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"TREES OF QUALITY"

INDEXED

***Napa Valley Nursery
Company***

NAPA, CALIFORNIA

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Descriptive Catalogue

OF THE

*Napa Valley Nursery
Company*

Trees of Quality

NAPA, CALIFORNIA

Notice!

All persons authorized to act as agents for us are provided with a written certificate to that effect, and we request that they be required to show their certificates. Stock is not unfrequently sold by persons without authority, and not furnished from the places they represent, by which means many poor trees and plants are distributed, causing great dissatisfaction and disappointment.

Buy Good Stock of Reliable Men, and this may be avoided.

INTRODUCTION.

In presenting you with this catalogue, our 4th edition, we desire to state to our old customers as well as the new ones, that it is now a quarter of a century since the "Old Reliable" Albany Nurseries stated with a small plant and our business has gradually grown into an enormous size.

There are only two things to consider in business: one is to satisfy your customer and the other is to make a legitimate profit for yourself. There are small nurseries who start in business when times are good and when trees are in demand, who when reverses come "fold up their tents in the night time" and like the Arab "silently steal away," and years afterwards when the trees they have sold prove untrue to name they are not to be found. Perhaps they are operating in pastures green. But the standard nursery that is always doing business at the same old stand, charging a reasonable price, ever willing and able to make good, is the one that should be patronized, be it whom it may.

It becomes natural for any one when contemplating planting to make inquiries where they can buy the best, and we regret to say that a great many wish to know where they can buy the cheapest. It costs just as much to prepare the ground to plant and to cultivate a cheap tree as it does a good one, and while sometimes the good standard nurseries may charge a little more than the questionable nurseries, this difference is, often, just what they need to make them strong and reliable. When you patronize a bank, you seek a good strong one, when you take insurance you look for a company in whom you can place perfect confidence and know that the future welfare of your widow and orphans will be protected. You do not expect to buy the fruit trees but once. Buy the best and be satisfied.

The Albany Nurseries interest with a planter does not necessarily end when we have sold him the trees but we are interested in seeing them grow, being properly pruned and cultivated and lastly the marketing of the fruit, and will always cheerfully do what we can to assist our customers as we are generally in touch with the market.

Realizing that there are no boundaries of territory, no barriers of distance, race or creed to the reliable nursery which has a code of honor and lives up to it with the confidence of our customers, we hope to continue to grow. We thank all our customers for their patronage in the past and will feel grateful for all future business.

Soliciting your valued inquiries we beg to remain,

Yours truly,

NAPA VALLEY NURSERY CO.,

G. W. PENNEBAKER, Manager.

To Correspondents.

In the transaction of any business, a mutual desire for mutual satisfaction between parties should prevail. Let us, then, ask of our patrons an observance of the following requests:

That all orders to us be written out in legible style, with the name in full on a separate sheet and not in the body of the letter, that no mistake may occur.

That particular and plain directions be given how they wish their packages marked, and by what route sent, and to whose care consigned. When no route is designated we will send by the one we deem most advisable; but let it be distinctly understood that we will, in no case, be responsible for any loss or damage that may occur after we have delivered them to the forwarders. They alone are responsible.

While we exercise the greatest care to have all our trees and plants true to name, well grown and packed in the best possible manner, and hold ourselves in readiness, on proper proof, to replace all trees or plants that may accidentally prove untrue to label, free of charge, or refund the amount paid therefor, it is mutually understood and agreed to between the purchaser and ourselves that our guarantee of genuineness shall in no case make us liable for any sum greater than that originally received for trees or plants that prove untrue. Our reputation for upright dealing, and the uniformly high standard of quality of our products, is our guarantee to our customers.

When orders are received specifying the kinds wanted, our purchaser will please say whether we shall fill up with other varieties, should some of those which he has ordered be exhausted. We will, so far as in our power, give him his choice; but when the varieties specified cannot all be furnished, or are known to be unworthy of cultivation, we will take the liberty of substituting others in their place, unless special orders are given to the contrary. When the purchaser is not well acquainted with the fruit by name, he would do well to leave the selection to us, briefly stating at what season he wishes the fruit to ripen; and in such cases we will exercise our best judgment in making a judicious and profitable selection of the standard sorts and good trees.

Prompt attention will be given to all letters requesting information, all of which should enclose a postage stamp.

It is expected that orders for trees from those of whom we have no acquaintance will be accompanied by the cash or a suitable reference.

Our terms are INVARIABLY CASH, or a negotiable note of short time, satisfactorily indorsed made payable at bank.

From past experience we have learned that we cannot afford to delay collections, and must henceforth insist upon prompt payment. Our business is attended with heavy expenses and we must have the cash to push it.

Trees, plants, etc., will be carefully taken up, each kind tied by itself and labeled, the roots packed so as to carry safely, and delivered to the transportation companies free of charge.

All communications should be addressed to

NAPA VALLEY NURSERY CO.,

Napa, Calif.

TO THE PLANTER or purchaser of nursery stock, at least three things are indispensable: First, varieties true to name; second, healthy, vigorous, well matured trees or plants; third, careful and judicious packing, without which all will be lost.

We give the most careful scrutiny to the propagation of varieties, endeavoring by all methods known to us to protect ourselves from error or imposition, and rejecting anything of which we may have reasons to be suspicious. By careful and constant watching and attention, we are warranted in offering our stock as pure and absolutely true to name.

Our soil being of character best suited to produce the healthiest conditions of growth, that soil, firm texture of the wood, with abundant fibrous roots, so necessary to successful transplanting, we are enabled to offer the product of our nurseries with entire confidence of planters in all sections of the country.

To still further protect our patrons, as well as ourselves against loss in this direction, we employ the most skilled and competent hands in our packing and shipping department.

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

We grow all our trees on **whole root stocks**, and our one-year-old trees have the same age root as two-year-old piece root graft; but a much better root system, as can be readily seen by referring to our illustration showing trees grown by both systems.

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous, and they bear transplanting better and are far more apt to live; they can also be more easily trimmed and shaped to any desired form and in the course of a few years will usually outstrip the older ones in growth.

Both fruits and flowers are more highly appreciated by the masses than formerly, and we regard it as a happy indication, not only in the effect it will have upon the health of the body, but also in the softening influence it will have on the harsher feelings of our nature.

PREPARATIONS FOR PLANTING.

Plow and subsoil repeatedly, so as to thoroughly pulverize to a depth of 12 to 18 inches. When planting upon the lawn or grass plots, remove the sod for a diameter of 4 to 5 feet, and keep this space well worked and free from weeds. Dig the hole deeper and larger than is necessary to admit all the roots in their natural position, keeping the surface and subsoil separate. Cut off broken and bruised roots and shorten the tops to half a dozen good buds. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the trees therein as they stand, carefully packing the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air, and "puddle" before planting.

PLANTING.

Fill up the hole with surface soil, so that the tree will stand about as it did when in nursery after the earth had settled, except Dwarf Pears which should be planted deep enough to cover the quince stock upon which they are budded two or three inches. Work the soil thoroughly among the roots, and when well covered tamp firmly. Set the tree firm as a post, but leave the surface filling (of poorer soil) light and loose. No staking will be required except with very tall trees. Never let manure come in contact with the roots.

PLANT YOUNG TREES.

We cannot too strongly recommend to our customers the procuring of young trees, especially for orchard planting, instead of selecting the largest that can be had, to secure more immediate effect. They can be taken up with more perfect roots, and will become sooner established in a new location. They can also be more readily trained to any desired shape. The largest and most successful planters invariably select young, thrifty trees as the surest in the end to give thorough satisfaction.

For small grounds or street planting, when it is necessary to make a show as soon as possible, large trees are often more desirable, and when handled with care should not fail to do well, but with the general planter the average of loss will be much less and both time and money will be saved if young trees are selected to commence with.

NUMBER OF PLANTS OR SHRUBS FOR AN ACRE

<i>Distance Apart.</i>	<i>No. of Plants.</i>	<i>Distance Apart.</i>	<i>No. of Plants</i>	<i>Distance Apart.</i>	<i>No. of Plants.</i>
3 x6 inches . . .	696,960	4 x4 feet . . .	2,722	13 x13 feet . . .	257
4 x4 " . . .	392,040	4½ x4½ " . . .	2,151	14 x14 " . . .	222
6 x6 " . . .	174,240	5 x1 " . . .	8,712	15 x15 " . . .	193
9 x9 " . . .	77,440	5 x2 " . . .	4,356	16 x16 " . . .	170
1 x1 foot . . .	43,560	5 x3 " . . .	2,904	16½ x16½ " . . .	160
1½ x1½ feet . . .	19,360	5 x4 " . . .	2,178	17 x17 " . . .	150
2 x1 " . . .	21,680	5 x5 " . . .	1,742	18 x18 " . . .	134
2 x2 " . . .	10,890	5½ x5½ " . . .	1,417	19 x19 " . . .	120
2½ x2½ " . . .	6,960	6 x6 " . . .	1,210	20 x20 " . . .	108
3 x1 " . . .	14,520	6½ x6½ " . . .	1,031	25 x25 " . . .	69
3 x2 " . . .	7,260	7 x7 " . . .	881	30 x30 " . . .	48
3 x3 " . . .	4,840	8 x8 " . . .	680	33 x33 " . . .	40
3½ x3½ " . . .	3,555	9 x9 " . . .	537	40 x40 " . . .	27
4 x1 " . . .	10,890	10 x10 " . . .	435	50 x50 " . . .	17
4 x2 " . . .	5,445	11 x11 " . . .	360	60 x60 " . . .	12
4 x3 " . . .	3,630	12 x12 " . . .	302		

NUMBER OF PLANTS OR SHRUBS FOR AN ACRE.

Apples—Standard . . . 25 to 30 feet apart each way	Nectarines . . . 16 to 18 " " " "
Pears—Standard . . . 16 to 20 " " " "	Quinces . . . 10 to 12 " " " "
Pears—Dwarf . . . 10 to 15 " " " "	Walnuts . . . 40 to 50 " " " "
Cherries—Standard . . . 20 to 25 " " " "	Currants . . . 3 to 4 " " " "
Cherries—Dukes and	Gooseberries . . . 3 to 4 " " " "
Morellos . . . 16 to 18 " " " "	Raspberries . . . 3 to 5 " " " "
Plums—Standard . . . 16 to 20 " " " "	Blackberries . . . 6 to 7 " " " "
Peaches . . . 16 to 18 " " " "	Grapes . . . 8 to 12 " " " "
Apriots . . . 16 to 18 " " " "

Fruit Department

APPLES (*Pyrus Malus*)

The first fruit in importance is the Apple. It will thrive on any well-drained soil. Its period of ripening, unlike that of other fruits, extends nearly or quite through the year. By making judicious selection of Summer, Autumn and winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

Our descriptive list embraces the best and most popular varieties known. Of course, it runs in too great a variety for any one orchard for profit; besides there is probably not a spot in the country where they would not flourish—but the latitude of our trade not only admits of, but demands a large list to supply the wants of the different sections of the country. After a long experience in the nursery business, we have with great care made the following selections, from which we trust all our patrons can supply their wants:

SUMMER VARIETIES

American Summer Pearmain. Medium to large; skin red, spotted with yellow in the shade, and streaked with lively red in the sun; flesh yellow,

remarkably tender, juicy and rich; a good bearer. August.

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

SUMMER APPLES, Continued.

Bough, Large Sweet. See Sweet Bough.

Carolina Red June. (Red June.) Medium size; red; flesh white, tender, juicy, subacid, and abundant bearer. June.

Early Colton. Entirely hardy in all parts of the country. Has stood the extreme cold of Minnesota, Wisconsin, New Hampshire. Annual and abundant bearer. Never in the history of over half a century has it been known to entirely fail of a crop. Very early, beginning to ripen so it is good to eat 10 days before Early Harvest, and continues to ripen for some time, making it very valuable for family use. Of beautiful appearance; fine quality.

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

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

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

Ideal. A new and promising variety, originated near Jefferson, Oregon. Above medium in size, regularly formed, roundishoblate, greenish color, turning to a rich golden when fully ripe; firm, crisp, sub-acid. July and Aug.

Keswick Codlin. Large conical.

ical; tender, juicy, acid, excellent for cooking. Tree erect, vigorous, exceedingly productive and early in bearing. July to October.

Red Russain. Early; very hardy; medium size, conical; red, slightly striped with deep red; flesh white, tender, juicy, sub-acid. Abundant bearer. Resembles the Red June, but flesh

more solid and better shipper, and color not as solid a red, but slightly striped. July and August.

Summer Queen. Medium to large, roundish; surface yellow blotched and streaked with red; flesh yellow and tender, with an acid, aromatic flavor. July and August.

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

Sweet June. Medium, roundish, regular; light yellow; very sweet, pleasant and rich. August.

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

White Astrachan. Very large, roundish; skin smooth and nearly white. A favorite market sort, where it always attracts attention and brings good prices. August.

Williams' Favorite. A large, handsome dessert Apple. Originated at Roxbury, Mass. Fruit medium size, roundish, oblong conical; long stem; skin smooth, color light red ground, but nearly covered with fine dark red; flesh yellowish white of very mild, agreeable flavor; abundant bearer. July to September.

Yellow Transparent. A new Russian variety imported in 1870, through the Agricultural Department. Pronounced by some who have seen it as the most valuable early apple ever introduced. Tree an upright grower and a very early and abundant bearer. Fruit of good size; skin clear white, turning to a pale yellow; flavor acid and very good. Ripens from 10 days to two weeks earlier than Early Harvest.

AUTUMN VARIETIES

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

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

Dutchess of Oldenburg. Of Russian origin. Large size, roundish; streaked with red and yellow; flesh whitish, juicy; flavor sprightly, subacid. Tree a vigorous grower, very hardy; very early and abundant bearer. While it is indispensable in the North; it is almost equally so in the South. We confidently recommend it for the orchard as one of the most valuable sorts for market, or in the garden for domestic use. September.

Dutch Mignonne. A popular Apple introduced from Holland. Tree moderately vigorous, upright, slightly conical; skin rather tough, yellow, shaded, striped and splashed with shades of light and dark, rich red, moderately sprinkled with light and brown dots; flesh yellowish and a little coarse, tender, juicy, slightly subacid; core small. One of the best cooking varieties. Nov. to Feb.

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

One-year-old Apple trees budded on three-year whole root. Height 6 feet.

AUTUMN APPLES, Continued.

Fall Jennetting. (Summer Jennetting.) Fruit large, oblate, slightly conical, almost ribbed; pale greenish yellow, with a blush; flesh whitish, tender, juicy, brisk, subacid. Tree vigorous and productive. September to October.

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

Emperor. See Alexander.

Glori Mundi. Very large; greenish yellow. Valuable for cooking and drying. October.

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

Haas. (Gross Pommier, Fall Queen.) Medium to large, slightly conical and somewhat ribbed; pale greenish yellow, shaded and striped with red; flesh fine white, sometimes stained, tender, juicy, subacid, good. Tree vigorous and very hardy; upright grower, with well-formed head; bears early and abundantly. September to November.

Hoover. (Wattaugh.) Large, oblate; dark red; juicy, acid, crisp and of good flavor. Tree vigorous, short-jointed grower. Very distinct. September and October.

Jefferis. Medium to large; yellow, striped, mostly red; flesh tender and delicious. One of the finest dessert apples. Moderate growth; productive. September to November.

Jersey Sweet. Medium size; striped red and

green; tender, juicy and sweet. A free grower and good bearer. Very popular both for table and cooking. September and October.

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

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

Rambo. Medium; yellowish, streaked with dull red and somewhat dotted; mild, tender and good. Fine grower, productive. More especially valuable in the West. October to December.

Red Bietigheimer. A rare German variety, recently introduced. Fruit large to very large; skin pale green, mostly covered with purplish crimson; flesh white, firm, subacid, with a brisk, pleasant flavor. Tree a fine grower and abundant bearer. September and October.

Snow. See Fameuse.

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

Stump. Medium-sized, conical; yellow, striped and shaded with light red; flesh juicy, tender, with sprightly subacid flavor; fruit very uniform in size and of fine appearance. Very prolific. September and October.

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

YELLOW TRANSPARENT.

Waldron Beauty. A new variety originated near Oregon City, Oregon. Medium size, roundish oblate; flesh white, resembling the McIntosh Red; color almost full red, underlaid with greenish yellow; skin smooth and takes a very high polish. A profuse bearer; quality good. A promising autumn variety. September to December.

Waxen. Medium; pale yellow, oily, sprinkled with a few dots; flesh whitish yellow, crisp, tender, juicy, sprightly, subacid, good. November.

WINTER VARIETIES

Akin. (Akin Red.) Size and color very much like Jonathan, but keeps three months longer; quality even better than that most excellent apple.

Illinois Horticultural Society: "The original Akin tree is 7 feet 3 inches in circumference, about 40 feet high, and over 60 years old; a regular bearer; keeps until April or May. Of great beauty and excellent quality; fine-grained, crisp, spicy and mild. Its fine quality and beauty make it worthy of general trial, for the time will come when such fruit will be in demand. So beautifully colored as to be almost irresistible to the eye, and of equally fine flavor. It is of good quality, medium size, red color, and a late keeper. Tree productive."

Antonovka. One of the true ironclads. Of Russian origin and perfectly hardy, withstanding our coldest winters. Fruit large, slightly oblong, and when fully ripe of a light golden color. Good keeper.

Arkansas Beauty. Large, beautiful crimson;

flavor rich, subacid; fine-grained. Free and good grower and enormous bearer. Nov. to March.

Arkansas Black. Large, round or slightly conical; regular, smooth, glossy yellow where not covered with deep crimson, almost black; flesh very yellow, firm, fine-grained, juicy; flavor subacid, pleasant, rich.

Babbitt. A strong, large grower; wood hard and tough; heavy bearer. Fruit one-third larger than Baldwin; brighter red; flesh fine-grained, juicy, crisp, rich and of a peculiarly fine acid; use—baking, stewing, pies or jelly, for each and all of which it is simply the best; in cooking it literally melts. Ready to cook as soon as grown, but it is so acid that few like to eat it uncooked until the latter part of the season, when it is a favorite eating apple.

Baldwin. Large, roundish; deep bright red; juicy, crisp, subacid, good flavor. Tree vigorous, upright and very productive of fair, handsome fruit; one of the best and most popular winter apples. Originated on farm of John Ball, Wilmington, Mass., about the middle of the 18th century. January to April.

Black Twig. See Mammoth Black Twig,

Bell de Boskoop. Large; bright yellow, washed with light red on the sunny side, and sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly, subacid; quality very good; a late keeper. Tree a vigorous grower.

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

Ben Davis. (New York Pippin, Kentucky Red

AN ORCHARD PLANTED WITH GOOD TREES AND CULTIVATED

WINTER APPLES, Continued

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.

Benton County Beauty. Originated in Benton county, Arkansas. Tree is a good grower, early and abundant bearer. Fruit large size, fine-grained, juicy and crisp; color a bright red all over. One of the finest appearing apples grown.

Bismark. In respect to its early fruiting habit, the most remarkable apple ever introduced; one-year grafts frequently produce fruit and two-year ones seldom fail. Has fruited in many sections of the United States; we hear only words of commendation. A two-year single stem tree about 18 inches high has been known to ripen a fine specimen. Originated in New Zealand; has been tested in nearly every apple-growing country, and promises to succeed wherever apples can be

bloom; flesh yellowish, mild, aromatic. October to February.

British Columbia. New. Named by the Fruit Growers' Association of British Columbia. Originated by H. P. Bales, at Nicomen in the Fraser Valley. The tree is a vigorous grower and very hardy, annual and abundant bearer; fruit large; russet on yellow ground, sometimes striped with red; somewhat irregular; flavor mild, subacid of the highest quality. Mr. Bales has now 400 trees of this variety bearing. The original tree, when 34 years old, measured 60 inches in circumference, and is still in a perfectly healthy condition. Mr. Bales has picked 36 50-pound boxes of Apples from it in one season, and always gets from 25 to 50 cents per box more for them than for other varieties. We consider this one of the most valuable Apples to plant for commercial purposes. January to June.

Canada Reinette. Extra large size, flattened and ribbed; greenish yellow, with russet dots and patches; flesh firm, rich, juicy and finely flavored; tree grows strongly and is a good bearer. November to March.

Coos River Beauty. From Douglas county, Oregon. First known as Geourney Seedling, later renamed by a Marshfield, Oregon, nurseryman, Coos River Beauty. Tree a good grower, an annual and prolific bearer; does not break or split, no matter how heavily loaded. Fruit large, red, turning to dark red on the sunny side; flesh white, firm, breaking crisp and juicy; flavor mild, subacid, spicy, something like Gravenstein. Season November to March at Coos Bay.

Cox's Orange Pippin. Medium size, roundish, ovate; color yellow, suffused with red streaks; flesh crisp, juicy, sweet, and best in quality. This is regarded by the English as the first apple in cultivation, either as a dessert fruit or for culinary purposes. The tree is a moderate, stocky grower. October to April.

Cunningham. New. Form conical; size medium; smooth; deep red; very attractive; flesh yellow, fine grained, pleasant, subacid, almost sweet; splendid keeper and good shipper. Annual and prolific bearer. March to May.

Delicious. Dark, brilliant red; large, irregular. Tree hardy. When grown in high altitudes the quality is very fine. October to February on the Pacific coast.

Delaware Red Winter. (Lawver.) Large, roundish, flat, mild, subacid; very heavy and hard; beautiful dark red. Handsomest of all the extra late keepers; very valuable as a late market sort. Tree a vigorous grower and very hardy; bears well. December to May.

Fallawater. (Fornwelder, Tulpehocken.) Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant, subacid flavor. Tree a

JONATHAN APPLE (see page 11.)

grown, proving healthy, hardy, productive and without a rival in its early fruiting quality. Tree of short, stocky growth, thick, healthy, foliage; makes beautiful specimens grown in pots for decorative purposes. Fruit large, handsome; yellow, sometimes shaded, red cheeks; flesh tender, pleasant, subacid, good for dessert, superior for cooking. Will keep well into winter.

Blenheim Orange. Fruit large, roundish, oblate, conical; yellowish, becoming deep orange, stained on the sunny side with dull and dark red stripes; flesh yellow, breaking, very sweet, pleasant, good. October to December.

Blue Pearmain. Very large; dark purplish red over dull ground, appearing bluish from white

WINTER APPLES, Continued.

strong grower; very productive even while young. November to March.

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

Gideon. Vigorous, early and prolific bearer. Medium, golden yellow; fine, juicy, subacid.

Grimes' Golden. (Grimes' Golden Pippin, Sheep-nose.) An apple of the highest quality. Medium to large size yellow. Tree hardy, vigorous, productive. January to April.

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

Hyde's King. Large to very large; handsome yellowish green; good quality; keeps all the year round.

Isham Sweet. Large, dark red; juicier than its parent, Bailey Sweet, and a better keeper. Tree very scraggy but hardy.

Jonathan. Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine-grained, very tender and finely flavored. Tree slender and spreading with light-colored shoots. Originated about 1828 at Woodsted, N. Y. November to April.

Kentucky Red Streak. See Ben Davis.

Lady. A beautiful little dessert fruit. Quite small, flat, regularly formed; skin pale yellow or lemon color, with a brilliant red cheek, flesh crisp, juicy and excellent. Bears abundantly. December to May.

Lawver. See Delaware Red Winter.

Longfield. A Russian variety, imported some years since. Tree a free, upright grower, early and abundant bearer. Medium to large; yellow with a blush on the sunny side like Maiden's Blush; rich, sprightly, subacid; quality as good as Fameuse and something like it. December to March.

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

Marshall or Red Bellflower. Very large, shaped like Yellow Bellflower; deep crimson; of fine quality. Tree productive. Originated near Napa, by J. L. Marshall, being a cross between Yellow Bellflower and Red June. One of the most valuable market varieties.

Minkler. Fruit medium, roundish, oblate, slightly conical; pale greenish yellow, striped and splashed with two shades of red; flesh yellowish, compact, moderately juicy, mild, pleasant, subacid. Tree an irregular grower, and vigorous. January to April.

Missouri Pippin. Large rich red, with darker, red stripes; very handsome and of fair quality. Good grower; early and immense bearer, late keeper.

Mammoth Pippin. (Red Cheek Pippin.) Large; greenish yellow with a fine red cheek; juicy, tender and good. Tree erect, vigorous and productive. Keeps well till March or April.

Mammoth Black Twig. (Paragon.) A Tennessee seedling. The original tree, over 50 years old, is still vigorous and bearing, though broken by storms. Thought to be a cross between Winesap and Red Limber Twig; combines the good qualities of both. Excels the Winesap in nearly every important point; a better and much stronger grower, hardier, and the fruit much larger—often measures 12 inches in circumference; color even a darker red; flesh firmer, flavor milder but fully equal. Remarkably heavy and a long keeper.

ROME BEAUTY APPLE (see page 13.)

Mann. Fruit to medium large; roundish; oblate, nearly regular; skin deep yellow when fully ripe; flesh yellowish, half fine, half tender, juicy, mild, pleasant, subacid. The tree grows straight and symmetrical and makes a large tree in the orchard. It is an early and annual bearer.

Newton Pippin. One of the very best Apples as to quality; tree a light grower while young; very juicy, crisp, and highly delicious flavor; fine keeper. Does not succeed in all sections. Originated in early part of eighteenth century. The first American apple to attract attention in Europe. December to May.

New York Pippin. See Ben Davis.

Northern Spy. Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red; flesh white and tender, with a mild subacid, rich and

WINTER APPLES, Continued

delicious flavor; in perfection in January and keeps till June. The tree is a strong, upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely. Originated about 1800, at East Bloomfield, N. Y.

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

Nonesuch. See Red Canada.

Okabena. A seedling of the Wealthy, fertilized by the Dutchess. Fruit medium sized, slightly flattened. A native of Minnesota, first introduced in 1886. Very highly colored where exposed to the rays of the sun; resembling the Dutchess. Flesh fine grained; as an eating apple it is hard to excel.

Ontario. Fruit large, oblate, slightly conical, skin whitish yellow, nearly covered with bright, rich red; flesh whitish yellow, fine, tender, juicy; sub-acid; refreshing, slightly aromatic; core small. January to April.

Opalescent. New. Probably the handsomest Apple ever put on the market. Color light shading to very dark crimson with many yellow dots; skin smooth, susceptible of a very high polish reflecting objects like a mirror; flesh yellowish, tender, juicy and good. The original tree has never failed to produce from a moderate to a full crop. It is not only a beauty but all right for size, quality and productiveness, qualities rarely combined in one variety. Season, December to March.

Oregon Red Winter. Fruit large, fine grained,

crisp, and juicy and rich. It could well be named the Winter Gravenstein, as its flavor so nearly resembles that variety. Color a bright red, with a dark-maroon colored cheek. Tree healthy and a strong grower, holding its fruit well until late in the season. Season from January to May.

Orenco. The new dessert apple. Full red overspread with numerous light colored dots. Flesh crisp, tender and juicy with a very small core; flavor mild, subacid with a pleasing aroma. Tree hardy, vigorous and productive. Superior to McIntosh Red or Spitzenberg as a dessert apple. November to May. Write for four-page circular.

Ortley. See white Bellflower.

Palouse. Large, bright red, juicy, crisp and fine flavor. A vigorous growing tree; the fruit somewhat resembling the Baldwin, but better keeper. January to May.

Paragon. See Mammoth Black Twig.

Peck's Pleasant. Large; pale yellow; very tender and, rich, with a Newton flavor. Tree erect and fine bearer. November to March.

Peter. Another seedling which originated with Peter Gideon, the pioneer in Apple culture in Minnesota. The tree is stout, erect, symmetrical, healthy, vigorous grower, an immensely productive tree. Fruit large, red, subacid and a long keeper. It possesses all the good qualities of the good sorts and none of the defects so common to many of them. It is hardier than the hardiest. The Peter has endured 45 degrees below zero without the least injury, and in 1885 at Excelsior, Minn., bore a crop of fruit when

TREES WELL PLANTED AND CARED FOR ARE A DELIGHT TO LOOK UPON.

WINTER APPLES, Continued

the Dutchess and Wealthy killed to the ground. It is four to six weeks later than the Wealthy.

Pewaukee. A seedling from Dutchess of Oldenburg. Fruit medium to large, oblate; surface bright yellow, partially covered with dull red, striped and splashed with whitish dots; cavity small; basin shallow and slightly fluted; calyx rather large; stem variable in length, with a fleshy substance on one side from one-half to one inch long; core small; flesh yellowish white, breaking juicy; flavor subacid, rich, aromatic, spicy, something like the Jonathan; quality good to best. Tree a strong grower, heavy bearer, and very hardy. January to June.

Pryor's Red. Medium, juicy, pleasant, very rich, subacid. January to March.

Rawle's Janet. Medium to large; yellow, stripes with red; flesh yellow, tender, juicy, with a pleasant vinous flavor. Prolific bearer. January to May.

Red Bellflower. See Marshall.

Red Canada. (Old Nonesuch, of Mass., Steele's Red Winter.) Medium, oblate, red, tender, crisp, rich, subacid, refreshing and delicious. Tree thrifty but a slender grower. Productive. January to may.

Red-Cheek Pippin. See Mammoth Pippin.

Red Romanite. (Gilpin.) Size medium, roundish, smooth, handsome; streaked with deep red and yellow; flesh yellow, firm, rich, becoming tender in spring. An excellent cooking and dessert Apple. Very prolific. Holds on tree late.

A fine winter apple and one of the best keepers. February to June.

Rhode Island Greening. Large; greenish yellow; tender, juicy and rich with rather an acid flavor; grows strong and spreading, and an abundant bearer. December to April.

Ribston Pippin. Fruit of medium size, roundish; greenish yellow mixed with a little russet near the stalk, and clouded with a dull red on the sunny side. Stalk short, slender, planted in a wide cavity; calyx small, closed and set in an angular basin. Flesh deep yellow, firm, crisp, with a sharp, rich, aromatic flavor; very good. The tree forms a spreading top. November to April.

Rome Beauty. Large, yellow, shaded with bright red; flesh yellowish, tender, juicy, subacid. Moderate grower. November to February.

Russet, English. This is a most valuable, long keeping variety. Good the first of January and will keep till July, and no Apple, to our taste, has a richer flavor. Medium size, but smooth, firm, crisp and rich, and never loses its richness to the last.

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

Russet, Roxbury or Boston. Medium to large; greenish or yellow russet; crisp, good, subacid flavor. Tree vigorous and productive. Very popular on account of its long keeping, June.

A PROFITABLE TREE.

WINTER APPLES, Continued

Salome. Long keeper; annual bearer. Medium and uniform size; good quality.

Scott Winter Hardy and vigorous. Bright red; crisp, juicy and of a brisk acidity; long keeper.

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

Shackelford. Tree hardy, free grower, an early and profuse bearer. Fruit large, well colored, purplish red in the sun, with a delicate bloom; flesh yellow; flavor mild, subacid; aromatic; long keeper.

Sierra Beauty. Originated at a high altitude in the Sierra Nevada Mountains, 30 miles east of Chico, Butte County, Cal. This beautiful crimson-red Apple is certainly a great acquisition to the standard commercial sorts, and will pack better than four tier. The original tree is now (1906) 36 years old and is a regular annual bearer. The flesh is white, crisp and tender,

and grows well transplanted in rich soil. November to April.

Spokane Beauty. Largest Apple known, a prodigy for size; of extraordinary beauty; color greenish yellow, shaded and striped with deep red; flesh crisp, juicy, rich, with a delicious high flavor. Unsurpassed for cooking and drying; a very long keeper, having kept till August 1. Was awarded first prize at the Spokane Fruit Fair in 1895 and 1896.

Springdale. Color dark red; size medium to large; fine flavor and of good quality; a good keeper. Introduced in Kansas. Winner at 15 different apple shows for home and market use. Tree a strong grower.

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

Stayman's Winesap. Similar to Winesap, but very much larger and better flavored; oblate, conical; greenish yellow, mostly covered, striped and splashed with two shades of dark red, with numerous gray dots; flesh yellow, firm, tender, juicy, mild, subacid, aromatic; best quality. A seedling of the Winesap, originated in Kansas. Tree resembles the Winesap, but more vigorous in growth. December to April.

Steele's Red Winter. See Red Canada.

Sutton Beauty. Medium to large, roundish; handsome, waxen yellow, striped crimson; flesh tender, juicy, subacid; good quality; keeps well. Tree a free grower and productive. One of the most beautiful and valuable apples.

Swaar. Fruit medium size, yellow, tender, rich and spicy. One of the best and very productive. November to May.

Tolman's Sweeting. Medium pale yellow, slightly tinged with red; firm, rich and very sweet. The most valuable baking apple. Vigorous and productive. November to April.

Tulpehocken. See Fallwater.

Vanderpool Red. Originated in Benton County, Oregon. Size medium to large; color bright red; fine flavor and one of the best keepers. Specimens of this variety, in good condition, were shown at the Oregon State Fair one year after picking from tree.

Vandevere. (Newton Spitzenberg of the West.) Medium size; waxen yellow, striped with red, and becoming deep crimson next the sun; flesh tender, yellow, rich and fine; rich and subacid flavor. Valuable cooking variety. Free grower and good bearer. Succeeds best in light, warm, dry soils. November to March.

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

Walbridge. Medium size, striped with red; handsome and of excellent quality. Vigorous grower and productive; very hardy and consid-

SPITZENBERG APPLE

with a delicious juicy flavor. The tree is a hardy, upright grower, resembling the Northern Spy. A splendid cooking and eating Apple. Season January to May.

Smith Cider. A fine market Apple. Large, handsome; yellow striped with red; flesh juicy, crisp, subacid; quality medium. Tree vigorous, abundant bearer. December to March.

Spitzenberg, Esopus. Medium to large; deep red; flesh yellow, crisp, subacid, high flavored. Tree a light grower in the nursery, but bears

WINTER APPLES, Continued

ered of great value in the North and North-west. March and June.

Wealthy. A native of Minnesota where it has proven perfectly hardy, vigorous and productive. Fruit of medium size, red, streaked with white;

YELLOW NEWTON PIPPIN APPLE

quality good. December to February.

White Bellflower. (Ortley) Fruit medium to large, roundish, oblong, conic; greenish yellow, becoming fine yellow at maturity, sometimes with a sunny cheek; flesh white, fine-grained,

tender, juicy and subacid, very pleasant. November to February.

White Winter Pearmain. Large, roundish, oblong, conic; pale yellow, extra high flavor. One of the best. December to February.

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

Winter Banana. Fruit large, perfect in form; golden yellow and beautifully shaded and marbled with bright crimson-red; flesh lemon yellow, fine grained, subacid, rich aromatic flavor, and of the highest quality. A good keeper, tree remarkably strong grower, and on account of its great hardiness will thrive in any climate. Its early bearing is simply wonderful, generally producing a fine crop of fruit the second year. Foilage large and free from blight and mildew. A valuable market variety. November to May.

Wisner's Dessert. Size medium to large; smooth, beautifully colored with yellow, shaded with bright red, in stripes and blotches, marked with russet dots. Exquisitely delicious flavor, juicy, melting, buttery, pear-like texture. Tree a strong grower and extremely hardy. Originated in northern Ontario, Canada. Season November to April.

Wolf River. The tree is very hardy and productive. Fruit large and handsome, red color, flesh white and of exceedingly fine quality; subacid. One of the largest.

Y. N. Pippin. See Newton Pippin.

York Imperial. Medium; whitish, shaded with crimson in the sun; firm, crisp, juicy and pleasant, mild subacid. Tree moderately vigorous and productive. A popular Pennsylvania variety. November to February.

Crab Apples (*Pyrus prunifolia*)

Within the past few years much attention has been given to improving this class of fruit, because of their adaptability to cold sections, where only a few varieties of apples can be successfully grown. These efforts have been attended with marked success. Crab Apples succeed equally well in all sections, and are valuable for cider, preserving, jelly, ornament and some of the improved sort are excellent for eating. Sent to the Eastern markets they command a very high price.

Alaska. Of northern origin. Fruit large, almost white; tree hardy; vigorous grower. Highly recommended.

Florence. Tree very hardy, a heavy bearer, but a poor grower. Fruit medium in size, good quality.

General Grant. Tree an erect, vigorous grower; fruit in dense clusters, quality equal to Duchess of Oldenburg. October to December.

Hyslop. Almost as large as Early Strawberry Apple; deep crimson; very popular on account of its large size, beauty and hardiness. Keeps well into the winter.

Large Red Siberian. About an inch in diameter, grows in clusters; yellow, lively scarlet cheek. Tree erect, vigorous; bears young and abundantly. September to October.

Large Yellow Siberian. Nearly as large as the above, a fine amber or golden yellow color.

Martha. A new fruit raised from seed of Duchess of Oldenburg. Resembles the Transcendent, but larger. Handsome, showy fruit; bears enormously; said to be equal, if not superior, to all others for sauce.

Minnesota. Hardy, a medium grower. January to February.

CRAB APPLES, Continued

Transcendent. All things considered, this is one of the most valuable varieties of Crab Apples grown. Tree remarkably vigorous, growing to a good size and immensely productive. Comes into bearing a little the second year from planting, bearing every year after, and producing good crops by the fourth year. Fruit very large, from 1½ to 2 inches in diameter, being large enough to quarter and core for preserving and

drying. Excellent for sauce and pies, both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating Apple. Skin yellow, striped with red. September to October.

Whitney's Seedling. Large, averaging 1½ to 2 inches in diameter, skin smooth and glossy green, striped, splashed with carmine; flesh firm, juicy and rich. Said to be a great bearer and very hardy. Tree a vigorous, handsome grower. Has no superior.

PEARS (*Pyrus communis*, or *P. Sinensis*)

Our soil is especially adapted to the production of the finest and hardiest pear trees—those containing the most life, body and strength, and it is an admitted fact that they cannot be excelled.

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

GATHERING PEARS—Most varieties of pears are greatly inferior in flavor when allowed to ripen on the tree. Gather when, on gently lifting the fruit, the stem will readily separate from the limb; this will be from one to two weeks before they are ripe.

Place in a cool, dark room until fully matured. Winter varieties should remain on the tree until time for the Fall rains or frosts.

The following list contains most of those that have been well tested and proven valuable:

SUMMER VARIETIES

Bartlett. Large size, often with a beautiful blush next the sun; buttery, very juicy and high flavored. Tree a strong grower, bearing early and abundantly; very popular. Last of August and first of September.

Clapp's Favorite. A large, new, fine Pear, resembling the Bartlett but without its musky flavor; pale lemon-yellow, with brown dots; fine texture, melting, buttery, juicy, with a rich, sweet, delicate, vinous flavor. Tree hardy and very productive. Very desirable in all sections, and especially so where other varieties fail. August and September.

Doyenne d'Ete. Small; melting, sweet; yellowish. Tree vigorous and productive. August.

Koonce. Originated in Southern Illinois. Has been largely planted; the most successful early market Pear in that section. A strong upright grower; hardy, magnificent foliage; has produced crops when all other varieties were killed by frost; fruit medium, yellow with carmine cheek; juicy, spicy, sweet and delicious quality. Ripens with the earliest. An excellent shipper; it comes into bearing young. July and August.

Lawson. Tree healthy, a strong grower, early bearer and profitable sort; of splendid quality for a very early Pear. Red cheek with yellow shading.

Le Conte. Tree vigorous and productive, partaking of the nature of the Chinese Sand Pear, of which it is a seedling. Large; skin smooth, pale yellow. Quality fair. Ripens about with the Bartlett.

Madeline. Medium; yellowish green; very juicy, melting, sweet. Fair grower, productive. August.

Souvenir du Congress. Recently imported from France, and of great promise. Fruit large and exceedingly handsome; beautiful yellow, with bright red in the sun; melting and juicy, with a musky flavor; rather tender. September.

Wilder. Handsome, melting, sweet, pleasant and of the best quality for an early Pear. One of the best keeping early pears.

AUTUMN PEARS

Bessemanika. From Russia. Fruit of fair quality. Tree is extremely hardy. Valuable for the north, where other varieties cannot be grown. As hardy as a birch. Strong, vigorous grower.

Beurre Clairgeau. Very large, pyriform; yellow and red, nearly melting, high flavored. Tree a very good grower, and an early and abundant bearer; a magnificent market fruit. One of the finest acquisitions. October and November.

Beurre d'Anjou. A large, fine Pear, buttery and melting with sprightly, vinous flavor. Tree a fine grower and good bearer. October to January.

Beurre Bosc. A large, fine Pear with long neck; cinnamon-russet, handsome, half melting, juicy, slightly perfumed and delicious. Tree a fine grower and productive. September.

Crocker Bartlett. Originated by L. L. Crocker, Loomis, Cal., who describes it as follows: "It is preferable to the standard Bartlett; better flavor, about the same size; very juicy and melt-

AUTUMN PEARS, Continued

ing; high golden yellow color; a prolific bearer. Trees never overloaded, although they bear heavy every year. The Crocker-Bartlett Pears are picked in October and laid away same as winter apples, till about January, when they mellow up and are delicious; very hardy; will ship to England and back if necessary. It has proven to be blight-proof and has stood the test for the past ten years. Out of 3,000 young Crocker-Bartlett trees in my orchard, I offer a liberal reward for any sign of blight on them."

Dempsey. Originated in northern Canada, where it has proven hardy. Fruit medium, excellent.

Doyenne du Comice. Large, yellow, with a crimson and fawn cheek, and russet dots, melting, rich, perfumed and luscious. Tree vigorous and productive. A Pear of much promise. October and November.

Doyenne White. (Fall Butter) Medium. pale yellow, with a faint blush; fine flavor. October to November.

CROCKER BARTLETT PEAR

AUTUMN PEARS, Continued

Duchesse d'Angouleme. Very large, greenish yellow, sometimes a little russeted. Makes a beautiful tree; does best on quince. One of the best. October and November.

Fall Butter. See Doyenne White.

Flemish Beauty. Large, beautiful, juicy, melting, rich and fine, a strong grower and good bearer, hardy everywhere. September and October.

Garber. Originated in Pennsylvania; is large and beautiful, bright yellow with red; juicy and good; delicious canned. Ready to pick with Le Conte, or a few days later, and much better, not only in fruit but in hardiness and health of trees. So far has never been blighted.

Howell. Large, light, waxen yellow, with a fine red cheek; handsome, rich, sweet, melting, perfumed aromatic flavor. Tree an upright, free grower, an early and profuse bearer. Very hardy and valuable. September and October.

Idaho. Size large, nearly globular, obtusely ribbed; color light, rich yellow surface, covered with many small dots; cavity very deep and narrow, and strongly furrowed; stem small and calyx closed; flesh white; fine-grained, buttery, melting and rich. September and October.

Keiffer's Hybrid. Tree a remarkable grower with so vigorous a constitution that it rarely, if ever, blights. Fruit of fine size, rich color and good quality. Brings high price in competition with other varieties. Best when picked at maturity and house-ripened. October and November.

Louise Bonne de Jersey. Rather large; greenish yellow, with a bright red cheek; juicy, buttery and melting; excellent; very productive; a fine grower on both pear and quince. September and October.

Rossney. A new and excellent Pear, raised from seed at Salt Lake City, Utah. In size medium to large, very fine grain; flesh melting and juicy, very sweet. Ripens two weeks after Bartlett. Is an excellent shipper and keeper. The tree is much stronger than Kieffer. Luther Burbank says under date of October 5, 1895: "The samples of Rossney Pear arrived in due season. The large size, handsome form and creamy yellow skin with crimson blush, give the fruit a tempting appearance, and the tender, creamy flesh of just the right texture, with no hard spots and an unusually small core, with its superior flavor, make it about the best Pear so far seen. If the tree is vigorous, healthy and productive, would prefer it to any other, even the standards, Bartlett or Seckel." September.

Seckel. Small, rich, yellowish brown; one of the best and highest flavored Pears known; productive. September and October.

Tonkoviethka. Russian origin. Tree a good grower and very hardy. Fruit medium size, fair quality like Bessimianka. Would advise planting in a northern country where other varieties fail.

Vermont Beauty. Tree hardy and vigorous, early and abundant bearer. Fruit medium, yellow, with red cheeks; rich, juicy, best quality. October.

Worden Seckel. A seedling of the Seckel, which, for many years has been conceded to be the standard of excellence. Equal in quality to its famous parent, which it much resembles in flavor; is equally luscious, more juicy, and with an aroma equally rich and inviting, while in size, color, form and appearance it is decidedly superior. In color, when well ripened, it closely resembles Clapp's Favorite, with a skin that is usually as smooth and waxy as if it had been varnished. Tree a more upright and rapid grower than Seckel; hardy and enormous bearer; fruit keeps well, retaining its quality to the last.

WINTER PEARS

Beurre Easter. Large, pale yellow, sprinkled with round dots, often dull red cheek; quality good; one of the best winter pears. Keeps all winter.

Glou. Morceau. Large; skin pale greenish-yellow, marked with small green dots; flesh fine-grained, buttery, very melting, with a sugary flavor. Not only a valuable table, but a fine keeper, standing shipping well. Dec.

Kennedy. Originated by General John Bidwell, ou Rancho Chico, Butte county, California. Superior to Bartlett or Winter Nelis. Would be classed as a winter variety in northern sections; hardy, vigorous growing tree; bears well. The most valuable new Pear tree, originated in California.

Lincoln Coreless. Large, green, until thoroughly ripe, when it becomes a beautiful yellowish green; flesh rich yellow, juicy, melting, and a very delicate aromatic flavor; no seeds or core. February and March.

DOYENNE DU COMICE PEAR.

WINTER PEARS, Continued

Mount Vernon. Medium to large, of rich, russet color; flesh juicy, rich, melting with a spicy flavor. New. November to January.

Pound. a monstrous, very showy fruit, often weighing three pounds; yellow, red cheek. Tree very vigorous and productive.

P. Barry. This Pear was originated by the late B. S. Fox, of San Jose, is acknowledged by our best judges to possess qualities unequalled by any of our long-keeping Pears. It is large, deep yellow, nearly covered with a rich, golden russet; flesh whitish, firm, juicy, melting, sweet, slightly vinous and rich; an early and prolific bearer. December and January.

Pratt's Seedling. Originated in Salem, Oregon, with Captain Pratt. A pear with all the good qualities of the Bartlett but will keep until March. In shade and color like the Sheldon, but larger. The tree is a fine grower with a more preading top than the Bartlett. Has been shown at our Fruit Convention and is endorsed by all our fruit growers; a fine acquisition to our winter varieties.

Vicar of Winkfield. (Le Cure.) Large, long, not first quality but desirable for its productiveness. Best on quince. November to January.

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

FLEMISH BEAUTY PEAR.

Nelis, but season a little later, and as good as can be desired.

Winter Nelis. Medium in size; yellowish green and russet; fine grained, melting, rich and delicious; one of the best winter pears. Tree straggly, slender grower, but very productive. December.

CHERRIES

Hearts and Bigarreaus (*Cerasus Avium*); Dukes and Morellos (*C. Vulgaris*.)

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

We divide them into two classes—Hearts and Bigarreaus, and Dukes and Morellos. The first, being strong and vigorous growers, make large open, spreading heads or tops, are best suited for the purpose of shade, and produce large, heart-shape sweet fruit. The Dukes and Morellos are of slower growth and do not ever attain so large size, and are more hardy, less liable to get injured by bursting bark, and generally produce acid fruits, and make the most beautiful dwarfs. One and two-year-old trees are the most desirable for transplanting, and are usually from 4 to 6 feet high.

The Hearts and Bigarreaus will successfully resist cold weather so as to be grown in most sections, except the extreme north, while the Dukes and Morellos, or acid sorts, are perfectly hardy and are starred (*) in this catalogue.

Allen. Has been fruiting for several years; tree a healthy grower, immensely productive.

Fruit of excellent quality; large size and nearly heart-shape, shiny and smooth; color, when ripe

CHERRIES, continued.

nearly black, very meaty and firm; so far free from all rot and disease; ripens late. Good enough for any home use and we believe will prove one of the most profitable market varieties in all sections where the sweet cherries succeed.

***Baldwin.** This cherry is a seedling of the English Morello, and it was originally planted for an early Richmond which has been budded on a seedling of the English Morello. The budded part was accidentally broken off and a sprout came from the root, which was so vigorous that it was allowed to grow. The tree is an upright grower more inclined to be round than otherwise. A very rank, vigorous grower; leaves rather broad; bloom pure white, which turns to pink color similar to the hydrangea; fruit very large, almost perfectly round, very dark, yet almost transparent; flavor slightly sub-acid, yet the sweetest and richest of the Morello type; stems rather large, of medium length, more inclined to grow in pairs than in clusters. It is remarkable for earliness, vigor, hardiness, quality and productiveness. It is a tree to command attention and is so distinct as to attract comments from many upon seeing it, without knowing its superior merit.

Bing. This grand new black cherry was originated by Seth Luelling, of Milwaukie, Oregon. Size very large; blackish purple. Flesh very solid, flavor of the highest quality. Tree thrifty, upright grower, very hardy and productive. A fine shipping and market variety.

Black Republican. (Luelling.) 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 and rather tender. An early and profuse bearer.

Black Tartarian. Very large; bright purplish black, half tender, juicy, very rich, excellent flavor. Tree a vigorous grower and productive. June.

Centennial. A new cherry; a seedling of Napoleon Bigarreau, raised by Mr. Henry Chapman, in Napa Valley, California. It is larger than its parent, more oblate in form and beautifully marbled and splashed with crimson on a pale yellow ground. Its sweetness is very marked. Its keeping qualities after being taken from the tree will undoubtedly render it the best for shipment, specimens having been carried to the Eastern States and Europe without apparent injury.

Chapman. This grand new cherry originated in Napa Valley, California, where it ripens about

April 10. It is the earliest of all shipping varieties, bears early and immense crops of fine, luscious fruit, which grows somewhat more in clusters than Black Tartarian. Size very large, form roundish, stem long and slender, surface smooth, color purplish black; flesh half tender; stone small, flavor of the highest quality. On account of its great beauty, quality and earliness, it is a very profitable market variety. Said to be a seedling of the Black Tartarian.

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

Deacon. This new cherry is supposed to have originated in Sacramento, Cal. Color black; flesh firmer than Luelling (Black Republican) and much larger. Ripens with Black Tartarians; flavor of the highest quality. It has been shipped from Sacramento to New York, arriving in prime condition.

***Early Richmond.** (Kentish, Virginian May.) Medium size, dark red; meltine, juicy, sprightly acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes. Tree a slender grower, with a roundish, spreading head, and is exceedingly productive. The most hardy of all varieties, uninjured by the coldest winters when almost every other variety has been killed. Ripens through June.

***English Morello.** Medium to large, blackish red; rich, acid, juicy and good; very productive. August.

Early Purple Guigne. (Early Purple.) The earliest fine variety; medium size, heart-shaped, tender, juicy and sweet. Tree a rather slender grower but very hardy and productive. First to middle of June.

Elton. Large and fine flavor; pale yellow, light red next the sun; vigorous grower. Last of June.

Governor Wood. Large, rich; light yellow with red cheek; juicy and sweet. Last of June.

Hoskin. Originated by C. E. Hoskin, Newberg, Oregon. Very large; color black, flavor similar to Black Tartarian. A very promising variety.

Knight's Early Black. Large, black, tender, juicy, rich and excellent; good grower and productive. Middle to last of June.

***Kentish.** See Early Richmond.

Lambert. In size the largest known; smooth, glossy, color dark purplish red with numerous, minute, indented, russet dots; flesh dark, purplish red with whitish veins, firm meaty texture

One-year-old Cherry trees on a 3-year-old root, 4 to 6 feet high.

CHERRIES, Continued.

small oval stone, semi-cling; flavor sweet or very mild subacid, rich and of highest quality; form roundish, heart-shaped, long, slender stem. The finest shipping variety. Originated near Portland, Oregon, about 1887, and named after the originator. Tree thrifty, hardy and vigorous grower, and forms a beautiful head. Donated by Mr. Lambert to Oregon State Horticultural Society, and the sole right to propagate it purchased from them by the Oregon Nursery Co.

***Late Duke.** Large, light red; late and fine. Last of July.

Luelling. See Black Republican.

***Lutovka.** A Russian sort of the morello type. Fruit firm, good quality, sprightly, acid, as large as English Morello, similar to that variety in color. Clings tenaciously to the long stem. Aug.

Major Francis. See Oxheart.

***May Duke.** Large, red, juicy and rich. An old excellent variety. Vigorous, productive. June 15.

***Montmorency Large.** A large, red cherry, larger than Early Richmond and fully ten days later.

A LIMB OF CHERRIES

***Montmorency Ordinaire.** A beautiful, large, red, acid cherry, larger and finer than Early Richmond, and fully ten days later. Being extraordinarily prolific and very hardy it can be highly recommended. Valuable for canning and preserving. Free grower.

Napoleon Bigarreau (Royal Ann.) A magnificent cherry of the largest size. Pale yellow with bright red cheek; flesh very firm, juicy and sweet. One of the best for market and canning. Late.

***Olivet.** A new Duke of French origin. Unlike most others of this class it is said to be very early, and to ripen over a long period. Fruit very large, globular, and of a deep shining red. Tender, rich and vinous, with sweet subacidulous flavor.

***Osthien.** A hardy cherry from Russia. It has been tested in the severest winters of Minnesota and has been found perfectly hardy. Fruit large, roundish; ovate. Skin red, dark at maturity; stalk long, flesh liver-colored, tender, juicy, almost sweet.

Oxheart. (Major Francis.) Fruit large, obtuse, heart-shaped; skin dark red, half tender with a pleasant juice; of second quality in point of flavor. Last of June.

Roe. The latest and firmest of all cherries, ripening fully six weeks after the Lambert and Royal Ann. Firmer than the Black Republican. Light yellow background, overspread with mottled red, with bright blush on sunny side; flavor very sweet, quality excellent.

Royal Ann. See Napoleon Bigarreau.

***Vladimir.** Russian variety. Very hardy. A strong grower, wonderfully prolific. Fruit size of Early Richmond. Mild, subacid, juicy, excellent quality. July.

Windsor. New seedling, originated at Windsor, Canada. Fruit large, liver-colored, resembling Elkhorn or Tradescant's Black Heart, nevertheless quite distinct. Ripens three or four days after that variety. Flesh remarkably firm and of fine quality. Tree hardy and prolific. Valuable for late market and for family use.

***Wragg.** Much like English Morrello. More productive and excels in size, yield and quality. One of the hardiest cherries and has produced annual crops at the northernmost limits of cherry culture.

Yellow Spanish. Large, pale yellow, with red cheeks, firm, juicy and excellent. One of the best light colored cherries. Vigorous and productive. Last of June.

PLUMS (*Prunus*)

The plum tree, like the pear and other finer fruits, attains its greatest perfection in our heavy soil, being entirely free from disease. Plums are hardy and grow vigorously in nearly all sections, succeeding best on heavy soils in which there is a mixture of clay.

The finer kinds of plums are beautiful dessert fruits, of rich and luscious flavor. For cooking and canning they are unsurpassed. For best flavor they should be allowed to remain on the tree until fully ripe; but for shipping to market, they must be gathered a few days earlier, when they may be shipped long distances, arriving in good condition. Over bearing should not be allowed.

Some varieties, especially of the native plums, are extremely hardy and will stand the climate of the extreme northwest.

Japanese or Oriental Plums.

These plums are as distinct from our native varieties as the Yellow Newtown is from the Baldwin apple. Many of these varieties are succeeding well in the northern and western states in many places where the European varieties cannot be depended upon; and for the southern states they open a new field in plum growing. They unite size, beauty, productiveness, and come into bearing at 2 to 4 years of age. Flesh firm and meaty, will keep for a long time in excellent condition. Their early blooming habit renders them unsafe in some sections and they never will take the place of our older varieties, but possess many valuable characteristics.

We group plums under the following divisions: A, American type, very hardy (Chickasaw types). D, Domestica, European types. J, Japanese type. J* (starred) Japanese Hybrids, and crosses of the Japan plums introduced by Luther Burbank.

Abundance. J. (Botan.) One of the best Japan plums. The tree is a very rapid grower, healthy in limb and foliage, comes into bearing remarkably young and yields abundantly. The fruit is full medium size, color a rich, bright cherry-red, with a distinct bloom, and highly perfumed; flesh light yellow, very juicy and tender and of excellent quality. Vigorous, hardy. Mr. Geo. Thisell, of Winters, Cal., says of this fruit: "I have fruited it three years, have found it very prolific. Fruit large to very large, exceedingly sweet, pit very small. Ripens at Winters, June 10. I consider this one of my best shipping plums."

America. J*. Originated by Luther Burbank. Fruit large to very large, skin glossy, coral-red; flesh yellow, moderately firm and delicious. Said to be one of the most highly flavored plums.

Apple. J*. Another of Burbank's novelties, named from its close resemblance, form, color and rare keeping qualities. Flesh firm, pale red with marblings and streaks of pink. A valuable acquisition to the list of Japanese plums. Ripens after Burbank.

Apricot Plum. See *Prunus Simoni*.

Bartlett. J*. One of the best of Burbank's recent introductions. Said to be wonderfully productive. A very ornamental tree, with glossy, green leaves resembling very closely the famous Bartlett in habit of growth, flavor and fragrance. Fruit oval, yellow, turning to deep crimson when fully ripe, flesh light salmon-colored, firm and juicy. Ripens before Burbank.

Blood Plum. See *Satsuma*.

Bradshaw. D. Fruit very large, dark violet-red; flesh yellowish green, juicy and pleasant. Tree vigorous, erect and productive. Middle of August.

Burbank. J. Very vigorous grower. Early and very heavy bearer, fruit very large, yellowish ground with red cheeks in the sun, flesh yellow, firm and very sweet when fully ripe. Extremely small pit, which clings. Middle of June.

Chalco. J*. A cross between *Simoni* and *Burbank*. Resembles the former variety very closely, but said by the originator, Luther Burbank to be far superior to it. A tremendous grower and very prolific. A superior shipping Plum as it ripens and keeps well when picked green. Must

eventually supplant *Simoni*, thriving and bearing where that variety is a failure.

Charles Downing. A. Vigorous, healthy tree, fruit large, round, red, handsome and excellent. One of the best of the Wild Goose type.

Climax. J*. This is well named the "King of Plums," as its extreme earliness, immense size, high color, delicious flavor and fragrance place it in the lead among early shipping Plums. Fruit heart-shaped, color, deep, dark red. Flesh yellow. Tree vigorous and remarkably productive.

Clyman. D. A beautiful Plum originated in the Napa Valley, Cal. A good bearer, fruit medium to large, mottled reddish purple, with beautiful blue. Freestone, quality of flesh superior, valuable on account of its earliness and its excellent shipping qualities.

Coe's Golden Drop. D. Large and handsome, light yellow, firm, rich, sweet. One of the best of late Plums. Last of September.

Columbia. D. Fruit of the largest size, 6 or 7 inches in circumference, nearly globular. Skin brownish purple, dotted with numerous fawn-colored specks. Flesh orange, not very juicy, but when at full maturity very rich, sugary and excellent. Last of August.

Combination. J*. New Plum, early, regular and abundant bearer of large, nearly globular fruit of uniform size. Flesh straw color, extremely sweet with a very pronounced pineapple flavor. Stone small and nearly free when fully ripe. Luther Burbank, the originator says: "An extremely handsome, large, early light crimson Plum of the very best quality, ripening at Santa Rosa, July 12, before most of the earliest Plums and about as early as the *Climax*. The trees, both old and young, are about the best and most symmetrical growers among the Plums, making an early, rapid growth, ripening the wood perfectly hard to the tips early in the season, indicating unusual hardness. The bark, leaves and fruit are all unique. Bark, dark, russet-bronze. The unusually large, broad, glossy coriaceous leaves are bronze-crimson in the spring and fall. 'Combination' trees resemble no other trees in cultivation and are certain to please everyone."

Damson. D. Fruit small, oval; skin purple,

PLUMS, Continued

covered with blue bloom. Flesh melting and juicy, rather tart; separates partly from the stone. Sept.

De Soto. J*. A. Medium size, resembles Miner in form and color but is two weeks earlier. Fine for eating or canning. A moderate grower, bears young and profusely. Hardy and very desirable.

First. J*. New plum. Fruit of good medium size. Pale amber, faint blush on sunny side, half transparent. Flesh same color, moderately firm, sweet, juicy and good, especially so when just at the right stage of ripeness. Tree of medium growth never fails to produce all it can hold. Luther Burbank the originator says: "Introducing this new Plum, I confidently make the statement that it is the earliest of all plums, ripening at Santa Rosa June 15, fully three weeks earlier than the Red June, and also that it is the largest, handsomest and most productive of all very early plums. It should prove very hardy, and for home use and near markets will be the most useful of all very early plums. It is too soft and ripens too suddenly for shipping to distant markets, but its extreme earliness, large size and good quality make a combination of very unusual value."

Green Gage. D Small; considered the standard of excellence; slow grower. Middle of August.

Forest Rose. A. A native of Pike county, Mo. Fruit round; larger than Wild Goose; skin rather thick and of a beautiful dark red color, covered with a delicate bloom; stone small; fine quality.

Gueii. D. Extensively grown for market. Tree a hardy, very strong, vigorous, upright grower, an early and very abundant bearer. Fruit large, roundish oval; skin dark purple, covered with a thick, blue bloom; flesh pale yellow, a little coarse, rather firm, juicy, sweet, sprightly, subacid; freestone. Season last of August and first of September.

Hale. J*. Fruit medium to large, yellow, mottled and speckled red; flesh soft and juicy, yellow; cling; of good quality. Tree a moderately spreading, vigorous grower. Follows Burbank in ripening. Last of August.

Jefferson. D. Large, yellow, reddened in the sun; juicy, rich and delicious; one of the best. Last of August.

Kelsey. J. Japanese; very large; rich reddish purple on yellow ground; tree a prolific and early bearer; very largely planted for shipping East. The largest of all Plums.

Lombard. D. (Bleeker's Scarlet.) Medium, round, oval; violet-red; juicy, pleasant and good, adheres to the stone. Tree vigorous and productive. A valuable market variety; one of the most hardy and popular. Last of August.

MAYNARD PLUM

PLUMS, Continued

Maynard. J*. Originated by Luther Burbank, that great master of modern horticulture. In size it is very large, often measuring $7\frac{1}{2}$ inches in circumference. Form nearly round, slightly flattened at the ends; of richest crimson-purple, deepening to royal damask as full ripeness is reached. Tree hardy, vigorous and compact grower. Leaves dark glossy green. Bears immense crops of even sized fruit while very young; never fails. Surpasses all other varieties in keeping and carrying qualities. Flesh firm, even when dead ripe, but melting and juicy, with a deliciousness indescribable. Will command the highest price in both home and foreign markets.

Milton. Rather large; dark red; skin thin; flesh firm; good quality; ripens earlier than Wild Goose; its large size, good quality and extreme earliness make it very valuable; a strong grower; productive.

Miner. Medium size; oblong; skin dark, purplish red; flesh soft, juicy, vinous and adheres to the stone; excellent for canning and cooking and esteemed for market; productive.

Miracle. Burbank's history and description of the stoneless plum Miracle: "About 16 or 18 years ago I sent to a French nurseryman for the *Prunus Sans Noyeau*, a fruit which has been known as a curiosity for hundreds of years. This soon fruited with me, producing a fruit about the size of a small cherry, having a Damson color and flavor, with a stone partially covering the pit, and growing on an unproductive, rambling, thorny bush. This was carefully crossed with the French prune and other plums, and after about ten years I began to see the results in sweet and sour Damson like fruits of all sizes. At last, about 4 years ago, in a lot of these hybrid seedlings, a strong vigorous, close jointed tree with large leaves and very prominent buds was raised, which produced the fruit called Miracle, of much better flavor than even the best Damsons, of greatly improved form, size, color and quality, and the stone wholly eliminated. Like several others of these hybrid seedlings, this new and first really stoneless hybrid plum not only resembles but even surpasses its staminate parent, the French Prune, in size, and resembles it in general form, and especially in its enormous productiveness, but having a much heavier blue bloom, thus more resembling some of the German Hungarian prunes. While not containing sugar enough to be classed among the drying prunes, for cooking it must supplant all the Damsons, as it is larger and more productive, if possible, than any of them which are noted for their productiveness. Experiments are to be continued in this very interesting line, and among the thousands of hybrid seedlings of the last generation a large number show that they have still further valuable distinctive qualities. It has been a tedious and highly expensive matter to breed out the stone from the plum, and at the same time increase its size, quality and productiveness, as only a small proportion of the seedlings are stoneless, and most of them show the many undesirable qualities usually found in seedlings, so that to produce a stoneless fruit of good quality has been a monumental task which very few would be willing to follow up. Probably not one person in a million realize the fact that such a plum could hardly be produced for less than the

cost of half a score of average New England farms, yet such are the facts."

Moore's Arctic. D. Size medium, purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet, and of a pleasant flavor. Charles Downing speaks of it as follows: "A new hardy Plum, which originated in the highlands of Aroostook county, Maine, where, unprotected and exposed to cold, it has for many years borne enormous crops, and is claimed to be the hardiest Plum grown, and so far free from black-knot." Tree healthy, vigorous. An early and abundant bearer.

October Purple. J*. Propagated by Luther Burbank, of California. Fruit large and uniform in size; color a dark rich maroon; stone small, flavor fine. Tree a fine grower. This variety is pronounced by Mr. Burbank one of the best varieties he has produced. Ripens middle of September. Should be in every collection.

Peach. D. Very large and handsome; dull red; good; very productive. Last of August.

Pond's Seedling. See Hungarian Prune.

Pottawattamie. A. A cross of Chickasaw and Swedish Sloe. Quality excellent. Tree perfectly hardy, a strong, vigorous grower; an immense annual bearer; curculio-proof. One of the most profitable trees for the fruit grower. Four-year-old trees have borne a crop of two bushels to the tree.

Prunus Simoni. J. (Apricot Plum.) A distinct species from China. Growth erect; flowers small, white, appearing early in the spring. Fruit flattened, of the size and appearance of a Nectarine, and of a brick red color; flesh yellow, with a peculiar aromatic flavor.

Red June. J. The best Japan, ripening before Abundance. Medium to large; deep vermilion red, with handsome bloom; flesh light lemon-yellow, firm; moderately juicy; fine quality. Tree upright, spreading, vigorous and hardy; productive. Ripens between Willard and Abundance. Highly recommended by Prof. Bailey, of Cornell University. Last of July or early August.

Reine Claude de Bavay. D. (Bavay's Green Gage.) Large; greenish yellow; spotted with red; firm, juicy, sugary and of fine quality; very productive. September.

Satsuma. J*. (Blood Plum.) Native of Japan. The tree looks much like the Wild Goose, and is likely to prove more hardy than Kelsey. The fruit has a pleasant flavor, and, unlike all others, has red flesh, with a remarkably small stone.

Shipper's Pride. D. Large, nearly round; dark purple; quite juicy, sweet; splendid shipper and marketer, moderate grower, productive. Originated in northwestern New York.

Shiro. J*. Originated by Luther Burbank. Fruit egg-shaped, medium size, smooth, bright yellow, thin bloom; flesh clings to the pit. Said to be more productive than the Burbank.

Sultan. J*. Said by the originator Luther Burbank, to be one of the most attractive Plums. Its huge size and deep purplish crimson color render it valuable for market. The flesh is very firm, fragrant, sweet, dark crimson, clouded and shaded with pink, salmon and light yellow. Very rapid grower, with wood and leaves much like a Royal Ann Cherry.

PLUMS, Continued

Tatge. D. Another new Plum of the *Domestica* type that bids fair to rival all others in this class. It is of the Lombardy family. Originated in Iowa. A good grower. Comes early into bearing, and is immensely productive.

Washington. D. Large, green, somewhat reddened; juicy, sweet and fine; very productive. Last of August.

Wickson. J*. 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.

Weaver. A. This remarkable Plum was found near Cedar Rapids, Iowa, growing in the old Indian camping ground. Flesh firm, with flavor re-

sembling the apricot. As a substitute for the peach it has no rival. Curculio-proof.

Willard. J. Medium in size, spherical in general outline, but prominently cornered or angled, and never pointed; the sinus very light, but stem cavity deep; color dark, clear red, with minute yellow dots; flesh rather firm, yellow, sweet and of fair quality; freestone. A strong, vinous and hardy tree, productive and one of the earliest market Japan Plums yet tested in the North.

Wild Goose. A. An improved variety of the Chickasaw, evident in the great vigor of the tree and increased size of the fruit, which is nearly as large as the Green Gage. Skin purple, with a bloom; flesh juicy, sweet and adheres to the stone. Last of July.

Yellow Egg. D. (Magnum Bonum, Yellow.) 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 (*Prunus*)

The plum of history is the *Prunus Domestica*. It also gives us the Prunes which are characterized by sweet, firm flesh, and capable of making a commercial dried product. They may be of any color, although blue-purple are best known. Any plum which can be successfully cured, without removing the pit, into a firm, long-keeping product, may be used for making prunes, the chief requisite being a large proportion of solids, more especially sugar.

To such proportions has the prune industry grown in the past dozen years that it may now be classed as one of the most important productions of the Pacific Coast, the exportations annually to the eastern markets reaching hundreds of thousands of pounds of the finest prunes in the world.

Dosch. D. Introduced by Hon. H. E. Dosch, after whom it is named. Originated near Portland, Oregon, about ten years ago. Color purple, very large; flesh juicy, delicious, sweeter than the Italian but not so sweet as the Petite; flavor excellent and for canning has no equal; dries very heavy. Tree hardy, thrifty grower, ten days to two weeks earlier than the Italian. Received a gold medal at Omaha Exposition in 1898, both in green and dried states.

Fellenberg. See Italian Prune.

French. See Petite.

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

Giant Prune. D. (California.) One of the largest Prunes known, the fruit averaging one and one-half to two ounces each. Its unequalled size, handsome appearance, rare keeping qualities and great productiveness make it desirable for home use or market. September.

Golden. D. A seedling of Italian Prune. Originated in Oregon. Light golden color, good flavor and heavy drier; strong grower and abundant bearer; freestone. September.

Hungarian Prune. D. (Grosse Prune, or Pond's Seedling Plum.) Very large, dark red, juicy and very sweet. Its large size, bright color, productiveness and shipping qualities render it a profit-

able variety for home or distant markets. Sept.

Imperial. D. (Epineuse.) Large size, light or reddish purple color; thin skin; sweet and high flavor. Tree stout, stocky, rapid grower.

Italian. D. (Fellenberg.) A late prune; oval; purple; flesh juicy and delicious, parts from the stone; fine for drying. Tree very productive. September.

Petite D'Agen. D. (French Prune.) The well-known variety so extensively planted for drying. Medium size; reddish purple; juicy, sugary, rich and sweet. Bears immense crops. Sept.

Pacific. D. Originated at Mt. Tabor, Oregon. Tree hardy; borne abundantly since three years old. Fruit freestone, very large and handsome. Flavor the finest; rich, sugary and luscious. A good shipper. The best of drying Prunes.

Robe de Sargent. D. A variety lately introduced from France. It is this which in a dried state forms the celebrated "Pruneau d'Agen." Fruit medium size, oval; skin deep purple, approaching to black and covered with a thick blue bloom; flesh greenish yellow, sweet and well flavored, sugary, rich and delicious, slightly adhering to the stone. A valuable drying and preserving variety. Ripens in September.

Silver. D. Originated in Oregon and said to be a seedling from Coe's Golden Drop, which it very much resembles; is much more productive and

PRUNES, Continued

tree more vigorous. The fruit on account of its large size, is ranked among the most valuable Prunes and drying plums. October.

Splendor. D. Large, very long in shape; clear even purple, turns quite black in curing. Cooked has a slight acid flavor.

Sugar. Originated by Luther Burbank. Ripens 28 days earlier than French (Petited' Agen). Almost one-fourth sugar (analysis shown it to be 23.92 per cent sugar). Three times larger than French, of which it is a seedling. On account of its earliness, large size and high per cent of sugar, is sure to revolutionize the prune industry of the

world. Tree vigorous, hardy and very productive; bears young. Color purple; good shipper. Aug.

Tennant. D. Originated in Whatcom county, Washington, where it has been tested for 20 years, and has never failed to produce a good crop of fruit. Large; dark purple, with a blue bloom; flavor of the highest quality; rich, sugary and delicious. Tree hardy and very productive. Bears transportation well. August.

Tragedy. D. This most valuable of all Prunes for early eastern shipments appears to be a cross between the German Prune and the Purple Duane, medium size, nearly as large as Duane; skin dark purple; flesh yellowish green, very rich and sweet, freestone. Ripens in July.

Our First Consideration

“Quality”

PRUNES COMPARED WITH A HALF DOLLAR.

PEACHES (*Prunus Persica vulgaris*)

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

Admiral Dewey. F. Skin deep orange yellow, with crimson cheek; flesh clear yellow, of uniform color and texture to the stone; juicy, melting, vinous; quality very good. Ripens with Triumph; has better form and brighter color on surface; equally hardy and productive; tree a strong and symmetrical grower. One of the best early freestones.

Alexander's Early. (Alexander.) C. Originated near Mt. Pulaski, Ill. Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet; tree vigorous and productive. Ripens two weeks earlier than Hale's Early.

Amsden's June. (Amsden.) C. Originated

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

Australian Saucer. F. Medium; flat, hollowed like a saucer on one side, hence the name; skin white, shaded crimson in the sun; flesh white, sweet, delicious flavor; pit very small, almost round. An oddity for home consumption only. July.

Banner. New. F. Originated at Woodslee, Ontario. The original trees have borne 16 crops, several years bearing well when all other varie-

PEACHES, Continued.

ties in Ontario failed. Tree very hardy both in weed and bud, bears young and very productive, equaling the Prolific. Fruit large, deep yellow, with crimson cheek; flesh yellow to the pit; firm, rich and of excellent quality; pit small, free; equal to any as a shipper or keeper. Prof. W. W. Hilborn, Director of the Experimental station at Leamington, Ontario, has shown it for many years, fruited it for several seasons in experimental orchard, and recommends it as the very best late market variety. Last of September and October.

Blood-Leaf Peach. See Deciduous Ornamentals.

Bokhara. F. A Russian variety, which is claimed to be the hardiest Peach grown; in fact, it has withstood a temperature of 28 degrees below zero without injury. It is a beautiful yellow Peach, with bright red cheek; perfect freestone, delicious flavor; its exceedingly tough skin makes it a splendid shipper.

Briggs' Red May. F. Originated with J. B. Briggs, of Marysville. Fruit medium to large, skin greenish white, with rich red cheek, flesh greenish white, melting and juicy. A standard

early variety and one of the most extensively planted in California. Middle of June.

California Cling. C. Very large, round, regular; orange, nearly covered with dark rich red; flesh deep yellow; flavor delicate, rich, vinous. Middle of August.

Carman. F. Large, resembling the Elberta in shape; creamy white or pale yellow, with deep blush; skin very tough; flesh tender and of fine flavor; juicy; prolific bearer. Profitable market variety. Ripe June 20.

Champion. F. A particularly hardy seedling of Old Mixon, from the west, which is noted for the hardiness of its blossoms, thus insuring a good yield in spite of heavy spring frosts. It is a very large, handsome Peach, with a creamy white skin and beautiful red cheek. In flavor it is exquisite, and is a true freestone. Ripens the middle of July.

Chinese Cling. C. Large, globular; skin white, shaded with light red; flesh white, red at the stone; very juicy, melting and rich. July.

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

Crawford's Late Melocoton. (Late Crawford.) F. Fruit of large size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow; tree vigorous, moderately productive. One of the finest late sorts. Last of September.

Crosby. F. An iron-clad Peach. The tree is of low, spreading, willowy habit of growth, similar to Hill's Chili, Wagner and others of that class of hardy Peaches. However, it is even more dwarf than these, and often the entire product of a tree, two bushels, or even more, can be picked by a man standing on the ground. The fruit is of medium size, roundish in form, slightly flattened, with a distinct seam on the blossom end; bright orange-yellow, splashed with streaks of carmine on the sunny side; of beautiful appearance, and not so acid as most yellow Peaches of the Crawford class. It ripens between Early and Late Crawford or about with Old Mixon. A good family Peach at all times, and, on account of its beautiful color, will command a ready sale alongside of the best standard sorts, in a season of abundance. However, when it is considered that its fruit-buds are so hardy as to withstand the frosts of winter and spring, that often kill all other good varieties, its special value is apparent; a fine yellow Peach to supply the market when there are no others.

Dewey. See Admiral Dewey.

Early Charlotte. F. An improved seedling from Early Crawford, originated at Salem, Oregon, in 1878, by O. Dickenson, where it has attracted much attention among fruit growers. This remarkable Peach succeeds in Oregon, where many other varieties fail. Flesh yellow, melting and juicy, with a rich and excellent flavor. Freestone. Ripens ten days after Crawford's Early.

Early Imperial. F. Originated by W. W. Smith, Vacaville, Cal. Fruit large, deep yellow, with dark red cheek; flesh rich, juicy and very firm. A very highly colored peach and remarkable for

One-year-old Peach tree; 4 to 6 feet high. Note the splendid root system.

PEACHES, continued.

its firmness. Resembles Yellow St. John in form but earlier, larger and more highly colored. Ripens with Hale's Early, and its rich color and earliness combined will make it one of the most profitable varieties for early shipment.

Elberta. F. Introduced from Georgia. A cross between Crawford's Early and Chinese Cling; very large; bright yellow, with a beautifully mottled red cheek; flesh yellow, juicy, sweet; tree a uniform and regular bearer and strong grower. Fruit very showy and a perfect free stone. One of the best market varieties, often selling at double the quotations of other peaches. Ripens last of July.

Everbearing. F. A remarkable peach, having the peculiarity of ripening its fruit successfully over a period of eight weeks. Creamy white, mottled and striped; flesh white, with red veins; juicy, rich and fine.

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

Foster. F. Originated in Medford, Mass. Large, deep orange-red, becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with subacid flavor, ripening earlier than the Early Crawford and superior in many points, flesh is firmer, without so much red at the stone, which is smaller; one of the very best for drying,

market or canning.

Gillingham. F. Large yellow, resembling the Early Crawford in form and appearance, ripening a few days later; flavor excellent. Bears young and abundantly. A very promising new variety.

Globe. F. Large, flesh firm, juicy, yellow, quality good, pleasant, rich, vinous and luscious. October.

Greensboro. S. C. Origin, North Carolina. Ripens with Alexander, but much larger. Round, flesh white, very juicy, of good quality, bright red over yellow, highly colored in the sun. A promising market variety.

Hale's Early. S. C. Medium size, greenish white, with red cheek, first quality. Tree healthy, good grower and productive. One of the earliest good peaches we have, and promises to be a leading orchard variety.

Heath Cling. C. A most delicious cling. Very large, skin downy, creamy white, with faint blush of red, flesh white, slightly red at the pit, very tender, juicy and sweet, valuable for canning. Season closes early September.

Henrietta Cling. See Levy Late.

Imperial. See Early Imperial.

Indian Cling. (Indian Blood.) C. Large, deep claret color with red veins, downy, flesh red, very juicy and refreshing. Highly valued by all lovers of Indian peaches. Last of August.

Lemon Cling. C. A very large and beautiful lemon-shaped variety; skin light yellow, reddened in the sun; flesh firm, yellow, with a rich, vinous, subacid flavor. Ripens first week in August.

MUIR PEACHES

PEACHES, Continued

Lemon Free. F. Originated in Ohio, very large, pale yellow, shaped a good deal like a lemon; of extra fine quality; tree very productive. Ripens before Salway.

Levy's Late or Henrietta Cling. C. A magnificent cling of large size; skin a deep yellow, a shade of rich brownish red in the sun; flesh deep yellow, firm, juicy, sweet, half-melting, slightly vinous. Latest of all clings and highly esteemed for canning and market. Middle of September.

Lovell. F. A California seedling; large; almost perfectly round; flesh yellow to the pit, firm and of excellent quality; a superb canning, shipping and drying Peach; tree a good grower and bearer. Worthy of extensive cultivation; ripens a few days after Muir.

McDevitt's Cling. C. Originated with Neal McDevitt, of Placer county, Cal. Very large, rich, golden yellow, becoming quite red when ripe; flesh yellow, firm and of superior flavor; excellent shipper. Last of August.

McKevitt's Cling. C. A California seedling introduced by A. McKevitt, Vaca Valley, Calif. White, flesh firm, rich, sugary and highly flavored, white to the pit, excellent for shipping and canning. Tree a remarkably strong grower and not subject to curl. Early in September.

Mountain Rose. F. Large, handsome, red cheek, flesh white, juicy, one of the best. Aug.

Muir. F. Large, pale yellow, very firm flesh, very sweet. Best for drying. Last of August.

Newhall. F. Originated with Sylvester Newhall, of San Jose. A superb Peach, of very large size, skin yellow, with a dark red cheek, flesh deep yellow, juicy and rich, vinous flavor. Tree very hardy, healthy, vigorous and not affected by curl like Crawford's Late. Ripens about one week before Crawford's Late.

Orange Cling. See Runyon's Orange Cling.

Perfection. F. This new and valuable peach originated about three miles above Weston, Umatilla county, Oregon, near the timber line of the Blue Mountain Range, at a high altitude which proves its hardiness. The fruit is of the largest size, yellow with beautiful blush cheek, flesh is thick and very fine grained, yellow, with red around the pit, which is nearly as small as a prune seed. Its tough skin, firm flesh and good keeping qualities place it in the lead for a good shipping and market variety. We cannot recommend this new peach too highly to our friends and patrons, and it should be largely planted. Ripens from September 10th to 15th.

Philip's Cling. C. Fine, large; yellow; flesh firm, clear yellow to the pit, which is very small. Preferred by canners to any other variety of cling. Its firmness, fine texture of flesh and lateness, not ripening until September, when other clings are practically harvested, makes a demand for this variety far beyond the supply.

Prolific (New.) F. Fruit large, attractive; firm; color yellow, crimson cheek, flesh yellow to pit, very firm, pit small.

The tree is very productive, and one of the hardiest peaches known. Sept.

Runyon's Orange Cling. C. Originated with Mr. Sol. Runyon, on the Sacramento River. The fruit is very large, yellow, with a dark crimson cheek; flesh golden yellow, rich and sugary, with a vinous flavor. Tree an immense bearer, and not subject to mildew like the common sort. A splendid fruit for shipping, canning or drying. Ripens early in August.

Salway. F. Fruit large, roundish, deep yellow, with a rich, marbled, brownish red cheek, flesh yellow, firm, juicy, rich and sugary. A new English variety. Promises highly as a late, showy, market sort.

Seller's. A variety of Orange Cling, of the largest size, raised by Mrs. Sellers, of Antloch. Skin, fine yellow, with a dark red cheek, flesh yellow, firm, very juicy and rich. A very desirable sort for canning, ripening a few days after Runyon's.

Sneed. S. C. It is claimed for this peach that it is fully ten days earlier than the Alexander, of same size and appearance, but more yellow; the flesh is tender, juicy, melting and delicious; clings slightly to the pit. Said to be the first peach to ripen, which makes it a very desirable variety.

Strawberry. F. Medium size; white, marbled with dark red; flesh white, red near the pit; juicy, with a rich delicious flavor. July.

Susquehanna. F. A large, handsome variety, nearly globular; skin rich yellow, with beautiful red cheek; flesh yellow, sweet, juicy, with a rich vinous flavor.

Triumph. S. C. Above medium; skin downy, dark orange-yellow, nearly covered with dark carmine; flesh yellow half-way to the stone, where it changes to greenish white and adheres to the stone like Alexander; juicy, melting and slightly sup-acid; quality good. Maturity June 15. The

FOSTER PEACH.

PEACHES, continued

great value of this peach for shipping purposes is its yellow color and attractive appearance, it being the earliest peach so far known, and has brought very high prices.

Tuskana Cling. [Tuscan, Yellow Tuscan.] C. A very large, yellow cling, the earliest fine cling; flesh juicy and of fine flavor and clear yellow to the stone. A good shipping and canning peach and very desirable on account of its earliness, ripening with the Early Crawford.

Twenty-Ounce Cling. C. A fine, very large peach, very desirable for canning. August.

Van Buren Dwarf. Tree very dwarf and ornamental and on this account valuable for very small gardens, fruit medium size; skin yellow, shaded red; flesh yellow and of fine quality. Ripens middle of August.

Wager. F. Large; yellow, more or less color in the sun; juicy and of a fair flavor. While high quality and great beauty cannot be claimed for this fruit, the trees have such remarkable vigor and vitality that they not only produce fruit in great quantities, but produce it with a degree of certainty and regularity which is quite unusual.

APRICOTS (*Prunus Armeniaca*, or *Armeniaca vulgaris*)

Beautiful and delicious fruit. In quality and appearance is between the plum and the peach, combining qualities of both. Ripening early, together with its delightful flavor, makes it one of the most valuable fruits. Tree is as hardy as the peach. Requires about the same cultivation as the peach or plum. It ships well and commands a good price in the eastern market. For drying and canning it has no superior. The Russian varieties are quite distinct from the other European sorts; much hardier, earlier bearers and productive.

Alexander. Very hardy and immense bearer; fruit large; yellow flecked with red; very beautiful, sweet and delicious. July.

Alexis. Very hardy and abundant bearer; yellow, with red cheek, large to very large; slightly acid, rich and luscious. July.

Blenheim. Large, oval; flesh full to the pit; yellow, rich and juicy, ripens evenly and soon after the Royal, regular and prolific bearer, profitable for canning, drying and marketing.

Gibb. Tree hardy, grows symmetrical, productive. Fruit medium, yellowish, subacid, juicy and rich. The best early variety, ripening soon after strawberries. A great acquisition.

Hemskirk. Large, roundish, but considerably compressed or flattened on its sides, orange, with red cheek, flesh bright orange, tender, rather more juicy and sprightly than the Moorpark, with a rich and luscious plum-like flavor. July.

J. L. Budd. Tree a strong grower and profuse bearer. Fruit large, white, with red cheek, sweet, juicy, with a sweet kernel, as fine-flavored as an almond. The best late variety and decided acquisition. August.

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

Nicholas. Tree hardy and prolific. Fruit med-

These facts commend it to all planters for market purposes. Last of August.

Waterloo. S. C. Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red, deepening into dark purple-crimson in the sun; flesh greenish white, with an abundance of sweet, vinous juice, adheres some to the stone, like Amsden, Hale's Early, etc. Ripened at Waterloo, July 14, 1878; in 1879, three or four days ahead of Alexander. For so early a peach it is a remarkable keeper, ripe specimens having been kept in perfect condition for nearly a week. This makes it valuable for shipping.

Wheatland. F. Large, roundish; skin golden yellow, shaded with crimson on the sunny side; flesh yellow, rather firm, juicy, sweet and of fine quality; tree vigorous. August.

Wonderful. F. A freestone; color rich golden yellow, overspread with carmine. It ripens after nearly all other varieties have disappeared, and is a remarkable keeper. The tree is wonderfully prolific.

Yellow St. John. F. Fully one week earlier than Early Crawford; a trifle smaller than latter, especially old trees; yellow with deep red cheek; juicy, sweet and highly flavored, quite free.

TILTON APRICOTS.

APRICOTS, Continued.

ium to large, white, sweet and melting. A handsome, valuable variety. July.

Peach, (Marysville Peach.) Very large, handsome and of delicious flavor, skin deep orange, mottled with dark brown, flesh of a fine saffron-yellow color, juicy, rich and high-flavored. One of the best. August.

Royal. Large, oval, slightly compressed, yellow, with orange cheek, faintly tinged with red,

flesh pale orange, firm and juicy, with a rich vinous flavor, exceedingly productive. July.

Tilton. New. We have pleasure in introducing this Apricot to the public. Its large size, rich Apricot color, high flavor, uniform ripening, sure and unusual productiveness, with frost resisting qualities and vigorous growth, easily place it far in advance of all other varieties. For drying or canning it is much superior to any of these older varieties.

QUINCES (*Cydonia vulgaris*)

The quince is, of late, attracting a good deal of attention as a market fruit. Scarcely any fruit will pay better in the orchard. The tree is hardy and compact in growth, requiring but little space. Productive, gives regular crops and comes early into bearing. The fruit is much sought after for canning for winter use. When put up in the proportion of about one quart of quinces to four quarts of other fruit, it imparts a delicious flavor. Especially desirable for jellies and preserves.

It flourishes in any good garden soil, which should be kept mellow and well enriched. Prune off all the dead and surplus branches and thin out the fruit if bearing too freely.

Apple, or Orange. Large, roundish, bright golden yellow, cooks tender and is of very excellent flavor. Valuable for preserves or flavoring; very productive. The most popular and extensively cultivated of the old varieties. October.

Angers Somewhat later than the preceding. Fruit rather more acid, but looks well. Tree a thrifty grower and abundant bearer.

Bourgeat. A French variety. Very productive, healthy and thrifty. It grows in tree form, like pears or plums. It has almost perfect foliage, leaves green and fresh until the end of the season. The fruit is very large, smooth, golden yellow, of the best quality, tender, ripens just after the Orange and will keep past midwinter in perfect condition.

Champion. Fruit very large, fair and handsome. Tree very handsome, surpassing other varieties in this respect, bears abundantly while young, flesh cooks as tender as an apple and without hard spots and cores, flavor delicate, imparting an exquisite Quince taste and odor to any fruit with which it is cooked. One of the most valuable.

Orange. See Apple.

Pineapple. Originated by Luther Burbank. The name comes from the flavor, which is suggestive of the pineapple. The fruit in form and size resembles the Oregon Quince, but is smoother and more globular. Makes a superior jelly. Can be

eaten raw and is said to cook as tender in five minutes as the best cooking apple, possessing a most exquisite and delicious flavor not equaled by any other Quince.

Luther Burbank says: "Quinces can probably be grown with less expense than any other fruit, and if the quality could be improved, would be extensively grown and more generally used. A more promising fruit for improvement cannot be named. For about 15 years we have been working in this direction and have succeeded in obtaining the Pineapple, a Quince which will cook as tender in five minutes as the best cooking apples and with a flavor never before equaled. Jelly made from it is superior to that made from any other known fruit—absolutely unapproachable—something which could never have been thought of until it was brought into existence. The fruit, in form and size, very much resembles the Orange Quince, but is smoother and more globular, in color much lighter yellow, average weight about three-quarters of a pound each. The tree is a strong grower and as productive as the Orange. Some one may produce a better Quince, we never expect to."

Rea's Mammoth. A seedling of the Orange Quince, one-third larger, of the same form and order, fair, handsome, equally as good and said to be as productive. Tree a hardy and healthy grower.

NECTARINES (*Prunus Persica*, or *P. laevis*)

A most delicious, smooth-skinned fruit, which thrives wherever peaches will grow. Much superior to the peach as a dried fruit, and excellent for preserves. Commands a high price in the eastern market, as it is somewhat of a novelty.

Boston. Very large and handsome, deep yellow, with a bright blush and mottles of red, flesh yellow to the stone, sweet, with a pleasant and peculiar flavor, freestone. One of the most valuable sorts for market.

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

Lord Napier. Large, cream-color, dark red

NECTARINES, Continued

cheek, flesh white, tender, juicy and sugary, free-stone. July.

New White. Large, white, nearly round, flesh white, tender, very juicy, with a rich, vinous

flavor, stone small and separates freely. August.

Stanwick. Very large, often as large as a peach, skin pale greenish white, shaded into deep rich violet in the sun, flesh white, tender, juicy, rich, sugary and delicious. For drying and shipping not excelled by any other variety. August.

GRAPES (*Vitis*)

Too much cannot be said in praise of the grape. It is one of the best and most popular fruits, delicious for eating, especially desirable for cooking and preserving, and everywhere in large demand.

The vine comes quickly into bearing, yielding fruit usually the second year after planting; requires but little space, and when properly trained is an ornament to the yard, garden or vineyard.

Almost every one can find room for from six to a dozen or more grape vines. They can be trained up the side of any building or over a garden fence, but the best and cheapest way to grow them, either in small or large quantities, is on a wire trellis.

Work the ground deep for grape vines and plant a little deeper than they were in the nursery. Make the rows eight feet apart and plant vines six to eight feet apart in the rows. Some of the tender varieties would be benefited by laying the vine flat on the ground during winter, with a light covering of earth or litter.

AMERICAN VARIETIES

Brighton. R. A cross between Concord and Diana Hamburg. Resembles Catawba, in color, size and form and bunch of berry; flesh rich, sweet and of the best quality. Ripens earlier than Delaware. Vine vigorous and very hardy. This variety has been thoroughly tested, and it may now be truly said to be without an equal among early grapes.

Campbell's Early. B. 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 unequalled by any 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 unrivaled by any of our present list of first-early market Grapes. It is, both as to luster 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.

Catawba. S. Well known as the great wine Grape of Ohio, Kentucky, etc. Bunches large and loose, berries large, of a coppery red color, becoming purplish when well ripened, requires the most favorable soils and situations, good culture and warm seasons to mature perfectly. Last of September.

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

Delaware. R. Still holds its own as one of the finest Grapes. Bunches small, compact, shouldered, berries rather small, round, skin thin, light red, flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous, hardy and productive. Ripens two weeks before the Isabella.

Early Ohio. B. Very early, hardy and productive, strong, thrifty grower, good-sized bunch, berry smaller than Concord, adheres firmly to the stem. A profitable early market sort.

Eaton. B. Seedling of the Concord. Bunch and berries of largest size, showy and attractive, leaf large, thick and leathery, berries round, covered with heavy blue bloom, pulp tender, separating freely from the seeds.

Green Mountain. (Winchell.) W. This, the earliest white Grape, has been thoroughly tested over a wide area, and has proved most satisfactory. It combines hardness, fruitfulness, vigor, good size and excellent quality. Bunch medium to large, shouldered; berries medium; greenish white, skin thin, tough; pulp tender, sweet, with few seeds; of excellent quality; free from foxiness, and the flavor is excellent, ranking in this respect as a grape of the first class. It is the first white Grape to ripen, maturing even in the worst of seasons, a consideration which will be appreciated by all planters. Its habit of growing is vigorous and the foliage clean and healthy, while its bearing quality is all that can be desired. It is a most valuable white Grape, either for the amateur or professional grower.

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

Isabella. B. An old standard sort, highly prized

AMERICAN VARIETIES, Continued

where it will thoroughly mature. Bunches long, large, loose, berries large, oval, sweet and musky. A good keeper.

McKinley Early. New. W. It is with intense satisfaction that we introduce a new early white Grape, of the Niagara type, which bids fair to add millions to the wealth of the nation, and which will be hailed with delight by fruit-growers, dealers and consumers throughout the world. Produced by Mr. Young near where the Niagara, originated. It is fully 10 days earlier than the Niagara, and as strong a grower, with very rich flavor. A strong, vigorous grower, with thick, healthy foliage and perfect self-fertilizing blossom. Bunches large and compact, usually shouldered; berries large, nearly round, very sweet with no acid around the seeds, and no puckery taste in the skin, skin thin, green at first, then turning yellow when fully ripe, very tenacious, bear handling and shipping. It has remarkable keeping qualities for an early Grape and will hang on the vine sound and perfect for six weeks or more after ripening, with no tendency to shell off or fall from the stems. As good a shipper as any of the American Grapes. For complete description and testimonials of our leading horticulturists, write for our two-page circulars, giving full particulars.

Moore's Early. B. A comparatively new Grape raised from seed by John B. Moore, Concord, Mass., in 1872. It is described as follows: Bunch large, berry round (as large as the Wilder or Rogers' No. 4); color black, with a heavy blue bloom; quality better than the Concord; vine exceedingly hardy, and has never been covered in the winter, and has been exposed to a temperature of more than twenty degrees below zero without injury to it; has been entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, and more particularly adapts it to Canada and the northern portion of the United States, maturing, as it does, ten days before the Hartford and twenty days before the Concord.

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

Niagara. W. Occupies the same position among the white varieties as Concord among the black. The leading profitable market sort. Bunch and berries large, greenish white, changing to pale yellow when fully ripe. Skin thin but tough. Quality much like Concord.

Pocklington. W. Originated at Sandy Hill, N. Y. Vine very vigorous, hardy and productive. Bunch and berry of good size, color a light lemon-yellow, flesh moderately tender, sweet, with a peculiar aromatic flavor. The great vigor and hardiness of the vine, with the beauty and size of

the cluster, place this in the front rank of white Grapes, ripens with Concord.

Salem. (Rogers' No. 22.) R. A strong, vigorous vine, berries large, Catawba color, thin skin, free from hard pulp, very sweet and sprightly, ripens first of September.

Wilder. (Rogers' No. 4.) B. Large and black, bunches generally shouldered, berry round and large, flesh buttery, with a somewhat fibrous center, sweet, rather sprightly.

Worden. B. This new variety is a seedling of the Concord, which it greatly resembles in appearance and flavor, but the berries are larger. The fruit is said to be better flavored and to ripen several days earlier.

Wyoming. R. Vines very hardy, healthy and robust, with thick, leathery foliage, color of berry similar to Delaware, but brighter, being one of the most beautiful of the amber or red Grapes, and in size nearly double that of the Delaware,

BLACK HAMBURG GRAPE

GRAPES, Continued.

flesh tender, juicy, sweet, with a strong native aroma. Ripens before Delaware. Best early red for market.

FOREIGN VARIETIES

For Table, Raisins, Shipping and Wine.

Black Hamburg. B. A fine, tender Grape producing large, magnificent, compact bunches, berries black, very large and oblong. A great favorite everywhere, especially for table.

Black Malvoise. B. Vine a strong grower, berries large, oblong, reddish black, with faint bloom, flesh juicy, flavor neutral. An immense bearer, an excellent table as well as wine Grape.

Black Prince. B. Bunches very long, tapering, berries medium, ovate, with thick bloom, juicy and sweet.

Chasselas de Fontainbleau. See White Sweet-water.

Chasselas Golden. R. Bunches medium, compact, berries of an amber color, sweet and watery. Ripe latter part of July.

Cornichon Black. B. Bunches long and loose, berries oval, tapering at both ends, skin thick and dark, covered with bloom, flesh firm, with pleasant flavor, a desirable variety for shipping and marketing, ripens late.

Emperor. R. Vine a strong grower and heavy bearer, bunches very large, long and loose-shouldered, berries large, oblong, deep rose-colored, resembles the Tokay, covered with light bloom, firm, skin thick, one of the most profitable late varieties to plant for market, its firmness, good keeping qualities and rich color cause it to be in great demand in eastern markets every year. Withstands rain better than any other variety. Does well on granite soil of the foothills. Should be staked to get best results.

Fehér Zagos. W. Vine a vigorous grower and immense bearer, very hardy and exceedingly productive in sandy and heavy soils. Bunches large and compact, berries oval, yellowish green. Good for wine or raisins.

Flame Tokay. R. Bunches very large and moderately compact, berries large, skin thick, pale red, covered with bloom; flesh firm, sweet. An old standard variety. Always commands a good price in the Eastern markets, and as a table grape is more extensively planted than any other variety.

Gordo Blanco. See Muscat.

Malaga. W. Vine a strong grower and immensely productive, thriving in almost any soil. Bunches very large, often weighing ten pounds, compact, shouldered, berry very large, oval, yellowish-green. Skin thick, fleshy. One of the best shipping grapes, commanding a good price in the Eastern markets every season. Makes a second quality raisin.

Montaro. B. One of the finest grapes for claret, good bearer and heavy grower. All the great French authorities agree in placing the Montaro as the finest red wine grape of the southern regions.

Mission of California. (Gordo Blanco.) W. Bunches long and loose, shouldered. Berry oval, sometimes round, yellowish green, skin thick,

flesh with a decided Muscat flavor. This is the variety so extensively planted for raisins. The distinctive feature between the Alexandria and the Gordo Blanco is supposed to be in the shape of the berries, the former being oblong and the latter round. On this coast, in most localities, the two varieties have been found to be so nearly identical, round and oblong berries being found on the same vine, that they are classed as Muscats, and no distinction is made by even the most experienced raisin vineyardists.

Rose of Peru. B. Vine a strong grower, bunch very large, shouldered, loose; fruit round, large, with firm and crackling flesh. A very handsome grape of fair quality, and highly esteemed as a market variety.

Seedless Sultana. W. Small, white grape, turning to amber, clusters large. It makes a fine raisin for culinary purposes, at the same time it is a fine wine grape. It is the only one we know of that is good for both raisins and wine.

Thompson's Seedless. W. This is a new variety

WYOMING GRAPE

FOREIGN GRAPES, Continued.

of great merit. It is perfectly seedless, and will doubtless become the most popular sort for seedless raisins. It is very attractive, larger than the Seedless Sultana, more oblong, and in color greenish yellow; resembles the Muscat. It is of good quality, claimed to be superior to the Seedless Sultana. It dries rapidly and evenly, and, being a sweet, heavily. A strong grower and unusually productive.

Tokay. See Flame Tokay.

White Sweetwater, (Chasselas de Fontainbleau.) W. 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.

Zinfandel. B. Bunches large, compact, berries round, dark purple. The most extensively planted Grape in California for making claret.

RASPBERRIES *Rubus*)

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

Plant in good soil and manure it from time to time freely. The hills should be not less than 4 feet apart each way, with two or three plants in a hill. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is much exposed and the plants inclined to kill down seriously, they may be bent over in the fall on mounds of earth formed at one side of the hills and covered sufficiently to keep them down until spring. Surplus suckers take their strength from the bearing plants. They should be cut away or hoed up often. Raspberries may be made very profitable with good cultivation.

RED AND YELLOW

Brandywine. (Susqueco.) Large, bright red, very fine. Valuable for market on account of its fine shipping qualities.

Cuthbert. (The Queen of the Market.) Large, conical, deep, rich crimson, excellent quality. A vigorous grower, entirely hardy and immensely productive. "I regard it as the best Raspberry for general culture." — Charles Downing.

"Now regarded by careful and experienced horticulturists as the best Raspberry in existence for general cultivation. I have it in a specimen bed with 25 other kinds, and it surpasses all others." — E. P. Roe.

Golden Queen This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality, pronounced by some superior to the old Brinkle's Orange, the finest flavored of all the Raspberries. Equal to the Cuthbert in size, immensely productive. A very strong grower and hardy enough even for extreme northern latitudes, having stood uninjured even when the Cuthbert suffered. The desire for a yellow Rasp-

Raspberry plants pruned for planting.

berry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this variety.

Herbert. A large early red Raspberry, originated at Ottawa. In hardiness it easily takes first place, standing a lower temperature than any other kind. The cane is very strong and vigorous, slightly prickly. Fruit bright red, somewhat oblong, larger than Cuthbert or Loudon. Flavor very sweet and juicy, one of the very best for table use. Enormously productive. Season 5 to 6 days before Cuthbert. Holds its size well to end.

Japanese. (Wineberry.) Ornamental both in fruit and plant. Canes covered with purplish red hairs; leaves dark green, silvery gray beneath. Fruit in large clusters, and each berry at first tightly enveloped by the large calyx, forming a sort of bur, which is covered with purplish red hairs. These gradually open and turn back, exposing beautiful wine-colored fruit of medium size; brisk subacid, retaining flavor when cooked. Highly esteemed for canning, preserves, jellies, etc.

Loudon. The best red midsummer 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.

Marlboro. The largest early red raspberry, ripening only a few days after Hansell. Beautiful bright scarlet; of good but not high quality. Hardy and productive.

Miller's. Bright red color, which it holds after picking. Stout, healthy, vigorous grower, canes not so tall as Cuthbert, but well adapted to carrying their immense load of berries. Berries large and hold their size to the end of the season;

RASPBERRIES, Red and Yellow, continued.

round, bright red; cores 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.

Queen of the Market. See Cuthbert.

Susqueco. See Brandywine.

Turner. (Southern.) Very desirable as an early sort for the home garden. Berries good size; bright crimson; sweet.

PURPLE CAPS.

Cardinal. New. This wonderful berry is a surprise in the fullness of its merits—its great growth, its extreme hardness and the exceeding productiveness of its choice red, rich, pure-flavored berries. It will pay. It is not a novelty, but a variety of great merit. The new Cardinal is claimed to grow 10 feet high and bear in proportion. Leading horticulturists who have seen this berry say that it is one of the wonders of the century, so far exceeding all others as to put it entirely beyond comparison. Judge Wellhouse, president of the Kansas State Horticultural Society, said at a meeting of the Society, that the introduction of the Cardinal Raspberry would add millions to the wealth of the farmers of the country because of its inherent great vigor and exceeding productiveness.

This most promising Raspberry is another natural product of Kansas. It is not a hybrid, but a result where nature combined its best in one little seed that produced the first Cardinal Raspberry plant. It also germinated that seed in its own way, not under the pet care of an expert gardener who could control the temperature, moisture, sunshine and weeds, but came up in a neglected clump of Gregg Raspberry bushes, and there showed its makeup by growing far above them and producing its great crop of red berries in contrast to the few Greggs beneath them.

GOLDEN QUEEN RASPBERRY

When first seen by the owner, the Greggs were dug and the Cardinals had the room.

Columbian. An improvement on Shaffer's, which it resembles, but the berry is finer, dark red, adheres to the bunch much longer, and retains its shape better, both on the market and for canning. Bush a stronger grower, attaining a very large size. One of the hardiest and wonderfully prolific. Unexcelled for productiveness, and stands at the head for canning, making jam, jelly, etc.

Haymaker. New. A purple cap, not so dark as Columbian or Shaffer, and much larger and firmer than either of those varieties, never crumbles and stands up well in shipping. Sample crates have been shipped to distant points with entire satisfaction. It is a berry to grow for either home use or market. The originator has found it the most profitable berry ever raised for market, and has never yet been able to supply the local demand. So much of a favorite has the Haymaker become that local growers have said that it ruined the sale of other varieties. Very popular as a canning berry. Many orders for this berry are placed a year in advance. One writer located near a canning factory has thus written: "If any one about here had several acres of it in bearing, he could dispose of the entire crop to good advantage to the canning factory."

Schaeffer's Colossal. (Puthill.) A strong-growing variety, producing berries of great size, excellent to dry, and unsurpassed for canning; flavor peculiar and fine.

BLACKCAPS.

Cumberland. In size the fruit is simply enormous, far surpassing any other sort. The berries run from $\frac{3}{4}$ to 15-16 of an inch in diameter, and are of such handsome appearance that the fruit has often sold for 10 cents per quart when other varieties were selling for from 5 to 7 cents per quart. The quality is very similar and fully equal to Gregg. In spite of its unusually large size, the fruit is possessed of great firmness and is thus well adapted for standing long shipments. Midseason. The bush is exceedingly healthy and vigorous, throwing up stout, stocky canes, well adapted for supporting their loads of large fruit.

Gregg. Of good size, fine quality; very productive and hardy. It takes the same position among blackcaps as Cuthberts does among the red sort. No one can afford to be without it. The standard Blackcap by which others are judged.

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.

Mammoth Cluster. Large in size; next to Gregg. Canes of strong growth and very prolific. Berries large and of fine quality.

Munger. The fruit of Munger is black, and resembles Gregg very much. It is a better flavored berry than Gregg, tougher in texture, and therefore a better shipper. In size it excels Gregg by almost 25 per cent, being extra fine for canning and evaporating. In seasons when most

RASPBERRIES, Blackcaps continued

others are dry and seedy, Munger ripens up sweet and juicy, and readily brings an advance of 50 cents per bushel over other kinds. The canes, too, resemble Gregg, are free from disease; upright in growth and extremely hardy.

Ohio. A very strong-growing, hardy sort;

fruit nearly as large as Mammoth Cluster; more productive than any other variety, and one of the most, if not the most valuable for market.

Souhegan. (Tyler) A new variety, commended very highly as a market sort by those who have grown it. The bush is said to be enormously productive, perfectly hardy and free from disease.

STRAWBERRIES (*Fragaria*)

Strawberries may be successfully grown on any soil adapted for garden purposes, or where good crops of grain or potatoes can be raised. The ground should be well prepared, thoroughly enriched, and should be kept free from weeds.

In the Middle and Northern States the plants should be set during the months of April and May. Pot plants that will produce some berries in the season following the planting may be set in August or September, but these are necessarily expensive. Plants taken from the open ground in August or September are much more liable to injury in transit than those sent in the spring, and need careful shading and water until established.

Admiral Dewey. New. Originated near Salem, Oregon. Larger than the Wilson; very firm; good shipper and unexcelled for canning. Color beautiful dark red, and, unlike other berries, the flesh is red to the center, no white core, shape conical, much like Clarke's Seedling. Very early and abundant bearer, continuing through the season, coming nearest to an everbearing berry of any in this vicinity. Flavor resembles that of the wild strawberry.

Clarke's Seedling. (Hood River.) This new berry originated at Hood River, Oregon, where it is planted to the exclusion of all others, for long distance shipments. Larger than Wilson, very firm; beautiful dark red, and in quality unsurpassed.

Gold Dollar. One of the earliest berries on the market. Fruit good, medium size, and dark red all through; rather tart; fine flavor, foliage heavy, large and spreading, which protects the blooms from early frosts. Has a perfect bloom, and strong stems that hold the berries up from the ground, which helps to keep color and flavor during the early rainy season. A very heavy cropper for so early a berry.

Hood River. See Clark's Seedling.

Jessie. On rich soil and with good culture, this is a valuable sort. Fairly productive, berries average large, of great beauty and high quality.

Magoon. Has proved to be a leader in hardiness, in addition to all of its other good qualities. The Magoon alone has come through the trying weather of hard winters without injury. It always brings top price in the Portland market, and is a remarkable yielder.

New Oregon. (Improved.) One of the finest and most satisfactory strawberries ever intro-

duced. Always looks bright, fresh and attractive. Berry is very large, firm and handsome, rich, dark red extending to the center. The flavor is rich, sweet and delicious. For table use and canning it cannot be equalled. The "Oregon" ripens very early and continues in bearing until late in the season.

Oregon Everbearing. A vigorous grower, and adapted to all soils and locations. On the Pacific coast it is a constant and abundant bearer of large, handsome berries of good quality, from early May until killed by frost.

Wilson's Albany. Medium to large, dark red, very hardy, vigorous and productive. The most widely known and universally successful Strawberry.

STRAWBERRIES COMPARED WITH SILVER DOLLAR

BLACKBERRIES (*Rubus*, or *Rubus villosus*)

This excellent and profitable fruit should be planted, for garden use, in rows 6 feet apart with plants 4 feet apart in the rows, for market, in rows 8 feet apart, with plants 3 feet apart in the rows. Give the plants same cultivation as raspberries.

Early Harvest. A variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and up-

right in growth, branching stout and vigorously. Hardier than Kittatinny or Lawton, an enormous bearer. Berries sweet and of the highest qual-

BLACKBERRIES, Continued

ity, though not so large as some varieties.

Erie. Said to be the only large, productive, absolutely hardy Blackberry yet introduced. Originated in northern Ohio. Free from rust and all other diseases, and wonderfully productive (exceeding even the prolific Lawton), bending the robust canes to the ground with the weight of fruit. Fruit very large, excellent quality, handsome and firm, and ripens exceedingly early, fruit uniform both in size and shape.

Eldorado. A new seedling from Preble county, Ohio. The vines are very vigorous and hardy, enduring the winters of the far northwest without injury, and their yield is enormous. The berries are large, jet black, borne in large clusters, and ripen well together. They are very sweet, melting and pleasing to the taste, have no hard core, and keep eight or ten days after packing with quality unimpaired, combining nearly all the good qualities found in a Blackberry.

Evergreen. Introduced from Oregon, origin

unknown, beautiful cut-leaved foliage, which it retains during the winter, berries large, black, sweet, rich and delicious. It continues to ripen from July to November, which makes it one of the best berries for family use, an excellent trellis and arbor plant.

Himalaya Giant. Vigorous grower; canes sometimes reaching 30 to 40 feet; must be trained on a trellis. Fruit large, black; very abundant bearer and excellent shipper; shape more round than Kittatinny or Lawton, more juicy and smaller seed. Mr. Brodie, Superintendent Experimental Station, Puyallup, states that it has yielded at the rate of 400 crates (9,600 quarts) per acre, and thinks it might be made to yield 600 crates per acre on proper soil.

Iceberg. This wonderful berry is the origination of the far famed Luther Burbank, whose remarkable success in the production of valuable new plants has given him the title of the "Wizard of Horticulture." The fruit is white, transparent; the seeds, which are unusually small, can be seen in the ripe berries. The clusters are larger than those of Lawton; individual berries as large, but earlier, sweeter and more melting than Lawton. Like all Blackberries the Iceberg is slightly bitter when not thoroughly ripe.

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

Lawton. (New Rochelle.) The well known market variety.

Mammoth. Supposed to be a cross between the wild blackberry of California and the Crandall's Early. Grows entirely unlike any other blackberry plant known. It is a rampant grower, trailing on the ground and under favorable conditions will grow 20 feet in a season. The canes are large, of deep red color when exposed to the sun; the foliage is large, thick, of a deep green color. Enormously productive and exceedingly early, ripening three weeks before other cultivated kinds. Fruit enormous, specimens measuring $2\frac{1}{2}$ inches long; seed small, soft and abundant; core small, soft. In size and flavor said to surpass all other varieties of Blackberries. We offer it to the public only after a most thorough test, covering a period of several years.

Mercereau. This early mammoth iron-clad Blackberry originated in northwestern New York, where the mercury falls from 15 to 25 degrees below zero and where it has stood in open field culture for many years without the slightest protection. As a shipper and keeper it is unsurpassed, remaining firm without bleeding in handling. The canes are of exceedingly strong, upright habit, attaining upon fairly good soil a height of 8 feet if permitted to grow unchecked, and are so stout as to always remain erect; foliage large, deep green and abundant. Its season is early to midsummer, ripening with the Snyder, in advance of Kittatinny, Lawton, Tay-

HIMALAYA GIANT

BLACKBERRIES, Continued.

lor's Prolific or Erie, but not so early as Early Harvest or the Wilson.

Rathbun. Origin, western New York. A strong, erect grower with strong stem, branching freely. Hardy, having endured 20 degrees below zero and produced a good crop. Forms a neat, compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious without hard core, of extra high flavor, jet-black, small seeds, firm enough to ship and handle well.

Snyder. Extremely hardy, enormously productive, medium size, no hard, sour core; sweet and juicy. The leading variety where hardiness is the consideration. Ripens early.

Ward. It was found growing in the fence-row adjoining a plantation of Wilson's, on the Michael Ward farm in Mammoth county, New Jersey. The Ward Blackberry is undoubtedly a seedling of the Kittatinny, which it closely resembles, having all the good qualities of the parent with none of its defects. The Ward is a very strong grower, perfectly hardy (in New Jersey), the fruit black throughout and very prolific.

BLACKBERRY-RASPBERRY (HYBRIDS)

Logan Berry. (Raspberry-Blackberry.) Judge J. H. Logan, of Santa Cruz, is the discoverer of this wonderful fruit. It is thought to be raised from a cross of the Auginbaugh Blackberry and Red Antwerp Raspberry. The vine grows entirely unlike the blackberry or raspberry; it trails upon the ground like a dewberry. The canes are very large, without the thorns of the blackberry, but have very fine spines like those found on the raspberry. Leaves resemble those of the raspberry more than of the blackberry, are of a deep green color, coarse and thick. An exceedingly strong grower and an enormous bearer. The fruit is as large as the largest sized blackberry, of the same form and shape, a dark bright red color when fully ripe, and combines the flavor of both the raspberry and the blackberry, having

a mild and very pleasant vinous flavor not found in any other fruit. Raw, it is excellent for the table, as also stewed and for jelly and jam it is without an equal. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful. It is firm and a fine shipper.

The Phenomenal Berry. One of the most valuable of all Luther Burbank's novelties. It is the result of a cross between the Improved California Dewberry and the Cuthbert Raspberry. Mr. Burbank describes it as larger than the largest berry ever before known, bright crimson raspberry color, productive as could be desired and the most delicious of all berries for canning and drying. The berries grow in clusters, each having five to ten or more, and individual berries often measure 3 inches around one way by 4 the other and weigh one quarter ounce each. Even larger ones were weighed and measured last summer and when exhibited provoked the question: "Will they be sold by the dozen?"

DEWBERRIES (*Rubus Canadensis*)

Austin Improved. From Texas; has been tested several years. It is of a glossy, shining black color; its very appearance has a tempting effect on those who see it. Its flavor is most excellent.

Lucretia. One of the low-growing, trailing Blackberries; in size and quality it equals any of the tall-growing sorts. Perfectly hardy, healthy and remarkably productive, with large, showy flowers. The fruit, which ripens early, is often 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 the ground. We highly recommend this variety.

Premo. A new extra-early Dewberry; very large, jet-black, firm and good; ripens its crop very fast. The special points in this Dewberry are: Ripens 7 to 10 days earlier than Lucretia, ripening the crop so fast that it is nearly all gone at the second picking of the Lucretia; better and firmer quality; foliage darker green and more healthy than Lucretia; not inclined to burn when hot sun comes.

CURRANTS (*Rubus*)

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

Plant in rows 4 feet apart each way, if practicable. Light and air will do as much to enhance the value of currant bushes as with other plants. Keep ground mellow,

free from weeds, and in good state of fertility and prune freely every spring. Should the currant-worm appear, dust a little white hellebore powder, from a small, coarse bag, over the bushes when the leaves are damp. In some in-

stances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms is trifling if the powder is applied as soon as the worms appear.

Black Champion. Very productive; large bunch and berry; excellent quality; strong grower. The leading, well-tested black sort.

Black Naples. Very large; black; rich; tender, and excellent for jellies and wine. Very productive.

Cherry. Large; deep red; rather acid; bunches short; plants erect, stout, vigorous and productive.

Fay's Prolific. Originated in Chautauqua county, N. Y. A cross between Cherry and Victoria; of large size fine flavor and extremely productive.

La Versaillaise. Very large; red, bunch long; of great beauty; good quality. One of the finest and best. Should be in every collection. Productive.

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

North Star. The strongest grower among the red varieties; should be given plenty of room and ground kept well enriched; bunches average 4 inches in length and are freely produced. Combines extreme hardiness, vigorous growth, extra quality and great productiveness.

Perfection. New. This grand fruit was originated by Charles G. Hooker, of Rochester, by crossing the Fay's Prolific with the White Grape Currant, with the view of combining the large size and color of the Fay with the good quality and productiveness of the White Grape. From quite a number of plants of this cross the Perfection was selected as the best, and after a thorough trial by the originator, proved so satisfactory and superior in many respects, combining, as it does, the good qualities of both parents that it was decided to enter it for the \$50 Barry Gold medal of the Western New York Horticultural Society. The Perfection Currant was the fruit first to receive the Barry Medal. It also received

Currant bushes, cut back ready for shipment. Our plants are all heavily rooted, and will frequently bear some fruit the first year, but will with proper care always produce the second year.

the highest award given to any fruit at the Pan-American Exposition. Plants were also sent to the New York State Agricultural Experiment Station, at Geneva, N. Y., for testing there, in competition with about 60 varieties in their trial block, including all the best varieties in cultivation. The result of the trial for four years at the station has been exceedingly satisfactory, Perfection coming out at the head of all introduced varieties on its general merits. The color is a beautiful bright red; size as large or larger than the Fay, the clusters averaging longer. The size of the berry is well maintained to the end of the bunch. The Perfection has a long stem, from point of attachment to the bush to the first berry, making it easy to pick without crushing the fruit. The Perfection is a great bearer, resembling its parent, the White Grape, in this respect, superior to the Fay, or any other large sort with which we are acquainted. On account of this great productiveness the plants should be kept well cultivated and fertilized, as should all heavy bearers. Under these conditions they will regularly produce heavy crops of large fruit of the very best quality. The season of ripening is about the same as that of the Cherry or Fay. Rich, mild, subacid, plenty of pulp with few seeds. Less acid and of better quality than any other large currant in cultivation. The White Grape has always been considered one of the best varieties for table use, and the effect of this strain is very plainly seen in the very fine quality of Perfection. In habit of growth it is intermediate between its parents Fay and White Grape, with remarkably large, healthy foliage. For complete description, see our eight-page colored circular. Each bush will bear a Perfection label as a guarantee of genuineness.

Pomona. While not the largest, is of good size. It is a beautiful, clear bright, almost transparent red; has but a few small seeds; easily picked; hangs a long time after ripe, and is one of the best to hold up in shipping or on the market. A vigorous grower, healthy and hardy; the most productive, one of the sweetest and best in quality; continues longest in profitable bearing; retains its foliage; hangs on bush in good condition the longest; comes into bearing early; is easily and cheaply picked. Holds an unparalleled record for actual acreage yield in ordinary field culture.

Victoria. A splendid variety, ripening two or three weeks later than the others. Bunches extremely long; berries of medium size, brilliant red.

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

GOOSEBERRIES (*Ribes*)

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

It requires the same cultivation and treatment for worms as the currant. The worms attack the Gooseberry before the currant bushes, and if a few of the former are set near a currant plantation, and the worms exterminated on these, there will be little if any trouble from them on the currant bushes.

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

Crown Bob. Very large; thin skin; hairy; bright red; flavor very good.

Downing. Originated at Newburg, N. Y. Fruit much larger than Houghton; roundish; light green, with distinct veins; skin smooth; flesh soft; juicy and very fine-flavored. Vigorous and productive.

Houghton's Seedling. Vigorous grower, abundant bearer; fruit of medium size; pale red, sweet and juicy. Free from mildew.

Industry. This is said to be the best English Gooseberry yet introduced. It is of vigorous, upright growth, and a great cropper. The berries are of the largest size, dark red, hairy, rich and agreeable. Mildews in Willamette Valley.

Josselyn. (Red Jacket.) An American seed-

Gooseberries. Note the root system, the result of being carefully dug.

ling 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.

Originated by Professor Wm. Saunders, of Central Experimental Farm, Ottawa, Canada, and named Red Jacket in memory of an old Indian chief, the introducer not being aware at the time of the existence of another Gooseberry (English) named "Red Jacket." The committee on Nomenclature of the Western New York Horticultural Society, at Rochester, Jan. 25, 1899, to hereafter prevent confusion in varieties, renamed the American Red Jacket Josselyn, in honor of the introducer.

Oregon Champion. A variety introduced from Oregon, where it originated; fruit large, round; an immense bearer, and entirely free from mildew. One of the best yet introduced.

Victoria. New. The best Gooseberry in England and the champion bearer for the London market. Strong grower, making shoots 3 feet 9 inches in a season. Berries larger than Crown Bob or Lancashire Lad, pale red, of excellent flavor: A late bloomer and a sure cropper; hardy. A three year-old bush, bearing 28½ pounds of fine, large fruit, was shown in 1900. All around, it seems well suited for market purposes here.

ASPARAGUS

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

Cultivation.—See that the ground is well drained, naturally or otherwise; work it up fine and deep, and make it very rich with well rotted barnyard manure. Locate the plants eight inches apart in rows three feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and except near the seashore, three pounds of salt per square yard yearly every spring. Do not cut for use until the plants have grown two seasons.

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

Columbian Mammoth White. It produces shoots which are white and remain so as long as fit for use. In addition to the marvelous advantage of its white color it is even more robust and vigor-

ous in habit, and grows larger shoots, and fully as many of them, as the Conover's Colossal. Market-gardeners, growers for canneries and amateurs, should give this great acquisition a thorough trial.

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

RHUBARB, OR PIE PLANT

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep and thus secure a more tender growth.

RHUBARB, Continued.

Australian Crimson Winter. Introduced by Luther Burbank: "Fully six months earlier than any other Rhubarb. The stalk is of medium size, well-grown ones averaging 12 to 18 inches in length and about $\frac{3}{4}$ to 1 inch in diameter; they are a pale, greenish crimson color, turning, when cooked, to a light clear crimson, and of very best quality. The plants are somewhat more inclined to blossom than the other kinds, which is easily remedied by topping. Crimson Winter starts to grow vigorously by October and continues to produce stalks continuously until after the common varieties make their first appearance. If

kept moist, will produce stalks abundantly at any season in warmer districts."

Dodge's Prolific. A valuable new variety; seedling from the Myatt's Linnaeus. Ripens between the Victoria and Linnaeus. Very large, stalks often 3 to 4 feet high; very tender. The best variety that has been introduced, unless it is the Australian Crimson Winter, which stands in a class by itself.

Linnaeus. Large, early, tender and fine. The very best of the old varieties.

Victoria. Very large and valuable for market. Early.

MULBERRIES

The Mulberry is valuable as an ornamental shade tree, and the fruit is much liked in many sections. Plant in deep, rich, sandy loam. The tree requires little or no pruning, and is of easy culture.

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

New American. Equal to Downing's in all respects, and a much harder tree. Vigorous grower; very productive; the best variety for fruit. Ripe from middle of June to middle of September.

Noir of Spain. A new everbearing Mulberry of large size, larger than the Lawton blackberry, which it greatly resembles. Color black; flavor tart, like a blackberry, and not the insipid sweet of most of the *Morus* family, and preferred by

many to a blackberry. The tree is a sure bearer, strong grower, very hardy and has a tendency to weep, and could almost be classed as a weeping tree, making the fruit easily gathered. A very desirable ornamental tree, as well as one of the hardiest and most abundant bearers. By far the most desirable of the Mulberries.

Russian. (*Morus Tatarica alba*.) A very hardy, rapid-growing timber tree of great value, especially of the West. Introduced by the Menonites. Foliage abundant and said to be very desirable in the culture of silkworms. Fruit good size and produced in great abundance.

White. (*M. alba*.) This has both white and black-fruited trees. It is also known under the names Moretti, Italica, etc. It forms a large, spreading tree, and in addition to its fruit, its foliage makes good food for silkworms.

NUT TREES

The past few years has witnessed a remarkable development in the planting of nut-bearing trees. Probably no branch of tree cultivation pays larger profits or is as well assured of a profitable market for all products. The immense importation of foreign nuts every year gives some idea of the market to be supplied. But few farms contain land that, if planted to nut bearing trees, would not pay better than anything else to which it could be devoted. The nuts in many cases pay better than farm crops or fruits, while most kinds are making a growth of valuable timber that will of itself pay a large percent on the investment. Our native nut-bearing trees are admirably adapted for planting in streets, farm lanes, pastures, etc., for shade, ornament and profitable returns.

ALMONDS. (*Prunus; Amygdalus*)

The Almond requires a light, warm soil.

Drake's Seedling. Originated with Mr. Drake, of Suisun, California. Of the Languedoc class. Bears abundantly and regularly where the Languedoc is a total failure.

Hard-Shell. A fine hardy variety, with large, plump kernel. The tree is very ornamental when in bloom.

I. X. L. Large, generally single kernels; hulls easily; soft shell. Tree a strong, upright grower and bears heavily and regularly.

Jordan. Introduced from Spain about 1893. Origin of name, "Jordan," unknown. Nut very

long, narrow, but very plump, with hard, smooth shell, truncated base and somewhat bent at apex, edge sharp and knife-like. Fruit thin-fleshed and covered with a heavy pubescence; kernel nearly fills the entire cavity and is covered with a most delicate papery skin, much thinner than on any other Almond, which is one of its most valuable qualities. In flavor and texture the flesh far surpasses in delicacy any other variety. The most valuable addition to the nut list that has been made for many years.

Ne Plus Ultra. Similar to above, but of different habit of growth.

Nonpareil. Large, full kernel, thin shell. Tree

ALMONDS, Continued

of a weeping habit and a strong grower. One of the best varieties.

Peerless. Originated near Davisville, California. A sure and heavy bearer; shell harder than I. X. L. and preferred by some to that excellent variety; single large kernel.

CHESTNUTS. (*Castanea*.)

American Sweet. (*Castanea Americana*.) The fruit of this variety is smaller than the European kinds, but very sweet and well flavored; highly esteemed in the eastern states.

Italian or Spanish. (*C. sativa* or *C. vesca*.) A highly ornamental tree of free growth, esteemed alike for its beautiful foliage and valuable timber. The nut is sweet and generally large, but, as the tree being raised from seed, the fruit often varies in size and quality.

Japan Mammoth. (*C. crenata*) A monstrous fruit larger than the European; and flavored like the American Sweet. Tree bears when quite young.

FILBERTS. (*Corylus*)

Barcelona. A magnificent variety of Spanish origin; nut large, round, first quality. Very productive; trained as a low standard tree or as a bush.

Du Chilly. The largest filbert fruited on the Pacific Coast. Elongated oval, very broad; often more than an inch long by three-quarters of an inch wide. Nuts uniformly large, well formed, full fleshed and sweet.

English. This is of the easiest culture, growing 6 to 10 feet high, entirely hardy and one of the most profitable and satisfactory nuts to grow, succeeding well on almost all soils, bearing early and abundantly. Nut nearly round, rich and of excellent flavor. Admired by all for dessert. The Kentish Cob and Red Hazel are the two leading varieties.

Kentish Cob. Not very large, oblong, and somewhat compressed; shell pretty thick, of a brown color; kernel full and rich, and great bearer. The best of all the nuts.

Purple-leaved. (*C. Avellana*, var. *atropurpurea purpurea*.) A very conspicuous shrub, with large, dark purple leaves. Soon after the leaves expand they are almost black, but later on fade to a light purple. Valuable for planting in groups of large shrubs to secure color effect. Distinct and fine.

Red Hazel. Medium size; shell rather thick; kernel crimson skin, with a peculiar excellent flavor.

HICKORY (*Carya*, or *Hicoria Pecan*.)

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

WALNUTS (*Juglans*.)

Black American. (*Juglans nigra*.) This species of Walnut is a common and stately forest tree in the middle and western states. Makes a fine shade and ornamental tree. Produces large crops of rich and oily nuts.

Butternut, White Walnut. (*J. Cinerea*.) A native of the eastern states. The cultivation of this sort, so highly prized in the eastern states, has been neglected here. It is a beautiful-growing tree, and yields large nuts with a rough, hard shell, within which are sweet, rich, white, oily kernels, of marked, though most delicate flavor. This variety does well in the coast countries and in well-watered regions of the foothills; not suited to the dry, hot valleys.

California Black Walnut. (*J. California*.) This species of Walnut is indigenous to California. The fruit is spherical, the nut is hard but smooth, and not furrowed like the eastern black Walnut; the kernel is rich and oily. This Walnut is of a rapid growth, spreading out more than the eastern kind, and bears sooner.

PERSIAN WALNUTS. (*Juglans regia*.)

Also known as English, Madeira and French Walnut.

We would call special attention of the public to the following most valuable varieties of Walnuts. The varieties we recommend to plant for market are well tested varieties that cannot be surpassed for beauty, size of walnut, quality of meat or hardness of tree. Commercial Walnut culture is concerned with *Juglans regia*, commonly known as English Walnut, but in reality the Persian, and sometimes known as the Maderia and French Walnut, as it was imported into England from France. It is, however, a native of Persia or Southern Asia.

FRENCH VARIETIES OF THE PERSIAN

These we grow from nuts secured in France, excepting the Franquette (see our 16-page Walnut Book), from grafted first-generation trees, thus making ours the second-generation tree. These should not be confused, or prices compared, with the common, tender varieties grown by most nurserymen as "English Walnuts," which are not hardy enough for Oregon or the northern states, and are very often barren, caused by the staminate (or male) blossom or catkin being out, while the pistillate (or female) blossom is yet in a dormant state; so that, when the latter are out, there are no male catkins to fertilize the nuts, which drop off after attaining about the size of a pea. Thousands of good healthy trees can be seen both in California and Oregon of this class which are worthless, except for shade.

Grafted Walnuts. We are prepared to furnish grafted trees on American and California Black, also on English roots. Franquettes will be grafted directly from the Vrooman orchard and guaranteed to be first generation. Other French varieties are grown from best French types of their kind that we have been able to secure in France.

Chaberte. An old and most valuable variety; late in budding out. The nut is well-shaped, roundish oval, and of fair size, though it is not what is called a large nut; the kernel is of extra fine quality; a good bearer. The Chaberte was

WALNUTS—French Varieties, continued

originated over a century ago by a man named Chaberte, hence its name.

Vrooman Franquette. An admirable and distinctive form of the Franquette Walnut having important and individual characteristics not found in the ordinary Franquette. It is especially adapted to the northwest, and is hardy, prolific and blight resisting to a marked degree. It is also an early bearer, which further commends it. We will gladly send special descriptive literature concerning the Vrooman Franquette, on request.

Franquette. Possesses distinctive characteristics. The tree is very hardy, withstanding the cold winters of eastern France, where it originated. It is a clean, vigorous grower, has never been attacked by disease; a late bloomer, escaping late frosts; a regular and abundant bearer. The hull, or outside covering, is much thicker than in the soft-shelled varieties, and consequently the nuts do not sunburn during hot spells, when most other varieties burn very badly. The Franquette is the ideal nut for dessert and confectionery use; it is of large, uniform size, long in form, and has a smooth, well-filled shell of medium thickness, which insures its safe shipment to market. Being long in form, it carries one to two ounces more meat per pound of nuts than the round or chunky sorts. Its pellicle is pale yellow in color; meat of exquisitely rich, oily, nutty flavor.

The Franquette is the peer of all French varieties and the heaviest bearer; unlike the Mayette, which produces a nut of fair quality, but is a decidedly shy bearer; not like the Praeparturien or other early-blooming soft-shelled varieties, which only occasionally bear a crop of nuts of mixed sizes and inferior quality. The tender soft-shelled varieties that have been planted in southern California must be left severely alone in the North, in order to insure an annual and successful crop. First, because the tree of the soft-shelled kinds are not hardy enough to withstand our coldest winters; and, second, because they bloom too early, they are almost sure to be caught by the frost.

Mayette. This is a fine dessert nut; it is quite large, well shaped, with light-colored shell; the kernel is full-fleshed, sweet and nutty. It is said to be very late in budding out, enabling it to escape the disastrous effect of late frosts in the spring. This is the nut imported into the United States under the name of Grenoble. but on account of the duty of three cents per pound as the nut is a high priced nut in France, a com-

mon and cheaper grade is mixed with it, to the disgust of nut importers in New York and Chicago. The Mayette was originated by a man by the name of Mayet, over 125 years ago, the nut having ever since been a great favorite. Said to be a shy bearer.

Parisienne. This beautiful nut, also one of the finest for dessert and market, was originated in the southeast of France, and not in the neighborhood of Paris, as the name would imply; its beauty causes it to be called the "Parisienne," in honor of the capital of France. The nut is large, broader at the small end than the Mayette and the Franquette, and has a very pretty shape. It is as late and hardy as Mayette.

Praeparturien. Perfect soft-shelled of first quality. One of the most productive kinds, but nuts are small.

CALIFORNIA SOFT SHELL VARIETIES

Placentia Perfection. The favorite soft-shell walnut in Southern California. Nut is large and of high quality. The tree is strong and vigorous and begins to bear young. An improved Santa Barbara soft-shell.

Santa Barbara Soft-shell. A variety originating with Joseph Sexton, of Santa Barbara, California. Tree a vigorous grower, early and abundant bearer. The nut is large; kernel white, sweet and readily extracted; shell thin, easily broken. One of the favorites in southern California.

JAPANESE VARIETIES

As the name indicates, they were introduced from Japan, and are sure to prove of great importance in nut-growing districts. Easily transplanted, hardy, abundant and early bearers, with little, if any, tap-root compared with other varieties, but abundantly supplied with laterals. Nuts superior to those of native species, and will probably become valuable where *J. regia* is too tender.

Cordiformis. (*J. cordiformis*). This, as the name indicates, is a heart-shaped nut. It differs from the Sieboldi in form of the nuts, which are broad, pointed, flattened, somewhat resembling the shell-bark Hickory; meat large, of best quality and easily removed, as the shell is thin and parts easily at the sutures, enabling one to get the kernel out whole. The flavor is something between that of an English Walnut and a Butternut. As a dessert nut it has few superiors; the meat, being very sweet, is used extensively for candied nuts. We recommend it as one of the very best Japanese varieties.

Sieboldi. (*J. Sieboldiana*) If it produced no nuts, it would be well worth cultivation for an ornamental tree. Grows with great vigor, surpassing all other nut trees, assuming a handsome form, needs no pruning; leaves large, charming shade of green. Nuts are borne in clusters of 12 or 15 each at tips of previous season's branches; have a smooth shell; thicker than the English, but not so thick as the Black Walnuts, much resembling Pecans; meat is sweet, of good quality, flavor like butternut but less oily. Commences bearing young; trees 3 to 4 years in nursery rows frequently producing nuts. Perfectly hardy, standing 21 degrees below zero without injuring a bud.

Ornamental Department

Pointers Relative to Beautifying Country Homes

—Fruit Trees Planted for Profit—
What About Trees to Make the Home Attractive?

THERE HAS BEEN IN THE PAST, and is at the present time, much said about the planting of fruit trees for profit, but what about beautifying the homes where you live and your children are growing up? An artistic front yard with a green lawn and some choice flowers is restful to the weary eye. A shady arbor with its thick foliage may give rest to the tired body. Flowers bring out the depths of childhood's nature instead of emotions borne down by strife.

Remember the home of one's youth is looked back upon in many years afterwards, their memories will travel thousands of miles back to the old home where deep in the mossy green the morning dew lingered; back under the shadows of a friendly tree in the yard during noontide's heat, or later on the old rustic bench under the arbor in the evening twilight—a sacred vision unbanished will revive the most hallowed memory of a duty that was sacred and sweet.

UPRIGHT DECIDUOUS TREES

AILANTHUS. Tree of Heaven

A. glandulosa. A distinct ornamental tree from Japan; rapid grower, with long, elegant, feathery foliage; exempt from diseases and insects. One of the most distinct of ornamental trees with pinnate foliage. Useful to produce tropical effects. Is sometimes cut off every spring, when the young shoots form a foliage mass of tropical richness.

ACACIA. (False-acacia.) See Locust.

ALDER. *Alnus*

European. (*A. glutinosa*.) A tree of rapid growth, attaining a height of 40 to 60 feet; foliage wavy, roundish, wedge-shaped; suitable for damp soils, but thriving well everywhere.

ARALIA

Angelica Tree or Hercules' Club

All small trees with large, finely divided foliage and snowy heads of white flowers; very useful for lawn planting and subtropical effects. We recommend the two following varieties:

A. Japonica. (Angelica Tree.) A handsome, distinct, small tree from Japan; spreading habit of growth, with immense finely divided foliage and spiny stems. Flowers white, in large spikes, in July.

A. Spinosa. (Hercules' Club.) A very showy sort. Broad, handsome cut foliage, and immense clusters of small white flowers in July or August. A singular-looking, small-sized tree, with very prickly stems and pinnate leaves. It suckers occasionally from the roots, but not after well established.

ASH. *Fraxinus*

European. (*F. excelsior*.) A lofty tree of rapid growth, with spreading head, pinnate leaves and black buds.

See also Weeping Trees.

BALM OF GILEAD. See Poplar.

BIRCH. *Betula*

European White. (*B. alba*.) A fine tree of moderate size, with silvery bark and slender branches.

See also Weeping Trees.

BEECH. *Fagus*

European. (*S. sylvatica*.) A beautiful tree growing to the height of 60 or 80 feet.

Purple-leaved. (*F. purpurea*.) Discovered in a German forest. An elegant, vigorous tree, growing 45 to 50 feet high. Foliage deep purple, changing to crimson. Like all varieties of the Beech, this is difficult to transplant; hence small trees 3 feet high are preferable.

Rivers' Blood-leaved. (*F. purpurea Riversi*.) Smooth-leaved Purple Beech. This variety differs from the ordinary Purple-leaved by its compact, symmetrical growth and crimson foliage early in the spring, changing to dark purple in

the summer. One of the finest of all purple-leaved trees.

See also Weeping Trees.

BILSTED. See Sweet Gum.

BOX ELDER. See Ash-leaved Maple.

BUCKEYE. See Horse-chestnut.

BUTTONWOOD. See Sycamore.

CATALPA. *Catalpa*

C. Bungei. (Umbrella Catalpa.) Grafted on stems 6 to 8 feet high, it makes an umbrella-shaped top without pruning. Perfectly hardy and flourishes in most all soils and climates. Leaves large, glossy, heart-shaped, deep green, lying like shingles on a roof; always makes a symmetrical head. One of the most unique trees. A valuable acquisition; desirable for lawn, park and cemetery planting.

C. Speciosa. One of the most rapid growers. Valuable for timber, fence-posts, railroad ties, etc., possessing wonderful durability. Large, heart-shaped, downy leaves and compounded panicles of white flowers, tinged with violet and dotted with purple and yellow. Very ornamental and useful.

C. Syringaefolia. A native of the South. A rapid-growing, beautiful tree, with very large, heart-shaped leaves and pyramidal clusters of white and purple flowers. Late in July.

C. Teas' Japan Hybrid. Large luxuriant foliage, handsome white flowers with purple dots and a touch of yellow around the throat, with a pleasant, delicate fragrance. A tree in bloom not only produces a magnificent spectacle to the

FLOWERING CHESTNUT. See page 48.

CATALPA, Continued

eye, but also fills the air quite a distance with its agreeable odor. In rapidity of growth it rivals the most luxuriant trees of temperate climates.

CHERRY. *Cerasus*.

Double-flowering. (*C. alba flore pleno*.) A tree of medium growth, producing clusters of double white flowers in May. Blooms so profusely as to completely hide the branches from view. 15 to 20 feet high when fully grown.

Rhexi fl. pl. Extra fine, double white-flowered variety. Its pure white flowers resemble small roses, and are freely produced at blossoming season.

Japanese Rose Flowering. (*C. Japonica rose*.) A Japanese cherry producing deep rose-pink double flowers early in spring in great profusion. One of the most beautiful. We also have several varieties of Japanese flowering cherries of different colors. These are most desirable acquisitions to any collection.

Dwarf Rocky Mountain. See Shrubs.

Japanese Weeping. See Weeping Trees.

CHESTNUTS. See Nut Trees.

CRAB. *Pyrus*, or *Pyrus Malus*

Betchel's Double-flowering. (*P. Floribunda*.) Makes a medium-sized ornamental tree of great beauty; perfectly hardy; succeeds well in all soils not extremely wet. When in bloom in early spring this tree presents the appearance of being covered with perfectly double, small pink roses of delicious fragrance. The only sweet-scented double Crab; blooms quite young. Unlike many other trees, it does not bloom until the leaves

DOGWOOD TREE

are fully developed, which adds greatly to its beauty. Sure to become quite popular as soon as it is well known.

DOGWOOD. *Cornus*

American White. (*C. florida*.) A native tree of fine form and beautiful foliage, growing from 20 to 25 feet high, producing white flowers 3 inches in diameter, early in spring before the leaves appear, also blooms again in autumn. A very desirable tree. Foliage grayish green, turning red in autumn, making the tree one of the most beautiful of that season. One of the most desirable of ornamental trees.

See also Weeping Trees and Shrubs.

EMPRESS TREE. See Paulownia.

ELM. *Ulmus*

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

Corkbark. (*U. racemosa*.) The bark is corky, the tree an upright, fast grower.

English. (*U. campestris*.) An erect, lofty tree, with rather small leaves.

Purple-leaved. (*U. purpurea*.) Erect in growth, with slender branches, densely clothed with dark purplish green foliage.

Camperdown. See Weeping Trees.

FRINGE. *Chionanthus*

Purple. (*Rhus cotinus*.) A much-admired small tree or shrub for its curious fringe or hair-like flowers that cover the whole surface of the plants in midsummer.

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

GINKGO. See *Salisburea*.

GOLDEN CHAIN. See *Laburnum*.

GUM. See Sweet Gum.

HERCULES' CLUB. See *Aralia*.

HICKORY. See Nut Trees.

HONEY LOCUST. *Gleditsia*

Three-thorned. (*G. traicanthos*.) A rapid-growing native tree, with powerful spines and delicate foliage, used especially for hedges.

HORSE-CHESTNUT. *Aesculus*

Red-flowering. (*Æ. rubicunda*.) Not so rapid or so fine a grower as the white; foliage of a deep green and blooms later, with showy red flowers.

Common Horse Chestnut—white flowering. (*Æ. Hippocastanum*.) A very beautiful, well-known tree, with round, dense head, dark green foliage, and in early spring an abundance of erect spikes or panicles of snowy white flowers, slightly marked with red specks.

HORSE-CHESTNUT, Continued

Ohio Buckeye. (*Æ. glabra.*) Has pale green leaves and showy yellow flowers. A fine small tree. A very crooked and irregular grower.

JUDAS, or RED BUD. Cercis

American. (*C. Canadensis.*) A medium-sized, native ornamental tree, covered with delicate pink flowers before the leaves appear. Heart-shaped, pure green leaves, with glossy surface; flowering about same time as Chinese Magnolia, and planted with them, produce fine effect.

LABURNUM. Cytisus

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

LARCH. Larix

A tree that should be in every collection, because of its beautiful green foliage, appearing early in the spring. As it is one of the first trees to come into leaf in the spring, it should be planted early. The American Larch is known as Tamarack and Hackmatack. We list only the following:

European. (*L. Europæa.*) An excellent upright, rapid-growing, pyramidal-shaped tree, with drooping, slender branches; foliage light green, soft and graceful in the spring, turning to golden yellow in the autumn before falling. Unlike most conifers, it is deciduous after the first year; perfectly hardy and thrives in nearly all situations. Makes a very handsome specimen for ornamental planting and is very valuable for timber.

LINDEN. Tilia

Close, dense-headed, rapid-growing tree; excellent for shade, doing well in nearly all situations; well adapted to street, park and large lawns. Should be planted much more freely than they are.

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

European. (*T. Europæa.*) A very fine pyramidal tree, with large leaves and fragrant flowers. A valuable tree for street and lawn planting, developing into beautiful specimens.

White or Silver-leaved. (*T. argentea.*) A handsome, vigorous-growing tree; pyramidal form; large leaves, whitish on the under side, and having a beautiful appearance when ruffled by the wind, its white color making it conspicuous among other trees. Blossoms very fragrant.

LIQUIDAMBAR. See Sweet Gum.

LOCUST, or False Acacia. Robinia

Black. (*R. pseud-acacia.*) 50 to 80 feet. Tree with feathery foliage and drooping racemes of very fragrant, pea-shaped flowers. Cut back when transplanting. This is the tree producing the "posts" and "pins" of commerce.

Rose, or Moss. (*R. hispida.*) A native species, of spreading, irregular growth; very long, elegant clusters of pea-shaped, rose-colored flowers in June, and at intervals through the season. Compound foliage of a pleasing shade of light green.

LOCUST, HONEY. (*Gleditschia.*) See page 55.

MACLURA. See Osage Orange.

MAGNOLIA, NATIVE SORTS

It would be difficult to overpraise Magnolias; they make beautiful trees for ornamental planting, and the *Acuminata* and *Tripetela* are also valuable as street and avenue trees. The leaves are large, dark green; the flowers white or yellow white, and most of them sweet-scented. Nearly all bear large and conspicuous fruit-pods. *Tripetela* being especially handsome in this respect. They should be transplanted in the spring and closely pruned. Figures indicate size of grown tree.

M. Acuminata. (Cucumber tree.) 60 to 70 ft. A beautiful pyramidal-growing native species, with large, glossy leaves, flowers yellow, tinted with bluish purple.

M. Tripitala. (Umbrella Tree.) Named from the whorled arrangement of its great, glossy leaves. The white flowers, also of great size, open in June and are followed by rose-colored fruit cones. Tree grows about 40 feet.

CHINESE AND JAPANESE MAGNOLIAS

The Chinese and Japanese are not so large-growing as the native ones, their maximum height being about 20 to 30 feet. They can be trimmed up to a single stem—tree form—or allowed to grow bushy as shrubs, in which form they could be kept to any desired height.

M. Conspicua. (Chinese White.) A beautiful Chinese variety, with large white flowers that appear before the leaves. Tree medium size, shrub-like in growth when young, but attains size of tree in time.

M. Purpurea. (*obovata.*) 6 to 10 ft. Bushy growth; flowers purple, after many others are over.

M. Soulangeana. 15 to 20 ft. Perhaps the most popular of all Magnolias, being of vigorous

WHITE FRINGE BUSH. See page 46.

CHINESE AND JAPANESE MAGNOLIAS, continued

growth, and blooming profusely, even when quite small. The flowers are large, pink on the outside of petals and white inside. In average seasons the flowers open in the third week in April. It can be grown as a small tree or large shrub.

M. Stellata (*Halleana*). Hall's Japan, 5 to 6 ft. A dwarf, bush-growing, most valuable species. The flowers are white, tinted with pink in the bud, semi-double, fragrant, and appear as early as April 15. The earliest of all to flower. It is one of the best for massing, as well as for a specimen shrub.

MAIDENHAIR. See *Salisburea*.

MAPLE. Acer

Silver Variegated (*A. argenteo-variegatum*). This we consider one of the most attractive ornamental trees grown; so much of the leaf is variegated that at a short distance it has the appearance of the whole leaf being silver-white. The tree is as hardy as the ash-leaved, and like it inclined to be a crooked grower when young. A specimen should be in every lawn.

Ash-leaved (Box Elder, or Manitoba Maple; *A. Negundo*). A fine, rapid-growing variety, with handsome, light green pinnated foliage and spreading head; very hardy; desirable for street planting, and succeeds in many sections where other varieties do not thrive.

Golden Variegated. Foliage golden yellow; tree very hardy and attractive.

Norway (*A. platanoides*). A native of Europe. Its large, compact habit; broad, deep green shining foliage, and its stout, vigorous growth, render it one of the most desirable species for streets, parks and lawns; rather a rough, crooked grower when young, but soon develops into straight, magnificent specimens.

Oregon (*A. macrophyllum*). A most graceful tree, with wide-spreading branches and large foliage. Very rapid growth.

Purple-leaved Sycamore, (*A. pseudo-platanus purpureum*). Leaves deep green on upper surface, purplish red beneath, producing a beautiful color effect when leaves are in motion. Tree of robust habit; fine for lawns for grouping with other foliage trees.

Red, or Scarlet (*A. rubrum*). A native species of medium size and rounded head; produces deep red blossoms, which appear before the leaves. In autumn the foliage changes to a brilliant scarlet.

Schwedler's (*A. Schwedleri*). A beautiful variety, with young shoots and leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. A distinct and handsome sort.

Silver-leaved or Soft (*A. dasycarpum*). A well-known native tree of rapid growth, large size and irregular rounded form; foliage bright green above and silvery white be-

neath; tree very hardy and easily transplanted. One of the most useful trees.

Sugar or Rock (*A. saccharinum*). A popular American tree of excellent pyramidal form. Its upright habit of growth, dense shade and adaptability to different soils have rendered it one of the most extensively used. Valuable for sugar or timber, as well as ornament and shade.

Sycamore (*A. pseudo-platanus*). A noble variety, with spacious head and large, deep green foliage; a rapid, upright, free grower; desirable for shade.

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

JAPANESE MAPLES

The Japanese Maples are becoming more popular as they become better known. They are all of dwarf habit and are varied in their foliage. They are also shrub-like in growth, and many of them of such rich, bright hues and deep-cut leaves that we class them by themselves. On account of these characteristics they are much used for forming permanent beds, but are very effective whether planted singly or in groups. In groups they can be planted 4 to 6 feet apart. Though succeeding in sun, they prefer light shade at mid-day. The bright-hued leaves make a fine display, and the blood-leaved (*Atropurpureum*), Aureum and Purple cut-leaf, are especially in demand. We include only those we can especially recommend.

Blood-Red Japan (*A. Polymorphum sanguineum*). The brightest and most constant in color of the red-leaved sorts and one of the most popular.

Dark Purple-leaved (*A. polymorphum atropurpureum*). Forms a bushy shrub. Foliage dark purple and deeply cut, very ornamental. The hardiest and altogether the best of the Japan Maples. One of the choicest small trees or shrubs. 12 to 15 ft.

JAPANESE MAPLES, Continued

Golden Japan (*A. palmatumaureum*). The leaves retain their light yellow color with little variation throughout the summer. One of the very best and most effective in a group. 8 to 10 ft. when grown.

Cut-leaved Purple (*A. polymorphum dissectum atropurpurea*). One of the most striking and handsome varieties of the Japan Maples. Form dwarf and weeping. The leaves are of a beautiful rose-color when young and change to a deep and constant purple as they become older. They are also deeply and delicately cut, giving them an elegant and fern-like appearance. 5 to 7 ft. when grown.

Green Japanese (*A. polymorphum*). The blood-leaved variety has drawn deserved attention away from this beautiful plant. The most vigorous of the type. Forms a small shrubby tree with various shades of color in the young growth; foliage small, deeply lobed, coppery green, changing to the most brilliant and gorgeous tints in autumn. It is the parent form of many of the Japanese Maples. For planting singly on a lawn it is most handsome, its feathery green leaves making its appearance distinct from that of any other shrub-like tree. 12 to 15 feet.

MOUNTAIN ASH. *Pyrus Sorbus*

Very ornamental, especially when covered with bright scarlet berries.

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

European (*P. aucuparia*). Similar in appear-

MAGNOLIA (See page 49)

ance to the above, with finer foliage and smaller deeper colored berries, much more desirable than the American and everywhere very popular. Erect stem, smooth bark, head dense and regular. When fully grown 20 to 35 ft.

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

See also Weeping Trees.

MULBERRY. See page 40, also Weeping Trees.

OAK. *Quercus*

Pin. (*Q. palustris*). The Pin Oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, firmly divided, of a beautiful shining green that colors to sparkling red and yellow in the fall. The tree is easily transplanted and grows well on wet and dry ground, is, in fact, the quickest growing of all the oaks. As an avenue and street tree it is unequaled, and is one of the best for park planting.

Red. (*Q. rubra*). A very well known rapid-growing native species. The leaves are large and bright green and take on a purplish scarlet hue in the fall. It becomes of large size, with a round and spreading head. One of the best sorts for street, avenue and ornamental purposes.

OSAGE ORANGE. *Maclura aurantiaca*

A native tree of medium size and spreading habit. Leaves bright shining green, broad and sharp-pointed. Fruit resembles an orange. One of the very best defensive hedges. It is of vigorous habit and rapid, dense growth and when properly trimmed makes a very effective hedge and is also ornamental.

OREGON MAPLE

AVENUE OF CAROLINA POPLAR

PAULOWNIA. *Paulownia*

Empress Tree (*P. imperialis*). A magnificent tropical-looking tree from Japan. Of extremely rapid growth and surpassing all others in size of leaves, which are 12 to 14 inches in diameter. Blossoms trumpet-shaped, formed in large, upright panicles in May. Quite hardy here, but the flower buds are apt to be killed during severe winter.

PEACH

Blood-leaf. Leaves blood-red; one of the finest colored leaf ornamentals. In the spring it is covered with blossoms. It also bears good white fruit. Will do well any place where Peaches will grow.

PLANE TREE. See Sycamore.

PLATANUS. See Sycamore.

POPLAR. *Populus*

Balm of Gilead (*P. candicans Ontariensis*). A native species of remarkably rapid, luxuriant growth, with large glossy foliage.

Bolles' (*P. Bolleana*). New, of pyramidal form, leaves dark green on upper side, brilliant silver beneath; very beautiful. A valuable tree for grouping on the lawn.

Carolina (*P. monilifera Carolinensis*). One of, if not the most rapid-growing trees, with large, handsome, glossy, serrated, deep green leaves. Succeeds everywhere; especially adapted to large cities, where it makes unusually fast growth, and resists smoke and gas. Pyramidal form, making a spreading head and dense shade when properly trimmed. New growth should be well cut back in spring for the first few seasons. It is unexcelled for quick growth and effect; makes a splendid wind-break or screen; is used in larger numbers than any other one tree for street planting. For new places and streets where the slow-

er-growing ornamentals are desired, plant the Poplars between, securing an almost immediate effect, removing them as the other trees attain size.

Lombardy (*P. fastigiata*). A well known, tall erect-growing tree of rapid growth and spire-like outline; very essential in landscape gardening to give variety of form and destroy the appearance of sameness produced by other trees.

Silver-leaved (*P. alba*). A tree of wonderfully rapid growth and spreading habit; leaves large, dark, rich green above and white as snow beneath.

See also Weeping Trees.

PRUNUS. *Plum*

P. Pissardi (Purple-leaf Plum). A new shrub of Persian origin. The tree is a decided contrast in itself. The leaves, as they first appear on the tips, are a beautiful orange color, and they mature to a rich purple, clear and distinct, growing darker as the season advances. The leaves remain until late in the fall—a decided contrast to other shrubs. Its beautiful, shining bark and its pink flowers and bright red fruit altogether make it the most rich and beautiful ornamental tree possible. It is remarkably hardy; a very rapid grower, compact, symmetrical in proportion, and attains about the size of the peach.

P. Triloba (Double-flowering Plum). A very desirable shrub, introduced from Japan. Flowers semi-double, of delicate pink, upward of an inch in diameter, thickly set. Hardy; flowers in May.

Red Bud. See Judas tree.

SALISBUREA. *Maidenhair, or Ginkgo*

S. Adiantifolia. A Japanese tree of large size and columnar growth. When fully grown it is more spreading. The leaves resemble those of the Maidenhair Fern. A valuable, ornamental

SALISBUREA, Continued

tree, and useful for street and avenue planting. If pruned several times when young it will make a round, compact-headed tree. It seems to thrive well along sidewalks in the city, and to be generally free from insects and diseases.

SWEET GUM or BILSTED

(*Liquidambar styraciflua*)

One of the finest American trees. Of medium size and moderate growth; round-headed or tapering form; leaves resemble somewhat those of the maple, but are star-shaped and of a beautiful glossy green color in summer, turning to a deep purplish crimson in autumn; in this respect it is equal to the Sour Gum; bark corky. Beautiful in all stages of growth, it is particularly handsome and striking in Autumn. It thrives in low, damp places, though growing equally well in higher ground. A beautiful tree for street and avenue planting. Prune closely when transplanted.

SYCAMORE. Platanus

American Plane, Sycamore or Buttonwood (*P. occidentalis*). A well-known, tall, rapid-growing native tree; leaves large, heart-shaped at the base; the lobes sharp-pointed.

European (*P. orientalis*). Oriental Plane. A lofty, wide-spreading tree; heart-shaped leaves, more deeply cut than above species; valuable for its handsome foliage and free growth; not so subject to disease as our native species. Entirely free from worms and insects. One of the oldest cultivated trees known.

THORN. Crataegus

Double Scarlet (*C. coccinea fl. pl.*). Flowers

deep crimson, with scarlet shade; very double, and considered larger than the double red; fine rich foliage.

Double White (*C. alba fl. pl.*). Has small, double, white flowers.

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

TREE OF HEAVEN. See *Ailanthus*.

TULIP TREE or WHITEWOOD

Liriodendron

Liriodendron tulipifera. Magnificent native tree, of very rapid growth; broad, glossy and fiddle-shaped leaves. It is valuable for its clean smooth bark and handsome green foliage. The flowers appear the first week in June. They are large, greenish yellow, blotched orange, and have the shape of a tulip. It makes a very desirable tree for street planting, thriving in low as well as high ground. Plant only in spring and prune very closely. Allied to the Magnolias, and, like them, difficult to transplant, unless of small size.

WALNUT. See page 41.

WHITEWOOD. See Tulip Tree.

WILLOW. Salix

Golden (*S. vitellina*). This is valued very much for its bright, golden-barked twigs in the winter season, for the effect of which it is much planted. It is especially showy when planted in large groups. To produce the best results, it should be severely trimmed every winter to induce a quantity of strong young growths.

See also Weeping, page 62.

WEeping, DRooPING or PENDULOUS TREES

Much attention is now given to this class of trees, and we place them separately for the convenience of our patrons. The superior grace and beauty of the weeping varieties render them especially adapted to yard, lawn or cemetery. No collection is complete without them; among ornamentals they have no superior.

For the benefit of those unacquainted with their habits or manner of growth, we would divide them into two classes:

(A)—Those which are grafted where the top or head commences to form, which assumes that conspicuous, umbrella-like form so well known, as in the Camperdown Elm, and are especially adapted to planting in small lawns or cemeteries, as well as producing beautiful effects in parks among the larger trees.

(B)—Those having long, slender branches, which droop naturally, like the Cut-leaved Birch and Babylonica Willow, having tall-growing trunks, with long, slender branches. They are best adapted to parks, streets or the larger lawns. Where they can be given sufficient room, the elegance, grace and beauty of their branches, at rest or in motion, are so apparent that they have few, if any, superiors among ornamental trees.

In our list will be found all the choicest varieties, which we deem particularly attractive. Customers, however, will be saved from disappointment if they will realize that it is impossible to deliver them from the nursery with the graceful form to which they will attain with age. This could no more be done than to deliver fruit trees loaded with fruit.

BEECH. *Fagus*

F. sylvatica pendula. A remarkably vigorous, picturesque tree of large size. The trunk or stem is generally straight, with the branches tortuous and spreading; quite ungainly in appearance with rich luxuriant foliage, of wonderful grace and beauty.

BIRCH. *Betula*

Cut-leaved (*B. laciniata pendula*). Probably the most popular and desirable lawn tree in existence, and produces a beautiful effect on streets and avenues. Makes a vigorous growth and is perfectly hardy. Trunk straight, slender, and white as snow. The slim side branches droop in a most picturesque manner; foliage delicate and deeply cut, coloring finely in the fall. The drooping branches and silvery bark form a most effective combination during the winter months. Mr. Scott, in his "Suburban Home Grounds," says of it: "No engraving can do it justice; like the palm tree of the tropics, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its white bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character."

Young's Weeping (*B. pendula Youngii*). Originated near Milford, Eng., where it was found trailing upon the ground. Grafted into stems of some height, it forms pendulous heads, drooping to the ground in fine, thread-like shoots. Very beautiful.

CHERRY. *Cerasus*

Japan Weeping Rose-flower (*C. Japonica pendula rosea*). Brought from Japan by Van Siebold, and is certainly one of the finest weeping trees for lawns and small grounds. The branches are slender and, when grafted on tall stems, fall gracefully to the ground. The flowers are rose-colored, appearing before the leaves. The finest weeping Cherry, and one of the finest weeping trees in cultivation.

ELM. *Ulmus*

Camperdown Weeping (*U. pendula*). A vigorous grower, and forms one of the most picturesque drooping trees. Leaves large, dark green and glossy, and cover the trees with a luxuriant mass of verdure; very desirable.

MOUNTAIN ASH. *Sorbus*

Weeping (*S. Aucuparia pendula*). A beautiful tree, with straggling, weeping branches; makes a fine tree for the lawn; suitable for covering arbors.

MULBERRY. *Morus*

Teas' Weeping Russian (*M. Tatarica pendula*). A weeping variety of the now well-known Russian Mulberry. One of the most graceful and hardy weeping trees in existence. Wholly unlike anything heretofore introduced. Forms a perfect umbrella-shaped, with long, slender, willowy branches drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion, it is without a rival. It has beautiful foliage; is wonderfully vigorous and healthy; is one of the hardiest, enduring the cold of the North and the heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. A very happy use of it lately seen was in the form of a canopy or tent, making a most pleasant play-house for children, who set their table and enjoyed themselves in the cool shade of its foliage.

MAPLE, Wier's Cut-Leaf. See page 48.

WILLOW. *Salix*

American Weeping (*S. purpurea pendula*). An American dwarf slender-branched species; grafted 5 or 6 feet high, it makes one of the most ornamental of small weeping trees; more hardy than the Babylonica.

Babylonica, or Common Weeping (*S. Babylon-*

WILLOW, Continued.

ica). The well-known common Weeping Willow. A large tree covered with drooping branchlets.

Kilmarnock (*S. Caprea pendula*). A distinct variety, having reddish shoots and large, glossy foliage; grafted at a proper height, about 5 feet

from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, with the branches drooping gracefully to the ground. It is well suited for planting in cemetery lots or other small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and vigorous growth.

EVERGREENS**(Coniferae)**

Evergreens are very desirable as they retain their foliage throughout the Winter, and are now everywhere appreciated as

indispensable for variety, giving color and effect to lawn or landscape, and adding to the tone, warmth and verdure, especially in Winter. The constant green of the coniferæ is the quality most valuable in them; the prevailing color which they give to their surroundings is deep-toned, but if the bright-leaved sorts, now plentiful, are planted among the somber ones, they greatly enliven the effect. They are also very desirable for hedges, shelters or windbreaks, or for screening undesirable objects.

They should be judiciously planted in small lawns as well as large and should be given sufficient room to fully develop. The sap of most evergreens, being of a resinous nature, is not so active in early Spring as that of deciduous trees, and, as a rule, all evergreens and coniferous trees succeed better planted late in Spring and earlier in Autumn than deciduous trees. The latter part of April or during May and latter part of Summer, say August, are the best times in ordinary seasons for transplanting in this latitude. August planting is not recommended, however, unless the season be favorable.

ARAUCARIA

Imbricata (Chilli Pine, or Monkey Puzzle). A fine tree of regular pyramidal form. Leaves bright green, broad, thick, pointed and overlapping each other.

ARBORVITAE. Thuya, or Thuja

American (*T. occidentalis*). This is one of the very finest evergreens for hedges. It is very hardy and, if set at the proper time with care and without undue exposure, it may be relied upon to

ARBORVITAE, Continued.

live; but small plants 12 to 18 inches high, which have been transplanted several times, are preferable. It bears shearing better than any other variety and may be made a very beautiful and dense hedge or screen to divide grounds or for any purpose where it is not required to resist cattle or other animals.

Chinese (*Biota orientalis*). Of upright growth, slender and bright green foliage. Growth is flat on twigs, arranged mostly vertically.

Compact, Parsons' (*T. compacta*). Foliage bright light green; habit dwarf and compact.

Globe (*T. globos*). Forms a natural evergreen globe or ball without any trimming; very pretty and hardy.

Golden (*T. aurea*). Free grower with fine golden yellow foliage; hardy. The most desirable Golden Arborvitae for the northern states.

Hovey's Golden (*T. hoveyi*). A seedling from the American. A perfectly hardy, distinct, compact variety; leaves a bright green. A beautiful object either singly or in hedge.

Pyramidal (*T. pyramidalis*). This exceedingly beautiful Arborvitae 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 (*T. Sibirica*). One of the best of the genus of this country. Exceedingly hardy keeping color well into winter; growth compact and pyramidal; makes an elegant lawn tree.

Tom Thumb (*T. Tom Thumb*). A dwarf variety of the American Arbor Vitae, which originated on grounds of Ellwanger & Barry. It is remarkable for its slow growth and compact symmetrical habit.

CALIFORNIA BIG TREE (*Sequoia gigantea*)

The famous Big Tree of California. It makes a handsome pyramid when young. Very desirable for lawn decoration; a very attractive evergreen. Thrives well in this climate.

CEDAR. Cedrus

Himalayan, or Indian (*C. Deodara*). The Great Cedar of the Himalayan Mountains. Exceedingly handsome, with drooping branches and silvery green foliage; branches feathery and spreading, forming a dense network. The finest, most rapid-growing of all Cedars, and worthy of a place in every garden.

CYPRESS. Cupressus

Lawson's (*Chamaecyparis Lawsoniana*, or False Cypress, also as *Cupressus Lawsoniana*). A fine evergreen, native of the Pacific Coast. One of the most graceful and beautiful of evergreens; of fine, compact habit; delicate feathery foliage, varying from vivid green to a silvery or bluish tint, according to sub-varieties. 30 to 40 ft.

CRYPTOMERIA. Cedar

Cryptomeria Japonica (Japan Cedar). A beautiful evergreen with delicate foliage and graceful habit. The color changes to a bronze or red-

dish brown in the fall, producing a pleasing contrast. When young resembles *Araucaria excelsa*. In time becomes a large pyramidal tree, with straight slender trunk, covered with reddish brown bark, with whorled spreading branches. Leaves spirally arranged. A very satisfactory evergreen for this latitude.

FIR. Abies

Colorado Silver (*A. concolor*). A stately and beautiful variety. One of the finest of Rocky Mountain evergreens. Graceful habit, broad, handsome foliage, bluish above, silvery beneath. A fairly rapid grower and a very desirable variety for the lawn. Extremely hardy and a fit companion for the Colorado Blue Spruce. Withstands heat and drought the best of Firs.

Silver, or Grand (*A. grandis*). A large stately tree of pyramidal growth; leaves thin, flexible, deeply grooved, very dark green above and silvery white beneath. A native of the Pacific coast.

See also Spruce.

JUNIPER. Juniperus

Golden Variegated (*aurea variegata*). Pyramidal in form, somewhat like the Red Cedar, but the growth is much finer. Golden variegation throughout the year.

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

Golden Japan (*J. Japonica aurea*). Foliage beautiful golden, of splendid dwarf form and spreading habit.

Swedish (*J. Suecica*). Similar to the Irish, though not so erect, with yellowish green foliage, of somewhat lighter color, forming a beautiful pyramidal small tree.

Red Cedar (*J. Virginica*). A well-known American tree, with deep green foliage; makes a fine ornamental hedge.

PINE. Pinus

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

Mugho, Dwarf Mountain Pine (*P. Mughus*, or *Montana*). Of compact, spreading growth; it keeps below 4 feet in height for many years. Does not grow tall, but spreads over the ground, generally assuming a globular form; very dense. Ornamental and hardy.

Scotch (*P. sylvestris*). A fine, robust, rapid-growing tree, with stout, erect shoots and silver-green foliage.

White (*P. strobus*). The most ornamental of all our native Pines; foliage light, delicate, or silvery green. Flourishes in the poorest soils. Hardy and valuable.

PODOCARPUS. See Yew.

RED CEDAR. See Juniper

RETINOSPORA

Japanese Cypress, Retinospora, or Chamaecyparis.

A genus very similar to Cupressus. It comprises many varieties of wonderful beauty.

RETINOSPORA, Continued

Botanists class all varieties under two species—*Obtusa* and *Pisifera*, but originating in Japan it is almost impossible to say for certain to which variety it belongs, and following most other nurserymen we list under the names as we received them. *R. plumosa*, *R. ericoides*, *R. filifera*, *R. squarrosa*, generally considered as forms of *R. pisifera*, also spelled *Retinospora*. They are very desirable for planting in groups, as they are of medium size. In the far north they must be protected in winter.

Ericoides. A dense, broadly pyramidal or round-headed bush, with upright branches and dull green foliage, changing to brownish green in winter. Leaves linear, soft, grayish green beneath. Very ornamental.

Filifera. Upright leader, main branches nearly horizontal, smaller branches of a graceful and weeping habit. One of the showiest.

Filifera aurea. A golden form of the preceding.

Obtusa. A free growing evergreen, of bright green foliage.

Pisifera. An evergreen of tree-like character when matured. The underside of foliage is silvery.

Plumosa. An exceedingly handsome, small evergreen from Japan, with feathery, light green foliage.

Plumosa aurea. Like the preceding, a plant of great beauty; foliage soft, plume-like, of a golden color; close and compact habit; should be in every amateur collection.

Squarrosa. This valued sort has steel-colored foliage and makes a tufty, compact growth. It grows to a large size, but by pruning can be kept down to almost any size, as, in fact, can all *Retinoporas*.

SEQUOIA. See California Big Tree.

SPRUCE. Picea

The names *Abies* for Fir and *Picea* for Spruce are used just oppositely by different authors, Linnaeus employing *Abies* for Spruce and *Picea* for Fir. We have followed Gray, Bailey and most of the later botanists, who use the name the same as the ancients.

Colorado Blue (*P. pungens*.) A rare, elegant tree, with foliage of rich blue. One of the most distinct and striking of all the Spruce family. This variety of Spruce was found in the Rocky Mountains, and has always given the best satisfaction wherever planted. Considered as one of the most beautiful of all evergreens. A free grower; perfectly hardy.

Douglas (*P. Douglasii* or *Pseudotsuga Douglasii*.) Indigenous to Colorado. Of quite rapid growth and conical form; foliage delicate green, glaucous underneath; hardy and easily grown. See also *Abies*.

Norway (*P. excelsa*.) A lofty, elegant tree, of perfect, pyramidal habit, remarkably elegant and rich, and as it gets age, has fine, graceful, pendulous branches. It is exceedingly picturesque and beautiful. Very popular, and should be largely planted. One of the best evergreens for hedges.

YEW. Taxus

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

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

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

Irish (*T. Hibernica*.) Of tall, slim growth and beautiful dark green foliage; it is of great use to planters. As with all Yews, it winters better when shaded from the sun during the cold months of winter.

PODOCARPUS

Japan Yews (*P. Japonica*.) A peculiar, charming, erect tree from Japan, hardier and denser than the Irish Yew, eminently fitting it for cemetery purposes.

LAWSON CYPRESS. See page 54.

Upright Deciduous Shrubs

No yard is complete without one or more beautiful flowering shrubs, and we would urge a more extensive planting of this class of ornamentals covering such a wide range in flower and foliage, habit of growth and season of blossoming. Requiring but small space, they can be used on lawns to fill vacancies, where large trees could not be harmoniously grown, breaking the monotony of the landscape by grouping or distributing singly according to size of grounds and scenic effect.

ALTHAEA. *Hibiscus Syriacus*

Rose of Sharon. One of the most showy and beautiful shrubs. Flowers large, double, of many brilliant colors. Blooms freely in August and September when few other trees or shrubs are in blossom.

Double Red [*H. rubra flore pleno.*]

Double Purple [*H. purpurea flore pleno.*]

Double White [*H. alba flore pleno.*]

Variegated Leaf [*H. variegata flore pleno.*]

ALMOND. *Prunus*

Double Rose-flowering [*P. Japonica rubra fl. pl.*] A beautiful small shrub, bearing in May before the leaves appear, small, double rose-like flowers, closely set upon the twigs.

Double White-flowering [*P. Japonica alba fl. pl.*] Produces beautiful white flowers in May.

AZALEA *Azalea*, or *Rhododendron Sinense*

A. Mollis. Showy, hardy plants, used extensively in parks and public grounds. The brilliancy of their flowers is not approached by anything in the line of hard shrubs. Excellent for the front of borders or clumps of taller growing shrubs.

BARBERRY. *Berberis*

Used as a hedge-plant quite extensively. Their showy orange and yellow flowers in May and June are followed by bright and various-colored fruits, making them especially showy in autumn and winter.

Purple-leaved (*B. purpurea.*) Foliage and fruit of violet-purple color, very striking; fine for single specimens; also a desirable ornamental hedge-plant, planted by itself or intermingled with the common.

B. Thunbergii. A very pretty variety from Japan; of dwarf, graceful habit; foliage small, changing to beautiful bright red early in fall; very showy.

BLUE SPIREA. See Verbena Shrub.

CALYCANTHUS

Sweet-Scented Shrub or Carolina Allspice.

Sweet-Scented Shrub (*C. Floridus.*) The wood is fragrant; foliage rich; flowers are of chocolate color, having a peculiarly agreeable odor. The flowers appear in June and at intervals afterward. Very popular.

CAMELLIA

A very desirable evergreen shrub which comes from Japan. Suitable for either lawn or pot culture. In appearance it is somewhat similar to the *Rhododendron*, having smooth, glossy, dark green leaves. The flowers appear early in the spring (in the Willamette Valley about the

middle to the close of March), and look like a medium-sized full-blown rose. We carry in stock three colors—Red, White and Pink.

CORAL BERRY. See Snowberry.

CORNUS. See Dogwood, page 46.

CHERRY. *Cerasus*

Dwarf Rocky Mountain. From the mountains of Colorado. Hardy as a Wyoming sage-bush. With its deep green, willow-like leaves, mass of pure white flowers in spring and a load of fruit in summer, it is well worth cultivation for an ornamental shrub. Makes a bush 4 to 5 feet high, usually fruiting in two years, producing large quantities of jet-black fruit about the size of English Morello, and ripening after all other Cherries are gone. See also pages 46 and 52.

CORCHORUS. *Kerria Japonica*

A graceful, slender shrub, growing 4 to 5 feet high, covered with double yellow flowers from early summer till fall. As pretty as a rose in shape of flower and makes a very ornamental plant for the lawn.

CURRENT. *Ribes*

Crimson-flowering (*R. sanguineum.*) Produces an abundance of crimson flowers in early spring.

Yellow-flowering (*R. aureum.*) A native species with yellow flowers.

CYDONIA. See Quince, Japan.

DEUTZIA. *Deutzia*

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

Abel Carriere (*D. Hortensis Abel Carriere.*) Bright rose-carmine; a choice sort. One of the best.

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

Slender-branched (*D. gracilis.*) A very desirable dwarf-growing variety. Flowers pure white. A valuable plant for winter blooming.

Lemoine's (*D. Lemoinei.*) Single white. A hardy hybrid, partaking to a great extent of the character of *Gracilis*, but of a stronger growth. Good for forcing.

D. c. var. Pride of Rochester. A new variety said to excel all others in size of the double white flower, length of panicle, profusion of bloom and vigorous habit. A charming acquisition, produced from the *Crenata*.

D. Watereri. A grand new variety with very large double white flowers, borne in large, loose racemes. Robust grower and very hardy.

DOGWOOD. *Cornus*

Red-branched [*C. sanguinea*.] A native species, very conspicuous and ornamental in the winter, when the bark is blood-red.

Sanguinea, var. elegantissima variegated. One of the finest variegated shrubs; of rapid growth. The leaves are broadly margined with white; bark bright red in winter.

See also page 46.

ELAEAGNUS

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

ELDER. *Sambucus*

Golden [*S. aurea*.] From Holland. New and rare. When the leaves first appear they are bright green, but, if planted where they will have plenty of sun, they soon change to a golden green. The blossom, which resembles the common Elder blossom, appears in July. The best effect is produced when they are planted with other shrubs, thus rendering the foliage more conspicuous by the contrast.

EXOCHORDA

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

HYDRANGAEA (PANICULATA) IN NURSERY ROW.

FILBERT. *Corylus*

Purple-leaved [*C. Avellana*, var. *atropurpurea*, or *purpurea*.] A very conspicuous shrub, with large, dark purple leaves. Soon after the leaves expand they are almost black, but later on fade to a light purple. Valuable for planting in groups of large shrubs to secure color effect. Distinct and fine. See also page 41.

FORSYTHIA. *Golden Bell*

F. Viridissima. This is one most frequently found in cultivation. It is of stiffer and more bush-like growth than the others. The flowers are a shade lighter yellow, and open a little later. Leaves a little larger and darker green. Forsythias are among the first to bloom in the spring.

F. Fortunei. Similar to the above but of more upright growth.

F. suspensa [Weeping Forsythia.] Of drooping habit, resembling Fortunei in its flowers.

HEDYSARUM MULTIJUGUM

Hardy perennial of recent introduction, of angular, straggling growth, 2 to 5 feet high; very showy and worthy of general culture; flowers all summer, pea-shaped, violet or purplish magneta, with yellow blotches in racemes, 8 to 18 inches long; leaves oval, grayish green. Fine for rockwork.

HONEYSUCKLE, UPRIGHT. *Lonicera*

Red Tartarian [*L. Tatarica rubra*.] A beautiful flowering shrub, blooms early in spring; flowers bright pink.

White Tartarian [*L. Tatarica alba*.] Similar to the preceding, with white flowers. See Climbing Honeysuckles, page 64.

HYDRANGEAS

Beautiful free-flowering shrubs, bearing immense panicles or trusses of flowers. *Paniculata* is perfectly hardy and requires no protection; the other varieties require protection in winter, and should be grown in pots or boxes and wintered in the cellar, except in the warmer sections.

The Japanese flat-headed flowers are the well known pink and blue variety and are worthy of special notice, being so distinctly different from all others. All are perfectly hardy along the seacoast but usually require protection in the winter in cooler sections, but are well worth the additional attention. The system of pruning is different, severe winter pruning being avoided, the aim being to preserve the wood, as it is on the old wood that the flowers appear.

H. arborescens grandiflora.

HYDRANGEAS, Continued

Also known as "Hills of Snow," "Snowball Hydrangea" and "American Hydrangea." A magnificent new shrub destined to become one of the most popular hydrangeas. The pure snow white flowers come into full round heads of very large size commencing in May or June according to locality and continuing until August or later—an unusual thing. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring shrubs, while its long season of bloom renders it doubly valuable to every owner of a garden. Makes a magnificent hedge.

H. paniculata grandiflora. This is one of the most valuable hardy shrubs. It attains a height of 3 to 5 feet and is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one half of last season's growth, as the flowers are borne on new wood and are much finer when the plant is treated in this way. An excellent shrub for cemetery planting.

H. Hortensia Japonica [coerulea.] Blue Japanese [dwarf 2 to 3 feet.] Flat-heads of flowers which are blue in the center with singular sterile flowers on the margin. Requires winter protection in colder sections.

H. Hortensia Otaksa. Another Japanese variety known by its huge heads of pink or blue flowers as the individual case may be. The color is not constant in either case. Flowers very large, produce freely.

H. Thomas Hogg. This Japanese variety has immense trusses of flowers, at first slightly tinged with green, becoming of the purest white and remaining so a long time.

HYPERICUM. St. John's Wort

H. Moserianum. A grand variety, with large bright golden yellow flowers 2 inches in diameter. A continuous bloomer until cold weather.

INDIAN CURRANT. See Snowberry.

JAPAN SILVER THORN. See Elaeagnus.

JUNEBERRY. Amelanchier

Improved Dwarf (A. Canadensis var. oblongifolia.) The fruit is borne in clusters, reddish purple in color, changing to bluish black. In flavor it is mild, rich, subacid; excellent as a dessert fruit or canned. It is extremely hardy. In habit it is similar to the currant, the bushes attaining the same size. The blossoms are quite large and composed of fine white petals, which with its bright, glossy dark green foliage, renders it one of the handsomest of ornamental shrubs.

KERRIA. See Corchorus, page 55.

LILAC. Syringa

Well known shrubs that succeed everywhere. Few are aware of the wonderful improvement in the past few years. We offer a choice selection of the best new double varieties, remarkable for their large trusses and beautiful flowers. Should be in every collection.

Common Purple [S. vulgaris.] The well-known sort.

Belle de Nancy [Double.] Very large; brilliant satiny rose, white toward center. Very fine.

Charles X. A strong, rapid grower, with large shining leaves; large trusses of deep reddish-purple flowers. An old, well known variety.

Common White [S. vulgaris alba.]

Josikaea, or Chionanthus-leaved [S. Josikaea.] From Transylvania. A fine distinct species, of tree-like growth, with dark, shining leaves and purple flowers in June, after the other lilacs have done.

Madam Ludwig Spaeth. Panicle long; individual flowers large, single, dark purplish red, distinct; superb.

Madam Abel Chatenay [Double.] Large panicle; double white. Very fine.

President Grevy. A beautiful blue; individual flowers very double and very large, measuring three-quarters of an inch in diameter; the panicle is magnificent and often measures 11 inches in length and 5 inches across. One of the finest Lilacs.

Senator Volland [Double.] Flowers rosy red.

Persian [S. Persic.] Medium size, with small leaves and bright purple flowers.

White Persian [S. Persica alb.] A fine sort, with flowers delicately tinged with rose-color.

MEADOW SWEET. See Spirea.

MOCK ORANGE. See *Syringa Philadelphus*.

OLEASTER. See Alaeagnus.

PEARL BUSH. See Exochorda.

PLUM [Prunus.] See under Deciduous Trees.

PRIVET. Ligustrum

The Privet in all its varieties deserves attention as an ornamental plant. It is almost an evergreen, and grows freely in all soils, is compact

LILAC

PRIVET, continued

and regular in its form, and bears shearing to any extent. The flowers appear in June and July. Makes fine ornamental single specimens and one of the most desirable hedge-plants; compact, free grower.

Common [*L. vulgare*.] An English shrub with smooth, dark green leaves; showy white flowers; fruit purple. Hardy.

California [*L. ovalifolium* or *L. Japonicum*.] A vigorous-growing variety, of fine habit, thick, glossy, nearly evergreen leaves. Of all ornamental hedge-plants this is the most highly prized. If cut to the ground one or two years after planting, it makes a very thick hedge right from the bottom, sending up many strong shoots. The leaves are a rich green and will remain on the plants up to Christmas, and if they are a little sheltered they will keep green almost all winter. This is especially the case if the hedge has attained some age and has frequently been trimmed. Though it is a strong grower, it can be kept to a low size by frequent trimming. Leaves remain on all winter in the Willamette Valley.

QUINCE, JAPAN*Cydonia, or Pyrus Japonica*

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

Scarlet [*C. Japonica*.] One of the best known, and a very handsome, hardy ornamental shrub. Has bright scarlet-crimson flowers in great profusion, early in spring. One of the hardy shrubs; makes a beautiful ornamental hedge.

Blush. A beautiful variety, with white and blush flowers.

JAPANESE SNOWBALL

ROCKY MOUNTAIN CHERRY. See Cherry.

ROSE OF SHARON. See Althaea.

SCOTCH BROOM. Genista

G. scoparia, also known as *Cytisus scoparia*. [Scotch Broom.] The branches almost rush-like in appearance, bear lovely yellow flowers.

SILVER BELL, or SNOWDROP TREE*Halesia*

H. tetraptera. A fine, large shrub, with beautiful large white, bell-shaped flowers in May. Rare and desirable.

SNOWBALL. Virbunum

Common [*V. sterile*.] A well-known favorite shrub of large size, with globular clusters of pure white flowers in the latter part of May.

V. opulus [High Bush Cranberry]. Handsome and dense foliage; flowers white, in drooping flat cymes, followed by brilliant scarlet fruit in showy pendulous branches that remain on the plant all winter.

V. plicatum [Japan Snowball.] This Japanese variety of the old-fashioned Snowball is one of the most valuable of our hardy shrubs. It forms an erect, compact shrub, 6 to 8 feet high; blooms in June and for a long time in a solid mass of white, the plants being completely covered from the ground to the top of the branches with large balls of flowers white as snow. The foliage in early summer is an olive-green, turning to very dark green later in the season.

SNOWBERRY. Symphoricarpus

S. vulgaris [Indian Currant, Coral Berry, St. Peter's Wort, or Waxberry.] Graceful small shrub; small flowers, followed by persistent deep red berries along the under side of branches.

S. racemosus. A well-known shrub with pink flowers and large white berries that remain on the plant through part of the winter.

SPIRAEA. Meadow Sweet

S. Anthony Waterer. A most beautiful variety of Bumalda. In habit of growth it is the same as its parent. The flowers are crimson in the bud and when first open, fading afterwards to a deep pink. It blooms about the close of June, and, if the flowers are cut off as fast as they commence to decay, there will be a continuance of them throughout the season, to some extent.

S. aurea [Gold-leaved Spirea.] Flowers fine, white; foliage of a beautiful golden color, which gives variety to the lawn and renders it very desirable.

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

S. prunifolia flore pleno [Double-flowering Plum-leaved Spirea.] Very beautiful; its flowers are like white daisies. From Japan. Blossoms in May.

S. Thunbergii. Profusion of small white flowers in early spring. Forms a rounded, graceful, dwarf bush; branches slender and somewhat drooping.

SPIRAEA, Continued

S. Van Houttei. The habit of the plant is pendulous, yet upright, giving a most graceful appearance even when out of bloom. The flowers are pure white and borne in dense clusters along the whole length of the branches, often weighing them to the ground. One of the finest ornamental shrubs that we offer. Excellent as a single lawn plant or for grouping with other shrubs; also a fine hedge-plant.

ST. JOHN'S WORT. See Hypericum.

ST. PETER'S WORT. See Snowberry.

SYRINGA, or MOCK ORANGE

Syringa Philadelphus

Most all the species and varieties of the *Syringa Philadelphus* have white flowers, many of them quite fragrant.

Garland [*P. coronarius.*] A well-known shrub, with pure white, sweet-scented flowers.

Golden-leaved [*P. aurea.*] A very pretty plant of medium size, with golden yellow foliage. It retains its color the entire season and is valuable for creating pleasing and striking contrasts with both green and purple-leaved shrubs.

Lemoine's Erect [*F. Lemoinei erectus.*] A charming variety of upright growth; flowers small, yellowish white, fragrant, more clustered than the older sorts, completely covering the bush.

SWEET-SCENTED SHRUB. See Calycanthus.

TAMARIX. Tamarisk

African [*T. Africana.*] A very beautiful shrub, with very fine, feathery foliage somewhat like the Juniper. This sort has light pink flowers in small racemes, which appear toward the close of May or the first of June. A valuable shrub for near the seashore or in sandy soils where others

do not do so well. They thrive in the very spray of the salt water.

VERBENA SHRUB, or BLUE SPIRAEA

Caryopteris Mastacanthus

A new shrub, which is planted because of its blossoming late in the fall, when but few shrubs are in flower. In the axil of each leafstalk is a bunch of bright blue flowers. It continues in flower from the middle of September until frost. An entire bed of this plant produces a striking effect. 2 to 3 feet high when grown. A valuable plant for bedding.

WAXBERRY. See Snowberry.

WEIGELA. Diervilla

Candida (*D. Candida.*) This is the very best of all the white-flowering Weigelas. A strong, upright, erect grower; flowers pure white and produced in great profusion in June and continue to bloom during the entire summer. One of the most satisfactory of shrubs.

D. Eva Rathke. A very fine variety 3 to 4 feet in height. Rich, deep, scarlet blossoms which follow a week after most other varieties. A beautiful, distinct, clear shade. Sometimes called a brilliant crimson.

Van Houtte. Clear, carmine flowers. Showy and handsome.

Rose-colored (*D. rosea.*) An elegant shrub, with fine rose-colored leaves. Introduced from China by Mr. Fortune and considered one of the finest plants he has discovered. Quite hardy. Blossoms in May.

Variegated-leaved (*D. nana foliis variegata.*) Leaves bordered with yellowish white, finely marked. Flowers bright pink, and borne in great profusion.

A FIELD OF PÆONIES IN OUR NURSERY.

EVERGREEN SHRUBS

This class of shrubs should not be neglected when planting a lawn or park. They fill the same relative position to the flowering shrubs that evergreens (conifers) do to the deciduous trees. Nothing could be more ornamental than a fine bed of Rhododendrons.

AUCUBA JAPONICA

Japan Spotted Laurel; Gold Dust Tree.

A small, beautiful shrub, with curious gold-blotched leaves. Needs protection in winter. We list two varieties.

A. J. maculata. Leaves long and narrow, irregularly toothed. Color deep green.

A. J. lanceolata. A desirable variety with deep green, lance-shaped leaves.

ASHBERRY. See Mahonia.

ADAM'S NEEDLE. See Yucca.

BOX. *Buxus*.

Dwarf (*B. nana*). Used principally for borders and edgings, for which purpose it is the best plant in cultivation.

Tree (*B. sempervirens aborescens*). A very desirable small tree in the yard or garden; well adapted to small places; prefers a shady situation. It can be made to assume any form.

B. Variegata. A variety of Tree Box, forming a beautiful small bush, blotched with white.

BURNING BUSH. See Euonymus.

CALICO BUSH. See Mountain Laurel.

EUONYMUS.

Spindle Tree, Strawberry Tree, or Burning Bush.

E. Japonicas radicans variegatas. A neat trailing variety with small, glossy green leaves, broadly margined with white. Valuable for rock work or borders of beds, also for vases or baskets. This variety is hardy in the North.

GOLD DUST TREE. See Aucuba.

HOLLY. *Ilex*

American (*I. opaca* or *I. quercifolia*, *Meerb*). A tree with spreading short branches, sometimes reaching to 50 feet in height, forming a narrow, pyramidal head. Leaves have large remote spiny teeth, rarely entire. Fruit dull scarlet, usually solitary. Hardier than the aquifolium but less handsome.

English or European [*I. aquifolium*]. A beautiful medium growing evergreen tree, with shining, dark, green leaves with spiny teeth, short, spreading branches, forming an oblong or pyramidal head. In winter it is covered with bright red berries. Much used for Christmas decorations. While in time it will attain a height of 30 to 40 feet, it is slow growing and usually classed as a shrub or small tree.

Pyramidalis [*I. aquifolium pyramidalis*]. Pyramidal or sometimes known as "Dutch" Holly. A variety of the European Holly with many of the leaves spineless. Grows to a more pyramidal form than the "English." Berries grow more in clusters and the berries are borne in large quantities at a much earlier age. A fine decorative variety.

Golden Variegated [*I. aquifolium golden variegated*]. Leaves having a large blotch of creamy yellow, surrounded by a green border.

Silver Variegated [*I. aquifolium silver variegated*]. Similar to the Golden variegated except that the leaves are blotched and tinted with silvery white in place of creamy yellow.

KALMIA. See Mountain Laurel.

Lauro-cerasus

CHERRY LAUREL or ENGLISH LAUREL [*Prunus lauro-cerasus*]. A bush or small tree reaching about 10 ft. in height with handsome evergreen foliage. Its glossy evergreen leaves makes it very popular for both summer and winter. Flowers small, white, in axillary or terminal short racemes in spring. Single specimens make fine plantings or in pairs for driveways or entrances, also very fine for hedges.

LAURUSTINUS. (*Viburnum Tinus*)

A well-known winter-flowering shrub of great beauty, producing an abundance of white flowers; well adapted for hedges.

Rotundifolia. Far superior to the common variety; leaves rounded, deep glossy green; flowers much larger; better adapted to the Willamette Valley; never sun-scalds.

Variegata. Leaves blotched with silvery white. Very fine.

LIGUSTRUM. See Privet.

MAHONIA, (Ashberry) or Holly-leaved Barberry

[*Mahonia aquifolium* (Berberis)] Oregon Grape.

A handsome shrub with foliage similar to the Holly, bright glossy green in the growing season, turning in the autumn to rich red and bronze shades. Persistent throughout the winter. The yellow blossoms in April are very attractive, and a profusion of blue berries in autumn. Does best where the ground is deep, rich and shaded. Usual height from 4 to 6 feet. The beautiful evergreen foliage is shipped east at Christmas time, taking the place of Holly. One of our most attractive evergreen shrubs, for decorative planting.

MOUNTAIN, or AMERICAN LAUREL

Calico Bush [*Kalmia latifolia*]

Broad, glossy green, shining foliage; flowers in large and showy clusters of elegant shape, and most beautiful colored, mostly pink or white. Few broad-leaved evergreens are as beautiful in foliage, and none can excel the beauty and delicate forms of its flowers. Requires about the same treatment as the Rhododendron.

OREGON GRAPE. See Mahonia.

PRIVET. See Deciduous Shrubs.

RHODODENDRON, or ROSEBAY

This, wherever known, is universally acknowledged to be the most showy, magnificent, hardy evergreen shrub that grows. It will thrive in any good soil without any special preparation, and in the full blaze of the sun. But it is more luxuriant in good, well prepared soil of leaf-mold, or leaf-mold and muck and peat mixed, and in partial shade, and does especially well near the sea-coast. It is abundantly supplied with numerous fibrous roots that retain a quantity of earth in lifting, so that it can safely be removed at any season of the year, except the short period of their rapid growth, covering a portion of June and July. The broad, thick evergreen foliage, with its glossy richness, would alone entitle it to a place foremost in the ranks of evergreen shrubs, but when in June this mass of luxuriant foliage is almost hidden by the magnificent array of beautiful flowers in clusters and each cluster large enough for a lady's bouquet, it gives it a preeminence that our pen must fail to portray. Planted singly, in the flower garden or upon the lawn, they are objects of interest; but their greatest beauty, as in many other plants, can only be fully developed by artistically massing them in beds upon the lawn, when the different varieties of white, blue, purple, cherry, lilac, mauve and crimson can be made to blend or contrast at will, producing an effect unrivaled by any other hardy plant in existence. We have a considerable list of hardy grafted varieties that are of higher price and much more desirable than the seedlings of the Catawbiense, as they compass in the different sorts the entire range of colors, and each in itself distinct and definite, while the seedlings, as a rule, vary but little from the original type. When soils are too strongly impregnated with lime, the original

soil should be removed to a good depth and width where the Rhododendrons are to be planted and the space filled in with leaf-mold and peat or muck mixed or some other soil tolerably free from lime. They will repay all care that may be bestowed in preparing a bed suitable to their wants.

SPINDLE or Strawberry Tree. See *Euonymus*.

YUCCA

Spanish Bayonet, or Adam's Needle

Has a fine appearance; the stem is two feet above the ground, covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork. We list two varieties.

Y. aloifolia. Slender, simple trunk; dagger-shaped leaves 1 to 2 inches wide; very stiff; flowers white, often tinged with green or purple; panicle compact, close to leaves.

Y. filamentosa. The well-known garden variety, threaded-leaved, creamy white; 2 to 4 feet. The best known and most largely planted of the Yuccas. July.

RHODODENDRONS

HEDGES

Nothing could be more beautiful than a neatly trimmed hedge of evergreens, and they are useful for boundary fences, screens, etc. We give below some of the best varieties for ornamental hedges, screens, windbreaks or boundaries.

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American Arborvitae (Evergreen)	52	<i>Euonymus</i> (Evergreen)	60
Siberian Arborvitae (Evergreen)	53	<i>Laurustinus</i> (Evergreen)	60
Red Cedar (Evergreen)	53	<i>Privet</i> (Deciduous)	57
Norway Spruce (Evergreen)	54	<i>Spirea</i> (Deciduous)	58
Honey Locust (Deciduous)	45		
Japan Quince (Deciduous)	58		
Ashberry (Evergreen)	60		
Barberry (Deciduous)	55		
Box (Evergreen)	60		

DEFENSIVE HEDGES

Honey Locust	45
Osage Orange	48

Both Deciduous

All described in appropriate places in this Catalogue; make beautiful ornamental hedges.

PURPLE (JAPANESE) WISTARIA.

HARDY CLIMBING VINES

It seems unnecessary to speak at length of the value of the climbing plants in our gardens and pleasure grounds. They are equally ornamental on the walls and terraces of the stable, mansion, and on the humblest cottage, over whose low roof a mantle of rose or clematis sheds such a transforming cloud of beauty. They grace the garden walls and take from stiff and hard lines their ugliness by fresh foliage, pretty flowers and, often, pleasing fruit. Invaluable for covering trellises, walls, cottages, etc.

AKEBIA

A. quinata. A very beautiful, perfectly hardy, fast-growing Japan vine, with magnificent foliage; produces flowers in large clusters of chocolate-purplish color, possessing a most delicious perfume; unsurpassed for covering trellises and verandas, the foliage never being attacked by insects.

AMPELOPSIS

A. Veitchii (Japan Ivy, or Boston Ivy). A beautiful, hardy climbing plant, of Japanese origin. Leaves a little smaller and more ivy-like than the American. This is one of the finest climbers we have for covering walls, as it clings firmly to the smoothest surface, covering it smoothly with the over-lapping leaves, which form a perfect mass of foliage. The color is a fresh deep green in summer, changing to the brightest shade of crimson and yellow in autumn. It is quite hardy and becomes more popular every year. For

covering walls, stumps, etc., no plant is more beautiful.

A. quinquefolia (Virginia Creeper, or American Ivy). A native vine of rapid growth, with large, luxuriant foliage, which, in autumn, assumes the most gorgeous and magnificent coloring. The blossoms, which are inconspicuous, are succeeded by handsome dark blue berries. Like the *bigonia* and ivy, it throws out tendrils at the joints, by which it fastens itself to anything it touches.

ARISTOLOCHIA. See Dutchman's Pipe.

BIGNONIA, or TRUMPET FLOWER

Tecoma

T. radicans. A splendid climber; vigorous and hardy, with clusters of large, trumpet-shaped scarlet flowers in August.

T. grandiflora. New. Leaves thick and shining, and immense blossoms of gorgeous crimson and yellow.

CLEMATIS. *Virgin's Bower*

Clematis plants of the improved sorts are exceedingly hardy, slender-branched, climbing shrubs of marvelously rapid growth and handsome foliage, which produce beautiful large flowers of various colors in great abundance, and during a long period. In these several species and varieties of it, the Clematis surpasses all other hardy climbers in its adaptation to many uses and locations. They do best in a rich soil, in a sunny situation.

Duchess of Edinburgh. Without doubt the best of the double pure whites. Deliciously scented.

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

Jackmani. This is perhaps the best known of the fine perpetual Clematises, and should have credit for the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successful bloomer, producing flowers until frozen up. The flowers are large, and of an intense violet-purple, remarkable for its velvety richness. Introduced in 1862,—since which time many new varieties have been brought forward. July to October.

Jackmani alba. A strong, vigorous grower, perfectly hardy, and a most prolific bloomer; fine, large, pure white flowers.

Madam Edouard Andre. This is the nearest approach to a bright red Clematis, and has been

HARDY PERPETUAL CLEMATIS

called the Crimson Jackmini. The plant is a strong, vigorous grower and very free in bloom. Color a distinct crimson-red; a very pleasing shade and entirely distinct from all other varieties.

Paniculata (Sweet-scented Japan Clematis). A Japanese plant possessing unusually attractive merits. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance. The flowers appear in September, at a season when very few other vines are in blossom.

Ramona. A strong, rampant grower and a true perpetual bloomer; flowers appear on the last year's growth and on the new shoots, giving an abundance of blossoms all through the season; color deep, rich lavender.

CINNAMON VINE

Dioscorea divaricata

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

CHINESE MATRIMONY VINE

Lycium Chinense, or vulgare

A neat, half-climbing plant, bearing small, light pink flowers in summer, followed by berries which turn to a beautiful scarlet in the fall, when it is very ornamental.

DUTCHMAN'S PIPE. *Aristolochia Siphon*

A magnificent hardy native vine of rapid growth, with very large, heart-shaped leaves and brownish flowers, resembling in shape a miniature pipe. Splendid for archways or verandas.

EULALIA

Zebra Grass.

Japonica Zebrina. One of the most striking and distinct plants. Unlike most plants of variegated foliage, the striping or marking is across the leaves instead of longitudinally, the leaves being striped every 2 or 3 inches by a band of yellow $\frac{1}{2}$ inch wide.

HONEYSUCKLE. *Lonicera*

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

Hall's Japan (*L. Halliana*). A strong, vigorous evergreen variety, with pure white flowers, changing to yellow; very fragrant. Covered with flowers from June to November.

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

Monthly Fragrant (*L. Belgica*). Blossoms all summer; flowers red and yellow; very sweet. Rapid grower.

Scarlet Trumpet (*L. sempervirens*). A strong

HONEYSUCKLE, continued

grower, and produces bright scarlet, inodorous flowers all summer.

See also Upright Honeysuckle

IVY. Hedera

Evergreen Ivies often suffer in winter if exposed to the sun, and should therefore be planted on the north side of a wall or building.

American, Japan, Boston. See Ampelopsis.

English (*H. Helix*). A well-known old and popular sort.

Variegated-leaved (*H. folia va iogata*). With smaller leaves than the preceding, variegated with white.

Irish (*H. Canariensis*, or *Hibernica*). The well-known old sort.

JASMINE. Jasminum

Hardy Yellow (*J. nudiflorum*). Bright yellow, fragrant blossoms.

Hardy White (*J. officinale*). Very sweet-scented and highly desirable.

KUDZU VINE

Kudzu Vine (*Pueraria Thunbergiana* or *Dolichos Japonica*, also called *Pachyrizus Thunbergiana*). A magnificent climbing vine for all purposes, well established vines growing 40 to 50 feet in a season; especially adapted to covering pergolas or to secure a dense shade. Leaves resemble those of lima bean in shape and are dark green and woolly, often changing during the season to green with cream or yellow along the veins. Flowers rosy-purple, pea shaped, borne in long, handsome racemes.

SILVERY-SWEET VINE

Actinidia polygama

A new hardy climber from Japan, of remarkable beauty. The foliage on the ends of the flowering shoots is of a glistening silvery white color, giving the whole vine, from a little distance, the appearance of being covered with large white flowers blossoming among its bright green leaves. The effect is very marked and beautiful. The flowers, which appear in this latitude about the middle of June, lasting from two to three weeks, are creamy white with purple centers, having numerous stamens and bright yellow anthers; remarkably sweet, resembling the Lily-of-the-Valley in fragrance.

TRUMPET VINE. See Bignonia.

WISTARIA

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

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

PAMPAS GRASS. *Gynierium digertium*

Half-hardy perennial. A native of South America. Very beautiful. Roots require winter protection in cold climates.

Elegans (*G. elegans*). Plumes silvery white, upon long stems; blooms early. A graceful new variety that is bound to become popular. The large plumes when dried make a splendid addition to a bouquet of dried grasses.

CHINESE WISTARIA

BULBOUS AND TUBEROUS-ROOTED PLANTS**PÆONIA. Peony**

Plant in deep, rich, well prepared soil, covering the buds but an inch or two. Do not expect too much the first year as they are a little slow in establishing themselves but will make up in attractiveness later. They may be planted singly or in beds or along borders, a large bed making a fine show, surpassing even the Rhododendron and Rose. It is the flower for the millions, coming into blossom early—May or June.

Herbaceous. This splendid class contains the largest, most showy and attractive flowers in cultivation, almost rivaling the rose in color and blossom, and it is to be regretted that they have been so much neglected. They are of stately growth, very hardy and delightful when in blossom. At the present time the public is beginning to appreciate the many fine varieties of recent introduction, ranging from pure white through the different shades of pink, rose, variegated, purple, white, etc. They increase in

PAEONIA, continued

beauty with age and may be planted in almost any situation. We recommend fall planting. They succeed best in rich soil and will be benefited by a mulch of rotten manure during the winter, which may be lightly spaded into the soil in the spring. Many of them are very double and have a delicate and refreshing fragrance. They are easily cultivated and require but little protection. Blossoms from 4 to 8 inches in diameter. Foliage rich, glossy, deep green color.

Adolph Rousseau. Very large; deep, brilliant pink. One of the best red varieties and is a free bloomer.

Delicatissima. A late flowering variety of rare beauty. Full, double immense blossoms, delicate, clear pink, passing to bluish white center. Very fragrant, blooms freely.

Edulis superba. Bright violet-rose, silvery reflex. Eragrant and early.

Festiva maxima. Extra large, in clusters, fragrant, the finest early white. It is pure white, except for a few flakes of crimson on some of the center petals. Full double flower, as near a perfect paeony as one could desire.

Felix Crousse. Very bright red; large ball-shaped flower.

Marie Lemoine (Calot.) Large, sulphur white, creamy center; double, massive flowers; strong stems; one of the finest, very late.

Modeste Guerin. Deep cherry rose, bright, showy; very large, distinct and fine shaped; fragrant, one of the best.

Rubra triumphans (Delache.) Bright carmine.

Also other choice named varieties.

AMARYLLIS

A beautiful class of plants with large, drooping, bell-shaped, lily-like flowers, varying in color from the richest crimson to pure white striped with crimson or scarlet.

CANNA

Indian Shot Plant. Stately and highly ornamental plants, for both flowers and foliage. They attain a height of 2 to 5 feet and may be grown singly or in masses. Leaves green or brownish red; flowers scarlet; crimson, yellow, cream, etc., variously marked.

New Large-flowering French and American. Not so tall as the old-fashioned sorts, but with flowers of great beauty; everywhere popular. These seedlings vary in color, ranging through all shades of yellow and orange to richest crimson, scarlet and vermillion. Some are plain and some spotted.

CROCUS

A universal favorite and one of the earliest garden ornaments. Should be planted about 2 inches deep. Colors blue, white, yellow and striped.

DAHLIAS

Through interest aroused by Dahlia Shows and Dahlia Societies and by the introduction of a number of new varieties, both elegant and exquisite, the cultivation of the Dahlia is again being given the attention it deserves. There is

nothing that, with the same amount of money invested, will give more show of stately and brilliant autumn flowers than the Dahlia. It is especially fine for borders, and makes fine beds. No flowering plant produces a finer display for a continuous period. Early in the eighties the introduction of the original Cactus Dahlia Juarez founded a new race known as the Cactus varieties.

Within a few years the new Paeony flowered Dahlia has made its appearance. Its immense flowers and graceful forms are a great improvement over the old single varieties. They are valuable for cut flowers, and make a splendid show for decorative work in the garden. We have the following:

Cactus Dahlias.

Paeonia Flowered Dahlias.

Decorative Dahlias.

Show Dahlias.

Pompon Dahlias.

GLADIOLUS

The Gladiolus is the most attractive of all the summer flowering bulbs and deserves a place in every garden, as it is sure to flower and do well with little care. They are the easiest thing to grow imaginable, but they do appreciate full sunshine.

Set bulbs about four to six inches deep when early garden is made, and additional plantings two weeks apart will give a long period of bloom, from July to November.

Cut when first flowers on the spikes are opening, and then place in water indoors, buds open to the end of the spike, affording beautifully decorative bouquet for ten days. No other flower is more lasting, or more satisfactory in its rich coloring.

We list the following:

America. Exquisite soft pink with lavender tints. Robust grower and splendid spike of flowers. We specially recommend this.

Attraction. Presents a most charming contrast with its deep crimson flowers and white throat.

Augusta. Pure white, throat delicately shaded with lavender. Splendid as a cut-flower.

Baron Hulot. A rich velvety blue, greatly admired, and a decided novelty.

Glory. Unique in having flowers with daintily ruffled petals. The color a rich cream with mingled apricot and red markings in throat. Absolutely distinct. A vigorous grower.

Klondyke. Primrose yellow, set off by a striking maroon blotch.

Madam Monneret. Fine spikes of a delicate rose. Valuable as a late bloomer.

Mrs. Francis King. A beautiful light scarlet, with pencillings of a deeper shade. Flowers unusually large—individual blooms, sometimes six inches in diameter. We recommend this one.

Pink Augusta. New but already tremendously popular. Clear pink, early blooming in the garden and excellent for florists' forcing.

Princes. Brilliant crimson with white blotches on lower petals. An open flower of immense size. No finer gladiolus grown.

We also carry a good line of imported Gladiolus both named and in general assortment.

HYACINTHS

The most beautiful and fragrant of early spring-flowering bulbs, much used for winter forcing. Too well known to need description. Large assortment of colors and varieties.

IRIS

Germanica (German Iris.) The true "Fleur de Lis," the national flower of France. They are perfectly hardy, thrive anywhere, grow and blossom luxuriantly, particularly if plentifully supplied with water or if planted in moist situations, as on banks of ponds, etc. Plants well established produce from 50 to 100 spikes of bloom, deliciously fragrant and fine for cutting. In beauty the flowers rival the finest orchids, colors ranging through richest yellows, intense purples, delicate blues, soft mauves, beautiful claret-reds, white, primrose and bronzes of every imaginable shade.

Kaempferi (Japan Iris.) Finest of all the Iris family. The flowers are of immense size, from 6 to 8 inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, and flower in great profusion during June and July. A well-established plant gives a dozen or more flower-stalks 2 to 3 feet high, each stalk producing 2 to 4 enormous blooms. The Iris thrives best if planted in a moist soil; if this cannot be had, should be plentifully supplied with water while growing and flowering.

JONQUILS. *Narcissi*

Pretty varieties of the *Narcissus*, having a very agreeable fragrance; adapted to either pots or out-door culture. The bulbs being small, six or eight may be put in a 6-inch pot.

LILLY-OF-THE-VALLEY

(*Convallaria majalis*)

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

LILIES. *Lilium*

No class of plants capable of being cultivated out-of-doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand prominently out from all other hardy plants. They thrive best in a dry, rich, well-drained soil where water will not stand in winter. After planting they require very little care, and not be disturbed for several years; established plants blossom more freely than if taken up annually.

Auratum (Gold-banded Lily of Japan.) Flowers very large, of a delicate ivory-white color, thickly dotted with rich chocolate-crimson spots, with a bright golden band through the center of each petal. The finest of all Lilies.

Elegans atrosanguineum. Dark blood-red. Erect.

Harrisii (the Bermuda Easter Lily.) Flowers

large, trumpet-shaped, pure waxy white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular as a winter flower. Tens of thousands of it are grown every year for church decorations at Easter.

Longiflorum. A well-known beautiful variety, with snow-white trumpet-shaped flowers that are very fragrant. It is quite hardy and blossoms freely in the open ground in June or July. It is also used largely for forcing for the Easter holidays; the flowers having more substance and lasting longer than the Bermuda Lily.

Tigrinum fl. pl. (Double Tiger Lily.) Bright orange-scarlet, with dark spots; a strong-growing showy variety, and entirely hardy. Succeeds well everywhere.

Speciosum rubrum. White, beautifully spotted red; flowers in August. This is one of the most useful of the Lily family, perfectly hardy, and flowering well under all circumstances.

Speciosum album. Very fragrant, large flowers; pure white, with a green band running through the center of each petal. One of the best.

NARCISSI

We have a choice collection of these fragrant winter-blooming plants.

TIGRIDIA

One of the most showy of all summer bulbs, and blooms from midsummer until frost, growing 3 feet high; with large wide-open triangular blooms, 4 to 6 inches across. The colors and markings are very brilliant and peculiarly odd and attractive, and clumps of them in the border have a most gorgeous effect. It is difficult to name a flower of such unique and exquisite beauty as a *Tigridia*, the superb spotting being so distinctive and handsome. They are easily grown and always more than satisfactory.

TUBEROSE

(*Polyanthus tuberosa*)

These deliciously fragrant, white, wax-like plants should be in every garden. This valley is particularly adapted to their successful culture.

TULIPS

Owing to the late spring frosts in the colder sections, bedding plants cannot be safely planted in such localities before the early spring flowering bulbs are through blossoming. Without these bulbs, for one or two months of beautiful spring weather, our garden would present a bare appearance. We know of nothing that for the money invested will give a more gorgeous show during early spring, and there is nothing more easily grown than the Tulip. They thrive well in almost any soil. Should be planted in October and November.

ROSES

ROSES are the most beautiful of flowers, and are among the easiest to raise to perfection. Even from earliest history it has been the favorite of all cultivated plants and still holds its undisputed sway as Queen of Flowers. We have given great care and attention to their culture, and are constantly adding new varieties, after thoroughly testing them, and dropping old ones that for any reason do not give satisfaction, our idea being to keep down the list of varieties to the fewest number possible, and still have those that will do well in every section. Not all varieties listed will do well in every district, as we cover every part of the country West of the Rocky Mountains and many parts east of these Mountains each year in our business. We try to keep up to date, but before placing them on the market, we always test them, as many varieties are not worthy of general distribution. For this reason if you do not find in our list what is wanted write us direct as we may have it in our experimental grounds in small numbers.

PLANTING—Roses thrive best when they have plenty of warmth and free air circulation. For this reason give them a sunny situation, and if possible well removed from buildings. It is inadvisable to plant them in even partial shade as this induces mildew in dull spring weather. However, they will endure severe exposure, and one need not hesitate to plant even if the situation is less favorable. Almost any good garden soil is suitable, but one with a good loamy subsoil is the best. Spade the ground to a depth of eighteen inches, at least, and pulverize well, mixing in plenty of well rotted manure. Spread the roots out carefully and place fine soil among and over them, treading it around them firmly; do not allow the manure to come into contact with the roots, fill in balance of the dirt, leaving the top soil loose and fine so as to form a dust mulch.

MANURE—Roses require plenty of manure and good cultivation. Cow manure is the best fertilizer for Roses and after they are established they are great feeders. One of the best plans is to drench the roots occasionally with liquid manure and in the fall when the ground is dry apply a heavy surface dressing of manure, which should remain during the winter and be spaded under in the spring. In dry climates spade under in winter.

PRUNING—Old and decayed branches, and about one half the previous season's growth, should be cut away early in the spring, while they are still dormant, and a little cutting back after the first bloom, usually about the middle of September will insure late flowers. As a rule prune close for size and quality, or what is known as exhibition flowers. For quantity or garden decoration follow same course with weak, old or unripe wood but do not cut back the strong thrifty shoots so severely. In shortening always prune to an "eye" pointing away from the center of the plant.

When planting prune all roses severely. In Fall planting prune the following spring, and when planted in the spring prune at time of planting.

PESTS AND DISEASES

Roses are not badly afflicted with diseases and pests in most sections, the two giving most trouble being green aphid and mildew. For the aphid use a strong solution of tobacco water or Phytophiline, on a quiet evening with a spray pump. For mildew one of the best remedies is flour of sulphur dusted over the affected parts as soon as it makes its appearance. A weak solution of Bordeaux sprayed over the bushes early in the winter and early spring will often prevent these ills to which the rose is subject. Another effective remedy is to take two ounces of slacked lime, mix with one pound of sulphur, place in a pot, add two gallons of water, boil for three or four minutes, until the sulphur, which is insoluble in water, enters into solution through action of the lime, forming a lime sulphur solution. When cold, dilute one part of this solution to five parts water and spray affected parts thoroughly.

For the convenience of our customers we have arranged most of our roses in alphabetical order, designating the class to which they belong by abbreviations.

ABBREVIATIONS

H. P. — <i>Hybrid Perpetual or Remontant Roses.</i>	H. N. — <i>Hybrid Noisette Roses.</i>
H. T. — <i>Hybrid Tea Roses.</i>	Cl. — <i>Climbing Roses.</i>
T. — <i>Tea Roses.</i>	B. — <i>Bourbon Roses.</i>
N. — <i>Noisette Roses.</i>	Poly — <i>Polyanthus.</i>

SPECIAL COLLECTIONS OF ROSES

Each season we make up special collections of the standard varieties of roses and sell in lots of 6, 12 or more at special prices. These collections are made up of either all roses of the same color or of assorted colors. These collections will give you a good assortment of the choicer varieties at reduced prices. Watch for our special collection if interested.

ROSE CATALOGUE

If interested in Roses write for our beautifully illustrated 25 page Rose Catalogue. The full description of the roses and illustrations are omitted from this catalogue, only a Table of colors and an Index being given.

TABLE OF COLORS

For the convenience of our customers we have arranged below a table of colors which will be found convenient in selecting varieties. Page numbers refers to Special Rose Catalogue.

PINK.				Class	Page
Hardy varieties.				T	14
				HT	11
				HT	11
Paul Neyron, deep rose pink	HP	17	Winnie Davis, apricot-pink	HT	13
Mrs. John Laing, pink	HP	17	Wm. Shean, purest pink	HT	13
Magna Charta, pink	HP	16	Burbank, pink	Bourbon	14
				T	14
				HT	14
				HT	18
				T	15
				Bourbon	16
				HT	17
				Moss	14
				Moss	15
				Moss	18
				HT	10
				HT	10
				HT	12
				HT	10
				HT	12
				HT	10
				HT	10

PINK AND FLESH COLORED ROSES.

Everblooming, half hardy varieties.

Mad. Caroline Testout, pink	HT	16
Pharisaer, rosy-flesh	T	12
Prince de Bulgarie, rosy-flesh	HT	13
Belle Siebrecht, bright pink	HT	13
Dean Hole, silvery-carmine	HT	10
Reine Karola de Saxe, pearly pink	HT	13
My Maryland, intense salmon-pink	HT	12
Maman Cochet, pink	T	16
La France, pink	HT	16
Killarney, pink	HT	16

TABLE OF COLORS, Continued.

	Class	Page		Class	Page
PINK CLIMBERS.			RED CLIMBERS.		
Hardy.			Crimson Rambler, red	Poly	14
Dorothy Perkins, shell pink	Wich	14	Philadelphia Rambler, red	Poly	17
Pink Rambler	Poly	17	Reine Marie Henriette, red	T	17
Queen of Prairie, rosy red	Prairie	17	Meteor, dark red	HT	17
Blue Rambler, purplish red	Poly	13	Wootton (Souv. de Wootton), red	HT	18
			Caroline Goodrich (Cl. Gen. Jacq.) red	HT	14
VARIEGATED.			WHITE ROSES.		
Everblooming, half hardy varieties.			Everblooming and Moss.		
Rainbow, coral pink-striped red	T	17	Frau Karl Druschki, best pure white	HP	15
Beauty Inconstante, variable	T	13	Kaiserin Augusta Victoria, white tinted		
			with yellow	HT	16
SALMON-PINK SHADES.			Molly Sharmon-Crawford, snowy white	HT	12
Everblooming, half hardy varieties.			White Killarney, waxy white	HT	18
Lyon Rose, red-salmon-chrome yellow	Pernet.	11	Maman Cochet (Priscilla), white	T	16
Mad. Leon Pain, silvery pink-salmon	HT	12	Mad. Hoste, ivory white to canary yellow	T	16
Joseph Hill, salmon-pink	HT	11	Bride, white	T	14
Countess of Gosford, salmon-pink	HT	10	White La France, white	HT	18
Mad. Abel Chatenay, salmon-pink	HT	11	Coq. des Alps, white tinges with carmine	HN	14
Bon Silene, salmon-rose	T	14	Bessie Brown, creamy white, sometimes flesh pink	HT	10
Mrs. Arthur Robt. Waddell, reddish-salmon	HT	12	Florence Pemberton, creamy white, suffused pink	HT	10
			Mildred Grant, silvery white, suffused pink	HT	12
CLIMBING-SALMON AND COPPER COLOR.			Per. White Moss, white	Moss	17
Glorie de Dijon, salmon-orange	HT	15			
Gold of Ophir (Ophire), salmon-yellow	N	15	CLIMBING WHITE.		
Beauty of Glazenwood, bronze-red-yel	N	13	White Rambler, white	Poly	18
			Mad. Alfred Carriere, creamy white, one of the best	HN	16
BRIGHT RED ROSES.			Cl. Kaiserin Augusta Victoria, white	HT	16
Hardy varieties.			Baltimore Belle, white, very hardy	Prairie	13
Hugh Dickson, brilliant crimson	HP	11	Banksia, white	Banksia	18
Ulrich Brunner, red	HP	18	White Cherokee, single white	Cher	14
Jubilee, red	HP	16	La Marque, white	N	16
Gen. Jacqueminot, red	HP	15			
American Beauty, red	HP	13	YELLOW SHADES.		
Glorie de Margottin, red	HP	15	Hardy varieties.		
Baby Rambler, red	Poly	13	Soliel d'Or, orange-yellow, reddish-gold	HP	18
			Harrison's Yellow, bright yellow	Aus.-briar	15
Half Hardy and Everblooming.			Persian Yellow, bright yellow	"	17
Jonkheer J. L. Mock, red-salmon-pink	HT	9	Glorie de Lyonnaise, yellow	HP	15
Gen. MacArthur, velvety scarlet	HT	15			
Rhea Reid, red	HT	13	YELLOW SHADES.		
Richmond, red	HT	18	Everblooming, half hardy varieties.		
J. B. Clark, scarlet-maroon	HT	11	Sunburst, cadmium-yellow, orange center	HT	10
Lady Battersea, cherry-crimson	HT	11	Mad. Ravary, deep yellow	HT	12
Liberty, red	HT	16	Marquise de Sinety, buds carmine-ocher, flowers ocher-yellow tinted reddish	HT	12
Juliet, rosy red	HB	9	Rayon d'Or, yellowest of yellow	HB	9
Papa Gontier, bright red	HT	17	Jean Note, chrome yellow	HT	11
Marshall P. Wilder, red	HT	17	Harry Kirk, deep sulphur-yellow	HT	11
Helen Gould (Balduin), red	HT	15	Franz Deegan, yellow-orange	HT	15
Geo. C. Waud, vermillion-red suffused orange	HT	11	Etoile de Lyon, yellow	T	15
			Sunset, yellow	T	18
DARK RED.			Perle des Jardins, yellow	T	17
Half hardy, everblooming.			Francisca Kruger, coppery-yellow	T	15
George Dickson, the deepest velvety-black-scarlet-crimson	HT	8			
Edward Mawley, deep velvety crimson	HT	8	YELLOW-COPPER COLOR-APRICOT YELLOW.		
Gruss an Teplitz, velvety crimson	HT	15	Lady Hillingdon, deep apricot-yellow, long buds	HT	9
Meteor, dark red	HT	17	Duchess of Wellington, coppery-yellow, saffron-yellow	HT	8
Chateau de Clos Vougeot, velvety-blk scarlet	HT	9	Dorothy Page Roberts, coppery rose	HT	10
			Mad. Constant Soupert, deep yel-pink	T	12
Hardy Varieties.					
Prince Camille de Rohan, dark red	HP	17			
Fisher Holmes, red-scarlet-velvety-crimson	HP	15			
Alfred Colomb, carmine-crimson	HP	13			

TABLE OF COLORS, Continued.

	Class	Page		Class	Page
Mad. Melanie Soupert, saffron-yellow, carmine-pink-----	HT	12	CLIMBING YELLOW.		
Mrs. Aaron Ward, yellow salmon-----	HT	12	Yellow Rambler-----	Poly	18
Betty, coppery rose-----	HT	10	Reve d'Or, apricot yellow-----	N	17
Safrano, apricot yellow-----	N	18	Wm. Allen Richardson, coppery yellow N		18
Lady Roberts, apricot yellow shaded orange-----	T	11	Chromatella (Cloth of Gold), yellow--	N	14
			Perle des Jardins Cl, yellow-----	N	17
			Marechal Niel, yellow-----	N	16

Tree Roses

The Standard Rose, generally known as the Tree Rose, is made by budding or grafting the desired variety on a tall straight stem which has been grown and trained for at least one year for that purpose, usually four to five feet in height, using a hardy variety for the stem.

One great disadvantage of the Tree Rose in the colder sections has been its liability to freeze during the winter, but since planters have become more familiar with its habits this can usually be overcome by wrapping the stem in winter with straw or some other material.

It is usual to grow the standards, budded or grafted, to hybrid-perpetuals, hybrid-teas, or tea roses, but lately many are made from Rambler and Wichuriana types of roses, which forms a somewhat weeping variety. The Baby Ramblers do especially well in tree form.

The following constitute the best varieties we try to carry in stock:

Frau Karl Druschki, white
La France, pink

Reine Marie Henriette, red
Baby Rambler, red
Gen. MacArthur, red
Gruss an Teplitz, dark red
J. B. Clark, red
Pharisaer, pink
Mad. Alfred Carriere, white
Mad. Caroline Testout, pink
Kaiserin Augusta Victoria, white
Betty, coppery-yellow
Jonkheer J. L. Mock, red-salmon
Mrs. John Laing, pink

And the following of the Rambler type for weeping effect:

Dorothy Perkins, pink; Crimson Rambler.

In ordering it is best to simply state colors and allow us to choose the best we have of the color. If you order a particular variety state whether we shall substitute another of same color and habit if sold out of the one desired, as late in the season we are liable to be sold out in many varieties.

HALF STANDARDS.

We often have in stock a number of Half Standards grown in same manner but not so tall.

Shasta Daises

(*Chrysanthemum leucanthemum hybridum*)

Originated by Luther Burbank, from whom we secured our supply. Too well advertised by this time to need any long description. A marvelous combination of size, grace, abundance and general effectiveness of flowers, which are borne on long, clean, strong stems; flowers snowy white or cream-colored, 4 to 5 inches across.

Alaska (New). The whole plant, roots, stems, leaves, buds and flowers are gigantic, but compact and graceful in every respect. The marvelous combinations of size, grace, glistening whiteness, abundance and general effectiveness of the flowers, which are borne on long, clean strong stems, will place it at once far ahead of all others of its class.

Under the ordinary field cultivation given *Chrysanthemums*, the flowers average 4½ to 5 inches across on stems 2 or 3 feet long; with 38 to 42 wide petals and a very small disk; with proper disbudding are produced perpetually, though more abundantly at the usual blooming season.

California [New]. Another giant in growth, and in most respects similar to Alaska, but the buds and half-opened flowers are of a most pleas-

ing clear, pale lemon-yellow, with two rows of petals. When a day or two old these gradually change to pure white. The combination is exceedingly pleasing. The flowers average 4 to 5 inches across, and, with ordinary care, are produced perpetually. The common varieties of *Chrysanthemum maximum* are as weeds when compared with these.

Westralia [New]. This is distinguished by its branching habit, which is a strong characteristic in one of the parents of the whole Shasta Daisy Family—the Japanese Field Daisy [*Chrysanthemum leucanthemum Nipponicum*].

Well grown plants are 3 to 4 feet high and nearly as much through; buds and nearly opened flowers are of a pleasing cream-color, semi-double, 3 to 4 inches across and are produced on fairly long stems in bewildering profusion.

Rudbeckia

"Golden Glow" or "Cone Flower." Among the most valuable hardy plants, growing from 1½ to 7 ft. in height, producing showy golden yellow flowers. Very free flowering; useful for cut flowers.

R. laciniata. "Golden Glow." A distinct, tall-growing, hardy perennial, from 6 to 7 ft. high. Foliage deeply cut, handsome bright green; flowers very double, rich golden yellow, 2 to 3 inches in diameter, borne on long, smooth stems, forming for the tall plant a solid head of bloom. Excellent for cutting.

SPRAY CALENDAR.

Spraying Schedule for the Year	Orchard Practice with Spraying	Kind of Sprays Used	Time to Do the Spraying	Notes
FALL— Anthraxnose Apple scab (fungus) San Jose scale	<p>Cut out badly diseased and dead branches</p> <p>Destroy diseased and fallen leaves by burning or cover them up by plowing.</p> <p>Cut down and burn all infested plants of no economic value.</p>	<p>Use 4-4-50 bordeaux mixture before the fruit is gathered, or 6-4-50 bordeaux or lime-sulphur (winter strength) immediately after fruit is gathered.</p> <p>Lime-sulphur (winter strength.)</p>	<p>Before the fall rains begin. When the diseases are abundant two applications three weeks should be made</p> <p>After the leaves have fallen</p>	<p>Anthraxnose and apple scab fungus both cause disease of the fruit held in storage. Spraying the fruit before picking apparently controls the disease in the orchard and prevents the spread of the fungi in stored fruit.</p> <p>Every portion of the plant must be coated, even the smallest twigs.</p>
LATE WINTER— Annual House Cleaning Powdery mildew Red spider Brown mite Codling moth Woolly aphis Aphides—green of green and brown San Jose scale	<p>Prune the trees, removing all dead and diseased parts of tree. Clean out the winter and scrape the flakes of bark from trunks of all trees. But the work must be done in a high at once. This work should precede spraying.</p>	<p>Lime-sulphur (winter strength)</p>	<p>Do the spraying as the buds begin to open.</p>	<p>Removing all diseased and dead parts and scraping the flakes off from the trunk and larger branches, exposing all hibernating pests so that the spray will reach them, should be practiced. Every portion of the plant must be coated, even the smallest twigs.</p>
SPRING— Apple scab (fungus) Leaf hopper Thrips Red spider Brown mite Aphides—Green, brown, black and woolly Codling moth	<p>Band the trees with tangle-foot.</p> <p>Remove bands to catch codling worms and destroy the worms.</p>	<p>Bordeaux 4-4-50 or lime-sulphur 1-32.</p> <p>Black Leaf 40 1 gallon, whale oil soap 40 lbs., water 1000 gallons</p> <p>(2) Black Leaf 40 1 gallon, lime-sulphur 32 gal, water 1000 gal.</p> <p>Arsenate of lead 1-50 or 2-50</p>	<p>Apply while the terminal buds of flower clusters are opening.</p> <p>Follow the calyx spray for the codling moth. Follows application of bordeaux, but cannot be mixed with it.</p> <p>(2) Before the flower buds open.</p> <p>Before the calyx closes</p>	<p>Bordeaux gives the better results, but only controls the fungus.</p> <p>High pressure and a driving spray are required to thoroughly wet every portion of the plant. Careful work in applying the spray is the only practice that will give the desired results.</p> <p>(2) Controls both apple scab and insect pests.</p> <p>Lime-sulphur 1-32 and arsenate of lead 2-50 may be mixed; controls both scab and codling moth.</p> <p>This is the most important of the sprayings for codling moth. Use a driving spray nozzle. If the trees are drenched the weaker spray may be used, otherwise use more poison.</p>
SUMMER— Codling moth Apple scab San Jose scale Red spider and leaf hopper Powdery mildew		<p>Arsenate of lead 2-50</p> <p>Lime-sulphur 1-32 or bordeaux 4-4-50</p> <p>Black Leaf 40 1 gal., whale oil soap 40 lbs., water 1000 gallons.</p> <p>Sulphide of iron 8-100</p>	<p>[1] Spray June 1-10 [2] Spray Aug. 1 to 10.</p> <p>After the apples become smooth.</p> <p>As soon as insects appear and before web becomes too thick (red spider), or adults become winged [hopper]</p> <p>As soon as the disease appears.</p>	<p>The June spraying may be omitted under the most favorable conditions, but is recommended since the application is the cheapest form of insurance. Use a good pattern mist spray nozzle.</p> <p>Spray lower sides of the leaves. Requires a high pressure and very careful work. Wet every leaf.</p> <p>Thorough spraying and usually two or three applications necessary where disease is abundant.</p>

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