Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.39

1894

ILLUSTRATED

DESCRIPTIVE CATALOGUE

.... OF

FRUIT AND ORNAMENTAL TREES,

VINES; SHRUBS, ETC.,

ISSUED BY

... P. A. ATKINS, ...

PLEASANT LAKE, MASS.

DESCRIPTIVE CATALOGUE

(NEW EDITION)

OF

Fruits, and Ornamental Trees,

GARDEN FRUITS, ROSES, SHRUBS, ETC.,

ISSUED BY

P. A. ATKINS,

PLEASANT LAKE, MASS.

ROCHESTER, N. Y. :

The Gelhaar, Fleming & Fuller Printing Company.

1894.

Advice to Correspondents.

[PLEASE READ BEFORE MAKING OUT ORDER.]

CORRESPONDENTS will greatly oblige by observing, as far as possible, the following regulations :

1st. All orders by mail should be sent in as early as possible to insure prompt attention, as it is our rule to execute them in the order in which they come to hand : hence we cannot, except for extraordinary reasons, delay orders received first, for those coming late in the season and requiring attention at once.

2d. Buyers, ordering by letter, should write out the order plainly, *on a separate list*, and not in the body of the letter. It will prevent mistakes in the hurry of the packing season.

3d. *Give plain and explicit shipping directions.* When none are given we forward according to our best judgment ; but in no case, except on orders made through our agents, do we assume any responsibility after the delivery of stock in good condition to the forwarders.

4th. All orders from unknown correspondents must be accompanied with a bank draft, post office order, or money by registered letter ; fractions of a dollar may be sent in postage stamps.

5th. When particular varieties are ordered, and particular *ages* and *sizes of trees*, *kinds of stock*, etc., it should be stated whether, and to what extent, other varieties, sizes, ages, etc., may be substituted, in case the order cannot be filled to the letter, as happens occasionally in all establishments.

6th. All trees and plants are carefully labeled and packed in the best manner for any part of the United States, Canada, or Europe, for which a moderate charge is made, but no charge is made for the delivery of packages at the railroad.

7th. Our customers are requested to notify us instantly of any errors that may be committed in filling their orders, so that we may at once make ample amends, as we desire to conduct our business in all respects satisfactorily to those who favor us with their confidence.

CAUTION.

We caution the public against any persons who are using our catalogues and circulars, and representing themselves as our agents, but who in reality have no dealings with us.

PREFACE.

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

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

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

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

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

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

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

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

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

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

DIRECTIONS FOR TRANSPLANTING, ETC.

Preparation of the Soil.—Prepare a rich, deep bed of mellow soil, and have the land sufficiently drained to relieve the roots from standing water. To insure a fine growth, land should be in as good condition as is required for a crop of wheat, corn or potatoes.

Preparation of Trees or Other Stock.—We use great care in digging and packing, but the loss of some small roots and fibres is unavoidable. If stock is properly prepared before it is planted, no permanent injury will result from this, but the preservation of the natural balance between top and roots render a *vigorous cutting back of the former, absolutely necessary* in most cases. And therefore, prune off broken or bruised ends of roots, if any: (a smooth cut root granulates or makes ready to extend sooner than one broken off); cut back the tops to the extent of about one-half the previous season's growth, taking care at all times to prune in such a manner as will tend to develop a well-formed head, sufficiently open to admit air and light freely. To insure success, *peach trees should have all the side branches cut off before they are planted.* Evergreen and other ornamental trees, the beauty of which depends on preserving their natural form, should be pruned very little. Hence, great pains should be taken in planting and caring for these. If not ready to plant when the stock arrives, "heel it in" by placing the roots in a trench and covering them with mellow earth, *well packed.*

Planting.—Make the holes large enough to admit the roots without cramping or bending, and deep enough to bring the tree to its natural depth. The fine surface soil should be used for covering the roots, and this should be carefully worked among them. If the ground is dry, it is well to pour in some water when the hole is partially filled. *See that the ground is firmly and solidly packed over all parts of the roots by exerting the full weight of the planter upon it,* so there will be no opportunity for dry air or frost to enter and destroy roots deprived of the full benefit of their natural protection. OMISSION TO PACK THE EARTH SOLIDLY IS THE MOST FREQUENT CAUSE OF FAILURE IN PLANTING NURSERY STOCK. Fill the holes full enough to be even with the surrounding surface after the fresh earth settles. Always remove the label when planting. If this is left until the tree is grown, the connecting wire often cuts into and destroys the tree or branch to which it is attached. *Never use manure in contact with roots.* When planting dwarf trees set them low enough to cover the stock upon which they are budded, but not lower. Large standard trees should be staked and tied, so that the wind will not loosen the roots. This should be so done that the bands will not chafe the trees. It is a very good way to drive two stakes and confine the tree between straw or hay bands, stretched from stake to stake.

Mulching.—When trees or bushes are planted, they should be mulched or covered with a layer of coarse manure or litter from three to six inches deep, for a space of say two feet more in diameter than the extent of the roots. This keeps the earth moist and of even temperature.

After Culture.—Grass should not be allowed to grow about young trees or plants. The ground should be cultivated for a space of at least one foot outside the roots. If the ground is poor it should be enriched with surface application of manure. Pruning should be varied according to the condition of the tree, and the purpose of the planter. It should be done regularly every spring, before the bud swell any. In this way the removal of large branches will be avoided.

Fall Planting.—When planted in the Fall, all trees should be banked up at least one foot high until Spring. This overcomes the tendency of the trees to heave out, protects them from mice, and prevents the roots from freezing before they have taken hold of the soil. In planting roses, shrubs, vines and other delicate stock in the Fall, *the tops should be nearly or quite buried with mellow earth during the first winter.* The surplus earth should be removed early in the Spring.

WINTERING NURSERY STOCK PROCURED IN THE FALL.

In the extreme north it may not be advisable to set out young trees and plants in the Fall, but the practice of procuring them in the Fall and planting them in the Spring is becoming more and more popular as experience has demonstrated its advantages. It being practicable to plant trees so procured as soon as the frost is out, they become thoroughly established the first season.

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

PLANT YOUNG TREES.

We cannot too strongly recommend our customers to procure young trees, especially for orchard planting. They cost less, they can be taken up with more perfect roots, are much more likely to live, and will become sooner established in a new location. They can also be more readily trained to any desired shape. The largest and most successful planters invariably select young, thrifty trees.

BEST DISTANCES FOR PLANTING.

Standard Apples.....	30 feet apart each way.
Standard Pears and strong growing Cherries.....	20 " " " "
Duke and Morello Cherries.....	18 " " " "
Standard Plums, Apricots, Peaches, Nectarines.....	16 to 18 " " " "
Dwarf Pears.....	10 to 12 " " " "
Dwarf Apples.....	10 to 12 " " " "
Quinces.....	10 to 12 " " " "
Grapes.....	rows 10 to 12 feet apart; 6 to 10 feet in the row.
Currants and Gooseberries.....	4 by 6 feet.
Raspberries and Blackberries.....	4 by 6 feet.
Strawberries, for field culture.....	1 by 3½ feet.
Strawberries, for hill culture.....	2 feet apart each way.

NUMBER OF TREES ON AN ACRE.

30 feet apart each way.....	50	10 feet apart each way.....	435
25 " " " ".....	70	8 " " " ".....	680
20 " " " ".....	110	6 " " " ".....	1210
18 " " " ".....	135	5 " " " ".....	1745
15 " " " ".....	205	4 " " " ".....	2725
12 " " " ".....	300	3 " " " ".....	4840

RULE—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which divided into the number of feet in an acre (43,560), will give the number of plants or trees to the acre.

Profit of Fruit Raising.

Success in growing fruit for market requires the same intelligence and persistence that are essential to success in any other business. At times the markets in one section are flooded, while in other sections good fruit, properly packed, is bringing high prices. Again, in some seasons ordinary fruit is low, *but there never has been a season, and we believe there never will be, when the wide-awake fruit grower will fail to receive BIG PRICES FOR EXTRA CHOICE FRUIT, PROPERLY PACKED.*

PEARS.

The market value of the Pear is a good indication of the amount of attention which this fruit deserves. The following are a few examples: DR. C. W. GRANT, of Newburgh, gathered four hundred specimens from a tree of the Flemish Beauty, only eight years planted, which he sold for \$30. T. R. AUSTIN, near Boston (says Hon. MARSHALL P. WILDER), set out 500 Dwarf Pears. They commenced bearing in about three years, and have borne regular and abundant crops ever since. An account was kept of the sales from them for the second six years, which amounted to \$3,498. They occupy about an acre. A wagon load of pears of the Beurre d'Anjou variety was sold by E. MOODY, of Lockport, N. Y., in Boston, for \$500. This is a very choice variety of pear.

CHERRIES.

The Cherry can be grown for market with great profit. Many varieties are regular and abundant bearers, and fruit commands a high price in the market. They can be sent by express, in baskets, to even distant markets, and thousands upon thousands of bushels are being canned every year. For canning they bring about ten cents per pound, and at this price \$1,000 per acre would be a very low estimate of sales of a full grown orchard.

PLUMS.

This fruit always finds a ready market at good prices, and as is well known, the trees are remarkably productive. It is estimated that an acre of plums should produce on the average from 150 to 200 bushels of fruit, which at \$2 per bushel (a low average price) would make the handsome total of \$300 to \$400 per acre.

PEACHES.

MR. ARNOLD, of Starkey, N. Y., bought a fruit farm of fifty acres, about one-half in peaches, and the balance in apples, cherries, grapes and berries. Price paid for farm, \$11,000. In the fall of the same year he sold peaches to the amount of \$5,000, the buyer doing his own packing and marketing. He also received over \$1,000 from the other fruits, thus realizing more than half the purchase money of the farm during the first six months. Equally favorable results could be given in a great number of instances if space permitted.

QUINCES.

Orange Quinces have frequently brought \$3 per bushel in the eastern markets, and Rea's Mammoth will do even better. Planted at 10 feet apart each way we have 430 trees to the acre. After a short time these bushes may be expected to bear from one-half to one bushel each; this gives at least 200 bushels per acre, and at even \$2.50 per bushel we have an income of \$500 per acre.

GRAPES.

FRANKLIN DAVIS & Co. say: "There is no fruit, excepting, perhaps, the strawberry, that yields so great, so quick and so certain a return for the attention necessary for its production, as the grape." Vines have frequently been known to produce *fifty pounds* of fruit the fourth year from planting, and at the common price of fine grapes, fifty pounds would be worth from \$4 to \$6. Planted ten feet apart, an acre holds 436 vines. If each vine produces only two dollars' worth, the income would amount to \$872 per acre.

STRAWBERRIES.

FRANKLIN DAVIS & Co., from whom we have just quoted, report sales from one acre of land, in strawberries, to the amount of \$621.72, and they say this was not the result of an extraordinary yield, or an unusual price.

Three hundred bushels per acre is not an unusual crop, nor ten cents per quart to the grower an unusual average price.

RASPBERRIES.

Raspberries, both red and black, may be made very profitable with good cultivation. The demand for them is well illustrated by the fact that one of the canning houses in this city *canned ten tons of Raspberries in a single day*. The canning houses pay from 8 to 10 cents per quart for black and 10 to 12 cents for red varieties, but even at these prices leading growers who have the facilities for so doing prefer to dry their entire crops. Ohio and Gregg may safely be relied on to yield 250 bushels per acre, and Cuthbert 200 bushels per acre.

CURRENTS.

Considering the ease with which currants are grown (for if our directions are followed the trouble from worms is not worth considering) there are few fruits that pay better than currants. They can be shipped to distant markets. The demand for them for household use, canning, preserving and making jelly, is constant and increasing. They may be relied upon to bring good prices. From 200 to 250 bushels per acre is a safe estimate of the yield.

GOOSEBERRIES.

The demand for canned Gooseberries, for use as table sauce and in making pies, seems to be unlimited, and this has caused an unusual degree of interest in this fruit. When we say that some of the most experienced producers of canned fruits have made plantations of from 10,000 to 20,000 plants of Downing Gooseberry, some idea of the interest in this fruit may be gathered. The fruit can be picked while green and shipped 1,000 miles without injury. Good plants produce from 250 to 400 bushels per acre, according to size. They commence to bear at once and bring from \$2.00 to \$5.00 per bushel.

BLACKBERRIES.

One grower reports that he has received about \$650 per acre for his Blackberries. The bushes averaged 100 bushels per acre, and sold at from twenty to twenty-two cents a quart.

William Parry, the well-known fruit-grower of Cinnaminson, N. J., says that "at the average price at which Blackberries have sold in the market for ten years, a field with ordinary treatment will yield from \$400 to \$500 per acre, net."

ASPARAGUS.

The late Peter Henderson, one of the largest gardeners and seedsmen, and the highest authority on this subject, says the asparagus crop sometimes yields \$1,000 per acre, and for ten years, beginning with the planting, an average annual *profit* of \$400 per acre.

FRUIT DEPARTMENT.

SELECT APPLES.

The first fruit in importance is the apple. Its period of ripening, unlike that of other fruits, extends nearly or quite through the year. By making judicious selection of Summer, Autumn and Winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard. As it takes from six to eight years for an orchard to come into bearing, some people hesitate to plant, regarding the time and expense as in a great measure lost. In reply to this we would quote the remarks made by O. C. Chapin, of East Bloomfield, N. Y., to J. J. Thomas. He said that he considered the yearly growth of each apple tree planted in his immense orchard of over one hundred and fifty acres, to be worth fully one dollar before they commenced bearing. He has had experience of nearly half a century, and he says he considers this a low estimate. At fifty trees per acre, this would make a yearly increase of value of fifty dollars per acre.

The average prices paid for *choice* fruit is steadily on the increase, and the immense demand for home consumption, foreign shipment, canning and evaporating, assures us that prices will continue to increase.

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

SUMMER.

- ✓ **Early Harvest** (Yellow Harvest)—Medium to large; pale yellow; fine flavor. Tree a moderate, erect grower, and a good bearer; a beautiful and excellent variety for both orchard and garden. Middle to end of August.
- ✓ **Early Strawberry**—Medium, striped with deep red; tender, sub-acid, and excellent. A poor grower, but productive. August.
- ✓ **Golden Sweet**—Rather large; pale yellow; very sweet and good. Strong grower and good bearer. August.
- ✓ **Keswick Codlin**—Large, conical; tender, juicy, acid; excellent for cooking. Tree erect, vigorous, productive and early in bearing. July to October.
- Primate**—Above medium; straw color, tinged with blush; tender, fine grained, juicy and sub-acid. A moderate grower and abundant bearer. Ripens August and September.

THE YELLOW TRANSPARENT.

THE BEST SUMMER APPLE KNOWN.

- ✓ **Red Astrachan**—Large, roundish; nearly covered with deep crimson, overspread with a thick bloom; juicy, rich, acid, beautiful. The tree is a vigorous grower, with large foliage, and a good bearer. August.
- ✓ **Sweet Bough**—Large; pale, greenish yellow; tender and sweet. Moderate grower and good bearer. August.
- ✓ **Sops of Wine**—Medium size, oblong; red; flesh white, often stained; mild and pleasant. Productive. August and September.
- ✓ **Tetofsky**—A Russian apple which has proved profitable for market growing. The tree is an upright, spreading grower, forming an open head; comes into bearing extremely early, usually the second year after transplanting, and bears every year. Hardy as a Crab. Fruit good size, nearly round; yellow, beautifully striped with red; flesh white, juicy, pleasant, acid, aromatic. July and August.
- ✓ **William's Favorite**—Medium size, roundish; flesh yellowish white; flavor very mild and agreeable; bears abundantly. Very popular in Massachusetts, especially about Boston. August and September.
- ✓ **Yellow Transparent**—A new Russian variety. Unquestionably the most valuable early apple ever introduced. Tree an upright grower and a very early and abundant bearer. Fruit of good size; skin clear white, turning to a pale yellow; flavor acid, and very good. Ripens from ten days to two weeks earlier than Early Harvest.

AUTUMN.

- ✓ **Alexander** (Emperor)—Of Russian origin. Large; deep red or crimson; flesh yellowish white; crisp, tender with pleasant flavor. Very hardy. October.
- ✓ **Autumn Strawberry**—Medium; streaked; tender, juicy, sub-acid, fine. Vigorous and productive. September and October.
- ✓ **Colvert**—Of large size; striped; sub-acid, tender; a strong grower and great bearer. October.
- ✓ **Duchess of Oldenburg**—Of Russian origin. Large size, roundish; streaked with red and yellow; flesh whitish, juicy; flavor sprightly sub-acid. Tree a vigorous grower; very hardy; very early and abundant bearer. September.
- ✓ **Fall Jenetting**—Large, oblate; pale greenish white, with a blush; tender, juicy, mild and sub-acid. Tree vigorous, spreading and productive. November.
- ✓ **Fall Pippin**—Very large; yellow; tender, juicy and rich. Tree vigorous. October to December.
- ✓ **Fameuse** (Snow Apple)—Medium size, roundish, oblate; whitish ground, striped with deep red; flesh very white, juicy and pleasant. Tree very hardy; one of the most valuable Northern sorts. November and December.
- ✓ **Gravenstein**—Large; striped and beautiful; tender, juicy and high flavored. Vigorous and productive. September and October.
- ✓ **Haas**—(Gros Pommier, Fall Queen)—Medium size; pale greenish yellow, shaded and striped with red; tender, juicy, sub-acid. Tree vigorous and very hardy; upright grower; bears early and abundantly. September to November.
- ✓ **Jeffries**—Medium sized; striped with red; flesh tender and delicious. One of the finest dessert apples. September and October.
- ✓ **Jersey Sweet**—Medium; striped red and green; very sweet, rich and pleasant. Good grower and bearer. September and October.
- ✓ **Maiden's Blush**—Medium size, flat, quite smooth and fair; pale yellow, with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. September and October.
- ✓ **Peach** (Irish Peach)—Medium size, round or a little flattened; yellowish green, streaked with brownish red; flesh white, tender and juicy. Tree a moderate grower and very hardy; highly prized in extreme north. September.
- ✓ **Porter**—Rather large; yellow; tender, rich and fine. Moderate grower, but productive. September.
- ✓ **Pumpkin Sweet** (Pumpkin Russet)—A very large, round, yellowish russet apple, very sweet and rich. Tree a *vigorous*, rapid, upright grower; valuable. October and November.
- ✓ **Rolfe**—Originated in Guilford Center, Me., where it is grown very extensively and regarded as perfectly hardy. A good bearer and of fine quality. Sub-acid and very small core; excellent for cooking or the table, and classed as one of the most attractive and best selling varieties. Season October to November.
- ✓ **Red Bietigheimer**—A rare German variety. Fruit large to very large; skin pale green color, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a free grower and abundant bearer. This is one of the largest and handsomest of apples. September and October.
- ✓ **St. Lawrence**—Large; yellowish, striped and splashed with carmine; flesh white, lightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. September.
- ✓ **Sherwood's Favorite**, or **Chenango Strawberry**—Medium size, oblong, and indistinctly ribbed; of a light color, splashed with dark crimson; flesh white, juicy, very mild and tender, slightly sub-acid, good. September.

Smokehouse—Large; yellow, shaded with bright red; flesh firm, crisp, juicy and fine flavored. Especially esteemed in Pennsylvania. October to November.

Stump—A well tried apple; of good size; roundish, conical; flesh firm, crisp, tender, sprightly, sub acid, good; greenish yellow, shaded with red; beautifully fair and has commanded the highest prices wherever shown. October to December.

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

WINTER.

Arkansas Beauty—Large to very large; deep red, tender, yet firm; one of the handsomest apples grown; quality good. Tree hardy, vigorous and very productive. Season December to May.

Bailey Sweet—Large; deep red; tender, rich, sweet. Vigorous, upright, good bearer. November to April.

Baldwin—Large, roundish; deep bright red; juicy, crisp, sub-acid, good flavor. Tree vigorous, upright, and very productive of fair, handsome fruit. In sections where it thrives, one of the best and most popular winter apples. January to April.

Baxter—Originated in Canada. Fruit uniformly large, handsome, delicious, mild acid. Tree extremely hardy, vigorous and productive. December to May.

Belle de Boskoop—Pronounced one of the most beautiful and profitable of the Russian varieties. Large; bright yellow, washed with light red on the sunny side, and sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly sub-acid; quality very good; a late keeper.

Bellefleur, Yellow—Large; yellow, with blush cheek; very tender, juicy sub-acid. In use all winter. Very valuable. A moderate grower and good bearer.

Ben Davis (New York Pippin, Kentucky Streak, etc.)—A large, handsome striped apple of good quality. Tree very hardy, vigorous and productive. A late keeper. Highly esteemed in the West and South-west.

Bethel—Large; deep red; flesh crisp and tender. A native of Vermont, where it is highly prized for its quality and the extreme hardness of the tree; a moderate grower. December to February.

Bottle Greening—Resembles Rhode Island Greening in size and flavor; but tree is a better grower and much hardier. A native of Vermont. December to March.

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

Cooper's Market—Medium, conical; yellow, striped with crimson; flesh white, tender, brisk, sub-acid; vigorous, upright grower. December to May.

Delaware Red—Medium to large; bright red; highly colored; flesh fine grained, crisp, juicy, sub acid; excellent; remarkable for its long keeping qualities. An early and abundant bearer. November to February.

Fallwater (Fornwalder, Tulpehocken)—Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant sub acid flavor. Tree a strong grower, very productive, even while young. November to March.

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

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

- ✓ **Gideon**—Raised in Minnesota. An upright grower; medium to large; color yellow, with vermilion blush on sunny side; mild acid; quality very good. December to March.
- ✓ **Golden Russet**—Medium size; dull russet with a tinge of red on exposed side; flesh generally crisp, juicy and high flavored. Tree a vigorous grower and a great bearer. Very popular. November to April.
- Grime's Golden** (Grimes' Golden Pippin)—An apple of the highest quality; medium to large size; yellow. Tree hardy, vigorous productive. January to April.
- Hubbardston Nonsuch**—Large; striped yellow and red; tender, juicy and fine. Strong grower and good bearer. November to May.
- Hurlbut**—Medium size, conical; yellow, shaded with red stripes and splashed with darker red; flesh white, crisp and tender, juicy, mild sub-acid; quality excellent; begins to bear while young and continues with regular and constant crops; very hardy and suited to the extreme North. In season during mid-winter.
- King** (Tompkins County)—Large and handsome; striped red and yellow. Tree vigorous and productive; one of the best. November to May.
- Lady Apple**—A beautiful little dessert fruit; flat; pale yellow, with a deep red cheek; juicy, rich and pleasant. November to May.
- Lankford Seedling**—Originated in Kent County, Md. Tree a stout grower; bears young and every year. Flesh firm, juicy, mild, sub-acid. January to March.
- Longfield**—A Russian variety. Tree a free, upright grower, early and abundant bearer. Medium to large; yellow, with a flush on the sunny side like the Maiden's Blush; rich, sprightly, sub-acid; quality good. December to March.
- Magog Red Streak**—Origin, Vermont. Bears annually large crops; valuable for its extreme hardiness, vigor, productiveness and long keeping; fruit medium; roundish; skin yellow, shaded with light red; flesh yellowish, a little coarse, moderately juicy, mild, sub-acid. December to March.
- Mann**—Fruit medium to large, roundish; skin deep yellow when fully ripe; flesh yellowish, juicy, mild, pleasant, sub-acid; good. It is an early and annual bearer.
- McIntosh Red**—An exceedingly valuable, hardy, Canada sort. Medium size; nearly covered with dark red; flesh white, fine, very tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but larger and more hardy and fully equal in quality to this standard sort. November to February.
- Monmouth Pippin** (Red Cheek Pippin)—Large; greenish yellow, with a fine red cheek; juicy, tender and good. Tree erect, vigorous and productive. Keeps well till March or April.
- Munson's Sweet**—Medium; pale yellow, slightly tinged with red; firm, rich and very sweet. The most valuable baking apple; vigorous and productive. November to April.
- Newtown Pippin**—One of the most celebrated of American apples on account of its long keeping and excellent quality. November to June.
- Nodhead** (Jewett's Fine Red)—Medium sized; greenish white, striped and splashed with crimson; flesh tender, juicy, almost sweet. Popular in Northern New England on account of its great hardiness. A great grower and bearer.
- Northern Spy**—Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red. Flesh white and tender, with a mild sub-acid, rich and delicious flavor; in perfection in January and keeps till June. The tree is a strong, upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely.
- Peter**—Origin Wealthy seed, and in form, size and color an exact duplicate of the parent, but differing in flavor and season, keeping from four to six weeks longer. The tree is perfectly hardy.

- Pewaukee**—A seedling from Duchess of Oldenburg. Fruit medium to large, surface bright yellow, partially covered with dull red; flesh yellowish white, breaking, juicy; flavor sub-acid, rich, aromatic, spicy, something like the Jonathau; quality good. Tree strong grower and very hardy. January to June.
- Plumb's Cider**—A native of Wisconsin, where its hardiness has been abundantly proved. Tree vigorous, round-headed and productive; flesh white, fine, tender, juicy, mild sub-acid. September to January.
- Rawle's Janet (Never Fail)**—Medium, roundish, ovate; greenish yellow, striped with red; crisp, rich and juicy; one of the best and longest keepers in the South and Southwest.
- Red Canada**—Medium size; red with white dots; flesh rich, sub-acid, delicious; slender grower. November to May.
- Rome Beauty**—Large yellow with red cheek, handsome, good quality, moderate grower. Great bearer on the Ohio River. December to May.
- Rhode Island Greening**—Large; greenish yellow; tender, juicy and rich, with rather an acid flavor; growing strong and spreading; an abundant bearer. December to April.
- Russet, Roxbury or Boston**—Medium to large; greenish or yellow russet; crisp, good, sub-acid flavor. Tree vigorous and productive; very popular on account of its long keeping. June.
- Salome**—Tree a strong grower; equals Wealthy in hardiness; an early and annual bearer; fruit of medium and uniform size; quality very good, which it retains even into summer; keeps well with ordinary care until July.
- Seek-no-Further (Westfield)**—Medium to large; slightly russeted with dull red stripes; tender, rich, spicy and fine. Good grower and bearer. November to February.
- Smith's Cider**—Medium; striped; flesh tender, juicy, sub-acid; very popular in Pennsylvania and Western States. December to March.
- Stark**—Esteemed in Ohio as a long keeper and valuable market fruit. Fruit large, roundish; skin greenish yellow, much shaded with light and dark red, and sprinkled with brown dots; flesh yellowish, juicy and mild sub-acid. January to May.
- Sutton Beauty**—Fruit large, waxy yellow, striped with crimson; flesh white, tender, juicy, mild acid; quality good and a remarkable keeper. Tree vigorous, a handsome grower, very productive. One of the most valuable market sorts in Western New York.
- Wagener**—Medium to large; deep red in the sun; flesh firm, sub-acid and excellent; very productive; bears very young. December to May.
- Walbridge**—Medium size; striped with red; handsome and of excellent quality. Vigorous grower and productive. Very hardy and considered of value in the Northwest. March to June.
- Wealthy**—A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of good size, red streaked with white; quality good. November to February.
- Winesap**—Medium; dark red; sub-acid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.
- Wolf River**—A new and beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the iron-clads. Skin greenish yellow, shaded with crimson; flesh white, juicy, tender, with a peculiar, pleasant, mild, sub-acid flavor. Tree a strong, stout grower, and great bearer. January and February.
- York Imperial**—Of medium size, truncated, oval, angular; skin greenish yellow; flesh tender, crisp, aromatic. Highly esteemed in Pennsylvania, where it originated.

EXTRA HARDY, OR IRON-CLAD APPLES.

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

Below we give a list of the most valuable extra hardy apples, with reference to the pages of this catalogue on which descriptions of them may be found:

SUMMER.		PAGE	
Yellow Transparent	10	Bethel	12
AUTUMN.		Clark's Orange	12
Alexander	11	Delaware Red	12
Duchess of Oldenburg	11	Gano	12
Fameuse	11	Grimes' Golden	13
Peach	11	Hurlbut	13
Red Bietigheimer	11	Longfield	13
WINTER.		Mann	13
Arkansas Beauty	12	McIntosh Red	13
Belle de Boskoop	12	Peter	13
		Salome	14
		Wealthy	14
		Wolf River	14

SELECT CRAB APPLES.

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

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

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

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

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

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

Montreal Beauty—Fruit large, bright yellow, mostly covered and shaded with red; flesh rich, firm and acid; very good. October and November.

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

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

Transcendent—Tree remarkably vigorous and immensely productive. Fruit large, from one to two inches in diameter; excellent for sauce and pies, being juicy and crisp; skin yellow, striped with red. September to October.

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

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

SELECT PEARS.

The cultivation of this noble fruit is rapidly extending as its value is appreciated. The range of varieties is such that, like apples, they can be had in good eating condition from August until early Spring.

The melting, juicy texture, the refined flavor, and the delicate aroma of the Pear, give it rank above all other fruits, except the grape. The Pear, like most things highly desirable and valuable, cannot be had without attention and labor. The relative prices of the Apple and the Pear being about as one to ten, purchasers of the latter can well afford to give the trees the high cultivation necessary to secure the best results.

Dwarf Pears are the result of budding Pears on Angers Quince stocks, and they must always be planted **SUFFICIENTLY DEEP** to cover the junction of the Pear and Quince two or three inches—the soil made rich, well tilled, and about one-half the previous summer's growth cut off each spring. Under this treatment dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height of three or four feet if desired. Train in pyramidal form. Ripen the fruit in the house. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. Winter Pears may hang on the trees until there is danger from frost, then place in a dry cellar to ripen.

The letters "D" and "S," appended to the descriptions of varieties, indicate favorable growth either as "Dwarfs or Standards," or both.

SUMMER.

Bartlett—Large size, often with a beautiful blush next the sun; buttery, very juicy and high flavored; tree a strong grower, bearing early and abundantly. Very popular. Last of August and first of September. Grows best as a Standard.

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

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

- Clapp's Favorite**—Large size; pale lemon yellow; flesh fine grained, juicy, melting, rich and buttery; a cross between Bartlett and Flemish Beauty; earlier than Bartlett and resembling the Flemish Beauty in growth. It is equally hardy with Flemish Beauty; a good grower and productive. In season during August and September. *Care should be taken to pick the fruit at least ten days before it would ripen upon the tree.* D and S.
- Doyenne d'Ete**—Small size; yellow, with a blush on sunny side; melting and sweet, with pleasant flavor; tree a strong grower and very productive. In season during August. D and S.
- Early Harvest**—Very promising new sort. Early.
- Lawson, or Comet**—A new Pear. The tree is a vigorous, upright grower, productive; foliage clean and healthy; fruit good size, yellow, flushed with the most beautiful crimson; flesh crisp and juicy; a firm, good shipper. August.
- Le Conte**—Tree very vigorous and productive; fruit large; skin smooth, pale yellow; quality poor; ripens about with Bartlett. Worthless when grown north of Georgia.
- Manning's Elizabeth**—Below medium size; bright yellow with a lively red cheek, dotted with brown and red dots; flesh juicy and melting. A beautiful dessert fruit. Tree a moderate grower.
- Margaret**—(Petite Marguerite.) Medium size; skin greenish yellow, with brownish red cheek; flesh fine, melting, juicy, vinous and of *first quality*; tree a vigorous, upright grower, and an early and abundant bearer. Ripens latter part of August. D and S.
- Osband's Summer**—Medium size, inclining to round; juicy, and melting, with a rich, sugary flavor, and often slightly perfumed; tree moderately vigorous, an erect grower, and very productive. In season during August.
- Souvenir du Congress**—A remarkably fine variety of very large size and most showy appearance; August and September. *Very subject to blight.*
- Tyson**—Above medium size; deep yellow at full maturity, slightly russet, with a crimson cheek; melting, juicy and fine flavored; a vigorous and rapid grower. One of the finest summer varieties. In season during August.
- Wilder's Early**—Small to medium; greenish yellow, with red cheek; handsome, sweet, delicious. July to August.

AUTUMN.

- Anjou** (Beurre d'Anjou)—A large, handsome pear; buttery and melting, with sprightly, vinous flavor; tree a vigorous grower and good bearer. We have no hesitation in pronouncing it to be *the most valuable pear in the catalogue*. Does equally well as a standard or a dwarf. Keeps until the winter holidays, when it commands very high prices in market. D and S.
- Bartlett-Seckel**—Seedling from Bartlett and Seckel. New and highly prized by good judges. September to October.
- Baron de Mellow**—Medium size; enormously productive, hardy, thrifty; quality very best, rich, melting, vinous. Mr. Barry, Pres. Am. Pom. Society, says: "It is a royal pear." November to January.
- Belle Lucrative**—Large size; yellowish green; melting and delicious; an upright grower and productive, bears while young. First quality in all respects. In season during September and October. D and S.
- Beurre Bosc**—A large and beautiful russety pear; very distinct, with a long neck; high flavored and delicious; a *moderate* grower and rather irregular; bears well. We top graft in order to obtain good standard trees. September and October. S.
- Beurre Clairgeau**—Its size, early bearing, productiveness and beauty, render it a profitable market variety. It should only be grown as a standard. Very large; light yellow, shaded with crimson and russet; an early and abundant bearer. S.

Boussock (Doyenne Boussock)—Large; lemon yellow, a little russeted; melting, juicy, with a sprightly, vinous flavor; good grower. October. S.

Duchesse d'Angouleme—Very large, with rough and uneven surface; of a greenish yellow, with patches of russet and a dull red cheek; a vigorous and strong grower and a good bearer while quite young. It attains its greatest perfection on the Quince root. In season during October and November. D.

Eastern Belle—Originated in Maine; fruit medium, yellow, shaded with light red and some russet; juicy, half melting, sweet and rich, with peculiar musky perfume; of excellent quality; very hardy and an abundant and regular bearer. September. S.

✓ **Flemish Beauty**—Large size; greenish yellow and brown; rich and juicy. An old and highly esteemed variety; a strong grower and a great bearer; hardy and desirable. In Season during September and October. S.

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

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

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

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

✓ **Idaho**—A very promising new pear. Originated in Idaho. Very large, nearly round; yellow, with brownish red on sunny side; flesh melting, juicy, vinous; quality best. Season September in Idaho, and said to be very hardy, vigorous and prolific.

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

Louise Bonne de Jersey—Large size, oblong, pyriform; pale green in the shade, but overspread with brownish red in the sun; very juicy and melting with a rich and excellent flavor; a profitable market variety, succeeding better on the Quince than on the Pear root. In season during September and October. D.

President—A very large handsome pear. Greenish yellow, with red in the sun; flesh juicy, with an excellent vinous flavor. Popular in New England. November. S.

✓ **Seckel**—Small size; yellowish russet, with a red cheek; flesh whitish, buttery, very juicy and melting. The richest and finest variety known and extensively planted all over the country. A most prolific bearer. September and October. S.

Sheldon—Large size, roundish; greenish yellow, mostly covered with thin, light russet; very juicy, melting, sweet and vinous; a fine grower and good bearer, but does not succeed on the Quince. October and November. S.

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

Swan's Orange (Onondaga)—A very large, melting, sprightly, vinous Pear. Tree *vigorous*, hardy and extremely productive. October and November. S.

Vermont Beauty—A beautiful new seedling pear that originated in Northern Vermont. Fruit of medium size; flesh melting, sprightly and of the best quality; tree healthy, hardy and very productive. October. S.

THE IDAHO.

WINTER.

- Duchesse de Bourdeaux**—Large size; greenish yellow, with lines of russet; flesh buttery, juicy and sweet, with an agreeable flavor; a very productive and valuable Winter variety. In season from November to January. S.
- Easter Beurre**—Large size; yellow, with a brownish red cheek; of excellent quality, rich and melting. A moderate strong grower and productive. One of the best keeping varieties. Succeeds best on the Quince root. D.
- Jones' Seedling**—Medium size; yellow, shaded with russet; flesh buttery, sugary, vinous. One of the best. Frequently sells in the Eastern market for \$15 per barrel. A free, upright grower. S.
- Josephine de Malines**—Medium to large, roundish; pale straw color; flesh rose colored, melting and delicately perfumed; first quality. Tree a *moderate* grower, succeeds well on the quince. This variety improves as the tree advances in age. One of the most delicious of our long keeping table pears, and it deserves extensive culture. D. and S.
- Lawrence**—Above medium size, yellow, tender and melting; quality best, and one of the best Winter Pears. In season during Mid-Winter. D. and S.
- Mount Vernon**—Medium size; light russet, red in the sun; flesh inclined to yellow, juicy and aromatic. Tree a good grower, an early and abundant bearer. In season during Mid-Winter. S.
- President Drouard**—A variety recently introduced from France, highly recommended for its rich flavor and great keeping qualities. Tree a vigorous grower. Fruit large and handsome; melting and juicy, with a delicious perfume. March to May. S.
- Vicar of Winkfield**—Large size, long, fine; rich yellow when fully ripe. Very vigorous and productive, and one of the best for general cultivation. D. and S.
- Winter Nelis**—Medium size; greenish yellow, spotted with russet; melting and buttery with a rich sprightly flavor. Tree of straggling growth; one of the very best early Winter Pears. S.

SELECT CHERRIES.

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

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

HEART AND BIGARREAU CHERRIES.

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

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

- Black Heart**—(Black Ox Heart)—A very old variety. Fruit medium size, heart-shaped, rather irregular; skin glossy, deep black; flesh tender, juicy, rich, sweet. Tree a rapid grower, hardy and productive. Early in July.
- Black Russian**—European origin. Fruit large; deep black, glossy; flesh very solid and firm, yet juicy and delicious. The most valuable late sweet Cherry.
- Black Tartarian**—Very large; purplish black; half tender; flavor mild and pleasant. Tree a remarkably *vigorous*, erect and beautiful grower, and an immense bearer. Ripe last of June and beginning of July. One of the most popular varieties in all parts of the country.
- Goe's Transparent**—Medium size; pale amber, red and mottled next the sun; tender, sweet and fine; *one of the best*. Tree vigorous and erect. End of June.
- Downer's Late**—Rather large, light red; tender and juicy; slightly bitter before fully ripe. Tree a *vigorous*, erect grower, and productive. One of the best late cherries.
- Early Purple**—Small to medium size; purple; tender, juicy and sweet. Growth *free*, slender and spreading. First to middle of June.
- Elton**—Large, pointed; pale yellow, nearly covered with light red; half tender, juicy, rich and delicious. Tree very *vigorous*, spreading and irregular. End of June.
- Emperor Francis (New)**—A very large and rich cherry of the heart type.
- Gov. Wood**—The finest of Dr. Kirtland's seedlings, of Ohio; clear, light red; tender and delicious. Tree a *vigorous* grower and most productive. End of June. Hangs well on the tree.
- Knight's Early**—Large; black; tender, juicy, rich and excellent. Tree a *free* grower and very productive; branches spreading. Ripe a few days before the Black Tartarian.
- Mercer (New)**—A remarkable new Cherry, which is destined to become very popular. Tree a good grower, very hardy and profuse bearer. Fruit dark red, larger than Black Tartarian and much finer flavor. Season early. Highly recommended.
- Napoleon Bigarreau**—Fruit of the largest size; pale yellow, with a bright red cheek; flesh very firm, juicy, and, when fully ripe, of an excellent flavor; tree vigorous and productive. Ripens early in July.
- Rockport**—Fruit large, obtuse heart-shaped; skin pale amber, light red in the sun; flesh rather firm, sweet and excellent. Tree vigorous, erect, and produces well.
- Schmidt's Bigarreau**—A most promising Cherry; fruit of immense size, of a rich, deep black; flesh dark, tender, very juicy, with a fine flavor; bears abundantly, and makes a most noble dish for the table.
- Windsor (New)**—A seedling originated at Windsor, Canada. Fruit large; liver-colored, resembling the Elkhorn, or Tradescant's Black Heart, nevertheless quite distinct; ripens three or four days after that variety; flesh *firm* and of fine quality. Tree hardy and very prolific. *A valuable late variety* for market and for family use.
- Yellow Spanish**—Large; pale yellow, with a bright red cheek in the sun; flesh firm, juicy and delicious; one of the best, most beautiful and popular of all light-colored cherries. Tree erect, *vigorous* and productive. End of June.

DUKE AND MORELLO CHERRIES.

These two classes of cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varying from light red to dark brown.

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

Bay State (New)—Of the Morello class. Fruit of largest size, dark red, juicy and of excellent flavor. The trees bear full crops, even when they are young. Season medium.

Belle Magnifique—A magnificent, large, red late cherry, excellent for cooking and fine for table when fully ripe; rather acid, tender, juicy and rich. Tree a slow grower, but a most profuse bearer; makes a fine dwarf or pyramid on the Mahaleb. Last of July. Very valuable.

OSTHEIM. $\frac{1}{2}$ NATURAL SIZE.

THE PRINCE OF RUSSIAN CHERRIES.

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

Early Richmond—An early red, acid cherry; very valuable for cooking early in the season. Ripens through June. Tree a *free* grower, hardy, healthy and very productive.

Empress Eugenie—Large; dark red; flesh juicy, rich. Tree *robust* and moderately productive.

May Duke—An old, well known, excellent variety; large; dark red; juicy, sub-acid, rich. Tree hardy, *vigorous* and fruitful; ripens over a long period; fine for dwarfs and pyramids. Middle of June.

Montmorency Large—*Tree very hardy and an immense bearer; commences to fruit while young, and is loaded annually thereafter with fine crops. Fruit very large, fine flavor, and of bright, clear, shining red; valuable everywhere; a week later than Early Richmond. The finest acid cherry.*

Morello English—Large; dark red, nearly black; tender, juicy, acid, rich. Tree dwarf and slender; makes a fine bush on the Mahaleb. If trained on a north wall it may be in use all the month of August. Valuable.

Olivet—This variety is of the greatest value. Fruit large; flesh red, with rose-colored juice, tender, rich and vinous, with mild, sub-acid flavor. As productive as the best of the Duke sorts, and probably the largest of this class.

Ostheim or Russian Cherry—A hardy cherry, imported from the nurseries of Dr. Regel, of St. Petersburg, Russia. It has been tested in the severest winters of Minnesota, and found to be perfectly hardy. Charles Downing thus describes it: "Fruit large, roundish, obovate; flesh liver color, tender, juicy, almost sweet, sub-acid; very good. Season middle of July." Morello class.

Reine Hortense—A French cherry of great excellence; large, bright red; tender, juicy, nearly sweet and delicious. Tree *rigorous* and bears well; makes a beautiful pyramid.

SELECT PLUMS.

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

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

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

Abundance—The popular new Japanese plum. Tree thrifty, hardy and beautiful; fruit large, showy and good, richly perfumed; the first extra good plum to ripen the last half of July in this latitude.

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

Botan (Japanese)—The family name of which Abundance is the best variety.

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

Belle of Louvain—One of the most promising Plums of recent introduction. Large, roundish oval; deep purple. Tree vigorous and hardy. A very fine Plum. Ripens end of August.

Bavay's Green Gage—(Reine Claude de Bavay)—One of the best foreign varieties. As large as the Washington, and of fine flavor; roundish oval; greenish, marked with red in the sun. Tree a *free grower* and remarkably productive. Middle to end of September. Hangs long on the tree.

$\frac{1}{2}$ Natural Size.

BURBANK.
THE SPLENDID NEW JAPANESE PLUM.

- Burbank**—The largest, handsomest and best of the wonderful new Japanese Plums. Tree thrifty, free from black knot and other diseases, and perfectly hardy. Fruit is not attacked by the curculio and ripens just after Abundance. A very great acquisition.
- Bradshaw**—A very large and fine early plum; dark violet red; juicy and good. Tree erect and *vigorous*; very productive. Valuable for market and home use.
- Coe's Golden Drop**—Large and handsome, oval; light yellow; flesh firm, rich and sweet; adheres to the stone. Tree a *moderate* grower and very productive. Valuable not only on account of its large size and fine appearance, but its lateness. Last of September.
- Czar**—Large size; rich, delicious; brilliant purple. Tree hardy and a good grower; very productive.
- Fellemborg** (French or Italian Prune)—A fine late Plum; oval; purple; flesh juicy and delicious; parts from stone; fine for drying. Tree a *free* grower and very productive. September.
- German Prune**—Medium; oval; purple or blue; rich, juicy, fine. Tree *vigorous* and very productive. September.
- General Hand**—Very large; yellow, handsome; parts freely from the stone. Tree *stocky*, vigorous and productive. September.
- Guii**—Fruit very large; deep bluish purple, covered with thick bloom; flesh yellowish green, coarse, sweet and pleasant. Great bearer and very early; tree hardy and rapid grower. This new variety is regarded as very valuable for market by growers along the Hudson river. First to middle of September.
- Grand Duke** (New)—A valuable addition to late plums; as large as the Bradshaw, of same color, and ripening latter part of September. Entirely free from rot.
- Green Gage**—Small, but of the highest excellence. Tree a *moderate* grower. We have to top graft it to get good trees. September.
- Imperial Gage**—Rather large; oval; greenish; flesh juicy, rich and delicious; parts from the stone. Tree a *vigorous* grower; very productive and one of the best of Plums. Middle of August.
- Jefferson**—A fine variety; yellow, with a red cheek; flesh orange colored, juicy and rich; parts from the stone. Tree a slow, *poor* grower, but productive. End of August.
- Kingston**—Tree vigorous and productive. Fruit very large, oval, purple. Very fine for canning, having an agreeable acid flavor. Season medium.
- Lombard**—Medium size; oval; violet red; flesh yellow, juicy and pleasant. Tree very *vigorous*, a *great bearer*, and peculiarly well adapted to light soils. September.
- Mariana**—Originated in Texas. A strong, rapid grower. Fruit larger than the Wild Goose; round, and of peculiar light red color. Its productiveness is marvelous. Best of the Chickasaw varieties. August. Valuable at the South.
- Monarch**—The largest size, even larger than Grand Duke; brilliant bluish purple. Free from rot and disease, and of extra good quality. One of the very best for home or market.
- Moor's Arctic**—Size medium or below; skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet, and pleasant flavor. Charles Downings speaks of it as follows: "A new, hardy plum, which originated on the high lands of Aroostook county, Maine, where, unprotected and exposed to cold, it has for many years borne enormous crops, and is claimed to be the hardiest plum grown, and so far free from black knot. Tree healthy, vigorous; an early and abundant bearer."
- Niagara**—Of extra large size and first rate flavor; color dark blue. Good bearer; not liable to rot. Ripens about August 1st. We regard it as one of the best new varieties.
- Prince Englebert**—Very large and long; deep purple; rich, excellent. One of the best. End of August.

- Prince of Wales**—One of the most popular of the new plums of European origin. Not fully tested as yet by us, but considered as very promising and worthy of a trial.
- Pond's Seedling, or Font Hill**—A magnificent English plum; form of *Magnum Bonum*; light red, changing to violet; flesh rather coarse. Tree a *vigorous* grower and most abundant bearer. One of the most attractive in cultivation. September.
- Prunus Simoni**—A distinct species from China. Growth erect, flowers small, white, appearing early in Spring; fruit large, flattened, of the size and appearance of a Nectarine, and of a brick red color; flesh yellow, with a peculiar aromatic flavor.
- Quackenboss**—A popular Hudson river variety. Large; deep purple; flesh greenish yellow, juicy and sweet, with a sprightly flavor; good. September.
- Satsuma**—One of the celebrated Japanese plums. Fruit large; color reddish purple, with blue bloom; flesh blood color; quality fine; pit remarkably small. Perfectly hardy and a vigorous grower.
- Shipper's Pride**—Originated in New York. An unusually thrifty grower, and stands our coldest winters. Very productive, the original tree having never failed to produce a good crop since it was old enough to bear. Fruit of large size and nearly round; color handsome dark purple; quality fine, juicy and sweet; excellent for canning and an unusual good shipper. Ripens from first to middle of September; a splendid market plum.
- Shropshire Damson** (or Prune Damson)—An English variety of great merit for preserving. Large, and much more desirable than the common Damson. Tree vigorous grower, very free from attacks of *cureulio*; hardy and an abundant bearer. October.
- Smith's Orleans**—Very large; reddish purple; flesh yellow, firm and juicy, with a rich, brisk, vinous flavor. Grows well and bears abundantly. Very fine. Last of August.
- Stanton**—Fruit medium size; color dark purple, with a beautiful bloom. Very productive. Ripens from September 15th to October 1st, and has been kept two weeks after ripening, with no tendency to decay. As a fine canning fruit it has no superior, and has fine quality as a table fruit.
- Strawberry Dwarf**—Originated in Kansas, but *very* hardy. A fine dwarf, enormously productive. Ripens with wheat harvest; medium size; brilliant scarlet; quality good. A great acquisition.
- Turkish Prune**—The largest and decidedly the best of the prune family and very like the Italian prune in most respects. Splendid for drying, canning or using fresh.
- Tennant's Prune**—Originated in Oregon. New and very promising on the Pacific slope. If it does equally well at the East, it will equal or surpass in all respects our largest and best prunes.
- True Sweet Japan** (New)—Not yet sufficiently tested in different localities, but very promising.
- Victoria**—Fruit oval, red, very large, sweet and juicy. An abundant bearer. Season medium.
- Warner's Late** (Middleburgh)—Fruit large; skin red, with a blue bloom; very fine grained. Free, vigorous and productive, and said never to be troubled with black knot. Ripens in October after all others are out of the market.
- Washington** (Bolmar's Washington)—All things considered, this is one of the finest and most popular plums. Fruit very large, roundish oval; skin yellow, with a slight crimson blush in well ripened specimens; flesh very sweet and luscious. Tree vigorous, with broad, handsome foliage; very productive. Last of August.
- Weaver**—Origin Iowa. Tree very hardy, thrifty, productive. Fruit large, purple, good. The best native sort.
- Wild Goose**—A variety of the Chickasaw; medium; roundish; oblong; reddish yellow; valuable and profitable at the South and Southwest, where the European plum will not succeed. Tree a *free* grower.

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

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

Yellow Japan—Not yet sufficiently tested in different localities, but very promising. New.

SELECT PEACHES.

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

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

Alexander—Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet. Tree vigorous and productive. Ripens two weeks earlier than Hale's Early.

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

Amelia—A very large and handsome freestone peach; white, nearly covered with crimson. Ripens with Crawford's Early.

Barnard's Early (Yellow Alberge)—Medium to large; yellow, cheek purplish red; flesh yellow, red at the stone; juicy, sweet and rich. First to middle of September.

Champion—Beyond doubt this is the champion early peach of America. Tree and fruit buds extremely hardy; has stood 18 below zero and produced a full crop the following summer. Fruit often ten inches in circumference; quality A 1; a free stone; a remarkably good shipper. Ripens just after Early Rivers.

Crosby—First introduced by Mr. Hale of Conn., one of the most intelligent, reliable and successful fruit growers in that state. He states that the Crosby has stood 22 degrees below zero without injury to the tree or fruit buds, and in every other respect has proved a remarkably fine peach for home use or market. Ripens just before Crawford's Late.

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

Crawford's Late—Fruit of large size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow. Tree vigorous; moderately productive; one of the finest late sorts. Last of September.

Conkling—A new, large, beautiful golden yellow peach, marbled with crimson; succeeds the Crawford Early; of fine quality; very handsome.

Diamond—A promising new variety of recent introduction from Ohio. The originator claims that the fruit is one of the largest size and very attractive.

ELBERTA PEACHES

$\frac{1}{4}$ Natural Diameter.

- Early Canada**—Originated at Jordan, Canada. As early as the earliest. Of good size, of fine quality, and handsome appearance. Its earliness, origin, and the fact that the flesh cleaves from the stone almost as freely as with the later varieties, creates an unusual demand for trees of this variety.
- Early Rivers**—Large; color creamy white, with a delicate pink cheek; flesh melting, with a remarkably rich, racy flavor. Larger and ten days later than Alexander. One of the finest of all peaches for home use, or nearby market.
- Early York** (Serrated Early York, Early Purple)—Medium size; greenish white, colored in the sun with dull red; flesh greenish white, very tender.
- Elberta**—The great market peach of the South and South-west. It is perfectly hardy at the North, and is confidently believed by the most experienced fruit growers at the North, to be one of the very best peaches for home use or market. Ripens with Crawford Early.
- Eureka**—New; extra fine. Good grower. One of the best.
- Foster**—Originated near Boston, Mass. Large; deep orange red, becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with sub-acid flavor. Ripens with Early Crawford. Very handsome.
- Globe**—A rapid, vigorous grower, and an enormous bearer. Fruit very large; globular in form; flesh firm, juicy, yellow, shaded with reddish crimson towards the pit or stone; quality good; very rich and luscious. September and October.
- Hance's Golden**—Large, round; rich golden yellow, almost covered with deep crimson; flesh firm, yellow, juicy, rich, and of the highest quality. Tree a strong grower, hardy and an annual bearer of immense crops of beautiful fair fruit. Ripens just after Crawford's Early.
- Hale's Early**—Medium size; greenish white, with red cheek; first quality. Tree healthy, good grower and productive.
- Hill's Chili**—Tree very hardy, slow grower, great bearer. Excellent; late.
- Honest John**—Medium to large; yellow; flesh yellow, of good quality. Tree vigorous and productive. First of September.
- Jacques' Rareripe**—Very large; deep yellow; has a high reputation. Last of August.
- Large Early York**—Large; white, with red cheek; fine grained, very juicy, rich and delicious; vigorous and productive; one of the best. Last of August.
- Lord Palmerston**—Originated with the celebrated nurseryman, Thomas Rivers, of England. Fruit very large; skin whitish with a pink cheek; flesh firm, melting, rich and sweet. Last of September.
- May's Choice**—New; a large and beautiful yellow peach of the highest quality, ripening immediately after the Early Crawford; in size and form closely resembling that variety, but superior to it in richness of color and high vinous flavor. Tree a good bearer; very desirable. Last of August.
- Mountain Rose**—Large; red; flesh white, juicy, rich and excellent; one of the best early peaches, ripening with Troth's Early, and much larger and finer than that variety. Should be in every collection. First of August.
- Morris White**—Medium; straw color, tinged with red; juicy and delicious; productive. Middle of September.
- Niagara**—Originated in Niagara County, New York, where it has borne heavy crops of uniformly large, delicious peaches every year the past six seasons. The original orchard has 200 trees, and not a tree has blighted or shown any sign of decay, although peach trees of other varieties in the same orchard and in many near by orchards have been decimated more or less by the yellows and have failed to produce crops oftener than two years out of three. Ripens just after Elberta.
- Old Mixon Cling**—Large; pale yellow, with red cheek; juicy, rich and high flavored; one of the best clingstone peaches. Last of September.

- Old Mixon Free**—Large; pale yellow, with a deep red cheek; tender, rich and good; one of the best. First to middle of September.
- Red Cheek Melocoton**—A famous, old, well known and popular variety; large, oval; yellow, with a red cheek; flesh yellow, juicy, rich and vinous. Tree very hardy and productive; valuable for the orchard. Succeeds Crawford's Late.
- Salway**—Fruit large, roundish; deep yellow, with a rich, marbled, brownish red cheek; flesh yellow, firm, juicy, rich and sugary. Very late.
- Smock Freestone**—Large size; light orange yellow, with red cheek; flesh yellow, juicy, rich, and free from the stone. Ripens in October.
- Stevens' Rareripe**—New, and producing remarkable crops in the vicinity of the Hudson river, which are sold at very high rates; fruit resembles our enlarged Old Mixon Free, being of very high color and very beautiful. Very productive and free from disease. Commences to ripen immediately after Late Crawford, and continues three or four weeks. Last of September and first of October.
- Steadley**—Large, round; of a greenish white color; flesh white to the stone, and of a delicious flavor; freestone; very hardy. First of October.
- Stump the World**—Very large, roundish; skin white, with a bright red cheek; flesh white, juicy and good. End of September.
- Troth's Early**—A very early and excellent peach; of medium size; whitish, with a fine red cheek; flesh juicy, sweet and very good. Middle of July.
- Wager**—Medium; yellow, colored in the sun; juicy, and of a fair flavor. The trees have remarkable vigor and vitality. Valuable for drying and canning. Last of August.
- Waterloo**—Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red; flesh greenish white, with an abundance of sweet, vinous juice. Ripens about with Alexander.
- Wheatland**—Fruit large; color golden yellow, with crimson tint; flesh firm and of fine quality. Ripens between Crawford's Early and Late.
- Willett**—One of the largest and finest peaches grown. Specimens have measured 12 inches in circumference, weighing $\frac{3}{4}$ of a pound each. Flesh yellow, juicy, rich and excellent. Skin yellow, covered with dark red. Last of September.
- Wonderful**—Introduced by Mr. Lovett of N. J., who says that it received the highest premium and a special silver medal at Mt. Holly, N. J., Fair last fall; that it is very beautiful, of high quality, and that its lateness insures the very highest price.
- Yellow Rareripe**—Large; deep yellow, dotted with red; melting, juicy, with a rich flavor; ripens one week later than Crawford's Early. Closely resembles Jacques' Rareripe.

SELECT APRICOTS.

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

- Acme**—A new and remarkable variety. Tree a stout, healthy grower, with handsome foliage; very hardy and productive. Fruit very large and sweet; rich yellow with red cheek. Very desirable.
- Breda**—Small; dull orange, marked with red; juicy, rich and vinous; productive and hardy. First of August.
- Early Golden (Dubois)**—Small; pale orange; juicy and sweet; hardy and productive. First of July.

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

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

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

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

RUSSIAN APRICOTS.

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

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

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

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

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

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

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

NECTARINES.

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

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

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

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

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

QUINCES.

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

VALUE FOR MARKET.

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

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

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

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

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

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

SELECT GRAPES.

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

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

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

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

Training Vines.—There are many methods of training grape vines, but as trellises are more generally employed, we will confine our suggestions to a description of the trellis method. To construct a trellis, take posts of oak, cedar or chestnut, 8 to

10 feet long; set them 3 feet in the ground and about 12 feet apart. Stretch No. 9 galvanized wire tightly along the posts, and fasten them to each. Let the first wire be 18 inches from the ground, and the distance between the wires about 12 inches. Wooden slats about 1x2 inches may be substituted for wires. Trellises should be at least 10 feet apart; a greater distance is preferable. Set the vines about 20 feet apart. Prune the vines to two canes each for two years after they are planted. In February or March these canes should be cut back to 5 or 6 feet each, and tied along the lower wire or slat of the trellis, horizontally.

When the growth commences in spring, the young shoots must be reduced by disbudding, so that they may stand about a foot apart on the cane, selecting, of course, strong, healthy shoots; as they grow they are tied up to the second, third and fourth wire or slat, and all superfluous ones removed, as well as the young *laterals* which will appear on vigorous vines; but the fruit-bearing shoots are allowed to extend themselves at will until September, when they may be pinched off at the ends to assist the ripening of the wood. The next pruning, which may be done in November or December, if it is desirable to lay the vines down and cover them over for the winter, or in February or March if not laid down, consists in cutting back all the young wood of the previous year's growth (except such shoots as may be required to extend the horizontal arms), to within one or two good buds of the bearing canes on the lower wire.

Each season thereafter the vines are to be treated in the same manner, cutting back every year to the *lower* wire or slat, extending the vine only in a horizontal direction, thinning vines in the rows by digging up every other plant if necessary; but never growing any grapes above the second wire, and renewing the bearing canes by new shoots from the stump when required.

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

CLASS I.—BLACK GRAPES.

Barry (Rogers' No. 43)—Bunch large but rather short; berries large, roundish, much like Black Hamburg; delicate, sweet and tender. Ripens with the Concord. Vine vigorous and productive. One of the largest and finest of the Rogers' Hybrids.

Champion.—A large grape of medium quality; a strong grower and very hardy; the earliest of all; succeeds in all sections, and this makes it a valuable market grape.

Clinton.—Bunches small and very compact; berries small with sprightly flavor: when thoroughly ripe is a good table grape, and keeps well.

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

Downing.—Vine vigorous and productive; bunch very large (ten to twelve inches long), compact; shouldered; berry large to very large; black; flesh firm, meaty, tender, sweet, rich; very good. A promising market grape. Ripe September 10th to 20th.

EARLY VICTOR.

THE EARLIEST EXTRA GOOD BLACK GRAPE.

Eaton.—Bunch very large, weighing 12 to 25 ounces; compact, often double shouldered; berries very large, many one inch in diameter, round, black, covered with a heavy blue bloom; adheres firmly to the stem. Skin thin, but tough, with no bad taste when eaten close; pulp quite large, tender, dissolving easily in the mouth. Very juicy, good as Concord, with much less of the native odor. Ripens with Concord or a little earlier.

Early Victor.—This new extra early grape of Kansas origin is gaining a good reputation throughout the entire country. In bunch and berry it is rather below the average, but ripens very early; it is very pure in flavor, with very little pulp, and without a trace of foxiness or other unpleasant taste, while it is exceptionally sweet, sprightly and vinous; never cracks, and adheres firmly to the bunch. Vine as hardy as the Concord, and one of the few that resists mildew perfectly. Color black, with a fine bloom. Last of August.

Early Ohio.—Fine, hardy, thrifty and productive. Very early, and of better quality than most early grapes. Very black, a little smaller than the Concord. Spicy, pleasant flavor. A good early home use and market grape.

Eumelan.—A native black grape. Bunches above medium, very handsome, double shouldered and moderately compact, in size medium; in color black; its flavor rich, vinous and sprightly.

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

Isabella.—An old, standard sort, highly prized where it will thoroughly mature. Bunches long, large, loose; berries large, oval sweet and musky; a good keeper.

Nectar.—A new Black Grape thought by its originator, etc., to be valuable.

Merrimac (Rogers' 19)—Bunch medium to large; berry large, sweet and rich; vigorous and productive. One of the earliest and best of the Rogers' sorts.

Moore's Early.—Bunch large, berry round; as large as the Wilder or Rogers No. 4; color black, with a heavy blue bloom; quality better than the Concord. Vine exceedingly hardy; has never been covered in winter, and has been exposed to a temperature of more than 20° below zero without any injury, and it has been entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, maturing as it does ten days before the Hartford, and twenty before the Concord.

Wilder (Rogers' No. 4)—Bunch very large; berry large, round, black; flesh tender, juicy, sweet. Ripens about with Concord; vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties, and on account of its size and beauty is very valuable for market.

Worden.—Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Destined to become very popular for the vineyard and garden.

CLASS II.—RED GRAPES.

Agawam (Rogers' No. 15)—Bunches large; berries large, round; color dark red or maroon; flesh quite tender, juicy, vinous; vine vigorous and productive. Like the others of Mr. Rogers' Hybrids, this variety is liable to mildew in cold, damp locations, and is not suited to the extreme north.

Amber Queen.—A new and promising variety, which originated in Massachusetts. Bunch and berry of medium size; color light amber; flesh tender to the center; juicy, sprightly and delicious. Larger than and as early as Delaware.

Brighton.—Our experience with the vine and fruit of the Brighton has convinced us of its superiority as a family grape. Its remarkable vigor and hardiness of vine, large, compact bunches, rich wine shade of the ripened berry, delicate skin; tender, almost seedless pulp, sugary juice and rich flavor, are combined qualities that are not united in such a degree in any other sort with which we are ac-

quainted. It ripens a week to ten days before the Delaware and bears most abundantly; it is enabled to stand the heat of the summer. We commend this sort especially as a standard variety for the vineyard or garden.

Catawba—Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery red color, becoming purplish when well ripened; two weeks later than Isabella; requires the most favorable soils and situations, good culture and warm seasons, to mature in Western New York.

Delaware—One of the finest grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, with an exceedingly sweet, and delicious flavor; vine moderately vigorous, hardy and productive. Ripens two weeks before the Isabella.

Iona—Bunch large, shouldered; flesh soft, tender, juicy, brisk sub-acid, high flavored; keeps till mid-winter. One of the finest table grapes. A little earlier than Catawba. Not early enough here in Rochester to ripen.

Jefferson—Produced by a cross of the Concord and Iona, by J. H. Ricketts, Newburg, N. Y. Bunch large, shouldered, often double shouldered, compact; berry medium to large, roundish, oval; skin rather thick, light red, with a thin lilac bloom; flesh meaty, yet tender, juicy, sweet, slightly vinous, aromatic and rich. A handsome, excellent grape where the season is long enough for it to mature.

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

Massasoit (Rogers' No. 3)—Bunch medium, rather loose, as the fruit does not always set well; berry medium, brownish red; flesh tender and sweet; very good; one of the best flavored of the Rogers'. Early as Hartford. A desirable garden variety.

Moyer—A new grape originated in Canada. In habit of growth and hardiness it resembles the Delaware very much, but ripens earlier. Flavor sweet, delicious; skin tough but thin; pulp tender and juicy. Too small berry and bunch to be of value.

Norfolk—A new variety of great vigor and hardiness, originating in Massachusetts.

Poughkeepsie Red—Somewhat larger than Delaware, but resembling it in general appearance. It is fully equal to the Delaware in quality, ripens early and keeps well.

Salem (No. 52)—Bunch large and compact; berry large, of a light chestnut or Catawba color, thick skinned, perfectly free from hard pulp; very sweet and sprightly, with a most exquisite aromatic flavor; as early as the Delaware, having never failed to ripen in the most unfavorable season for the past six years; keeps well.

Uister Prolific—A native seedling grown by a A. J. Caywood. A red grape of fine quality, healthy growth and great productiveness. Will be found valuable for general use as it has all the characteristics of our hardy and healthy native varieties. September.

Vergennes—Very productive; clusters large; berries large, holding firmly to the stems; color light amber; flavor rich and delicious; flesh meaty and tender. Ripens with Concord and is an excellent late keeper.

Wyoming Red—An extra early red grape, resembling the Delaware in appearance, but double its size and ten days earlier. Bunch compact and handsome; berry medium, bright red; skin thin and firm; flesh sweet.

CLASS III.--WHITE GRAPES.

Diamond—A white grape recently introduced, and undoubtedly very valuable. A cross between Concord and Iona. A vigorous grower, with leaf resembling Concord,

DIAMOND.

very free from mildew. Bunch large, well filled, moderately compact, berry about the size of Concord; flesh melting and juicy, sweet to the center, and free from foxiness; skin thin, but sufficiently tough to bear packing and handling well. Ripens about with Delaware. Very productive.

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

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

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

Lady Washington—Bunch very large, compact, generally double shouldered; berry medium to large, round; color yellow, with a tinge of red on the sunny side, and covered with bloom; flesh soft, tender, juicy, sweet and good, not rich. Vine remarkably vigorous and productive, and the fruit is beautiful when in perfection. It ripens here after the Concord.

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

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

Pocklington—Bunch large; berry large, round, of a rich yellow color; flesh pulpy, juicy, and of good quality; ripens at the time of the Concord. Vines vigorous, healthy, very hardy and productive. It is considered a very valuable and reliable variety, and is constantly growing in favor. Quality good.

SELECT CURRANTS.

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

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

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

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

FAY'S PROLIFIC.

THE GREAT HOME USE AND MARKET CURRANT.

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

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

La Versailles—(See Cherry Currant.)

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

North Star—Originated in the North-west. Bush a vigorous grower and very hardy. Not fully tested here at the East, but represented by the originator and others who have seen it, as a decided improvement on the older sorts, both for home and market.

Prince Albert—Bush thrifty, hardy and enormously productive; fruit of large size, very handsome and of good quality. Grown extensively for market by experienced and successful fruit growers. Ripens a little later than the Fay's Prolific, and planted in large numbers with Fay's by market gardeners and orchardists.

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

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

GOOSEBERRIES.

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

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

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

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

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

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

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

Red Jacket—New and promising. Originators claim that it is absolutely mildew proof, thrifty, healthy and productive, and that the fruit is a No. 1 in every respect.

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

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

ENGLISH VARIETIES.

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

Chautauqua.—A new, strong-growing variety of the English type. Very promising. Fruit white of largest size, and enormously productive. Its size, beauty, productiveness and good quality will make it very popular with intelligent and energetic fruit growers.

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

THE INDUSTRY.

THE PRINCE OF ENGLISH GOOSEBERRIES.

Industry.—Large; oval; dark red, hairy; rich and agreeable. Although this is a foreign variety it has succeeded admirably on our grounds, where it has fruited extensively for several years. We can confidently recommend it, both for the garden of the amateur and the market plantation. The plant is remarkably vigorous and productive, and the fruit large, beautiful and of excellent quality. Where shoots are left long, they fruit to the very tips. We regard it as, on the whole, the best foreign Gooseberry ever introduced.

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

SELECT RASPBERRIES.

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

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

CLASS I.--RED AND YELLOW VARIETIES.

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

Caroline—A seedling from Brinckle's Orange, combining the peculiarly melting and luscious flavor of that variety, with canes of great vigor, entire hardiness, and fair productiveness. Color, pale salmon; berries large and of fine quality.

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

Cuthbert (Queen of the Market)—Large, conical; deep, rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy, and immensely productive.

Golden Queen—*Rich golden yellow.* The flavor is of the highest quality, pronounced by some superior to the old Brinckle's Orange. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme Northern latitudes. The desire for a yellow raspberry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this variety.

Hansell—Medium to large, bright crimson, firm, flavor fine. Earliest of all.

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

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

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

Shaffer's Colossal—Fruit large, purple, soft, with a sprightly sub-acid flavor; plant very vigorous, hardy and productive. Much esteemed in some localities. Season medium to late. Valuable for canning.

Superlative (New)—Large, conical, handsome, red. Canes are stout, supporting themselves, and a very heavy cropper. The introducer is confident that this variety is a decided advance on all of the older sorts in this class. It is perfectly hardy here.

Turner—A comparatively new red variety from Illinois. Very productive and hardy; of good size, light handsome red, and of fine flavor. Its success in extreme localities must render it of great value.

GOLDEN QUEEN.

CLASS II.--BLACK CAPS.

- Davison's Thornless.**—Similar in appearance and quality to the common black cap, but much earlier and nearly thornless, which is alone sufficient to make it very desirable.
- Doolittle (Doolittle's Black Cap).**—This is an improved variety of the common *Black Cap*, of medium size, dark purplish black, with pleasant sub-acid flavor; much esteemed for cooking; entirely hardy.
- Early Canada.**—Originated in Canada. Bush thrifty, extra hardy and wonderfully productive. Berry large to very large, bright black in color, of exquisite flavor, and ripens just before Gregg. A great acquisition.
- Gregg.**—Of great size; fine quality; very productive and hardy. It takes the same position among black caps as Cuthbert among the red sorts. No one can afford to be without it.

Johnston's Sweet—Smaller than the Gregg, of same color. A good strong grower, healthy and hardy; ripening with Tyler; stands up well in picking and handling.

Kansas.—A very promising new sort from the West, not yet fully tested here.

THE EARLY CANADA.

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

Ohio—A very strong-growing, hardy sort; fruit as large as Mammoth Cluster; more productive; one of the most valuable for market; also much esteemed for drying.

Souhegan—A new variety commended very highly as a market sort by those who have grown it. Said to be enormously productive, perfectly hardy and free from disease of any kind.

Smith's Prolific—Originated on the farm of Mr. Smith, near Palmyra, N. Y. We visited the original plantation of Smith's Prolific last summer, and our previous impression regarding it was more than confirmed. It was magnificent in every respect. The bushes were loaded to the ground with enormous berries of the highest quality and appearance, and it was plain that the crop would be entirely gone just before Gregg began to ripen.

BLACKBERRIES.

This excellent and profitable fruit should be planted for garden use in rows six feet apart, with plants four feet apart in the rows; for market, in rows eight feet apart, with plants three feet apart in the rows. Give the plants the same cultivation as raspberries.

THE MINNEWASKA.

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

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

Early Harvest—A new variety of great promise, being early in time of ripening and always reliable. The canes are strong and upright in growth; hardier than Kittatinny; an enormous bearer. Berries sweet and of the highest quality, though not as large as some varieties.

Erie—A new variety from northern Ohio; plant a vigorous grower; berry, large, round.

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

Lovett's Best—Plant remarkably hardy, a strong, vigorous grower. Fruit large and nearly round in shape, firm and juicy. Profitable for both home use and market. Early.

Minnewaska—The new coreless blackberry. John Charlton, of this city, a very high authority, says: "In my judgment, the Minnewaska will soon supersede all others."

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

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

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

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

Wilson's Junior—This is a noble variety and it continues to yield enormous crops of large fruit. It combines many good qualities; size, earliness and productiveness. Its capacity for yielding is extraordinary. A little tender in this section.

STRAWBERRIES.

JESSE.

Bubach—Fruit uniformly large and handsome, conical, bright scarlet, moderately firm and a fair quality. Valuable for home use, and near-by market. Season early to medium.

PARKER EARLE.

Beader Wood—New, early and very promising.

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

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

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

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

Sharpless—This grand old sort originated in Pennsylvania. Was introduced 14 years ago, and has been planted everywhere with very satisfactory results. Fruit largest size, showy and good. Season medium.

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

The Leader—New and promising.

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

MULBERRIES.

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

New American—A sport from Downing and precisely like that well known sort, save that the tree is decidedly hardier.

Russian—A hardy, rapid growing tree, introduced from Russia by the Menmonites; foliage abundant, and doubtless valuable for wind-break. Fruit of no value.

ASPARAGUS.

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

CULTIVATION.

See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well rotted barn-yard manure. Locate the plants eight inches apart in rows three feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow

earth. Give the bed liberal dressings of manure at intervals, and, except near the sea shore, three pounds of salt per square yard early every spring. Do not cut for use until the plants have grown two seasons.

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

Palmetto—Until recently we believed that the Conover's Colossal was the best sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder, and more even and regular in its growth, and that it will eventually supersede the old favorite. The average bunches contain 15 shoots measuring $13\frac{1}{2}$ inches in circumference and weighing nearly 2 pounds. It has been tested both north and south, and has proved entirely successful in every instance.

RHUBARB OR PIE PLANT.

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

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

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

ORNAMENTAL DEPARTMENT.

While most people appreciate well arranged and well kept grounds, large or small, many fail to realize that *they* can have equally fine grounds. They have tried a few shrubs or roses, perhaps, growing in thick turf, with no attention given to pruning or cultivating. Under such circumstances, good results cannot be expected.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of a place. A purchaser having to decide between a house with bare, unkempt grounds, and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put upon the market. Lots thus planted readily secure purchasers at good prices, when bare grounds go begging.

HOW TO PLANT.

Do not make the mistake of planting at random. A fine, well-cut lawn is one of the handsomest features of a place. Trees may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from it. This will secure light and air with good views. When practicable, upright shrubs and roses should be planted in beds, each class by itself, about the borders of the grounds. These beds should be well cultivated and the plants annually pruned. When the growth of the plants has made them very thick, some should be taken out. It will not do to plant so little that years must elapse before a fine effect will be produced. A surplus should be planted at first, and this gradually be taken out. Vines should be planted near to and allowed to climb upon and about the house, or they may be trained on posts, arbors or stakes, placed in suitable locations on the lawn.

WHAT TO PLANT.

A detailed list of desirable ornamental trees and shrubs would be little less than a recapitulation of our entire list, but as few have room for all, we here present a list of the most desirable in each class, and refer the reader to the proper places in the catalogue for descriptions of them.

Flowering Trees: **May**—White Dogwood, Magnolias in variety, Judas Tree, Horse Chestnuts, Double Flowering Cherry; **June**—White Fringe, Laburnum, Mountain Ash, Thorns in variety, Catalpa, Syringafolia, Lindens in variety; **July**—American Sweet Chestnut.

Trees Valued for Their Form and Foliage—White Fringe, Magnolias, Cut-leaved Weeping Birch, Kilmarnock Willow, Weeping Mountain Ash, Oak-leaved Mountain Ash, Camperdown Weeping Elm, European Linden, White-leaved Weeping Linden, Salisburea, Norway Maple, Purple-leaved Maple, Wier's Cut-leaved Maple, Imperial Cut-leaved Alder, Purple-leaved Beech, Fern-leaved Beech.

Evergreen Trees—Norway Spruce, Austrian Pine, Irish Juniper, American Arbor Vitæ, Pyramidal Arbor Vitæ.

Upright Flowering Shrubs: **APRIL**—Evergreen Honeysuckle (*Fragrantissima*). **May**—*Forsythia*, Japan Quince, *Rhodotypus*, *Spirea*, *Prunifolia*, Lilacs in variety, Tartarian Honeysuckle, *Cornus Mascula Variegata*; **JUNE**—*Deutzia Gracilis*, *Deutzia Crenata flore pleno*, *Viburnum Plicatum*, Snowball, *Weigela* in variety, White Fringe, *Syringa*, Golden-leaved and plain, *Calycanthus* (at intervals through the summer), *Exochorda Grandiflora*, *Spirea Lanceolata*, *Spirea Golden-leaved*, *Halesia*, Japan Globe Flower; **JULY**—*Spirea Callosa Alba*, *Spirea Callosa*; **AUGUST** and **SEPTEMBER**—*Altheas* in variety, *Hydrangea Paniculata Grandiflora*, *Anemone*.

Climbing and Trailing Shrubs—*Clematis* in variety (flower from June to November), *Ampelopsis Veitchii*, American Ivy, Climbing Honeysuckle in variety (flower all summer), *Aristolochia Sypho* (flowers in May and June), *Akebia Quinata*, *Bignonia* or Trumpet Vine, *Wistaria*, Chinese Matrimony Vine.

Evergreen Shrubs—*Rhododendron* in variety, Dwarf Box, Tree Box.

Roses—Climbing and Moss, blooming in June; Hybrid Perpetual and Perpetual Moss, blooming at intervals all summer, and Tender Roses, blooming constantly.

UPRIGHT DECIDUOUS TREES.

Alder.

IMPERIAL CUT-LEAF (*Laciniata Imperialis*)—A charming tree of stately, graceful growth, having large and deeply cut foliage. Vigorous and hardy; one of the best lawn trees.

Ash.

AUCUBA-LEAVED (*Aucubifolia*)—A fine tree with variegated gold-blotched leaves, valued for planting near purple trees.

EUROPEAN FLOWERING (*Ornus*)—Grows from 20 to 30 feet high; flowers greenish, white, fringe-like; produced early in June in large clusters at the ends of the twigs.

GOLD BARKED (*Aurea*)—A conspicuous tree at all times, especially in winter, on account of the yellow bark and twisted branches.

Beech.

EUROPEAN (*Sylvatica*)—A beautiful tree, growing to the height of sixty or eighty feet.

FERN-LEAVED (*Heterophylla*)—An elegant tree of symmetrical habit, having beautifully cut foliage.

PURPLE-LEAVED (*Purpurea*)—Discovered in a German forest. An elegant, vigorous tree, growing 40 to 50 feet high. Foliage deep purple, changing to crimson. Like all varieties of the beech this is difficult to transplant, hence small trees three feet high are preferable.

Birch.

EUROPEAN WHITE (Alba)—A fine tree of moderate size, with silvery bark and slender branches.

PURPLE-LEAVED (Folii Purpureis)—A variety possessing the vigorous habit of the species, and having rich purple foliage.

Catalpa.

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

SYRINGEFOLIA—A native of the South. A rapid growing, beautiful tree, with very large heart-shaped leaves, and pyramidal clusters of white and purple flowers a foot long. Late in July.

TEAS' JAPANESE HYBRID—It has large, luxuriant foliage, and large, handsome white flowers. In rapidity of growth, it rivals the most luxuriant trees of temperate climates, while its hardiness has been demonstrated by its standing uninjured twenty-five degrees or more below zero.

Cherry.

DWARF WHITE FLOWERING (Humilis, fl. pl.)—A variety of the Morello, with double white flowers. Both this and the succeeding are very ornamental.

LARGE DOUBLE FLOWERING (Flore Alba Pleno)—A variety of the Heart Cherry, with pretty double flowers.

Chestnut.

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

SPANISH—A valuable species for both ornament and fruit. It forms a handsome lawn tree, and produces fruit three or four times as large as the American variety. Not hardy north of Philadelphia, Pa.

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

JAPAN—Tree medium sized and decidedly ornamental. It fruits when very young, nuts are much larger than the Spanish and equal to it in flavor. Believed to be a great acquisition. *Not hardy* north of Philadelphia, Pa.

Dogwood.

AMERICAN WHITE (Florida)—A native tree of fine form and beautiful foliage, growing from 20 to 25 feet high, producing white flowers three inches in diameter, early in the spring, before the leaves appear. A very desirable tree.

RED FLOWERING—First disseminated by Thomas Meehan and considered a great acquisition.

Elm.

AMERICAN WHITE (Americana)—The noble, spreading, drooping tree of our own woods. One of the grandest and hardiest of park or street trees.

PURPLE—A beautiful variety; leaves of rich purple color when young.

SCOTCH OR WYCH—A fine spreading tree of rapid growth; foliage large.

Fringe.

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

Horse Chestnut.

WHITE FLOWERING (Hippocastanum)—A very beautiful, well known tree, with round, dense head, dark green foliage, and an abundance of showy flowers in early spring.

DOUBLE WHITE FLOWERING—A superb variety, with double flowers, in larger panicles than the common sort, and of fine pyramidal habit. It is one of the best ornamental trees.

Judas Tree or Red Bud.

AMERICAN—A small-growing tree, covered with delicate pink flowers before the leaves appear.

JAPAN—A great improvement on the well known American Judas tree. It is of shrub like growth, and about the first of May is covered with deep rose colored flowers, a dozen or more in a bunch on the bare stem before the leaves appear. It has the trick of flowering from branches many years old, as well as from the new ones. The foliage is a lustrous green all summer. A great acquisition. Very rare as yet. Plants 6 to 10 inches high only.

Laburnum.

GOLDEN CHAIN—Bears long, pendant racemes of yellow flowers in June; showy and beautiful. Should be in every lawn.

Larch.

EUROPEAN (Europæa)—An excellent, rapid-growing, pyramidal tree, also valuable for timber. Small branches drooping, with needle-shaped foliage like the spruce or hemlock.

EUROPEAN LINDEN.

Linden.

AMERICAN (Americana)—Rapid-growing, beautiful native tree, with very large leaves and fragrant flowers.

EUROPEAN (Europæa)—A very fine pyramidal tree, with large leaves and fragrant flowers. Only desirable on large grounds.

WHITE OR SILVER-LEAVED (Argentea)—A handsome, vigorous-growing tree; large leaves, whiteish on the under side, and have a beautiful appearance when ruffled by the wind. One of the best.

Magnolia.

One of the most beautiful of flowering trees. Being difficult to transplant, small trees three to four feet high are preferable.

ACUMINATA (Cucumber Tree)—A beautiful pyramidal growing native species; growing to the height of sixty or seventy feet, with large glossy leaves; flowers yellow, tinted with bluish purple.

CONSPICUA (Chinese White)—Tree of medium size and shrub-like growth. Flowers are large, pure white, very numerous and appear before the leaves.

Magnolia.

LENNEI—Recently introduced; foliage large, flowers purplish crimson or magenta, and although not a handsome grower, a superb variety. Very expensive.

ROBERTIANA—Tree a fine regular grower, foliage fine, flowers very large, white, and purple. One of the best.

SOULANGEANA—A French hybrid, a rather irregular grower, foliage large, glossy and massive, flowers very large, three to five inches in diameter, white and purple. Very effective.

SPECIOSA—A good grower, of fine form; flowers a little smaller and of a lighter color than those of Soulangeana, but being produced in wonderful profusion; this is the best variety.

Maple.

ASH-LEAVED (*Negundo fraxinifolium*)—A fine, rapid-growing variety, with handsome light green pinnated foliage and spreading head. Very hardy.

NORWAY (*Platanoides*)—A native of Europe. Its large compact habit, broad, deep green shining foliage, and its vigorous growth, render it one of the most desirable species for streets, parks and lawns.

PURPLE-LEAVED SYCAMORE (*Purpurea*)—Strong, rapid grower; foliage deep green on the upper surface and purplish red underneath. Produces a fine effect with other trees.

SCARLET (*Rubrum*)—A native variety of medium size, producing deep red blossoms before the leaves appear. In the autumn the leaves change to a brilliant scarlet, rendering the tree very effective.

SCHWEDLER'S NORWAY (*Schwedlerii*)—A beautiful variety, with the young shoots and leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. One of the most valuable trees of recent introduction.

SUGAR OR ROCK (*Saccharinum*)—The well-known native variety, valuable both for the production of sugar and as an ornament in lining streets and avenues. A stately form and fine, rich foliage renders it justly popular as a shade tree.

SILVER-LEAVED (*A. dasycarpum*)—One of the most ornamental of the species; the under surface of the leaves a soft white. It is exceedingly rapid in its growth, often making shoots six feet long in a season; valuable as a street tree.

WIER'S CUT-LEAVED (*Weirii 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 and may be easily adapted to small lawns.

Mountain Ash.

EUROPEAN (*Aucuparia*)—A fine hardy tree; head dense and regular, covered from July till winter with large clusters of bright scarlet berries.

OAK-LEAVED (*Quercifolia*)—A hardy tree of fine habit; height and breadth from twenty to thirty feet. Foliage simple and deeply lobed. A very fine lawn tree.

Mulberry.

For description of several fine varieties, see pages 48 and 58.

Peach.

DOUBLE ROSE-FLOWERING (*Flore Rosea Pleno*)—Flowers pale rose color, double, produced in great abundance and very handsome.

DOUBLE WHITE-FLOWERING (*Flore Alba Pleno*)—Very ornamental flowers, pure white—hardy.

Poplar.

GOLDEN-LEAVED (*Van Geertii*)—The foliage is a decided golden tint which lasts throughout the season. Very effective when massed with trees and large shrubs on the lawn.

WIER'S CUT-LEAVED MAPLE.

Poplar.

7/00 CAROLINA—Pyramidal in form, and robust in growth. Leaves large, serrated and pale to deep green in color.

CAROLINA POPLAR.

Salisburea.

MAIDEN HAIR or GINGKO TREE (*Adiantifolia*)—One of the most beautiful of lawn trees. A native of Japan. Of medium size, rapid growth, and rich, glossy, fern-like foliage. Rare and elegant.

Thorn.

50 DOUBLE SCARLET (*Coccinea* fl. pl.)—Flowers deep crimson, with scarlet shade; very double, and considerably larger than the double red; fine, rich foliage.

105 DOUBLE WHITE (*Alba Flore Pleno*)—Has small, double white flowers.

PAUL'S DOUBLE SCARLET (*Coccinea* fl. pl. *Paulii*)—Flowers large, deep carmine scarlet. Superior to any other variety.

Tulip Tree.

TULIPFERA—A magnificent native tree, with broad, glossy, fiddle shaped leaves and beautiful tulip-like flowers. Allied to the Magnolias, and like them difficult to transplant, unless of small size.

Walnut.

BLACK WALNUT (*J. Nigra*). A native species of large size and majestic form, foliage beautiful, being composed of from thirteen to seventeen leaflets.

ENGLISH, or MADEIRA NUT (*J. regia*)—A handsome tree which produces fine fruit. Should be more extensively planted as it is quite hardy.

Willow.

ROSEMARY-LEAVED (*Rosmarinifolia*)—Budded five to seven feet from the ground, it makes a very handsome round headed, small tree; branches feathery, foliage silvery.

GOLD BARK—Origin Russia. Bark rich golden, very conspicuous in winter; a fine grower, and of great value to give variety to the lawn.

WEeping DECIDUOUS TREES.

Ash.

EUROPEAN WEeping (Excelsior Pendula)—The common, well-known sort, one of the finest lawn and arbor trees, covering a great space, and growing rapidly.

GOLD BARK WEeping (Aurea Pendula)—An elegant variety; bark in winter as yellow as gold.

WEeping BEECH.

Beech.

WEeping (Pendula)—A native of Belgium; a fine, vigorous and beautiful tree, attaining a large size; though ungainly in appearance when divested of its leaves; it is extremely graceful and effective, when covered with its rich, luxuriant foliage.

Birch.

CUT-LEAVED WEeping (Pendula Laciniata)—Extremely vigorous and hardy. Mr. Scott, in his "Suburban Home Grounds," says of it: "No engraving can do it justice; like the palm trees of the tropics, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its white bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character."

YOUNG'S WEeping (Pendula Youngii)—Originated near Milford, England, where it was found trailing upon the ground. Grafted into stems of some height, it forms pendulous heads drooping to the ground in fine, thread-like shoots—very beautiful.

Cherry.

EVER-FLOWERING WEeping (Semperflorens)—A very fine drooping variety, with beautiful globular head, that bears flowers and fruit all summer.

Dogwood.

WEeping (Cornus Florida Pendula)—A magnificent flowering weeping tree introduced by Thomas Meehan, of Germantown, Pa. Its flowers are like the common White Dogwood, but the tree is a true weeper like the Kilmarnock Willow and, when in bloom, presents a spectacle that cannot be excelled. They are difficult to propagate, and will always be rare and expensive.

CAMPERDOWN ELM.

Elm.

CAMPERDOWN WEEPING—A vigorous grower, and forms one of the most picturesque drooping trees. Leaves large, dark green and glossy, and cover the tree with a luxurious mass of verdure; very desirable.

Linden or Lime Tree (Tilia).

WHITE-LEAVED WEEPING (Alba Pendula)—A fine tree with large leaves and drooping branches.

Mountain Ash (Sorbus).

WEEPING (Aucuparia Pendula)—A beautiful tree, with straggling weeping branches; makes a fine tree for the lawn; suitable for covering arbors.

Mulberry.

TEA'S WEEPING RUSSIAN—The most graceful and beautiful of hardy weeping trees, and wholly unlike anything heretofore introduced, forming a perfect, umbrella-shaped head, with long, slender, willowy branches, drooping to the ground, parallel with the stem. These hang like the most delicate vines from a hanging basket, and are swayed by the slightest breath of the wind. It has handsome foliage of a beautiful glossy green. Admirably adapted to cemetery planting and for the lawn.

Poplar. (Populus).

LARGE-LEAVED WEEPING (Grandidentata Pendula)—A variety having, when grafted standard high, long, slender branches, like cords, which droop very gracefully; foliage large, dark shining green, and deeply serrated. One of the finest weeping trees in cultivation.

Willow (Salix).

AMERICAN WEEPING (Purpurea Pendula)—An American Dwarf, slender-branched species; grafted five or six feet high, it makes one of the most ornamental of small weeping trees; more hardy than the Babylonica.

KILMARNOCK WEEPING (Caprea Pendula)—An exceedingly graceful tree, with large, glossy leaves; very hardy.

WEEPING (Babylonica)—The well-known common Weeping Willow.

EVERGREEN TREES.

Evergreens are very desirable, but they are difficult to transplant, and both the time and manner of transplanting should be looked to. They should never be set in the fall, after the growth of other trees have ceased. They may be set in August, or after they have started in May, but they should be subjected to as little exposure as possible and be set with great care.

Arbor Vitæ.

AMERICAN—This is the very finest evergreen for hedge. It is very hardy, and if set at the proper time with care, and without undue exposure, it may be relied upon to live; but small plants 12 to 18 inches high, which have been transplanted several times are preferable. It bears shearing better than any other variety, and may be made a very beautiful and dense hedge or screen to divide grounds, or for any purpose where it is not required to resist cattle or other animals.

ARBOR VITÆ PYRAMIDALIS (New)—Of Upright, compact habits, similar to the Irish Juniper. Very desirable.

SIBERIAN—Exceedingly hardy, keeping color well in winter; growth compact and pyramidal; makes an elegant lawn tree.

TOM THUMB—Compact growth; valuable for planting in cemeteries and small places, where large trees are not admissible.

Juniper.

IRISH—Very erect and tapering in its growth, forming a column of deep green foliage; a pretty little tree or shrub, and for its beauty and hardiness is a general favorite.

Pine.

AUSTRIAN OR BLACK (Austriaca)—A remarkably robust, hardy, spreading tree; leaves long, stiff, and dark green; growth rapid; valuable for this country.

SCOTCH—"A dark, tall evergreen," with bluish foliage and rugged shoots; hardy and grows well, even on the poorest soils.

Both the above are very ornamental, and well adapted to thrive in this country.

Silver Fir.

BALSAM—Leaves dark green above, silvery beneath, retaining their color during the severest winter; grows rapidly and is very hardy.

Spruce Fir.

NORWAY SPRUCE (*Abies excelsa*)—One of the handsomest and most popular of evergreens. Makes fine wind break.

BLUE SPRUCE (*A. pungens*)—This is not only one of the hardiest, but the most beautiful of all the Spruces. Miss Bird, in her "Lady's Life in the Rocky Mountains," mentions it as the most attractive tree she has seen, beautiful alike in shape and color. Beautiful in color and outline, and hardy; it is a valuable acquisition. Very rare and expensive.

HEMLOCK SPRUCE; COMMON HEMLOCK—When old it loses its conical shape, and assumes irregular and picturesque forms. Difficult to transplant.

UPRIGHT DECIDUOUS SHRUBS.

Althea, or Rose of Sharon (*Hibiscus*).

The Altheas are fine, free growing flowering shrubs, of very easy cultivation. Desirable on account of flowering in August and September, when nearly every other shrub or tree is out of bloom.

Althea, or Rose of Sharon (*Hibiscus*).DOUBLE RED (*Rubra flore pleno*).DOUBLE PURPLE (*Purpurea flore pleno*).DOUBLE WHITE (*Alba flore pleno*).SINGLE RED (*Rubrum*).SINGLE PURPLE (*Purpurea*).SINGLE WHITE (*Alba*).

VARIEGATED-LEAVED DOUBLE-FLOWERING (*flore pleno fol. variegata*)—A conspicuous variety, with foliage finely marked with light yellow. Flowers double purple. One of the finest variegated-leaved shrubs.

Almond.

DWARF DOUBLE-FLOWERING (*Prunus Japonica*)—A well-known beautiful small shrub, with handsome, double, pink flowers early in the Spring.

DOUBLE WHITE-FLOWERING (*P. Japonica alba*)—A pretty sort, with double white flowers.

Aralia.

SPECIOSA—Imported from Europe. A very wonderful large shrub, or small tree, which resembles the Palm tree of the tropics. It has dark green, fern like foliage of enormous size and bears large panicles of white flowers in August. It has been thoroughly tested and found perfectly hardy. Invaluable, as it gives a tropical appearance to the lawn or garden.

JAPONICA—Of same family as above but of Japanese origin. Very promising.

Azalea.

JAPANESE—This class have larger flowers and bloom earlier in the season than the Ghent varieties. The colors are chiefly red and yellow and shades of the same. They should be planted in partial shade.

PONTICA, or GHENT—Natives of Asia Minor. Grow from 3 to 4 feet high. The Ghent hybrids which we offer combine nearly all colors, and possess a delightful perfume. They rank next to the Rhododendrons for decoration of lawns and pleasure grounds. Bloom through May and June. They must receive slight protection in the winter and should be planted where there is partial shade, and on loose, peaty soil, where there is abundance of moisture. In the latitude of Philadelphia they are perfectly hardy.

Berberry (*Berberis*).

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

EUROPEAN (*Vulgaris*)—A fine shrub with yellow flowers in drooping racemes, produced in May or June, followed by orange scarlet fruit.

Calycanthus, or Sweet Scented Shrub (*Calycanthus*).

The wood is fragrant, foliage rich, flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June and at intervals afterwards.

Currant (*Ribes*).

CRIMSON-FLOWERING—Produces an abundance of crimson flowers in early spring.

YELLOW-FLOWERING—A native species with yellow flowers.

Clethra Alnifolia (*Sweet Pepper Bush*).

Spikes of clear white, fragrant flowers in August.

Deutzia.

This valuable species of plants comes to us from Japan. Their hardiness, luxuriant foliage, and profusion of attractive flowers, render them deservedly, among the most popular of flowering shrubs. The flowers are produced in June, in racemes 4 to 6 inches long.

DOUBLE FLOWERING (*Crenata flore pleno*)—Flowers double white, tinged with rose. One of the most desirable flowering shrubs in cultivation.

Deutzia.

SLENDER-BRANCHED (*Gracilis*)—A charming variety, introduced by Dr. Siebold. Flowers pure white, and so delicate that they are very desirable for decorative purposes.

ROUGH-LEAVED (*Scabra*)—An exceedingly profuse white flowering shrub.

PRIDE OF ROCHESTER—A new variety said to excel all others in size of flower, length of panicle, profuseness of bloom, and vigorous habit. A charming acquisition.

WATERER—A cross between *Gracilis* and *Crenata*. Flowers large, of purest white, and borne in immense profusion.

Dogwood (*Cornus*).

RED-BRANCHED (*Sanguinea*)—A native species, very conspicuous and ornamental in the winter, when the bark is a blood red.

VARIEGATED (*Cornus mascula variegata*)—Variegated Cornelian Cherry. A small tree or shrub, producing clusters of bright yellow flowers, early in spring before the leaves appear. Has beautiful foliage, variegated with white. One of the prettiest variegated shrubs in cultivation.

ELEGANTISSIMA VARIEGATA—An improvement on the preceding, and one of the finest variegated shrubs, of rapid growth; foliage beautifully marked with creamy white and tinged with red, while some leaves are entirely white; should be in every collection.

Elder (*Sambucus*).

A well-known shrub which blossoms in the spring, and afterwards is covered with handsome berries; there are several varieties.

GOLDEN (*S. Aurea*)—A beautiful variety with light yellow leaves, which hold their color well, and render the plant very conspicuous and effective.

Euonymus (Burning Bush, Strawberry Tree).

A very ornamental and showy bush, whose chief beauty consists in its brilliant berries, which hang in clusters from the branches until midwinter; berries rose-colored; planted with a background of Evergreens, the effect of contrast is very fine.

Exochorda.

GRANDIFLORA—A most beautiful shrub, producing large white flowers in May.

A native of North China, difficult to propagate, and hence it will always be rare.

Eleagnus Longipes.

A well-known shrub of spreading habit, dark green foliage, silvery white beneath with yellow flowers and bright red fruit that is beautiful as an ornament on the bush and is esteemed very highly by many for use in place of cranberries. Within the last few years, there have been many thousand plants imported from Europe, the demand having far exceeded the supply of American nurserymen.

Filbert.

PURPLE-LEAVED (*Corylus avellana atropurpurea*)—A vigorous shrub with large deep purple leaves; very ornamental; produces good fruit.

Forsythia or Golden Bell (*Forsythia Viridissima*).

A very singular and quite ornamental shrub. Its branches in the early spring, before the leaves appear, are covered with bright golden yellow, pendulous flowers.

Fringe.

PURPLE OF SMOKE TREE—A very elegant and ornamental large shrub, with curious, hair-like flowers, which being of a pinkish brown color, give it the names "Purple Fringe" and "Smoke Tree." The blossoms are in July, sometimes literally covering the tree, and remaining all summer.

Fringe.

WHITE (*Chionanthus Virginica*)—An entirely different plant from the preceding: has handsome, large foliage, and racemes of delicate white flowers, that hang like finely cut shreds, or fringes of white paper.

Globe Flower (*Kerria Japonica*).

A slender, green-branched shrub, five or six feet high, with globular yellow flowers from July to October.

Halesia (Snow Drop Tree).

SILVER BELL—A beautiful large shrub, with handsome, white, bell-shaped flowers in May. Very desirable.

Honeysuckle (*Lonicera*).

RED TARTARIAN—A beautiful shrub. Vigorous, and producing large, bright red flowers, striped with white, in June.

WHITE TARTARIAN—A large shrub, having white flowers in May and June.

FRAGRANTISSIMA—Almost an Evergreen. A hardy, vigorous bushy growing shrub, reaching a height of five or six feet, flowers bright red and exquisitely fragrant; foliage dark, rich green, which is retained in all its beauty until spring, when flowers and new foliage appear. A great acquisition.

GRANDIFLORA—A beautiful shrub, very vigorous and produces large, bright red flowers, striped with white, in June. One of the best.

HYDRANGÆA PANICULATA GRANDIFLORA.

Hop Tree or Shrubby Trefoil (*Ptelia*).

A large shrub or small tree of rapid growth and robust habit. Fruit winged and in clusters. Flowers in June.

Hydrangea.

OTAKSA—Foliage a beautiful deep green. Produces immense clusters of rose colored flowers in profusion in July. Should be planted in tubs and protected in winter.

PANICULATA GRANDIFLORA—A fine, hardy shrub, growing to the height of eight or ten feet; flowers white, in great pyramidal panicles a foot long, produced in August or September, when most other shrubs are out of bloom. Very elegant and showy.

RED-BRANCHED HYDRANGEA.
FOR HOME AND VERANDA.

RED-BRANCHED—Originated in this city and the highest authorities here pronounce it the grandest plant for house or verandas that has ever been introduced. The wood is distinct red and the flowers of great beauty and immense size.

Japan Maple. (See cut, page 64.)

Very beautiful and very expensive.

BLOOD-LEAVED—A bushy shrub with deeply cut leaves. The young growth is of a very brilliant crimson. One of the best. Plants 12 to 18 inches, \$3.00.

GOLDEN-LEAVED—A beautiful variety. Foliage richly shaded with gold and green. Plants 12 to 18 inches, \$5.00.

RED-LEAVED—An interesting variety. The young growth is of a deep red, changing to a brilliant green. Plants 12 to 18 inches, \$3.00.

ROSY-PINK-LEAVED—A slow grower with small leaves margined with rosy-pink, distinct and beautiful. Plants 12 to 18 inches, \$4.00.

30-
73

BLOOD-LEAVED JAPAN MAPLE.

Lilac.

LUDWIG SPATH—New, and believed to be the finest of its class. Color purplish red. A great acquisition.

MARIE LE GLAY—A free grower, producing magnificent large thysses of purest white flowers, which are very fragrant and showy. Highly recommended as perhaps the best of the white lilacs.

MADAM LEMOINE—New, and very promising. Flower double white.

PERSIAN PURPLE—Foliage resembles the Privet more than the lilac. Flowers are most abundant and very delicately tinted.

PERSIAN WHITE—Foliage resembles the Privet more than the Lilac. Flowers are very abundant and pure white.

PURPLE COMMON (*Vulgaris*). The well-known sort.

RED (*Rubra Insignis*)—New, and one of the choicest of its color.

LARGE FLOWERING WHITE (*Alba grandiflora*)—Very large, pure white tufts of flowers.

Plum (*Prunus*).

P. PISSARDI—The finest purple-leaved small tree or shrub of recent introduction. The young branches are very dark purple; the leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in Autumn. Flowers small, white, single.

DOUBLE FLOWERING (*P. Triloba*)—A very desirable shrub, introduced from Japan. Flowers semi-double, of a delicate pink, upwards of an inch in diameter, thickly set. Hardy; flowers in May.

Privet.

BOX-LEAVED—A variety of erect habit, with short, dark, thick green leaves, which remain on the plant until very late in the autumn. One of the best for the lawn.

LAUREL-LEAVED—Leaves are the largest of any of this class, distinct and fine.

CALIFORNIA—A vigorous, hardy variety, of fine habit and foliage, especially valuable for hedges where protection against cattle is not essential.

12 18 24 30 inches 300 Hundred

Quince, Japan (*Cydonia*).

SCARLET—Has bright scarlet, crimson flowers, in great profusion, early in spring; one of the best hardy shrubs; makes a beautiful ornamental hedge; for defence against boys and cattle it has no superior, and for ornament no equal.

BLUSH—A beautiful variety, with white and blush flowers.

Rhodo Typhus.

Origin Japan. A very ornamental shrub, of medium size with remarkably handsome foliage, and large, single white flowers in the latter part of May.

SNOWBALL.

Snowball Reticulatum.

Almost Evergreen. The leaves are very large, with heads of white flowers in May, and of great beauty; then clusters of red berries follow it, which ripen in early August, being at that time of brilliant red.

Spiræa.

BLOOMER—A charming bush that has large panicles of deep rose colored flowers, June and July.

BLUMALDA—New, and considered one of the finest of this class. Flowers brilliant pink, with variegated foliage.

CALLOSA ALBA—A white flowering variety, of dwarf habit; very fine; remains in flower all summer.

GOLDEN LEAVED (*Foliis Aureis*)—A beautiful dwarf plant with golden yellow foliage. It keeps its color the entire season and creates a very pleasing effect among other shrubs.

PRUNIFOLIA FLORE PLENO—A beautiful shrub from Japan, with double white flowers in May.

REEVESII, or LANCE-LEAVED—A charming shrub with narrow-pointed leaves and large, round clusters of white flowers that cover the whole plant.

DOUBLE LANCE-LEAVED—A beautiful double flowering variety. One of the best, if not the best.

Spiræa.

VAN HOUTTE'S (*S. Van Houttii*)—The most showy of all the *Spiræas*, and one of the very best flowering shrubs in cultivation. The plant is a rather tall, upright grower, with long, slender branches that droop gracefully with their weight of foliage and flowers. Flowers pure white in great clusters and whorls, forming cylindrical plumes two or three feet long. This is one of the hardiest of all the *Spiræas*.

Strawberry Tree (See *Euonymus*).

Syringa.

EUROPEAN FRAGRANT or "Mock Orange," (*Philadelphus coronarius*)—A well-known, very hardy shrub, with showy white flowers which are very fragrant.

LARGE FLOWERING (*P. Grandiflorus*)—Large showy flowers. A valuable variety.

GOLDEN-LEAVED (*P. foliis aureis*)—A beautiful new variety with bright yellow foliage, which affords pretty contrasts with other shrubs, especially with the purple-leaved varieties.

VARIEGATED—A magnificent new variety, with beautiful foliage, somewhat similar to the variegated *Althea*; very rare as yet. A great acquisition.

Weigela (*Diervilla*).

AMABILIS or **SPLENDENS**—Of robust habit; large foliage and pink flowers; blooms freely in Autumn; a great acquisition.

CANDIDA—Thought by some to be the best of all. Of vigorous habit, an erect grower, flowers pure white, produced in great profusion, in June, the plants continuing in bloom through the summer.

COCCINEA—A decided improvement upon *Floribunda*, being of the same intense deep red color, and of strong, upright growth.

DESBOISSI—A beautiful variety, with deep, rose-colored flowers, resembling *Rosea*, but much darker. One of the darkest and best.

FLORIBUNDA (*Crimson Weigela*)—The flowers are dark crimson, with white stamens projecting from them, reminding one somewhat of *Fuchsia* flowers. It blooms in the spring with other *Weigelas*; but if plants are topped off after young growth has been made, they bloom profusely in the fall. One of the best.

HORTENSIS NIVEA—Flowers pure white, retaining their purity during the whole time of flowering; foliage large.

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; blooms in May.

VARIEGATED-LEAVED (*Fol. Variegated*)—Leaves bordered with yellowish white, finely marked; flowers bright pink.

EVERGREEN SHRUBS.

RHODODENDRONS.

The *Rhododendrons* are magnificent flowering evergreen shrubs. They must have a peaty soil, entirely free from lime, and partially shaded location. Hence we cannot recommend them for general cultivation. The choice varieties require winter protection in this latitude. We import a limited number of choice colors.

TREE BOX.

The finest of all evergreen shrubs for the lawn and for cemetery planting. Especially adapted where but little space can be allowed. Perfectly hardy.

PÆONIES.

A splendid class of shrubs, flowering in all shades, from red and lilac to white, with blooms from four to eight inches in diameter. Many of them are very double, and have a delicate and refreshing fragrance; they are easily cultivated and require but little protection.

CLASS I.—PÆONIA MOUTAN. TREE PÆONIES.

P. Moutan—The parent species, is a native of China. The varieties are handsome flowering shrubs, attaining from six to eight feet in height, in about ten years, with proper care. The flowers are remarkably striking, of gorgeous colors, very numerous, and enormous in size, often measuring six to nine inches across, and appearing in May.

P. Banksii (Chinese Double Blush Peony)—Very large, fragrant flowers; rosy blush with purple center. One of the finest.

P. Alba Pleno—Double white, shaded with purple at the center.

CLASS II.—CHINESE HERBACEOUS PÆONIES.

These are beautiful, showy, and easily cultivated plants, blooming from the beginning of May till 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, varying from *pure white, pink rose, dark red, purple and deep rose.*

ANEMONE JAPONICA (Wind Flower.)

Red Flowering—A distinct and beautiful species; flowers $2\frac{1}{2}$ inches in diameter; bright purplish rose, with golden yellow centers, borne in great profusion from September to November. Height $2\frac{1}{2}$ feet; habit neat and compact; very desirable and effective as a pot plant, and in lines or masses in beds or mixed borders.

White Flowering—A distinct and beautiful variety of the preceding; flowers $2\frac{1}{2}$ inches in diameter; pure white, center golden yellow, borne in great profusion from September to November; very desirable and effective as a pot plant, and in lines or masses in beds or mixed borders.

Double White Flowering—New and beautiful, but rare as yet and expensive.

HARDY CLIMBING SHRUBS.

Ampelopsis.

AMERICAN IVY OR VIRGINIA CREEPER (*A. Quinquefolia*.)—A native vine of rapid growth, with large, luxuriant foliage, which in autumn assumes the most gorgeous crimson and purple coloring.

A. VEITCHII (Veitch's Ampelopsis)—Japan. Leaves a little smaller and more Ivy-like in form than the foregoing. Overlapping each other they form a dense sheet of green. It grows rapidly and clings to the surface of even a painted brick wall with great tenacity. The foliage is especially handsome in summer, and changes to a scarlet crimson in autumn. For covering walls, stumps of trees, rocks, etc., no plant is more useful or beautiful.

ROYALI—New. A larger and stronger variety than the preceding, otherwise quite similar.

Aristolochia or Dutchman's Pipe.

SYPHO—A rapid growing vine with magnificent foliage ten to twelve inches in diameter, and curious pipe-shaped yellowish-brown flowers.

CHINESE MATRIMONY VINE.

Chinese Matrimony Vine.

A vigorous, hardy climber. It will soon cover any desired space. It has dark green foliage and beautiful flowers and loads of small berries, which far surpass the Holly berries, which are seen in all parts of the country at Christmas time. The Chinese Matrimony Vine is regarded as indispensable where a hardy climber is desired.

Climbing Hydrangea.

A handsome, rapid-growing vine with almost the characteristics in flower and foliage of the *Hydrangea Paniculata*. It clings with tenacity to any object by which it may be planted, and attains a height of 50 feet, has large white flowers which remain a long time on the plant, making it conspicuous and desirable.

CLIMBING HYDRANGEA

Honeysuckle (*Lonicera*).

CHINESE TWINING (*Japonica*)—A well-known vine, holding its foliage nearly all winter. Blooms in July and September, and is very sweet.

COMMON WOODBINE (*Periclymenum*)—A strong, rapid grower, with very showy flowers, red outside, buff within. June and July.

HALL'S JAPAN (*Halleana*)—A strong, vigorous, evergreen variety, with pure white flowers, changing to yellow. Very fragrant, covered with flowers from June to November.

JAPAN GOLD-LEAVED (*Anra reticulata*)—A handsome variety, having foliage beautifully netted or variegated with yellow.

MONTHLY FRAGRANT (*Belgica*)—Blooms all summer. Flowers red and yellow. Very sweet.

SCARLET TRUMPET (*Sempervirens*)—A strong grower, and produces scarlet in-odorons flowers all summer.

Ivy, American (See Ampelopsis).

Ivy.

COMMON ENGLISH (*Hedera helix*)—The Ivy, being an evergreen, not very hardy, and suffering from exposure to the winter sun, should be planted on the *north* side of buildings or walls. It is very effective, grown in pots, for inside decoration.

Trumpet Vine (*Bignonia Radicans*)—A splendid climber, vigorous and hardy with clusters of large, trumpet-shaped scarlet flowers in August.

Wistaria.

CHINESE PURPLE (*Sinensis*)—A most beautiful climber of rapid growth, and producing long, pendulous clusters of pale blue flowers. When well established, makes an enormous growth; it is very hardy, and one of the most superb vines ever introduced.

CHINESE WHITE (*Sinensis Alba*)—Introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions. Rather tender.

CLEMATIS, OR VIRGIN'S BOWER.

CLEMATIS COCCINEA (SCARLET.)

BLIGHT PROOF.

The different varieties and species of Clematis now in cultivation are of the highest beauty and utility. They vary greatly in their foliage and flowers, and are adapted to various uses; some of them, such as our common native sort, (*C. Virginiana*), and the European (*C. flammula*), and *Paniculata* from Japan, are very fragrant, and are particularly attractive on this account. The large-flowered varieties,

like the well known *C. Jackmanni*, are extremely showy, and produce great numbers of their beautiful flowers. These plants are trained on trellises, and over porches and pillars. All are hardy, of easy growth, and will adapt themselves to nearly or quite all soils.

Coccinea—Distinct from other varieties; bright coral scarlet flowers. July to October.

Crispa—A handsome native variety, with nodding, bell-shaped, lavender-purple, fragrant flowers, which are an inch or a little more in length and breadth, with revolute sepals; very distinct.

Flammula (European Sweet)—The flowers of this variety are very fragrant; requires a slight protection in Winter; very desirable.

Paniculata—A native of Japan. A beautiful and rapid growing climber, which in a very brief time will cover any ordinary veranda. The flowers are small, pure white and delightfully fragrant and are borne in enormous masses, almost concealing the foliage. Entirely free from blight, and regarded as a great acquisition.

LARGE FLOWERING.

Alexandra—This is one of the continuous blooming sorts of real merit. The flowers are large and of a pale reddish violet color. Desirable. July to October.

Baron Willard—New. Flowers large and very abundant, and handsome rose color. One of the best of its class.

Belle of Woking—A fine new double variety of the Florida type; the color is a delicate tint of bluish-mauve or silver gray. A decided acquisition.

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

Duchess of Edinburg—This is one of the best of the double white varieties. The flowers are pure white, four inches across; very deep. They are also remarkably sweet scented.

Edward Andre—First seen in this country at the World's Fair at Chicago. Flowers large, abundant and a beautiful red. Beyond doubt the finest of its class, but scarce and very expensive.

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

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

Gem—A new and perpetual blooming variety. The flowers are of a deep lavender blue. June to October.

Henryi—This is the finest of all white Clematis, and should find a place in every collection. It is not only a vigorous grower—it is a remarkably free and continuous bloomer, beginning with the earliest and holding on with the latest. Flowers large, of a beautiful creamy white, with reddish chocolate anthers. Art cannot produce a picture corresponding in any degree to the wealth of beauty found in the flowers of this variety. Especially desirable. June to October.

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

- John Gould Veitch**—Sent from Japan in 1862. The flowers are very handsome, distinct, large, double, and of light blue or lavender color. It is like Fortunei, except in the color of the flowers. June and July.
- Lady Caroline Neville**—A remarkably fine variety of the Lanuginosa type, producing flowers successionally through the summer and autumn months. Color pale mauve, with lavender bar; anthers pale reddish-brown.
- Lanuginosa Candida**—A variety of the above, having large, delicately tinted, grayish white flowers, which become white after the flowers are fully expanded. One of the best. July to October.
- Lawsoniana**—One of the finest of all; a vigorous grower and continuous bloomer. The flowers are very large, often nine inches in diameter. Opening a rich, glistening, rosy purple, they gradually change to a mauve purple. June to October.
- Lucie Lemoine**—New. Flowers white, double, large and well formed; composed of 75 to 90 petals; very showy. June.
- Madam Grange**—A remarkable and vigorous-habited variety; flowers five inches across; of a rich, deep velvety, maroon-crimson, becoming purplish with age; having a red bar down the center of each sepal.
- Miss Bateman**—One of the most charming of the spring-flowering hybrids, having large white flowers, with chocolate-red anthers, and somewhat fragrant. May and June.
- Prince of Wales**—This is one of the very profuse flowering varieties of vigorous habit; showy and free. The flowers are of a deep purple with a red bar in the center of each flower leaf. First-rate for bedding as well as training up. July to October.
- President**—Deep, rich purple, shaded with plum. One of the best new Clematis.
- Ramona**—Said to be an American seedling of the Jackmanni type; one of the strongest growers; flowers lavender blue, similar to the Gem.
- Rubella**—One of the finest of the Jackmanni class, having the same habit of abundant and continuous blooming until frozen up. The flowers are large and of a deep velvety claret color; showy and effective. July to October.
- Star of India**—A very showy, very free flowering sort, with large flowers, first of a reddish plum color, changing to a violet purple, with turkey-red bar in the center of each flower leaf. A distinct variety of great merit. July to October.
- Velutina Purpurea**—This variety has great merit in being the darkest colored Clematis of the class. It has the vigorous, free-blooming character of the Jackmanni. The flowers are large and of a very rich blackish mulberry-purple color. New and choice. July to October.
- Viticella Venosa**—A beautiful Clematis of free growth. The flowers are above medium size; the color is a pleasing tint of reddish-purple, elegantly veined with crimson. July to October.

ROSES.

We are constantly adding the most promising new kinds to our list, and have one of the best grown and best selected stocks of Roses in the country.

Cultivation.—Roses require *plenty of manure and good cultivation*. Old and decayed branches and at least half the previous season's growth should be cut away early each spring, and a little cutting back after the first blooming will insure more late flowers. The so-called tender Roses must be carefully protected in winter by covering them with leaves and evergreen boughs; and the hardy sorts will be rendered more vigorous and productive of fine flowers, if they too, are similarly protected.

Insects.—If the "thrip" or fly appears, syringe the plants daily with a strongly steeped solution of tobacco stems (one pound of stems to five gallons of water), or a solution of whale oil soap (one pound of soap to eight gallons of water), until the insects are mastered. Rose bngs, which work at the flowers, must be picked off. The presence of the rose caterpillar can be detected by its glueing two or more leaves together to form a shelter. These leaves should be promptly pressed together with the thumb and finger. Insects which eat the leaves can be destroyed by applying White Hellebore when the foliage is damp. *The secret of success in destroying all species of insects lies in applying the appropriate remedy as soon as the insects appear.*

Our Roses are strong plants grown out of doors, well-rooted and every way desirable. They have already bloomed before being sent out, and are in every respect much better and stronger plants than the ones that are so fully advertised and sent out by mail, which are small, tender shoots, started in a greenhouse, and after a few weeks sent out, before they have established growth and constitution enough to stand the shock of transplanting.

CLASS A.--HARDY HYBRID PERPETUAL OR REMONTANT ROSES.

In this class are included the so-called "HYBRID NOISETTES," also a few of the "HYBRID TEAS." These two groups contain some very beautiful varieties, which cannot be omitted from any good list of Roses for outdoor cultivation, but as they are much more tender than the others in this class, they must be thoroughly protected in winter by a covering of forest leaves or other light litter. We also include the SUMMER ROSES (Hybrid China and others), blooming but once in the season, but very hardy and beautiful. As for the rest of this class, it comprises many of the most beautiful Roses in cultivation, and as they are hardy and easy of culture, with the desirable habit of producing a second crop of flowers in the autumn, they must be as a class the most popular and reliable for the multitude of planters. To insure their blossoming freely in the autumn, however, they must be cut back in the summer, and a portion of the first crop of flowers sacrificed.

The most of our Roses are propagated on their *own roots* from cuttings. They are never liable to throw up suckers of an inferior kind.

Alfred Colomb—Brilliant carmine crimson, very large, full, of fine globular form and extremely fragrant.

Anne de Diesbach—One of the best and most satisfactory Hybrid Perpetual Roses. A strong, vigorous grower, extremely hardy; producing very large, double flowers, of a lovely shade of carmine, and delightfully fragrant.

American Beauty—Large, globular; deep pink shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing, and may be found valuable for cultivation out of doors.

Augusta Mie—Delicate pink; finely cupped. A vigorous grower.

Baron de Bonstetten—Rich velvety maroon; large, full. A splendid sort.

Caprice—A true hybrid perpetual, perfectly hardy, a strong grower, a great bloomer. It has attracted a great deal of attention both on the Pacific coast and at the East. Valued chiefly as a novelty.

Caroline de Sansal—Clear delicate flesh color; fine form; a strong grower, and one of the best of its color.

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

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

Comtesse Cecil de Chabillant—Deep pink, of medium size; full, fragrant, of perfect globular form. A lovely rose; very hardy.

Coquette des Alpes—White, slightly shaded with carmine; form semi-cupped; wood long-jointed; larger flowers than the other. The strongest grower of the entire class.

Coquette des Blanches—Pure white, sometimes faintly tinged with pink; flowers of medium size, somewhat flat, but full and very pretty; growth more bushy and symmetrical than any of the others. One of the hardiest. Later than the rest in coming into flower, but continuing to produce immense quantities of beautiful white roses in large clusters throughout the season, until frost appears.

Countess of Oxford—A seedling from Victor Verdier. Bright carmine, fading in the sun; very large and full; not fragrant. Wood almost thornless; foliage very handsome, large and distinct. Fine in the bud; valuable for forcing.

Densmore—Scarlet crimson, large, double, very fragrant; free bloomer. One of the finest roses.

Duke of Edinburgh—Bright crimson, large double flowers, slightly fragrant. Foliage large and attractive. A free bloomer early in the season.

Earl of Dufferin—New and expensive. One of the finest roses of recent years, red and velvety crimson, shaded with dark maroon. Large flower, finely formed, vigorous grower. One of the very finest dark roses, and should be in every garden.

Earl of Pembroke—Soft, silvery crimson, shaded with bright red; large and full. A superb variety.

Fisher Holmes—One of the choicest of perpetual roses. Bush is vigorous and produces freely of superb blossoms. Color brilliant carmine crimson.

Franco's Levet—Cherry-red; medium size; well formed; one of the Paul Verdier style; very free bloomer and vigorous grower.

General Jacqueminot—Brilliant crimson, large and very fine; one of the handsomest and most showy roses of this color. Beautiful in the bud; semi-double when full blown. Of fine free growth; a universal favorite.

General Washington—Fine crimson; very full and double; a moderate grower; one of the handsomest of roses when well grown.

- Gloire de Margottin**—New. This is the brightest colored rose yet introduced, and is in every way a most desirable variety, being a good strong vigorous grower and free bloomer; good for either forcing or out-door culture.
- Jean Liabaud**—Fiery crimson: large and double; fragrant: one of the best dark roses; vigorous.
- John Bright**—Glowing crimson. Said to be the brightest rose yet raised.
- John Hopper**—A seedling from Jules Margottin, fertilized by Mme. Vidot. Bright rose with carmine center; large and full; light red thorns, not numerous. A profuse bloomer and standard sort.
- John Keynes**—A strong grower, and as hardy as any of the perpetual family. Flowers very large and fine; brilliant carmine. A splendid rose.
- Jules Margottin**—Bright cherry red; large and full; free flowering and hardy.
- La France**—Delicate silvery rose; very large and full; an almost constant bloomer; equal in delicacy to a tea rose; the most pleasing fragrance of all roses; only a moderate grower, but most desirable.
- La Reine**—Brilliant glossy rose, very large; cupped and beautiful; a very hardy, useful rose.
- La Rosiere**—Velvety crimson. A fine rose, excelling Prince Camille; petals with good substance.
- Leopold Premier**—Bright dark red; fine form; large, and a strong grower.
- Louise Odier**—Bright rose color, medium size, full; well formed and hardy.
- Louis Van Houtte**—Crimson maroon; medium size; sometimes large, full. A tender sort, but very free blooming, and, altogether, the best crimson rose we have. A moderate grower.
- Mad. Gabriel Luizet**—For loveliness in color, fragrance, size and freedom of blooming qualities, this rose has no equal to-day; equally good as a bedding rose out-doors. Pink, distinct, very large, cupped shape; somewhat fragrant. As an exhibition rose, will rank with its rival, Baroness Rothschild.
- Madame Plantier**—Pure white; medium size, full; flowers produced in great abundance early in the season.
- Marie Rady**—Vermilion, shaded with crimson; large, very full, of fine globular form. A fragrant, superb sort, but a shy bloomer in Autumn. A free grower.
- Magna Charta**—Bright pink, suffused with carmine; very large, full and fragrant, with magnificent foliage. A free bloomer. For the earliest deep color is still the best.
- Marshall P. Wilder**—Raised from the seed of the Gen. Jacqueminot. It is of vigorous growth, with healthy foliage; flowers large, semi-globular, full, well formed; color, cherry-carmine. In wood, foliage and form of flower, it resembles Alfred Colomb.
- Maurice Bernardin**—Bright crimson, large, moderately full; a good free-flowering sort, often coming in clusters.
- Mrs. John Laing**—New. As a bedding rose this is undoubtedly one of the best varieties yet introduced, being hardly ever out of bloom all summer. Color, a beautiful shade of delicate pink; of large size and very fragrant. It is also a good forcer from January onwards.
- Mereville de Lyon**—Pure white, shaded and marked with satin; flowers very large, double and of beautiful cup shape. A seedling from Baroness Rothschild. A *superb variety*.
- Madam George Bruant**—A seedling from the Japan Rose, Rosa Rugosa and tea rose, Sombrioul. From these it gets its exquisite sweetness and its ever blooming character. Considered by the best judges to be of *great value*.
- Pæonia**—Red; large or very large; fragrant, and a free bloomer. A good garden variety.

MADAM GEO. BRUANT.

- Paul Neyron**—This magnificent rose by far the largest variety in cultivation; very double and full, of a beautiful deep rose color, and delightfully fragrant, borne upon vigorous upright shoots in great abundance throughout the entire season. We recommend this variety very highly for general planting, as it is calculated to give more satisfaction to the masses than any other known variety.
- Persian Yellow**—Deep, bright yellow; small but handsome; double; a very early bloomer, and much the finest hardy yellow rose.
- Pierre Notting**—Blackish red, shaded with velvet; globular in form; very large and full, and one of the finest dark roses. Needs some winter protection.
- Pius IX**—Deep rose, tinged with carmine; large and full; a robust grower and profuse bloomer.
- Prince Camille de Rohan**—Deep velvety crimson, large, moderately full. One of the darkest in cultivation, and a splendid rose.
- Queen of Queens**—Pink, with blush edges; undoubtedly the finest rose of its color; extra free flowering.
- Sydonie**—Light rose, large and distinct; buds especially fine; a strong grower, producing magnificent foliage and an abundance of flowers.
- Ulrich Brunner**—A superb rose; a seedling from Paul Neyron; extra large, bold flowers; full and globular; petals large and of good substance; color, rich glowing crimson, elegantly lightened with scarlet; fragrant.
- Victor Verdier**—Fine, bright rose, shaded with carmine; very hardy and a fine bloomer; a splendid rose.

HARDY CLIMBING ROSES.

- Baltimore Belle**—Pale blush, nearly white; double; the best white climbing rose.
- Gem of the Prairie**—Carmine crimson, occasionally blotched with white; a cross hybrid between Madame Laffay and Queen of the Prairie.
- Greville, or Seven Sisters**—Crimson, changes to blush; flowers in large clusters; not as hardy as others.
- Mary Washington**—One of the hardiest of the ever-blooming climbers; a remarkably free bloomer, producing medium sized pure white flowers in large clusters. An extra strong grower when established.
- Eugene Verdier**—New and very promising.
- Queen of the Prairie**—Bright rosy red, frequently striped with white; large, compact and globular.

MOSS ROSES.

- Countess de Murinais**—Pure white; large; very desirable; the finest white moss.
- Crested**—Deep pink buds, surrounded with mossy fringe and crest. Very beautiful and fragrant; growth slender.
- Glory of Mosses**—A moderate grower. Flowers very large; appear to best advantage when full; color pale rose.
- Luxembourg**—Deep crimson; fine grower.
- Madam Alboni**—Pink; very large. A beautiful and desirable sort.
- Princess Adelaide**—A vigorous grower; pale rose, of medium size and good form.
- Perpetual White**—Pure white.
- Salet**—A vigorous grower and perpetual bloomer. Light rose, large, full. The best of the class. A true perpetual moss, blooming at intervals from June until November.
- White Bath**—White, sometimes tinged with flesh; attractive in bud and open flower. This is by far the best white moss.

CRESTED MOSS.

PERPETUAL TENDER ROSES.

Under this head we include all classes of Tender Roses—Bourbon, China, Noisette and Tea, and indicate the class to which each variety belongs with the letter B, C, N, or T, respectively.

Agrippina (C)—Red, velvety crimson; moderately double; fine in buds; valuable for planting out. One of the best.

Bon Silene (T)—Rosy carmine, shaded with salmon; fragrant and very free flowering. Valuable for the buds.

Catherine Mermet (T)—Bright flesh color, with the same peculiar lustre possessed by La France. Large, full and beautiful. One of the finest teas.

Cornelia Cook (T)—Pale yellowish white, tinged with flesh. A superb rose when well grown.

Douglass (C)—Crimson; medium size; semi-double; fine buds.

General Tartas (T)—Deep crimson; often mottled; of special value for its buds.

Gloire de Dijon (T)—(Climber)—A combination of salmon, orange and buff; flower large and of good globular form; hardy.

Hermosa (B)—Bright rose; *a most constant bloomer*; hardy; one of the best.

Madam Welch (T)—Pale yellow, orange center. Large, full, of good form.

Marechal Niel (N)—Deep yellow; very large; very full, globular; highly scented. Requires careful treatment. It should be severely pruned. The finest yellow rose.

Niphotos (T)—Pale yellowish-white, often snowy white. Long, large buds. Very beautiful.

Papa Gontier (T)—Rose shaded yellow, reverse of petals crimson; large, semi-double, fragrant, free growing, profuse flowering; very popular for winter forcing.

CLOTHILDE SOUPERT.

Perle des Jardins (T)—A beautiful straw color, sometimes deep canary; very large, full, and of fine form; stiff shoots or stems, and very free flowering. Now established as the most popular yellow rose for forcing.

Safrano (T)—Safron and Apricot. A very free bloomer. One of the oldest and best varieties, especially when used in the bud state.

Souvenir de la Malmaison (B)—Pale flesh, with a fawn shade; very large; showy, beautiful. An old favorite.

Sunset (T)—A sport from *Perle des Jardins*. Identical in every respect with that variety except that its color, instead of being a canary yellow, is of a rich, tawny shade of saffron and orange.

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

POLYANTHA ROSES.

This charming class is from Japan, and of recent introduction. The foliage and flowers are very small, the latter being produced in clusters. They are of slender growth and producing extremely beautiful little flowers. They are quite as hardy as many well known varieties that are considered perfectly hardy. We offer four of the choicest.

Cecil Brunner—Salmon pink, deep scarlet center. Very small flower, delicately scented.

Clothilde Soupert—Medium sized, very double, produced in clusters; pearly white, with rose lake center, sometimes producing red and white flowers on same plant. Considered one of the best, if not the best of this class.

Parquette—An old standard white variety; flowers pure white, about an inch in diameter. Flowers in clusters from five to fifty blossoms.

Perle d'Or—Naukeen yellow, with orange center. Bush very branching, blooming in clusters of twenty to thirty flowers.

HEDGE PLANTS.

Hedges are valuable as a defense against animals, as wind brakes to protect orchards, gardens or farms unduly exposed, and as ornamental fences or screens to mark the boundaries of a lawn or cemetery lot.

HEDGES FOR DEFENSE AND ORNAMENT.

Honey Locust—For turning cattle and as a farm hedge, is much the best in the Northern States. It is of vigorous growth, perfectly hardy; thrives with ordinary care, and is sufficiently thorny to be impenetrable. It bears the shears well.

Quince, Japan—See description, page 65.

Osage Orange—In the South and Southwest is in great favor. Too tender for this climate.

HEDGES FOR WIND BRAKES.

Norway Spruce is the best. Its vigorous habit, rapid, dense growth, when properly sheared or pruned, large size and entire hardiness, are characteristics not easily obtained in any other evergreen.

American Arbor Vitæ comes next. Belts of *Pinus* are also useful as a protection.

ORNAMENTAL HEDGES OR SCREENS.

American and Siberian Arbor Vitæ, Norway Spruce, and especially **Japan Quince** and **Purple Berberry**, all described in their appropriate places in this catalogue, make beautiful screens or hedges.

Privet, California—A pretty shrub with smooth, shining leaves and spikes of white flowers, also makes a beautiful hedge. Perfectly hardy.

INSECT ENEMIES AND HOW TO DESTROY THEM.

About fifteen years ago—it was the first season in which the apple worm (coddling moth) made its first grand raid on the orchards of Western New York—we visited the celebrated orchards of Hon. T. G. Yeomans, at Walworth, N. Y., and asked Mr. Yeomans what would be the result to fruit growers of this invasion of insect enemies. He replied: “The intelligent, energetic fruit grower will soon learn to destroy these pests, will get good crops of choice fruit, which will net him a much higher price than would be possible, if the insect enemies to the fruit crop had never appeared.” This prediction has been fully verified in every part of the country, so that it is now perfectly understood that there is absolutely no difficulty in growing all sorts of choice fruit absolutely free from worms and other defects.

We embody in the following pages brief but plain descriptions of the various insects which attack different classes of trees and plants, and in each case the best known remedy. **Our directions can be relied upon implicitly, and we need only ask our friends and customers to follow the directions in each case to the letter.**

DIRECTIONS FOR PREPARING THE REMEDIES.

Paris Green.—This poison is used either in solution or dry form. In solution, one pound is mixed with from 100 to 300 gallons of water, the strength depending on the plant sprayed and the insect to be destroyed. The poison should first be mixed with enough water to form a paste, after which the full quantity may be added. It is always best to add one or two pounds of lime for each pound of the green, as the danger to foliage will be much lessened thereby.

Paris Green alone is sometimes applied in dry form. It is best, however, to mix each pound with ten pounds of flour or plaster. The liquid is much less objectionable, and we would in all cases recommend it.

London Purple.—What is said under Paris Green is applicable here, as both poisons are used in the same way.

Kerosene Emulsion.—Take common bar soap, one-half a pound, water one gallon, and kerosene two gallons. Shave the soap into the water, then heat the whole until all the soap is dissolved: add the soap liquid, boiling hot, to the kerosene, and churn for ten minutes by pumping it back into itself; when cool the emulsion should have the consistency of thick cream or soft butter, this depending somewhat on the kind of soap used.

Lime, Whale Oil Soap, Soft Soap, Carbolic Acid, Pyrethrum and Hellebore.—The manner of preparing and applying these will be given under insects for which they are used.

INSECTS AFFECTING THE GRAPE.

THE FLEA BEETLE.

This small steel-blue insect appears in early spring, and at once begins eating the tender foliage. After eating about a moment the female beetle deposits small, yellow eggs on the foliage. These soon hatch into small larvae, which continue the work of destruction.

REMEDIES.—Spray with Paris Green, one pound, and one and a half pounds lime to 200 gallons of water, as soon as the beetles are noticed. Two applications of this solution, at intervals of a week or ten days, will usually destroy all the insects.

THE ROSE BUG.

It makes its appearance early in the summer, devouring flowers, young fruit and leaves. The beetle is about half an inch long, and of a brown color.

REMEDIES.—The best results have followed the use of pyrethrum, which should be applied in solution at the rate of one ounce to two gallons of water.

INSECTS AFFECTING THE APPLE.**THE CODDLING MOTH.**

The little white caterpillar, whose effects are so familiar to everyone, is the larvae of a small, nocturnal, gray moth. The moth deposits her egg on the blossom end of the fruit. As soon as the eggs hatch the larvae eats its way into the young fruit; the rest of the story is well known to everyone.

REMEDIES.—Spray the trees with Paris Green or London Purple at the rate of one pound to 250 gallons of water, and add one-and-a-half pounds of lime, first when the flowers are falling and again when the fruit is the size of peas.

THE CANCKER WORM.

This measuring worm eats the green portion of the leaf, giving the tree a brownish color as though scorched by fire. The worms appear in early spring and when full grown are an inch long.

REMEDIES.—Spray the trees when the leaves are one third grown with Paris Green solution, one pound to 200 gallons of water, and add one-and-a-half pounds of lime. Usually one spraying will be sufficient, but if the worms appear to be on the increase, a second application will be advisable.

APPLE TREE TENT-CATERPILLAR.

The large silken nests made by this insect are familiar to everyone. The caterpillars appear in May or June, and in five or six weeks have reached their full size.

REMEDIES.—Cut out and burn the nests as soon as they are seen, taking the precaution to do this in the morning when the caterpillars are all in. This, together with one or two sprayings of Paris Green solution, having a strength of one pound to 200 gallons of water, and add one-and-a-half pounds of lime, will effectually rid the trees of the pest.

THE APPLE APHIS.

Apple trees are often attacked early in the season by this insect. The lice are quite small and green in color. By sucking the juices from the young growth they greatly interfere with the functions of the latter, and as a result the tree has a sickly yellow appearance.

REMEDIES.—Spray with kerosene emulsion at the rate of one gallon to twenty of water, as soon as the lice appear. Repeat the treatment in eight or ten days if necessary. A decoction made by soaking over night four or five pounds of tobacco stems, or refuse tobacco of any kind, in five gallons of water, will also be found an excellent remedy against the lice.

THE OYSTER SHELL BARK LOUSE.

There is frequently seen on the trunks, branches and twigs of the apple tree small whitish shells resembling in shape those of an oyster. Under these shells are numerous small lice busily engaged in sucking the sap from the tree.

REMEDIES.—Scrape the trees thoroughly in spring before the leaves appear and then paint the trunk and large limbs with a thick solution made by dissolving one quart of soft soap in half a gallon of hot water. Two ounces of crude carbolic acid added to this will also increase its efficacy. Make no further treatment until the middle of May, when kerosene emulsion, one gallon to twenty-five gallons of water, should be applied. It is always best to apply the emulsion soon after the lice hatch, the time being determined by closely examining the scales.

INSECTS AFFECTING THE PEACH.**THE BLACK APHIS.**

Numbers of this small, shiny black insect may be seen in the spring on the leaves and twigs of the peach. The lice often do a great deal of damage above ground as well as below on the roots.

REMEDIES.—For the form above ground, spraying with kerosene emulsion, one gallon to thirty-five gallons of water, is the most effective remedy. The first spraying should be made as soon as the lice appear; if necessary this should be followed by others at intervals of a few days until the trees are rid of the pest. Under the ground the lice are best destroyed by digging in tobacco stems or dust among the trees. The tobacco is scattered on the ground to a depth of half an inch or more, then dug in with a spade or fork.

PEACH YELLOWS.

This is one of the few diseases as to which very little is positively known, except its effects. It usually makes its appearance about mid-summer, causing the foliage of the tree to turn yellow, and soon thereafter the body and larger limbs will throw out a considerable number of weak, yellow leaved suckers. If the tree is loaded with fruit it will be under size, little or no flavor, and ripen prematurely.

REMEDIES.—The moment that you feel sure that a tree is affected with yellows, dig it up root and branch and burn it, and plant any tree that you like, other than a peach, in its place.

The Peach Yellows has played such havoc with the peach orchards in Maryland, Delaware, New Jersey, and parts of Virginia, as well as with the blocks of young growing trees in the nurseries in those States, that in many parts of the country where, unwittingly, planters have purchased Southern grown peach trees, the yellows has appeared from time to time and caused a degree of consternation among farmers that they never would have felt if they had confined their purchases of peach trees to Northern grown stock. It is quite seldom that we see, in Western New York, even a single tree affected with the yellows, and in an active experience of over thirty years we have never seen, in any New York nursery, a single tree that was so affected.

INSECTS AFFECTING THE PEAR.**THE PEAR TREE SLUG.**

This insect attacks the leaves, eating away the green portion, so that nothing remains but the parchment-like tissue and the veins. It appears usually the latter part of June and again in August.

REMEDIES.—Spraying with a simple solution or milk of lime, made by mixing two pounds of lime in twenty gallons of water, will often rid the plants of this pest. The first application should be made as soon as the slugs are noticed; if necessary others should follow in a week or ten days. By adding a little Paris Green, say one ounce, to the lime milk the latter will be made more effectual.

THE SCURFY BARK LOUSE.

This insect resembles the Oyster Shell Bark Louse, already described as attacking the apple.

REMEDIES.—The method of dealing with the Oyster Shell Bark Louse should be followed in this case.

PEAR BLIGHT.

A good many theories have been devised to account for this disease, and scores of remedies, which by their originators were believed to be efficacious. But it is understood by the best authorities, both practical and scientific, that the cause of the disease is absolutely unknown, and that there is but one certain remedy, namely, to cut out the blighted parts promptly on appearance of the disease and burn them. Fortunately, Pear Blight seldom visits us oftener than once in twenty or thirty years, and in orchards where the knife and saw has been used promptly on its appearance, but trifling damage has resulted. On our own grounds we had a visit of this disease about fifteen years ago. We promptly removed every limb that was affected, perhaps a dozen in all, and from that day to this we have not so much as seen a blighted pear tree either on our own grounds or on the grounds of our neighbors.

INSECTS AFFECTING THE PLUM.**THE CURCULIO.**

This little grub originates from eggs deposited by a small, dirty, gray beetle when the flowers are still small.

REMEDIES.—The most reliable way now known of dealing with the Curculio is to spray with Paris Green. The first application should be made when the flowers are falling, using a solution made by mixing one pound of Paris Green in 200 gallons of water and adding one and a half pounds of lime. In a week or ten days make a second application, and follow this by another after the lapse of some length of time.

THE PLUM TREE APHIS.

This insect resembles the one occurring on the peach, and, like it, may be destroyed by spraying with kerosene emulsion made by mixing one gallon of the concentrated emulsion in twenty gallons of water.

BLACK KNOT.

The most scientific as well as practical fruit growers in the country are by no means agreed as to the cause of Black Knot on plum and cherry trees, but they are entirely agreed as to the only known remedy, namely, just as soon as the Black Knot appears, cut it out, removing the branch at least two inches below where the knot appears. Burn the affected parts, and follow this method promptly, thoroughly and in ninety-nine cases out of a hundred you will have exterminated the disease before it has done serious damage.

INSECTS AFFECTING THE CHERRY.

The Cherry is injured by Plant Lice resembling those occurring on the peach or plum. The Pear Tree Slug also attacks the leaves, while the fruit is infested by the Plum Curculio.

REMEDIES.—The remedies given under peach and pear insects should be adopted in this case.

BLACK KNOT.

Cherry Trees are affected with Black Knot the same as plum trees, and the same remedies should be used.

INSECTS AFFECTING THE CURRANT AND GOOSEBERRY.**THE CURRANT WORM.**

The perfect form of the worm is a small fly, which lays its eggs on the leaves in early spring. As soon as the eggs hatch the worms eat circular holes in the foliage. As the worms increase in size they become more voracious, often riding the leaves.

REMEDIES.—As soon as the worms are seen, spray the plants with a solution made by mixing one ounce of hellebore in two gallons of water.

THE CURRANT APHIS.

The insect attacks the leaves, causing them to curl and turn brown. The lice are usually abundant in early summer, but as hot weather advances they disappear.

REMEDIES.—Spray with kerosene emulsion, one gallon to twenty gallons of water, as soon as the lice are noticed.

INSECTS AFFECTING THE ROSE.**THE ROSE BUG.**

The same as sometimes attacks the grape.

REMEDIES.—The same.

THE GREEN APHIS.

The same that attacks the apple.

REMEDIES.—The same.

THE BLACK APHIS.

The same as attacks the peach and other trees.

REMEDIES.—The same.