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1900
... ILLUSTRATED ...

AND

DESCRIPTIVE CATALOGUE

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CUT-LEAF WEEPING BIRCH.

FRUIT AND ORNAMENTAL TREES,

SHRUBS, ROSES,
GRAPE VINES,
SMALL FRUITS, Etc.

McNary & Gaines,

XENIA STAR NURSERIES,

Xenia, Ohio.

MARSHALL P. WILDER.

RECOMMENDED SORTS.

Purchasers are advised to confine their selections to the following kinds—the cream of the list:

APPLES.

Aikin.	Haas.	Stark.
Arkansas Black.	Iowa Blush.	Salome.
Autumn Strawberry.	Jonathan.	Trenton's Early.
American Golden Russet.	King.	Talman's Sweet.
Ben Davis.	Maiden's Blush.	White Pippin.
Baldwin.	Mann.	Wine Sap.
Clayton.	Mammoth Black Twig.	Wagener.
Chenango Strawberry.	Minkler.	Walbridge.
Duchess of Oldenburg.	Northern Spy.	Wealthy.
Early Harvest.	Northwestern Greening.	Yellow Transparent.
Fall Rambo.	OPALESCENT.	York Imperial.
Fallwater.	Paradise Winter Sweet.	General Grant.
Flory.	Pewaukee.	Hyslop.
Greenville.	Rome Beauty.	Martha.
Grimes' Golden.	Red Astrachan.	Transcendent.
Gideon.	Summer Rambo.	Van Wyck's Sweet.
Gano.	Sweet Pippin.	Whitney's No. 20.
Holland Pippin.		

PEARS.

Bartlett.	Garver.	Louise Bonne de Jersey.
Beurre d'Anjou.	Howell.	Seckel.
Clapp's Favorite.	Idaho.	Sheldon.
Doyenne d'Ete.	Kieffer's Hybrid.	Vermont Beauty.
Duchess d'Angouleme.	Koonce.	Wilder.
Flemish Beauty.	Lawrence.	Worden-Seckel.

CHERRIES.

Black Eagle.	Empress Eugenie.	Olivet.
Black Tartarian.	Governor Wood.	Rockport.
Belle de Choicy.	Ida.	Reine Hortense.
Baldwin.	Large Montmorency.	Schmidt's Bigarreau.
Dyehouse.	Louis Phillippe.	Wragg.
Duke of Dayton.	Late Duke.	Windsor.
Early Richmond.	Late Morello.	Yellow Spanish.
English Morello.	May Duke.	

PLUMS.

Apple.	Earliest of All.	Pond's Seedling.
Abundance.	Grand Duke.	Red June.
Arctic.	Gueii.	Reine Claude.
Bartlett.	General Hand.	Shipper's Pride.
Bradshaw.	German Prune.	Shiro.
Burbank.	Hale's.	Sultan.
Chalco.	Lombard.	Wickson.
Climax.	Peach.	

PEACHES.

Admiral Dewey.	Foster.	Old Mixon Free.
Amsden.	Fitzgerald.	Old Mixon Cling.
Alexander.	Greensboro.	Smock.
Bokara.	Golden Beauty.	Salway.
Beer's Smock.	Gold Drop.	Stump.
Crawford's Early.	Gold Mine.	Steadley.
Crawford's Late.	Hill's Chili.	Snow's Orange.
Chair's Choice.	Honest John.	Sneed.
Crosby.	Heath Cling.	Susquehanna.
Champion.	Jacques Rareripec.	Triumph.
Champion, Jr.	Lemon Cling.	Waterloo.
Elberta.	Lewis Seedling.	Wonderful.
Early Barnard.	Lovett's White.	Wheatland.
Early Rivers.	Mountain Rose.	Yellow St. John.
Early Canada.	New Prolific.	

ADDITIONAL DESCRIPTIONS.

We here describe a few varieties of merit not included in the body of this catalogue.

APPLES.

- Aikin**—Long-lived, hardy tree; not an early bearer; fruit medium size, red, crisp, tender and spicy. Highest quality.
- American Golden Russet** (Bullock's Pippin, Sheep Nose)—Medium or small, roundish ovate; clear golden russet; very tender, juicy, rich; upright grower; good bearer. November to January.
- Chenango Strawberry**—Medium size; oblong, strawberry color, mottled with yellow; tree vigorous and productive. September and October.
- Clayton**—Large, conical, flattened, regular, red, with darker stripes, flesh yellow, breaking, sub-acid, good; a very valuable market sort. Tree a strong grower, long-lived, good bearer. January to May.

Flory (Flory's Bellflower)—Medium to large; rich yellow; tender, sub-acid. Tree a remarkably fine grower, hardy, and an abundant bearer. November and December.

Holland Pippin—Very large, greenish yellow; flesh tender, juicy, and of excellent flavor, somewhat similar to Fall Pippin, but is quite superior to it in point of productiveness; one of our best cooking apples, and immensely productive. Is fit for pies about the middle of August, and from that time until the first of November is one of the very best kitchen apples.

Iowa Blush—Medium in size, roundish conical, whitish with red cheek, quality fine, tart. Tree vigorous, and hardy on the prairies. November to January.

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

Minkler—Valuable in the commercial orchard; medium size, greenish yellow, stripes dull red, strong vigorous grower. Not of high quality but a good seller. January to April.

Paradise Winter Sweet—Large; yellowish white, blushing in the sun; flavor very sweet; quality excellent. Tree vigorous, upright, and productive. November to March.

Summer Rambo (Western Beauty, Large Rambo, etc.)—Large to very large; skin pale yellow, covered with red; flesh light yellow, tender, juicy; flavor first rate; tree a strong grower, productive. August.

Sweet Pippin—An old variety; productive. Fruit medium, roundish oblate, with red in the sun; stalk short; flesh firm, moderately juicy, sweet, good. November and December.

Trenton Early—Fruit above medium, irregular, ribbed; color yellowish, with slight undulations over the surface, which are green; skin smooth and oily; flesh not very fine grained, very light and tender, with a pleasant sub-acid flavor. Good. August.

White Pippin—Large; greenish white, pale yellow at maturity; tender, juicy, crisp, and rich flavored. Tree thrifty, upright, a regular good bearer. January to March.

CHERRIES.

Late Morello—The Late Morello tree is entirely hardy. It resembles the Early Richmond somewhat, but it is rather more erect in its habit of growth and makes a more shapely and better tree. The fruit is fully as large as Early Richmond, of a considerably darker color and is considered much superior to Richmond for canning. It is an abundant and regular bearer, ripens immediately after the Early Richmond, probably about same season as Montmorency. We consider it among our best varieties.

Baldwin—The tree is an upright grower, more inclined to be round than otherwise; a very rank, vigorous grower; leaves rather broad; bloom pure white, which turns to a pink color, similar to the hydrangea; fruit very large, almost per-

fectly round, very dark, yet almost transparent; flavor slightly sub-acid, yet the sweetest and richest of the Morello type; stems rather large, of medium length, more inclined to grow in pairs than clusters. It is remarkable for earliness, vigor, hardiness, quality and productiveness; and out of 800 cherry trees in bearing it is the most thrifty and beautiful tree in the lot, and yet has had only the same care and attention as the others. It is a tree to command attention, and is so distinct as to attract comment from many upon seeing it, without knowing its superior merit. The original tree was planted eight years ago, and has fruited now five years, and the tree is now at least one-third larger than any Early Richmond tree of the same age.

Duke of Dayton—This new early Cherry has proven itself worthy of a place in every collection by its excellent quality and early ripening. It is larger, of lighter color than the Early Richmond and about a week earlier than that sort. A rich, sub-acid flavor. Tree a strong grower and hardy. A valuable acquisition to the list of early Cherries.

PLUMS.

Reine Claude de Bayay—One of the best foreign varieties. 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.

Red June—Japanese origin. Prof. Bailey, of Cornell, says: "By all odds the best Japanese plum." Ripens before Abundance; fruit good size, brilliant red. Finest extra early plum.

Luther Burbank's Famous Japanese Hybrid Plums.

Apple—Named because of its close resemblance to an apple in general appearance, form, color and rare keeping qualities. Fruit averages about 2½ inches in diameter, striped and mottled until nearly ripe, when it turns to a deep reddish-purple. The superlatively rich, high flavored sweet or sub-acid flesh is rather firm, pale red; marbled pink, nearly freestone. Ripens soon after Burbank; sometimes keeps over a month in good condition.

Earliest of All (Yosobe)—A week earlier than Willard. A small, handsome, deep purple-red plum; poor quality, immensely productive, hardy and annual bearer. Valuable for its season. July.

Wickson—One of Mr. Burbank's greatest seedlings. Strong, upright grower; very productive; fruit remarkably handsome, deep red, covered with white bloom; stone very small; fruit very large, firm, sugary and delicious. A great acquisition.

Hale—Prof. L. H. Bailey, of Cornell Experiment Station, in a Bulletin on Japan Plums, says of the Hale: "A very handsome, large, round-cordate plum; orange, thinly overlaid with mottled red, so as to have a yellowish-red appearance, or in well colored specimens, cherry-red with yellow specks; flesh yellow, soft and juicy (yet a good keeper); not stringy, with a very delicious, slightly acid peach flavor. Very late." And again he says: "To my taste, these specimens have been the best in quality of all the Japanese Plums."

The following are Mr. Burbank's latest productions—the "up-to-date" plums. Originator's descriptions:

New Plum—CLIMAX—Fruit heart-shaped, as large as Wickson, and more highly colored; so fragrant that a whole house is perfumed with a single fruit; delicious as could be desired or imagined, and above all, it ripens before any other good plum and nearly a month before Wickson.

Tree extremely vigorous, rather upright growth, with strong branches, prominent buds, and very large leaves; the very picture of hearty vigor. Productive as Burbank, about four or five times as large, two or three weeks earlier, and very much more richly colored. The most wonderful plum ever grown, and one which will change the whole business of early fruit shipping.

Prominent California growers who learned of this "King" were disposed to form a ten thousand dollar syndicate for its purchase and control, but instead it is now offered freely to all who may wish to purchase.

New Plum—SULTAN—This huge, oval, deep purplish-crimson fruit is generally thought by those who have tested it to be the very best, or one of the best plums produced.

The flesh is remarkably firm and solid, fragrant, sub-acid or sweet, dark crimson, beautifully clouded and shaded with light pink, salmon, and light yellow, showing in the fruit a curious combination of ancestral dynamics. Remarkable for the great proportion of flesh compared with the diminutive seed. The tree grows very rapidly, but is compact and with wood and leaves as much like the Napoleon cherry as like a plum. Exceedingly productive, ripening a week before Burbank; falls like apples as soon as ripe; a great keeper. A basket of these plums would attract instant attention anywhere by their unusual size and remarkable beauty of form and color.

New Plum—BARTLETT—The wonderful combinations which can be made in fruits will always be a surprise, even to those who have studiously prepared the way for them. Who could have believed that a plum would ever be produced which would in quality, flavor and fragrance be exactly like the ever-popular Bartlett pear? Yet such are the facts, but the Bartlett plum is so much superior to the Bartlett pear in its own peculiar fragrance and flavor that no one will ever eat the pear if this plum is at hand and, better yet, it bears the second season *and will produce more fruit in ten years than the Bartlett pear will in twenty.*

The fruit is oval, yellow mostly over-spread with crimson, turning to deep crimson when fully ripe, with flakes and dots of yellow.

New Plum—SHIRO—This handsome plum is a tri-specific hybrid—a combination of Robinson, Myrobolan and Wickson, from seed of Wickson. In foliage, growth and general appearance the tree most resembles a Myrobolan, but is a much stronger grower than any of the three from which it came; wood very hard and wiry, ripening up early in the fall.

The fruit is produced in the utmost profusion, is medium to large, very uniform in size, clear light yellow, with an almost imperceptible thin white bloom, and so transparent that the pit can be seen through the flesh, which is firm yet juicy, rich, pleasant, sub-acid, clingstone; ripens two weeks before the Burbank, and is nearly, or perhaps, quite as productive. The fruit will keep in good condition for a month at least. From its ancestry and general appearance it should prove of great value where it is too cold to raise most of the good plums.

New Plum—CHALCO—After twelve years of experiment in crossing the unique, handsome, fragrant Chinese plum, *Prunus Simoni*, with the Japanese and American plums, we now offer the first fruits of this long and very expensive work. The fruit is large, flat like a tomato, deep reddish purple, with very sweet, rather firm, exceedingly fragrant yellow flesh and small seeds. The fruit is as stemless as a peach, and completely surrounds the older branches as thick as it can stick, like kernels on a huge ear of corn. A superior shipping plum, ripens well when picked green, and keeps nearly or quite a month.

PEACHES.

Admiral Dewey—A crossbred seedling, and is another triumph in the production of very early peaches. It is a perfect freestone and ripens with the Triumph. The flesh is of uniform color and texture to the pit. Has better form and brighter color on the surface. It is equally hardy and productive, and is the best very early market sort yet brought out.

Beer's Smock—A large yellow flesh peach, an improvement on Smock's Free, which it resembles. Ripens a few days later and is a better annual bearer. One of the most desirable and profitable market sorts. Last of September to first of October.

Chair's Choice—Origin, Maryland. Has no superior in quality and flavor, and for profit is without a rival; large, yellow, free, rich in color, flesh very firm, and ripens after Smock; great bearer.

Champion, Jr.—A seedling of the Champion, and no higher praise could be ascribed than to say it resembles its parent in every particular, except in season, being three weeks earlier.

Early Barnard (of Michigan)—Large, yellow, with red in the sun; flesh yellow and very good; tree vigorous and good bearer.

Fitzgerald—An improved Early Crawford, being fully equal to it in size, quality and color. The tree commences bearing young, is productive and one of the hardiest. Fruit large; brilliant color, bright yellow, suffused with red; flesh deep yellow, best quality. Early September.

Greensboro—The largest and most beautifully colored of all the early varieties. Double the size of Alexander, ripening at the same time; parts clear from seed when fully ripe. Flesh white, juicy and good. July.

Golden Drop—This variety has a sort of transparent golden appearance, rendering it immensely attractive in market, selling for the highest price. Good quality, a very early and profitable bearer; hardy; medium size. Last of September.

Golden Beauty—Very large, has a dark red cheek, small stone, flesh sweet as honey, juicy, and luscious when fully ripe; clingstone. Will bear transportation well. Fine for canning. Ripens August 1st..

Gold Mine—Recently originated in Michigan by one of the leading commercial orchardists in the famous peach belt. We here give the originator's statement:

"To Whom it May Concern:

"The Gold Mine Peach now being introduced originated in my orchard, and is a direct cross of the Honest John (the hardiest Barnard seedling) and the Late Craw-

ford. It has borne six successive crops, during which time it has proven as hardy as any peach I have. Has always been a healthy, good, upright grower and a very heavy bearer. The fruit is firm, of the round and smooth shape of the Barnard, while it has the high color and size of the Late Crawford."

Heath Cling—Fruit very large; skin downy, cream-colored white, with a faint blush or tinge of red in the sun; flesh greenish-white, very tender and melting, exceedingly juicy, with the richest, highest and most luscious flavor; surpassed by no other variety.

Lovett's White—Fine white peaches are always in demand and are very desirable, especially late in the season, when they invariably command good prices. In Lovett's White may be found every quality demanded in the ideal white peach, with the additional merit of an ironclad tree. Is handsome, hardy, good quality and an abundant and regular bearer. Season very late, color pure white; very large.

Lemon Cling—Large; skin fine yellow, with a dark brownish-red cheek; flesh yellow, with a rich, sprightly, sub-acid flavor. One of the largest and most beautiful of all the yellow-fleshed clings.

Lewis Seedling—Large, handsome; skin greenish-white, with red cheek; flesh white, fair quality; hardy and productive; valuable for market. Middle to latter part of August. One of the leading commercial kinds.

New Prolific—A seedling from Michigan. Ripens right after Crawford, at a time when large peaches are scarce in the market. The fruit is very large and attractive, and of a rich aromatic flavor; it is very firm, and one of the best shippers.

Snow's Orange—Medium to large size; yellow flesh, melting and juicy. Is being planted largely as a market variety; its hardiness, productiveness, fine appearance, etc., make it a profitable sort. September.

Sneed—The earliest peach known; originated in the South, where it has fruited for several years. Ripens eight to ten days before Alexander. Fruit medium size, creamy white, with light blush cheek; excellent quality, resembling its parent, Chinese cling; productive. July.

Triumph—Earliest yellow flesh peach in the United States. For many years peach growers have been looking for a yellow flesh peach early as Alexander, with good eating and shipping qualities. This demand is met in the Triumph. Ripens with Alexander; blooms late; sure and abundant bearer; strong, vigorous grower. Fruit good size, yellow with red and crimson cheek. July.

Yellow St. John—A grand peach, ripening about ten days after Hales. Nearly as large as Crawford. Round fruit, brilliant, showy and the earliest yellow free-stone peach; produces abundantly. August.

...OUR NEW APPLE...

OPALESCENT

IS NOW OFFERED FOR
THE FIRST TIME

SIZE, BEAUTY and QUALITY most happily unite in this remarkable apple. All who have examined the OPALESCENT regard it as the handsomest apple grown. It is not only highly colored, but susceptible of a very high polish, reflecting objects near it like a mirror. This feature makes it a highly prized sort for fruit stands. The flesh is yellowish, tender, juicy, and good. Color light shading to a very dark crimson. Season December to March.

We have in our nurseries the entire supply
of the OPALESCENT. It can be obtained only
from us direct, or through nurserymen or agents
who have arranged with us for their supply. . . .

M McNARY & GAINES,

Xenia Star Nurseries,

XENIA, OHIO.

SCENE IN ONE OF THE BLOCKS OF THE NEW PLANT OF THE XENIA STAR NURSERIES, XENIA, O., CONTAINING
1,329,000 APPLE, PEAR, PLUM, CHERRY AND PEACH.

ILLUSTRATED

DESCRIPTIVE CATALOGUE

—OF—

Fruit and Ornamental Trees,

SMALL FRUITS,

Vines, Roses, Shrubs,

ETC., ETC.

PRESS OF
VREDENBURG & COMPANY,
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 and peaches should 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 24 hours, and should be pruned more closely than ordinarily.

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 APPLES.

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.

Russian Transparent—An early Russian apple of merit; an abundant bearer; fruit brisk, sugary and refreshing, flesh transparent. Tree a *moderate*, handsome, upright grower. July to September.

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

Summer Pearmain—Medium size, oblong; red, with spots and stripes of yellow; quality best. July to September.

Tetofsky—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.

Arabskoe—(ARABIAN APPLE)—One of the new Russian varieties; medium size and roundish, skin dark red with a purple bloom; flesh white, juicy; a handsome apple. Hardy. October and November.

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

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.

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

DUCHESS.

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.

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.

Peck's Spice—Large, fair, clear skin, nearly white, becoming a rich golden yellow when fully ripe, with minute russet dots. Acid, rich and spicy; excellent for table and cooking. Most beautiful and attractive. September and October.

Peach (Irish Peach)—Medium size, round or a little flattened; yellowish green, streaked with brownish red; flesh white, tender and juicy. Tree a moderate grower and very hardy; highly prized in extreme north. August and September.

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.

Rolfe—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.

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

WINTER.

- American (Rebel)**—Popular in the South. Good size, excellent quality, deep red and very beautiful; fruit uniform and perfect; annual bearer; excellent keeper; valuable. December to February.
- 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.
- 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.
- 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.
- Bethel**—Large; deep red; flesh crisp and tender. A native of Vermont, where it is highly prized for its quality and the extreme hardness of the tree; a moderate grower. December to February.
- 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.
- Boiken**—A handsome Austrian variety, fruit medium to large, light yellow, shaded with red, resembling the 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.
- Cranberry Pippin**—A popular and beautiful market apple; roundish and very smooth; pale yellow with scarlet cheek; moderately juicy; brisk, sub-acid. Oct. to Feb.

OPAESCENT.

No picture can adequately portray the beauty of this wonderful apple. It is universally conceded to be the handsomest apple on the market. It is as good as it looks. Large size, hardy and high quality. Season, December to April.

Clark's Orange—New Iron Clad. Originated in Pewaukee, Wis. Fruit medium to large, nearly round like an orange; skin yellow, covered partially with vermilion and carmine striped; very smooth and beautiful; flesh white, juicy, sub-acid, good. November to January.

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.

Fallawater—Very large; roundish; yellow, with generally a red cheek; mild sub-acid; a popular Pennsylvania apple. October to February.

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

Franklin Sweet—Originated in Franklin County, Me., and is considered very desirable. Perfectly hardy and good quality; fair size; flesh white and very juicy; color similar to Bellflower; has been kept until March. We think it a very valuable Winter sweet apple. December to March.

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.

Greenville—A seedling of Maiden's Blush, which it resembles in quality, size and productiveness. Originated in 1874, it has proven healthy, free growing and a productive annual bearer, being largely planted for commercial orchards. Fruit light waxen yellow with red cheek; flesh crisp, tender, juicy, with mild sub-acid flavor. December to April.

Grimes' Golden—Medium; rich golden-yellow; flesh crisp, tender, juicy, with a peculiar aroma; tree a good grower and early bearer; origin, Virginia. Dec. to April.

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.

Hubbardston Nonsuch—Large, striped yellow and red; tender, juicy and fine; strong grower and good bearer. October to April.

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.

Ivanhoe—An iron-clad apple originating in New Jersey; medium to large; deep golden yellow; tender and excellent flavor. Tree vigorous and hardy; bears early and abundantly. January to April.

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.

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

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.

Lady Hanniker—An English variety; large, roundish; yellow, with faint blush on sunny side; tender, good flavor and pleasant perfume. Valuable for cooking and dessert. Tree free grower and great bearer. October to February.

LONGFIELD.

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 hardiness, 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.

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. Oct. to Feb.

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.

Munson's Sweet—Medium; pale yellow, slightly tinged with red; firm, rich and very sweet. The most valuable baking apple; vigorous and productive. September to February.

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.

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. Dec. to May.

- Nodhead** (Jewett's Fine Red)—Medium size; greenish white, striped and splashed with crimson; flesh tender, juicy, almost sweet. Popular in Northern sections on account of its great hardness. A great grower and bearer. Oct. to January.
- 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.
- Northwestern Greening**—Greenish yellow, good size, fine quality. Hardy. December to April.
- Ontario**—Large, whitish-yellow, nearly covered with bright, rich red; flesh tender, juicy, sub-acid and slightly aromatic. January to April.
- 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.
- 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.
- Plumb's Cider**—A native of Wisconsin, where its hardness has been abundantly proved. Tree vigorous, round-headed and productive; flesh white, fine, tender, juicy, mild sub-acid. September to January.
- Pecks Pleasant**—Large; pale yellow; very tender and rich, with a Newtown Pippin flavor; fine bearer. November to March.
- Quebec Sweet**—Originated in Province of Quebec, Canada. Similar in size and appearance to Talman Sweet. Splendid quality and very hardy. December to March.
- Rhode Island Greening**—Large, roundish; light greenish-yellow; tender, rich and juicy; a crooked but vigorous grower. November to March.
- 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.
- Rome Beauty**—Large, yellow, with red cheek, handsome; good quality; moderate grower. Great bearer. December to May.
- 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.
- 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 hardness; 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.
- Seek-no-Further** (Westfield)—Medium to large; slightly russeted, with dull red stripes; tender, rich, spicy and fine; good bearer. November to February.
- 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.

WEALTHY.

- Spitzenberg, 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.
- 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.
- Wealthy**—Originated in Minnesota. Hardy, vigorous and very productive. December to February.
- Winesap**—Medium; dark red; sub-acid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. November to May.
- Wolf River**—A beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the iron-clads. 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.		
Tetofsky.	Red Bietigheimer.	Grimes' Golden.
Yellow Transparent.	St. Lawrence.	Longfield.
	WINTER.	Mann.
AUTUMN.	Arkansas Beauty.	McIntosh Red.
Alexander.	Baxter.	Nodhead.
Arabskoe.	Belle de Boskoop.	Peter.
Duchess of Oldenburg.	Bethel.	Pewaukee.
Fameuse.	Clark's Orange.	Salome.
Hurlbut.	Delaware Red.	Walbridge.
Peach.	Gano.	Wealthy.
Rolfe.	Gideon.	Wolf River.

SELECT CRAB APPLES.

As as ornamental fruit, and for jellies, preserving, etc., the Crab Apple is unequaled. 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.

Beurre Giffard—An excellent variety; medium; greenish yellow, red in the sun; very early; tree slender but healthy; very productive. August. D and S.

Bloodgood—Medium size; yellow touched with russet; melting and delicious; fair grower, moderately productive. D. and S. August.

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.

Chambers—(Early Harvest 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.

WILDER.

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.

Dearborn's Seedling—Below medium size, pale yellow, melting and good. Tree free grower, early and prolific bearer. August. 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.

Great Britain—Native of Nova Scotia and valuable on account of hardiness. Tree rapid grower and great bearer. Fruit large and excellent. September. S.

- 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 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.

- 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 market. D and S.
- 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 russety 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. Sept. and Oct. 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. Nov to Jan. S.
- Boussock** (Doyenne Boussock)—Large; lemon yellow, a little russeted; melting, juicy, with a sprightly, vinous flavor; good grower. October. 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.
- Eastern Belle**—Originated in Maine; fruit medium, yellow, shaded with light red and some russet; juicy, half melting, sweet and rich, with peculiar musky perfume; of excellent quality; very hardy and an abundant and regular bearer. September. S.
- 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.

Probably the Handsomest Pear Yet
Produced.

WORDEN SECKEL.

WORDEN SECKEL.

A SEEDLING of the Seckel, which it certainly resembles and fully equals in flavor and quality, and far surpasses in size, color, form and beauty. It is more juicy and equally delicious.

It was originated by Mr. Sylvester Worden, of Minetto, Oswego Co., New York, the originator of the noted Worden Grape.

For the last ten or twelve years the original tree has not failed to bear a full crop of bright, clean fruit, without spraying or any other treatment, showing its freedom from a tendency to scab or other pear diseases.

It is more upright and a much better grower than its parent, with rich, abundant foliage, which it retains until late in the season.

Has not been injured by freezing, even in the cold locality of its origin, showing its unusual hardiness.

It is an enormous bearer, ripens a little later than the Seckel, keeps remarkably well, retaining its flavor until the last.

Free from the tendency to decay at the core, even when left upon the tree until fully ripe.

Probably no other pear combines such high quality and rare beauty, great productiveness, hardiness and freedom from disease.

It bears exceedingly young, producing frequently large clusters of beautiful pears on three and four-year-old standard trees in the Nursery Row.

The testimonials furnished by such noted experts as E. S. Carman, of the *Rural New Yorker*; Thos. Meehan & Son, of *Meehan's Monthly*; J. S. Woodard, of Lockport, N. Y., Ex-Secretary N. Y. State Agricultural Society; C. L. Hoag, of Lockport, N. Y.; Mr. J. J. Thomas, *Country Gentleman*; Prof. I. P. Roberts, Cornell University; Mr. A. D. Perry, Pres. of the Central N. Y. Horticultural Society, and Supt. N. Y. State Fruit Exhibit at the Columbian Exposition; Hon. Geo. T. Powell, of Ghent, N. Y., General Supt. of N. Y. State Display at the Columbian Exposition; *New England Homestead*; Dr. Peter Collier, Director of New York State Agricultural Experiment Station, of Geneva, N. Y.; Dr. Carroll E. Smith, *Syracuse Journal*, and other noted pomologists fully substantiate the above claims regarding this pear. Their testimonials cannot be inserted in this brief circular but can be furnished to any party desiring to see them.

We are now prepared to offer for the fall of 1899 first-class trees of the Worden Seckel Pear, at both wholesale and retail, Standard and Dwarf.

Each tree sent from our nurseries will be marked with a seal attached to the roots of the tree.

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. Ripens from middle to last of October. S.

Goodale—This hardy pear originated at Saco, Maine. Fruit large; flesh white and of excellent flavor and quality; tree hardy, vigorous and upright in growth, and uniformly productive; a valuable acquisition. October. S.

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. It is an erect, fine grower, very hardy, and a great bearer. Season October. S.

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

IDAHO.—REDUCED ONE-HALF.

Idaho — Originated in Idaho. Very large, nearly round; yellow, with brownish red on sunny side; flesh melting, juicy, vinous; quality best. Hardy, vigorous and prolific. September and October. 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. In season during September and October. 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. 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.

Superfin (Beurre Superfin)—A large, fine pear; very juicy and melting, with a rich, pleasant and sprightly sub-acid flavor; tree *vigorous*. October. S.

Swan's Orange—(Onondaga)—Very large, melting, sprightly, vinous. Tree *vigorous*, hardy and extremely productive. 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.

VERMONT BEAUTY.

WINTER.

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 DeMalines—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.

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 Winkfield—Large size, long, fine; rich yellow when fully ripe. Very vigorous and productive; one of the best. Nov. to Jan. D. and S.

Winter Nellis—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 Bigarreus, 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, dropping leaves.

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

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

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.

- Early Purple**—Small to medium size; purple; tender, juicy and sweet. Growth *free*, slender and spreading. First to middle of June.
- 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.
- Emperor Francis** (New)—A very large and rich cherry of the heart type.
- Gov. Wood**—The finest of Dr. Kirtland's seedlings; clear, light red; tender and delicious. Tree a *vigorous* grower and most productive. Hangs well on the tree. End of June.
- Knight's Early**—Large; black; tender, juicy, rich and excellent. Tree a *free* grower and very productive; branches spreading. Ripe a few days before the Black Tartarian.
- Mercer** (New)—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 varying from light red to dark brown.

The Dukes have stout, erect branches usually, and some of them, like Reine Hortense, quite sweet fruit; while the Morellos have slender, spreading branches, and acid fruit invariably. These two classes are peculiarly appropriate for dwarfs and pyramids, on the Mahaleb stock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender.

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.

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BALDWIN CHERRY.

Tree an upright, vigorous grower, forming a round head; leaves large and broad; bloom pure white, changing to pink; fruit large, almost round, very dark transparent wine color; flavor slightly acid, yet the sweetest and richest of the Morello type; stems rather large, of medium length, and generally in pairs. Unexcelled in earliness, vigor, hardiness, quality and productiveness. Out of 800 trees it readily attracted attention as being the most thrifty and beautiful. The original tree was planted eight years ago and has fruited five years, and is now one-third larger than any Early Richmond tree of the same age in same orchard near Seneca, Kansas, on the grounds of S. J. Baldwin the introducer.

- 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. If trained on a north wall it may be in use all the month of August. 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. THE PRINCE OF RUSSIAN CHERRIES.

- 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; makes a beautiful pyramid.

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

Arch Duke—Very large; black; very prolific; of first-rate quality. October.

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

Bavay's Green Gage—(Reine Claude de Bavay)—One of the best foreign varieties. As large as the Washington, and of fine flavor; roundish oval; greenish, marked with red in the

ABUNDANCE.

sun. Tree a free grower and remarkably productive. Middle to end of September. Hangs long on the tree.

tive. 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. Oct.

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. Beginning of September.

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

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

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

Grand Duke (New)—A valuable addition to late plums; as large as the Bradshaw, of same color, and ripening latter part of September. Entirely free from rot.

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. This new variety is regarded as very valuable for market by growers along the Hudson river. First to middle of September.

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 and one of the best of Plums. Middle of 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. End of 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, with remarkably small pit. September.

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. A very great acquisition.

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. August.

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 produc-

- 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.
- Mariana**—Originated in Texas. A strong, rapid grower. Fruit larger than the Wild Goose; round, and of peculiar light red color. Its productiveness is marvelous. Best of the Chickasaw varieties. Valuable at the South. August.
- Marsters**—Originated in Nova Scotia. Very hardy and wonderfully productive; color blue-black; size about same as German Prune; quality excellent; flesh fine grained and rich. Very valuable. Sept.
- McLaughlin**—Very hardy, vigorous and productive. Large, greenish yellow; sugary and luscious; a first-rate variety. Aug.
- Monarch**—The largest size, even larger than Grand Duke; brilliant bluish purple. Free from rot and disease, and of extra good quality. One of the very best for home or market. Last of September.
- Monroe**—Tree very vigorous and healthy; bears abundantly, medium size; greenish yellow; flesh firm, rich and sweet. Sept.
- Moer's Arctic**—Size medium or below; skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet and pleasant flavor. Charles Downing speaks of it as follows: "A new, hardy plum, which originated on the high lands of Aroostook county, Maine, where, unprotected and exposed to cold, it has for many years borne enormous crops, and is claimed to be the hardiest plum grown, and so far 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. Ripens about August 1st. We regard it as one of the best new varieties.
- Pond's Seedling, or Font Hill**—A magnificent English plum; form of Magnum Bonum; light red, changing to violet; flesh rather coarse. Tree a *vigorous* grower and most abundant bearer. One of the most attractive in cultivation. September.
- 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 Sept.
- 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 a peculiar aromatic flavor.
- Quackenboss**—A popular Hudson River variety. Large; deep purple; flesh greenish yellow, juicy and sweet, with a sprightly flavor; good. 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.
- Shipper's Pride**—Originated in New York. An unusually thrifty grower, and stands our coldest winters. Very productive, the original tree having never failed to produce a good crop since it was old enough to bear. Fruit of large size and nearly round; color handsome dark purple; quality fine, juicy and sweet; excellent for canning and unusual good shipper. A splendid market plum. Ripens from first to middle of September.
- Shropshire Damson** (or Prune Damson)—An English variety of great merit for preserving. Large, and much more desirable than the common Damson. Tree vigorous grower, hardy and 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. Last of August.
- Spaulding**—Tree remarkably vigorous; fruit large, yellowish green, with delicate white bloom; flesh pale yellow, firm, and of great richness, parting readily from the stone. Middle of 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. As a fine canning fruit it has no superior, and has fine quality as a table fruit. September 15th to October 1st.

Strawberry (Dwarf)—Originated in Kansas, but *very* hardy. A fine dwarf, enormously productive. Ripens with wheat harvest; medium size; brilliant scarlet; quality good. A great acquisition.

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 August.

WASHINGTON.

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

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

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. Middle of August.

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.

CHAMPION.

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

- Beatrice**—(Early Beatrice)—Medium size with a marbled red cheek; flesh melting and very juicy. Early August. (c.)
- Bokara**—The best of Prof. Budd's importations from Bokara, and said to be the hardest peach grown. Large size, fine quality and immensely productive. Last of August. (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.)
- Conkling**—A new, large, beautiful golden yellow peach, marbled with crimson; of fine quality; very handsome. September. (f.)
- Coolidge's Favorite**—Medium to large size; clear white, mottled with red in the sun; melting, juicy and rich; very productive. Middle of Aug. (f.)
- Crosby**—First introduced by Mr. Hale of Conn., one of the most intelligent, reliable and successful fruit growers in that state. He states that the Crosby has stood 22 degrees below zero without injury to the tree or fruit buds, and in every other respect has proved a remarkably fine peach for home use or market. Ripens just before Crawford's Late. (f.)
- Crawford's Early**—A magnificent large yellow peach of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted. First of September. (f.)
- Crawford's Late**—Fruit of large size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow. Tree vigorous; moderately productive; one of the finest late sorts. Last of September. (f.)
- Early Canada**—Originated at Jordan, Canada. As early as the earliest. Of good size, fine quality and handsome appearance. Its earliness, hardness and the fact that the flesh clings but slightly to the stone, creates an unusual demand for trees of 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 Aug. (f.)
- Early Silver**—Large, melting and rich, with the vinous flavor of the White Nectarine, its parent. Early September. (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 Aug. (f.)
- Elberta**—The great market peach of the South and South-west. It is perfectly hardy at the North, and is confidently believed by the most experienced fruit growers at the North to be one of the very best peaches for home use or market. September. (f.)
- Foster**—Originated near Boston, Mass. Large; deep orange red, becoming very dark on the sunny side; flesh yellow, very rich and juicy, with sub-acid flavor. September. (f.)
- Garfield**—A good yellow peach; valuable, hardy and productive. Sept. (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 pit or stone; quality good; very rich and luscious. September. (f.)
- Haines' Early**—Large; white, with red cheek; flesh pale, juicy and delicious; tree hardy and very productive. One of the best varieties. Middle Aug. (f.)
- Hale's Early**—Medium size; greenish white, with red cheek; first quality. Tree healthy, good grower and productive. Middle August. (f.)
- 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 Sept. (f.)
- Jacques' Rareripe**—Very large; deep yellow; has a high reputation. Last of August. (f.)

- Large Early York**—Large; white, with red cheek; fine grained, very juicy, rich and delicious; vigorous and productive; one of the best. Last of August. (f.)
- Lord Palmerston**—Originated with the celebrated nurseryman, Thomas Rivers, of England. Fruit very large; skin whitish with a pink cheek; flesh firm, melting, rich and sweet. Last of September. (f.)
- Louise (Early Louise)**—Medium size, bright red, melting, very juicy and excellent. The finest quality. Late Aug. (f.)
- 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.)
- Old Mixon Cling**—Large; pale yellow, with red cheek; juicy, rich and high flavored; one of the best clingstone peaches. Last of September. (c.)
- Old Mixon Free**—Large; pale yellow, with a deep red cheek; tender, rich and good; one of the best. First to middle of September. (f.)
- Ostrander's Late**—An excellent bearer and of good size; flesh fine and juicy and quality good. Nov. (f.)
- Red Cheek Melocoton**—A famous, old, well known and popular variety; large, oval; yellow, with a red cheek; flesh yellow, juicy, rich and vinous. Tree very hardy and productive; valuable for the orchard. Last 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. Aug. (f.)
- Smock**—Large size; light orange yellow, with red cheek; flesh yellow, juicy and rich. October. (f.)
- 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. Last of September and first of October. (f.)
- 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. Sept. (f.)
- Troth's Early**—A very early and excellent peach of medium size; whitish, with a fine red cheek; flesh juicy, sweet and very good. Middle of July. (f.)
- Wager**—Medium; yellow, colored in the sun; juicy, and of fair flavor. The trees have remarkable vigor and vitality. Valuable for drying and canning. Last of August. (f.)
- Waterloo**—Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red; flesh greenish white, with an abundance of sweet, vinous juice. July. (f.)
- 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 have measured 12 inches in circumference, weighing $\frac{3}{4}$ of a pound each. Flesh yellow, juicy, rich and excellent. Skin yellow, covered with dark red. Last of September. (f.)
- Wonderful**—Large, uniform in size and shape; color rich golden yellow, largely over-spread with vivid carmine, with ramblings of crimson. Flesh yellow, rich, high-flavored and delicious, exceedingly firm; bright red at pit, which is very small, and from which it parts freely. Middle of Oct.
- Yellow Rareripe (Yellow Alberge)**—Large; deep yellow, dotted with red; melting, juicy, with a rich flavor. Closely resembles Jacques' Rareripe. First of August. (f.)

CHAMPION JUNIOR.

A seedling of the famous Champion peach, and just like its parent, except that it is three weeks earlier. Where the Champion is known, nothing more need be said. Both are of the highest quality, a rare feature in early peaches.

VREDENBURG & CO.,
ROCHESTER, N. Y.

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 hardiness, 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.
- 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.
- Concord**—A large, handsome grape, very hardy and productive. Succeeds over a great extent of country; is one of the most popular market grapes. Ripens middle of September.
- 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.
- Early Victor**—This extra early grape, of Kansas origin, is gaining a good reputation throughout the entire country. In bunch and berry it is rather below the average, but ripens very early; it is very pure in flavor, with very little pulp, and without a trace of foxiness or other unpleasant taste, while it is exceptionally sweet, sprightly and vinous; never cracks, and adheres firmly to the bunch. Vine as hardy as the Concord, and one of the few that resists mildew perfectly. Color black, with a fine bloom. Last of August.
- 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.
- Eumelan**—A native black grape. Bunches above medium, very handsome, double shouldered and moderately compact; medium size; flavor rich, vinous and sprightly. Ripens just after Hartford.
- 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.
- Merrimac** (Roger's 19)—Bunch medium to large; berry large, sweet, and rich; vigorous and productive. One of the earliest and best of the Rogers' sorts.
- Mills**—This valuable grape is a cross between Muscat Hamburg and Creveling, originating at Hamilton, Ont. Berry large, jet black with heavy bloom. Flesh firm with a rich sprightly flavor. Skin thick, bunch large, compact, shouldered. Vine vigorous, hardy and productive. Ripens with Concord or a little later.
- 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** (Roger's No. 4)—Bunch very large; berry large, round, black; flesh tender; juicy, sweet. Ripens about with Concord; vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties, and on account of its size and beauty is very valuable for market.
- Worden**—Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Destined to become very popular for the vineyard and garden.

*Vineyard
of
H. G. M'Pike
Alton, Illinois
Grown & Raised*

M'PIKE GRAPE.

Originated by H. G. M'Pike of Mount Lookout Park, Alton, Illinois. A seedling of Worden with all its good qualities, unequaled leaf, perfect character in every point, superb quality, color and flavor like Worden; berries very large, measuring over three inches in circumference easily; the best grape grown; without a fault or a peer.

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.

Lindley (Rogers' No. 9)—Bunch medium, somewhat loose; berry medium to large; round; color a rich shade of red, rendering it a very handsome and attractive grape; flesh tender, sweet, with a rich, aromatic flavor; ripens soon after the Delaware; vine vigorous and productive.

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.

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 seen or had experience with it.

La Versailles (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.

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 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.

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.

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.

Triumph—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.

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.

Clarke—Large, light red; moderately firm; high flavored. A strong grower, productive and very hardy. One of the very best old sorts for home use.

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.

Herstine—Fruit large, oblong, crimson; moderately firm, juicy; flavor sub-acid and very good; an abundant bearer; season early to medium.

Marlboro—The best early red raspberry for the North, ripening soon after Hansell. Hardy and productive.

Philadelphia—Medium size, round, dark red; mild sub-acid, moderately firm; canes strong, stocky, and almost without spines; requires no winter protection; valuable for market.

Reliance—Large, roundish, dark red; firm, with a pleasant, sprightly acid flavor; hardy, vigorous and very productive; A valuable sort.

Rancocas—Light red; vigorous and very productive, and ripens with the earliest. A splendid shipper.

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.

Davison's Thornless—Similar in appearance and quality to the common black cap, but much earlier and nearly thornless.

Doolittle (Doolittle's Black Cap)—This is an improved variety of the common Black Cap, of medium size, with pleasant sub-acid flavor; much esteemed; hardy.

Early Canada—Originated in Canada. Bush thrifty, extra hardy and wonderfully productive. Berry large to very large; of exquisite flavor, and ripens just before Gregg. A great acquisition.

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 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. This latter crop does not consist of a few scattering berries, but immense clusters, often numbering 100 berries on a single stalk. Fruit large size and delicious flavor.

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 blackcap 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.

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

Souhegan (Tyler)—Highly commended as a market sort; enormously productive, perfectly hardy and free from disease of any kind.

GAULT RASPBERRY.

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VREDENBURG & CO., ROCHESTER, N. Y.

THE NEW CARDINAL RASPBERRY.

This wonderful berry is a surprise in the fullness of its merits—its great growth, extreme hardiness, and the exceeding productiveness of its choice red, rich, pure flavored berries. It will thrive where others fail; it will pay; it is not a novelty, but a variety of great merit. Originated by A. H. Griesa, Lawrence, Kas.

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 sized, melting, without core. Bush hardy and very prolific. One of the very best old sorts, and is still grown in immense quantities by successful market gardeners and orchardists.

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.

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.

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

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.

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

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.

BUBACH.

Bubach (P)—Fruit uniformly large and handsome; conical, bright scarlet, moderately firm and of fair quality. Valuable for home use, and near-by 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.

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 near-by market. Season medium.

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.

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

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.

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.

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.

PARKER EARLE.

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 Menonites; 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, and more even and regular in its growth, and that it will eventually supercede the old favorite. It has been tested both north and south, and has proved entirely successful in every instance.

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, Peony, 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

ciation 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.

Spiraeas, Lilaes, Althaeas, 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 (Folius 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)—Satiny 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 harder than the Syringa-Leaved, having proved itself able to stand the severe winters of Wisconsin and Iowa; making when planted in groves, straight, symmetrical trees, suitable for posts or railway ties, for which 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 (*Seboldii 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.

REPRODUCED FROM NATURE BY VREDENBURG & CO., ROCHESTER, N. Y.

ORIENTAL SYCAMORE OR PLANE TREE.

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.

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 (*Soulangeana*)—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 44.

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 (*Normanniia*)—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 (*Suecica*)—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 are 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 Berberies 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.

Fortuneii—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.

REPRODUCED FROM NATURE BY VREDENBURG & CO., ROCHESTER, N. Y.

XANTHOCERAS SORBIFOLIA.

A new and rare shrub from Central Asia, of remarkable handsome appearance, having long pinnate foliage like that of the mountain ash, only handsomer. Its blooms are borne in upright terminal clusters of pure white, bell-shaped flowers, shaded at base with reddish brown or copper color, which open in the spring with the coming of the leaves. Should be severely pruned when transplanted.

Cut-Leaved Fringe.

Deutzia.

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.

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.

Double-Flowering (Crenata flore pleno)—Flowers very double, white, tinged with rose. The finest flowering shrub in cultivation, and should be planted in every yard. We know of nothing among ornamental shrubs that will give more satisfaction than this charming Deutzia.

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

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-Branches (*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. *Elaeagnus* 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.

Osbeck's (*Osbeckii*)—Very ornamental.

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. It grows 12 to 15 feet high and should be allowed plenty of room to spread. Indispensable from its striking appearance.

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.

Cerulea—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. Unequaled 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.

Hydrangea Thomas Hogg.

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

***Speciosa**—Leaves silver variegated. Very pretty.

***Thomas Hogg**—Flowers pure white, in great profusion.

LILAC (*Syringa*.)

Well-known and beautiful hardy shrubs; very ornamental in the spring; flower in May.

Amurensis—New. A white-flowered lilac from China, of the greatest interest.

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

Dubia—A species from China, with red flowers in great abundance.

Emodi—Tree-like specie from China, with long leaves and late red flowers.

Fern-Leaf (*Persica laciniata*)—This sort is extremely fine in foliage, and is a very effective trailer on the rockery.

Frau Bertha Dammann—This produces the largest clusters of white lilacs, of the common species, known in cultivation, and also the purest white. Highly desirable.

Josikæa—A specie found in Transylvania; leaves long, wrinkled; flowers blue.

Leon Simon—Thyrses, attaining 14 inches in circumference; 4-parted; compact; crowded and packed with blossoms. These flowers, which are piled one on another, are very double, and perfectly round; color bluish crimson; buds, clear coral. The whole appearance of the cluster produces the effect of a lot of wall-flowers joined together. This plant is altogether extraordinary, and has nothing to resemble it, in port or in beauty, either among single or double lilacs. (Silver Medal, Paris, May, 1885.)

Ligustrina Pekinensis—Found in the mountains of the Pekin district. A tall shrub of much beauty of foliage; flowers white, with the odor of honey.

Ludwig Spath—This is, without doubt, 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.

Michel Buchner—Plant dwarf, bearing at the top of all the branches thyrses, which form rigid pyramids of blossoms, 9 inches high. These are of perfect regularity, $\frac{3}{4}$ inch broad, formed of three corollas each, the rounded lobes of which are regularly intricated; pale lilac throughout in half-opened blossoms, and also in the bud state; magnificent plant of the greatest superiority.

Persian (*Persica*)—Purple.

Persian (*Persica*)—White.

President Grevy—Magnificent spikes, of an amplitude unknown before in single lilacs, 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; these reversed edges make the fine blue of the center show strongly by the contrast.

President Hayes—Rose lilac; enormously long spikes.

Pubescens—New; exceedingly rare yet; large woolly leaves and showy flowers.

Purple—(Vulgaris.)

Sinensis—Specie with dark red flowers in great profusion.

Violacea—The darkest of all Persian lilacs.

White (*Vulgaris alba*.)

HARDY ORANGE (*Limonia Trifoliata*.)

A very ornamental shrub, perfectly 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. It makes an excellent plant for hedges.

Hardy Orange.

OTAHEITE ORANGE.

This makes one of the most desirable pot plants. Blossoms very fragrant.

PÆONIA—TREE.

A handsome flowering shrub, growing from 6 to 8 feet in 10 years; very free bloomer; gorgeous flowers of immense size; season May; effective for borders.

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

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 handsome, 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.

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 (*Douglassi*)—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.

WHITE FRINGE (Chionanthus Virginica).

One of the finest trees or shrubs, with large green leaves, and racemes of delicate fringe-like greenish-white flowers. Blossoms in May and June. This, and the Purple Fringe, should be found on every lawn. Well worthy of the choicest place in the garden. When fully grown. 10 to 20 feet.

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.

AMPELOPSIS.

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

Virginia Creeper or American Ivy (*Quinquefolia*)—A native climber of vigorous growth with digitate leaves; a fine green in Summer, changing to rich crimson in Autumn. It throws out tendrils at the joint, by which it fastens to anything it touches, affords shade quickly and is very desirable for covering walls, verandas, or trunks of trees.

Veitchii, Boston or Japan Ivy (*Veitchii*)—A beautiful, hardy, climbing plant, of Japanese origin. This is one of the finest climbers we know for covering walls, as it clings firmly to the smoothest surface, covering it evenly with overlapping leaves, which form a perfect mass of foliage. The color is a fresh deep green in Summer, changing to the brightest shade of crimson and yellow in Autumn. It is a very rapid grower. It is quite hardy and becomes more popular every year.

BIGNONIA, OR TRUMPET FLOWER.

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

BIRTHWORT, OR DUTCHMAN'S PIPE.

(*Aristolochia Siph*).

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.

Alexandra—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. New and desirable. July to October.

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

Crispa—Very hardy and a free bloomer; flowers blue, with center of petals an

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.

Gem—A new and valuable perpetual blooming variety. The flowers are of a deep lavender blue. The parent plant, though much weakened by propagation, had upwards of one hundred flower buds as late as the middle of

Group of Clematis.

opaque white; *very fragrant*; useful for festooning.

Dairdiana—A new Clematis from Japan, which is destined to take high rank. This variety forms a shrubby, upright plant, with fresh, light foliage. Leaves grow in whorls around the stem, while the flowers cluster in greatest profusion around each whorl of leaves. Flowers long, bell-shaped and fragrant.

October. June to October.

Grand Duchess—A splendid variety, with flowers about nine inches across, bluish white, and of good quality. First-class certificate Royal Horticultural Society.

Glorie de St. Julien—This is one of the best new perpetual *white* varieties. The flowers are very large and abundant. June to October.

Clematis Jackmanni.

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. Though raised in 1862, since which time many new varieties have been raised and introduced, the Jackmanni has no superior and very few, if any, equals. 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.

Jeane d'Arc—A free-growing, vigorous variety. The flowers are very large—seven inches across—of a grayish or

French white color, with three bluish veins in each sepal; delicate and beautiful. July to Oct.

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.

Lord Neville—Flowers large and well-formed; color, rich dark plum; stamens light, with dark anthers; edgings of sepals finely crimped. First-class certificate Royal Horticultural Society.

Lady Boville—This very fine variety has peculiar and well-formed cupped flowers, of a clear, soft, grayish blue. It is a vigorous grower and free and continuous bloomer. July to Oct.

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.

Clematis Jackmanni and Clematis Ramona.

Lanuginosa Nivea—This is one of the finest blooming plants; it has great merit in these particulars, viz.: It is *pure white*—it is a perpetual bloomer—it opens its first blossoms earlier than Jackmanni, and thence continuing to bloom onward until arrested by frost. June 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.

Madame Van Houtte—A new white variety, having flowers remarkably fine in size and quality. July to Oct.

Magnifica—A very distinct and effective Clematis. A free-flowering variety of

the Jackmanni type, giving a great profusion of blooms continuously. The flowers are of a rich purple, with a distinct red bar through the center of each flower leaf. July to Oct.

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

Modesta—This variety has a free-growing and a free-blooming character, with flowers of a fine form, and of a bright blue color. July to Oct.

Mrs. James Bateman—This is a new variety of great merit; a free, successional bloomer, continuing throughout the season to yield an abundant crop of

its showy blossoms, which are of a reddish lilac, changing to a pale lavender as they become older. July to Oct.

Otto Froebel—This is a splendid variety with a very robust habit and very large flowers, of a grayish tinted or French-white color, and a good form and texture. July to Oct.

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.

Purpurea Elegans—Deep violet purple; light-colored filaments, and pinkish-brown anthers. First-class certificate Royal Horticultural Society.

Perfecta—This is a fine variety of the Lanuginosa class, with large, white, well-formed and handsome flowers; slightly tinted at first, but bleaching to pure white. July to Oct.

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 flower leaf. First-rate for bedding as well as training up. July to Oct.

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 flow-

ers being six and seven inches in diameter and eighteen to twenty inches in circumference. It is certainly the finest Clematis in the list, and every lover of this beautiful climber should have it.

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 Oct.

Rubra Violacea—This is another of the Jackmanni class, producing flowers in great profusion, which are of a maroon-purple, flushed with reddish violet. One of the best. July to Oct.

Samuel Moulson—Mauve, with a reddish tint on the bars.

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

Tumbridgensis—A very fine variety, having flowers of a remarkably good form and reddish-lilac color, with a central band of bluish mauve. This variety can be used to advantage with the Jackmanni and other dark-colored sorts. July to Oct.

Velutina Purpurea—This variety has great merit in being the darkest-colored Clematis of the class. It has the vigorous, free-blooming character of the Jackmanni. The flowers are large and of a very rich, blackish mulberry-purple color. New and choice. July to Oct.

Viticella Major—This is an improved form of the Viticella; is a free grower, with flowers of reddish-plum color.

Viticella Venosa—A beautiful Clematis, of free growth. The flowers are above medium size; the color is a pleasing tint of reddish-purple, elegantly veined with crimson. July to Oct.

The following varieties flower in Spring and early Summer, from the old or ripened wood of the previous 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.

Aureliana—A valuable hybrid variety; flowers large and of a lively porcelain-blue color, which are produced in great profusion. June to Oct.

Clematis Coccinea.

Duke of Norfolk—A very deep mauve color, with a broadish pale bar. The anthers are dark colored.

Duchess of Teck—A pure white, with a faint, delicate mauve bar. Awarded first-class certificate by the Royal Botanic Society.

Fair Rosamond—Free-growing and handsome. The flower is fully six inches across, and consists of eight sepals. The color is white with a bluish cast, having a light wine-red bar up the center of each sepal. Flowers very fragrant, and are abundant through June and first of July.

Lady Alice Neville—Color rosy lilac, with pale mauve bars. Certificate Royal Horticultural Society.

Lady Londesborough—One of the best of the early-flowering Japanese hybrids. The flowers are large, of a silvery gray, with a paler bar in the center of each sepal. June and July.

Maiden's Blush—Delicate bluish white tint, of bright rosy lilac at the base of bar.

Mrs. George Jackman—Satiny white, with a creamy bar. This variety often flowers in the young wood, giving it more the character of a perpetual bloomer. This is one of the best of the early-flowering whites.

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

Montana—A remarkably free-growing, exceedingly ornamental, hardy Indian climber, well adapted for trailing over walls or trellises. The flowers are white, with a dash of pink and tuft of straw-colored stamens. Sweet-scented and very copious—the branches literally becoming converted into floral garlands.

Standishii—Introduced from Japan. A remarkably free-growing variety, with beautiful, richly-colored, very finely-formed flowers; of a light mauve purple color. One of the best. June.

Sir Garnet Wolseley—Bluish ground; effective dash of bronze, with a distinct bar of plum red.

Stella—New; very showy; one of the choicest. The flowers are of a light violet or deep mauve, with a distinct bar in the center of each sepal of a reddish plum color.

The Queen—A new variety, having a free habit and remarkably handsome foliage, and flowers of a delicate lavender color.

Vesta—Large; of fine form; dead white, with a creamy tinge over the center bar; delicate primrose fragrance. A valuable early bloomer.

Virginiana—A very strong grower, having fragrant white flowers. Valuable for covering screens.

DOUBLE SORTS.

Countess of Lovelace—A decided advance on John Gould Veitchi, both in habit, color and form. A bluish-lilac, rosette-shaped, forming a double flower.

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

Enchantress—A very large and distinct variety. Good habit, bearing very double white flowers. The exterior petals are very prettily flushed in the center with rose. First-class certificate Royal Horticultural Society.

blue or lavender color. It is like *Fortunii*, except in the color of the flowers. June and July.

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

HONEYSUCKLE (*Lonicera*).

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

Brown's Scarlet Trumpet (*Brownii*)—A choice variety with bright red blossoms; very fragrant; a fine trellis sort.

Group of Honeysuckles.

Excelsior—A distinct double-flowered sort with flowers about six inches across; of a grayish purple or deep mauve color, marked with a plum-colored bar; the outer flower-leaves of the same color as the large ones. It is a first-class certificate variety.

Fortunii—This was introduced from Japan by Mr. Fortune. The flowers are large, double, white, and somewhat fragrant.

John Gould Veitchi—Sent from Japan in 1862. The flowers are very handsome, distinct, large, double, and of a light

Canadian (*Canadensis*)—Large glaucous leaves and blossoms.

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

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.

... ROSES ...

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.

Abel Carrier—Purplish crimson, fiery red center; very double; fine

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

Alphonse Soupert—Bright rose color; large and very showy.

American Beauty—This variety has been rightly described an ever-blooming Hybrid perpetual. The flowers are very large, of beautiful form and very double; color a deep rich rose. 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.

Annie Wood—Vermillion; very fragrant; fine in fall.

Auguste Mie—Clear rosy pink; very large, vigorous and fine; long and well known as one of the best of its class.

Baronne Prevost—Brilliant rose; large and full; a vigorous grower and free bloomer. One of the oldest, and unsurpassed.

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

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

Baronne de Maynard—Pure white; very free flowering.

Captain Christy—Delicate flesh color, shaded rose in the center; a large, finely formed flower.

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

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

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

Charles Darwin—Brownish crimson; globular; full and fragrant.

Charles Margottin—Color a bright carmine rosy crimson; flowers large, double and well formed; quite fragrant; good grower.

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

Comte de Paris—Brilliant red, shaded and illuminated with bright crimson; large, full and of fine form; very vigorous.

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

Coquette des Alps—One of the finest pure white hybrid perpetuals; large, full; finely-formed flowers; color 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; flowers medium size; full and pretty; slightly fragrant; blooms the first year and all through the season.

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. The plant is of a 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.

Duke of Teck—Bright crimson; medium size; fine early in the season.

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

Earl of Pembroke—Soft velvety crimson; petals margined with cardinal red; large regular flowers.

Eclair—Color bright glistening rose, passing to rich scarlet crimson, elegantly shaded with pure maroon.

Eugenie Verdier—Silvery pink, large and full and very valuable for forcing.

Ferdinand de Lesseps—Purplish crimson; fine form; large and fragrant.

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, and very full; fresh, clear rose; bright and glistening. The flower is large and of fine form.

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

GENERAL JACQUEMINOT ROSE.

General Jacqueminot—Bright, shining crimson; very 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 also for forcing.

General Washington—This splendid Rose is one of the best hardy perpetuals for general planting; color bright shining crimson; very rich and beautiful; flowers are large and perfectly double; blooms first season and constantly.

Giant of Battles—Very deep brilliant crimson center; dwarf habit; free bloomer, and one of the very best.

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.

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; blossoms large and perfectly double; the color is a lovely pink.

Jean Libaud—This is one of the very darkest of all Roses; the flowers are large, full and fragrant, and of the most intense dark rich velvety crimson imaginable.

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

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

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

La Reine—Bright rosy pink; very large, double and sweet; one of the best.

Leopold Premier—Bright, dark red, fine form; large and fine.

Lion of Combats—Deep colored crimson; showy and fine.

Lord Bacon—Deep Crimson, lit up with scarlet and shaded with velvety black; large, full and globular.

Lord McCartney—Crimson, as bright as General Jacqueminot; of very fine appearance; prolific in bloom and very hardy; very desirable.

Lord Raglan—Fiery crimson, shaded with purple; large and finely formed; a superb rose and a vigorous grower.

Louise Margottin—Beautiful pink; cupped form.

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. In all save substance of petal and color, this variety is identical with *Baroness Rothschild*.

Madame Laffay—Rosy crimson; large and double; one of the oldest and best.

Madame Lacharme—White, sometimes faintly shaded with pink; moderately large. A free bloomer in Spring.

Madame Masson—Large and double; color a reddish crimson; of fine form; a fine autumn bloomer.

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

Mademoiselle Eugene Verdier—A seedling from *Victor Verdier*. Beautiful silvery rose; large, full, of fine form; large lustrous foliage; exquisite buds; of great merit.

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

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

Marie Bauman—Bright carmine red; large and full.

Marie Rady—Brilliant red; flowers large and of fine form; very full, imbricated. One of the finest.

Marechal Forey—Crimson; one of the richest dark shaded roses; cupped, good size and a free bloomer; very hardy.

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

Mrs. Elliott—Bright rose; large, vigorous and one of the best.

MRS. JOHN LAING.

Mrs. John Laing—This we consider one of the finest roses that has been sent out in years. It is very freeflowering, 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.

Paul Neyron—Flower of immense size; one of the largest roses grown and one of

the finest; color deep shining rose, very fresh and pretty. It is a 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 bright crimson; velvety; globular in form; very large and full, and one of the finest dark roses.

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

PRINCE CAMILLE DE ROHAN.

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

Sidonie—Violet crimson; vigorous grower.

Sir Garnet Wolseley—Bright red, shaded with carmine; an excellent variety.

Silver Queen—Silvery blush, shaded in the center with delicate rosy pink; flowers large, full, of a beautiful cupped form, and produced in great abundance; habit unusually good; very distinct and fine.

Ulrich Brunner—Flowers large and full; with exceedingly large, shell-shaped petals. Color cherry.

Victor Verdier—Bright rose with carmine center; of good size; free grower and very beautiful.

Xavier Olibo—A magnificent rose; intense dark crimson, very rich and velvety; a good vigorous grower and free bloomer; exceedingly sweet and handsome; one of the best.

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.

Bon Silene—Equally valuable for Summer or Winter blooming. Buds of beautiful form; an unusually free bloomer; color deep rose, shaded with carmine.

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

Cornelia Cook—Beautiful creamy white; buds of immense size and very double; does not open well at all times, which is its weak point, but when well grown is a magnificent flower.

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

Dr. Grill—Coppery yellow, with a rosy reflex; back of the petals shaded china rose. The outer petals are large, round and shell-shaped, and inclose a mass of shorter petals, which are of very brilliant color. A healthy grower and very free bloomer.

Devoniensis—On account of its whiteness and sweetness often called the Magnolia Rose. Creamy white, delicately flushed in the center with pink. One of the most fragrant roses, and a favorite of long standing.

Duchess Marie Salviati—Strong and vigorous grower; large oval buds, which open well; color chrome orange, shaded with delicate flesh color; frequently the flowers come a clear saffron yellow with no shading.

Etoile de Lyon—This, we consider, one of the finest yellow bedding roses for outside planting, and one of the hardiest in the Tea section. Flower very large and double and deliciously fragrant; color chrome yellow, deepening in center to pure golden yellow.

NIPHETOS.

Mad. Hoste—Ivory white, changing during the heat of midsummer to canary yellow, with amber center; a strong, healthy grower and very free bloomer. Flowers and buds of large size and can always be cut with long stems. One of the finest for bedding out or for forcing for winter flowers.

Mme. Joseph Schwartz—A lovely new Tea rose; extra large globular flowers, very full and deliciously sweet; color pure white, elegantly tinged and shaded with pink; an exceedingly beautiful rose and constant and profuse bloomer, bearing large clusters of flowers.

Mme. Cusin—Vigorous and prolific; rosy purple; base of petals and center of flowers almost white.

Niphetos—Snowy white; long, pointed buds; of no use for outdoor planting, but for winter forcing one of 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. It is a strong grower, with fine healthy foliage; the buds are large and long, with thick, broad petals of dark carmine crimson color, changing to a lighter shade in the open flower. An excellent winter-blooming variety, and one of the best for outdoor planting, opening up its flowers beautifully.

Perle des Jardins—A beautiful straw color, sometimes deep canary; very large, full and of fine form; stiff shoots or stems, and very free flowering.

Reine Marie Henriette—Flowers large, full, of fine form; color beautiful cherry red, with a shade of violet; flowers somewhat flat, and highly scented. An extra climbing variety.

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

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

SUNSET.

Sunset—Tawny shade of saffron and orange; very double and handsome, and has beautiful rich foliage; one of the best roses of recent introduction, and excellent for forcing.

The Bride—A lovely, pure white Tea Rose of large size. Admirable for forcing, as well as for Summer flowering. The buds have more substance than Niphetos, are full and double and possess the good characteristics of Cath. Mermet.

Triomphe du Luxembourg—Salmon buff, shaded with deep rose; distinct and fine.

William Francis Bennett—In shape the flowers resemble Niphetos, and rival in coloring the rich glowing crimson of General Jacqueminot; while they resemble in fragrance the lovely La France. It is of vigorous growth and the utmost freedom in bloom.

Waban—A sport from Catherine Mermet; the most popular of all the winter-flowering roses. Flowers borne on long strong stems, in form somewhat larger than Mermet; color carmine pink, increasing in intensity towards the ends of petals. This is a gem in every way and one that is sure to become one of the most popular varieties for winter forcing.

Yellow Tea—An old and popular rose; very fragrant; straw color; very fine bud.

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.

Antoine Verdier—Bright silvery rose, shaded rich carmine; flowers very freely the entire season; extra fine.

Belle Siebrecht—Cross between La France and Lady Mary Fitzwilliams. Flowers large, forming a beautiful bud. Color deep rich pink; very fragrant.

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. The flowers are deep even pink, very large and full, highly perfumed, and of first quality in every respect. The growth of the plant is vigorous, habit good, and the flowers are produced in extraordinary profusion, the plants being continually covered with handsome blooms.

Grace Darling—A vigorous grower and profuse bloomer; flower large and full; base of petals creamy white, deeply tinted and shaded with pinkish peach.

La France—Delicate silvery rose, shaded with cerise pink, often silvery pink with peach shading. Very large, very double and of superb form. It flowers continuously throughout the season. None can surpass the delicacy of its coloring; in fragrance, incomparable; in form, perfect. The sweetest and most useful of all roses.

Meteor—A rich, dark, velvety crimson, ever-blooming rose, as fine in color as the best of the Hybrid Perpetuals; the flowers are of good size, very double and 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. 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.

Viscountess Falkstone—A Hybrid Tea Rose of artistic shape and color. It forces readily; is of strong growth and bears lovely white flowers tinged salmon pink, slightly cupped and delightfully fragrant. The buds are of large size, pointed.

BOURBON ROSES.

Alfred Aubert—A vigorous grower and profuse bloomer; flowers as well shaped as *Hermosa*; of a bright red color.

Hermosa—Always in bloom and always beautiful. The flower is cupped, finely formed and full; color the most pleasing shade of pink; very fragrant. A favorite with everyone.

Mrs. Degraw—A fine ever-blooming, hardy garden rose, of strong vigorous growth. Flowers of medium size; color rich glossy pink. Very fragrant.

Souvenir de la Malmaison—A noble rose; flower is extremely large and double. Color flesh-white, 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.

BENGAL OR CHINA ROSES.

Agrippina, or Cramoise Superior—Rich velvety crimson.

Archduke Charles—Rosy crimson; distinct and fine.

Douglass—Rich velvety crimson; a fine, free bloomer.

Sanguinea—Deep crimson; a most profuse and constant bloomer and free grower.

NOISSETTE ROSES.

Cloth of Gold (Chromatella)—Rich, deep yellow; large, double, fragrant, and a vigorous grower.

Celine Forestier—Fine, bright yellow highly fragrant; a strong grower and profuse bloomer; a fine rose.

Caroline Marniesse—Pure white; medium size; double; tea fragrance; a constant bloomer.

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.

Lamarque—White, with sulphur center; flowers in clusters. A magnificent climbing rose under glass.

Lady Emily Peel—Has pure white flowers in large clusters; a free grower and fine for pillars.

MARECHAL NIEL.

Marechal Niel—A beautiful deep yellow; large and globular; fragrant; free flowering; one of the finest yellow tea-scented roses; a good climber. Well known and deservedly popular.

Solfaterre—Bright sulphur yellow; large and globular.

CLIMBING ROSES.

These, recommend themselves to all lovers of the beautiful. They are admirably adapted to cover arbors, walls, etc.

Anna Maria—Light pink, changing to blush; blooms in large clusters.

Baltimore Belle—Pale blush, nearly white; very double. Flowers in large clusters, the whole plant appearing a perfect mass of bloom.

QUEEN OF THE PRAIRIE.

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 pyra-

midal 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. The color is a bright, vivid crimson, showing none of the purplish tint so common in crimson roses.

Gem of the Prairies—Flowers large and double; light crimson, sometimes blotched with white.

Jules Margottin—Carmine rose; fine in open flower and in bud; the best of all climbing sorts. It may be grown as a Pillar Rose, or by pruning, kept in bush form; it should be in every collection.

Victor Verdier—Resembles Victor Verdier, of which it is a seedling, but having a decided climbing habit. Bright rose with carmine center—a very fresh shade of color; free bloomer; wood nearly smooth. This variety is particularly desirable on account of its vigorous constitution and free-flowering habit.

Queen of the Prairies—Bright rosy red; large, compact and globular flowers; blooms in clusters; one of the best.

Seven Sisters (Greville)—Crimson, changing all shades to white.

MOSS ROSES.

Blanche Moreau—Pure white, large, full and perfect form; one of the best.

Captain Ingram—Color brilliant carmine; very bright and attractive; medium-size flowers, nicely mossed; a 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; appear to best advantage when full; color pale rose.

Luxembourg—Deep crimson; fine grower.

Princess Adelaide—A vigorous grower; pale rose; of medium size and good form; good in bud and flower. One of the best.

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

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

POLYANTHA, OR FAIRY ROSES.

Anna Marie de Montravel—A beautiful, pure white, fairy-like rose; very double, perfect flowers, delightfully scented, and borne in such large clusters that the whole plant appears a mass of bloom.

Cecile Brunner—Larger flowers than most of the others; perfectly double and delightfully fragrant; color rosy pink, on rich creamy white ground; a great bloomer; very 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. The bush is a vigorous and compact grower, and a continuous and remarkably profuse bloomer, being literally loaded with roses throughout the whole growing season. It is highly 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 certainly a great acquisition; full, round flowers, perfectly double, borne in large clusters; pale chrome yellow, with rich citron-red center; blooms quickly and profusely, besides being exceedingly beautiful.

Flora—The flowers are quite large, very full and round, delightfully perfumed and borne in immense clusters. The color is fine ivory white, delicately tinged with soft rosy blush.

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.

ROSA RUGOSA.

Alba—A splendid white variety; highly scented.

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; color pure white; remarkably free-flowing, and is hardy where the thermometer does not go below zero. It forms a handsome bush for the lawn and yard, as it retains the heavy thorny canes and glossy leathery leaves of the Rugosa class.

TREE ROSE.

TREE ROSES.

These are top-grafted or budded upon strong-growing wild stocks, at a distance of $3\frac{1}{2}$ to $4\frac{1}{2}$ feet from the ground. They thus form tree-shaped plants, nicely headed, and with proper care they are very desirable. We offer them in all colors.

MISCELLANEOUS

HARDY HERBACEOUS PLANTS, INCLUDING BULBS, ETC.

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 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 for cemetery plants.

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, the red being the least interesting.

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. Look at them occasionally to see that they are not shriveling from too dry an atmosphere, nor starting the eye too early in consequence of too much moisture and warmth.

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.

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. These dried flowers are valuable as parlor ornaments, as they retain their beauty a long time.

JAPONICA ZEBRINA—This is one of the most striking and distinct plants in cultivation.

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 midsummer, and for several years if not allowed to bloom too freely the first year. The colors are nicely assorted, so that almost every color, from white to purple, may be expected.

Perennial Larkspur—The Perennial Larkspur, like their relatives, the Annuals, commonly called Larkspurs, are valuable plants, and in no other way can we get such a grand and constant display of blue flowers. *Formosum* is a most brilliant dark blue, by all odds the finest blue flower known among our hardy plants. The Chinese are generally of lighter shade, from lavender to deep blue.

Perennial Phlox—The flowers of the Perennial Phlox are immense masses of bloom from the purest white to crimson. They grow to a height of two feet or more and are perfectly hardy.

SUMMER AND AUTUMN FLOWERING BULBS,

That Require Taking Up in the Fall and to be Kept From Freezing.

Amaryllis—**FORMOSISSIMA** (Jacobean Lilly)—Flowers large, deep red.

JOHNSONIA—Dull brick red, with a white star center.

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.

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.

FLOWERING BULBS, TO BE PLANTED IN THE FALL.

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.

CANDIDUM—Common white.

CANDIDUM, fl. pl.—Double white flowering.

LANCIFOLIUM ALBUM—White Japan.

LANCIFOLIUM ROSEUM—Rose spotted.

LANCIFOLIUM RUBRUM—Red spotted.

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

LANCIFOLIUM PUNCTATUM—Pink and white.

TENUFOLIUM—One of the earliest flowering Lilies; foliage slender and flowers brilliant scarlet. This is a little beauty.

UMBELLATUM—Vivid orange.

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. Can ship either in the spring or autumn.

Narcissus.—*Garden Varieties.*

Admirably adapted for garden decoration in early spring. They are easily cultivated; hardy; very showy and fragrant.

Single Varieties.

BIFLORUS—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.

Crocus—in various colors.

Colchicum Autumnale.

Frittilaria Imperialis—**CROWN IMPERIAL**
Very showy plants; are quite hardy and when the bulbs are once planted they need no further culture. Plant five inches deep, one foot apart.

AURORA, CROWN ON CROWN, WILLIAM REX.

Calanthus—**SNOW DROP**—This, the earliest of spring flowering bulbs, is universally admired for its elegant snow-white drooping blossoms.

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.

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.

DUC VAN THOL—Single red, early.

DUC VAN THOL—Double red.

DUC VAN THOL—Single white.

DUC VAN THOL—Single Yellow.

PARROTS, named varieties.

TOURNESOL—Orange and red; double early.

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CLEMATIS PANICULATA.

BARTLETT PEAR.