegan**—The earliest black raspberry and the leading market sort. It ripens its entire crop within a very short period; canes vigorous, strong and hardy; foliage healthy and free from rust; flesh firm and sweet and of pleasant flavor.
- Juneberry**—A good substitute for the large swamp huckleberry, or whortleberry.
- Logan Berry**—A blackberry-raspberry; a great novelty. *Fruit large as the largest-sized blackberry: color, when fully ripe, a dark bright red, deepening to maroon. Partakes of the flavors of both the blackberry and the raspberry. Excellent for the table, and for jelly or jam is without an equal. Seeds are small, soft and not abundant. Fruit extremely firm and carries well.*

STRAWBERRIES.

- Brandywine**—One of the finest new berries; plant is remarkably vigorous, hardy and productive. It has a perfect blossom and its fruit colors all over. Season rather late. Berries large, regular, conical; color, bright glossy red, which extends to the center. Its great productiveness, very large size, beauty of form and color, firmness and high quality make it a desirable variety for all purposes.
- Enhance**—One of the most productive berries grown; dark red, sometimes ribbed; very large and holds its size well throughout season, which is late. Succeeds everywhere and is a good pollinizer for late pistillate sorts.
- Excelsior**—One of the best early berries grown, ripening its fruit ahead of Michel's Early and very much more productive. Berries medium size, holding up in size until the last. A vigorous grower and in every way desirable.
- Glen Mary**—A perfect flowered strawberry; season medium early to quite late. Berries large, bright red, glossy and beautiful. One of the most desirable.
- McKinley**—A superior strawberry, remarkable for its size, shape and quality. Color crimson, flesh firm and quality very good. The plant is vigorous, healthy and a great yielder. Season medium to late.
- Sample**—Berries larger and handsomer than any other extremely late sort. Very regular in shape and attractive in color. All who have grown it are loud in its praise. Always brings the highest price on account of its extreme lateness.
- Senator Dunlap**—Is most beautiful in form and color, easily picked and hulled, hardy, productive, and a splendid keeper. Ripens with Warfield, but is sweeter and a better keeper. Color about the same.
- Warfield**—Berry dark red, conical in shape; flavor much like the Wilson when ripe; sweet and rich; a vigorous grower, with long penetrating roots to resist the drouth; tall leaves to protect the blossoms from the frost.
- William Belt**—This new berry marks another step in advance over the older kinds. Fruit larger than Bubach and much more productive. For beauty, size, productiveness and hardiness it will scale higher than almost any other berry.

ORNAMENTAL TREES.

- Almond, White-flowered** (*Davidiana Alba*)—Flowers single, pure white and appear before the leaves; very pretty and showy. The first tree to flower in the spring, hence particularly desirable on that account.
- Angelica Tree, or Hercules Club** (*Aralia Spinosa*)—A singular looking, small-sized tree, with very prickly stems, pinnate leaves and bearing immense panicles of white flowers in mid-summer. Very useful to give a tropical effect to gardens and for odd looking clumps for background.
- Bechtel's Double-flowered American Crab** (*Pyrus Angustifolia*)—One of the most beautiful of the many fine varieties of the flowering crab. Tree medium size, covered in early spring with large, beautiful double fragrant flowers of a delicate pink color. From a distance they have the appearance of roses. Blooms when young.
- Locust—Black or Yellow**—A native tree, large size, rapid growth and very ornamental. Flowers in long, pendulous racemes, yellowish-white, very fragrant, appear in June.
- Rose or Moss** (*Acacia*) (*Robinia*)—A native species, of spreading, irregular growth, with long, elegant clusters of rose-colored flowers in June.
- Catalpa Bungei** (*Umbrella Tree*)—This beautiful lawn tree is of dwarf habit, growing from five to eight feet, and is of Chinese origin. Its perfect symmetry of growth and compact spreading head of large glossy green leaves, seven inches long by six inches wide, give it a decidedly tropical appearance, making a marked contrast with all other lawn trees. It takes on the umbrella shape naturally.
- Oak—Golden** (*Quercus Concordia*)—A superb variety, with orange-yellow leaves, which retain their golden tint throughout the season. One of the finest.
- Pin** (*Quercus Palustris*)—An oak distinguished from all others by its peculiar beauty. The leaves are deep green and finely divided. As the tree attains size the branches droop until the lower ones touch the ground. The foliage takes on beautiful yellow and scarlet hues in the fall. It transplants easily, and as an avenue tree is unequalled. Will also thrive in city streets and is greatly admired.
- Plane Tree** (*Oriental Sycamore*)—As an ornamental tree for large grounds, or a shade tree for street planting, this has no superior. A rapid grower, attains a large size and is very graceful. Foliage heavy and not subject to the ravages of insects. Especially valuable for city planting, as it is not affected by smoke or gas.

EVERGREENS.

- Concolor Fir**—The Concolor is the queen of the Firs, clothed in robes of ermine and emerald. Its delicate feathery foliage and beautiful shades of coloring render this one of the most beautiful lawn trees.
- Pine** (*Mugho Dwarf*)—An upright small pine, tree or bush, found on the Pyrenees and Alps. Very beautiful for lawn.
- Retinospora, or Japan Cypress**—*Plumosa*—A variety with fine short branches and small leaves.
- Squarrosa*—A distinct variety, with slender branches and very light bluish-green foliage; hardy and handsome.

ORNAMENTAL SHRUBS.

- Tree Althea, or Rose of Sharon**—The Althea, as a shrub, is fine and attractive, but grown in tree form becomes doubly beautiful and interesting. It is hardy and of easy cultivation. Prevailing colors are rose, white, purple and variegated.
- Filbert** (*Corylus*) *Purple-leaved*—A very conspicuous shrub, with large, dark purple leaves. Distinct and fine.
- Privet** (*Ligustrum*) *Ibota*—A valuable shrub, native of China and Japan. Flowers large, white, very fragrant, produced in great profusion. Very hardy.
- Silver Bell, or Snowdrop Tree** (*Halesia Tetraptera*)—A beautiful large shrub, with a profusion of pretty white bell-shaped flowers in spring. Distinguished by its four-winged fruit from one to two inches long.
- St. John's Wort** (*Hypericum Moserianum*)—A fine, native, low-spreading shrub, with bright yellow flowers in mid-summer. Succeeds in the shade and poor soils.
- Weigela**—*Eva Rathke*—A charming new variety; flower brilliant crimson, a beautiful, distinct, clear shade. Flowers twice in one season.

SPRAYING CALENDAR

Although much has been written on the subject of spraying, the information is so scattered that it cannot readily be brought together. In the preparation of this calendar 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 table below. 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 compiled from the latest results obtained by leading horticulturists and entomologists, and they may be followed with safety.

NOTICE—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.

	First Application	Second Application	Third Application	Fourth Application	Fifth Application
Apples (Scab, Codling-Moth, Bud Moth.)	Spray before buds start, using copper sulphate solution.	Just before blossoms open, bordeaux. For bud moth, arsenites when buds open.	Within a week after blossoms have fallen bordeaux and arsenites.	Eight to twelve days later bordeaux.	Ten to fourteen days later, bordeaux.
Cabbage (Worms, Aphis.)	When worms first appear, kerosene emulsion.	Repeat in 7 to 10 days if plants are not heading.	If worms reappear repeat if not heading.	After heads form use saltpeter for worms; a teaspoonful to gallon of water.	(When plants are small arsenites may be used to check worms.)
Carnation (Rust and other fungous diseases, Red Spider.)	When rust is first noticed, bordeaux. For Red Spider, kerosene emulsion.	For rust repeat first in 10 to 14 days. For Red Spider, repeat in 3 to 4 days.	Repeat second, using ammoniacal carbonate of copper if plants are in bloom.	Repeat second if necessary.	
Cherry (Rot, Aphis, Slug and Curculio.)	As buds are breaking, bordeaux. When aphis appear, kerosene emulsion.	When fruit has set bordeaux. If slugs appear dust leaves with air-slacked lime.	Ten to fourteen days later; if signs of rot appear, bordeaux.	Ten to fourteen days later ammoniacal copper carbonate.	
Currant (Mildew, Worms.)	At first sight of worms, Paris green.	If worms reappear repeat; if leaves mildew, bordeaux.	If worms still trouble, hellebore.		
Gooseberry (Mildew, Worms.)	When leaves expand, bordeaux. For worms, Paris green.	Ten to fourteen days later repeat.	Ten to fourteen days later, ammoniacal copper carbonate.	Repeat in 10 to 14 days if necessary.	If mildew persists after crop is gathered bordeaux.
Grape (Fungous diseases, Flea Beetle.)	Before buds burst, copper sulphate solution. For flea beetle, Paris green.	When leaves are half grown, bordeaux. Paris green for larvae of flea beetle.	As soon as fruit has set, bordeaux.	Ten to fourteen days later if any disease appear bordeaux.	If necessary ammoniacal copper carbonate.
Nursery Stock (Fungous Diseases)	When buds appear, bordeaux.	Repeat at intervals of 10 to 14 days.			
Peach, Apricot (Rot, Mildew.)	Before buds swell, copper sulphate solution.	As soon as fruit has set, bordeaux.	Ten to twelve days later repeat.	When fruit is nearly grown ammoniacal copper carbonate.	Repeat last if necessary in 5 to 10 days.
Pears (Codling-Moth, Psylla, Leaf Blight, Scab.)	Before buds start, copper sulphate solution.	Just before blossoms open, bordeaux. Kerosene emulsion for psylla when leaves open.	After blossoms have fallen, bordeaux and arsenites.	Ten to twelve days later repeat if necessary.	
Plum (Rot, Fungous Growths, Curculio.)	As buds start, copper sulphate solution.	When fruit has set bordeaux. Paris green. Begin to jar trees for curculio.	Ten to twelve days later repeat	Ten to twenty-three days later bordeaux.	Two to three weeks before plums ripen bordeaux or ammoniacal copper carbonate.
Potato (Beetles, Blight)	When beetles first appear, arsenites.	When vines are 2-3 grown, bordeaux; arsenites for beetles if necessary.	Ten to fifteen days later repeat if necessary.	Ten to fifteen days bordeaux if necessary.	
Quince (Leaf and Fruit Spot, Rot.)	Before buds start, copper sulphate solution.	When fruit has set bordeaux and arsenites.	Ten to twelve days later bordeaux.	Ten to twenty days later, bordeaux.	
Raspberry, Blackberry (Anthracnose, Rust)	Before buds break, copper sulphate solution.	When new canes are one foot high, bordeaux mixture.		During summer if rust appears, bordeaux.	After crop is gathered remove old cane, and spray with bordeaux.
Rose (Mildew, Black Spot, Red Spider, Aphis.)	Mildew, keep heating pipes painted with equal parts lime and sulphur mixed with water to a paste.	Black spot. Spray plants once a week with weak copper sulphate.	Red Spider. Kerosene emulsion to underside of foliage.	Aphis, kerosene emulsion.	Solution should be very dilute as rose foliage is easily injured.
Strawberry (Rust.)	Just before blossoms open, bordeaux.	As first fruits are setting, bordeaux.	When first fruits are ripening ammoniacal copper carbonate.	When last of fruit is harvested, bordeaux.	
Tomato (Rot, Blight.)	At first appearance of rot or blight, bordeaux.	Repeat if diseases are not checked.			

Black knot on plums or cherries should be cut out and burned as soon as discovered.

For aphides or plant lice use kerosene emulsion on all plants.

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. For rots, moulds, mildews and all fungous diseases.

AMMONIACAL COPPER CARBONATE.

Copper Carbonate,	1 ounce.
Ammonia,	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 same purposes as Bordeaux.

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,	250 gallons.

If this mixture is to be used on peach trees, 1 pound quicklime should be added. Repeated applications will injure most foliage, unless lime is added. *Paris green and bordeaux can be applied with perfect safety.* 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 the lime, or with the Bordeaux mixture. Do not use it on peach or plum trees. For insects which chew.

HELLEBORE.

Fresh White Hellebore,	1 ounce.
Water,	3 gallons.

Apply when thoroughly mixed. 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 15 times before applying. For insects which suck, cabbage worms, and all insects which have soft bodies.

Hydrangea Paniculata Grandiflora

Plane Tree (Oriental Sycamore)—*See page 98*