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U.S. Department of Agriculture
Bureau of Plant Industry

Baltimore Nurseries

Established 1850

High-Grade Fruit
Shade *and* Ornamental

TREES

Hardy Shrubs, Evergreens

Vines *and* Roses

Franklin Davis Nursery
Company

BALTIMORE, MARYLAND

Fruit and Ornamental Trees, Shrubs, Vines and Plants

CULTIVATED AND FOR SALE BY

FRANKLIN DAVIS NURSERY CO.

BALTIMORE, MD.

IT IS once more our pleasure to present to our friends and patrons a new edition of our Descriptive Catalogue of Fruit and Ornamental Trees, etc., and in doing so we tender to them our sincere thanks for the many expressions of encouragement and substantial aid they have given us. We will endeavor in the future, as we have in the past, by strict personal attention to business, to merit their patronage and good will.

In 1877, at the exhibition of the American Pomological Society at Baltimore, we were awarded a "Wilder" medal for the largest and finest collection of Apples. With these and other evidences of our success, and the many encouraging words of our friends, we do not feel like relaxing our efforts, but, on the other hand, are induced to push on with renewed energy; and while we are adding to our acres we are also watching closely all the new fruits that are brought to notice throughout the country. If their merits seem to justify it, we add them to our list, and at the same time discard those that have proved less valuable. Our Catalogue is, therefore, under revision all the time, and every succeeding list that we make is an improvement upon the one preceding it.

There are three considerations that claim the attention of purchasers of nursery stock: **First, it is of the greatest importance to procure a fine article, true to name.** Secondly, it is of vital importance to secure good, **healthy stock**, for without a healthy plant to begin with, we have but a poor chance of success; one healthy stock is worth a dozen sickly ones. Thirdly, success often depends on **careful packing**; without it thousands of dollars' worth of trees are annually lost.

To secure the first, we have tested in our specimen orchards nearly all the leading varieties of fruit, and our orchards, being planted in different localities, enable us to judge the merits of the fruit and its success in different soils and situations. We will propagate largely only of sorts we know will succeed in the section in which we intend selling them. Secondly, we will send out nothing but good stock. Thirdly, our packing will be done in the best manner, and by experienced hands, so as to insure the safe transit of the trees.

A change has taken place in the labor system of the Southern states, and with it comes a change in the pursuits of many of their people. Many are looking about undecided as to what they shall undertake. We believe that fruit-growing offers greater inducements than anything else. Under this conviction we have gone largely into the business ourselves, and say to others, "go and do likewise," and, if you give it proper attention, we will guarantee satisfactory returns.

Maryland is already noted for her extensive peach orchards, which are indeed a large and profitable interest in the state; yet, there is room to extend them far beyond their present proportions, and with great certainty of profitable results. Other fruits are very properly receiving more attention throughout the state.

Virginia, from her climate, soil and geographical position, must at no distant date become famous for the products of her orchards; and whosoever does the most to bring this about must be looked upon as a public benefactor. To this end we aspire.

FRANKLIN DAVIS NURSERY CO.

N. E. Cor. Baltimore and Paca Sts., BALTIMORE, MD.

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 addressed to us be written out in a legible style, and the name in full, that no mistakes 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, the result of a 57 years' business career, is our only guarantee to our customers.

When orders are received specifying the kinds wanted, the 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 case we will exercise our best judgment in making a judicious and profitable selection of the standard sorts and of 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 with whom we have no acquaintance will be accompanied with the cash or a suitable reference.

Our terms are **invariably cash**, or a negotiable note of short time, satisfactorily endorsed, made payable at bank.

To all the points where the express companies have an office we can send trees marked C. O. D. This will save the purchaser, as well as ourselves, some trouble.

When the cash accompanies the order, no charge is made for packing.

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, and the roots packed so as to carry safely.

HINTS ON TRANSPLANTING

The proper season for transplanting fruit trees is during the months of February, March and April in the spring, and October, November and December in the autumn.

The ground should be well prepared by at least two good plowings; let the subsoil plow follow in the furrow of the other, loosening up the earth to the depth of 12 to 18 inches. If the ground is not in good condition, it should be made so by the application of a considerable portion of well-decomposed manure, or fertilizer of some substantial kind.

Dig the holes sufficiently large to admit the roots, giving them their natural position as near as practicable. Use the surface soil for filling in, having it first well pulverized. Avoid deep planting, for it is decidedly injurious to the tree, and, when excessive, may cause its death, or a weak and feeble growth. Plant no deeper than it stood in the nursery.

Immediately before planting, all the bruised or wounded parts should be pared off smoothly; then dip them in a bed of mud, which will coat over every part evenly, and leave

no portion in contact with the air, which, accidentally, might not be reached by the earth in filling the hole. If the trees have been out of the ground for a long time, and have become dry and shriveled, they should be immersed in water for 24 hours before planting. Fruit trees sometimes remain with fresh and green branches, but with unswollen buds, till midsummer; instead of watering such at the roots, let the body and branches be wet every evening regularly, about sundown, with a watering pot; this will, in nearly all cases, bring them into active growth.

However carefully trees may be taken up, they will lose a portion of their roots, and if the whole top is allowed to remain, the demand will be so great upon the roots that in many cases it will prove fatal to the tree. To obviate this, it becomes necessary to shorten in the branches, which should be done at the time of planting. If the tree has lost the greater part of its roots, a severe shortening-in of the branches will be necessary; if only a small portion of its roots has been cut off, more moderate pruning will be sufficient.

Mulching is another very important matter, particularly in this climate, where we frequently experience severe midsummer droughts. It consists in covering the ground about the tree with a coarse litter, straw, leaves, shavings, or anything that will shade the ground and prevent evaporation. It should be done early in the spring, and will, in most cases, obviate the necessity of watering at the roots.

Cultivating.—While it is very important to have trees well planted, it is doubly important to have them well cultivated afterwards. Give your trees for a few years a clean, mellow and fertile soil, and they will bend under copious loads of fine fruit, and yield to the cultivator his reward. Dwarf Pears, more than any other trees, require a deep, rich soil, and clean cultivation. In cultivating, great care should be taken not to injure the trees by rubbing the bark off. The best crops for an orchard are those requiring summer culture—such as potatoes, beans, etc.

Pruning.—We recommend the greatest care and moderation in this operation, believing, as we do, that upon the whole there is more injury done by the use of pruning instruments in unskilled hands than would result from its entire neglect. Some of the objects sought are to diminish the thick growth, to increase the vigor of the branches, to admit light and air, and to form a well-shaped top. Occasional pinching or cropping off of the ends of branches to give the tree proper shape, and removing those that cross or crowd each other, will be all that will be needed by most trees. Peach trees would be greatly benefited by an annual shortening-in of the branches, say one-half of the previous year's growth; this may be done at any time after the fall of the leaf until the buds commence swelling in the spring; they

never need any thinning out of the branches. Dwarf Pears also need careful attention annually, to keep them in shape, by cutting back the rampant and straggling shoots; they should be pruned down instead of up, never allowing them to grow high, or the top will become too heavy for the roots, and increase the danger of blowing down.

PROPER AGE AND SIZE OF TREES FOR TRANSPLANTING

Experience has taught observing planters that a small, young tree, set at the same time, will in a few years overtake and pass a larger one, and continue more vigorous and productive. Large trees are necessarily or unavoidably more injured in digging than small ones. The latter can be moved with their system of roots almost entire. This is another reason why there is less risk in planting small trees.

DISTANCES FOR PLANTING

Standard Apple, not less than.....	33 feet apart each way.
Standard Pear and large-growing Cherry.....	20 " " "
Duke and Morello Cherries.....	18 " " "
Standard Plum, Peach, Apricot and Nectarine.....	15 to 20 " " "
Quince.....	12 " " "
Dwarf Pear, Apple and Cherry.....	10 " " "
Dwarf Cherries of the Duke and Morello varieties.....	8 " " "
Currants, Gooseberries and Raspberries.....	4 to 5 " " "
Grapes.....	6 to 10 " " "
Asparagus, field culture.....	1 foot by 4 or 5 feet.
" garden culture. Beds.....	12 inches by 12 inches each way.
Strawberries, field culture.....	1 foot by 3½ feet.
" garden culture.....	1 foot by 18 inches.

NUMBER OF TREES ON AN ACRE AT VARIOUS DISTANCES

3 feet apart each way.....	4,840	20 feet apart each way.....	108
4 " " ".....	2,722	25 " " ".....	69
5 " " ".....	1,742	30 " " ".....	48
6 " " ".....	1,210	33 " " ".....	40
8 " " ".....	680	35 " " ".....	35
10 " " ".....	435	40 " " ".....	27
12 " " ".....	302	45 " " ".....	21
15 " " ".....	193	50 " " ".....	17
18 " " ".....	134		

NUMBER OF PLANTS REQUIRED TO PLANT AN ACRE

GRAPE-VINES—		GOOSEBERRIES—	
8 by 6 feet apart.....	907	6 by 3 feet apart.....	2,420
8 by 7 " ".....	777	6 by 4 " ".....	1,815
8 by 8 " ".....	680	RASPBERRIES—	
9 by 8 " ".....	605	6 by 3 feet apart.....	2,420
9 by 9 " ".....	538	7 by 3 " ".....	2,075
9 by 10 " ".....	484	BLACKBERRIES—	
10 by 8 " ".....	545	6 by 3 feet apart.....	2,420
10 by 10 " ".....	435	7 by 3 " ".....	2,075
CURRANTS—		STRAWBERRIES—	
6 by 3 feet apart.....	2,420	3 by 1½ feet apart.....	9,658
6 by 4 " ".....	1,815	3½ by 1½ " ".....	8,260

Extracts from Letters

Car of shrubbery received and unloaded November 19 from your Nursery. Stock was carefully packed and received in first-class condition, and is the best lot of shrubbery and trees that I have handled while in the landscape business. I thank you kindly for the care taken and for the stock you shipped. Will you kindly send to my address the price charged for each variety sent, as I am planting on different divisions of the P. R. R., and must charge and make report as material is furnished. I will thank you very much if you will send prices at your earliest convenience.—J. F. SMITH, P. R. R. Gardener.

In a letter just received from Mr. Converse, acknowledging carload of trees, he says: "Manager Drew spoke very enthusiastically of the splendid specimens shipped, and from what little I know about these things I should judge that you had obtained some very fine plants and trees." There were other trees besides yours, but yours were O. K.—E. H. BISSEL.

I can recommend the Franklin Davis Nursery Company as a thoroughly reliable firm. They furnish the grower splendid trees, and roots to grow them (a fault with many nurserymen not giving sufficient roots). I have always found their stock No. 1 and true to name.—THOMAS J. VICKERS.

The 1,500 hedge roots received in first-rate shape, and wish to say they are the finest 2-year-olds I have ever handled. Not one faulty root in the whole lot.—CLEMENT HENLY.

Fruit Department

SELECT APPLES

"The Apple," says Downing, "is the world-renowned fruit of temperate climates." Our list embraces the best and most popular varieties known. Of course, it runs into too great a variety for any one orchard for profit; besides, there is probably not a spot in the country where they would all 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 an experience of many years in the nursery and fruit-growing 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. (American Summer Pearmain.) Medium size, oblong; nearly covered with streaks and dots of red; flesh tender, juicy and rich, subacid flavor; fine. Tree a slow grower, but bears early and abundantly; continues in use for several weeks. One of the very best Apples. Last of July to August.

Bough. (Sweet Bough.) Large, roundish, sometimes conical; pale yellow; flesh white, very tender, with an excellent, sweet flavor. Tree moderately vigorous and very productive. Best sweet Apple of its season. July.

Benoni. Medium size, round; deep red; flesh yellow, tender, subacid. An excellent Apple. July.

Carolina June. (Carolina Red June.) An early bearer; productive; fruit medium size, dark crimson; flesh white, very tender. Fine-grained, juicy, subacid. June and July.

Early Harvest. Rather large; round; yellow; flesh nearly white, tender, juicy, crisp, with a rich, sprightly subacid flavor. Tree a moderate grower and very productive. Taking all its qualities into consideration, this has no superior among early Apples. June and July.

Early Ripe. This fine Apple, coming as it does immediately after the Early Harvest, fills a want long felt by the orchardist. Its large size, handsome appearance and good bearing qualities combine to make it the most profitable market variety of its season. The tree is hardy and of vigorous growth; fruit large, yellowish white; flesh white, juicy, subacid; fine for the table or for cooking. First of July.

Early Strawberry. Medium size; nearly covered with red; flesh tender, with a mild, fine flavor. Tree a moderate grower and good bearer. July and August.

Fanny. Handsome, slightly conical fruit of deep rich crimson; tender, juicy, subacid. Begins to ripen just before Red Astrachan is done; keeps better and is of better quality.

Fourth of July. A German Apple introduced by C. F. Jaeger, of Columbus, Ohio. Very valuable for cooking and market. Fruit medium, roundish oblate, conical, slightly ribbed; whitish yellow, striped and splashed with bright red. It has been thoroughly tested and found to be one of the very best early Apples. Matures early in July.

Horse. Large; yellow; flesh coarse, subacid; fine for cooking and for market. Tree vigorous. August.

SUMMER APPLES, continued

Red Astrachan. Rather large, approaching conical; covered with deep crimson, overspread with a thick bloom; flesh juicy, rich, acid. From its earliness, handsome appearance, its excellent culinary qualities, and the vigor of the tree, it is worthy of general cultivation. July.

Starr. The original tree of this most valuable Apple was found on the grounds of Judge John Moore White, of Woodbury, N. J., which property afterwards came into possession of Mrs. Starr, whose son, John Starr, while in the Legislature with the late William Parry, about 1865, gave him scions from which he grew and fruited it under the name of Starr Apple. It has proved a very valuable and desirable early market Apple, having created for itself such a reputation that it is always sought after and bought up by fancy grocers at high prices, even when other good varieties are selling low. The tree is a good grower, comes to fruiting young, and produces abundant crops annually. Fruit is very large, 11 to 12 inches around; showy pale green, frequently with handsome blush on sunny side; very early, marketable first week in July, and will continue in good condition until September. An excellent shipper for so early an Apple, having carried to California in good condition. Flavor pleasant, subacid. A very superior Apple for cooking or eating.

Tetofsky. A handsome Russian variety, very hardy. Tree vigorous and productive; comes into bearing early. Fruit medium size; skin yellow, striped with red; flesh white, fine-grained, acid. July.

Williams' Early Red. Large; red, showy. Early to medium; productive. Good for cooking or eating; excellent for shipping or near-by market.

Yellow Transparent. A Russian Apple of great value. Above medium size, roundish, oblate, slightly conical; skin a clear white, changing to pale yellow when fully matured. A remarkably early bearer; very prolific; tree a vigorous and upright grower. Gives general satisfaction, does well everywhere, and ripens among the earliest. July. (See illustration on page 7.)

AUTUMN APPLES

Bismarck. Bears fruit on 2-year grafts. Of finest quality, finest color, dwarf, and extremely prolific; most suitable Apple for hot climate, yet the hardiest known. A prominent firm boldly asserts that 1-year grafts bore as many as eight fruits, that 2-year-old trees seldom fail to produce good crops, and that the tree is an excessive bearer and extremely hardy. The tree is of short, stocky growth, and when laden with handsome fruit at one or two years old, is a pretty pot-plant for table or greenhouse decoration. The tree is a hardy, vigorous grower, and the apples are very sound, solid and heavy. It is especially recommended for gardens when grafted on Paradise stock. Fruit is large, brilliantly colored.

Buckingham, or Winter Queen. Large to very large; greenish yellow, mixed and striped with crimson or purplish red; flesh yellowish, breaking tender, juicy, mild sprightly, subacid. A handsome, healthy tree; comes in bearing very early, and is very productive. This Apple is cultivated over a great portion of the southern and western states, and is everywhere very profitable and popular, succeeding in almost every locality. We consider it one of the most valuable sorts. October to January.

English Red Streak. Medium size; yellow, streaked with dark red; flesh firm, yellow, fine-grained, rich and juicy. A good fall Apple. Sept. to Dec.

Fall Pippin. Very large, roundish; skin smooth, yellowish green, becoming rich yellow when ripe; flesh yellowish, firm, becoming tender, rich, aromatic, excellent; valuable for cooking and market. Succeeds well everywhere. September to December.

Gravenstein. Large, roundish; striped with red; flesh tender, juicy, very rich, subacid, high flavor. Productive, handsome and excellent. Fine in all localities. August.

Golden Sweeting. Rather large; rich yellow; flesh juicy, tender and sweet. August.

Jefferis. A fair and handsome fruit of excellent quality, in use all of September; fruit medium, oblate; yellow, loaded and splashed with crimson, and thickly covered with large whitish dots; flesh white, tender, juicy, with a rich, mild, subacid flavor; very good. Sept.

STARR APPLE

AUTUMN APPLES, continued

Jersey Sweeting. Medium-sized; striped with red; flesh whitish, very sweet, juicy and tender; flavor very good. Succeeds well in all localities. Sept. and Oct.

Maiden's Blush. Rather large, oblate, smooth, regular, with a fine, evenly shaded red cheek, or blush on a clear pale yellow ground; flesh white, tender, sprightly, with a pleasant subacid flavor. This variety forms a handsome, rapid-growing tree with a fine, spreading head, and bears large crops. Aug. to Oct.

Ohio Nonpareil. This is among the best dessert Apples of the season. It is declared to be "better than the best." Fruit large to very large, oblate, very handsome; yellow, covered with bright red; flesh yellowish, tender, fine-grained, juicy, subacid; first quality for table or cooking. September to December.

Oldenburg. (Duchess of Oldenburg). A Russian variety of very handsome appearance and great value; tree very hardy, vigorous, and an abundant bearer; fruit medium to large, golden yellow, nearly covered with streaks of crimson; flesh tender, juicy, pleasant. Valuable for the market. August.

Red Bietigheimer. German origin. Fruit large to very large, roundish, inclining to conical; skin pale, cream-colored ground, mostly covered with purplish crimson; flesh white, firm, subacid, with a brisk, pleasant flavor; tree a vigorous grower and abundant bearer; worthy of general cultivation. September.

Rambo. There is not, perhaps, another Apple named in this catalogue so widely disseminated, or which was once so generally esteemed as this; but recently, in some localities, the trees have become less vigorous than formerly. They grow well until three or four years old, then, from some cause unknown to us, commence declining, and do but little good afterwards; but where it still succeeds it is one of the best Apples, and should be planted. Fruit above medium size; skin smooth, streaked with dull yellowish red; flesh greenish white, very tender, with a rich, spicy, subacid flavor. October to January.

Summer Rambo of Pennsylvania. Very large, striped with red, on yellow ground; flesh mild, subacid, with an agreeable flavor. September.

Smokehouse. Fruit large, oblate, striped with red on yellow ground; flesh yellowish white, firm, juicy, crisp and rich, with a fine, aromatic, subacid flavor; unsurpassed for culinary purposes; productive; should have a place in every orchard. September to Dec.

Western Beauty (Big Rambo, or Ohio Beauty). Very large; pale yellow, striped and splashed with bright red; flesh yellow, tender, juicy; never water-cored and not disposed to rot; one of the best fall Apples. September to December.

YELLOW TRANSPARENT (See preceding page)

WINTER APPLES

American Golden Russet (Bullock's Pippin, or Sheep-Nose). Small, roundish ovate; skin dull yellow, with a very thin russet; flesh yellowish, very tender, juicy, with a mild, rich, spicy flavor; very productive. A favorite in flavor with many Apple lovers. October to January.

Albemarle Pippin. We consider this, Yellow Newtown Pippin and Brooks' Pippin identical. Perhaps no Apple stands higher in the market than this, or brings as high a price; others may be more profitable to the grower. It succeeds finely in the Piedmont region and in many parts of the valley of Virginia, though in poor, cold soils it will not succeed. It needs a deep, warm soil to bring it to perfection. Where it does well, we would still advise planting it largely for market. Fruit large, round, lop-sided, ribbed and irregular; surface smooth, yellowish green, sometimes bronzy, becoming yellow when ripe; flesh yellow, firm, brittle, juicy; flavor acid, rich, agreeable; tree a slow grower in the nursery; does not succeed so well below the Piedmont country. January to April.

WINTER APPLES, continued

Arkansas Black. Fruit large, almost black; tree a vigorous grower. Fruit smooth and handsome, very dark; flesh yellowish, slightly subacid and crisp. A splendid keeper.

JONATHAN (See opposite page)

Bellflower. Large, oblong, ovate; skin pale yellow, with sometimes a blush; flesh very tender, fine-grained, crisp, juicy, acid, becoming subacid; does not succeed in tide-water, nor south of James river, except in the mountain country. A general favorite where grown. October to January.

Baldwin. Large, roundish, narrowing a little to the eye; skin yellowish in the shade, but nearly covered and striped with red and orange in the sun; flesh crisp, juicy and subacid, rich; tree a vigorous grower and bears abundantly; succeeds well in western Maryland and the mountains of Virginia, but drops its fruit too early in or near the tide-water section. October to January—later in the mountains.

Bentley's Sweet. Supposed origin, Virginia; fruit medium, roundish, flattened at ends, sometimes slightly oblique, and sometimes sides unequal; pale, yellowish green, shaded with pale red, and moderately sprinkled with light and brown dots; flesh fine, whitish, compact, sweet, somewhat honeyed flavor; tree moderately vigorous, hardy, good bearer and keeper; very good. January to May.

Bonum. Large, oblate, color light to dark red; flesh yellow, firm, breaking, fine-grained; flavor rich, subacid, first quality for dessert; a most excellent apple; originated in North Carolina. A particularly valuable variety for the South. Deserves more general attention. October to January.

Ben Davis. Originated in Kentucky; tree remarkably healthy, vigorous, and an abundant bearer; fruit large, handsome, striped; flesh whitish, tender, juicy, subacid; a very profitable market variety; should be in every orchard. Keeps till midwinter or later.

Berry Red. A chance seedling from the farm of John Berry, of Meadow Creek, Ky. Large to very large; color dark, bright, shining red; form oblate; flesh cream color; quality good, flavor excellent and retained through its long keeping season; subacid, rich, juicy. As a market variety and long keeper it is second to none; an enormous bearer. In 1872, 47 bushels were picked from the original tree, and in 1874 over 76 bushels. Many years it has averaged 40 bushels. A noble winter Apple; deserves a place in every collection.

Delaware Late Winter, or Lawver. A valuable winter Apple, especially in the South. Strong grower and abundant bearer; fruit medium to large, bright red, fine texture, subacid, juicy; long keeper. It promises to gain the standing in the South that Baldwin has in New England and Northern Spy in western New York. January to March.

Dominie. Large size, flat, striped with red; flesh white, juicy, firm, mild, subacid, sprightly, pleasant flavor; keeps till midwinter; a rapid grower and prodigious bearer. Is well deserving of extensive cultivation.

Esopus Spitzenburgh. One of the standard northern winter apples, but not valuable here on account of the fruit specking on the trees; besides, it is a poor bearer.

Fallawater. Large, roundish, slightly ovate, conical, very regular, smooth; skin yellowish green, with a dull red cheek; flesh greenish white, fine-grained, with a mild, slightly subacid flavor; tree a strong grower and good bearer; fruit uniformly fair; highly deserving extensive cultivation. Nov. to Feb.

Fameuse (Snow Apple). Medium size, deep crimson; flesh snow-white, tender, melting and delicious; strong grower; dark wood. Valuable for both dessert and market; does best in the North. November to January.

Gano (Red Ben Davis). Fruit and tree closely resemble the well-known Ben Davis, but more highly colored; yellow, nearly covered with dark red; very handsome, large; flesh pale yellow; mild subacid. Season with Ben Davis. A good keeper.

Grimes' Golden. A native of Brooke Co., West Va.; an Apple of the highest quality. Dr. Warder says: "Too good for aught else but the dessert." Medium to large; flesh yellow, subacid, aromatic, spicy, rich, refreshing; tree hardy, vigorous and productive. January to March.

WINTER APPLES, continued

Hubbardston Nonesuch. Origin, Massachusetts. Fruit large, handsome, round, tapering both ways from the middle surface; yellow, covered with mixed red and broken stripes; flesh yellow, juicy, tender, with fine, rich flavor. Deserves general cultivation; valuable for market and dessert. October to January.

Jonathan. Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine-grained, very tender and finely flavored. This Apple is being planted extensively in all sections and deserves the attention of planters everywhere. Nov. to April.

Johnson's Fine Winter, or York Imperial. Medium size, truncated oval, angular; skin greenish yellow, nearly covered with bright red; flesh tender, crisp, juicy, aromatic; an enormous bearer, and hangs well on the tree; it is also a good keeper, retaining its flavor to the last. We cannot say too much in favor of this Apple; all things considered, it is scarcely second to any in the catalogue as a profitable orchard variety. February to April.

King. (Tompkins County). Very large, red-striped, handsome and of fine quality; a splendid Apple North, but not valuable here. November to February.

Kinnard's Choice. This splendid Apple originated in Tennessee; wherever known it is spoken of in the highest terms. Tree vigorous, and bears very young; fruit medium to large, highly colored, red; flesh yellow, fine-grained, tender, rich, juicy; keeps well. November to March.

Lankford's Seedling. Origin, Kent Co., Md. Tree hardy and a good bearer, bearing annual crops; fruit of large size, striped; quality excellent; keeps till April. This new sort possesses many valuable qualities, and will no doubt become a popular sort for late winter use.

Limbertain. A well-known southern Apple. Above medium size; color dull, purplish red; flavor subacid, rich, aromatic; productive, keeps well. February to April.

Lady Apple, or Pomme d'Api. Quite small, regular and flat; skin light, clear yellow, with a brilliant red cheek; flesh white, tender and juicy, with a pleasant, delicate, subacid flavor; a great bearer; brings the highest price of any fancy Apple in the market. December to April.

Long Island Russet. Medium round; russet.

McIntosh Red. Large, roundish, skin mostly covered with bright red; flesh white, tender, subacid, sprightly, very good; a handsome Apple of fine quality; strong grower. November to February.

Mammoth Black Twig (Arkansas Paragon). Originated in Arkansas. A seedling of the Winesap, which it resembles, but it is superior in many ways. Large, deep red; subacid; early and abundant bearer, and a good keeper. The tree is a strong grower, and roots well. This valuable winter Apple has few equals. December to April. (See illustration, page 10.)

Missouri Pippin. Large, oblong; bright red, with darker red stripes; very handsome; fair quality; a good grower and an early and immense bearer; often fruits at two years in nursery rows; valuable for market. December to April.

Nickajack. This Apple is very widely disseminated in the southern states, where it is known under about forty different names, which is pretty good evidence that it has proved itself a valuable sort. Fruit large, roundish; skin striped and splashed with crimson; flesh yellowish, compact, moderately tender and juicy, subacid; quality only good. November to March.

Northern Spy. Large, conical, flattened; striped and quite covered on the sunny side with dark crimson, and delicately coated with bloom; flesh white, fine-grained, tender, slightly subacid; both leaf and blossom buds open a week later than most other sorts. An Apple of very high character, but we cannot advise its planting south of Pennsylvania, except in mountain regions. November to February.

JOHNSON'S FINE WINTER, OR YORK IMPERIAL APPLE

WINTER APPLES, continued

Northwestern Greening. A Wisconsin seedling of great value; has stood the most trying tests and found to be equal to Wealthy in point of hardiness, but superior in fruit and keeping qualities; large, smooth, greenish yellow; flesh fine-grained, juicy, firm; good quality; thoroughly tested. January to April.

Opalescent. Several years ago a number of Apple seedlings were found growing by an oak stump in an orchard, presumably from cores or apples thrown there. When four to five feet high they were grubbed out and thrown away. Prompted by an afterthought, one of them was picked up and used to fill a vacancy in a row near by with a purpose to top-graft it when of sufficient size. Before this was done, however, it bore a few Apples which at once attracted attention as being quite unlike and superior to anything in the orchard. This original tree never fails entirely, and usually bears from a moderate to a full crop of superior fruit. Size, beauty and quality most happily unite in this remarkable Apple. All who have examined the Opalescent regard it as the handsomest Apple grown. It is not only highly colored, but susceptible of a very high polish, reflecting objects near it like a mirror. This feature makes it a highly prized sort for fruit stands. The flesh is yellowish, tender, juicy and good, size large to very large, and color light, shading to very dark crimson. Season, December to March. Sold only under copyright label, duly registered in the Patent Office at Washington.

Paradise Winter Sweet. Large, regularly formed, roundish; skin fair and smooth, dull green when picked, with a brownish blush; flesh white, fine-grained, juicy, sweet, sprightly and good; productive; an excellent Apple. Well worthy a place in the orchard. November to February.

Pewaukee. Origin, Wisconsin. Seedling from Oldenburg. Medium to large, roundish oblate; skin bright yellow, striped and splashed with dark red; flesh white, tender, juicy, subacid; very hardy, stands intense cold. January to May.

Rhode Island Greening. Large, roundish, oblate; skin green, becoming a greenish yellow when ripe; flesh yellow, fine-grained, tender, juicy, with a rich, acid flavor; succeeds well at the North, but not valuable here, dropping its fruit too early. October to December.

Roxbury Russet. Rather above medium size, roundish, oblate, remotely conical; skin covered with russet; flesh greenish white, rather granular, slightly crisp, with a good subacid flavor. November to January.

Romanite, or Carthouse. Medium size, roundish, oblong; striped and shaded with deep red on greenish yellow ground; flesh yellow, firm, juicy and rich, becoming tender and sprightly in the spring; valuable for the South; an early and profuse bearer and a good keeper. January to May.

Royal Limber Twig. Very large, pale yellow, blushed or striped with red; flesh juicy, rich and very good; tree a thrifty grower, and bears well. December to March.

Rawle's Genet. Tree moderately vigorous, putting forth its leaves and blossoms much later than other varieties in the spring, consequently avoiding injury by late frosts; it is, therefore, particularly valuable for the South and Southwest. Fruit medium size, roundish, approaching oblong; color pale red, distinctly striped on yellow ground; flesh nearly white, fine, rich, mild subacid, fine texture, crisp, juicy, compact, a profuse bearer. One of the most popular winter Apples South and West. January to April.

Rome Beauty. Large, yellow, striped and mixed with light red; flesh yellow, breaking coarse-grained, subacid; valuable for market on account of its productiveness, size and beauty, as well as for its certain bearing. November to January. Can always be depended upon for a full crop.

Salome. Tree a strong grower; equals Wealthy in hardiness; holds its fruit firmly, even against strong wind-storms; an early and annual bearer, although a heavier crop on alternate years; fruit of medium and uniform size; quality very good, which it retains even into summer; keeps well with ordinary care until July, and has been kept in excellent condition until October.

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

MAMMOTH BLACK TWIG APPLE (See page 9)

WINTER APPLES, *continued*

Smith's Cider. Rather large; greenish white, striped with red; flesh tender, juicy, with a mild, subacid flavor; a prodigious bearer and profitable market variety. December to February.

Shockley. From Jackson Co., Ga. Fruit medium size, yellow, with crimson cheek; flesh subacid, nearly sweet; tree erect, vigorous grower; comes into bearing early, and is exceedingly productive. This is probably the most reliable and valuable winter variety for the South, and is there justly very popular; valuable in eastern Virginia and lower Maryland. Keeps till May or June.

Sutton's Beauty. From Massachusetts. Large, handsome, roundish; skin yellow; waxy, striped with crimson; flesh tender, subacid; tree strong grower and bears well; a valuable new market Apple. December to January.

Stark. A western kind of first quality; thoroughly tested and always valuable, especially for market. The tree is a very strong grower, hardy and bears annually; much in demand, and planted on a large scale; fruit large, oblong, partly covered with red; flavor mild subacid. Deserves a place well up among "best kinds;" long keeper.

Stayman's Winesap. J. W. Kerr, of Denton, Md., says: "It is one of the finest Apples under cultivation—so much superior to its parent, the old Winesap, in size, flavor, color and keeping qualities as to completely crowd it out where both are known. It originated with Dr. Stayman, of Kansas, and was in bearing with me ten years ago. Its merits were so strongly pronounced from the first as to warrant strong commendation. From my oldest trees specimens have been exhibited at county fairs and horticultural meetings, and sent to many pomologists and prominent growers. It is now attracting attention everywhere as a profitable market variety. It has large size, bright red color, great productiveness and best quality to recommend it. The tree is a vigorous grower, and, like its parent, is irregular and drooping in habit, and adapts itself readily to different soils and situations. Truly it is a great Apple."

Twenty Ounce (Cayuga Red-Streak). Very large and showy, roundish, uneven; greenish yellow, splashed and marbled with dull red; flesh is good, sprightly, though not high-flavored, coarse-grained; its size and regular bearing make it popular. October to January.

Talman's Sweet. Medium size; pale yellow, tinged with red; flesh rich and of first quality, and a good cooker. December to April.

Virginia Beauty. Very popular in southwest Virginia, where it has been grown for the past thirty years or more. Medium to large; very dark red; subacid. Very valuable on account of its fine keeping qualities.

STAYMAN'S WINESAP

We have been growing this variety for 25 years for the southwest Virginia trade, but we think it should be planted more freely in other sections. November to March.

Wealthy. From Minnesota; not tested South. Fruit medium, oblate; whitish yellow ground, shaded with deep rich crimson in the sun, obscure, broken stripes and mottlings in the shade, sometimes entirely covered with crimson, many light dots; flesh white, fine-grained, stained with red; tender, juicy, lively, vinous, subacid; very good.

Willow Twig. Fruit medium size, roundish, slightly conical, somewhat oblate; light yellow, shaded and marbled with dull red, and sprinkled with numerous russet dots; flesh yellowish green, not very tender, pleasant subacid; good. Valuable for late keeping.

Winter Banana. Fruit large size, perfect 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. It is a remarkably strong grower and on account of its great hardiness will thrive in any climate. Its early bearing is something wonderful, generally producing a fine crop of fruit the second year. Foliage large and free from blight or mildew. A valuable market variety. November to May.

Wolf River. An Apple peculiarly adapted to the West on account of its extreme hardiness; very large and handsome; flesh whitish, juicy, subacid; a good bearer and long keeper.

Winesap. We can scarcely find words sufficiently strong to express the high opin-

HYSLOP CRAB APPLE

WINTER APPLES, continued

ion we have of this fruit, possessing, as it does, a combination of so many excellent qualities. For cider it has but few equals; for the table it stands amongst the best; for keeping it is justly esteemed; and for bearing it scarcely has a rival. Considering all this, we most earnestly recommend it to the consideration of orchardists. Fruit medium size, rather oblong; skin smooth, of a fine, dark red, with a few streaks and a little yellow ground appearing on the shady side; flesh yellow, firm, crisp, with a rich, high flavor. December to April.

Yates. A Georgia variety; of small size, dark red and dotted with white dots; flesh firm, juicy, aromatic; immense bearer and good keeper.

CRAB APPLES

For Ornament or Preserving

General Grant. Very large, round, dark red; flesh white and tender; excellent for dessert. September.

Varieties best suited to Tidewater Virginia and Eastern- and Western-shore Maryland

SUMMER VARIETIES

American Summer
Bough
Carolina June
Early Harvest

Early Ripe
Fourth of July
Gravenstein
Horse

Red Astrachan
Starr
Yellow Transparent

FOR LATE SUMMER AND AUTUMN

Buckingham
Bonum
Fallawater

Gravenstein
Jefferis
Maiden's Blush

Oldenburg
Wealthy

FOR LATE AUTUMN AND WINTER

Benoni
Ben Davis
Berry Red
Delaware Late Winter
Johnson's Fine Winter
Jonathan

Kinnard's Choice
Lankford's Seedling
Lady Apple
Mammoth Black Twig
Nickajack
Royal Limbertwig

Romanite, or Carthouse
Shockley
Stayman's Winesap
Smith's Cider
Winesap

Varieties best suited to Piedmont, Virginia

SUMMER VARIETIES

Amer. Summer Pearmain
Bough
Benoni
Carolina Red June

Early Harvest
Early Ripe
Gravenstein

Red Astrachan
Starr
Yellow Transparent

Hewes' Virginia Crab. A famous cider Apple; immensely productive; fruit small, striped; flesh firm, yellowish, juicy; flavor acid, rich; musk very heavy; cider can be kept in a sweet state for a long time; should be in every orchard from which a barrel of cider is intended to be made. Oct. to Dec.

Hyslop Crab. Fruit large for its class; produced in clusters; dark rich red, covered with a thick blue bloom; good for culinary uses and for cider.

Red Siberian Crab. Quite small—a little over an inch in diameter; nearly round, with a brilliant scarlet cheek, on a pale, clear,

waxen yellow ground; stalk very long and slender; tree very productive, and bears when very young; quite ornamental; good for preserving. September to October.

Transcendent Crab. Fruit large for its class; golden yellow, with a beautiful, rich crimson cheek; when ripe, the red or crimson nearly covers the fruit; flesh creamy yellow, crisp, subacid, pleasant and agreeable. This is truly a beautiful fruit; tree a rapid grower and productive. September.

Whitney. (No. 20.) Large; striped and splashed with red; flesh yellow to white, firm and juicy, with a pleasant subacid flavor; tree very hardy, vigorous, and productive. August.

Yellow Siberian Crab. Resembles the red crab except in color, which is of a fine, rich yellow. This is equally good for preserving, and considering the beautiful habit of the tree, the rich, showy bloom, together with its attractive appearance when covered with fruit, we think it highly deserving of a place amongst the ornamentals.

VARIETIES BEST SUITED TO PIEDMONT, VIRGINIA, continued

FOR LATE SUMMER AND AUTUMN

Buckingham	Jefferis	Smokehouse
Bonum	Maiden's Blush	Wealthy
Duchess of Oldenburg		

FOR LATE AUTUMN AND WINTER

Albermarle Pippin	Kinnard's Choice	Rome Beauty
Ben Davis	Lady Apple	Royal Limbertwig
Fallawater	Mammoth Black Twig	Smith's Cider
Gano	Nickajack	Stayman's Winesap
Grimes' Golden	Paradise Winter Sweet	Shockley
Johnson's Fine Winter	Rawle's Genet	Winesap
Jonathan	Romanite, or Carthouse	

Varieties for the Valley of Virginia and West Virginia and Western Maryland

SUMMER VARIETIES

Amer. Summer Pearmain	Carolina Red June	Red Astrachan
Bough	Early Ripe	Starr
Benoni	Early Harvest	Yellow Transparent
	Jefferis	

FOR LATE SUMMER AND AUTUMN

Buckingham	Fall Pippin	Maiden's Blush
Duchess of Oldenburg	Fallawater	Smokehouse
	Gravenstein	

FOR LATE AUTUMN AND WINTER

Albermarle Pippin	Gano	Paradise Winter Sweet
Baldwin	Grimes' Golden	Rawle's Genet
Bonum	Jonathan	Rome Beauty
Ben Davis	Johnson's Fine Winter	Royal Limbertwig
Delaware Late Winter	Kinnard's Choice	Stayman's Winesap
Fallawater	Lady Apple	Winesap
	Mammoth Black Twig	

Varieties best suited to Pennsylvania and the West

SUMMER VARIETIES

Early Harvest	Fourth of July	Starr
Early Ripe	Jefferis	Yellow Transparent
	Red Astrachan	

FOR LATE SUMMER AND AUTUMN

Buckingham	Fallawater	Oldenburg
Bonum	Gravenstein	Smokehouse
Fall Pippin	Maiden's Blush	Wealthy

FOR LATE AUTUMN AND WINTER

Baldwin	Grimes' Golden	Northern Spy
Ben Davis	Johnson's Fine Winter	Rome Beauty
Dominie	Jonathan	Smith's Cider
Gano	Kinnard's Choice	Stayman's Winesap
	Mammoth Black Twig	

Varieties best suited to the South

SUMMER VARIETIES

Caroline Red June	Early Harvest	Starr
Early Ripe	Fourth of July	Yellow Transparent
	Horse	

FOR LATE SUMMER AND AUTUMN

Buckingham	Fall Pippin	Oldenburg
Bonum	Gravenstein	Wealthy

FOR LATE AUTUMN AND WINTER

Ben Davis	Lankford Seedling	Shockley
Berry Red	Mammoth Black Twig	Stayman's Winesap
Johnson's Fine Winter	Nickajack	Winesap
Jonathan	Romanite	Yates
Kinnard's Choice	Royal Limbertwig

KOONCE PEARS

SELECT PEARS

The Pear succeeds on most soils, but does best on heavy soil. STANDARD trees are produced by budding or grafting on its own stock. These are best adapted for large orchards. DWARFS are produced by budding on quince. These are best suited for small grounds and gardens. They should be planted deep, a few inches below the bud. Pears should be well cultivated when young. Gather the fruit about two weeks before fully ripe.

SUMMER PEARS

Bartlett. Large; yellow, with a soft blush on the sunny side; flesh white, exceedingly fine-grained and buttery, sweet, very juicy, with a highly perfumed vinous flavor. This is justly esteemed one of the very best Pears in cultivation, and deserves a place in every collection; bears early and well. July and August.

Clapp's Favorite. A first-rate early variety, which is rapidly growing in favor; resembles the Bartlett in appearance, but ripens a week or ten days earlier; one of the best native sorts. Fruit large; skin smooth, yellowish green, becoming yellow, dotted and shaded with red next the sun; flesh yellowish white, juicy and melting; of very good quality. Last of July.

Comet, or Lawson. This Pear is now attracting a good deal of attention, and promises to be a profitable sort for the early market. The tree is a vigorous grower and very productive; fruit above medium size, and of most beautiful crimson color, on yellow ground; flesh crisp and pleasant, though not of best quality. Ripens early in July.

Early Harvest. Fruit medium size; skin pale yellow at maturity, with blush next to sun; flesh white, tender, sweet; among the best of its season. July.

Koonce. Origin, Illinois. Early, highly recommended; good bearer; said to be frost-proof and free from blight; vigorous grower; fruit handsome. (See cut above.)

LeConte. Supposed to be a hybrid between the old Chinese Sand Pear and a culti-

SUMMER PEARS, *continued*

vated variety. Fruit large, pyriform; skin smooth; tree of remarkable vigor and rapid growth; foliage luxuriant; has so far been nearly free from blight; commences to bear early, and is extremely prolific; fruit ships well, and has been sold in the Boston and New York markets at very high prices; quality variable. Probably no new variety of fruit has ever attracted so much attention in the South as this. Ripens a few days before Bartlett. Grown only as a standard.

Manning's Elizabeth. Fruit small, yellow, with a lively red cheek; flesh white, juicy and very melting, sweet and sprightly. Tree hardy and exceedingly productive. We regard this as one of the most valuable early dessert Pears, and should be in every collection. Season, August.

Wilder. A beautiful early Pear, bell-shaped, yellow with slight blush; flesh yellow, fine-grained, subacid; does not rot at the core. Tree vigorous and bears young. July.

AUTUMN PEARS

Angouleme (Duchesse d'Angouleme). Very large, dull greenish yellow, streaked and spotted with russet; flesh white, buttery and very juicy, with a rich and very excellent flavor; on young standard trees the fruit is variable, but on the quince, to which stock this variety seems well adapted, it is always fine. The large size and fine appearance of this fruit make it a general favorite. September to November.

Anjou (Beurre d'Anjou). Large, greenish, sprinkled with russet, sometimes shaded with dull crimson; flesh whitish, buttery, melting, with a high, rich vinous, excellent flavor; very productive; succeeds well on the quince; should be in every orchard. October and November.

Bar-Seckel (Columbia). A cross between Bartlett and Seckel combining the best qualities of each. Tree vigorous, hardy and productive. Fruit good size. Rich quality, high color, handsome and good. Sept. and October.

Blight Proof. This ironclad against blight is indeed an acquisition. It seems to have inherited all the health and vigor of its parent, the Sand Pear; the fruit is large to very large, conical, smooth, with beautiful greenish yellow surface; flesh is tender and very juicy; the tree is an upright, strong and handsome grower; bears young and enormously. Should be in every collection where a good fruit and annual bearer is desired. First-rate for market. August and Sept.

Flemish Beauty. Large; skin pale yellow, but mostly covered with marblings and patches of light russet, becoming reddish brown at maturity on the sunny side; flesh yellowish white, not fine-grained, but juicy, melting, saccharine and rich. In good soils and open situations the Flemish Beauty, when in perfection, is one of the most superb Pears; the tree is hardy, and bears early and abundantly. The fruit should be gathered sooner

than most Pears, and ripened in the house; they are then always fine; otherwise often poor. September.

Garber. A seedling of the Japan Hybrid, raised by Dr. J. B. Garber, of Pennsylvania; resembles Kieffer, yet is larger, of better quality and very productive, and especially valuable for canning. Tree a strong grower, bears early and abundantly. "Bound to win favor for market." Free from blight. September and October.

Howell. Rather large, light waxen yellow, often with a finely shaded cheek, and covered with dots and patches of russet; flesh white, rather coarse and granular, with a rich, perfumed, aromatic flavor; a profuse bearer. August.

Japan Golden Russet. From Japan, and remarkable in many ways. The fruit is round or apple-shaped, very regular and uniform; of good size, 8 or 10 inches around and becomes a handsome golden russet color, hanging in clusters. The tree is a luxuriant grower with an abundance of thick, tough, leathery foliage, enabling it to endure great heat and drought without injury. It is an extremely early bearer and bears enormously every year. Ripens in September.

Kieffer (Kieffer's Hybrid). A new variety originated near Philadelphia, and supposed to be a cross between the Chinese Sand Pear and the Bartlett. Tree a very vigorous grower and an early and abundant bearer. Fruit medium to large; skin yellow, with a bright vermillion cheek; flesh brittle, very juicy, of good quality; valuable for market or family use; succeeds best as a standard. September.

Rossney. Ripens two weeks after Bartlett; large; excellent keeper and shipper; uniform size, shape and color; handsome,

GARBER PEAR

LAWRENCE PEAR

AUTUMN PEARS, continued

creamy skin, with blush; melting, juicy, sweet and superior flavor. Tree a strong grower, hardy and productive. Its recommendations are its fine quality, large size and form and good shipping qualities.

Sheldon. Medium size; yellow on greenish russet, with a richly shaded cheek; flesh a little coarse, melting, juicy, with a very brisk, vinous, highly perfumed flavor; productive. Grown only as a standard. Oct.

Seckel. Small; skin brownish green at first, becoming dull yellowish brown, with a lively russet-red cheek; flesh whitish, buttery, juicy and melting, with a peculiarly rich, spicy flavor and aroma. This variety is pro-

nounced by good judges the richest and most exquisitely flavored Pear known, and we may add that the tree is the healthiest and hardiest of all Pear trees, forming a compact and symmetrical head, and bearing regular and abundant crops at the ends of the branches. In view of all this, it is easy to see that we consider no collection complete without it. It ripens gradually from the middle of August to the middle of September.

Vermont Beauty. In color it is a rich yellow, with a beautiful bright carmine cheek. The fruit is of medium size and the flesh is of the finest quality, being rich, juicy and aromatic. The tree is a fine grower, of very thrifty habit and perfectly hardy. Its season of ripening, which is after the Seckel and before the winter Pears are ripe, makes it particularly valuable.

Worden Seckel. A seedling of the Seckel, equally good in flavor and quality, but far superior in size, color and beauty. It is an upright grower, abundant bearer; ripens a little later than Seckel. Originated in Oswego county, N. Y. Introduced by Smith & Powell Co., Syracuse, N. Y.

WINTER PEARS

Lawrence. Rather large; yellow, covered with brown dots; flesh whitish, slightly granular, sometimes buttery, with a very rich, aromatic flavor; unsurpassed amongst the early winter Pears; succeeds well on the quince; ripens with little care; should be in every orchard; tree healthy, hardy and productive. November and December.

Lincoln Coreless. As its name implies, it is entirely seedless; no seeds or core whatever. In season it is late, and the keeping qualities of this Pear are extraordinary. Specimens have been known to keep in an ordinary cellar until March. In size it is very large, single specimens having weighed from one to one and one-half pounds. The trees are strong, healthy growers, enabling them to hold the fruit well; in growth equal to the Kieffer. The quality of the fruit is excellent, there being no core; the Pear is one solid mass of rich, luscious, juicy fruit, which is pronounced perfect by all who taste it. When ripe they are mellow; color a golden tint, and possessed of a rich aromatic flavor. The flesh is yellow and the quality of the best.

Winter Nelis. Medium size; dull russet; flesh yellowish white, fine-grained, buttery and melting; abounding with juice of a rich, saccharine, aromatic flavor; the tree is a slender, straggling grower, but a good bearer. November and December.

To aid the inexperienced in making their selections, we have carefully prepared the following lists,—one for cultivation as standards on Pear stocks, the other to be grown as dwarfs on the quince root.

FOR STANDARDS

Anjou
Angouleme
Bartlett
Blight Proof
Clapp's Favorite

Flemish Beauty
Garber
Harvest
Howell
Koonce

Kieffer
Le Conte
Lawrence
Manning's Elizabeth
Seckel

Sheldon
Vermont Beauty
Worden Seckel
Wilder

FOR DWARFS

Anjou
Angouleme
Clapp's Favorite

Flemish Beauty
Howell
Koonce

Lawrence
Manning's Elizabeth

Seckel
Sheldon

SELECT PEACHES

The Peach when in perfection is one of the most delicious of all fruits. It succeeds in favorable localities from Maine to California. The trees are of shorter duration than most fruit trees of temperate climates, but on account of their being more easily grown and in shorter time than other fruits are consequently cheaper. Everybody can afford to plant a few, and the orchardist, if his soil is at all adapted to their culture, will find them more profitable than almost anything that can be grown on the same land. We have revised our list so as to include only well-known and tried varieties. Our aim is to grow the best stock, not the cheapest. We bud from healthy vigorous stock only, and our trees are absolutely free of yellows, San José Scale and other injurious insects, as Certificate of Inspection will show.

Admiral Dewey. This is a perfect freestone; ripens with the Triumph; flesh is yellow, of uniform color and texture to the pit. Has better form and brighter color on the surface; is equally hardy and productive. The tree is a strong, symmetrical grower, and as near perfection as we can obtain in a single variety. Specimens sent us from Georgia were received in perfect condition, and were all that Mr. Husted claims for them. We believe there is no doubt about its being the very best early yellow freestone in cultivation. June.

Alexander. One of the earliest Peaches. Fruit medium size, nearly covered with crimson; flesh white and good; valuable market variety South; bears very young. June.

Amsden (Amsden's June). This variety originated on the farm of L. C. Amsden, near Carthage, Mo., fruiting for the first time in 1872. It first fruited for us on our grounds at Richmond in 1877, ripening June 26, or more than two weeks in advance of Hale's Early. Tree hardy, healthy and vigorous, and a great bearer; fruit full, medium size, roundish; skin nearly covered with light and dark red, almost purplish in the sun, somewhat mottled in the shade; flesh greenish white, white at the stone, juicy, sweet, slightly vinous and very good; has proved quite profitable South for the early market. This fills the place of Alexander, Bower's Early, Governor Garland, Wilder and several other sorts, all of which are very similar to it in appearance, time of ripening and general characteristics.

Argyle Elberta. New. The originator says, "It is a strain of Elberta that has not been degenerated by years of propagation from the nursery row. The original trees are about 16 years old; there are about 17 of them, and they made about six crates of Peaches per tree last year. It is superior to the common Elberta in the following points: It has a stronger constitution, evidenced by a dark green, healthy-looking foliage, and abundant production of fruit. There is no record of but one total failure to produce fruit, and that was in 1899—everything failed then. The fruit is of finer color, redder, has better flavor, and keeps better. Seems to be more resistant to rot, as you would expect the fruit on a vigorous tree to be. It is a little later than the common Elberta, ripening four to six days after it every year. One of its finest qualities is that it has fine color before it is ripe, enabling it to present a much finer appearance in the northern markets. I have a young two-year-old orchard of the Argyle Elberta that have some fruit this year, notwithstanding the freeze. I ceased to propagate the common Elberta four years ago."

Bilyeu's Late. Originated in Caroline county, Md. A very late Peach, ripening in October, after Smock Free and Salway. Fruit of large size; color white, with a beautiful blush cheek; flesh white; freestone, and an excellent shipper.

Brandywine. A Peach closely resembling Crawford's Late in appearance, but ripening ten days later, and fully as large. Flesh yellow; freestone. Last of August.

Carman

PEACHES, continued

Butler's Late. This magnificent new freestone Peach originated in the garden of J. T. Butler, Richmond, Va. Fruit of the very largest size; skin greenish white, with red cheek; flesh white, firm and of very good flavor; tree vigorous and very productive. This promises to be a very valuable sort, owing to its combination of many valuable qualities, among which are very large size, great productiveness and very late ripening, coming in after Smock, when there is usually a dearth of Peaches. First to middle of Oct.

Briggs' Red May. About medium; very highly colored; flesh greenish white, very juicy, vinous and of very good quality; adheres somewhat to the stone; of firm texture, and proves good as a shipping Peach; tree very prolific. Middle to end of July.

Bokara No. 3. The hardiest yellow Peach yet brought to notice; of fine quality and a heavy bearer; 30 per cent harder than any other kind. August.

Belle of Georgia. Very large; skin white, with red cheek; flesh white, firm and of excellent flavor; the fruit is uniformly large and showy; tree a rapid grower and very prolific. A seedling of Chinese Cling, originated by Mr. Lewis A. Rumph, Marshallville, Ga. New. Ripe July 1 to 15.

Beer's Smock. Large, yellow, oblong; similar to the Smock, but larger; also a few days later; flesh firm and red next the seed; one of the very best; freestone. October 1.

Carman. In this new, hardy, rot-proof Peach, ripening at same time as Early Rivers, and yet almost as large and fine as Elberta itself, we have a Peach of great market value; a large, roundish Peach, with pale yellow skin, red blush on sunny side; white flesh, tender and melting; rich, sweet and of superior flavor; by far the finest of any Peach ripening middle of July. The nurseryman who fails to propagate the Carman will soon learn his mistake. A big, early, yellow-skinned Peach of high quality is sure to be in great demand. Don't miss the Carman!

Champion. This new Peach comes from Illinois, recommended as an ironclad against frost, as in 1890, when there was a total failure of the Peach crop, it bore heavily. It has stood a temperature of 18° below zero, and bore well the following season. Fruit is of large size; skin creamy white, with red cheek; the flesh is white, rich and juicy; a perfect freestone and good shipper. July.

Chair's Choice. Originated in Anne Arundel county, Md. Fruit of very large size, yellow, with a red cheek; flesh yellow, firm and of good quality; tree a strong grower and a good bearer. Ripens just before Smock. Early September.

Christiana. A new, very large, fine-looking yellow Peach, ripening between Crawford's Late and Smock. Its large size, handsome appearance and time of ripening combine to make it a very valuable Peach. Last of August.

PEACHES, continued

Chinese Cling. Fruit large, roundish, oval; skin transparent cream color, with marring of red next to the sun; flesh creamy white, very juicy and melting, with a rich, agreeable flavor. Last of July.

Chinese Free. Seedling of Chinese Cling. Large, oblong; skin white, with red cheek; flesh firm and well-flavored; free from rot; valuable for market. August.

Columbia (Yellow Indian, Pace, etc.). Large; skin rough and thick, dull, dingy red, with streaks of darker red; flesh yellow, interspersed with red or pink. Last of August.

Connet's Southern Early. A seedling of the old Chinese Cling, which originated in Guilford county, N. C. It has extra-large fruit of a cream-white shade, having a beautiful blush next the sun. It is one of the most delicately colored Peaches grown, and a clear freestone, with small seed. Of fine quality, and borne in profusion early in July upon trees noted for their strength and vigor.

Mr. W. G. Balsley, of Greensboro, N. C., in the year 1889 planted a seed of Connet's Southern Early, and in the year 1893 the tree was loaded with as fine Peaches as any one need wish to see. The season being a rainy one, and the little tree loaded down with fruit (as the Peaches had not been thinned out, every one that was set was allowed to mature), one would naturally suppose there would be a great many rotten Peaches, but there was not a rotten Peach on the tree—not even a specked one. Only one showed signs of decay, and it had been bruised in hunting for soft Peaches.

Crawford's Early. A magnificent large yellow Peach of good quality; tree exceedingly vigorous and productive; its size and beauty make it one of the most popular orchard fruits; flesh very juicy, rich, slightly subacid, of good flavor; valuable as a market variety; freestone. First of August.

Crawford's Late. A superb fruit of very large size; skin yellow, with a broad, dark red cheek; flesh deep yellow, but red at the stone, juicy and melting, with a very rich and excellent vinous flavor. This is undoubtedly one of the very best yellow Peaches, and an admirable market fruit; tree vigorous and productive; freestone. Middle of August.

Crosby. (Excelsior Frost Proof). This valuable Peach has been tested for ten years in the bleakest parts of New England, and in each case has proved itself to be first-class in every way. In 1886 and 1890, when there was a total failure of the Peach crop, from the late

frost, the Crosby bore its regular heavy crop. Being almost frost-proof, it should be planted generally. The fruit is medium size, bright yellow, splashed and streaked with carmine on the sunny side; the flesh is firm, sweet and delicious; stone very small; an enormous bearer. It ripens early in August.

Early Canada. Originated in the Province of Ontario. Medium size, good quality and handsome appearance. One of the earliest varieties, and nearer freestone than most of the early sorts. July.

Elberta. An exceedingly large, high-colored yellow Peach; a cross between Crawford's and Chinese Cling. Juicy, well-flavored. Said to be probably the finest yellow freestone in existence. Ripens early in August.

Emma. Fruit very large; skin golden yellow, with red cheek; flesh yellow, fine-grained, firm, juicy and highly flavored. Tree a luxuriant grower and quite prolific; a perfect freestone. One of our most attractive and profitable market varieties. Ripe July 25 to August 5.

Engle's Mammoth. Large; yellow. Resembles Crawford's Late. Middle of Oct.

Everbearing. W. T. Nichols, of Obion county, says of this variety: "The parent tree is said to have produced its first crop about 1888. The tree ripens fruit continuously from about August 1 to October 1. The best specimens on the parent tree at twelve years old measured twelve inches in circumference; skin creamy white, with a deep blush in the sun; clingstone." A variety that will bear on one tree fruit for two months, having during all that time ripe fruit to be gathered, is one that every lover of fruit will desire on account of its novelty.

CHAMPION (See preceding page)

FITZGERALD PEACH

PEACHES, continued

Fitzgerald. An improved Early Crawford, being fully equal to it in size, quality and color. In Canada and Michigan it has proven one of the hardiest. Fruit large; brilliant color, bright yellow, suffused with red; flesh deep yellow, best quality. Early September. The originator says: "Fully realizing that there are too many varieties of fruit placed upon the market, with no special merit, adds to our pride and pleasure in being able to offer in the Fitzgerald Peach something that has intrinsic worth and many points in its favor ahead of any other variety that has of late years been introduced. The Fitzgerald Peach is a chance seedling found at Oakville, Ontario, fully outside the Peach belt of Canada, and in a section where Peach-growing as a business can never be profitably engaged in. This tree was first brought to our notice by one of our traveling salesmen. We watched it three years, in which it fruited abundantly, and that, too, in seasons when the Peach crop was a failure in the favored Niagara district. The fruit is of very large size, exceeding that of the Early Crawford. Its quality is infinitely superior, while as a cropper it far excels the Crawford in every way, and most other varieties. One strong point is the smallness of the pit, being the smallest of that of any Peach that we know of. The location in which it was found dem-

onstrates its hardiness, and it has another strong quality of fruiting very early."

Ford's Late (Chinese Strain). Large; white, with carmine to the sun; flesh white, juicy. One of the best; freestone. Oct.

Foster. A new, very large Peach resembling Crawford's Early in appearance, but is larger and somewhat earlier. Tree hardy and productive. First of August.

Fox's Seedling. Large; skin white, with a red cheek; flesh melting, sweet and good. Desirable for canning or marketing. First of September.

Globe. Origin, Pennsylvania. Tree a rapid grower and an enormous bearer; large; golden yellow, with a red blush; flesh firm, sweet and delicious; uniformly large; freestone. September 20 to October 1.

Gold Drop. Large, fine quality, handsome and hardy; valuable for market. A Michigan favorite; freestone. September.

General Lee. Seedling of Chinese Cling. Of same description, ten days earlier, and less inclined to rot; clingstone. July 29.

Geary's Hold-On. Large, yellow Peach, seedling of the Smock; fruit large; pale lemon-yellow. Ripens a little later than the Smock. Last of September.

Greensboro. Larger and earlier than Alexander; colored beautifully with crimson,

PEACHES, continued

or yellowish cast; many specimens measure 8 to 9 inches in circumference; flavor pronounced by some equal to an August Peach. Originated from seed of Connet's Southern Early. Will be a fine market Peach. June.

Grand Admirable Cling. Full medium size; skin white, nearly covered with red. A very handsome and excellent Peach, and a good bearer. First of August.

Golden Dwarf (Van Burens'). This very distinct and attractive variety originated in Georgia. The tree is of diminutive growth, seldom attaining more than 4 or 5 feet in height; foliage dense, which it retains until quite late in the season. Fruit large; skin yellow, with a red cheek; flesh yellow, subacid, adhering firmly to the stone. Quite hardy and free from disease. Ripens last of September.

Heath Freestone. A fine Peach. Fruit large; skin white; flesh juicy, rather tender, with a good flavor. Beginning of Sept.

Heath Cling. This is, perhaps, the very best of the late clingstone Peaches. Its very large size, beautiful appearance, high and luscious flavor, combined with its late maturity, and the long time it may be kept after taken from the tree, render it a most valuable sort for market. Fruit very large; skin pale yellowish white, with a faint blush or tinge of red in the sun; flesh greenish white, very tender and melting, exceedingly juicy, with a sweet, rich, high and luscious flavor. Tree hardy and vigorous. Middle of September, and sometimes keeps a month after taken from the tree.

Hiley. Belle of Georgia and Elberta, twin sisters, and children of the old Chinese Free, are without doubt the two most popular Peaches of their season in America today. Hiley, a seedling of Belle, when it becomes generally known and planted, will take rank close up alongside of the two named above, and on account of its earliness is far more profitable than either. Hiley is a variety of great size and beauty, ripening two or three weeks before its parent. Tree a moderate grower, fruit-buds extremely hardy; fruit of large size and much resembles the Belle, only being more highly colored on the sunny side. Perfect freestone, a long keeper and superb shipper, ripening a week or more ahead of Mountain Rose. Being of such large size, exquisite color and as fine a shipper as the best of the later varieties, it has for the past three seasons sold for more money than any other Peach I grow, and I have taken thousands of trees of other good varieties and budded them over to Hiley; I couldn't wait for young trees to grow up to fruiting. Take my word for it—don't miss planting the Hiley; it is a money-maker, sure! July.

Hyne's Surprise. A very early Peach of good quality; highly colored; similar to Waterloo, but earlier. June.

Hill's Chili. A great favorite for market in the cold northwest, on account of its extreme hardness and heavy bearing. Fruit medium size, oblong; skin yellow, shaded with dark red; flesh yellow, very rich and sweet; freestone. October 1.

Holderbaum. Originated in Pennsylvania. The introducers make wonderful claims as to its immense size, iron-clad hardness and productiveness. Fruit extra large, light creamy yellow. A beautiful red cheek, small pit; flesh light yellow, streaked with red, extra quality, firm texture. Early Sept.

Iron Mountain. A large, white-fleshed freestone Peach, ripening at about the same time as Bray's Rare Ripe, which it resembles. It is a very popular market Peach in northern New Jersey. Last of August.

Jennings. Originated in Richmond, Va. It is one of the finest, largest and handsomest yellow Peaches we have seen. The Baltimore "Sun" of Aug. 20, 1903, says: "A specimen of this Peach was exhibited at our office, which weighed a pound and measured twelve inches in circumference each way, and was without a visible flaw or blemish." It is a new seedling, fruited for the first time; freestone. August.

Kalamazoo. Mr. R. Morrill, President of the Michigan State Horticultural Society, says of this variety: "Originated in Kalamazoo, attracted attention by bearing regular crops of large fruit of highest quality in a locality where the Peach is considered a failure. A wonderfully strong grower, bears full loads of fruit at two years old, sets an enormous amount of fruit. My trees shed a large portion soon after bloom falls, but so far (four crops) have required some thinning. Size equals Early Crawford, more uniform, pit small, flesh thick, yellow, superb quality. Skin golden yellow, with light crimson cheek; fewest culls of any variety I ever saw. Kalamazoo, Lewis and Gold Drop are our money-makers, fully as reliable as a potato crop and grown as cheaply, bushel for bushel. Ripens between Early and Late Crawford." Aug.

Large Red Rarripe. A most excellent Peach, ripening early in August. Fruit large; skin greenish white, dotted, and with a beautiful, rich red cheek; flesh white, red at the stone, melting and juicy, with a sweet and rich flavor.

Large Early York. Is rather large and a beautiful Peach, well worthy a place in every good collection. The tree is vigorous and productive; fruit dotted with red in the shade, deep red cheek to the sun; flesh nearly white, fine-grained, very juicy, with a mild, rich, excellent flavor; a very valuable sort. July 25.

Lemon Cling. A very large and beautiful lemon shaped variety; light yellow, reddened in the sun; flesh firm, yellow, rich, with a vinous, subacid flavor; fine for preserving; tree very hardy and productive. Last of August.

Lemon Free. The name is very appropriate, as it is almost lemon-shaped, being longer than broad, pointed at the apex, color a pale lemon when ripe. This magnificent yellow Peach originated in Summit county, Ohio, and has proved itself to be harder than any other good Peach grown in that section. It is of large size, quality excellent, sweet and rich. Exceedingly productive. It is the surest yielder of any variety we have yet grown, never as yet failing to give a crop in the most unfavorable season. September.

PEACHES, continued

Levy's Late (Henrietta). A new late clingstone, which originated in the garden of W. W. Levy, Washington, D. C. Fruit large, roundish; skin deep yellow, a shade of rich brownish red in the sun; flesh deep yellow, rather firm, juicy, half-melting, sweet; good and a valuable variety. First to last of Oct.

Lewis Seedling. One of the earliest freestones; white with red cheek; medium to large size. Middle of August.

Lorentz. Its introducer says of it: "We have never known it to fail a crop in the most adverse seasons, and we believe it to be as nearly frost-proof as any variety yet introduced. It bears crops when others fail entirely. Fruit is unusually large and of a superior flavor, especially so for one so late in the season. It is a freestone, yellow-fleshed, and its handsome appearance has been a surprise to all who have seen it. It bears enormously, one foot of wood cut for photographing having as many as twenty-five Peaches on it, and frequently requiring thinning from over-production. We feel confident that this is the best late Peach ever introduced, and that this belief will be shared by those who grow it. Does not crack; is very firm; keeps well, and is a fine shipper." Ripens last of September.

Mamie Ross. Seedling of Chinese Cling, which it resembles; fruit almost as large as its parent; white, nearly covered with carmine; flesh white, juicy, good quality; a regular and prolific bearer. Is popular throughout the South as the finest early cling, June.

Mary's Choice, Yellow. Blushed with red; large to very large. A fine Peach and should be planted extensively. Freestone. August.

Mary's Choice, Red. Freestone. Extra large and fine Peach; one of the best Peaches; should be planted in every orchard. August.

LORENTZ PEACH

Mathew's Beauty. A seedling from Randolph county, Ga. The original tree has been fruiting for eight years and missed but one crop; is being largely planted as the most valuable succession to Elberta yet introduced. Its bearing and shipping qualities are fully equal to Elberta—it is a size larger, superior in quality, ripens about three weeks later. Perfect freestone; skin golden yellow, streaked with red; flesh yellow, firm, of excellent quality. Probably the best market Peach since Elberta was introduced. September.

McCallister. Large yellow freestone of first quality. September.

Michigan Early. A western variety which has given great satisfaction. Splendid as a market Peach, as well as for canning; hardy and prolific.

Moore's Favorite. A handsome large Peach, white with blush to the sun; similar to Oldmixon, but a few days later; flesh white, tender and juicy; very desirable. Freestone. August and September.

Mountain Rose. A variety of very great value; very profitable for market, and is steadily growing in favor. Fruit large, roundish; skin whitish, nearly covered with light and dark, rich red; flesh white, slightly stained at the stone, juicy, sweet; separates freely from the stone. Ripens just after Troth's Early.

Morris' White. Rather large; skin creamy white, tinged with red in the sun; flesh slightly firm, white to the stone, melting and juicy, with an excellent flavor; tree vigorous, and bears fair crops; one of the very best for preserving, on account of the entire absence of red at the stone. August 15.

New Prolific. A yellow freestone, ripening between Crawford Early and Late. From Michigan.

Oldmixon Freestone. Is a fine, large, productive variety, succeeding well in all localities and well deserving of the high favor in which it is held as an orchard variety; skin yellowish white, with deep red cheek; flesh white, but red at the stone, tender, rich, excellent; indispensable. Middle of August.

Oldmixon Clingstone. Large; yellowish white, dotted with red on a red cheek; flesh pale white, very melting and juicy, with an exceedingly rich, luscious flavor; one of the most desirable clingstone Peaches. Middle of August.

Picquet's Late. This very valuable late Peach originated in Georgia, and has been disseminated over a wide extent of country, and succeeds well generally. It has been planted to a considerable extent in Maryland and Virginia, and has proved a very excellent and profitable sort. Fruit large and handsome; skin yellow, with red cheek; flesh yellow, melting, sweet, and of the highest flavor. We recommend it for its many valuable qualities. Ripens about with Smock.

Rivers (Early Rivers). One of Rivers' seedlings, introduced from England. Large; color pale straw, with a delicate pink cheek; flesh melting, or rather dissolving, with a rich racy flavor; ripens ten days later than Early Beatrice. The best Peach of its season.

Red Cheek Melocoton. A famous old, well-known and popular variety, extensively

ELBERTA PEACH (See page 19)

PEACHES, continued

cultivated as a market fruit; fruit large; skin yellow, with a deep red cheek; flesh red at the stone, juicy, with a good, rich, vinous flavor; productive; freestone. Middle of Aug.

Reeves' Favorite. Fruit large, roundish, with a fine red cheek; flesh deep yellow, red at stone, juicy, melting, with a good, vinous flavor. One of the largest and handsomest Peaches; should be in every orchard. First of September.

Ringgold Cling. Said to be larger and in every way superior to Heath Cling, with which it ripens.

Ruding's Late Free (Yellow). We have fruited this variety on our nurseries and consider it one of the finest large, late, yellow freestones grown. We advise that it be planted extensively. Some specimens measured 9 inches in circumference.

Salway. A large, late, yellow freestone, of English origin; handsomely mottled, with a brownish red cheek; flesh deep yellow, juicy, melting, rich; very productive; a variety growing more and more in favor with the orchardist. Ripens after Smock. Free.

Smock Free. Rather large, yellow, with a red cheek; flesh yellow, red at the stone; very productive; not of high excellence, but valuable as a market variety. In the Delaware and Maryland peach-growing district this variety is planted perhaps more extensively than any other sort, and large profits have been realized from it. It succeeds well in eastern Virginia, but west of the ridge is not so valuable. Middle to last of September.

Sneed. The originator says: "Sneed has been bearing several years, and has ripened ten days earlier than Alexander. It is a seedling of Chinese Cling, of same high quality, and is the earliest fine Peach known. The fruit is of full medium size, somewhat oval in shape; creamy white, with light red blush; flesh very tender and good." June.

Snow's Orange. Large, yellow; very hardy and productive; valuable for market; freestone. September.

Steven's Rareripe. Large, oblong; white, nearly covered with red, very highly colored and beautiful; heavy bearer and free from disease; freestone. October 1.

Stamp the World. Large; creamy white, with a bright red cheek; flesh white, juicy and high-flavored; very productive; one of the best market varieties. Middle of August.

Susquehanna. A very handsome and valuable Peach; originated on the banks of the Susquehanna river, in Pennsylvania; a great favorite wherever known. Fruit of the largest size, sometimes measuring twelve inches in circumference; skin rich yellow, with a beautiful red cheek; flesh yellow, juicy, sweet, with a rich, vinous flavor; the best of all the yellow-fleshed Peaches; freestone; a moderate bearer. Aug. 25.

Troth's Early. A very early and excellent Peach, of medium size; whitish, with a fine red cheek; flesh juicy, sweet and very good; one of the most popular and profitable varieties for early marketing. We are propagating it largely for that purpose. Middle of July.

WHEATLAND PEACH

PEACHES, continued

Triumph. Originated in Georgia. Ripens with Alexander; blooms late; has large flowers, and is an abundant bearer. Tree makes a very strong growth; fruit large size, with very small pit; surface is yellow, nearly covered with red and dark crimson in the sun; flesh bright yellow; nearly free when fully ripe; of excellent flavor. This and the Greensboro almost entirely supersede the Alexander and Amsden, and Triumph has especial value as being the earliest yellow Peach. June.

Victor. This is a new, very early variety from Texas. Fruit medium to large, with pleasant subacid flavor; semi-cling. Tree is a vigorous grower, and a heavy annual bearer. The originator says it is earlier than Sneed, which makes it a valuable variety for the South. Late June.

Waddell. A remarkable new Peach of the North China strain. Tree a heavy, stocky grower, with low spreading habit. Fruit is of medium size, oblong, rich, creamy white, with bright blush on sunny side; skin thick; flesh firm, rich, juicy, sweet and melting when fully ripe; freestone. Ripe early in June. J. H. Hale, the famous Georgia Peach grower, says of it: "I am willing to risk my Peach reputation on the claim that Waddell is the largest, most beautiful, finest flavored, best shipping and longest keeping Peach of its season."

Wager. Large; skin yellow, with a red cheek; flesh yellow, juicy, and of fine flavor; a very certain and abundant bearer; valuable market sort. Last of August.

Ward's Late. A fine variety, ripening last of August; vigorous and productive; fruit rather large; skin white, with a fine crimson cheek; flesh white, juicy, melting and excellent; valuable for canning and market purposes.

Wheatland. An extensive fruit-grower says: "It is the largest, hardiest, best, most productive and handsomest of its season, filling a gap just before Crawford's Late, which it excels. Though crowded on the tree, the fruit was all large." This is high praise, and we hope that on further trial it will be found still worthy of it. Early August.

Wilkin's Cling. Supposed to be a seedling of Heath's Cling, but is larger. Ripens with Heath. October.

Wonderful. From New Jersey. Large, almost globular, slightly pointed apex, uniform size and shape; rich golden yellow, partly covered with bright carmine; flesh yellow, rich, high-flavored, firm; freestone. One of the best for shipping. October.

Yellow Rareripec, or Yellow Alberge. One of the earliest of the yellow-fleshed Peaches; fruit of medium size; skin yellow, with a purplish red cheek; flesh yellow, red at the stone, juicy, sweet and pleasant; freestone. July 20.

Yellow St. John (Fleita's St. John). A large, roundish, yellow freestone, ripening a little before Troth's Early; skin orange-yellow, with a deep red cheek; flesh yellow, juicy, sweet and high-flavored. This is the earliest good yellow Peach we have, and must prove a profitable sort for the early market. Early July.

SELECT PLUMS

The Plum, like the Pear and other finer fruits, attains its greatest perfection on our heavy soil. The curculio, a small, dark brown beetle, often stings the fruit, causing it to drop off; but the following directions, faithfully observed, will secure a good crop of this splendid fruit everywhere.

As soon as the blossoms have fallen, spread two sheets under the tree, and give the tree a sudden jar by striking a smart blow with a hammer upon the stub of a limb sawed from the tree for the purpose; the insects will drop on the sheet and can be killed. Collect all the fallen fruit and burn or feed to swine. Repeat the operation every day for two or three weeks. It should be done before sunrise.

Bradshaw. Very large, dark violet-red, juicy and good; tree vigorous and very productive. July.

Coe's Golden Drop. One of the largest, most beautiful and valuable of late Plums; light yellow; flesh yellow; firm, rich and sweet; adheres to the stone; productive. Last of August.

German Prune. A valuable Plum, of fair quality for the table, but most esteemed for drying and preserving; fruit long, oval; skin purple, with a thick blue bloom; flesh firm, green, sweet and pleasant; separates from the stone.

Gueii (Blue Magnum Bonum). A large, handsome Plum; flesh yellowish green, rather coarse, sweet and pleasant; valuable for market. September.

General Hand. Very large; skin deep golden yellow; flesh coarse, pale yellow, moderately juicy, sweet and good; tree grows vigorously, and is very productive; separates from the stone. August.

Green Gage. Small, yellowish green; flesh pale green, melting, juicy, very sweet and rich, and unequaled in flavor; one of the richest and best flavored Plums; separates from the stone; growth slow, and young trees are hard to raise in moist localities. August.

Lombard. Medium size; skin delicate violet, dotted thick red; flesh deep yellow, juicy and pleasant. One of the hardiest, most productive and valuable Plums. Succeeds well everywhere, even on light soils. August.

Monarch. Fruit dark purplish blue, covered with a thin bloom, nearly spherical; large, being about 6 inches in circumference. Flesh pale, greenish yellow, partly free from stone, juicy, and with a pleasant flavor. Trees come into bearing very young, and bear abundantly. September.

Moore's Arctic. Originated in Maine, and celebrated for its remarkable hardness, freedom from curculio, and great bearing qualities. Fruit grows in large clusters; large, dark purple; flavor fine, both for preserving and dessert. A long keeper.

Niagara. Very large; reddish purple; a superb Plum; the tree is an erect, strong grower, and bears well; very valuable for home use and market. August.

Prince's Imperial Gage. Rather large; greenish yellow; flesh greenish, juicy, rich and delicious, sometimes adhering to the stone; tree vigorous and very productive, a single tree near Boston yielding fifty dollars' worth of fruit in one year. This variety is particularly adapted to dry, light soils; valuable. August.

Prince's Yellow Gage. Above medium size; skin yellow; flesh deep yellow, rich, sugary and melting; parts freely from the stone. Its great hardness and productiveness, joined to its rich, sugary flavor, make this a favorite sort. July 1.

Reine Claude de Bavay. Large, greenish yellow, spotted with red; flesh rather firm, juicy, sugary, rich, of fine quality; adheres slightly to the stone; a vigorous grower, very productive, and a valuable addition to the late varieties. September.

Spaulding. Seedling of some European variety; almost curculio-proof; when injured the wound heals quickly and the fruit ripens perfectly; the fruit is large, yellowish green, sweet and rich, with white bloom; quality excellent; fruit parts from the stone readily; a superb Plum; tree a strong grower and an early and abundant bearer. August 15.

Shipper's Pride. This valuable new Plum of the Damson type originated in western New York. Large size; purple, firm and sweet; first-class shipper. September.

Shropshire Damson. An improvement on the common Damson, being of the largest size of its class; dark purple; highly esteemed for preserving; tree vigorous and enormously productive. September.

Smith's Orleans. Large; reddish purple, becoming very dark; flesh deep yellow, slightly firm, juicy, rich, nearly first-rate; adheres to the stone; very productive. Aug.

Washington (Bolmar's). Very large; skin yellowish green, often with a pale red blush; flesh yellowish, firm, very sweet and luscious, separating freely from the stone. There is perhaps, not another Plum that stands so high in general estimation in this country as the Washington. Its great size, its beauty and the vigor and hardness of the tree are qualities which claim for it a place in every good collection. August.

Wild Goose. Medium size; oblong; bright vermilion red; juicy, sweet, of good quality; cling; productive, and nearly proof against the curculio. The most profitable variety for market in the South and deserves more extensive planting there as well as in the Middle states. July.

Yellow Egg (White Magnum Bonum). A very popular fruit on account of its very large size and splendid appearance; its slight acidity renders it valuable for making sweetmeats; skin yellowish, covered with a white bloom; flesh yellow, adhering closely to the stone; rather acid until it becomes very ripe. Last of July.

BOTAN, OR ABUNDANCE PLUM

JAPANESE PLUMS

This new strain of Plums has been received with general favor, and in the South, where the European kinds do not succeed as well as at the North, they have proved a blessing. In some sections where the Chickasaw or native kinds (Wild Goose, etc.) only are successful, the Japanese kinds are especially welcome, as they rate up in quality quite well with the very best European varieties. The Japanese Plums, with the exception of one kind, are extremely hardy and vigorous, bearing early and abundantly annual loads of rich luscious fruit, ripening from early in June to September. One very valuable quality of the Japanese Plum is, that the wound made by the curculio (an enemy to Plum culture everywhere), does not seem to affect the Japan kinds to the same extent as European and other kinds; while they are not curculio-proof entirely, yet for some reason the wound soon heals and the fruit matures perfectly. This may be attributed to the extremely strong and vigorous nature of both tree and fruit, as it appears to be able to resist and outgrow the trouble.

Botan, or Abundance. Lemon-yellow ground, nearly overspread with cherry, with heavy bloom; flesh yellow, very juicy; sub-acid, with apricot flavor; highly perfumed; stone small; the tree is exceedingly hardy and bears regularly; nearly curculio-proof; early and heavy bearer; the best of its class First of August.

Bartlett. Strong upright-growing tree with very glossy dark green foliage; very productive and usually fruits abundantly the second season. Fruit medium size, perfect freestone, dark crimson with flakes and dots of yellow, white bloom; flesh yellow, juicy; quality, flavor and fragrance closely resembling the ever-popular Bartlett pear, but even more delicious; ripens just before Burbank.

Probably too soft for long shipments, but all that can be desired for home use and near by.

Burbank. Resembles the Abundance in many ways; globular, large, cherry-red, with slight lilac bloom; flesh deep yellow, very sweet, with pleasant and agreeable flavor; strong grower; bears early, often at second year. September 1.

Climax. Mr. Burbank says: "Fruit heart-shaped, as large as Wickson and more highly colored; so fragrant that a whole house is perfumed with a single fruit; delicious as could be desired or imagined, and above all ripens before any other good Plum and nearly a month before Wickson. Tree extremely vigorous, rather upright grower, with strong branches and very large leaves. Productive as Burbank, four or five times as large, two to three weeks earlier and much more highly colored." Mr. Burbank has strong commendations for Climax from such authorities as Professor Van Deman and Professor Waugh, and in all sections where it proves reliable it will be an advance in many respects upon any Plum now known.

Hale. Originated also by Luther Burbank, who sold the original tree to J. H. Hale for \$500. Pronounced by Prof. L. H. Bailey, the admitted Plum authority of the country, as "the best in quality of all the Japans." Large, very beautiful, of delicious flavor, and may be successfully shipped long distances. The fruit is clear yellow, nearly covered with bright red; flesh deep yellow, juicy and of rare quality. Tree the most vigorous of all Plums, and a tremendous bearer. This is surely a most promising sort, which no planter can afford to neglect.

BURBANK PLUM

JAPANESE PLUMS, continued

Kelsey. By great odds the best Plum for the South; unfortunately, it is not entirely hardy north of Maryland. After thorough testing it has proved itself to be of first quality in every way; the fruit is large, heart-shaped, golden yellow, sometimes splashed with reddish purple; the flesh is firm, yellow, rich and juicy, with elegant flavor; the pit is small, and parts freely from the flesh; good for home use or shipping. August.

Ogon. Large golden yellow, with faint bloom; firm, sweet and of good quality; freestone; first-rate for canning; tree vigorous grower. Last of July.

Red June. The great early-market Plum; two weeks earlier than Abundance, and equals Lombard in quality; very large, bright red; free from rot on account of its early ripening. Tree vigorous and hardy, and should be in every orchard.

Simonii (Apricot Plum). Origin, China. Fruit large, tomato-shaped, cinnamon-red color; flesh is firm, sweet, aromatic; the flavor is delicious and not found in any other Plum, being similar to that of a pineapple, nectarine and banana; a beautiful and valuable Plum. We believe it has come to stay. Tree a strong grower, bearing young. August.

Satsuma, or Blood Plum. Large, round; skin and flesh dark purplish red, with blue bloom; seed exceedingly small; flesh firm, of good quality, fine flavored; very hardy and strong grower, adapted mainly to the southern states, but does well in the North. Aug.

Shiro. A combination of Robinson, Myrobolan and Wickson. A strong grower, having

RED JUNE PLUM

the appearance of a gigantic Myrobolan in leaf and growth, wood hard and wiry, ripening early in fall; should prove of great value where it is too cold for most of the best sorts. Fruit is produced in profusion, medium to large, clear light yellow with thin white bloom, so transparent the pit can be seen through the flesh, which is firm, juicy, rich, pleasant subacid; ripens two weeks before Burbank and nearly as productive.

Sultan. Professor Van Deman says: "Sultan is my choice of all the new Plums which I have tested. It is a cross between Wickson and Satsuma; large, being over two inches in diameter and nearly round in shape. The surface is smooth, dark wine-red or garnet, and very handsome. The flesh is garnet color, too, and rich-looking. In flavor it is excellent, being tart enough, yet not sour, but a delicious subacid. No Plum that I have eaten is better, and when cooked it could scarcely be equaled. It has all the high flavor of Satsuma when cooked, and Satsuma has heretofore been rated far above all other Plums for cooking. The season of Sultan is at least a month earlier.

Wickson. One of the latest of Mr. Burbank's introductions. The fruit is very large and of rare beauty. Pearly white color, changing to a glowing carmine, with a heavy white bloom. The flesh is firm, sugary and delicious; will keep two weeks after ripening. Ripens after Burbank and before Satsuma. This Plum has many good qualities, and should be planted extensively, as it is a valuable market sort.

Willard. Earliest of all the Japan Plums, and hence very valuable for market. A strong, vigorous, hardy tree, very productive; fruit medium size, spherical to oblong; bright claret-red, with many minute dots; firm, white flesh, free-stone. Very handsome when well ripened, and will keep a long time. Two weeks earlier than any other kind except Red June. The best variety for market.

WICKSON PLUM

IDA CHERRIES

SELECT CHERRIES

The Cherry succeeds on most soils and in nearly all localities throughout this country, but attains its greatest perfection upon those of a light, gravelly or sandy nature, provided they are in good condition. In planting Hearts and Bigarreaus, avoid wet or damp situations. The Dukes and Morellos will bear more moisture, but will flourish best in a soil that grows the others to the greatest perfection.

HEART AND BIGARREAU

Bigarreau, or Graffion (Yellow Spanish). Very large, often an inch in diameter; pale yellow, with a handsome light red cheek to the sun; flesh firm, with a fine, rich flavor. This variety, though not of the highest excellence, has become, from its great size, beauty and productiveness, a general favorite. July.

Black Tartarian. Fruit of the largest size, frequently measuring an inch in diameter; flesh dark, half tender, with a peculiar liver-like consistency, rich, nearly destitute of acid, of fine flavor. The vigorous growth and great productiveness of the tree, and the large size and mild, sweet flavor of the fruit, render this variety a general favorite. June.

Black Heart. Rather above medium size; flesh tender, juicy, with a rich, sweet flavor; very productive. June.

Downer's Late Red. Medium size; light red, amber in the shade; flesh tender, melt-

ing, rich, with a very high, sweet flavor. A good late sort. July.

Elton. This is certainly one of the finest Cherries, in all respects; its large size, early maturity, beautiful appearance, luscious flavor and productiveness render it universally esteemed; fruit large, pale yellow, blotched and shaded with red; flesh firm, becoming tender, juicy, rich and high-flavored; very productive. May and June.

Early Purple. An exceedingly early variety, ripening in May; fruit of medium size; color dark red, becoming purple at maturity; flesh purple, tender, juicy, with a rich and sweet flavor; indispensable as an early variety; productive.

Governor Wood. One of the best of Dr. Kirkland's seedlings, and deserves a place in every good collection. Fruit large; skin light yellow, shaded with bright red; flesh nearly tender, juicy, sweet, rich and delicious; tree vigorous and productive. June.

Ida. This reliable Cherry originated in

"A car of California Cherries sold in New York City during May, 1905, for \$5,342—a record price. The Cherries were mostly Black Tartarian and averaged \$2.35 per box. The top prices received, however, ran from \$3 to \$4.25 a box." From "American Fruits" of August, 1905.—NUFF SED.

HEART AND BIGARREAU, continued

Pennsylvania several years ago. We consider it worthy of general cultivation for either home use or shipping. Tree vigorous and upright, and an abundant bearer. Fruit rather large; color pale, whitish yellow, more or less mottled with red. Flesh tender, juicy, rich, and of best quality. Seed very small. Ripens early, about May. Should be in every orchard.

Knight's Early. Large; black; flesh purple, tender, juicy, with a very rich, high, excellent flavor. Considered one of the best Cherries in quality; productive. First of June.

Mercer. The Wonderful new Cherry. Introducer says: "It is the finest Heart Cherry that we have ever seen. It is decidedly different from anything before known. It is a very dark red and early. It is one of the most profuse bearers that is grown, and for growth and hardiness it is second to nothing; not even the Mazzard surpasses it. It is larger than the Black Tartarian, and is a finer flavored, and, in fact, is a true Heart Cherry of the finest type. It is a sure cropper. The former owner of the farm has lived on the place since birth and cannot remember a single year when that Cherry did not bear, and for canning it has no equal.

"Another feature of this Cherry is that we have never seen a single Cherry that was wormy, and before we picked the Cherries we called in our neighbors and the universal comment was, 'Isn't that a beautiful sight?

and did you ever see anything so full? Aren't they beautiful? Have you any trees of that kind?' Every one's opinion was that it was beyond being beautiful; it was grand and magnificent. But the great recommendation for the Cherry is the extreme hardiness of the tree. This tree is the acme of healthy growth, never having a sign of disease in any part of it. The leaves maintain their dark green and the tree continues to grow very late in the season. We do not exaggerate in this description in any way, but give you the plain facts, and are willing to give you at any time proofs that will substantiate what we say of it."

Napoleon Bigarreau. Is one of the best of the firm-fleshed Cherries; it is one of the largest size, often measuring an inch in diameter; well flavored, handsome and productive; skin pale yellow, becoming amber in the shade, richly dotted with deep red, and with a fine marbled, dark crimson cheek; flesh very firm, juicy, with a very good flavor; profitable for marketing. June.

Rockport Bigarreau. Large; deep brilliant red; flesh rather firm, juicy, sweet, rich, with an excellent flavor; a very desirable and profitable Cherry. Beginning of June.

Schmidt's Bigarreau. Very large, deep black; flesh dark, tender, very juicy; fine flavor; productive. July.

Windsor. Origin, Canada; fruit large, liver-colored; flesh firm and of fine quality; tree very hardy; a valuable late variety. July.

EARLY RICHMOND CHERRIES

DUKE AND MORELLO

The Dukes and Morellos are not so vigorous and upright in their growth as the Hearts and Bigarreaus, forming low, spreading heads, with acid or subacid fruit.

Baldwin. Tree an upright, vigorous grower, forming a round head; leaves large and broad; bloom pure white, changing to pink; fruit large, almost round, very dark, transparent wine color; flavor slightly acid, yet the sweetest and richest of the Morello type; stems large, of medium length, and generally in pairs. Unexcelled in earliness, vigor, hardness, quality and productiveness.

Dyehouse. In hardness and general appearance resembles Early Richmond, but is of finer quality and several days earlier; it produces very regular annual crops; fruit medium; skin bright red, darkened in the sun; flesh soft, juicy, tender, sprightly, subacid, rather rich; resembles both the Morello and Duke in growth, wood and fruit; productive. Superior to Early Richmond.

English Morello. Above medium size; skin dark red, becoming nearly black; flesh juicy, subacid, rich. July.

Early Richmond, or Kentish. Medium size; red; flesh melting, juicy, and at maturity of a rich acid flavor; very productive; fine for cooking. Commences ripening last of May, and hangs long on the tree.

May Duke. Medium size; dark red; melting, rich and juicy; an old and popular sort. Ripens soon after Early Purple Guigne.

Montmorency Large-fruited. Fruit large, and the finest flavored of any in this class; tree a free grower, hardy and prolific.

Montmorency Ordinaire. A beautiful, large, red, acid Cherry; larger than Early Richmond, and fully ten days later; very prolific and hardy; a variety of great value; tree a free grower.

Wragg. Tree moderate grower; fruit fair size. Introduced from northern Germany, and recommended as very hardy; flesh rich and dark. July.

SELECT APRICOTS

This beautiful and excellent fruit needs only to be known to be appreciated. It ripens a month or more before the best early peaches, and partakes largely of their luscious flavor. The tree is even more hardy than the peach, and requires about the same treatment. To make a crop more certain, plant on the north or west side of a wall, fence or building.

Alexander (Russian No. 2). Very large, oblong; yellow, flecked with red; flavor sweet and delicate. July 12.

J. L. Budd (Russian No. 6). Large size; white, with red cheek; sweet and juicy; very fine; the best late variety. August 1.

Early Golden (Dubois' Early Golden). Small; pale orange; flesh orange, juicy and sweet; tree hardy and productive; separates from the stone. Last of June.

Harris. Origin, New York. A new kind of great promise; very hardy; blooms late; a sure bearer; elegant golden yellow color.

Large Early. Large size; orange, with a red cheek; flesh sweet, rich and juicy; separates from the stone; tree vigorous and productive; one of the very best of the early sorts. Last of June.

Moorpark. One of the largest and finest Apricots; yellow, with a red cheek; flesh rather firm, orange, parting from the stone, sweet, juicy and rich, with a luscious flavor. July.

Montgamet (Alberge de Montgamet). Fruit medium size; skin pale yellow, with a slight tinge of red on the side next to the sun; flesh firm, juicy; one of the best. Early.

SELECT NECTARINES

The Nectarine requires the same culture, soil and management as the peach, from which it differs only in having a smooth skin like the plum.

HARRIS APRICOTS

Boston. Large; yellow, red cheek; flesh yellow, sweet and of pleasant flavor; freestone. August.

Elruge. Medium size; greenish yellow, with a dark red cheek; flesh pale green to the stone, sometimes stained with red there, melting, very juicy, with a rich, high flavor. This is one of the best and most celebrated of Nectarines; freestone. August.

Pitmaston Orange. Large size; skin rich orange-yellow, with a dark, brownish red cheek; flesh deep yellow, but red at the stone, melting, juicy, rich, sweet and of excellent flavor; freestone; best yellow-fleshed Nectarine. Middle of July.

CHAMPION QUINCE

SELECT QUINCES

From Cornell Agricultural Experiment Station Bulletin, by Prof. L. H. Bailey

"The Quince crop is reliable, and not easily destroyed by capricious variations in weather. Trees are hardy and productive, easy to prune and spray, and diseases and insects, while rather numerous, are held in check with comparative ease, with the single exception of pear-blight. The lands should be retentive of moisture, but not wet and soggy. Good drainage is as essential to Quince culture as it is to the growing of pears or other fruits.

"Quince orchards should be given clean culture. The roots are usually shallow, and very shallow tillage is generally best. Probably the best results will be obtained, in the long run, if the trees are set 14 or 15 feet apart each way."

Bourgeat. Bright golden yellow. The new golden prolific Quince. Pronounced by a responsible grower, who has fruited it for six years, a profuse bearer, of large, handsome, showy, richly colored fruit, that actually keeps like Baldwin apples, in a good cellar, until spring. The core is very small. Will cook without hardness, like apples. Tree is a robust grower. Origin, France. Ready for use from November through to March or April.

Champion. Greenish yellow; fruit large, distinctly pear form, furrowed about the top. Flesh tender, delicate flavor. Cooks as tender as apples. Tree bears abundantly while young. In some places it does not ripen well. A good keeper. In a test at Cornell University Agricultural Experiment Station (New York), in 1892-93-94—including Orange, Champion, Rea's and Meech—the Champion averaged the most productive, with Orange a close second. Of American origin. Season late.

Meech's Prolific. Pale, bright orange, with a thin fuzz; fruit large, and in shape ranges from nearly apple shape to short pear shape, somewhat furrowed at the top. Very fragrant, good flavor. Bears young. Productive. Supposed to have originated in Connecticut. Midseason.

Orange. (Apple Quince.) Bright pale orange. The surface only moderately fuzzy. Fruit variable in size and shape, but in the ideal or original form is distinctly flattened at both ends, like an apple. The most extensively cultivated of the old varieties. Ripens after mid-autumn, and keeps until February under good conditions.

Rea. (Rea's Mammoth.) Rich orange, surface very smooth, fruit large to very large, pear form. Flesh of excellent quality. Tree a very strong grower, distinguished by its short stature. Does best under high cultivation. We consider that for orchard purposes, as well as a garden tree, it is very valuable. Origin, Coxsackie, N. Y. Ripens early.

Extracts from Letters

In placing an order with us this spring they say: "We wish to thank you very much for the 900 fine yearling trees we bought of you last spring. They were all beauties and did well; better than trees of any nursery we had ever bought of. Will always deal with you and recommend you while you deal thus."—HULL BROTHERS.

I saw the 1,000 York Imperial Apple trees on Sunday, which were purchased of you, and wish to express my appreciation of the manner in which you filled the order. I have never seen any trees that I thought compared with them. I wish to thank you very much for them.—F. S. KIRKPATRICK,

JAPAN CHESTNUTS

NUT-BEARING TREES

All over the country there is a rapidly growing interest in nut culture. The demand for nuts is great; the markets are poorly supplied, and the prices too high. Palatable and wholesome as they are, they should become a common article of food here, as in Europe.

Numerous experiments show plainly that nut culture of nearly every kind can be carried on in the United States with entire success; in fact, statistics plainly prove that a well cared for nut orchard is a "gold mine," indeed.

A large portion of the nuts on our markets are imported. We are sure that, with proper care and culture, we can raise enough to have plenty at home and export largely at paying prices. Most kinds of nuts are planted 30 feet apart, like apple trees, and require about the same general culture.

CHESTNUTS

AMERICAN (*Castanea Americana*)

The well-known native variety; a stately tree, with broader leaves than the European, and producing smaller nuts but a larger quantity of them; both useful and ornamental; the timber is very useful for many purposes.

SPANISH (*Castanea Vesca*)

Originally introduced from Asia Minor into Europe; a vigorous grower, and forms a handsome head for lawn planting; a valuable species, both for ornament and fruit; the fruit is much larger than the American variety; very sweet and excellent when boiled or roasted. Bears early.

GRAFTED VARIETIES

The Spanish strain ripens after the Japanese. The trees are large-growing, and in planting require more room than the Japanese. There are many profitable varieties of this strain, among the best of which are Numbo, Paragon, Ridgely and Scott. These ripen after the Japanese, and prolong the season well into October.

Numbo. Very hardy; very productive. Comes to bearing quite young. Nuts large and of good quality, ripening early, usually before frost, and selling at high prices.

Paragon. Tree hardy, productive; nuts large and of excellent quality. Two trees 4 years grafted produced one bushel of nuts each, which sold at wholesale at \$10 per bu.

SPANISH CHESTNUTS, continued

Scott. Tree very hardy, strong grower, enormously productive, attaining large size. The original tree measures 5 feet in diameter and produces annually 3 to 5 bushels of large, handsome nuts of excellent quality, that have sold in New York markets at \$16 to \$18 per bushel. The Scott trees are very precocious, producing heavy crops at 2 years from graft. Another very important feature is its almost entire exemption from attacks of the Chestnut weevil. The original tree stands between two others planted at the same time, both of which have always suffered severely from the Chestnut weevil, while it is the exception to find an imperfect nut on the Scott. Young orchards propagated from the Scott so far appear to be free from worms. The nuts are large, beautiful, glossy mahogany color, free from fuzz, and of good quality, ripening mid-season.

Ridgley. A large variety of the Chestnut from Delaware. Very productive. The crop from the original tree is reported to have brought \$32. Very good quality.

JAPAN (*Castanea Japonica*)

Mammoth. This valuable new nut is attracting widespread attention. It claims superiority over all others because it is larger, sweeter, better; bears young and abundantly; like all valuable fruit nowadays, it is necessary to graft to secure and maintain the most reliable kinds; the tree is dwarf in habit, hardy and ornamental.

We grow the following named kinds. Our trees are grafted and are much preferable to seedlings. There are many Japan strains, all of which are early and profitable. As a few are better than many, we will name some ripening in the order named:

Alpha is the first to open. It is large in size, 2 and 3 in a bur, productive; opens September 5 to 10; brings the highest market price.

Reliance. A very early bearer; nuts large and uniform; very productive; ripens after Alpha.

Superb. Very productive, running 3 nuts to the bur; ripens after Reliance.

Giant. The largest Chestnut, measuring 7 inches in circumference; smooth, dark, handsome; ripens after Superb.

WALNUTS

American Black. This is the common native variety. The nuts are excellent and always desirable; besides, the wood is very valuable for many uses.

English. A fine, lofty-growing tree, with a fine spreading head and bearing crops of large and excellent nuts. The fruit in a green state is highly esteemed for pickling, and the great quantity of nuts annually imported and sold here attest to its value; the tree is peculiarly well adapted to the climate of the South, and deserves extensive cultivation.

Japan. Produces in abundance nuts considerably larger than the common hickory nut, which are borne in clusters of 15 to 20. The shell is thicker than the shell of the English Walnut, which in a general way it resembles, but is not so thick as that of the Black Walnut. The meat is sweet, of the very best quality, and can be removed entire. The tree grows rapidly, and attains a very large size, with a magnificent spreading top. The leaves are of immense size, of a charming shade of green, and very handsome.

Japan, Cordiformis. Differs from Sieboldiana in form of nuts, which are broad, pointed and flattened. Nuts of medium size, shell thinner than Sieboldiana and if cracked longitudinally the kernel can be removed entire. The meat is of good quality. Tree very vigorous grower; attains a great height, has a magnificent head. A very valuable acquisition. Perfectly hardy. We consider this the best of the Japan Walnuts. Destined to become a valuable nut for market.

Japan, Sieboldiana. A native of the mountains of Japan. Extremely hardy and vigorous grower. Of symmetrical and beautiful form. Three-year-old trees in our nursery have produced nuts. Wonderfully productive. Nuts produced in clusters of from 12 to 20 nuts each. Shell thicker than that of the English Walnut, but not so thick as that of the Black Walnut. Meat is sweet and of the best quality. The tree has an abundance of fibrous roots and transplants readily.

PECANS

The common wild native variety found in the South, produced from the seed; bears regular crops of medium size; very salable nuts and good; the tree is rapid-growing and handsome.

Paper-shell Pecan. This is indeed the most valuable nut yet introduced; large, often 1½ inches in length; thin shell; the kernels are very large, rich, sweet and delicious; enormous profits have been received from the culture of this nut; many thousand trees are being planted, and soon the nut industry, especially of the South, will be very large. Hardy in the Middle states.

FILBERTS, or HAZELNUTS

We have the best English varieties. The nut is medium size, oblong, very sweet; the tree is of bushy habit, growing from 6 to 8 feet high; very hardy almost everywhere; early and abundant bearer; very satisfactory.

BUTTERNUTS

A handsome, rapid-growing, luxuriant tropical looking tree; very ornamental and productive; the nuts are something like black walnuts, but longer and flat; the kernel is much sweeter and rich and more delicate; fine flavor.

ALMONDS

Hard-shell, Soft-shell or Ladies'

JAPANESE HARDY ORANGE (*Citrus trifoliata*)

This valuable new fruit from Japan, after thorough testing, has proved itself entirely hardy in any part of the United States; it has borne regularly here for several years. The fruit, while not to be classed with first-class Florida oranges, is nevertheless attractive and valuable; it is of small size and much like the ordinary orange; the flavor is good, subacid, very sprightly, valuable to use in place of the lemon, and is elegant to preserve; very desirable as an ornamental, and also for hedging.

MULBERRIES

This fruit is getting very popular, especially South, where it is fine food for hogs and poultry. The tree is also fine for shade, as it grows rapidly and is very hardy.

Downing's Black. Fruit very large, black and subacid; mostly planted North. Fruits about June 1 to middle of July.

Hicks, or Everbearing Black. This variety is very popular South, as the tree is a very rapid grower, bears very young and has a long season, very often from June 1 until the middle of August. Very sweet.

New American. This we consider equal

to Downing's in all respects, continuing in bearing fully as long and a hardier tree. Fruit jet black.

Russian. Brought from Russia by the Mennonites. Tree a very hardy and a rapid grower; fine as a shade tree; bears very young and very heavily, but the fruit is of very little value.

White English. Fruit very small and sweet, but not so good as Hicks'.

PERSIMMONS

AMERICAN PERSIMMON

A native of the states south of New York. Makes a beautiful ornamental tree, with dark green foliage. Fruit very luscious, if allowed to ripen on the tree, which is late in the fall, after several good frosts.

JAPANESE PERSIMMONS

By the introduction of the Japanese Persimmon, we have added one of the most beautiful and luscious fruits, and one that will be greatly appreciated when better known.

The tree is wonderfully productive, and comes into bearing very young; we have had 1-year-old trees reach us late in the spring from Japan, and next season they would bear a profusion of fruit. Trees 3 feet high, standing in nursery rows, have matured 21 specimens, and others, about 5 feet, have borne over 50. We know of no tree that makes so fine a show in fruit as the Japanese Persimmon.

The trees are not entirely hardy north of the Potomac, though we have had them standing unprotected near Baltimore for five years, where they have borne well, and even came through the severe winters unharmed.

BEST VARIETIES

Hachiya. Very large, oblong, conical, with sharp point; very showy; diameter $3\frac{1}{2}$ inches longitudinally and 3 inches transversely; color of skin reddish yellow, with occasional dark spots or blotches, and rings at apex; flesh dark yellow; some seed; astringent until fully ripe, then very good; tree vigorous and shapely.

Tane-Nashi. Very large, roundish conical, pointed, very smooth and symmetrical; diameter 3 inches longitudinally and $3\frac{1}{2}$ inches transversely; color of skin light yellow,

low, changing to bright red at full maturity; flesh yellow; generally seedless; astringent until fully ripe, then one of the best.

Tsuru. Longest in proportion to its size, of all the varieties; slender, pointed; diameter $3\frac{1}{4}$ inches longitudinally and $2\frac{1}{4}$ inches transversely; color of skin bright red; flesh orange-colored, with darker coloring in immediate vicinity of seeds, which are few; very astringent until ripe, and one of the latest to ripen; a good keeper; and of good quality when fully ripe; tree a heavy bearer.

Yeddo-Ichi. Large, oblate; diameter $2\frac{1}{2}$ inches longitudinally and 3 inches transversely; very smooth and regular in outline, with a slight depression at the end opposite the stem; color of skin a darker red than most varieties; flesh a dark brown color, verging into purple; quite seedy. In quality it is one of the best, being exceedingly rich and sweet, and, like the Hyakume, is good to eat while still hard; tree a heavy bearer and very thrifty.

Yemon. Large, flat, tomato-shaped, somewhat four-sided; diameter $2\frac{1}{4}$ inches longitudinally and $3\frac{1}{4}$ inches transversely; skin bright orange-yellow; flesh yellow, generally seedless; quality very fine; tree rather an open grower, with distinct foliage of a light shade.

Zengi. The smallest of all the varieties introduced; round, or roundish oblate; diameter $1\frac{3}{4}$ inches longitudinally and $2\frac{3}{4}$ inches transversely; color of skin reddish yellow; flesh very dark, shows black dots and white fibers when cut transversely; very seedy; quality very good, it being edible while still hard, and one of the earliest varieties to ripen; the tree is vigorous and a very good and reliable bearer.

We also grow other varieties.

Rocky Mountain Cherry

Improved Dwarf. 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 other Cherries are gone.

SELECT GRAPES

The cultivation of this fruit is so simple that no one need fail to obtain a good annual crop, if a little care is taken and a proper selection made. When space is limited they can be trained upon fences or over doorways or arbors. On this account Grape-vines are particularly desirable for planting in city lots or village gardens. If a few vines each of the red, white and black varieties are selected, then as much enjoyment—perhaps more—can be obtained from this fruit as any other. When the selection is made to include some of the early varieties, as well as those that are good for winter keeping, it is possible to have fresh Grapes upon the table during several months of the year.

The following list contains the best known sorts of hardy American varieties.

RED VARIETIES

Brighton. A cross between the Concord and the Diana Hamburg. Bunch large and beautifully formed; berries above medium to large size; usually of a red or Catawba color when first ripe, changing to reddish purple if allowed to hang long on the vine, covered with a blue bloom; skin thin; flesh tender, very sweet and of fine and excellent flavor; quality best as compared with the finest native Grapes. The fruit keeps well for an early Grape, either on or off the vines; vine productive and vigorous.

Catawba. So well and favorably known as to need but little notice here. One of our best Grapes, succeeding well in the valley and Piedmont regions of Virginia; bunch and berry large, dark red when ripe; flesh very juicy and rich; productive and valuable in September.

Delaware. This Grape is so well known as to need no commendation. Its earliness, hardiness and admirable sweetness have become too well known to the public to demand more said in its behalf. Bunches medium size, compact; berries rather small; skin of a beautiful light red color; it is without hardiness or acidity in its pulp; exceedingly sweet, sprightly, vinous and aromatic. Ripens in August.

Isabella. An old, well-known sort; large size; dark purple; sweet and rich, with a slightly musky aroma. Beginning of September.

Lutie. This remarkable Grape has never been known to rot. It seems to be absolutely free from the shortcomings of so many of the leading kinds. It has been tested for ten years, and has fully sustained its reputation. The fruit is of dark red or purplish color; bunch and berry large, exceedingly sweet, sprightly, vinous and aromatic. The vine is a strong grower and regular bearer. Ripens close after Moore's Early.

Salem (Rogers' No. 22). Bunch and berry large; of a light chestnut color; skin thin; flesh tender, very sweet and sprightly, with a rich, aromatic flavor; vine vigorous and productive; ripens before Concord. One of the best and most popular of Rogers' Hybrids.

Vergennes. A chance seedling from Vermont. Skin light red, rather thick; flesh tender, juicy, well-flavored; very good quality. Ripens with Concord.

Wyoming Red. Ripens with Delaware; somewhat similar, though larger in bunch and berry; light red; early; vine strong grower and hardy.

BLACK VARIETIES

Concord. There is no Grape in this Catalogue so popular or planted so extensively as this. It succeeds well in almost all parts of the country, and, although of northern origin, is better here than in its native place. It received the \$100 premium offered for the Grape of the greatest value. Vine a very vigorous grower and enormously productive, comparatively free from disease; bunches large, compact; berries large, round, black, with a blue bloom; a profitable market sort.

Campbell's Early. The King of American Grapes. Another season's experience confirms and strengthens the entire confidence heretofore expressed that the introduction of this Grape marks an epoch in the substantial advancement of American Grape culture, not less distinct and important than that which followed the appearance of the Delaware (introduced by Mr. Campbell) or Concord. It has been very carefully observed

BRIGHTON GRAPE

BLACK GRAPES, continued

and tested more than a dozen years, during which time it has shown no fault, but has exceeded all expectations as to its evident merit and high character. It is confidently believed to be a Grape in all respects better adapted to general use in all sections suited to our native varieties than any other which has yet been grown and tested. A very strong, vigorous, hardy vine, with thick, healthy, mildew-resisting foliage, and perfect, self-fertilizing blossoms, always setting its fruit well and bearing abundantly.

Clinton. A black Grape of medium size, entirely healthy and hardy; a strong, rank grower, requiring thin soil and plenty of room; on strong, rich soil should be allowed to run, and pruned long; often succeeds where most other kinds fail; colors early, but should hang long on the vine. A good table Grape when fully ripe.

Early Ohio. Claimed to be the earliest black Grape known; ten days earlier than Moore's Early. Bunch large, compact and shouldered; berry medium, covered with bloom; hardy as the Concord; strong grower and very productive; quality good; first-class for market.

Eaton. Origin, Massachusetts. A seedling of the Concord; stronger grower; large, black; the bunch and berry strongly resembles Moore's Early, the skin rather thick and covered with heavy bloom; juicy, with some pulp, though tender; has less native odor than the Concord; large and attractive. Early.

CAMPBELL'S EARLY GRAPE

Ives. Bunch medium to large, sometimes shouldered, compact; berries medium black; flesh sweet, pulpy and somewhat foxy; should hang some time on the vine after it colors; hardy, vigorous and bears well; deservedly becoming popular. Early.

McPike. (New.) Said to be a seedling of Worden, which it resembles in color, quality and time of ripening. Bunch large, berries very large.

Moore's Early. A seedling of the Concord, combining the vigor, health and productiveness of its parent, and ripening a few days earlier than the Hartford; bunch medium; berry quite large; color black, with a heavy blue bloom. Its extreme hardness and size will render it a popular market sort.

Norton's Virginia. Bunch large, shouldered; berries small, round; skin thin, dark purple, nearly black; flesh purple, with a brisk, rather rough flavor; vine vigorous, productive and free from disease. Last of August.

Worden. Said to be a seedling of the Concord, and is a slight improvement on that variety; ripens a few days earlier; bunch large and compact; berry large, black and of good quality; vine vigorous and productive. Will become very popular for the vineyard and garden.

WHITE VARIETIES

Empire State. Another new white Grape of great promise; bunch large-shouldered, berry medium, skin slightly tinged with yellow; flesh tender, rich, juicy, sweet and sprightly; ripens a little after Hartford; vine a good grower and productive.

Goethe (Rogers' No. 1). Bush and berry large; skin thin, yellowish green, tinged with red; flesh tender, melting, sweet and delicious; strong grower and very productive; deservedly becoming popular. First of Sept.

Green Mountain, or Winchell. Well tested; the berry is medium size; color greenish white, with delicate white bloom; flesh juicy and sweet; remarkably free from mildew, and will do well in any soil where the Concord grows. A valuable early variety.

Martha. This is one of the most reliable white Grapes yet known. Bunch medium, compact, shouldered; berry white or greenish, turning to pale yellow when fully ripe; skin thin; flesh very sweet and juicy; a seedling of the Concord, and will take the same rank amongst white Grapes that its parent does amongst the black. Ripens a little earlier than Concord.

Moore's Diamond. Origin, New York. Said to be a cross between Concord and Iona. This handsome new white Grape has met with general favor; its extreme early ripening alone would make it valuable, coming in two or three weeks ahead of Concord; the bunch is medium size, slightly shouldered; color greenish white, with a yellow tinge when fully ripe; flesh juicy and almost without pulp; few seeds.

WHITE GRAPES, continued

Niagara. No Grape has been so strongly presented for public favor as this, and for a while it seemed as though it would merit all the praise bestowed upon it. The vine is remarkably vigorous and productive; bunch large, generally shouldered; berry large, roundish; color greenish white, turning to light yellow; skin thin, but tough; flesh slightly pulpy, tender and sweet; has a decided foxy flavor before fully ripe, which it pretty well loses at maturity. Ripens with Concord. In some vineyards it has suffered greatly from rot, but where it succeeds it is unquestionably a very valuable sort.

Pocklington. A seedling of the Concord. Vine very hardy, healthy and productive; bunch large, generally shouldered; berry light golden yellow when fully ripe; quality good; ripens rather early. It is a good keeper, and bears shipping well. It will probably take its place as a valuable standard Grape, being the largest white Grape of its type yet introduced.

Scuppernong. A southern Grape, too tender for a more northern latitude than Virginia, but southward it is quite hardy and valuable. Vine a vigorous grower, requires no pruning; bunch small, loose, not often containing more than six berries; fruit large, round; skin thick, light green; flesh pulpy, juicy, sweet; produces enormous crops; continues in season about six weeks.

MOORE'S DIAMOND GRAPES

GOOSEBERRIES

There has been a great demand for these plants for several years on account of the profitableness of the crop, the demand having exceeded the supply. Prices in the Baltimore markets have been from 6 to 10 cents per pound, wholesale.

INDUSTRY GOOSEBERRY

Downing. A seedling of the Houghton. An upright, vigorous-growing plant; fruit larger than its parent; color whitish green;

flesh rather soft, juicy, very good; productive; valuable market sort.

Houghton's Seedling. Rather small; pale red; flesh tender, juicy, sweet and pleasant; produces enormous crops; free from mildew; most profitable market variety.

Industry. English origin; the best foreign Gooseberry yet introduced; very large, dark red, excellent quality, beautiful, and an enormous bearer.

Pearl. Said to be the most prolific Gooseberry yet known. Originated by Professor William Saunders, of the Experimental Station at Ottawa, Canada. It has also been thoroughly tested at nearly all of the experimental stations in the United States for the past four years, and reports are unanimous in its favor. It is a wonderful cropper, strong grower, and free from mildew. Fruit one-third larger than Downing.

Red Jacket. Plant vigorous and healthy. Fruit rich dark red; oblong. Believed to be valuable.

Smith's Seedling. A new variety grown from seed of the Houghton; more vigorous and upright in growth of plant than its parent; the fruit is larger and somewhat oval in form; light green; flesh moderately firm, sweet and good.

CURRENTS

Currents should be planted on good soil, which must be kept rich and well worked. Trim out the old wood as soon as it begins to decline, and shorten all the young shoots, to keep the bushes in good shape. Sprinkle ashes around the roots occasionally to keep the borers away. The currant-worm may be destroyed by sprinkling the bushes with powdered white hellebore while they are wet with dew. This powder is poisonous, and, where it has been applied, the fruit should not be used without first being washed.

The Currant comes partly with the Raspberry, but follows it several weeks. Indeed, none of the small fruits will remain so long on the bushes without injury as the Currant.

LEE'S PROLIFIC
CURRENT

Black Naples. Very large; black; valuable for jams and jellies; has a strong musky odor.

Cherry. Very large; red; strong grower and moderately productive; fine for preserving and a valuable market variety.

Fay's Prolific. This Currant has now been before the public a number of years, and we believe has pretty well sustained the claims of its disseminator, who says of it: "Color rich red; as compared with the Cherry Currant, Fay's Prolific is equal in size, better in flavor, containing less acid, and five times as prolific, and from its long, peculiar stem, less expensive to pick."

Lee's Prolific. A black variety of recent introduction, and perhaps the best of its class. Earlier than Black Naples, with the peculiar musky flavor of that variety; fruit large; very prolific.

La Versailles. One of the largest and best Currents; an enormous bearer; red; flavor good; very similar to Cherry.

North Star. This new Currant is of remarkably vigorous growth and wonderfully prolific; the stems of fruit thickly set average four inches in length. The fruit is very sweet and rich, a fine dessert fruit and unequaled for jelly. Its large, long clusters can be more rapidly picked than other kinds. It is extremely hardy, easily propagated, bears early.

Red Cross. Jacob Moore, the originator, says: "Red Cross clusters are long and have well-necked berries, double the size of Victoria, and far superior in quality to Cherry or Victoria. Nothing will compare in quality with Red Cross but White Dutch, which is too small. Red Cross was first fruited in 1889. We have seen the fruit growing in such masses as to hide the upper branches from view. It is later than Cherry. The plant makes twice the growth of Cherry, and yields two or three times as much fruit. We recommend it with confidence. We consider Red Cross one of the best of the new Currents."

Red Dutch. Larger than the common red, and clusters much larger and less acid; one of the best red Currents.

White Grape. The best white Currant; bunch moderately long; berries large; very productive, less acid than the red Currents; fine for the table.

RASPBERRIES

Will do well on any soil that will produce a good corn crop. Land should be thoroughly prepared and well enriched; ground bone is one of the best fertilizers. Keep well cultivated and free from weeds and suckers. As soon as they are done bearing, cut out the old wood to give more vigor to the young canes. Spring is the best time to plant Black Caps. Plant in rows 5 feet apart, 3 feet apart in rows.

Cumberland. Black. Very large. Very similar to Gregg in quality and firmness; in hardiness and productiveness it is unexcelled. One of the best mid-season market varieties.

Columbian. Dull purple, very large, moderately firm. A good market berry and one of the best for canning. Bush remarkably strong and wonderfully productive.

CUTHBERT RASPBERRIES

RASPBERRIES, continued

Cuthbert (Queen of the Market). Canes strong, upright, very vigorous, sometimes branching; foliage luxuriant; fruit large to very large; red; moderately firm, with high sprightly flavor; very productive. Its many valuable qualities render it desirable for home or market culture. It succeeds well generally, and is almost the only one that can be relied on in the cotton states. We commend it to planters in all sections.

Gregg. This is one of the largest, if not the largest, of the black cap family; fruit large, black, with a slight bloom; flesh quite firm, moderately juicy, sweet and rich; the fruit ripens late and very evenly, making the picking season short; it is a very strong grower and good bearer. Very desirable.

Golden Queen. A seedling or "sport" of the Cuthbert, and in hardiness and vigorous growth of plant resembles that variety; fruit of large size; color beautiful yellow; flavor excellent.

Kansas. Black. Berries as large as Gregg and of better color; very little bloom; of best quality; ripens early. Very strong grower and immensely productive.

Loudon. Dark crimson, large, firm, of good quality. The best mid-season market variety. Very vigorous, hardy and productive.

Miller Red. This new red Raspberry originated in Sussex county, Delaware, and is very popular in that section; fruit about the size of the Cuthbert, and holding its size to the end of the season; color bright red, and does not fade; core very small; the finest and best shipping berry in existence; ripens early; heavy bearer.

Munger.—Description of introducer.—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. Its season of ripening is from 5 to 8 days later than Gregg, and it has a special faculty of withstanding drought and hot sun. The past season, when most others were dry and seedy, Munger ripened up sweet and juicy, and readily brought an advance of 50 cents per bushel over other kinds. The canes, too, resemble Gregg, are free from disease, upright in growth, and have never yet been affected by the cold of winter; originated in western Ohio by Timothy Munger, now of California.

Souhegan (Cap). A week or ten days earlier than Doolittle; strong grower; very hardy; fruit large, jet black, handsome; one of the very best of the caps.

WINEBERRY

Of Japanese origin. A novelty that has created quite a sensation in the horticultural world, and proved itself to be a valuable acquisition. The plant is quite distinct; it belongs to the raspberry family, and is large, robust and perfectly hardy. The berries are half transparent and beautiful, ranging in color from an amber to crimson as they ripen; in general appearance they resemble the raspberry; the quality is distinct, rich, sprightly, with a sharp subacid; elegant for cooking, canning or jelly, far surpassing the huckleberry, raspberry and many other small fruits. It begins to ripen in July, and continues a long time. It is also a handsome ornamental shrub, and its freedom from insect pests and rust makes it valuable indeed.

BLACKBERRIES

The culture of these is about the same as that of the raspberry, but if the soil is not very rich they may be set 5 by 2 feet in the row; on rich soil $6\frac{1}{2}$ by 3 feet. It requires about 3,000 plants per acre. They should be topped 2 feet from the ground for laterals; do not let more than 3 canes grow to the hill. The past seasons have proved to us that there is as much profit in Blackberry culture as in any other branch of fruit-growing. The culture of Blackberries is not so general as the profits would justify, the demand being always good in the large cities.

Eldorado. We are more than ever impressed with the conviction, after fruiting this berry another year, that we have in this variety the best Blackberry ever introduced. Wherever it has had a trial, its merits appear at once, and hence its quick popularity where tested, so much so that we have already had to decline orders in large quantities.

Like many of our best fruits, Eldorado is an accidental seedling, and takes its name from the town close by where it was found in Preble county, Ohio. It has been cultivated twelve years, and under careful test at different experiment stations for four years, has never winter-killed or failed to produce a full crop of the finest fruit. The vines are very vigorous and hardy, enduring the winters of the far Northwest without injury, and their yield is enormous. The berries are very 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 for eight or ten days after picking with quality unimpaired.—Introducer.

Erie. One of the very best large new berries; absolutely hardy; coal black; firm and solid; ripens early.

Early Harvest. One of the earliest, if not the very earliest Blackberry yet introduced, ripening two weeks before Wilson's Early; berry medium size, good quality, and very prolific; it is firm and attractive in appearance; a good market sort.

Iceberg (The White Blackberry). This new novelty is one of Luther Burbank's productions. Fruit large; early, sweet.

Lucretia. This is a trailing Blackberry or dewberry; a good grower and productive; fruit large and of good flavor.

Lawton (New Rochelle). An "old reliable"; large and of best quality; turns black a considerable time before ripening. Late.

Rathbun. A strong, erect grower with strong main stem branching freely; will root from tip of branches like a raspberry. Hardy, having endured 20 degrees below zero and produced a good crop. Forms a neat, compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious without hard core, of extra high flavor, standing at the head of all for quality; jet black, small seeds; firm enough to ship and handle well. Of enormous size, berries having measured $1\frac{1}{4}$ inches long by $1\frac{1}{2}$ inches in diameter, and many of the berries will run $1\frac{1}{4}$ to $1\frac{1}{2}$ inches long; 45 of them have filled a quart basket. Earlier than Eldorado.

Snyder. The hardiest Blackberry known; thoroughly tested in the extreme Northwest, never known to winter-kill; fruit medium size and of good quality.

Wilson's Early. A well-known and most valuable sort; it is of very large size, and very productive, ripening its fruit quite early and maturing the whole crop in a short time, adding thereby greatly to its value as a berry for early marketing. There has been more fruit grown of this variety during the last twenty years than all other sorts combined.

Wilson, Jr. A seedling of Wilson's Early, said to inherit all the good qualities of its parent, besides being larger and earlier. Probably the best early Blackberry yet introduced.

RATHBUN BLACKBERRIES

JUNE BERRY

This valuable acquisition to the list of "new fruits" has been received with general approval. In appearance and quality it strongly resembles the swamp huckleberry; the fruit is reddish purple in color, changing to bluish black, and is borne in clusters; the flavor is rich subacid; excellent for dessert or canned; the plant attains about the same size as the currant; extremely hardy, both to cold and heat; very easy to cultivate; seems to grow and do well with very little care.

SELECT STRAWBERRIES

The Strawberry at present occupies a very prominent place in the catalogue of fruits, and nowhere is there greater reason for a people to be interested in its culture than in the Middle States. It is at home in our soil, and ripens its fruit so early as to give us an opportunity of getting the principal part of our crop into New York and other markets before the more northern grower has a basket of berries to send in. Thus we have the very cream of the market; and that we can send berries to this or even Boston markets by rail or water, and that they can reach their destination in good condition, has been shown to our entire satisfaction.

In garden culture, set the plants in rows 18 inches apart and 12 inches apart in the rows, leaving a narrow walk between every three rows, from which the fruit can be gathered without treading on the bed. In field culture let the rows be 3 feet apart and the plants 12 inches apart in the rows. An acre thus set will require 14,520 plants. The ground should be kept free from weeds and grass and the runners cut off as they make their appearance. Thorough preparation of the soil is advised before setting; then shallow cultivation afterwards, so as not to disturb the roots. In the spring the ground should be mulched around the plants, so as to keep the fruit clean. By this course a bed may be kept in good bearing condition for many years.

We have given especial attention to the selection of varieties, both for the amateur and market grower, and believe that our collection embraces the very best sorts. Our plants are of the best quality, and will be furnished at very reasonable rates to those wanting them in large quantities. We will here put in a word of caution against the flaming advertisements of new varieties that are so often heralded before the public. That there is room for improvement, we admit; but the most of these new sorts, so highly puffed, and offered at enormous prices, are destined, like the most of their predecessors, to shine but a short time and then sink into obscurity; perhaps, as the case has often been, to come out at some future day under a new title, to shine again for a short season. It is well enough to try those that seem to merit it, but touch them lightly until they have proved themselves good. Hold on to the standard sorts until something better is found by actual experience.

Those varieties marked (P) have pistillate or imperfect blossoms and must be planted near some variety with perfect blossoms to fruit them.

Bubach No. 5. (P.) This is decidedly, all things considered, the best large Strawberry. Unfortunately it does not stand shipping, but for near-by market and home use it has paid enormously (over \$500 per acre). It does well on all kinds of soil; being an imperfect flower, it reaches perfection only when fertilized with some good staminate kind as Jessie. Like all Strawberries, it requires a liberal amount of manure; the plant is a strong grower, with only a limited number of runners; dark green foliage, and does not blight or rust; enormously productive; the fruit is large, light red, handsome and delicious. Early.

Clyde. "But few varieties ever introduced have given better satisfaction in all parts of the country. I have fruited it four times and

PERFECT FLOWER

PISTILLATE

consider it to be the very best second-early variety ever offered to the American people. With me Clyde is as large as Bubach, nearly or quite a week earlier and very much firmer. It is a strong staminate. I do not think any one will ever regret planting Clyde, as it is a sure producer of fine large berries and lots of them. I shipped quite a lot of berries of this variety last year to the Boston market, a distance of about 500 miles, and some of the highest prices obtained were for this variety, which proves its shipping qualities beyond a doubt, notwithstanding some statements to the contrary."—Allen.

Crystal City. (P.) Medium size, conical; color light crimson; flesh soft; quality good when very ripe; valuable on account of its early ripening.

CLYDE STRAWBERRY (See page 41)

STRAWBERRIES, continued

Crescent Seedling. (P.) Fruit medium to large; roundish, conical, bright scarlet. It requires less time and attention than most varieties, and is well calculated for those who cannot and will not give the necessary labor to produce the better kinds. It is a hardy, strong, vigorous grower, and very productive; the plant requires much room to give good results; it ripens early and continues late, holding its size tolerably well; and although not of high flavor, its fair size, good color and moderately firm flesh has given it a near market value. Being a pistillate variety, it should be planted near other varieties.

Crimson Cluster. One of the finest late berries yet introduced. Similar to the Gandy, claimed by some to be better.

Excelsior. Large early market variety and is recommended as a good berry for truckers who want a money-maker.

Glen Mary. "This giant among Strawberries was first offered to the public by me in the spring of 1896. I have watched every word that has been written or said concerning this variety. I am now satisfied that, all things considered, it is without an equal, it being large to very large in size, one of the most productive ever grown; of strong, sturdy and healthy growth; highly colored, firm for a large berry, and ranks with the best in flavor."—Allen.

In the summer of 1899 the Glen Mary became famous, having beaten all previous records for size. Mr. Joseph Haywood, who lives near Philadelphia, sent in to the "Farm Journal" office a quart box that was filled to the top with (4) berries of the Glen Mary.

Gandy. A new, very late kind; the fruit is uniformly large, bright red, firm and of first quality; very valuable as a shipper; requires high cultivation to bring it to perfection; is valuable as a fertilizer to use with other kinds, making the latter more faithful; the best late variety.

Haverland. (P.) Origin, Ohio. Seedling of Crescent fertilized with Sharpless; one of the heaviest bearers, though a pistillate; the plants are strong and healthy. It does best on light, fertile soils, making too heavy foliage on clay; the fruit is large, long, conical, even in form; light color; very desirable.

Hoffman. This new berry has made lots of money for the southern fruit grower; it does its best south of Maryland; the fruit is medium size, very firm and of good quality; the plant is a strong grower and very productive.

Jessie. A large, handsome, dark red berry; in some localities one of the best market sorts. Strongly staminate; a fine fertilizer for such varieties as Bubach. Vigorous, healthy plant. Midseason.

Johnson's Early. "I must give our customers a word of warning concerning this berry, that is, do not let it get too thick. If properly grown in thin, matted rows, it is going to give satisfaction, as it is one of the finest of the early berries that I know of. Being very showy and attractive in the baskets when picked, a good average medium size, neither very large nor small, it cannot fail to please all who are interested in a good early berry. If allowed to make all the plants it will, the ground will become packed so full that it would be impossible for it to mature a satisfactory crop, and persons who disregard this advice should not complain if it does not meet their expectation, for, if grown as above directed, I still recommend it, and believe it will be a very valuable acquisition. In fact, it is decidedly the best berry of its season, which is three or four days later than Excelsior, and the same as Michel and Hoffman."—Allen.

Kentucky. A native of Kentucky; very large; bright scarlet; sweet and delicious; ripens about a week later than most varieties; fruit firm; a fine market sort; plant hardy and very productive; valuable for the late market.

Lady Thompson. Mr. J. S. Westbrook, one of the largest strawberry growers in N. C., says: "I have shipped the Lady Thompson another season, and my experience has not only confirmed but increased my good opinion of its merits. It has proven its

GLEN MARY STRAWBERRY

STRAWBERRIES, continued

adaptability to adverse as well as favorable surroundings. We have had an unusually dry season, and, while the other varieties of berries succumbed to the drought and many plants died, the Lady Thompson held up and yielded a full crop of large, fine berries. I began shipping them April 6, and at this writing, May 18, there are many berries on the plants, in every stage from the bloom to well-matured, ripe ones, and I am still shipping at remunerative prices, although the market is broken and small berries are worthless. I consider the Lady Thompson invaluable and very far superior to any berry I have ever seen."

Michel's Early. Origin, Arkansas. Six to ten days earlier than Crescent; a perfect flower, and a good fertilizer for other sorts; the berry is large and firm, and of the finest flavor. One of the very best for early market; especially adapted to the South; the plant is a strong, hardy grower, free from rust or blight.

Nick Ohmer. A great surprise is in store for all who fruit this Strawberry for the first time; its mammoth size, beautiful color and great productiveness being really astonishing. The plant is exceedingly vigorous, with clean, healthy foliage without the slightest tendency to rust. The berries are of the largest size—a perfect giant among Strawberries—roundish conical in form, uniform and regular; rich, glossy crimson, firm and solid, excellent in quality, and average large to very last picking. Growers should give this a trial.

Sharpless. This large, showy Strawberry originated with J. K. Sharpless, Catawissa, Pa. Fruit large to very large; bright scarlet, somewhat glossy; flesh light red, quite firm, moderately juicy, sweet, rich and of very good flavor; medium to late in ripening. A

most excellent sort for family use, and also a very profitable one for market. No variety amongst the many new ones introduced during the past fifteen years has sustained its good name so well as this.

WM. BELT

Tennessee Prolific. Large, good color, productive, of good shape, free from rust and ranks among the best in the Strawberry list. It is a seedling of Sharpless and Crescent, showing the parentage of both. The fruit is a large, handsome plant, and as productive as Haverland.

Tubbs. This is a good berry of Crescent type. In size it runs through the season about like the first picking of Crescent, does not run down toward last part of season like the Crescent. Very productive. In Anne Arundel county, Md., where it originated, it is considered the best berry grown. It has a perfect blossom and is a vigorous grower.

Wm. Belt. Fruit is large, regular, round and conical. It requires high cultivation to make it a success. Color bright red and fine flavor. Medium to late.

FIGS

This is one of the most desirable of southern fruits, and may be had for table use from June to November. It is well adapted to nearly the whole South, and no home or fruit orchard should be without it. In Virginia and Maryland they are not hardy, and will not stand the winters unless protected. We know of several lots near Baltimore that bear annual crops, but these plants are pinned to the ground and thoroughly covered with earth in the winter, and in the spring this earth is removed. The land for Figs should be well drained and very rich; one of the most desirable places to plant, where only a few trees are required for family use, is near a wash-house or some convenient place where soapy water, ashes, etc., can be placed around the trees. The following are among the best and hardiest varieties: **Celestial White, Brunswick, Brown Turkey, Early Violet, White Genoa and White Marseilles.**

CELESTIAL WHITE FIGS

ASPARAGUS

There has been an increasing demand for Asparagus. Coming at a time of the year when the farmer has very little to sell, it has been a very satisfactory and well-paying crop.

Everybody owning a small lot or farm should plant either a bed for home use or a few acres for market. A patch once well established and cared for will last and yield good crops for twenty years.

DIRECTIONS FOR PLANTING. Give land a heavy top-dressing of manure, plow deep, harrow, roll and run rows 4 or 5 feet apart, about 12 inches deep, then put in 2 or 3 inches of thoroughly rotted manure mixed with bone or bone and potash, then a little good top soil on that and ground is ready for plants, which should be 12 inches apart, being careful to spread roots out well with top up. Cover with 2 or 3 inches of soil. When plants come up, work the earth to them gradually from both sides and from time to time as plants grow, until the ground is level. The middles between the rows should also be worked shallow and grass and weeds kept out. In the fall, after one or two frosts, cut the tops off and burn them, then cover patch with stable manure. Early in the spring, work this manure in the ground, adding, if necessary, some commercial fertilizer on both sides of rows. Salt spread broadcast early in spring, 5 to 10 bushels to an acre, is a benefit.

Barr's Mammoth. Originated near Philadelphia. The largest of all, and, with this great merit, it is very early and quite tender; delicious; light colored; the yield is simply enormous. Decidedly the best Asparagus for all purposes yet introduced.

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, the Columbian Mammoth White Asparagus is even more robust and vigorous in habit, and throws larger shoots and fully as many of them as the Conover's Colossal. Market-gardeners, growers for canners, and amateurs should give this great acquisition a thorough trial.

Conover's Colossal. A standard kind of first quality; tender and high-flavored; often ready to cut the second year after planting.

Donald's Elmira. This new Asparagus has attracted much attention throughout New York state, where it was originated by Mr. A. Donald, a prominent market-gardener of Elmira. He has always realized handsome prices and, although a large grower, was unable to supply half the demand. The delicate green color is noticeable, different from either the famous Barr's Philadelphia Mammoth or Palmetto, while the stalks are more tender and succulent. Its mammoth size can

be realized from the fact that in whole crops a bunch of twelve stalks will average four pounds in weight. It requires much less labor in cutting and bunching, thus lessening the expense of marketing.

Giant Argenteuil. This variety was originally a selection from imported French Argenteuil stock, but has been both acclimated and improved, and is much superior to the original stock. It has been grown for several years, by some of the leading and most successful truckers, near Charleston, S. C., and is pronounced superior to Palmetto or any other variety in earliness, productiveness and size of stalks produced. One large southern grower speaks of this variety as follows: "I have been growing Asparagus for 30 years, and have grown both Palmetto and Argenteuil, and there is as much difference between them as there is between Conover's Colossal and Palmetto. And for my personal experience of Conover's Colossal and the Palmetto, the Palmetto is twice the size of Conover's Colossal, and longer-lived. And I consider Argenteuil twice the size of Palmetto, earlier, more prolific, and longer lived."

Palmetto, or French. Southern origin; new. Ten days earlier than other kinds; valuable for home or market; largest, tender; very regular growth; one of the best.

RHUBARB, or PIE - PLANT

This very desirable vegetable comes early in the spring. The large stems of the leaves are used for pie-making and stewing; it is also valuable for medicinal purposes. We grow the best varieties.

A deep, rich soil is indispensable to secure large, heavy stalks. Plant in rows 4 feet apart, set plants 12 inches from each other. Set so that the crowns are about an inch below the surface. Top-dress annually in the fall with stable manure and fork under in the spring.

HORSE-RADISH

No garden should be without its Horse-radish. As a relish for meats it is unsurpassed. The land should be rich, well manured, plowed deeply, harrowed and free from lumps. As it is a great vegetable to spread, plant in a roomy space by itself. Make rows 15 inches apart, set plants 12 inches from each other. Plant shoots about five inches long, making holes for same with a stick, and set them about two inches under the soil. Have the shoots cut squarely across the bottom, but cut slanting at the top, in order that one side may be a little longer than the other.

Keep free from weeds for the first and second seasons, after which the Horse-radish will take care of itself.

JAPAN MAPLES (See page 48)

Ornamental Department

In issuing this new edition of our Descriptive Catalogue of Ornamental Trees, Evergreens, Flowering Shrubs, etc., we may say the increasing demand for this class of stock has induced us to make this branch a more prominent feature of our establishment, and to this end we have been steadily working for years, carefully selecting the best and most desirable sorts out of the great mass that has been brought to the notice of the public. That there should be many very good things, and also very poor ones, in these vast collections, is a fact beyond question. For the supply of the amateur, and those whose plantings are to embrace a large collection for variety's sake, it is very proper that they should be supplied; but our purpose is chiefly to furnish material to those who select for true merit, who want trees and plants that will do the most good and give the best satisfaction. It should be kept in mind that, with ornamentals, as with fruit trees, there are some that do well in one place that will fail in another, so that care should be taken, in making up planting lists, to select such only as are known to succeed in the particular locality where they are to be planted. We want trees that will not only show well in the earlier stages of their growth, but those that will maintain a good form and pleasing habit as they grow older; in fact, we should look more to the character of the tree when developed than to its appearance when young. Our stock is in the best possible condition for transplanting, having plenty of room where growing, and in soil eminently suited to the development of a good system of roots. With careful planting, and proper care afterward, there will be but little danger of failure.

Transplanting and Cultivation

The same advice concerning transplanting and cultivation, given in our Fruit Catalogue, applies to this department; but, as it is often impossible to cultivate the ground in which shade trees are planted, it will be the more necessary to mulch them well, and not let the grass grow close around the stem of the tree.

Flowering shrubs and evergreens should be carefully planted in good, deep, rich soil, and well mulched. When this is done, watering will seldom be necessary; but when, in case of extreme drought, it may be required, it should be thoroughly done, so as to reach well down to the roots. Very much watering before the leaves expand is a decided injury; let there be just enough to keep the earth moist about the roots, not soaking wet, or it may cause them to decay.

The branches should always be shortened back, at the time of planting, in proportion to the loss of roots sustained by the tree in moving.

Those contemplating planting trees should bear in mind that the value and beauty of a tree or plant is dependent upon its thriftiness and symmetry rather than its height.

DECIDUOUS TREES

Varieties marked with a (*) are the best for street planting, shading drives and walks.

ASH, European (*Fraxinus excelsior*). A lofty tree, of rapid growth.

White American (*F. Americana*). A native tree of large size, pale green foliage; one of the best of the family.

MOUNTAIN ASH, European (*Pyrus Aucuparia*). A small tree, with dense and regular head. In the northern states it is covered from July till winter with great clusters of bright scarlet berries, but here and southward it drops them much earlier, therefore losing much of its beauty.

***American** (*Sorbus Americana*). Tree of coarser growth and foliage than preceding.

Oak-leaved (*S. quercifolia*). A distinct and desirable tree, with compact, pyramidal head and dark lobed leaves, downy underneath; produces the same flowers and berries as the American or European Mountain Ash. Very hardy, and desirable for planting on lawns or in dooryards. When fully grown, 20 to 25 feet high.

BEECH, American (*Fagus ferruginea*). One of the grandest trees of our forest; hardy and comparatively free from insect depredations; well deserving of more extensive planting.

Purple-leaved (*F. sylvatica purpurea*). Foliage deep purple in the spring, but under our hot sun and in dry seasons it loses much of its color; for the northern states it is a very desirable tree.

European, or English Beech (*F. sylvatica*). A beautiful tree, attaining a height of 60 feet or more.

Beech, Copper (*F. cuprea*). Similar to Rivers' Purple Beech; leaves not so fine a dark purple and turn green much sooner.

Fern-leaved (*F. sylvatica heterophylla*). A tree of elegant, round habit, and delicately cut fern-like foliage. During the growing season its young shoots are like tendrils, giving a graceful, wavy aspect to the tree.

BIRCH, White (*Betula alba*). A medium-sized tree, quite erect when young, but after a few years the branches assume an elegant, drooping habit, which renders the tree very effective in the landscape.

BOX-ELDER, Ash-leaved Maple (*Negundo fraxinifolium*). A rapid-growing native tree, with light green twigs and pinnate leaves; easily cultivated.

CATALPA bignonioides. A native of the southern states; a rapid-growing tree, with large, heart-shaped leaves and large spikes of white and purple flowers.

Bungei. Large, glossy foliage. Grown as a dwarf tree, five feet high and top-grafted; makes a fine umbrella-shaped tree. Suitable for lawn or avenue planting.

Kaempferi. A Japanese species of rapid growth, with cream-colored, fragrant flowers.

speciosa. Originated in the West; said to be finer than the above, and blooms two or three weeks earlier.

CRABS, Flowering (*Pyrus Malus*)—

Bechtel's Double-flowering. This Crab is the finest acquisition in the way of a flowering shrub that has been introduced in recent years. It is a rose in disguise, and sweet as a breath of spring. The tree is sturdy, hardy, and free from disease. It grows to be a medium-sized tree and when in bloom presents the appearance of being covered with very delicate pink roses of medium size, scenting the atmosphere for a distance with a perfume surpassing the fragrance of Tea Roses. Small trees have more the appearance of Tree Roses than anything else and cut blossoms have often been taken for pink roses. This tree does not blossom until in full leaf, which adds greatly to its beauty.

Sibirica. Red.

Rubra plena. Red-flowering.

Alba plena. White-flowering.

Floribunda. Dwarf habit. Red berries in the fall.

Spectabilis. White double-flowering; pink bud; fragrant.

CATALPA BUNGEI

DECIDUOUS TREES, continued

Crabs, Toringo. Yellow-fruited; pretty in the fall.

Parkmani. A double-flowering variety from Japan. One of the most beautiful trees for lawn decoration. A compact grower, with persistent dark green foliage. Flower buds long, tapering, of a rich carmine color, on slender stems completely covering the tree.

CHERRY (*Cerasus*). Large, double-flowering; produces a profusion of double white flowers in the early spring.

CORNUS florida (White-flowering Dogwood). An American species of fine form, growing from 16 to 25 feet high. The flowers produced in spring, before the leaves appear, are from three to three and a half inches in diameter, white, and very showy. They begin to appear just as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom in the garden border.

Florida flore rubro (Red-flowering Dogwood). A variety of the well-known White Dogwood, but having a deep rosy pink colored flower. The leaves, also, have a soft, velvety appearance, and are of a darker green than the old variety. It makes a good, upright, bushy growth.

CYPRESS (*Taxodium distichum*). Deciduous Cypress of the South.

***ELM** (*Ulmus campestris*). A native of Europe; a noble, rapid-growing tree, forming a dense head; desirable tree for streets, avenues, etc.

English Cork-barked (*U. suberosa*). Strong, upright grower; young branches very corky; leaves rough on both sides.

***American, or White** (*U. Americana*). A native tree of large size, with spreading head and graceful, drooping branches. Of all trees, no other perhaps, unites in the same degree majesty and beauty, grace and grandeur, as this one does. It flourishes in all parts of the country, and deserves to be more generally planted.

FRINGE TREE, White Fringe (*Chionanthus Virginica*). A small native tree, with ash-like leaves and drooping racemes of pure white flowers, resembling an elegant fringe.

HAWTHORN (*Crataegus oxyacantha*). The celebrated English hedge plant; not so valuable here for that purpose.

Double White (*C. flore pleno*). Has small, double white flowers; quite ornamental in flower and foliage.

Double Pink. Rose-colored flowers, and produced in great abundance.

Double Red. Bright, double red flowers.

HERCULES' CLUB (*Aralia spinosa*). A small-sized, singular-looking tree with prickly stems, and bearing immense panicles of white flowers in midsummer. Desirable to plant for screen or on lawn. If allowed to, it will sucker and form a clump.

***HORSE-CHESTNUT, Common White-flowering** (*Æsculus Hippocastanum*).

A handsomely-formed tree, with very attractive flowers; succeeds well in the northern states and in the elevated portions of the southern states; but in many places South its foliage burns.

Red-flowered (*Æ. rubicunda*). A superb tree in both foliage and flower; the foliage is darker green than the white, and the flowers showy red, coming later.

Ohio Buckeye (*Æ. glabra*). A native of the western states, forming a large-sized tree; flowers pale yellow.

Dwarf (*Pavia parviflora*). An ornamental flowering bush of spreading habit; flowers in summer.

JUDAS TREE, or Red Bud (*Cercis Canadensis*). A very ornamental tree of small size, with heart-shaped leaves, and is covered with a profusion of delicate pink flowers before the foliage appears.

Japan Judas Tree (*C. Japonicum*). Recently introduced from Japan. The flowers are larger than the above species, and of a light rose-color; it is entirely hardy and very beautiful.

KENTUCKY COFFEE (*Gymnocladus Canadensis*). A large-growing tree, with rough bark, stiff blunt shoots, and feathery foliage.

KOELREUTERIA (*Kœlreuteria paniculata*). A small tree, valuable because of its yellow flowers and pretty foliage.

LARCH, European (*Larix Europæus*). A beautiful, rapid-growing pyramidal tree, with all the characteristics of an evergreen, except that it drops its foliage in the autumn; very desirable.

LABURNUM, Golden Chain (*Cytisus Laburnum*). A very ornamental small tree, a native of Europe, with smooth, shining foliage, bearing a profusion of drooping racemes of yellow flowers.

***LINDEN, American Basswood** (*Tilia Americana*). A large, native, rapid-growing tree, with large leaves and fragrant flowers; fine for street or lawn planting; is becoming very popular, and deservedly so, as it is a fine tree.

European (*T. Europæa*). A fine pyramidal tree, more compact in its habit than the above, but does not attain so large a size; a very popular tree.

LOCUST, Yellow (*Robinia Pseudacacia*). A native tree of large size, of rapid growth, possessing a soft and graceful foliage, with a refreshing tint of light green; flowers white or yellowish, very abundant and fragrant, and growing in long, pendulous racemes.

Rose Acacia, or Moss Locust (*R. hispida*). A native tree or shrub, of spreading, irregular growth, producing long clusters of rose-colored flowers.

MAIDENHAIR TREE, or Japan Ginkgo (*Salisburia adiantifolia*). A remarkable tree from Japan, with leaves resembling the Maidenhair Fern. Valuable for lawn and avenue planting.

DECIDUOUS TREES, continued

MAPLES (*Acer*)

English, or Cork-barked (*A. campestre*). A slow-growing tree, of compact, roundish habit, with corky bark.

***Norway** (*A. platanoïdes*). One of the most beautiful and desirable trees known; foliage broad, deep green, shining; its compact habit and stout and vigorous growth render it one of the most valuable trees for street or lawn planting.

***Sugar** (*A. saccharinum*). A well-known native tree, of stately growth, fine form and foliage; very desirable as an ornamental or shade tree.

Sycamore (*A. Pseudo-platanus*). An European species, of moderate size; leaves large, dark green.

Schwedler's. This beautiful Maple of recent introduction is attracting considerable attention; it is one of the Norma family, and of about the same habit of growth; its handsome purplish crimson leaves in May and June, changing to a bronze as they mature, are much admired.

Red, or Scarlet (*A. rubrum*). A native species, of moderate size, producing deep red blossoms, and in autumn the foliage changes to a brilliant scarlet.

***Silver-leaved** (*A. dasycarpum*). A hardy, rapid-growing native tree, attaining a large size; valuable for producing a quick shade; fine for street and park planting, for which purpose it is planted more largely than any other tree.

Maple, Wier's Cut-leaved (*A. Wieri laciniatum*). A silver Maple with remarkable and beautiful dissected foliage. Of rapid growth; shoots slender and drooping, giving it a very graceful appearance; should be in every collection. While it makes a large tree, if undisturbed, it will bear any amount of pruning; easily adapted to small lawns.

JAPAN MAPLES (*Acer polymorphum*)

The Japan Maples are becoming more and more popular as they become better known. Their chief recommendation is their dwarf habit and attractive appearance. Some of them have foliage of medium size and of rich, bright hues, while that of others is deeply cut and of peculiar form. All are noted either for their singularity or beauty. Planted singly, they are effective, but when planted in groups, embracing varieties possessing various desirable characteristics, they make a beautiful appearance throughout the season. (See illustration, page 45.)

MAGNOLIAS

Their superior stateliness of form and splendor of growth, the size and richness of their foliage and lavish yield of fragrant flowers all tend to place them in the foremost rank among hardy ornamental trees and shrubs. Their proper place is on the lawn, where they show to fine advantage in contrast to the green; or they may be planted effectively on the borders of lawns, with an evergreen in the background to heighten the contrast. Planted in groups, they yield to no rival, and their effect in the early spring is grand beyond description, illuminating the whole landscape and filling the atmosphere with their rich perfume. Great care should be exercised in their removal, the fibrous roots being preserved as nearly as possible, and carefully guarded from any exposure to wind or sun. While almost any good soil is sufficient to insure their growth, they succeed best in a warm, rich, dry soil.

Alexandrina. Similar to Soulangeana, but blooms earlier.

Cucumber Tree (*M. acuminata*). A beautiful pyramidal tree, attaining a height of seventy or eighty feet; growth very rapid and upright; flowers greenish yellow.

Everblooming, Chinese Hybrid (*M. semperflorens*). One of the best yet introduced; very desirable on account of never being without bloom; purple, large; very pretty.

Grandiflora. See Evergreens, page 52.

Great-leaved (*M. macrophylla*). A tree of medium size; leaves from 2 3 feet long; flowers 8 to 10 inches in diameter; pure white; very fragrant.

Lenne's (Lenne's Magnolia). A seedling of *Purpurea*; foliage large; flowers dark purple; very fine.

YULAN, or CHINESE WHITE MAGNOLIA (See page 49)

DECIDUOUS TREES, continued

Magnolia, Purple Japan (*M. purpurea*). A small tree, or rather large shrub; flowers dark purple outside, and shaded to white within.

Soulange's Hybrid Chinese (*M. Soulangeana*). Shrubby and branchy when young, but becoming a fair-sized tree; flowers white and purple, 3 to 5 inches in diameter; blooms late; handsome and hardy.

Showy-flowered (*M. speciosa*). Flowers a little smaller than those of *Soulangeana*, and of lighter color; blooms a week later, and remains in perfect condition on the tree longer.

Umbrella Tree (*M. tripetala*). A small-sized tree, of rapid growth, with immense leaves; flowers creamy white, four to six inches in diameter.

Yulan, or Chinese White (*M. conspicua*). A medium-sized tree, with a regular form; flowers are large and pure white, and appear before the leaves.

OAK (*Quercus*)

The Oaks, when they attain size, are our most picturesque trees. The species and varieties are numerous, and the majority are adapted to ornament large grounds where they can have an abundance of room. Some kinds, however, are moderate growers and suitable for small places, especially if kept in good shape by a judicious use of the knife. Our collection embraces a variety of forms and includes the finest.

Cup (*Q. macrocarpa*). One of the most beautiful of Oaks, of massive, open growth, and with large, heavy leaves. The acorns are of the largest size. An interesting feature is the mossy cup which holds the acorn, not to mention its extremely corky bark. It is easily transplanted if pruned severely. 35 to 40 feet.

English (*Quercus Robur*). Spreading and slow grower, but forms a large, majestic and grand tree at maturity.

Pin (*Q. palustris*). An Oak distinguished from all others by its peculiar beauty. The leaves are deep green and finely divided. As the tree grows, the branches droop until the lower ones touch the ground. It is also easily transplanted. It is now much appreciated for its great beauty when well developed. The foliage takes on a partly scarlet and yellow color in the fall. As an avenue tree it is unequaled, and it will also thrive as a street tree in cities. 40 to 50 feet.

Pyramidal (*Q. fastigiata viridis*). This distinct variety grows upright in pyram-

Pyramidal Oak, continued

idal shape. It is much used by planters. Its dark green leaves remaining without changing color until late fall makes it of much value. A variety of the English Oak. Does well at the seashore. 35 to 40 feet.

Red (*Q. rubra*). A very well-known, rapid-growing native species. The leaves are large and bright green, and take on a pur-

ORIENTAL PLANE (See page 50)

plish scarlet hue in the fall. It becomes of large size, with a round and spreading head. One of the best sorts, not only as a street and avenue tree, but also for ornamental purposes. We especially recommend it. Must be pruned when transplanted. 50 to 60 feet.

Scarlet (*Q. coccinea*). This is perhaps the most esteemed of all Oaks. Not only does it make a large, well-shaped tree, but in the fall the foliage changes to a brilliant scarlet. It makes a fine street or avenue tree, but should be severely pruned when transplanted. It has very large, shining leaves of a rich green color. 50 to 60 feet.

White (*Q. alba*). One of the noblest of our native trees, of large size, and widely spreading branches.

DECIDUOUS TREES, continued

***ORIENTAL PLANE** (*Platanus orientalis*). A very popular shade tree on account of its shapely and rapid growth, hardiness, and retaining its foliage until late in the season. It makes a fine tree for street planting or lawn.

PAULOWNIA (*Paulownia imperialis*). A rapid-growing tree with immense leaves; has blue, trumpet-shaped, fragrant flowers.

PEACH, Double White-flowering (*Persica vulgaris alba flore pleno*). Flowers pure white and very double.

Double Red-flowering (*P. vulgaris sanguinea flore pleno*). Flowers semi-double, bright red, very fine.

Double Rose-flowering (*P. vulgaris rosea flore pleno*). Flowers double, pale rose-colored; resemble small roses; very pretty. Grouping the three is effective.

Peach, Purple-leaved. A strong-growing Peach with remarkably handsome purple foliage; desirable as an ornamental.

***POPLAR, Carolina, or Cottonwood** (*P. Caroliniana*). A large-sized tree, of remarkably rapid growth, and becoming popular with those who want shade in the shortest possible time.

Golden (*P. Canadensis aurea*). Golden yellow foliage, retains its tint throughout the season; effective in masses.

Lombardy (*P. fastigiata* or *dilatata*). Well known for its erect, rapid growth and commanding spiry form. Very desirable in large grounds or along roads to break the average height and forms of other trees.

TULIP TREE (*Liriodendron Tulipifera*). A magnificent native tree, with large smooth, shining leaves; flowers tulip-shaped, greenish yellow; fine for shade; difficult to transplant except when of small size.

SOPHORA, Japan (*S. Japonica*). A medium-sized tree, light-colored, soft foliage; flowers of a light cream color, in panicles.

SWEET GUM (*Liquidambar styraciflua*). A fine native ornamental tree, the foliage resembling that of the Maple; corky bark; leaves changing to deep crimson in the autumn.

TEXAS UMBRELLA TREE (*Melia Azedarach Umbraculiformis*). A variety of the China tree; has a dense, spreading head, resembling a large umbrella, and is a very desirable shade tree of rapid growth in the South. Not hardy north of Virginia.

WILLOW, Golden (*Salix vitellina aurantiaca*). A handsome tree, particularly conspicuous in winter on account of its yellow bark.

YELLOW-WOOD (*Virgilia lutea*; *Cladrastis tinctoria*). A fine spreading tree of medium height, with smooth, gray bark like the beech, and bright yellow wood. The white flowers, in long, drooping clusters, resemble the yellow locust. It is one of the most graceful of flowering trees.

TEAS' WEEPING MULBERRY (See opposite page)

WEeping TREES

ASH, Weeping (*Fraxinus excelsior pendula*). A tree of medium size, with stiff, twisted, pendulous branches.

BIRCH, Weeping Cut-leaved (*Betula alba pendula luciniata*). A charming tree in the northern states, but does not show so much beauty South, except in very favorable locations; it is of very graceful, drooping habit, silvery white bark and delicate, cut foliage. Most effective and picturesque.

CHERRY, Dwarf Weeping (*Cerasus pumila pendula*). A grafted, round-headed weeping tree.

Japan Weeping (*Cerasus Japonica pendula*). Has feathery, graceful foliage, white flowers and red fruit.

DOGWOOD (*Cornus pendula*). Very similar in foliage and flower to the common white Dogwood, yet with decidedly drooping branches; hardy and very handsome; makes brilliant autumn foliage; a beautiful lawn tree of dwarf habit.

ELM, Camperdown Weeping (*Ulmus Camperdown pendula*). A drooping and picturesque variety of the Scotch Elm; foliage large, dark green, covering the tree with a luxuriant mass of verdure.

MULBERRY, Teas' Weeping. Fountain-shaped, like the Kilmarnock willow; long, slender branches, drooping to the ground; very hardy and striking; among the best of weeping trees; quite hardy.

MOUNTAIN ASH, Weeping (*Sorbus Aucuparia pendula*). The branches of this distinct variety are of a straggling, pendent habit; a rapid grower.

WILLOW, Common Weeping (*Salix Babylonica*). A native of Asia. This is one of the most graceful and beautiful of the weeping trees; it is of rapid growth, attaining a very large size, showing its great beauty in damp or moist soils, but grows fairly well in any good soil.

Kilmarnock (*S. cuprea pendula*). A variety of the Goat Willow, making a very pretty tree when budded 6 or 8 feet high. It forms a complete umbrella head, the branches and foliage being very dense; unique in form.

New American Weeping (*S. purpurea pendula*). A small, slender-branched species from Europe; often known as the Fountain Willow.

Wisconsin Weeping. Of drooping habit and harder than Babylonica. Valuable on account of its ability to resist severe cold.

EVERGREENS

Their superior stateliness of form and splendor of growth, their dense foliage and pleasant resinous odor, all tend to place the Evergreens of first importance as ornamentals, especially for the winter landscape. Invalids and many people visit the parts of our country where the Pine or Evergreen forests abound, on account of the atmospheric resinous odors having a well-founded reputation for healthfulness. The Balsam Fir is especially odorous. A pillow filled with Balsam sprays remains wonderfully fragrant, and gives out much of the regular health-giving properties of a Balsam forest. Such pillows for summer nights are refreshing, to say the least. Those having extensive yards to accommodate evergreens need not travel great distances to wild forests to secure benefit from evergreen trees.

Early spring planting is the best, though they can be safely moved during wet falls. If soil inclines to be dry in planting evergreens, tramp or pound down the earth quite firmly (but with care) on the roots. Mulching is good for them during dry seasons. We are now giving special attention to the propagation and culture of the perfectly hardy species, as follows.

ARBORVITAE, American (*Thuja occidentalis*). Sometimes called White Cedar; a well-known native species, of great value, forming an upright, conical tree of medium size; especially valuable for screens and hedges.

Chinese (*Biota orientalis*). From China and Japan; a small tree, with erect branches and dense, flat, light green foliage.

Chinese Golden (*B. aurea*). This is the most elegant and charming, and justly becoming the most popular of the Arborvitæ. The beautiful golden tint of its foliage and the compact and regular outline of its habit render it unusually attractive.

Ever Golden (*B. orientalis semper aurea*). This very distinct evergreen is desirable on account of its never changing its beautiful bright golden color; very hardy.

Globe-headed (*T. globosa*). Originated at Philadelphia; forms a dense, round head; dwarfish in habit; desirable.

Arborvitæ, Heath-leaved (*T. ericoides*). A dwarf variety, with heath-like foliage; forms a dense bush but a few feet high. Distinct and ornamental.

Hovey's Golden (*T. Hoveyi*). Of dwarfish habit; globular in outline; foliage of a light yellowish green hue; hardy and fine.

Lutea. Dwarf, with gold-tipped foliage; very desirable for small places or cemeteries.

Nootka Sound (*Plicata*). Similar to Siberian, but with shorter growth, and branches disposed so as to give them a plaited appearance.

Parsons' (*Tsuga compacta*). A dwarf of compact habit and yellowish green foliage. Its small size makes it practicable to use in restricted areas.

Siberian (*T. Sibirica*). A well-known popular variety; tree of medium size, very hardy, of dark green color; compact growth.

EVERGREENS, continued

Arborvitae, Tom Thumb. Similar to the Heath-leaved, but more desirable; remarkable for low, compact habit; valuable for planting in cemeteries and small places, where large trees are not admissible.

Upright (*T. pyramidalis*). Of very erect form; dark green, compact and very desirable.

LAWSON'S CYPRESS

BOX, Dwarf (*Buxus suffruticosa*). The well-known sort used for edging; makes a very pretty little shrub when planted singly.

Common Tree (*B. sempervirens*). A handsome shrub, with deep green foliage; succeeds well in the shade.

CEDAR, Deodar (*Cedrus Deodara*). A native of the Himalayas, being one of the most graceful and elegant of the European trees; growth rapid, branches drooping; foliage light glaucous green; not entirely hardy north of Philadelphia.

CYPRESS, Lawson's (*Cupressus Lawsoniana*). From California; a large, graceful tree, having elegant, drooping branches; leaves dark, glossy green, tinged with a glaucous hue; one of the finest of its class.

Nootka Sound (*C. Nutchensis*). A hardy and desirable species from Nootka Sound; pyramidal in habit, forming a tall tree, with dark green, slightly glaucous foliage.

Lawson's Pyramidal (*C. Lawsoniana pyramidalis*). Upright and dense in its habit of growth.

Cypress (Imported). We have a fine lot of specimen plants of the following varieties: **Alumnii, Frazeri, Monumentalis, Monu-**
mentalis glauca and **Wisselli**. These are beautiful plants.

EUONYMUS, Japan. Leaves shining green; used for hedging; also desirable on the lawn.

Silver-striped (*E. argentea*).

Gold Variegated (*E. aureus*).

FIR, Balsam, Balm of Gilead (*Picea balsamea*). A well-known and popular tree; very pretty when young.

English Silver (*P. pectinata*). A noble tree, with spreading, horizontal branches; dark, shining green foliage, holding its color well through the winter; it is rather stiff-looking, when young, but makes a splendid tree.

Nordmann's Silver (*P. Nordmanniana*). A rapid grower, regular in outline; foliage massive, dark green; one of the finest of the Silver Firs.

JUNIPER, Irish (*Juniperus Hibernica*). A distinct and beautiful variety, of very erect, dense, conical outline, resembling a pillar of green.

MAHONIA, Holly-leaved (*M. Aquifolium*). A native species, with purple, prickly leaves, and showy, bright yellow flowers.

Japonica. This has broader foliage than the other, but it does not change in the winter as the other does. Both do well in shady places as well as in more open ones. 3 to 4 ft.

MAGNOLIA grandiflora. The most magnificent of our broad-leaved evergreens. The trees bloom when quite small. The flowers are very large, pure waxy white, and of the most delicious fragrance. All of our plants are nursery-grown, and are finely rooted.

EVERGREENS, continued

PINE, Austrian (*Pinus Austriaca*). A rapid-growing species, with long, stiff, dark green leaves.

Scotch (*P. sylvestris*). A rapid-growing, hardy tree, with bluish foliage and rugged shoots.

White, or Weymouth (*P. Strobus*). A well-known native tree; very hardy, and of rapid growth; foliage light silvery green.

Bhotan (*P. excelsa*). A graceful, elegant tree, resembling the White Pine, but with longer foliage; native of the Himalayas.

RETINOSPORA, Plume-like Retinospora, Japan Cypress (*R. plumosa*). A very compact-growing variety, with small, light green leaves and short, slender branches; quite hardy.

Obtuse-leaved (*R. obtusa*). A pretty and distinct species, growing 6 to 8 feet high, with graceful, drooping branches.

Golden-tipped Plume-like (*R. plumosa aurea*). A very striking and desirable plant for this climate; the tips of branches showing a beautiful golden yellow hue.

Silver-spotted Plume-like (*R. plumosa argentea*). Young shoots sprinkled with numerous silvery white dots.

SPRUCE, Douglas' (*Abies Douglasi*). A rapid-growing species, but the foliage browns badly in some localities.

Colorado Blue (*A. pungens*). A rare, elegant tree with foliage of a rich blue. One of the most distinct and striking of all the Spruce family. A free grower and perfectly hardy.

Hemlock (*A. Canadensis*). One of the hardiest and most handsome trees, branches drooping; foliage delicate, retaining its color well through the winter; should be in every collection, however small; it also makes a highly ornamental hedge.

Norway (*A. excelsa*). A European species of very rapid, elegant and lofty growth, and when it attains to the height of

Norway Spruce, continued

15 or 20 feet the branches assume a graceful, drooping habit. This is one of the handsomest as well as the most popular evergreen trees; a grand decoration for the lawn; very hardy.

White (*A. alba*). A very pretty tree; attains a height of 40 to 50 feet; compact in growth; conical in form, with soft, light green foliage; very hardy; desirable.

YEW, English (*Taxus baccata*). A small, bushy tree, with rich, dark, glossy green foliage; suitable for clipping into artificial forms.

Irish (*T. fastigiata*). Of close, erect habit and dark green foliage.

COLORADO BLUE SPRUCE

We exercise the greatest amount of care in the growing of our evergreens, and pay scrupulous attention to the matter of varieties, so that those purchasing evergreens from us can feel assured of getting just what they order.

RHODODENDRONS

Directions for planting beds.—The Rhododendron is one of the most beautiful plants in cultivation, either when planted as a single specimen on the lawn, or in beds. Its heavy, dark green foliage is striking, both in winter and summer, to say nothing of the great masses of varied colored flowers, which are produced in large trusses on the ends of nearly every branch of the plant. The flowers open during the latter part of April and the early part of May, and, as all the buds do not open at the same time, there is always a profusion of bloom for a period of several weeks. The finest effect is produced by planting in beds; the number of plants in a bed is immaterial, though, naturally, the larger the bed and the more plants there are in it, the greater will be the display. It is a mistaken idea that many have that Rhododendrons are not hardy. Of course, as with many other trees and plants, some varieties will not stand our climate; but we have been handling these plants so long that we are thoroughly conversant with those varieties best suited for this country, and on no account would we send anything else but the very best ones.

Rhododendrons have a mass of small, hair-like, fibrous roots; and it has been found that when the soil is light and good drainage given them, they do remarkably well. While they like plenty of water, they are averse to having it stagnant about the roots.

When planting a bed of Rhododendrons, it would be well to see that the following directions are observed in preparing it, so as to produce the very finest effect: The soil should be dug out about four feet deep and the bottom filled in with about two feet of broken stone or similar material, finishing with about two-thirds good top-soil—sod, if it can be procured—and one-third sand, with a good sprinkling of well-rotted stable manure. Prepared in this way, it will be cool and moist all the time. The plants can be set about three or four feet apart, according to the size used, and they will thrive, bloom and give a great deal of pleasure. A pretty and desirable effect can be produced by mixing in a few hardy Ghent and Mollis Azaleas along the outer edges of the bed. These do not grow so large as Rhododendrons, and having different colored flowers, add materially to the beauty of the bed.

While Rhododendrons require no winter protection, we have found it to be time well spent to fill roset leaves, straw, hay or similar material in among them late in the fall. It keeps severe winds from the plants and frost from their roots, and they always look better for it in the spring. An occasional top-dressing of well-rotted stable manure will also be advantageous. We can furnish the best hardy varieties in assorted colors, with flower-buds.

IF YOU NEED A GARDENER OR FARMER we should be glad to assist you in finding a suitable one for your place. Let us know size of place, whether you want single or married man. We keep a number of good men on our list and would recommend only those we believe to be competent and reliable. We make no charge for this.

FLOWERING AND OTHER SHRUBS

ALTHAEA, or **Rose of Sharon** (*Hibiscus*). The Althæas are fine, hardy, free-growing flowering shrubs, of easy cultivation, and desirable on account of their late summer-blooming. Our collection comprises a great variety of colors and shades.

Ardens. Bluish purple; a distinct color and good variety.

Amaranthus. Rich purple; fine.

Anemoneflora. Light red.

Carnea plena. White, tipped with pink.

Duchesse de Brabant. Flowers large; very double, of reddish lilac color. One of the best varieties.

Kanoch, Variegated Leaf. Foliage finely marked with light yellow; produces purple flowers.

Lady Stanley. Large, very double; lovely pure white, with a few purplish stains in throat.

Paeoniflora. Large double pink; pretty.

Rubra plena. Reddish striped; double flowers.

Speciosa rubra. Red.

Totus albus. Pure white; single.

Violacea. Flowers medium size, double; of violet-lilac color; free-flowering; one of the best.

We also have several new varieties not named or described in this list.

ALMOND (Dwarf), Double Rose-flowering (*Prunus Japonica rosea fl. pl.*). A beautiful small shrub, producing an abundance of small, double, rose-like flowers, closely set upon the twig before the leaves appear; very attractive.

White-flowering (*P. Japonica alba fl. pl.*). Produces beautiful, double white flowers in April.

AZALEAS. These are among the most valued and desirable of shrubs. They are of two classes, the Ghent varieties and the natives. The beautiful, delicately tinted fragrant flowers and waxy green leaves are their distinct characteristics. They are admirable both for grouping and specimen planting.

Amoena. A dwarf evergreen with small leaves and rose-colored flowers; blooms in early spring.

Ghent. Pretty shrubs of the honeysuckle family. Among the numerous varieties may be found nearly every shade of color from white to scarlet; very desirable.

Mollis. A new, hardy, desirable species from Japan; flowers large and showy, in trusses of various colors, resembling the rhododendron.

Azalea Pontica. Fine yellow flowers; free-blooming; should have some protection in winter.

BACCHARIS halimifolia (Groundsel, or Salt Bush). A very attractive shrub with whitish flowers, followed by fluffy seed-pods in the fall.

BARBERRY (*Berberis*). A showy, upright-growing shrub; covered in autumn with brilliant red fruit.

Purpurea. A fine variety, with purple leaves and showy flowers.

Thunbergii. A beautiful Japan variety of dwarf habit. Small foliage, changing to beautiful red in autumn. Very desirable for grouping.

BLADDER SENNA (*Colutea arborescens*). A large shrub, with small, delicate foliage and pea-shaped blossoms, followed by curious, inflated pods.

BLEEDING HEART (*Dicentra spectabilis*). A very hardy and beautiful plant with pretty, heart-shaped, pink flowers.

CALLICARPA purpurea. A valuable shrub from China. Has long drooping branches, covered with violet-colored berries in the autumn.

ALTHÆA, OR ROSE OF SHARON

FLOWERING AND OTHER SHRUBS, continued

CALYCANTHUS floridus (Sweet-scented Shrub). A well-known native bush, the young wood of which has a strong aromatic odor; foliage luxuriant, and the rare, chocolate-colored blossoms are delightfully fragrant; blossoms in May and at intervals during the summer.

CRAPEMYRTLE (*Lagerstræmia Indica*). Too much cannot be said in favor of the delicately flowered Lagerstræmia; universal favorites in the South, and deservedly so. Deciduous shrubs, hardy in the southern states, and producing throughout the summer great clusters of delicately-fringed flowers. In the South the Crape Myrtle takes the place of the lilac, so common at the North. Makes the most charming flowering hedge known. A success with every one.

Purple. A grand sort, producing immense quantities of bloom of a rich purple color.

Scarlet. A very dark shaded variety; in our opinion the best of all. A gorgeous plant.

White. This is quite scarce, and very lovely. A most desirable sort.

CORNUS alba (*Stolonifera*). Red-twigged Dogwood. This bears bunches of white flowers in early June. In winter the young shoots become of deep blood-red color, for which it is much valued. It should be cut to the ground every spring and allowed to make entirely new growth each summer, to secure the best color to the wood. 4 to 5 feet.

Golden (*Spæthii*). One of the finest of recently introduced shrubs. The leaves are margined with yellow.

Mascula. Cornelian Cherry. One of the earliest of spring-blooming shrubs, bearing a profusion of small, yellow flowers along its naked branches in the early days of April. They are followed by bright red berries, about the size of a small cherry, which are very ornamental. 8 to 10 feet.

CLETHRA ainifolia. Dwarf and dense in growth; leaves light green. Numerous spikes of white, fragrant flowers are borne in midsummer. Very desirable.

CURRENT, Crimson-flowering (*Ribes sanguineum*). Small, deep red flowers, blooming very abundantly in early spring.

Yellow-flowering (*R. aureum*). Bright, shining leaves and yellow flowers.

DEUTZIA. We are indebted to Japan for this valuable genus of plants. Their hardihood, fine habit, luxuriant foliage and profusion of attractive flowers render them the most beautiful and deservedly the most popular of flowering shrubs at the present time. The flowers are produced the latter part of June in racemes 4 to 6 inches long.

Candidissima. Of recent introduction. Flowers pure white, large; very desirable.

Rough-leaved (*D. scabra*). An upright, thrifty shrub, bearing a profusion of white flowers in May.

Slender-branched (*D. gracilis*). A smaller variety than the preceding; branches slender and graceful, producing a profusion of pure white flowers that literally crowd the branches; exceedingly pretty and very hardy.

Double-flowering (*D. crenata fl. pl.*). From Japan; flowers double, white, delicately margined with pink. This is deservedly one of the most popular and desirable flowering shrubs, and no collection can be complete without it.

Double White (*D. alba fl. pl.*). Produces a profusion of double, pure white flowers; similar in habit to preceding.

Fortune's (*D. Fortunei*). Dark green foliage, and large, single flowers. Their hardihood, luxuriant foliage and profusion of attractive flowers render the Deutzias deservedly the most popular flowering shrubs in our collection.

Pride of Rochester. Origin, Rochester, N. Y. Large, double, white flowers, the back of the petals being tinted with rose; excels most of the old kinds in flower and vigorous habit; quite early and very handsome.

Watereri. This variety is of recent introduction; similar to Pride of Rochester, though in habit of growth they are more dwarf than the above. Very handsome.

ELDER, Golden (*Sambucus aurea*). The golden yellow foliage of this variety is quite conspicuous on the lawn or where planted with other shrubbery; when the leaves first appear they are a bright green, soon changing to golden green. Will not produce the desired effect if planted in the shade.

SLENDER-BRANCHED DEUTZIA

HYDRANGEA PANICULATA GRANDIFLORA (See page 58)

FLOWERING AND OTHER SHRUBS, continued

ELAEAGNUS longipes. This has small, yellowish white flowers in May, followed by berries somewhat larger than currants, which when ripe, toward the close of June, are of a reddish amber color, and are very good for eating fresh or for cooking. The bush is also then quite ornamental.

Parvifolia. This one is generally understood when "Silver Thorn" is spoken of, though the name applies to all the species. It has sweet-scented yellow flowers, in great profusion, in May. The stems are clustered with mottled red berries in July, which, while not equal to those of Longipes, are fairly good eating.

EUONYMUS Europaeus (Strawberry, or Spindle-Tree). An ornamental shrub of large size, whose chief beauty consists in its brilliant red berries.

EXOCHORDA grandiflora. Japanese origin. A superb shrub, furnishing clouds of bloom in May; the flower is large, pure white, in racemes of five or six, with spoon-shaped petals, which are very narrow and stand apart at the base; the bush is large-growing, attaining sometimes 10 feet in height and nearly as broad; hardy; a grand shrub, indeed.

EVERGREEN THORN (*Crataegus Pyracantha*). A low, bushy plant, retaining its foliage all winter; has pinkish or white flowers, succeeded by dense clusters of orange-scarlet berries.

FORSYTHIA, Golden Bell (*F. viridis-sima*). Flowers golden yellow, produced in the greatest profusion in the very early spring.

Fortune's (*F. Fortunei*). Growth upright; flowers golden yellow.

Weeping (*F. suspensa*). Growth slender and drooping; flowers yellow.

FRINGE, Purple (*Rhus cotinus*). Smoke Tree, Venetian Sumac, etc. A very elegant ornamental tree, or large shrub, with curious, hair-like flowers of pale purplish color that covers the whole plant.

Fringe, White (*Chionanthus Virginica*). See Ornamental Trees.

GOLDEN GLOW (*Rudbeckia*). A hardy perennial, growing 6 to 7 feet high, and producing hundreds of bright golden flowers 2 to 3 inches in diameter, on long, graceful stems, forming immense heads of bloom. Fine for cut-flowers. Can be grown anywhere with very little care. Should be planted in every garden, for when once well established will furnish an endless amount of flowers.

HAZEL, Purple-leaved European Hazel-nut (*Corylus Avellana atro-purpurea*). A vigorous shrub, with deep purple leaves.

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

Kalmianum. Flowers bright yellow; blooms in midsummer.

Moserianum. A half-shrubby sort, almost evergreen when protected, bearing very large yellow flowers 2 inches in diameter, which are produced from July till late fall. One of the most desirable of recent introductions. 1 to 2 feet.

HALESIA tetraptera (Common Snow-drop, or Silver Bell). Very pretty white, bell-shaped flowers in the spring.

HONEYSUCKLE, Fragrant Upright. (*Lonicera fragrantissima*). Is almost an evergreen. Flowers cream-colored and very fragrant; continue for a long time. The following species are upright or shrubby plants. Climbing sorts belonging to this class will be found described under the heading of Climbers and Creepers.

Tartarian (*Lonicera Tartarica*). From Tartary; flowers abundant; rose-colored.

White-flowering Tartarian (*L. Tartarica alba*). Similar to the preceding, but with nearly pure white flowers.

Great Red-flowering (*L. rubra grandiflora*). Of strong growth; flowers very abundant; deep rose; very attractive.

FLOWERING AND OTHER SHRUBS, continued

HYDRANGEA

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

Garden (*H. hortensis*). Hardy, foliage large; flowers produced in large, globular greenish heads, changing to light rose-color.

Oak-leaved (*H. quercifolia*). Leaves large, turning to crimson in the autumn; flowers white, changing to purple.

Large-panicked (*H. paniculata grandiflora*). This is one of the very finest shrubs of recent introduction, growing 8 to 10 feet high, producing immense pyramidal panicles of white flowers more than a foot long; blooms in Aug. and Sept.; indispensable.

Tree or Standard Form. Same as above but grown as standard instead of bush form.

Thomas Hogg. An attractive variety, with enormous heads of pure white flowers; recently introduced from Japan.

Otaksa. From Japan; immense trusses of rose-colored flowers in June.

LILAC, CHARLES X

HOP TREE (*Ptelea trifoliata*). This does not advance much beyond the shrub size. It bears clusters of white flowers in June, followed by hop-like seeds in the fall.

Aurea. Same as the above, but with golden foliage. 12 to 15 feet.

INDIGO BUSH (*Amorpha fruticosa*). A fine shrub, with long, slender spikes of dark violet flowers; very pretty.

IRIS Kaempferi (Japanese Iris). The flowers of these Irises grow to an enormous size, averaging 6 to 8 inches in diameter, while the beauty and variety of the coloring surpasses description. They should be planted in rich soil, and will succeed in any situation except shade.

JAPAN QUINCE (*Pyrus Japonica*, *Cydonia Japonica*, etc.). Produces bright scarlet flowers in great profusion in the early spring; very attractive and hardy; one of the very best hardy shrubs in the Catalogue.

White-flowering (*C. Japonica alba*). A desirable shrub, producing delicate white and blush flowers in early spring.

KERRIA Japonica (Japan Globe-flowered Corchorus). A flexible green-branched shrub, producing for several months double globular yellow flowers.

LILACS

Well-known beautiful shrub, indispensable in every collection. They flower in May. The Double Lilacs are heavier and more massive, and trusses of bloom larger than the single varieties.

Common (*Syringa vulgaris*). Very generally known and admired, with its profusion of fragrant bluish purple flowers.

Charles X. A strong, rapid grower, with large, shining leaves and reddish purple flowers.

Double (*S. Lemoinei flore pleno*). A new and choice variety of the Lilac, producing long racemes of double purple flowers, lasting longer than the single sorts. Valuable.

Common White (*S. alba*). Flowers produced in slender panicles; pure white and fragrant.

Japan, or Tree (*S. Japonica*). A large-growing kind; panicles of white flowers. Foliage deep green.

Louis Van Houtte. Large panicles of red flowers.

Lilac of Marley (*S. de Marley*). Flowers of reddish purple, borne in great profusion.

President Grevy. A beautiful blue; individual. Very double and very large; one of the finest Lilacs.

Sanget's (*S. Sangeana*). Purplish red; flowers very fine.

Souvenir de la Spath. The most distinct and beautiful variety in the collection. Trusses immense; very compact; florets very large, deep purplish red. Growth vigorous.

White Persian (*S. Persica alba*). The flowers are nearly white, being slightly shaded with purple.

SPIRÆA VAN HOUTTEI (See page 60)

FLOWERING AND OTHER SHRUBS, continued

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 and regular in its form, and bears shearing to any extent. The whole collection which we offer makes an interesting group on the lawn; flowers appear in June and July.

Ovalifolium (California). A vigorous, hardy variety, of fine habit and foliage, nearly evergreen; grows well in almost every soil; ornamental, and one of the best hedge plants.

Variegata. A variety of the Vulgare, the foliage of which is streaked with yellow.

PEONIES, Herbaceous. These are very beautiful, showy and easily cultivated plants, blooming from the beginning of May to the end of July. They should have a place in every garden. A selection will give a continuous bloom for three months. We offer the best sorts in assorted colors.

Tree Peony (*Paeonia Moutan*). The varieties are handsome flowering shrubs, attaining 5 to 8 feet in height; flowers very large and quite numerous, with gorgeous colors.

PERENNIAL PEA (*Lathyrus grandiflorus*). Similar to the sweet pea, but has pink and white flowers in large clusters.

PLUM, Double-flowered (*Prunus triloba*). Of recent introduction from China; a very hardy shrub; flowers semi-double, of a delicate pink, closely set along the branches, forming a compact spike; very pretty and desirable.

Purple-leaf (*P. Pissardi*). One of the very best small trees or shrubs of recent introduction; the foliage is a beautiful red-purple, changing to a deep, black-purple; the hot sun has no ill effect on

Purple-leaf Plum, continued

its rich colors; it remains beautiful until frosts come, something unusual in purple-leaf plants; by far the best of its kind; exceedingly hardy and very easy to transplant.

SIBERIAN PEA (*Caragana arborescens*). A large shrub with bright yellow, pea-shaped flowers.

SPIREAS

Beautiful shrubs of the easiest culture; very desirable for shrubberies or the flower-garden.

Anthony Waterer (Crimson Spirea). Color bright crimson. It has a very dwarf and dense growth; blooms all summer and fall; it also makes a beautiful pot-plant.

Billard's (*S. Billardii*). Bright rose-colored flowers; blooms nearly all summer; desirable.

Billard's White (*S. Billardii alba*). Very similar to the rose-colored, but with blossoms pure white.

Blue Spirea (*Caryopteris Mastacanthus*). Small violet or lavender-blue flowers; late summer and autumn. Very desirable.

Fortune's (*S. callosa*). A fine sort; flowers light pink, produced in large panicles; blossoms nearly all summer.

Fortune's Dwarf White (*S. callosa alba*). A new dwarf variety, with pure white flowers.

Golden-leaved (*S. opulifolia aurea*). Very conspicuous from the golden yellow hue of its foliage. June.

Plum-leaved, Bridal Wreath (*S. prunifolia flore pleno*). A very beautiful variety; flowers pure white, small and very double; blooms very early.

VIBURNUM PLICATUM (SNOWBALL)

FLOWERING AND OTHER SHRUBS, continued

Spirea, Reeves' (*S. Reevesii*, or *lanceolata*).

A very pretty sort, producing clusters of white flowers that cover the whole plant.

Reeves' Double-flowering (*S. Reevesii flore pleno*). This is one of the handsomest of the Spireas; flowers pure white, very double; indispensable.

Thunberg's (*S. Thunbergii*). A small, white-flowering variety; desirable for pot culture.

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

SNOWBALL (*Viburnum Opulus*). Cranberry Bush. An old and well-known shrub, bearing large balls of pure white flowers; very decorative fruit, which begins to color about midsummer hangs on during the winter. It is claimed that the English Sparrows will not eat the berries. The foliage, like that of all the Viburnums, gets very pretty in the autumn.

Single (*V. tomentosum*). A single form of Snowball; has white flowers, but the attractiveness of this shrub is its purple foliage in autumn.

Japanese (*V. plicatum*). A rare and exceedingly beautiful species from China; flowers in large, globular heads, pure white, hanging long on the bush; a very choice and desirable shrub.

SNOWBERRY, Pink (*Symphoricarpos racemosus*). Flowers in summer; quantities of large, white waxen berries in autumn.

MOCK ORANGE (See opposite page)

FLOWERING AND OTHER SHRUBS, continued

Snowberry, Red (*S. glomeratus*). Compact form; small red berries in autumn.

SUMACH, Cut-leaved (*Rhus glabra laciniata*). A very striking plant, of moderate size, with deeply cut leaves resembling fern leaves; dark green above and glaucous below, and turning to a rich red in autumn.

SYRINGA, or MOCK ORANGE (*Philadelphus*)

Of vigorous habit; very hardy, with large, handsome foliage and beautiful white flowers, produced in the greatest profusion in the blossoming season. It merits a prominent place in all collections of shrubbery. It is called the Mock Orange because its flowers somewhat resemble orange blossoms, and are equally fragrant, though with not so delicate a perfume. Most of the varieties, except those of dwarf habit, form large-sized shrubs, 12 to 15 feet high. They can, of course, be kept smaller by pruning. The dwarf sorts do not yield many flowers, but are very pretty, compact plants, and are very useful where small shrubs are desired. All of the varieties flower in June, after the Weigela. By planting the late-flowering sorts, the season may be considerably extended.

Double-flowering (*P. flore pleno*). A variety with partially double, fragrant flowers.

Garland (*P. coronarius*). A well-known shrub, with pure white, highly scented flowers. One of the first to flower.

Gold-leaf (*Philadelphus aureus*). A dwarf variety. Flowers abundantly. A handsomely shaped plant, of medium size, with bright, golden yellow foliage. Will be found valuable for creating pleasing and striking contrasts with shrubs of other colored foliage.

Grandiflorus. A large-flowered, strong-growing sort, and perhaps the best of all.

Lemoinei erectus. The flowers of this species are more clustered than the older sorts. Flowers very sweet. Four to 6 feet.

Nepalensis (*P. variegata*). A variety similar to *P. grandiflora*, but blooms later.

Nivalis. Stamens cream color; the whole flower is a delicate white.

Sweet (*P. coronarius*). Strong-growing, rounded habit. A pure white, very fragrant, late-flowering variety.

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

Tamarix Africana (African Tamarisk). A tall, graceful shrub, with small foliage like the Juniper, and delicate, small, rosy purple flowers, produced in spikes; very pretty.

Tetrandra. The most beautiful of the genus, flowers pale pink; blooms late in summer.

WEIGELA

Hardy, easily grown, and great bloomers. Of erect growth while young, but gradually spreading and drooping as they acquire age. They produce, in June and July, superb, large, trumpet-shaped flowers of all shades and colors from pure white to red. In bor-

WEIGELA ROSEA (See page 62)

ders and groups of trees they are very effective, and for margin work, the variegated-leaved varieties are admirably suited, their gay-colored foliage contrasting finely with the green of other shrubs. The Weigelas flower in June, after the lilacs are gone, keeping up a fine show of color in the shrubbery for a month or two longer. Some of the old wood should be cut out each year, after flowering, which will result in the growth of young, vigorous shoots, that will produce an abundance of large flowers.

Abel Carriere. Bright rose; a choice sort.

Candida. A strong-growing new variety, bearing pure white flowers in great profusion. One of the best.

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

Groenewegenii. One of the vigorous, tall growers; flowers are dark rose.

FLOWERING AND OTHER SHRUBS, continued

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

Hortensis nivea. Flowers pure white, retaining their color, and being clear enough for the choicest bouquets; foliage large; a profuse bloomer; of dwarf, spreading habit. 3 to 4 feet.

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

Lovely Weigela (*W. amabilis*, or *splendens*). A showy variety of vigorous growth, blooming late in the season. Very desirable.

Rosea. An elegant shrub, with fine rose-colored flowers. Introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered. Quite hardy; of erect, compact growth. Blossoms in June.

Sieboldi alba marginata. Of upright habit. When the leaves are young the variegation is yellow; when they mature it becomes silvery white; flowers rose-colored. A splendid and effective variegated-leaved shrub.

Weigela Stelznerii. Flowers dark red; a profuse bloomer.

Variegated. The leaves of this variety are strikingly marked with white, yellow and light green. The flowers are light rose-colored.

Van Houttei. A new variety of vigorous growth with dark rich crimson flowers, produced in great abundance. A decided acquisition.

WAYFARING TREE (*Viburnum Lantana*). A large, robust shrub, with soft, heavy leaves and large clusters of white flowers in May, succeeded with red fruit; retains its foliage very late. In some localities it is almost an evergreen and adds a picturesque touch to the lawn even in winter.

YUCCA filamentosa (Adam's Needle). Perfectly hardy and easily grown. The stem on which the flowers are borne is thrown up in July, and forms a perfect pyramid of creamy white, bell-shaped flowers. Very picturesque effects are produced when planted in groups on the lawn. The foliage retains its color until late in the winter and is very effective at that time.

ORNAMENTAL GRASSES

These beautiful hardy Grasses are deserving of the highest commendation. For the garden they are invaluable, being very showy and ornamental and of easy cultivation. They should be in every collection.

EULALIA Japonica variegata. Handsomely variegated leaves.

Japonica zebrina (Zebra-striped Eulalia). One of the most beautiful of Ornamental Grasses; foliage marked crosswise with bands of white and green.

ERIANTHUS Ravennae. A vigorous grower with large plumes.

PAMPAS GRASS (*Gynerium argenteum*). Grows in large, thick tussocks; has silvery, plume-like spikes of flowers; the most popular of all the Grasses.

CALIFORNIA PRIVET HEDGE

HEDGE PLANTS

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

EVERGREEN

ARBORVITAE, American. One of the most desirable evergreen hedge-plants. Of very attractive appearance. Although a fast grower, it can be kept trimmed to any height desired. Best adapted for screens or windbreaks.

EVERGREEN THORN (*Crataegus Pyracantha*). A valuable plant for growing singly or for hedges. Attractive, rich, glossy foliage. When of mature age produces fragrant white flowers, succeeded by bright, orange-red berries.

SPRUCE, Hemlock. Desirable and ornamental. Nothing handsomer for hedges; sheared, compact and bushy.

Norway. A popular variety. Makes a very dense, compact hedge. Desirable for a firm hedge, to take the place of a fence.

DECIDUOUS

ALTHEA. Is much used in many localities for ornamental hedging. It can be sheared into any shape, and is very showy, either when the entire hedge is of one color or when assorted colors are combined.

BERBERIS Thunbergii. Beautiful dwarf Barberry from Japan. Has small, bright green foliage, changing to red in fall.

OSAGE ORANGE. The well-known and extensively planted thorn hedge of the present day. The cheapest hedge-plant we know of. Makes a strong, durable

Osage Orange, continued

fence; though not so ornamental as the other kinds, yet when closely trimmed it is quite attractive.

PRIVET, California. Nothing in the way of a hedge-plant has attained in so short a time the popularity of the California Privet. While in this latitude it is deciduous, yet it retains its foliage until very late in the fall or early winter. The flower is creamy white and very fragrant. It is certainly a most desirable thornless, hardy hedge-plant, with beautiful dark green foliage. It can be kept at any desired height by frequent trimming, and grows well at the seashore.

JAPANESE HARDY ORANGE (*Citrus trifoliata*). This valuable new fruit from Japan, after thorough testing, has proved itself entirely hardy in any part of the United States; it has borne regularly here for several years. The fruit, while not to be classed with first-class Florida oranges, is nevertheless attractive and valuable; it is of small size, and much like the ordinary orange; the flavor is good, subacid, very sprightly; valuable to use in place of the lemon, and is elegant to preserve. Beautiful ornamental shrub and an elegant hedge-plant.

JAPAN QUINCE. (*Pyrus Japonica*, *Cydonia Japonica*, etc.). Produces bright scarlet flowers in great profusion in the early spring.

CLIMBERS AND CREEPERS

AKEBIA quinata. A climbing plant from Japan, with fine foliage and clusters of purplish, fragrant flowers; very pretty.

AMPELOPSIS quinquefolia (American Ivy, or Virginia Creeper). A native vine of vigorous growth, with abundant foliage, which turns rich crimson in the autumn; suitable for covering walls or trunks of trees.

Veitchii (Veitch's Ampelopsis). Recently introduced from Japan; grows rapidly and attaches itself firmly to walls; leaves small, turning to brilliant red in autumn.

ARISTOLOCHIA Siphon (Dutchman's Pipe). The common name comes from the resemblance of the flowers to an old-style pipe. The leaves are very large.

CLEMATIS (Virgin's Bower)

This is unquestionably one of the handsomest classes of vines for covering arbors, trellises, pillars, etc., that has been introduced. They are slender-branched, rapid growers, with handsome foliage and beautiful flowers, ranging in color from white to deep purple.

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

Flammula, or European Sweet-scented. A rampant grower; very hardy, bearing masses of small white flowers from June to September; very fragrant and beautiful.

Henryi. Very large, free grower and bloomer; flowers creamy white; one of the best.

Jackmani (Jackman's Clematis). Without a doubt the best yet introduced, and a general favorite; large velvety, dark violet-purple, strong and hardy.

Madam Edouard Andre. A handsome new red Clematis with large flowers of a beautiful velvety red. A free and continuous bloomer. It is destined to become as popular as the Jackmani Purple.

Paniculata. This valuable white Clematis, a native of Japan, has, after a thorough trial of several years, proved entirely hardy. The deep, clear, green foliage is unusually broad and healthy, and remarkably free from all insect enemies. The flowers are pure white, often slightly tinged with cream, from three-quarters to an inch in diameter, star-shaped, and with a most pleasing and penetrating fragrance. They are borne in heads, on stiff stems 4 to 6 inches long from the axils of the leaves. The fragrance is remarkable in its intensity, and is noticeable quite a distance. For any situation where a rapid-growing climber is needed, this will be found a very valuable plant. The late season of blooming is a strong point, as most other climbers have passed their flowering stage by the middle of August, when this is just coming to perfection, and continues blooming nearly a month.

Scarlet (*C. coccinea*). Flowers brilliant scarlet; unlike any other Clematis; very choice and rare. Blooms in July.

White Jackmani (*C. Jackmani alba*). Similar to the purple in growth and habit, but with pure white flowers. It is a most beautiful and graceful covering for the trellis and porch, and is perfectly hardy.

CLEMATIS PANICULATA

HONEYSUCKLE

(Lonicera)

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

Golden-veined (*L. brachypoda aureo-reticulata*). A handsome and desirable variety, with elegantly veined and netted foliage.

Hall's New Japan (*L. Halliana*). A strong, vigorous evergreen sort; flowers white changing to yellow; very fragrant, and is covered with flowers nearly all summer and autumn; the best of all the Honeysuckles.

Red Coral, or Scarlet Trumpet (*L. sempervirens*). A common native vine, producing scarlet inodorous flowers through the summer.

IVY (*Hedera*). The Ivies are evergreens, and much used for covering walls, trees, etc., clinging tenaciously thereto. They generally succeed best in a cool or somewhat shaded place. We grow the most desirable sorts.

JESSAMINE, Naked-flowering (*Jasminum nudiflorum*). Produces golden yellow flowers very early in the spring, before the foliage appears.

Common White (*J. officinale*). A popular climber, with very fragrant white flowers.

Fruticans. Yellow flowers; shrubby growth.

Grandiflora (Large-flowered Trumpet Creeper). Blooms orange-red.

TRUMPET FLOWER (*Bignonia radicans*). A rapid-growing native plant, with large, trumpet-shaped scarlet flowers.

HALL'S JAPAN HONEYSUCKLE

AMPELOPSIS VEITCHII (See opposite page)

WISTARIA, Chinese (*W. Sinensis*). One of the most elegant and rapid-growing of all the climbing plants; attains a very large size, sometimes growing 15 or more feet in a season; has long racemes of pale blue flowers in spring and sometimes in autumn. A Wistaria adds an indefinable touch of grace and beauty to the plainest porch.

Double Purple (*W. flore pleno*). The habit of this plant is similar to the preceding; flowers very double, and deeper in color than the former.

White-flowering (*W. alba*). Like the preceding, except that the flowers are pure white and single.

ROSES

The Rose has long been acknowledged as the "Queen of Flowers," No flower yet introduced compares at all with the Rose in exquisite beauty and fragrance, and no word of praise can add to its charms. We aim to keep on hand a good supply of only the very best varieties, such as will bloom freely and give satisfaction.

Roses of the Tea and Monthly class are not altogether hardy north of Virginia, yet with careful banking of the earth high around the plant most kinds will do well. The Hybrids, Mosses and Clusters are more hardy, still some protection is very beneficial to these, if it only be a covering of loose straw or leaves. Coarse stable manure is the best mulch for winter and summer. We would recommend that, north of Virginia, selections should be made from the Hybrid Perpetual class, and especially where complete hardiness and large plants are desired. Spring is the best time for planting Roses. The soil should be rich and well drained, with careful culture, to insure success. Annual pruning is very beneficial. Our Roses are all grown on their own roots outdoors and will transplant with much better satisfaction than the tender hothouse plants.

The Baby Rambler, or Dwarf Everbearing Crimson Rambler

A cross between Crimson Rambler and a Polyantha Rose. It has large trusses of crimson flowers like the Crimson Rambler, but instead of being a climber is of dwarf, compact habit with dark green foliage, and is perfectly hardy and blooms continually through the season.

TEA AND MONTHLY ROSES

The Tea Roses may well be considered the highest type of the Rose in color, fragrance and grace of form. All Teas bloom freely throughout the season.

Bon Silene. Brilliant carmine-rose, richly tea-scented; a well-known favorite.

Bridesmaid. Famous everywhere. Magnificent buds and flowers. Color clear, dark pink.

Catherine Mermet. Bright flesh color; full and beautiful; one of the most lovely of its color.

Coquette de Lyon. Light canary yellow; a most desirable bedding variety.

Cornelia Cook. Hard to beat. Pure creamy white, tinged with lemon and blush. Perfect.

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

Etoile de Lyon. Fine striking sulphur-yellow; the most valuable yellow for summer bedding.

Golden Gate. This is a beautiful free-blooming and healthy Tea Rose that we can recommend to everyone desiring large flowers, long stems and continuous bloom. The buds are long and pointed, opening out into a well-shaped flower of creamy white, delicately tinged golden yellow and rose.

Golden Sun (Soleil d'Or). This is a splendid new hardy yellow Rose, suitable for garden planting. Seems to be a cross from the old Persian Yellow with a bright red hybrid perpetual. It makes a strong, vigorous growth. The flowers are extra large, full and deep and delightfully sweet. The color is an exquisite shade of chrome yellow, beautifully tinged and colored with bright orange and nasturtium-red; exceedingly beautiful. The bush is entirely hardy, needs no protection and blooms abundantly every season; it will be a permanent ornament for your lawn or garden for years. Golden Sun has taken the highest prizes wherever exhibited, both in this country and Europe, and is a most valuable acquisition to our list of Hardy Garden Roses.

Gruss an Teplitz. One of the brightest-colored Roses grown. When first opened it is dark rich crimson, quickly changing to bright scarlet, shading to velvety fiery red. Blooms continually; flowers good-sized and delightfully fragrant. Plant vigorous and upright, making fine pot-plants.

THE BABY RAMBLER

TEA AND MONTHLY ROSES.
continued

Ivory, or White Golden Gate. Golden Gate has become so well known to all rose growers as an extremely free forcing variety of the largest size, that all will understand what the new Rose Ivory is like, when it is described as a White Golden Gate, a sport from that variety. Its extraordinary freedom, large size, heavy canes, all tend to make it a valuable white variety for cut-flowers. Strong plants.

Isabella Sprunt. One of the grandest old Roses in cultivation. Splendid large flowers of bright canary-yellow.

Kaiserin Augusta Victoria. Celebrated the world over for its elegant, large, pointed buds and large, full, double flowers. Color delicate, creamy white. Deliciously fragrant. Particularly hardy, and one of the most beautiful Roses in cultivation for open ground culture.

La Reine. A beautiful, clear, bright rose, fine, full form, very fragrant. It is well named "The Queen."

Madam C. Testout. A really grand Rose of the La France type but larger and of better color. It is clear pink—there is nothing in the Rose line that can approach it in color—and the flower is as large as Baroness Rothschild and as free as La France. Very fragrant; a magnificent forcing variety.

Maman Cochet. Deep rose-pink, inner side of petals silvery-rose, very double; an exquisite Rose in every way.

Meteor. A rich dark velvety crimson Hybrid Tea; free-blooming and vigorous grower.

Perle des Jardins. The queen of all yellow Roses. Color is clear golden yellow, indescribably rich. Immense, full, double and globular flowers; exquisitely beautiful.

Papa Gontier. One of the best crimson Roses, with immense buds and magnificent large bold flowers.

Pink La France. Famous the world over. One of the loveliest and sweetest of all Roses. Perfect buds and flowers. Color silvery pink, tinged with crimson. Deliciously sweet.

Safrano. Saffron and apricot; one of the oldest and best Roses; in the bud shape it can hardly be surpassed.

The Bride. Most popular white Rose for winter flowering. Flowers large and double, on long stiff stems, of fine texture and substance; last a long time in fresh state after being cut. During extreme hot weather it becomes a pinkish white, at other times a beautiful pure white.

White Maman Cochet. For open ground planting cannot be surpassed. Superb, large, deep and double flowers. Color snow-white, sometimes tinged with pale blush.

TYPE OF TEA ROSE

Yellow Cochet, or Madame Derepas Matrat. A pure Tea Rose, very free-growing and hardy in character, withstanding ten degrees below zero. It throws up fine, strong stems, crowned by solitary buds of grand size; the color is a good sulphur-yellow, blooms very large, perfectly double, splendid form and freely produced. It has every quality necessary to make the ideal yellow bedder, ranking with the White and Pink Cochets in value as a Summer Rose.

BENGAL, or CHINA ROSE, HERMOSA

Undoubtedly the best pink bedding Rose in cultivation; an old favorite

HARDY HYBRID PERPETUAL
ROSES

These are considered the most valuable of all hardy plants. They are distinguished by their vigorous, upright growth and large, bold flowers, frequently measuring 4, 5 and 6 inches in diameter. Entirely hardy in all parts of the country, living through the most severe winters, with a light protection of leaves or coarse manure. They bloom the second year when fully established, and should be planted in the open ground. Our collection includes the finest varieties in cultivation.

American Beauty. A grand Rose for either forcing or outdoor culture. Its very double flowers are of a deep crimson color

AMERICAN BEAUTY (See page 67)

HARDY HYBRID PERPETUAL ROSES, con.
and very fragrant; it is of full and quite perfect form, with the petals finely imbricated; a constant bloomer and strong grower. Very desirable in every way; its rich "June-rose" scent would alone commend it, to say nothing of its many other good qualities.

Anne de Diesbach. Clear bright carmine; very large and finely shaped; full and fragrant.

Coquette des Alps. White center, shaded rose; of fine form, full center.

Coquette des Blanches. Pure white, large and globular.

Fisher Holmes. Rich velvety crimson; large, double and of fine form.

General Jacqueminot. Too well known to require lengthy description. It still holds first place among the dark red Roses, and is one of the most satisfactory to grow. A rich crimson-scarlet, simply a mass of bloom when at its best.

General Washington. Bright red, with crimson shade; large, full and free bloomer.

Madame Charles Wood. A splendid crimson; large and full; very free bloomer.

Madame Plantier. Pure white and a free bloomer; unrivaled for hedges or cemetery use.

Magna Charta. Extra large, full flowers, very double; finely formed; color clear rosy red, beautifully flushed with violet-erimson. None better.

Marshall P. Wilder. Color bright cherry-carmine, fragrant, of vigorous growth, with fine foliage. One of the freest of the H. P's to bloom; we can recommend this Rose without hesitation.

Mrs. John Laing. Delicate pink, with satin tinge.

Paul Neyron. Very large dark Rose; by far the largest Rose in cultivation; one of the most desirable.

Prince Camille de Rohan. Deep velvety crimson-maroon, shaded with red.

Ulrich Brunner. Extra large, bold, full, globular flowers; rich crimson, flamed with scarlet.

MOSS ROSES

Who does not admire Moss Roses? Their mossy buds are the very symbol of beauty and elegance. Nearly all the varieties are strong, robust growers, perfectly hardy, and deserve rich culture. There are annual and perpetual bloomers, that are highly cultivated, and will give two or three flowers to the other one's crop; but the prettiest flowers are found among the annual bloomers.

Perpetual White. White; blooms in clusters.

Crimson Moss. Very distinct in color and growth.

CLIMBING ROSES

Roses of this class are valuable for training on trellises and arbors, covering verandas and buildings. They are rapid growers, and produce great quantities of handsome bloom.

Baltimore Belle. Pale blush, variegated carmine, rose and white; double.

Crimson Rambler. The greatest Climbing Rose of its color in existence, small plants making a growth of 10 to 20 feet in a single season, producing in marvelous profusion large trusses of flowers, pyramidal in form. When in full bloom it is a vivid mass of crimson beauty. Perfectly hardy.

CRIMSON RAMBLER (See preceding page)

CLIMBING ROSES, continued

Yellow Rambler. The only hardy yellow Climbing Rose in cultivation, and as such is almost indispensable. Identical with Crimson Rambler, except the flowers, which are deep golden yellow and fragrant.

White Rambler. Flowers are of the size of a silver quarter, partly filled, very fragrant, and in color pure white, tinged with blush; borne in clusters.

Pink Rambler. Same as White Rambler, except color of flowers, which are brilliant light carmine.

Empress of China. A remarkably strong-growing variety, attaining a height of 15 to 25 feet in a single season; produces hundreds of finely formed buds and flowers; color soft dark red, changing to lighter red or pink, like an apple blossom. A great Rose.

Greville, or Seven Sisters. Flowers in large clusters; varies in color from white to crimson.

Marechal Niel. Famous in the South as the acme of perfection; superb; extra large, deep and double flowers of delicious fragrance; color deep golden yellow.

Prairie Queen. Color bright pink, sometimes with a white stripe; very double, full and globular.

Queen of the Prairie. Extra strong growth and free annual bloomer; bright, rosy red; the strongest climber of all.

Reine Marie Henriette. Rich cherry-crimson; one of the finest hardy Climbing Roses.

Tennessee Belle. Graceful and slender in growth; bright pink flowers in clusters.

ROSA RUGOSA (Japanese Roses)

Glossy green foliage. Seems to be insect proof. Large single flowers in red and white, which are succeeded by large red fruit, making them particularly attractive in late summer and autumn. Desirable also as a hedge plant.

TREE ROSES

Tree or standard form. Budded on stems 3 to 4 feet high. We have these in assorted colors and best varieties.

WICHURAIANA, or MEMORIAL ROSE

Hardy. This is a new race of rapid-creeping habit of growth. Invaluable for covering the ground, stumps of trees, pillars, posts, trellises, rocky slopes and embankments, growing where other Roses could not possibly live. Perfectly hardy and will survive the severest winters in any climate, soil, exposure, remaining green up to Christmas; flowers borne in the utmost profusion; delightfully fragrant.

There Is Profit in Spraying

It is foolish for the orchardist or trucker to argue against it. Spraying is not only a protection against insects and fungous diseases, but improves the quality of the fruit and vegetables and increases the yield.

We handle the following Spray Pumps and Insecticides that are giving general satisfaction:

Gould's Fruitall Spray Pump

The Auto Spray

Gould's "Fruitall" Spray Pump

With Agitator. All Working Parts Bronze

"Fruitall" Spray Pump is made on the same general lines as the now-famous "Pomona." It is, however, lighter and of smaller capacity. All working parts, including plunger, gland, valves, valve seats and strainer, are of brass. Regularly fitted with ring agitator similar to one used on "Pomona," and which has proven to be the best type. Pump is held in barrel by anchor at bottom and adjustable clamp at top, fitted over end of stave. Not made for side of barrel. The agitator is a perfect working device and answers every purpose for any one desiring a lighter and cheaper pump.

Gould's Pomona Spray Pump

With Agitator. All Working Parts Bronze

Plunger.—Diameter, $2\frac{1}{2}$ inches; stroke, adjustable to 3, 4, 5 in.; discharge, $\frac{1}{2}$ -in. hose.

No leather packing. Valves are brass; easily accessible; wing guided on beveled seats ground to fit. Air-chamber steel. Lever long and powerful, with adjustable stroke, 3-, 4- or 5-

inch. Solid brass plunger, machine-turned, fitting gland accurately. Pump is held securely by adjustable clamp plate, made to fit end of barrel, and by a small anchor located at bottom of barrel. The mechanical agitator is operated by stroke of the handle.

PATENTED.

INSECTICIDES

1. **Lime-Sulphur Solution.** For scale insects.
2. **Bordeaux Mixture.** For fungous diseases, scale, etc.
3. **Bordeaux-Arsenate of Lead Mixture.** For codling moth, curculio, potato bugs.
4. **Arsenate of Lead.** For potato bugs. Is cheaper and more effective than Paris green.
5. **Good's Whale Oil Soap.** For sucking insects.
6. **Tobacco Stems.** Used as a fertilizer and insecticide.

WRITE FOR PRICES

FRANKLIN DAVIS NURSERY CO., Baltimore, Md.

HOW AND WHEN TO SPRAY

PLANTS	1st Application	2d Application	3d Application	4th Application	5th Application
APPLE — Canker worm, codling-moth, scab.	Spray before buds start, using copper sulphate solution.	After the blossoms have formed, but before they open, Bordeaux and Paris green.	Within a week after blossoms have fallen. Bordeaux and Paris green.	10 to 14 days later, repeat.	10 to 14 days later, Bordeaux or weak copper sulphate.
CHERRY — Rot, aphid, curculio and slug.	Before buds start, use copper sulphate solution. For aphid, kerosene emulsion.	When fruit has set, Bordeaux and Paris green.	10 to 12 days later, if signs of rot appear, repeat.	10 to 12 days later, copper sulphate solution weak.	Repeat if necessary.
CURRENT — Worms, mildew.	As soon as worms are seen, Paris green.	If they reappear repeat, adding Bordeaux for mildew.	If worms still trouble, pyrethrum or hellebore.		
GOOSEBERRY — Mildew, worms.	As leaves open, Bordeaux and Paris green.	In 10 to 14 days, repeat with both.	10 to 14 days later, sulphide of potassium on English varieties.	10 to 14 days later, repeat if necessary.	If mildew persists after crop is gathered, Bordeaux.
GRAPE — Flea-beetle, fungous diseases.	Before buds burst, copper sulphate solution and Paris green.	When first leaves are half grown, Bordeaux and Paris green.	As soon as fruit has set, repeat.	10 to 14 days later, Bordeaux mixture if disease is present.	If necessary, very weak copper sulphate solution.
NURSERY STOCK — Fungous diseases.	When buds burst, Bordeaux.	Repeat at intervals of 10 to	10 to 12 days later, repeat.	10 to 12 days later, repeat.	If rot persists use very weak copper sulphate solution every 5 to 7 days.
PEACH, APRICOT — Leaf-curl, curculio, mildew and rot.	Before buds swell, copper sulphate solution.	As soon as fruit has set, Bordeaux and Paris green.	10 to 12 days later, repeat.	10 to 12 days later, repeat.	If rot persists use very weak copper sulphate solution every 5 to 7 days.
PEAR — Leaf blight, scab, psylla and codling-moth.	Before buds start, copper sulphate solution.	Within a week after blossoms fall, Bordeaux and Paris green.	10 to 12 days later, repeat.	10 to 16 days later, Bordeaux.	10 to 16 days later, Bordeaux.
PLUM — Black knot, rot and all fungous diseases, curculio.	As buds start, copper sulphate solution. Cut out knot and burn.	When fruit has set, Bordeaux and Paris green.	10 to 12 days later, repeat.	10 to 20 days later, Bordeaux.	Weak copper sulphate solution, as is necessary.
QUINCE — Leaf and fruit spot, rot.	Before buds start, copper sulphate solution.	When fruit has set, Bordeaux and Paris green.	10 to 12 days later, repeat.	10 to 20 days later, Bordeaux.	Bordeaux or copper sulphate solution, as necessary.
RASPBERRY, BLACKBERRY — Anthracnose, rust.	Cut out badly diseased canes. Spray with copper sulphate before growth starts.	When new canes are one foot high, spray with Bordeaux mixture.	10 to 12 days later, weak copper sulphate solution.	When crop is gathered remove old canes, thin new ones and spray with Bordeaux mixture.	
ROSE — Mildew, black spot, red spider, aphid.	Mildew. Keep heating pipes painted with equal parts lime and sulphur, mixed with water to a paste.	Black spot. Spray plants once a week with weak copper sulphate.	Red spider. Kerosene emulsion to under side of foliage.	Aphid. Kerosene emulsion.	
STRAWBERRY — Rust.	Just before blossom opens, Bordeaux and Paris green.	When fruit has set, Bordeaux or weak copper sulphate solution.	As soon as berries are harvested, Bordeaux, if to keep longer.		

SPECIAL NOTES

For **BLACK KNOT** on cherries and plums, cut out and destroy by burning the diseased parts as soon as discovered. For **APHIS** on all plants use kerosene emulsion. If **RED RUST** appears, the entire stools affected should be cut out and burned. **YOUNG PLANTS** should be sprayed with Bordeaux mixture at the time of the first and third applications to bearing plants.

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ENEMIES OF FRUIT TREES AND PLANTS

The insect and fungous enemies of the orchard and fruit-garden have increased rapidly of late years, on account of which we are often called on for information as to combating them successfully. We have given below a few simple formulas that any one can make in order to have perfect fruit and much of it; it is very necessary to spray orchards and gardens. We can furnish an up-to-date spray pump for applying these solutions.

For further information about insects, insecticides and fungicides, we suggest your sending to your State Entomologist, or United States Entomologist, Washington, D. C.

INSECTICIDES AND FUNGICIDES

Formula 1.—Paris Green (Poisonous). One-fourth of a pound of Paris green dissolved in 50 to 100 gallons of water. Stir well.

For foliage-eating insects.

Formula 2.—London Purple. One-fourth pound of London purple to 75 gallons of water. Stir well.

Formula 3.—Kerosene Emulsion. Dissolve $\frac{1}{4}$ lb. whale-oil soap in one gallon of water, and while boiling hot remove from fire and add two gallons of kerosene and stir vigorously with paddle, force pump or spoon until it is of the consistency of cream. Set aside to cool; then dilute with ten to twenty parts cold water. For sucking insects.

Formula 4.—Bordeaux Mixture. Dissolve $\frac{1}{2}$ lbs. sulphate of copper (blue vitriol, blue-stone) in two gallons of hot water; slake 3 lbs. fresh lime slowly with five gallons of water, stirring continually so as to keep it smooth, and after partly cooled pour it slowly into the copper solution, stirring rapidly at same time. Add 25 gallons of water. Stir and strain well before using.

Formula 5.—Ammoniacal Carbonate of Copper. One quart of commercial ammonia added to three ounces carbonate of copper, dissolve and add 25 gallons of water.

Formula 6.—Whale-Oil Soap. Dissolve in water at rate of 1 lb. of soap to 12 gallons of water. For rose-slugs and plant-lice.

"WEED'S SPRAYING CROPS."—Why, When and How, is a valuable work on the subject. It can be had of the Deming Company, Salem, Ohio.

Inspection and Fumigation

OUR stock is inspected every twelve months by the State Entomologist (a facsimile of the Certificate of Inspection is given below), and in addition to this we thoroughly fumigate all stock before shipment from Nurseries. Our fumigating plant is one of the best equipped in the country.

Certificate of Inspection

This is to Certify, That we examined the Nursery Stock of Franklin Davis Nursery Co., growing in their Nurseries at Mitchellville, State of Maryland, in accordance with the Laws of Maryland, 1898, Chapter 239, Section 58, and that said nurseries and premises are apparently free, so far as can be determined by inspection, from the San José Scale, Peach Yellows, Pear Blight, and other dangerously injurious insect pests and plant diseases.

THOMAS B. SYMONS,
State Entomologist

J. B. S. NORTON,
State Pathologist

COLLEGE PARK, Md.

Every customer receives a copy of Certificate of Inspection with his shipment

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Brief Directions for Transplanting Trees, Vines, &c.

Transplanting may be done at any time when the ground is in working order, between the cessation of growth in Autumn until it commences again in the Spring. Almost any soil that will produce good crops of corn or vegetables will grow fruit trees. Let it be well prepared by deep and thorough plowing; if a subsoil plow can be used, so much the better. If the whole surface cannot be prepared at once, plow six or eight furrows where the row is to stand; then dig the holes sufficiently large to admit the roots, giving them their natural position as near as practicable. Pare off all bruised and broken parts; then **dip the roots in mud so as to coat every part.** Fill up the hole with finely pulverized soil, jarring the tree frequently as the work goes on, so as to settle the earth well about it; then tramp lightly with the feet. Set the trees just as deep as they stood in the nursery. Avoid deep planting, for that is decidedly injurious. Bank up the earth—say 12 inches high—immediately around the tree; this will hold it steady and obviate the necessity of staking. If the trees should come to hand in a dry state, and the bark be much shriveled, immerse the whole tree in water for 48 hours; or if received in a frozen condition, put the bale or box *unopened* in a cellar or some dark place free from frost, when the thawing will be gradual and little or no injury will be sustained. In the Spring the ground should be well mulched for a space of four to six feet in diameter around each tree. This consists in covering the surface with straw, leaves, shavings, spent tan-bark, &c. It should be placed, say 4 inches thick; this will prevent weeds from growing, and protect the trees against the damaging effects of mid-summer drought.

CULTURE.—Every farmer knows how to grow corn; the same culture will make fruit trees grow. Frequent stirring of the soil is absolutely necessary; but do not go so deep as to disturb the roots. Corn, potatoes, peas, or any crop that requires Summer culture may be grown, but the fertility of the soil should be maintained by the use of well decomposed manure—an occasional application of lime will be found beneficial.

PRUNING FRUIT TREES.—When a tree is transplanted from the nursery there is more or less loss of roots, and in this condition it

is unable to support the entire head as it came from the nursery. In order that a tree may thrive, there must exist a balance between the root and the stem or branches; consequently, when a tree is transplanted the branches should be reduced by shortening. The branches forming the head of a standard tree should be pruned, at the time of planting, to within three or four buds of the base of each of the branches. These remaining buds, receiving all the nourishment, will push vigorously—whilst if all the branches had been allowed to remain, the tree would make but a very feeble growth. Trees of all kinds branched low will grow twice as fast as when trimmed up to long, naked stems. They will be stronger and more healthy, less liable to disease of stem and attacks of insects that are now destroying so many orchards. They will also bear much more fruit in a short time, and it will be more easily gathered; besides, in a few years, less cultivation of the ground will be necessary, as little grass will grow under the trees trained in this way. Apple and Pear trees should be trained with open heads, so as to admit the sun and air. Some varieties will require little or no thinning out of the branches, while others, with close, compact heads, will need a good deal of thinning. Peach and Nectarines will only require a *shortening in* of the branches.

DISTANCE TO PLANT.—Apples should be 33 feet apart each way; Standard Peers and large growing Cherries, 20 feet; Peaches, Plums, Apricots, and Nectarines, 15 feet; Quinces, 12 feet; Dwarf Peers, Apple, and Cherry, 8 to 10 feet; Grapes, strong-growing kinds, 6 by 10 feet; weak growers, 6 by 6.

STRAWBERRIES.—Where the horse cultivator is used, should be in rows 3 feet apart, and stand 12 inches apart in the row. When the cultivation is done by hand, put the rows 18 inches apart, with the plants 12 inches from each other in the row. Keep the ground free from weeds, and cut off all runners as they appear. To keep the fruit clean, the ground around the plants should be covered with straw, leaves, shavings, or something of the sort, early in the Spring. No plowing or hoeing should be done after they commence blooming. Pull all the weeds by hand until after the crop is gathered; then the cultivator and hoe may be used.

Evergreens require more careful attention in transplanting than fruit trees to insure their living. The ground should be carefully prepared. Before planting dip the roots of the tree in mud, so as to coat every part. In planting use finely pulverized soil, and settle the earth carefully about the roots. When planted in the Fall it is best to protect the trees from cold, drying winds. A barrel with both heads removed placed over the tree and secured in place by stakes, makes a very good protection for the Winter. In Spring the ground should be well mulched.

Grapes require a warm, well drained, moderately fertile soil, and may be planted from 6 to 12 feet apart at the sides of the house, if desired, and trained to the roof. The vines should be pruned between the cessation of growth in Autumn and the starting of the sap in the Spring, say from the first of November to the middle of February. Few fruits will repay the most ordinary cultivation better than the grape.

Roses require a deep, very rich soil; the richer the soil the larger and higher colored the bloom will be. At time of planting, head the plant back to within 4 to 6 inches of the ground, and if set in the Autumn throw up a mound of earth **sufficient to cover it**; on the approach of warm weather in the Spring, or as soon as it is probable that there will be no more severe freezing, the mound should be removed. Hybrid Perpetual and other hardy roses will need no protection in this climate after they are established by one season's growth, but the tender sorts may be protected by continuing to mound the earth about them on the approach of Winter, or by removing both heads from a barrel and setting it over the plant, then filling the barrel closely about half full with dry oak or other forest leaves, removing the same early in the Spring.

Asparagus. To grow this plant successfully the soil must be rich and deep; let a trench be made 18 inches deep, 4 feet wide, and any length desired; then fill in with equal portions of old or well-rotted manure and rich earth (that thrown out of the trench will do if rich) to within ten inches of the surface; then set three rows of good one or two-year old plants; let one row be in the middle of the trench and the other two 15 inches from it on either side, with the plants 1 foot apart in the rows, putting in 3 or 4 inches more of the compost; then fill up the trench with earth until it is 4 inches higher than the surrounding surface. Another plan pursued by many of the growers in this vicinity is to make the trench 18 inches wide only, setting a single row of plants 10 inches apart in the row; then in the early Spring, previous to the first cutting (which is best to be deferred until the third season after planting), with a plow, throw two furrows together over the trench, rounding and smoothing the same with a rake. By this mode of culture much more of the stalk is grown *under* ground, hence is *white*, which pleases the fancy of most consumers in this market; but we think this mere fancy, and for ourselves would prefer it grown with less covering. The beds should have an annual covering of 2 or 3 inches of well-rotted manure, applied in February or March.

**Franklin Davis Nursery
Company**

BALTIMORE, MARYLAND