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U. S. Department of Agriculture

DESCRIPTIVE
CATALOGUE

U T A H
NURSERY
COMPANY

Office, 434 D. F. Walker Bld'g
SALT LAKE CITY, UTAH

1903

Location of Packing Grounds and Nurseries, Ninth East
and Twelfth South

Take East 7th South and Ashton Avenue Cars

SEVENTEENTH EDITION

CATALOGUE

OF

====Fruit and==== Ornamental Trees

Small Fruits, Roses, Shrubs, Etc.

U T A H
NURSERY
COMPANY

SALT LAKE CITY:
GROECR PRINTING CO., PRINTERS, ETC.

Guarantee of Genuineness.

Our trees are all budded or grafted as far as possible from bearing trees, and every care and precaution is exercised to have them true to name: still with all our caution mistakes may occur, but we hold ourselves in readiness, on proper proof, to replace all trees and other stock that may prove untrue to label, free of charge, but do not hold ourselves liable for further damages.

Hints on Transplanting, Etc.

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

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

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

Standard Orchard Trees.—These, as sent from Nursery, vary in height from three feet and upwards, according to age and variety. Also branched

and without branches. The branches should all be cut back to within three or four buds of their base. This lessens the demands upon the roots and enables the remaining buds to push with vigor. Cut off smoothly all bruised or broken roots up to the sound wood. In case of older trees of extra size, the pruning must be in proportion: as a general thing it will be safe to shorten all the previous years' shoots to three or four buds at their base, and where the branches are very numerous some may be cut out entirely.

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

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

3d. *PLANTING*.—Dig holes in the first place large enough to admit the roots of the tree to spread out in their natural position: then, having the tree pruned as above directed, let one person hold it in an upright position, and the other shovel in the earth, carefully putting the finest and the best from the surface among the roots, filling every interstice, and bringing every root in contact with the soil. When the earth is nearly filled in, a few pails of water may be thrown on to settle and wash in the earth around the roots: then, after the ground has settled, fill in the remainder and tread gently with foot. Guard against planting too shallow and also too deep. The trees, after the ground settles, should stand in this respect about one to two inches deeper than they did in the Nursery. Trees on dwarf stock should stand so that *all the stock* be under the ground, and *no more*. In very dry, gravelly ground the holes should be dug twice the usual size and depth, and filled in with good loamy soil.

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

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

from baking or cracking, and maintains an equal temperature about the roots. This does not apply to large plants, where constant cultivation is required.

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

7th. *Treatment of Trees that Have Been Frozen in the Packages, or Received During Frosty Weather*.—Place the packages, unopened, in a cellar or some such place, cool but free from frost, until perfectly thawed, when they can be unpacked, and either planted or placed in a trench until convenient to plant. Treated thus, they will not be injured by the freezing. Trees procured in the fall for spring planting, should be laid in trenches in a slanting position to avoid the winds; the situation should also be sheltered and the soil dry. A mulching on the roots and a few evergreen boughs over the top will afford good protection.

8th. If trees are very dry when received, bury them root and branch in moist soil for four or five days, when they will be found fresh and plump.

DISTANCE BETWEEN TREES IN PLANTATIONS.

Standard Apples, 20 to 30 feet apart each way.

Standard Pears and Cherries, 16 to 20 feet apart each way.

Standard Plums, Peaches, Apricots and Nectarines, 16 to 18 feet apart each way. The greater distance is better where land is not scarce.

Currants, Gooseberries and Raspberries, 4 to 5 feet apart.

Blackberries, 6 to 7 feet apart.

WHY YOUNG TREES ARE BEST TO PLANT.

Most people have the erroneous idea that the larger and older the tree is they plant the sooner will it bear fruit. This is by no means the case, for trees, after they attain the age of from three to four years, lose their fibrous root and form a tap root, which is impossible to dig up without some injury. The act of transplanting is such a shock to the large tree, that it takes from two to three years to recover from it, and during that time makes little if any growth; while the young tree, commencing growth the first season after planting, very soon outgrows the larger one, and being more vigorous, produces fruit sooner. The larger the tree the less fibres there will be upon the roots. A tree that has plenty of fibrous roots will live and flourish, while one that lacks such feeders will languish and perhaps die. At least the chances are that it will never be a vigorous fruit-bearer. The roots of large trees are always more or less mutilated in transplanting, while the smaller ones do not suffer in this way.

Intelligent, experienced fruit growers always plant young trees.

NUMBER OF TREES ON AN ACRE AT VARIOUS DISTANCES.

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

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

SELECT APPLES.

Our principal stock of Apples consists of the following varieties, which have been well proved and can be recommended as the best now in cultivation for the inter-mountain climate.

CLASS I.—SUMMER APPLES.

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

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

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

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

Yellow Transparent.—Mr. Downing's description: "A Russian variety, which promises to be valuable for a cold climate, as an early fruit of good quality, ripening before the Tetofsky, with more tender and delicate flesh, but does not continue long in use. It is said that the tree, so far, has proved to be very hardy, moderately vigorous, upright and an early and good bearer annually. Fruit medium, roundish oblate, slightly conical; skin pale yellow when fully matured; flesh white, half fine, tender, juicy, sprightly, sub-acid; quality good to very good. Season, early in August and a week or two before Tetofsky."

CLASS II.—AUTUMN APPLES.

- Alexander.**—Origin Russian. A very large and beautiful deep red or crimson apple, of medium quality. Tree very hardy, a *moderate* grower and rather a light bearer. September and October.
- Chenango** (Chenango Strawberry, Sherwood's Favorite).—Large, oblong; red and yellow; very handsome; highly valued as a table or market fruit on account of its handsome appearance and good quality. Tree a *vigorous* grower and very productive. September.
- Gravenstein.**—A very large, striped, roundish apple, of the *first quality*. Tree remarkably rapid, *vigorous* and erect in growth and very productive. One of the finest fall apples. September to October.
- Maiden's Blush.**—Large, flat; pale yellow, with a red cheek; beautiful, tender and pleasant, but not high flavored. Tree an erect, *free* grower and a good bearer. A valuable market apple. September and October.
- Oldenburg** (Duchess of Oldenburg).—A large, beautiful Russian apple: roundish; streaked red and yellow; tender, juicy and pleasant. A kitchen apple of best quality, and esteemed by many for the dessert. Tree a vigorous, fine grower, and a young and abundant bearer. September. Succeeds well in the Northwest, where most varieties fail.
- Porter.**—Medium to large; oblong; yellow; flesh tender and of excellent flavor. Tree a *poor* grower; very popular in Massachusetts. September.

CLASS III.—WINTER APPLES.

- Arkansas Black.**—Origin, Bentonville, Arkansas; the tree is a beautiful upright grower, young wood very dark; fruit medium to large; fine flavor; beautiful dark color, almost black; flesh yellowish, slightly sub-acid, crisp; one of the best cooking apples; vigorous. January to July.
- Baldwin.**—Large, bright red, crisp, juicy and rich. Tree *vigorous*, upright and productive. In New England, New York, Ontario and Michigan this is one of the most popular and profitable sorts for either table or market. November to March.
- Ben Davis** (New York Pippin, Kentucky Streak, etc.)—A large, handsome, striped apple of good quality. Tree very hardy, *vigorous* and productive; a late keeper; highly esteemed in the West and Southwest.
- Bismarck.**—Tree of short, stocky growth, thick, healthy foliage; makes beautiful specimens grown in pots for decorative purposes. Fruit large, handsome, yellow, sometimes shaded red cheek; flesh tender, pleasant, sub-acid. Entirely new in its remarkable quality of producing crops on young trees, seldom failing to bear when two years old. October to January.
- Delaware Red Winter.**—See Lawver.
- *Esopus Spitzenberg.**—Large, deep red with grey spots, and delicately coated with bloom; flesh yellow, crisp, rich and excellent. Tree rather a *feeble*, slow grower and moderate bearer; esteemed as one of the very best. November to April.

- Fameuse** (Snow Apple).—Medium size; deep crimson; flesh snowy white, tender, melting and delicious. Tree *vigorous*, with dark wood, *one of the finest dessert fruits*, and valuable for market: succeeds particularly well in the North. November to January.
- Gano**.—Origin Platte County, Mo. Tree spreading in orchard, vigorous, very hardy, having stood 32 degrees below zero without injury. An early, annual and prolific bearer. Fruit large, bright red on yellow ground, smooth, regular. In a letter to W. G. Gano, under date of December 29, 1883, Charles Downing says: "It is a handsome, well shaped apple of very good quality. Flesh white, fine grained, tender, mild, pleasant, sub-acid." Its perfect form, brilliant color, hardiness and splendid keeping qualities are just what the market demands. Season February to March.
- Grimes' Golden** (Grimes' Golden Pippin).—Medium to large size; skin golden yellow sprinkled with grey dots; flesh crisp, tender, juicy, sprightly; very good to best. Tree hardy, *vigorous*, productive; originally from Virginia; grown in Southern Ohio. December to February.
- *Jonathan**.—Medium size; red and yellow; flesh tender, juicy and rich; a *moderate* grower; shoots light-colored, slender and spreading; very productive. One of the best varieties either for table or market. November to March.
- Lawver**.—Tree vigorous, spreading, an early and annual bearer. A beautiful fruit and a long keeper. Color dark, bright red, covered with small dots; flesh white, firm, crisp, sprightly, aromatic, mild, sub-acid; a fine dessert apple. January to May.
- Mammoth Blacktwig**.—The coming apple of Arkansas. Tree upright, strong grower, good bearer, and holds its fruit well; one-fourth larger than Winesap and equal in flavor and keeping qualities.
- Mann**.—Medium to large; deep yellow, often with a shade of brownish red where exposed; juicy, mild, pleasant, sub-acid. Tree hardy and an upright grower; an early and annual bearer and a late keeper. January to April.
- McIntosh Red**.—Originated in Ontario some twenty years since, but is not widely known. Tree very hardy, long lived, vigorous, good annual bearer of fair, handsome fruit of excellent quality, for home or market use. Fruit above medium, roundish, oblate; skin whitish-yellow, very nearly covered with dark rich red or crimson, almost purplish in the sun. Flesh white, fine, very tender, juicy, mild, sub-acid, very promising. November to February.
- Missouri Pippin**.—Medium to large; pale whitish-yellow, shaded with light and dark red, often quite dark in the sun; flesh whitish, a little coarse, crisp, moderately juicy, sub-acid. January to April.
- Minkler**.—Fruit medium, roundish, oblate; pale greenish-yellow, striped and splashed with two shades of red; flesh yellowish, compact, moderately juicy, good; January to March.
- Newton Pippin**. One of the most celebrated of American apples, on account of its long keeping and excellent qualities, and the high price it commands abroad; but its success is confined to certain districts and soils. It attains its greatest perfection on Long Island and the Hudson. In

Western New York and New England it rarely succeeds well. It requires rich and high culture, and it makes such a slow, *feeble* growth, that it has to be top grafted upon a strong growing variety. November to June.

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

Northwestern Greening.—Hardy, yellow, rich; of good size. Extra long keeper.

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

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

Rawle's Genet (Rawle's Janet, Never Fail, etc.)—Medium to large size; yellow striped with red; crisp, juicy, rich; a *free* grower; prolific bearer. One of the most popular winter apples in the South and Southwest. One of the best keepers.

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

Rome Beauty.—Large; yellow and bright red; handsome; medium quality; a *moderate* grower; good bearer. December to May.

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

Smith's Cider.—Large, handsome, red and yellow; juicy, acid, quality medium; a *moderate* grower and good bearer; succeeds well in the South and West. November to February.

*Salome.—Long keeper, annual bearer, medium and uniform size; good quality, dark red.

*Shackleford.—Originated in Clark County, Missouri. The tree is a vigorous grower and a prolific bearer, better even than the Ben Davis, it flourishes on poor land with a clay sub-soil; apples large, highly colored and finely flavored; choice cookers and good keepers. Season, December to May.

- 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.
- Talman Sweet.**—Medium size; pale, whitish-yellow, slightly tinged with red; flesh firm, rich and very sweet; excellent for cooking. Tree a *free* grower, upright and very productive. November to April.
- Twenty-Ounce.**—A very large, showy, striped apple of fair quality. Tree a *free*, spreading grower, and fine bearer; excellent for baking, and of pleasant flavor, though not rich; very popular in the markets. October to January.
- Wagener.**—Medium to large size; deep red in the sun; flesh firm, sub-acid and excellent. Tree a *moderate*, handsome, upright grower, and very productive; an excellent variety, introduced from Penn Yan, Yates County, N. Y. November to March.
- Waldridge** (Edgar Red Streak). Origin, Edgar Co., Ill. Medium size, oblate, regular; skin pale yellow, shaded with red; flesh crisp, tender, juicy. *Esteemed, especially in cold climates, for its hardiness and productivity*; a late keeper. Tree *very vigorous*. January to May.
- Wealthy.**—Originated near St. Paul, Minn. Fruit medium, roundish; skin smooth, oily, mostly covered with dark red; flesh white, fine, juicy, vinous, sub-acid, very good. Tree very hardy, a *free* grower, and productive. An acquisition of much value, on account of its great hardiness and good quality. November to February.
- White Winter Pearmain.**—Large, roundish, oblong, conic; pale yellow, extra high flavor; one of the best. December to April.
- Wolf River.**—A new, large, handsome apple; hardy, vigorous, and fairly productive; greenish-yellow, shaded with light and dark red; flesh rather coarse, juicy, pleasant, with a peculiar, spicy flavor. November.
- Wine Sap.**—Large, roundish; deep red; medium quality, keeps well. Tree a *moderate* grower and good bearer; succeeds well in the West and is there valuable and popular. December to May.
- Willow Twig.**—Of unknown origin. Fruit medium size; light yellow, shaded and marbled with dull red, and sprinkled with numerous russet dots. Flesh yellowish-green; pleasant, sub-acid, good. Valuable for late keeping.
- *Winter Banana.**—Large, fine-grained, smooth; golden yellow, shaded with red; delicious, sub-acid, finest flavored apple grown; juicy, rich, and a good keeper. Tree very hardy and a beautiful, erect grower; foliage large and glossy; begins to bear the second or third year. Fruit brings from \$5.00 to \$10.00 a barrel. A fine apple for table. Originated at Adamsboro, Ind. December to May.
- Yellow Bellflower.**—Large; yellow, with a tinge of red on the sunny side, flesh crisp, juicy, with a sprightly, aromatic flavor; a beautiful and excellent fruit. Valuable for baking. The tree is a *free* grower and good bearer. November to April.
- York Imperial.**—Medium, oblate, white, shaded with crimson, flesh firm, crisp, juicy and sub-acid; a good bearer and keeper, one of the best winter apples; moderate. November to April.

CLASS IV.—CRAB APPLES.

FOR ORNAMENT OR PRESERVING.

Hyslop's.—Almost as large as the Early Strawberry Apple; deep crimson; very popular at the West on account of its large size, beauty and hardiness; late. Tree remarkably *vigorous*.

Large Red Siberian.—Nearly twice as large as the Red Siberian, but similar in appearance and quality. Tree a fine grower. September and October.

Martha.—A new Crab. A rapid, stiff grower, a perfect pyramid in tree; a great bearer of the most beautiful fruit. Flavor a mild, clear tart; surpassing all other Crabs for culinary purposes, and fair to eat from hand.

Transcendent.—A beautiful variety of the Siberian Crab; red and yellow. Tree a remarkably *strong* grower.

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

SELECT PEARS.

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

Those designated by a * are of American origin. A special list of those which we find particularly well suited to the Quince stock will be found at the end of the general list.

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

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

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

CLASS I.—SUMMER PEARS.

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

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

Souvenir de Congres.—Large to very large, larger than the Bartlett or Clapp's Favorite, to which it bears a strong resemblance (we have had specimens which weighed 27 ounces and which measured 14 inches in circumference); skin smooth, bright yellow when the fruit is fully matured, with the parts exposed to the sun brilliant red or carmine. The flesh, while it is like that of the Bartlett, is free from its strong musky aroma, and is firm to the core. It commences to ripen in August, a little before the Bartlett, and extends into September. The tree is a *moderate* grower. On account of its size, quality and earliness, it is entitled to a place among the best Pears.

Summer Doyenne (Doyenne d'Ete). A beautiful, melting, sweet Pear, rather small. Tree a *vigorous* grower and good bearer. First of August.

***Tyson.**—Rather above medium size; melting, juicy, sweet and pleasant. Tree very *vigorous* and rapid grower; bears abundantly every year; one of the best summer varieties. Origin, Jenkintown, Pa. August.

CLASS II.—SELECT AUTUMN PEARS.

Angouleme (Duchesse d'Angouleme).—One of the largest of all our good Pears. Succeeds well on the Pear, but it attains its highest perfection on the Quince; as a dwarf it is one of the most profitable market Pears. October and November.

Doyenne White.—A well known and almost universally esteemed variety, of the highest excellence. Tree a *vigorous* grower, productive and hardy; succeeds best in most parts of the West.

Flemish Beauty.—A large, beautiful, melting, sweet Pear. Tree very hardy, *vigorous* and fruitful; succeeds well in most parts of the country. September and October.

***Howell.**—One of the finest American Pears; large, handsome; sweet, melting. Tree very *vigorous*, hardy and productive. September and October.

Improved Bartlett.—This valuable Pear was first brought to our notice by one of our customers, a large fruit grower who resides on the shore of Great Salt Lake. Its origin appears to be unknown, as he had but one tree of this variety, which came to him with others purchased and under the name of some of the old well-known varieties. It is probably related to the Bartlett, but in some respects superior to this most valuable Pear, being a longer keeper, and particularly valuable for the reason that it ripens just after the Bartlett, and a much better shipper; in fact, reliable growers inform us that it has no equal in the latter respect. For canning it is unsurpassed; remains firm in the can; color almost white, and quality better than Bartlett. Fruit larger than Bartlett, much more highly colored, surface a little more uneven; hangs well to the tree. We believe when the merits of the Improved Bartlett become known, it will be rated as the best commercial variety of its season. It is a regular and annual bearer. We have the only trees on the market. Price for two year, \$0.75 each, \$6.00 per dozen.

***Kieffer** (Kieffer's Hybrid).—Said to have been raised from seed of the Chinese Sand Pear, accidentally crossed with Bartlett or some other kind. Large: skin rich golden yellow, sprinkled thickly with small dots and often tinted with red on one side: flesh slightly coarse, juicy, melting, with a pronounced Quince flavor. Tree very *vigorous*, and an early and great yielder. October and November.

Louise Bonne of Jersey.—A large, beautiful, first-rate Pear: yellow with a dark red cheek: melting, vinous, buttery and rich. Tree a vigorous, erect grower and most abundant bearer: best on the Quince. September and October.

Rossney.—A chance seedling grown near Salt Lake, where it has been fruiting about fifteen years without missing a crop. Ripens just after Bartlett. averages larger, good keeper and shipper, uniform size, shape and color. one of the handsomest: creamy skin with crimson blush: flesh melting, juicy, sweet and tender, of superior flavor. Tree claimed to be a stronger grower than the Keiffer, hardy both in wood and fruit bud, and very productive. Combines excellent quality with large size, fine form and superior shipping qualities. Should be tested everywhere. 60c. 2 for \$1.00.

***Seckel**.—The standard of excellence in the Pear: small, but of the highest flavor. Tree stout, slow, erect grower. September and October.

***Sheldon**.—A Pear of the very first quality: large, round, russet and red: melting, rich and delicious. Tree vigorous, erect and handsome, and bears well when grown on the Pear. It must be double worked on the Quince. October and November.

CLASS III.—SELECT AUTUMN AND EARLY WINTER PEARS.

Anjou (Beurre d'Anjou).—A large, handsome Pear, buttery and melting, with sprightly, vinous flavor: keeps into mid-winter. Tree a vigorous grower and good bearer. Elwanger & Barry say in their descriptive catalogue: "We have no hesitation in pronouncing it to be the most valuable Pear in the catalogue." Does equally well as a standard or a dwarf. Keeps until the winter holidays, when it commands very high prices in the market.

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

CLASS IV.—SELECT LATE WINTER PEARS.

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

P. Barry.—This is the third seedling of acknowledged great merit sent out by the late Mr. Fox. Thorough tests have proved it to be a free and vigorous grower, an early and prolific bearer, and in its keeping points, its size and richness of flavor, coupled with its time of ripening, to be the most valuable addition to our shipping and late-keeping winter Pears. The fruit is large to very large, elongated pyriform: skin deep yellow, nearly covered with a rich golden russet. Flesh whitish, fine, juicy, buttery, melting, rich and slightly vinous. January to March.

Mt. Vernon.—Medium size, light russet, reddish in the sun; flesh yellowish, juicy and aromatic; early bearer; a very good late Pear. December to February.

Vicar of Winkfield.—A large and very productive Pear; pale yellow, generally juicy, with a good, sprightly flavor. December and January.

Winter Nelis.—One of the best early winter Pears; medium size; dull russet; melting, juicy, buttery, and of the highest flavor. December and January.

PEARS.—NEW VARIETIES.

Idaho.—A recent introduction from Lewiston, Idaho, of unknown parentage. It is especially recommended for its hardiness, prolific bearing qualities, large size, and ability to stand transportation long distances. As yet we have not fruited it ourselves, and can, therefore, only give the introducer's description: "Fruit large, and when fully ripe of a bright golden yellow color, with a red cheek, flesh white, exceedingly fine grained, very tender and buttery, with a rich, subdued acid flavor. It ripens about a month later than the Bartlett, and is said to keep well. Tree vigorous."

Winter Bartlett.—This fine Pear originated at Eugene, Oregon. The tree stands in a door yard in that city, bearing fine fruit, and has, with possibly two or three exceptions, borne a good crop for over 20 years. Tree very vigorous, a foot in diameter and 40 feet high. Has had no pruning or care, yet it is as symmetrical and pretty shaped tree as one ever sees. Fruit large, closely resembling the Bartlett in shape and appearance, perfectly smooth; flesh tender, juicy and melting; flavor similar to the Winter Nelis, but season a little later, and as good as can be desired. *In every way a grand Pear.*

CHERRIES.

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

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

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

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

CLASS I.—HEART CHERRIES.

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

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

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

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

Luelling (Black Republican).—A native of Oregon. Fruit very large, shining black: flesh very solid and firm: fine: a good keeper, and will bear transportation well. Tree a moderate grower; an early and profuse bearer.

Windsor.—A seedling originated at Windsor, Canada. Fruit large: liver-colored: flesh remarkably firm and of fine quality. Tree hardy and very prolific. A very valuable late variety. Middle July.

CLASS II.—BIGARREAU CHERRIES.

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

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

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

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.

CLASS III.—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 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 profuse bearer; makes a fine dwarf or pyramid on the Mahaleb. Last of July. Very valuable.
- Early Richmond.**—An early, red, acid Cherry; very valuable for cooking early in the season. Ripens through June. Tree a *free* grower, hardy and very productive.
- Late Duke.**—Large; light red; late and excellent. Tree *robust*, and makes a nice dwarf or pyramid. End of July. Valuable.
- May Duke.**—An old, well-known, excellent variety; large; dark red; juicy, sub-acid, rich. Tree hardy, vigorous and fruitful; ripens a long time in succession; fine for dwarfs and pyramids. Middle of June.
- Montmorency Large Fruited.**—Fruit large and one of the finest flavored in this class; tree a free grower, hardy and prolific. Last of June.
- 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.
- Ostheimer.**—A perfectly hardy late variety from Germany, claimed superior to both Wragg and English Morello. Large, heart shaped, nearly black when ripe, juicy and rich; not as acid as English Morello; fine for dessert and kitchen use; unsurpassed for market. Blooms late; one of, if not the most productive variety, commencing to fruit on young trees and producing annually heavy crops.
- Olivet.**—Large; very shining, deep red; tender, rich and vinous, with a very sweet sub-acidulous flavor; promising. June.
- 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. July.

The following varieties of Cherries, and the descriptions of same, were procured from the Agricultural Experimental Station at Logan, Utah, who recommend them very highly. We commenced propagating them very recently, and only have a very few to dispose of.

- Double Natte.**—Fruit is large, nearly black when ripe, cavity shallow, sature obscure, juice highly colored, quite bitter until dead ripe; ripens about the first of August, and is an excellent variety for canning. The tree is low and spreading, has good foliage, does not winter kill, and is very prolific.
- George Glass.**—Fruit is large, firm, flavor acid, stone quite large, excellent for dessert. Tree is hardy, has fine foliage and is a good bearer. Ripens about the middle of July.
- Griotte du Nord.**—Fruit medium size, round, dark red, flavor acid, slightly astringent, is of the Besarabian type, ripens about the first of July. Tree is hardy and vigorous, good bearer.

SELECT PLUMS.

These are generally five to six feet in height, and, like all the stone fruits, should have low heads.

- ✓ **Bavay's Green Gage** (Reine Cloude de Bavay).—One of the best foreign varieties. As large as the Washington, and of fine flavor: roundish oval: greenish, marked with red in the sun. Tree a *free* grower and remarkably productive. Middle to end of September. Hangs long on the tree.
- ✓ **Bradshaw**.—A very large and fine early Plum: dark violet red: juicy and good. Tree erect and *vigorous*; very productive: valuable for market.
- Columbia**.—Originated on the Columbia river, where it is extensively grown. It is very large. Flesh rich and finely flavored. Its excellent shipping qualities and time of ripening, being a little later than most of the other leading varieties, commends it as one of the best to plant for the market.
- ✓ **Green Gage**.—Small, but of the highest excellence. Tree a moderate grower. September.
- ✓ **Hale's Plum**.—Mr. Hale says of this Plum: "It is the most vigorous of all the Japans, and there are enough fruit spurs all through the inside to insure a good crop, even though the buds on the outside be killed."
Luther Burbank recently wrote: "Hale's Plum will yield enough fruit to suit anybody, and every season, too."
Fruit large: bright orange, mottled with cherry red: superb in quality. Ripens middle of September.
- ✓ **Jefferson**.—A fine variety: yellow, with a red cheek: flesh orange colored: juicy and rich: parts from the stone. Tree a slow grower, but productive. End of August.
- ✓ **Kelsey's Japan Plum**.—The largest Plum ever introduced into this country, specimens measuring 8 to 9 inches in circumference, and weighing 6½ ounces. Flesh very solid, well adapted to shipping long distances: flavor fine, slightly tart: stone remarkably small. It comes into bearing as young as the Peach, requiring same pruning: ripens last of September after all other Plums are gone, making it a valuable market fruit. No orchard is complete without it.
- ✓ **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.
- ✓ **Peach Plum**.—Tree upright, vigorous: only a moderate bearer. Tree rather tender at the North: branches smooth. Fruit very large, shaped more like a Peach than a Plum: roundish: much flattened at both ends. Suture shallow, but strongly marked: apex much depressed: skin light brownish red, sprinkled with obscure dark specks and covered with a pale bloom. Stalk short, rather stout, set in a shallow, narrow cavity: flesh pale yellow, a little coarse grained, but juicy, and of pleasant, sprightly flavor when fully ripe: separates freely from the stone. Good. Last of July.

Pond's Seedling, or Font Hill.—A magnificent English Plum: form of Yellow Egg; light red, changing to violet: flesh rather coarse. Tree a vigorous grower and most abundant bearer. One of the most attractive in cultivation. September.

Prunus Simoni (Apricot Plum).—Tree very thrifty and vigorous, bearing when quite young. Fruit hanging on the tree, shining like apples of gold, becoming a rich vermillion when fully ripe. It will ship any distance, and in point of quality will outrank any blue Plum grown.

Shropshire Damson.—Originated in England. A Plum of fine quality, which blossoms ten days later than the common Damson, and is therefore less liable to injury by late frosts. Flesh amber color, juicy, sprightly and free from astringency; also perfectly free from the attacks of curculio. In market it has commanded nearly double the price of the common Damson. Enormously productive. Ripens in October.

*Washington.—A magnificent large Plum: roundish, green, usually marked with red; juicy, sweet and good. Tree robust and exceedingly productive. One of the very best. End of August.

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

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

Yellow Egg.—A very large and beautiful egg-shaped yellow Plum: a little coarse, but excellent for cooking. Tree a free grower and very productive. End of August.

PRUNES.

Fellenberg (Large German Prune, Swiss Prune, Italian Prune).—Medium size, oval; dark purple; flesh juicy and delicious; parts from the stone: fine for drying. Tree a free grower and very productive. Late in September.

French Prune (Petite d'Agén, Burgundy Prune).—The well-known variety so extensively planted for drying; medium size, egg-shaped, violet purple; juicy, very sweet, rich and sugary; very prolific bearer.

German Prune (Common Quetsche).—From this variety the dried prunes exported from Germany are made; the name, however, has been applied to numerous plums and prunes, which are all sold under it. The fruit of the true German Prune is long, oval, and swollen on one side; skin purple, with a thick blue bloom; flesh firm, green, sweet, with a peculiar pleasant flavor; separates readily from the stone. September.

Hungarian Prune (Grosse Prune d'Aagen).—Very large; dark red; juicy and sweet. Its large size, bright color, productive and shipping qualities render it a profitable variety for home or distant markets.

✓ **Imperiale Epineuse.**—There are now some large orchards of this variety in bearing in California, where they claim that it is decidedly the most profitable and best Prune on the market. The finest Prunes imported from France are of this variety, and retail in our market at from 20 cents to 25 cents per pound. They are generally put up in small tin boxes. It is claimed the tree is hardy, very prolific and an annual bearer. Its uniformly good size, early ripening and other good qualities commends it as the best Prune for planting.

Silver Prune.—Originated with W. H. Pettyman, of Oregon. Mr. Pettyman says of it, "that it is a seedling from Coe's Golden Drop, which it most resembles, but is more productive, one tree of the Silver Prune producing more fruit than five of Coe's Golden Drop." Samples of dried fruit brought the highest price in the San Francisco market, and it is, in the judgment of fruit experts, because of its large size and superior flavor, entitled to rank first among prunes and drying plums. September.

✓ **Tragedy Prune.**—A new Prune originated by Mr. Runyon, near Courtland, in Sacramento County. It would seem to be a cross between the German Prune and Duane's Purple. Fruit medium size, nearly as large as the Duane Purple; looks much like it, only it is more elongated; skin dark purple; flesh yellowish-green, very rich and sweet; frees rapidly from the pit. Its early ripening (in August) makes it very valuable as a shipping fruit.

✓ **Sugar Prune.**—We have attempted to be beforehand with Luther Burbank's Sugar Prune, destined to supplant all other prunes for drying purposes. It has nearly one-third more sugar than the French Prune, and only dries away one-half on the trays, and averages from twenty to thirty-five to the pound. It ripens from three to four weeks earlier than French and Italian, which adds greatly to its value for evaporating, and especially sun drying. Mr. Burbank says: "The new Prune 'Sugar' and the new Plum 'Climax' are what may be called spring frost proof, as they are among the few to escape wholly here. It is with intense satisfaction that we can at last introduce a new Prune which bids fair to add millions to the wealth of the State and Nation, and which will be hailed with delight by growers, dealers and consumers throughout the world. For many years we have labored to produce a large, early, productive, handsome, easily cured, richly flavored Prune, with a high percentage of sugar; the prize appeared four years ago, and we have now tested it in every way sufficient to warrant its introduction, and we are upheld in our estimate of its great value by all fruit growers who have seen it, and at this writing, even before grafting wood has been offered, numerous growers have ordered from \$50.00 to \$500.00 worth for grafting, regardless of the quantity to be received. The tree is very far superior to the French Prune tree in every respect—better grower, better bearer, better foliage, better form, requires less careful pruning, will carry and mature a larger crop of fruit. The fruit is unusually even in size and very large, *averaging from thirteen to fifteen to the pound; fresh; at least three or four times as large as the French Prune grows here.*"

The following is an accurate description, taken from the report of B. M. LeLong, Secretary of the California State Board of Horticulture: "An extremely early Prune, ripens August first; cures superbly rich, with a yellow flesh, tender and rich in sugar juice. Skin very tender, at first of a light purple; tinted with green, changing at maturity to dark purple, covered with a thick white bloom. Form ovoid; slightly flattened, measuring five by six and a half inches in circumference. Average size, fifteen to the pound, which is two or three times larger than the French Prune. Fruit stock short; severs very easily from the

stem as the fruit reaches maturity. Pit medium size, flattened, slightly wrinkled and most often separated from the flesh. The skin is so thin or porous that the fruit begins to shrink on the tree fully as soon as ripe. Tree an unusually vigorous grower and very productive. One pound green fruit makes $7\frac{1}{2}$ ounces when dry. By the usual mode of curing, one pound green would probably make one-half pound when cured. Analysis of the fresh fruit at the State University discloses the fact that it is nearly one-fourth sugar, the exact amount being 23.92 per cent.; the average of sugar of the French Prune being 18.53 per cent., and of all prunes 15.33. A seedling of Petite, and bids fair to revolutionize the prune industry of the world. Originated by Luther Burbank, of Santa Rosa."

Mr. G. Luther Bowers, of Coyote, Cal., says: "The Sugar Prune has many good points, with no bad ones. 1st. They come into bearing very early and hang on the tree until you need them: a little jar will bring all the ripe ones down. 2d. They dry so easily, in about half the time of French Prune of the same size. 3d. Their immense size. Some of mine went 15 to the pound: the lot went 29 to the pound. Thus they bring a fancy price, and only require about 1 minute to process them for packing. 4th. They are so easy to cook. They retain their shape and are delicious. 5th. They come and are out of the way before the French Prunes are fairly ripe."

B. F. Langford, of Acampo, Cal., says of the Sugar Prune: "I have growing 250 acres of Sugar Prunes grafted on 12-year-old almonds. They are heavy bearers and commenced to bear the 2nd year after grafting. I hold these opinions: 1st. Tree is a fine grower. 2d. Early bearer. 3d. Early ripener. 4th. Fruit large in size. 5th. Contains plenty of sugar. 6th. Size gives them a value over other Prunes."

CAL. FRUIT GROWER, Feb. 28, 1903.

A recent analysis of cured Prunes at the University of California resulted as follows: The cured Prunes ran in size, number to the pound as to variety, Sugar, 32.6; Imperial, 37.8; Robe de Sergeant, 41.2; French, 50.4. The percentage of sugar was as follows: Sugar, 49.5; French, 45.4; Robe de Sergeant, 39.1; Imperial, 37.9.

SELECT PEACHES.

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

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

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

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

Arkansaw Traveler.—Resembling the Alexander, though much larger and of finer flavor.

Carman.—The originator says it is either a seedling of or sister to Elberta; tree of same habit of growth, only has larger and darker colored foliage. Tree hardy and productive, and fruit practically rot-proof, as original tree, standing in low, wet ground, has perfected its fruit two seasons, while other varieties all about have rotted entirely. Carman is described as large, broadly oval in form, pointed; skin yellowish-white, dotted and flushed red; flesh of creamy white, slightly tinged red, of a sprightly, vinous flavor. *The Rural New Yorker* first described it some years ago as an extra large yellow Peach, like Elberta, only five weeks earlier; it certainly is of Elberta type, but is not strictly a yellow Peach, neither is it white. Size large, resembling Elberta, and extra fine flavor; skin tough, makes it the great market Peach of its season. Ripens very soon after Triumph.

Crawford's Early.—A magnificent, large, yellow Peach of good quality. Tree exceedingly vigorous and prolific; its size, beauty and productiveness make it one of the most popular varieties. Beginning of September.

Champion.—A new early Peach, described as large, handsome, creamy white, with red cheek, sweet, rich, juicy, freestone; a good shipper; hardy and productive. Follows Elberta.

Crosby.—A new variety which comes highly recommended, especially for its hardiness. Fruit medium, roundish, slightly flattened, bright orange yellow, splashed with streaks of carmine on sunny side; good in quality. Ripens between Crawford's Early and Late.

Crawford's Late.—A superb yellow Peach; very large, productive and good; ripens here about the close of peach season. Last of September.

Chille Free.—Medium dull yellow; extra hardy and productive. Some growers in this vicinity believe it has no superior. Fruit large, and distributes itself evenly on the tree, similar to Elberta, and ripens about two weeks earlier.

Early Charlotte.—An improved seedling from Crawford's Early, originated in Oregon in 1878, where it is attracting more attention among fruit growers than any other new Peach ever introduced. It resembles Crawford's Early, but is much larger, handsomer, and of superior quality; the tree is a better grower, hardier and more productive. This free, yellow and remarkable new Peach succeeds in Oregon, where all other sorts fail, on account of the extraordinary power of the tree to withstand the leafblight, the great enemy of the Peach on the Pacific Coast. Ripens with Early Crawford.

- Elberta.**—This variety originated in Georgia some years ago and has proved to be one of the most valuable for that region. It is also highly spoken of in other parts of the country. This peach has done remarkably well, and is considered highly promising. Large, yellow; quality good. Ripens between Early and Late Crawford.
- Foster.**—Originated near Boston. A large yellow Peach resembling Crawford's Early, but of better quality. Ripe about the same time as Crawford's Early, or a little earlier.
- Globe.**—Skin lemon yellow, with a fine mottled red cheek; flesh yellow, deep red at the pit, juicy, sweet, rich and melting. Larger and better than Late Crawford, good specimens measuring $9\frac{1}{2}$ inches in circumference. Follows Elberta.
- Golden Acme.**—This large, delicious Peach originated near Olathe, Johnson County, Kansas. It is the most beautiful and showy yellow free in cultivation. Highly colored, rich, sweet, juicy and of superior flavor. Its remarkable large size for the time of ripening—about ten days later than the Amsden—has placed it in the front rank as a market and family Peach. Tree strong grower, hardy and very productive.
- Golden Drop.**—Large, good quality, hardy, profitable market sort: follows Crawford's Late.
- Hale's Early.**—Raised in Ohio; medium size; flesh white, first quality; ripens middle of August.
- Heath Cling.**—Large, oblong, creamy white, slightly tinged with red in the sun; very tender, juicy, melting; very rich and luscious. October.
- Lemon Cling (Pineapple Cling).**—Large, oblong, having a swollen point similar to a lemon; skin yellow with red cheeks; flesh yellow, firm, juicy and sweet; tree a fine grower. August.
- Lemon Free.**—Almost lemon shape, pointed at the apex; color a pale lemon yellow when ripe. It is of large size, of excellent quality. Ripens after Late Crawford.
- Muir.**—This very remarkable Peach originated with G. M. Thissel, of Winters, Cal., who gives the following description: "I believe it to be a seedling from the Early Crawford, though the tree does not resemble the Crawford; the leaf is more like a willow. It is an excellent bearer, does not curl. The fruit is large to very large; is a very free stone; never saw one stick to the pit. It is a fine shipper, and one of the best canning Peaches in the United States. It requires but little sugar, and many pronounce it sweet enough without any. As a drying Peach it excels all others ever introduced into the market." Middle of September. The Muir is the best drying Peach and the best of the free Peaches for the canneries. The demand for it of late years has been unprecedented.
- *New Prolific.**—Claimed by some to be the king of the Peach orchard. Fruit large size; golden yellow with rich red cheek; flavor unsurpassed; tree very hardy and exceedingly productive. Bears fruit in large clusters. Fifth to tenth of September.
- Oldmixon Free.**—Large; greenish-white and red; flesh pale, juicy and rich. Tree hardy and productive; a most valuable variety. Succeeds Crawford's Early.

Orange Cling.—Very large: deep yellow or orange color, with red cheek. The most extensively grown in this State of any of the cling varieties. Tree a strong grower and regular bearer. Ripens just after Elberta.

*Salway.—An English Peach: large, roundish: skin creamy yellow: flesh deep yellow, juicy, melting, rich. A valuable late Peach for market.

Sneed.—The earliest Peach known: originated in the South, where it has fruited for several years, and, so far, has not failed to ripen eight to ten days before Alexander, and, on account of its earliness, has proven very profitable. Fruit medium size, creamy white, with light blush cheek: excellent quality, resembling its parent, Chinese Cling: productive. July.

Stephen's Rareripe.—A fine, handsome, late, white Peach, the most profitable market variety after Crawford's Late, large, very showy and of good quality.

Stump the World.—A new Jersey variety: red and white, handsome, good size and fair quality. Very productive. End of September.

Triumph.—Earliest yellow Peach. Ripens before Alexander, blooms late: sure and abundant bearer: fruit good size, yellow with crimson cheek, not entirely free.

Utah Orange.—As near as we have been able to ascertain it originated near Salt Lake City about twelve years ago. It is very thrifty and symmetrical in habit, and can always be relied on for a good crop in a fruit season. Fully as large as Foster and about the same color: quality rich and unsurpassed: parts readily from the pit: ripens *immediately* after Elberta and is an excellent shipper.

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

Willet.—One of the very best late Peaches.

Wonderful.—This good Peach created a remarkable furor at the Mt. Holley Fair, of New Jersey. In beauty, productiveness, and other desirable qualities, it is so fine the word "Wonderful," unconsciously escapes so many upon seeing it, that it became known at once as that "Wonderful Peach:" hence that name has been accepted for it, contrary to the wishes of the owners, by force of circumstances. It is a free-stone of the richest golden yellow, largely overspread with vivid carmine, and ripens after Late Crawford and nearly all other Peaches.

SELECT APRICOTS.

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

Blenheim, or Shipley.—Medium size; juicy and good; ripens ten or twelve days before the Moorpark. Very hardy.

Coe's Hemskirk.—Originated in California, where it has met with great favor. In size full as large as any other variety, and of better quality. The green fruit sells readily at \$5.00 more per ton and the dried at from 1½c. to 2c. per pound higher than other varieties. It is a regular bearer, the original tree having produced nine successive annual crops without a single failure. We consider it a great acquisition.

Cole's Mammoth.—Large to very large. Meets with great favor in this locality, where it is largely grown for shipping and canning. August.

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

Peach.—Very large, handsome, rich and juicy. One of the best.

Royal.—Large; rich; ripens just before the Moorpark; hardy.

SELECT NECTARINES.

The Nectarine requires the same culture and management as the Peach, from which it differs only in having smooth skin like the Plum.

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

✓ **Early Violet.**—Medium size; yellowish-green, with a purple cheek; flesh pale green, melting, rich and high flavored; freestone. Last of August.

Red Roman.—Greenish-yellow and red; flesh greenish-yellow, rich and good; freestone. September.

QUINCES.

The Quince is well known and highly esteemed for cooking and preserving. It flourishes in any good garden soil; should be kept mellow and well enriched. Prune off all dead and surplus branches, and thin out the fruit if bearing too freely.

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

Angers.—A strong, rapid growing sort.

Champion.—A new variety. The tree bears early and abundantly; and is vigorous. Ripens in October.

Meeche's Prolific.—Tree a rank grower. Fruit said to be larger than the Orange, resembling the Champion in shape and general appearance, though not averaging quite so large; of great beauty and delightful fragrance. Said to excel the latter in vigor and productiveness, and ripens early.

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

NUT TREES.

ALMONDS.

IXL.—Introduced by Mr. Hatch, of Suisun, Cal., whose description we give: "Tree a sturdy, rather upright grower, with large leaves; nuts large, with, as a rule, single kernels; hulls easily, no machine being needed, nor any bleaching necessary; shell soft, but perfect. It bears heavily, and, up to and including this season, very regularly."

Ne Plus Ultra.—Introduced by Mr. A. T. Hatch. The tree is a sturdy and rather upright, rigid grower, but not so much so as the IXL; twigs not at all willowy, leaves rather large; extremely prolific, producing its nuts in bunches all over the twigs; nut large and long, almost invariably of one kernel; of fine flavor; hulls readily.

Nonpareil.—First called *Extra*. Of a weeping style of growth, smaller foliage than the IXL, but still forms a beautiful tree. An extraordinarily heavy and regular bearer, with very thin shell, of the Paper Shell type.

Paper Shell.—Medium size; shell very tender, easily broken between the finger and thumb; kernel large, white, sweet and relishing.

HARDY NATIVE GRAPES.

CLASS I.—BLACK GRAPES.

Campbell's Early.—Its strong, hardy, vigorous growth, thick, heavy, perfectly healthy foliage; very early ripening and abundant bearing of large and handsome clusters of excellent quality, combined with the most remarkable keeping and shipping qualities, form a combination equalled by no other Grape. Its period of full maturity is from the middle to the last of August, according to the season, ripening with Moore's Early, but, unlike that variety, it has kept sound and perfect, both on and off the vine, for weeks after Moore's Early was decayed and gone. In dessert quality it is unrivalled by any of our present list of first early market Grapes. It is, both as to cluster and berry, of large size, of a glossy black color with a beautiful blue bloom; pulp sweet and juicy; free from foxiness; seeds small, few in number, and part readily from the pulp. 50c., 2 for 75c.

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

Early Victor (New Kansas Grape).—Of this promising new Grape the originator says: "After eight years of fruiting, it is found to possess those most important qualities, *perfect hardiness, great vigor, enormous productiveness, without the least sign of mildew on leaf or fruit.*" Bunch and berry medium size, tender, sweet, rich and pure flavored; black, covered with a blue bloom; makes a fine, highly flavored wine like Claret. It has fruited in Missouri, Pennsylvania, Ohio, Connecticut, Colorado and Utah successfully. Ripens two weeks before Concord.

Moore's Early.—Bunch medium; berry large, round, black, with a heavy blue bloom; flesh pulpy and of medium quality; vine hardy and moderately productive; ripens with the Hartford. Its large size and earliness render it desirable for an early crop.

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.

CLASS II.—RED AND REDDISH PURPLE GRAPES.

Agawam (Rogers' No. 15).—One of the best of the red varieties; bunch variable in size; sometimes large and handsome; flesh tender and juicy. Vine a good grower and bearer.

Brighton.—Resembles Catawba in color, size and form of bunch and berry. Flesh, rich, sweet, and of the best quality, equal, if not superior, to Delaware; ripens early, with the Delaware, Eumelan and Hartford. Succeeds remarkably well over the inter-mountain country. Vine productive and vigorous.

Catawba.—Bunches large and loose; berries large, of coppery red color, becoming purplish when well ripened; vinous, rich; requires the most favored soils and situations, good culture and warm seasons to mature perfectly in Western New York.

Delaware.—This fruit has fully maintained its reputation as one of the finest of our native Grapes. The vine is comparatively slender, but grows freely, and is perfectly hardy in this climate: ripens early. Bunch small and compact: berries small, light red, with a violet bloom, beautiful: sweet, sugary and vinous, with a musky aroma. It justly claims a place in every garden.

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

Vergennes.—Originated in Vermont. Bunch of medium size: somewhat loose, not uniform: berry large, round: skin thick, tough, red, overspread with a thick bloom: flesh quite pulpy, flavor pleasant, but not rich. Vine vigorous, hardy, healthy and productive. Ripens with Concord. Keeps well.

CLASS III.—WHITE GRAPES.

Elvira Grape.—A new seedling from Missouri, considered the most promising new white Grape grown. Skin thin, almost transparent: pulp sweet, very tender, juicy and of fine flavor. Vine a strong, healthy grower, very hardy. Ripens about ten days later than the Concord, and promises to be the leading white wine grape of the Middle States.

Moore's Diamond.—A new early, hardy white Grape. Produced from seed of Concord crossed with Iona Vine: very hardy, healthy and vigorous. Ripens from two to four weeks earlier than Concord.

Niagara.—Said to be a cross of Concord and Cassady. Bunch medium to large: compact, occasionally shouldered: berry large, roundish, uniform: skin thin but tough, pale green at first, changing to pale yellow when fully ripe, with a thin whitish bloom: flesh slightly pulpy, tender, sweet, not quite equal to the Concord. Before it is fully matured it has a very foxy odor, which disappears, to a great extent, later. Vine remarkably vigorous, healthy and productive: foliage thick and leathery. Ripens with the Concord. This variety is no doubt destined to supply the long felt want among white grapes.

GRAPES.

FOREIGN VARIETIES.

FOR TABLE, RAISINS AND SHIPPING.

Black Hamburg.—A fine, tender grape, producing large, magnificent, compact bunches: berries black, very large and oblong. A great favorite everywhere.

California, or Mission.—A well-known variety. A strong, sturdy grower, bearing large, black, medium sized berries. Valuable for wine.

Chasselas de Fontainbleau.—Bunches large and compact: berries medium size, round: skin thin, transparent, greenish-yellow: pulp tender, juicy, sweet, and richly flavored. One of the best early grapes.

Emperor.—Clusters large, with large, oval, rose-colored berries. One of the most valuable grapes for shipping long distances.

- Flame-Colored Tokay.**—Bunches very large and handsomely formed; berries large; skin thick, pale red, or flame-colored; flesh firm, sweet, with a sprightly and very good flavor. A splendid shipping Grape.
- Golden Chasselas.**—A most excellent Grape; bunches large; berries round, and larger than those of the C. de Fontainbleau; skin thin, amber color when fully ripe; flesh tender, delicious.
- Muscat of Alexandria.**—Bunches large, long and loose; berries large, slightly oval, pale amber when ripe, covered with a thin white bloom; flesh firm, brittle, exceedingly sweet and rich; fine flavored. The variety most extensively planted for raisins.
- Rose of Peru.**—Bunches very large; berries large, oval; skin thick, brownish-black; flesh tender, juicy, rich and sprightly; a fine market variety.
- Sultana.**—Bunches compact, tapering; berries large, long and conical; skin thin, green, semi-transparent, becoming pale yellow as it ripens; pulp tender, seedless, and flavored much like the Sweetwater. October 1st.
- Thompson's Seedless.**—A seedless variety, resembling the Sultana in some respects, but in others much superior. The vine is exceedingly prolific and the fruit very fine.
- White Sweetwater.**—See Chasselas de Fontainbleau.

FOREIGN WINE GRAPES.

- Zinfandel.**—Bunches large, compact; berries round, dark purple, covered with a heavy bloom; a valuable Claret wine grape, succeeds well in most any climate.

BLACKBERRIES.

In the garden, plant in rows about five feet apart, and four feet apart in the rows. In the field, plant in rows six feet apart, and three feet apart in the rows. Treat the same as Raspberries. They may be planted in the fall or spring.

- Ancient Briton.**—One of the best of the hardy varieties. Very vigorous, healthy and hardy, fruit stems loaded with good-sized berries of fine quality that carry well to and fetch highest price in market. For general planting for home or market in all sections subject to severe winters, the Ancient Briton is recommended as a first-class variety.
- Erie.**—One of the best hardy varieties, as vigorous as Kittatinny; very productive; foliage clean and healthy; free from rust; fruit large, about the size of Lawton; round in form, giving it the appearance of being even larger than it really is; good quality; ripens between Early Harvest and Wilson Junior; one of the most popular.

Early Harvest.—Of small size, fair quality and very early; plant vigorous and productive. Appears to be tender.

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

Rathburn.—A strong, erect grower, with strong main stem branching freely; will root from tip of branches like a Raspberry. Hardy, having endured 20 degrees below zero and produced a good crop. Forms a neat, compact bush four to five feet high, producing its immense fruit abundantly.

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

Taylor.—Berries of fine flavor, larger than Snyder. Canes of vigorous growth, iron-clad hardness and wonderfully prolific. Ripens late. A fine companion for Snyder in cold sections.

Wachusett.—Fruit of medium size, oblong, oval, moderately firm, sweet and of good quality; is a good keeper and ships well. It is also hardy and comparatively free from thorns.

Wilson.—A magnificent, large, very early, beautiful berry, of sweet, excellent flavor. Ripens evenly, holds its color well and brings highest market price. Strong grower, exceedingly productive.

Wilson, Jr.—Large, luscious and sweet as soon as colored. Plant hardy; ripens earlier and is said to be more productive than its parent.

DEWBERRY.

Lucretia.—One of the low-growing trailing Blackberries; in size and quality it equals any of the tall-growing sorts. The plant is perfectly hardy, healthy and remarkably productive, with large, showy flowers. The fruit, which ripens early, is often 1 and 1½ inches long, by 1 inch in diameter, soft, sweet and luscious throughout, with no hard core; ripe before late Raspberries are gone. Should be mulched to keep berries from ground. We can highly recommend this variety.

RASPBERRIES.

To keep a Raspberry bed in good productive condition, the old, weak and dead wood should be cut out every season, to give strength to the young shoots for the next year's bearing. In spring the weakest suckers should be

removed, leaving five or six of the strongest in each hill. The ground should be spaded and a top dressing of manure given.

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

They can be planted in the fall or spring with success. Black Caps cannot be planted in the fall.

AMERICAN SPECIES AND VARIETIES, BLACK CAP, ETC.

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

Gregg.—One of the most valuable varieties of the Black Cap family; fruit larger than the Mammoth Cluster, but not quite so good in quality; ripens some days later; hardy, a vigorous grower and great yielder.

Kansas.—Strong, vigorous grower, standing extremes of drought and cold, and bearing immense crops. Early, ripening just after Palmer. Berries size of Gregg, of better color: jet black, and almost free from bloom: firm, of best quality; presents a handsome appearance and brings highest price in market. The best Black Cap on our grounds.

Logan (Raspberry-Blackberry).—Fruit size of large Blackberries, same form and shape; color dark, bright red; partakes of the flavors of both Blackberry and Raspberry: mild, pleasant, vinous, excellent for table and for canning, jelly, jam, etc. Seeds few and small. Bush of trailing habit. Not perfectly hardy; easily protected during winter.

Loudon.—The best red mid-season berry. Its points of superiority are vigor of growth, large fruit, beautiful, rich, dark crimson color, good quality and marvelous productiveness and hardiness, enduring winters without protection and without injury to the very tips. It stands shipping the best of any variety, and will remain on bushes the longest without injury.

Miller's.—Bright red color, which it holds after picking. Stout, healthy, vigorous grower; canes not as tall as Cuthbert; well adapted to carrying their immense loads of berries. Berries large; hold their size to end of season; round, bright red; core small; do not crumble; firmest and best shipper; rich, fruity flavor. Commences to ripen with the earliest. We can highly recommend this for either home or market.

Marlboro.—The best early red Raspberry for the North, ripening soon after the Hansell; hardy and productive.

Reliance.—Large; roundish; dark red; firm, with a pleasant, sprightly, acid flavor; hardy, vigorous and very productive; may be described as an improved "Philadelphia."

Shaffer's Colossal.—Bids fair to become one of the best in the Raspberry line that has yet been introduced. As compared with the Gregg, it is said to average larger the season through. Its season is the same as the Gregg, but remains in bearing longer.

Souhegan, or Tyler.—Large, black, without bloom and of medium quality. Plant very hardy and a great bearer: ripens a little before Mammoth Cluster.

Turner.—Medium size: moderately firm: juicy and sweet: vigorous and prolific if the suckers are kept down, of which it is very productive. Much esteemed for its good quality and the great hardiness of the plant. Season early.

CURRENTS.

Currents can be successfully planted in the fall or spring. Being perfectly hardy, they do not suffer injury from the winter. Our stock of plants is very large and fine.

To destroy the current worm, dust the plants with white hellebore, when wet with dew. Care must be taken not to breathe the hellebore, as it causes violent sneezing.

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

Cherry.—The largest of all red Currents: bunches short: plant vigorous and productive.

Fay's Prolific Current.—A cross between Cherry and Victoria. It has claimed for it equal size and beauty for the Cherry, with longer clusters, less acid and better flavor: it has a longer stem, which admits of rapid picking, and what is of the greatest importance, is very much more productive. We quote from the disseminator's description: "Color rich red. As compared with the Cherry Current, Fay's Prolific is equal in size, better in flavor, contains less acid and is *five times as prolific*, and from its peculiar stem less expensive to pick."

Lee's Prolific.—Larger than Black Naples and very productive.

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

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

White Grape.—Very large, mild and excellent: the best table variety. This is very distinct from the White Dutch.

GOOSEBERRIES.

I.—ENGLISH VARIETIES.

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

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

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

Industry.—Size large: form oval: skin dark red, hairy: flavor rich and agreeable.

II.—AMERICAN VARIETIES.

Columbus.—This is one of the most valuable introductions of recent years in small fruits, and it fully sustains the high opinion first formed of it. It was introduced by Elwanger & Barry a few years ago. The fruit is of largest size, handsome, of a greenish-yellow color, and the quality is excellent. The plant is vigorous and productive, and does not mildew. It merits a place in every garden. \$3.00 per dozen: \$15.00 per 100. The editor of the *Rural New Yorker* says: "It is the *best* variety yet introduced, and seems close to a perfect Gooseberry for our climate."

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

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

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

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

Champion.—Originated in Oregon, where it is much esteemed. Reddish color: very prolific, and free from mildew: medium size. The most profitable for canning.

STRAWBERRIES.

Brandywine.—A fine, large, late, handsome, productive berry, of excellent quality: regular conical form: dark, glossy red, extending to the center. Plant healthy and vigorous, abundant producer. An extra good sort for all purposes.

Eclipse (Barton's) (p).—Luxuriant grower, with dark green, perfectly healthy foliage, strong roots, berries very large, bright scarlet, uniform size, excellent quality: firm: carries to market well.

Glen Mary.—Berries large to very large, often flattened: bright deep red on surface, light red to center: sweet, rich, good flavor: season medium to late. One of the most productive, and holds its size well to end of season: plant very vigorous. One of the best for home use and nearby market.

Margaret.—Has made a remarkable record for healthy, vigorous growth, productiveness, size, beauty and quality. Season medium to very late, holding its size to the end. Under good culture its berries are all extra large, and it produces the finest fruit in great abundance. Berries usually conical, never misshapen: dark, glossy red to the center: firm and of excellent flavor.

Nick Ohmer.—The plant is very large and stocky, sending out plenty of very strong runners. It is probably not surpassed in healthy, vigorous growth and great productiveness by any variety. It has a perfect blossom. The fruit is of the very largest size, a giant among strawberries. It is never misshapen. Its only departure from the regular roundish conical form is when, under high culture, it is somewhat triangular. It is dark, glossy, red, firm and of excellent flavor.

Pride of Cumberland.—One of the best posted strawberry specialists says: "For a long-keeping, shipping berry of fine size and great beauty Pride of Cumberland heads the list." Plant is healthy and vigorous, berries large size, conical, rich glossy red, good quality, firm and unexcelled for long distance shipments. Thrives on almost all soils: like all the large berries delights in a deep rich one.

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

Warfield (p).—Its great beauty, firmness, earliness, good flavor, productiveness and vigor make it exceedingly popular. Ripens with Crescent, and is superseding that variety for a reliable market sort.

ORNAMENTAL DEPARTMENT.

Trees, Shrubs, Etc., for Ornament.

We are just beginning to appreciate the value and importance of planting Ornamental Trees, Shrubs and Plants, Evergreens and Deciduous Hedges, for lawns and yards, and screens for the protection of our orchards and gardens, and yet we have scarcely begun to realize the commercial value of such an investment to our homes. We know a keen, sagacious business man in one of our larger cities who has operated for years past in the following manner: He buys a tract of land in the suburbs of the city, cuts it up into liberal sized building lots, drives stakes for a house, and immediately plants the ground with fruit and ornamental trees, shrubs and hedges. He then employs a good man to care for them, and does not offer the lots for sale for two or three years, well knowing that the increasing value of the property will pay him good interest on the investment. When a purchaser goes to look at the property, he finds that when his house is built, he has, instead of a naked house on a bare lot, a neat and beautiful home, with its growing trees and plants, which it would have taken years to get around him. Many of our most active business men are also men of taste, and would be glad to improve and beautify their ground, but they are so occupied with business that they have neither time nor disposition to find out what they want or to lay out their grounds. Some competent man can generally be found to aid in this matter.

HOW TO PLANT.

Flower gardens and graveled walks are beautiful, but expensive, and require constant labor to keep them in order. Grass and trees are always charming, and need but little care. In the laying out and planting of grounds have regard to economy of labor. Let there be as few walks as possible: cut your flower beds (not many) in the turf; and don't make the lawn a checker-board of trees and shrubs. Mass them on the boundary lines or in groups, leaving a broad expanse of green for the eye to rest on, and the mower to sweep freely over. If an unpleasant object is in sight, conceal it by planting free-growing trees: if there is a pretty view, leave an opening. While it is not

well to have large trees near the house, there should be at least one at the sunny corner, for summer shade. Plant flowering shrubs and the smaller evergreens in circles or ovals, and twice as thick as they should stand when fully grown. This will make a show at once, and in two years or more you can take out one-half, leaving the rest to fill up the space, and obtaining a supply of finely rooted plants to set somewhere else. Keep the shrubs and trees cultivated or mulched the first two seasons, and then let the turf grow about them. Mow the grass frequently, except in mid-summer, and top-dress with fine manure every fall and winter.

Straggling growers like the *Forsythia* and *Pyrus Japonica*, should be repeatedly pinched back or clipped during the growing season to produce a close, compact form. *Weigelas* and *Deutzias* should be pruned like currants, leaving the strong wood to flower. *Altheas* and some of the *Spireas* which bloom on the new shoots, may be pruned back each year to the old wood. A very beautiful hedge can be made by intermingling different Flowering Shrubs, and clipping according to the directions given below, or allowing them to grow naturally.

HEDGES.

The idea of planting Hedges for use and ornament, and screens for the protection of the orchards, farms and gardens is a practical one, and rapidly becoming appreciated.

They serve not only as protection against the fierce winds, but there is much less trouble from the blowing off of fruit. Some writers tell us that the temperature is warmer in the vicinity of Evergreens. However this may be, we know that our gardens are earlier, and that our fruits ripen better when protected by such screens. Nothing can be more beautiful than ornamental hedges of Evergreens or shrubs well kept and pruned to serve as boundary lines between neighbors, or as divisions between the lawn and garden, or to hide unsightly places. By using medium sized plants, a hedge can be made as cheaply as a good board fence can be built, and then with a very little care it is becoming every year more and more "a thing of beauty." We all know that such hedges constitute a principal attraction in our best kept places.

CLASS I.—DECIDUOUS TREES.

Ash (*Fraxinus*).

EUROPEAN.—A large growing. curious variety: irregular habit, spreading head and gray bark.

GOLD BARKED.—A new variety, growth irregular: has peculiar appearance in winter on account of its golden bark.

MYRTLE LEAVED.—A small growing tree, with dark green myrtle-like leaves.

Beech (*Fagus*).

FERN LEAVED.—Tree of beautiful habit, and delicate fern-like foliage. A splendid lawn tree, with deeply cut leaves and a remarkably fine foliage.

PURPLE LEAVED.—An elegant vigorous tree, growing 40 to 50 feet high: the foliage in spring is deep purple, and later in the season changes to crimson, and again to a dull purplish green in the fall.

Birch.

COMMON WHITE (*Alba*).—A well-known variety, with silvery white bark, smooth leaves and pliant branches.

PURPLE LEAVED.—A very desirable novelty. With the habits of the Birches, it has beautiful purple foliage, as dark as that of the Purple Beech.

Cherry.

FLORE ALBA PLENO (Large Double Flowering Cherry).—At the period of flowering, a remarkably beautiful and attractive tree. The flowers are so numerous as to conceal the branches, and present to the eye nothing but a mass of bloom, each flower resembling a miniature white rose. A valuable variety deserving of wide dissemination. May.

Chestnut (American Chestnut).

A magnificent forest tree, with deep rich foliage, and well known fruit; is exceedingly valuable as a timber tree.

EUROPEAN, OR SPANISH.—A European sort, perfectly hardy, bearing larger nuts than the native: very fine.

Catalpa.

SPECIOSA.—A variety originating at the West: more upright and symmetrical in its growth than the common Catalpa (*Syringifolia*), and blossoms two or three weeks earlier. Very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability. A very ornamental and valuable tree.

Dogwood (*Cornus*).

WHITE FLOWERING (Florida).—Has large showy white blossoms in the early spring: very ornamental.

Elm (*Ulmus*).

HUNTINGDON.—Of very erect habit, and rapid, vigorous growth. Bark clear and smooth, one of the finest Elms for any purpose.

AMERICAN WHITE, OR WEEPING (American).—The noble, graceful spreading and drooping tree of our own forests.

SCOTCH, OR WYCH (Montana).—From the North of Europe, forming a spreading tree, with large, rough, dark green leaves. A rapid grower.

Horse Chestnut (*Æsculus*).

WHITE FLOWERING.—The well known species; decidedly ornamental; makes a dense, symmetrical head; blooms in May, with large clusters of white flowers, mottled with red; makes the most popular shade tree; very healthy and hardy. Dbl. red and white.

Larch (*Larix*).

EUROPEAN.—A very fine pyramidal-shaped tree, of rapid growth; somewhat drooping in habit; very hardy, makes a beautiful tree.

Locust (*Triacanthos*).

HONEY, OR THREE THORNED.—A rapid growing, graceful tree, with very long thorns and beautiful, delicate foliage, much used and very desirable for hedges, and when grown singly very conspicuous.

Linden or Lime Tree (*Tilia*).

WHITE, OR SILVER LEAVED.—A handsome, vigorous growing tree; large leaves, whitish on the under side, having a beautiful appearance when ruffled by the wind. One of the best.

RUBRA (Red-Twigged European Linden).—A fine variety with blood red branches.

AMERICAN, OR BASSWOOD.—A rapid growing, beautiful native tree.

Maple (*Acer*).

SUGAR.—Sugar Maple does not succeed in this climate.

SILVER LEAVED.—A very fine tree, of rapid growth; leaves white beneath; very valuable as a shade tree.

ENGLISH, OR CORKED BARK (*Campestris*).—From Central Europe, forming a small-sized tree, with rough corky bark, and a regular rounded outline. Leaves small, five-lobed and numerous. Fine for lawn.

NORWAY (*Platanoides*).—One of the most beautiful and desirable trees known: of large size, perfect outline; deep green foliage; compact in form and free from insects and disease.

WIER'S CUT-LEAVED.—A variety of the silver-leaved. A rapid growing tree with slender branches and very pretty indented leaves, silvery on the under side. Very graceful and attractive. One of the best lawn trees.

PURPLE LEAVED SYCAMORE MAPLE (*Purpurea*).—A very handsome tree of rapid growth. Foliage deep green, purplish red underneath.

Mountain Ash (*Sorbus*).

EUROPEAN.—A very fine, hardy, ornamental tree, universally esteemed; profusely covered with large clusters of red and scarlet berries.

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

Poplar (*Populus*).

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

CAROLINA.—A vigorous, healthy, native tree of rapid growth; pyramidal in form, with large, glossy leaves; valuable for park or street planting. Makes a fine, spreading head, if well cut back the first few seasons; succeeds everywhere.

SILVER POPLAR (or Silver Poplar).—The Poplars are all large, rapid-growing trees, and will thrive in any soil. The leaves are on slender foot stalks and easily stirred by the wind, when the white under side is shown and produces a fine effect.

LOMBARDY.—Its tall, fastigate form, sometimes reaching 120 feet, makes it indispensable in landscape effects for breaking monotony of outline. Its growth is very rapid.

Peach.

DOUBLE RED FLOWERING PEACH.—Flowers double, rose-colored: very pretty.

DOUBLE WHITE FLOWERING PEACH.—Very ornamental: flowers pure white.

Salisburia (Maiden Hair).

A singular and beautiful tree from Japan: foliage yellowish-green, curiously lobed and marked with delicate hair-lines.

Tulip Tree.

A native tree of Magnolia order. Remarkable for its symmetry, its rich, glossy foliage, regularly distributed branches, and large, tulip-like flowers.

Thorn (Crateægus).

PAUL'S NEW DOUBLE.—This is a new sort and the best. Flowers are in clusters like verbenas; are very double, large and full, and of a deep rich crimson.

Walnut (Juglans).

BLACK.—A very ornamental tree of a spreading habit, with a round head: desirable for its fruit.

EUROPEAN.—A large tree. It is much cultivated in Europe both for its fruit and for its timbers.

White Fringe.

Distinguished for beautiful fringe-like foliage and delicate white flower.

Willow (Salix).

ROSEMARY LEAVED (Rosemarinifolia).—A very distinct and ornamental tree, with long, glossy, silvery foliage; makes a very beautiful lawn tree, medium size: very ornamental.

[See "Weeping Trees," for the weeping varieties of the Willow.]

CLASS II.—DECIDUOUS WEEPING TREES.

The following class of Weeping trees are highly interesting and ornamental for choice grounds, lawns, cemeteries, etc., for their graceful appearance.

Ash (Fraxinus).

EUROPEAN WEEPING.—One of the finest Weeping trees for lawns and arbors.

Birch (*Betula*).

CUT LEAVED WEEPING.—Beyond question one of the most popular of all weeping or pendulous trees. Its tall, slender, yet vigorous growth, graceful, drooping branches, silvery white bark, and delicately cut foliage, present a combination of attractive characteristics rarely met in a single tree.

Cherry.

EVER FLOWERING WEEPING.—A drooping variety that bears fruit and flowers all summer.

DWARF WEEPING (*Pumila*).—A very slender growing variety: makes a nice round head; suitable for small lawns.

Elm (*Ulmus*).

CAMPERDOWN.—Grafted 6 to 8 feet high forms one of the most picturesque drooping trees; is of rank growth, often growing several feet in a single season. The leaves are large, dark green and glossy, and cover the trees with a luxuriant mass of verdure.

Mountain Ash (*Sorbus*).

WEEPING.—A beautiful variety of rapid growth and decidedly pendulous and trailing habit, one of the most desirable lawn trees.

Willow (*Salix*).

WEEPING (*Babylonica*).—The common Weeping Willow.

NEW AMERICAN WEEPING (*American Pendula*).—An American species of dwarfish habit, with slender, drooping branches, and when grafted six to seven feet high, forms a beautiful and graceful tree.

KILMARNOCK.—A very graceful weeping tree, with brown branches, glossy leaves, and a symmetrical, umbrella-shaped head. Thriving in any soil or situation, it is one of the most desirable of the weeping trees.

CLASS III.—EVERGREEN TREES.

This class of Evergreens are mostly very hardy, and particularly adapted to our Northern and Western climates. Many of these make the most ornamental hedges and screens, and when planted with other deciduous trees, the contrast has the most happy effect.

Arbor Vitæ (*Thuja*).

AMERICAN (*Occidentalis*).—A large, pyramidal tree, with flat foliage, adapted for single planting or for ornamental hedges; should be more extensively cultivated: perfectly hardy.

PYRAMIDALIS.—This exceedingly beautiful Arbor Vitæ is the most compact and erect of all the entire species, being in form almost a counterpart of the Irish Juniper. Foliage a deep green, retaining its color remarkably well through the entire season and perfectly hardy.

SIBERIAN (*Siberica*).—This is a most beautiful tree; perfectly hardy; makes a fine lawn tree, with its elegant dark green foliage, which it retains all winter.

Juniper (*Juniperus*).

IRISH (*Hibernica*).—A very neat little tree, with dark green foliage.

Pines (*Pinus*).

AUSTRIAN, OR BLACK (*Austriaca*).—Tree of a very large growth, with long, stiff leaves, and dark green foliage; very hardy.

SCOTCH PINE (*Sylvestris*).—A very noble and rapid grower; tree has strong, erect shoots, and glossy, green foliage; quite hardy in all localities.

WHITE PINE (*Strobus*).—A rapid growing native pine, with light green foliage.

Silver Fir (*Picea*).

BALSAM FIR (*Balsamea*).—A very erect, pyramidal tree; very regular in its habits, of strong growth, with dark green foliage.

Spruce.

NORWAY (*Excelsa*).—An elegant, lofty and graceful pyramidal tree, with drooping branches and bright green foliage. It is decidedly the most hardy, ornamental and interesting of the Evergreen tribe.

BLUE SPRUCE (*Abies Pungens*).

HEMLOCK (*Canadensis*).—A very elegant and graceful tree, with fine form, pendulous or drooping branches and delicate or dark green foliage; makes a beautiful lawn tree or ornamental hedge.

DECIDUOUS SHRUBS.

Althea Frutex (*Hybiscus Syriacus*).

This is a very desirable class of shrubs, blooming in the autumn months, when few other shrubs are in blossom, and of the earliest cultivation, being very hardy.

LADY STANLEY, { Variegated red and white flowers; new. Very
SPECIOSA. { fine.

DOUBLE VARIEGATED, OR PAINTED LADY (*Variegatus flore pleno*).—Fine double flowering; variegated pink and white.

DOUBLE LILAC (*Pæoniflora*).—Very handsome; double lilac-flowering.

Azaleas (*Ghent*).

These plants differ from the *Indica* or indoor varieties, inasmuch as they are extremely hardy. The richness of their varied colors cannot be surpassed by any other shrub for beauty. Their best effect is obtained by planting in groups. We have a fine collection of leading varieties. Twelve to eighteen inches.

Almond (*Amygdalus*).

DWARF DOUBLE ROSE FLOWERING (*Pumila Rosea*).—A beautiful shrub, with small double, rosy blossoms.

DWARF DOUBLE WHITE FLOWERING (*Pumila Alba*).

Berberry (*Berberis*).

PURPLE LEAVED (*Purpurea*).—Valuable for its rich, dark purple foliage and fruit.

Calycanthus (Sweet-Scented Shrub).

FLORIDUS.—An interesting shrub, having a rare and peculiar fragrance of wood and flowers: its blooms are abundant and chocolate color.

Cornus, or Dogwood.

ELEGANTISSIMI.—A new and remarkable variety, with dark green foliage, margined with silver and red: wood a very dark red, retaining its color the entire year. A very beautiful and attractive shrub for lawns and group planting: a strong grower and perfectly hardy in all soils and climates.

RED BRANCHED (*Sanguinea*).—Very conspicuous and ornamental in winter from its red bark.

Deutzia.

CRENATE LEAVED (*Crenata*).—A fine shrub, nearly as strong as the *scabra*, and profuse flowering as the *gracilis*.

CRENATA FL. PL.—Similar in growth and habit to the above: flowers double, white, tinged with rose. The finest flowering shrub in cultivation.

ROUGH LEAVED.—One of the finest profuse white flowering shrubs.

SLENDER BRANCHED (*Gracilis*).—A very pretty shrub, with delicate white flowers: introduced from Japan. Fine for pot culture.

Fringe Tree.

PURPLE FRINGE.—A very much admired shrub for its singular fringe or hair like flowers, covering the whole plant: known as Aaron's Beard.

WHITE FRINGE.—A small tree or shrub, with graceful, drooping clusters of fringe-like white flowers.

Hydrangea.

OTAKSA.—New, from Japan. Corymbs of flowers of very large size, deep rose color: foliage larger than other varieties of the species. Growth vigorous, very attractive.

PANICULATA GRANDIFLORA.—A fine, large shrub, bearing showy panicles of pink and white flowers in the greatest profusion. It is hardy, and is altogether a most admirable shrub for planting singly, or on the lawn in masses.

THOMAS HOGG.—Flowers pure white, often measuring fifteen inches in diameter. It is hardy everywhere, if a slight protection of leaves is given around the roots in winter.

Honeysuckles. Upright.

WHITE TARTARIAN.—Forms an upright bush with white flowers and fruit.

PINK FLOWERING.—A beautiful shrub, producing large, bright red flowers striped with white; in June; superseding the old Red.

Lilac (*Syringa*).

DOUBLE LILAC (Emile Lemoine).

COMMON PURPLE.—Bluish purple flowers.

COMMON WHITE.—Cream colored flowers.

PERSIAN PURPLE (*Persica*).—One of the best. Small foliage and bright purple flowers.

The above class of shrubs are very interesting and desirable for their beauty of foliage and profusion of fragrant, showy flowers, being some of the hardiest shrubs.

CALIFORNIA.—Rapid grower, with bright, shiny leaves.

Prunus (Double Flowering Plum).

TRILOBA.—A very desirable hardy shrub, with semi-dbl. pink flowers.

PISSARDI.—A very new introduction from Persia, with dark purple leaves, stem and fruit, as fine in appearance as Purple Leaved Beech, attains the height of a small tree. Considered the finest ornamental plant of recent introduction.

Quince.

SCARLET JAPAN.—A very hardy shrub, with double, scarlet crimson flowers in great profusion early in spring; highly ornamental.

St. Peter's Wort, or Snow Berry (*Symphoricarpos Racemosus*).

A very hardy and well-known shrub, with pink flowers, and large, white berries, hanging on till winter.

Spirea.

BILLARDI.—Blooms nearly all summer; rose-colored; fine; showy.

CALLOSA ALBA.—A new white flowering Spirea, of dwarf habit; very fine, perfectly hardy; blooms in July and August; one of the most desirable.

GOLDEN LEAVED (*Opulifolia*).—An interesting variety, with golden yellow tinted foliage, and double white flowers in June. Very conspicuous. Strong grower and distinct.

PLUM LEAVED, DOUBLE FLOWERING.—Beautiful; flowers very profuse and full. Blooms in May.

The above are best specimens of Spirea. They are all very hardy and showy; of the easiest culture. Blooming in succession some two or three months.

Syringa, or Mock Orange (*Philadelphus*).

AUREA.—A new gold leaf shrub of delicate growth and beauty. It is not so fine a grower as the Mock Orange, but is sufficiently free to make it very valuable for clumps and hedges.

GARLAND (*Coronarius*).—A very fine shrub, with sweet-scented flowers.

DOUBLE FLOWERING.—Habit of growth stronger than above, with semi-double white flowers.

LARGE FLOWERED SYRINGA.—A vigorous grower; very showy; large white flowers, slightly fragrant.

Tamarix.

AFRICAN (*Africanus*).—These are beautiful shrubs, with small, delicate flowers; leaves somewhat resemble the Juniper.

Viburnum.

SNOWBALL TREE.—A well-known, favorite shrub, of large size, with globular clusters of pure white flowers. The latter part of May.

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

Weigela (*Durvillia*).

HORTENSIS NIVEA.—White flowered Weigela. Of dwarf spreading habit and slow growth, flowers pure white, retaining their purity the whole time of flowering; foliage large; A profuse bloomer.

ROSEA (Rose-Colored Weigela).—A beautiful and hardy shrub, with double rose-colored flowers, rich in profusion; introduced from China by Mr. Fortune, very hardy; blooms in June.

CANDIDA.—All white varieties heretofore known have been lacking some important characteristic. *Hortensis nivea*, the best and only really white sort, is a poor grower and difficult to propagate; other so-called white sorts have flesh-colored flowers, so that the introduction of the *Candida* supplies a long felt want. It is of vigorous habit, an erect grower, becoming in time a large sized shrub; flowers pure white and produced in great profusion in June and the plants continue to bloom during the summer, even until autumn.

CLIMBING PLANTS.

Ampelopsis (*American Ivy* or *Virginian Creeper*).

Has beautiful digitate leaves that become rich crimson in autumn; a very rapid grower; like the Ivy it throws out tendrils and roots at the points, by which it fastens itself to anything it touches; one of the finest vines for covering walls, verandas, or trunks of trees; affords shade quickly.

VEITCHII (*Japan Creeper*).—Leaves smaller than those of the American and overlap one another, forming a dense sheet of green. The plant is a little tender while young and requires protection the first winter; but once established there is no further risk. It grows rapidly and clings to wall or fence with the tenacity of Ivy; the foliage is very handsome in summer and changes to crimson scarlet in autumn; for covering of walls, stumps of trees, rookeries, etc., no plant is so useful. For the ornamentation of brick and stone structures it can be specially recommended.

Aristolochia (Birthwort).

SIPHO (Tube Flower, or Dutchman's Pipe).—A twining vine of rapid growth, having large, dark green leaves ten inches in diameter, and curious brownish pipe-shaped yellowish-brown flowers in July.

Bigonia, or Trumpet Flower (Radicans).

A splendid, hardy, climbing plant, with large, trumpet-shaped scarlet flowers in August.

Honeysuckle (Lonicera).

COMMON WOODBINE (Pericliminum).—A vigorous grower and very showy.

CHINESE TWINING (Japonica).—Retains its foliage nearly all winter; is quite fragrant.

HALL'S JAPAN (Hallena).—An evergreen variety with pure white flowers changing to yellow. Very fragrant and blooms from June to November. Holds its leaves till January. The best of all.

JAPAN GOLDEN LEAVED (Aurea Reticulata).—The most beautiful variety of this class of climbers: leaves of bright green, and golden yellow vines; exquisitely beautiful: fine for bedding, pot culture or for hanging baskets; perfectly hardy: will give entire satisfaction.

MONTHLY FRAGRANT (Belgica).—Sweet-scented, very fine: continues in bloom all summer.

SCARLET TRUMPET MONTHLY (Sempervirens).—Strong, rapid grower; blooms all summer.

Ivy (Hedera).

GRANT (Regneriana).—A new and hardy variety, with large, dark green and shiny leaves: evergreen.

ENGLISH.—An old variety: a hardy climbing plant.

TRICOLOR.—Leaves green, white and rose.

NEW SILVER STRIPED.—Deep green leaves, heavily margined with white: very striking.

Wistaria, or Glycine.

CHINESE PURPLE.—One of the most splendid, rapid growing plants: has long, pendent clusters of purple flowers in spring and autumn.

CHINESE WHITE.—Similar to the above, except in color of the flowers, which in these are pure white.

Clematis Coccinea (The Scarlet Clematis).

This remarkably handsome climbing plant, after several years' trial, has proved to be one of the most desirable for any purpose where climbing plants are required. The plant is a herbaceous perennial, the stems dying to the surface each winter (this is an advantage where an unobstructed view is required in winter); the vines attain the height of from 8 to 10 or 12 feet, beginning to flower in June and continuing until frost; single vines have from 20 to 30 flowers on each, and frequently as many as ten vines will start from one crown each season. The flowers are bell-shaped: in color a rich, deep-coral scarlet, shining as if polished, and lasting a long time when cut. Indeed, one of the most beautiful plants for festooning is to be found in *Clematis Coccinea*, with its peculiar shaded green and elegantly cut and varied foliage: if it never flowered it would be a handsome climbing vine. The plant, during our observation, has no insect pests or enemies: it grows freely in any soil, requiring one or two hours' sunshine to strengthen the vine sufficiently to make a successful flowering season, and above all is perfectly hardy, standing exposure in our severest winters without harm.

CLEMATIS.

CLASS I.—PERPETUALS.

Summer and autumn bloomers, flowering on wood of the same season's growth.

C. *Paniculata*.

A great novelty from Japan. It has proved to be one of the most desirable, useful, and beautiful of hardy garden vines, being a luxuriant grower, profuse bloomer, and possessing fine foliage. It is particularly useful for covering verandas, pillars, fences, where a trellis or support can be provided for it to climb on. The flowers are of medium size, very pretty and fragrant, and produced in the greatest profusion in late summer. We can recommend this novelty in the strongest manner as one of the best vines to grow near the house; it makes a growth of from 25 to 30 feet in a single season, and should be cut back to the ground each spring. 75c.

Imperatrice *Eugenia*.

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 October.

Jackmanii.

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

Jeanne 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 to each sepal: delicate and beautiful. July to October.

Star of India.

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

CLASS II.

Flowering in the spring and early summer from the old wood of the previous year's growth.

Miss Bateman.

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

Virginiana.

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

HEDGE PLANTS.

Which May be Used for Ornament, Shelter and Screens.

ORNAMENT.

ARBOR VITÆ,

JAPAN QUINCE,

PRIVIT,

SPIREAS.

HEMLOCKS.

FOR SHELTER AND SCREENS.

NORWAY SPRUCE.

RUSSIAN MULBERRY.

WILLOW.

CAROLINA POPLAR.

SELECT ROSES.

CLASS I.—HYBRID PERPETUAL ROSES.

This class of Roses are the most desirable on account of their free blooming and are particularly desirable for cold climates, because they are entirely hardy. Though slight protection in winter in exposed situations is always desirable, this may be done by hilling up the earth, or better, by strewing leaves or straw lightly over the plants and securing them with evergreen branches or brush of any kind. Pruning should be done in March or early in April. Remove two-thirds of the past year's growth. All weak and decayed wood should be entirely cut out. Hybrid Perpetuals and Moss Roses may be planted in spring or fall.

Anna de Diesbach.—Brilliant crimson, sometimes shaded with bright maroon.
A superb garden sort; fragrant; one of the hardiest and best.

Alfred Colomb.—Cherry red, passing to bright rich crimson: flowers extra large, double and full: extremely fragrant, and in every respect a superb sort: one of the very finest Hybrid Perpetual Roses.

Black Prince.—Very deep blackish crimson; large size; full globular form; fragrant.

Barronne Prevost.—Beautiful bright rose, deeply shaded with dark crimson: very large and finely perfumed.

Couquette des Blanches.—Pure white, sometimes faintly tinged with pale rose; flowers of medium size, somewhat flat, but full and pretty; slightly fragrant; blooms in large clusters; one of the hardiest.

Couquette des Alps.—White, slightly shaded with carmine, medium size; a profuse bloomer, very full and fragrant; one of the finest white Hybrid Perpetual Roses.

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

Climbing Victor Verdier.—Brilliant rosy carmine; edged with purple; very large, full and fragrant.

Caroline de Sansal.—Pale flesh color, deepening toward the center; very large and sweet; hardy and a first-class variety.

Crimson Rambler.—The wonderful Japanese Rose, by far the most important and valuable acquisition of recent years. The Crimson Rambler is unquestionably an acquisition, and most distinct in its characteristics. It is a running or climbing rose of vigorous habit, strong and rapid growth, with handsome, shining foliage, and produces in marvelous abundance clusters of the brightest crimson semi-double roses. Its clustered form, its brilliancy, the abundance of its bloom, and the great length of time the flowers remain on the plant without falling or losing their brilliancy, are qualities which will make this new claimant for admiration an assured favorite. For verandas, walls, pillars, and fences, it is a most suitable plant. If grown in beds and pegged down it produces marvelous heads of bloom, or it can be grown in bush form and thus becomes a most striking object. We planted this rose out of doors, along with Hybrid Perpetuals and other hardy roses, and the plants came through the winter even better than many of the hardy varieties, remaining fresh and green to the very tips. But it is not only for outdoor use that it is valuable; it can be employed most satisfactorily for decorating in-doors when grown in pots, and for forcing at Easter time when pot-grown specimens bring high prices. We are satisfied that this is the greatest rose novelty of recent years.

Gen. Jacqueminot.—Brilliant crimson; not full, but large and extremely effective; very fragrant and of excellent hardy habit; magnificent buds.

Louis Van Houtte.—Crimson maroon; large, full and fragrant; a very free bloomer, and one of the best crimson roses.

La France.—Delicate silvery rose, changing to a silvery pink; very large, full of fine globular form; a most constant bloomer, very sweet and cannot be surpassed in delicacy of coloring.

Marshal P. Wilder.—Color cherry carmine, richly shaded with maroon, very fragrant and a free bloomer; a vigorous grower and hardy; continues to bloom long after other Hybrid Perpetuals are out of bloom; a superb rose and should be in every collection.

Mabel Morrison.—White, sometimes tinged with blush; in the autumn the edges of the petals are often pink; a very valuable white rose.

Madame Charles Wood.—One of the best roses for general planting ever introduced; the flower is extra large, full and double; color deep rosy crimson, sometimes brilliant scarlet with maroon shading, a constant and profuse bloomer.

Madame Alfred Carriere.—Extra large, full flowers, very double and sweet; color rich creamy white, faintly tinged with pale yellow; exceedingly beautiful; a strong, hardy grower and free bloomer.

Madame Plantier.—Pure white, above medium size, full: produced in great abundance early in the season: one of the best white roses: hardy: suitable for cemetery planting or massing in groups.

Madame Louis Carrique.—Rich velvety crimson: large size and free bloomer, blooming in clusters, fragrant: a strong grower and hardy.

Mademoiselle Annie Wood.—A magnificent variety: flower very large, fine, full form: color crimson, exquisitely fragrant: an early and profuse bloomer.

Mrs. John Laing.—A seedling from Francois Michelon: soft pink: large and of fine form, produced on strong stems: exceedingly fragrant: one of the most valuable varieties for forcing, and flowers continuously in the open ground. The most beautiful rose of recent introduction.

Paul Neron.—Deep rose color, good tough foliage: by far the largest variety in cultivation: a free bloomer, very double and full, finely scented.

Pius IX.—Clear bright rose, changing to rosy pink, delicately shaded: very large, fragrant and desirable.

Prince Camille de Rohan.—One of the darkest colored roses: very dark velvety crimson, changing to intense maroon. There is no rose in all this collection that attracts more favorable comment than this one. A very prolific bloomer and the blooms are of excellent form and size.

Victor Verdier.—Bright rose, with carmine center: extra large, full flowers, very double and sweet: a splendid rose.

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

Yellow Rambler.—Flowers 2 to 2½ inches in diameter, in clusters of 6 to 10: yellow in bud, but white when fully open. When half open, flowers are tinged with yellow: slightly fragrant: plant vigorous and free blooming: hardy. Very pretty and desirable.

CLASS II.—MOSS ROSES.

Aetna.—One of the finest: very large and full: delightfully fragrant: color bright crimson, shaded with purple: very mossy.

Henry Martin.—Fine rosy pink: large, full and globular: fragrant and mossy.

Mad. Rochlembert.—Fine clear rose: full and globular: beautiful mossy bud.

Princess Adelaide.—Fine strong grower, hardy: flowers bright rosy pink, large, very double.

Perpetual White Moss.—One of the most mossy varieties, prettiest in bud: flowers of medium size, and borne in large clusters: fragrant: color pure white.

CLASS III.—CLIMBING ROSES.

CLIMBING ROSES are highly valued for training over arbors, trellises and verandas: also as screens for unsightly objects. They grow ten to twelve feet high, and are entirely hardy. They bloom the second year, and but once during the season, but are loaded with splendid roses.

Baltimore Belle.—Pale blush variegated carmine, rose and white, very double: flowers in beautiful clusters: the whole plant appearing a perfect mass of bloom: one of the very best Climbing Roses.

Prairie Queen.—Clear bright pink, sometimes with a white stripe: large, compact and globular; very double and full; blooms in clusters.

Gem of the Prairie.—A hybrid between the Queen of the Prairie and Madam Laffay. It is a strong and vigorous grower, similar in habit to the Queen, but the flowers are considerably darker in color besides being quite fragrant. New and great acquisition.

Russell's Cottage.—Dark velvety crimson; very double and full; a profuse bloomer.

CLASS IV.—YELLOW ROSES.

(HARDY.)

Harrison's Yellow.—Golden yellow, medium size, semi-double; free bloomer.

Persian Yellow.—Bright yellow, small, nearly full.

CLASS V.—BOURBON ROSES.

These are quite hardy, and require a slight protection of leaves or straw, or evergreen boughs; during the winter. They are continual bloomers and of rapid growth, and are the most beautiful in autumn. The flowers are produced in clusters, and are generally of light color, well shaped and somewhat fragrant.

Empress Eugenie.—Beautiful rosy flesh, deepening at center to clear pink; petals delicately margined with purple; very large and full, perfectly double, very sweet tea scent; quite hardy.

Hermosa.—Bright rose color, blooms in clusters; large; very double and fragrant; constant bloomer; one of the best.

Malmaison.—Rich creamy flesh, changing to lovely fawn, with rose center; very large, double and exceedingly sweet.

Queen of Bedders.—Bright glowing crimson; flowers large, full and regular; blooms constantly from early summer to late autumn; one of the best.

HERBACEOUS PÆONIES.

It is surprising that so noble a flower, almost rivaling the rose in brilliancy of color and perfection of bloom, and the Rhododendron in stately growth, should be so neglected. Amateurs seem to have lost sight of the many improved varieties introduced within the last few years, and our finest gardens, perfect in other respects, are singularly deficient in specimens of the newer kinds. The first point in their favor is hardiness. It may be truly said that they are "hardy as an oak." In the severest climate the plants require no other protection than that they afford themselves. Then their vigorous habit and healthy growth and freedom from all diseases are important arguments in favor of their cultivation. The Pæonia may be planted either singly on the

lawn or in borders: a large bed makes a grand show. It is really a flower for the million.

Duchese de Orleans.—Violet rose, center salmon.

Grandiflora Plena.—Outside delicate blush, center light straw color: very large.

Humei.—Purplish rose color: very full and double and of monstrous size: a late bloomer.

Odorata.—White, tinted with yellow; large and beautiful.

Palmata.—One of the handsomest of our herbaceous plants, and very hardy: beautiful palmate foliage, and a succession of showy flowers, deep crimson color.

Perfection.—Outside petals rosy lilac, inside salmon, marked with purple.

Rosa Superba.—Rose color.

Whittleji.—Large, white, with yellow center: in clusters.

DAHLIAS.

LARGE FLOWERING.

The DAHLIA is well known for its beauty of form and brilliancy of color. All persons can be successful in its culture if the following hints are observed:

First, it delights in deep rich soil. Let the ground be well dug and manured with decomposed loam or manure. They may be planted out in June and well watered during a season of drouth, and they will be benefited by a heavy mulching of leaf mould or short manure to keep the roots cool and moist. If the Dahlia fly attacks them, a little slacked lime dusted over the tops after rain, or when the dew is on, will be of service to them. The roots should be taken up in the fall and well dried. Keep them in a cellar or some cool place free from heat and frost.

Andrew Dodd.—Crimson maroon.

Annie Neville.—Pure white: extra fine.

Armeth.—Lilac splashed crimson.

Adeline.—Mauve, purple tip.

Alice.—Rosy lilac: good form.

Belle de Baum.—Deep pink.

Canary.—Fine yellow.

Crimson Beauty.—Dark Crimson.

Chieftain.—Deep scarlet, large, fine shaped.

Dandy.—Cream ground, black spotted.

Eclipse.—Orange buff.

Firefly.—Bright crimson.

Flamingo.—Deep vermilion scarlet.

Gladiator.—White, very deeply laced, like a Picotee.

La Phare.—Brilliant scarlet.

Lydia.—Purple.

Oriole.—Golden yellow.

Tom Green.—Maroon, white tipped.

Vesta.—Pure white: very fine.