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Oregon Nursery Co. *Indy* LIMITED

DESCRIPTIVE CATALOGUE

1903 & 1904

1920

Verde, Propaganda, et al.

THE GREAT
ORIGINATOR
LUTHER
BURBANK
AND HIS
GRAND
PLUM
MAYNARD.

SHOWING
TREES
FRUITING
AT TWO
YEARS
GREATEST
PLUM
ON EARTH.

TWO YEAR OLD TREES OF **MAYNARD PLUM**, A BASKET OF RIPE FRUIT AND
LUTHER BURBANK, THE ORIGINATOR, IN THE BACKGROUND.

Whom it May Concern:

This is to certify that I have, under royalty contract, assigned to the **Oregon Nursery Company**, of Salem, Oregon, the sole right to propagate and introduce my new Plum, **Maynard**, and that no other person has ever received any buds or scions, or have any right to propagate or introduce the **Maynard**, except under contract from the **Oregon Nursery Company**. I consider the **Maynard** one of the best Plums that I have ever introduced.

Dated at Santa Rosa, California, this first day of December, 1902. (Sgd) LUTHER BURBANK.

SALEM, OREGON.

ESTABLISHED 1867.

INCORPORATED 1900.

OREGON NURSERY CO.'S

DESCRIPTIVE CATALOGUE

OF

Fruit and Ornamental Trees

— GRAPE VINES, SMALL FRUITS,
SHRUBS, PLANTS, ROSES, ETC.

FOURTH EDITION.

SALEM, OREGON.

COPYRIGHT 1903 BY OREGON NURSERY CO.

Notice to Customers.

1. Orders should be sent in as early as possible, that there may be plenty of time for shipping long distances when necessary.

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

3. Give plain and explicit shipping directions. When none are given we forward according to our best judgment; but in no case do we assume any responsibility after the delivery of stock in good condition to the forwarder.

4. All orders from unknown correspondents must be accompanied with the cash or satisfactory references.

5. If the varieties of fruit ordered cannot be supplied, others equally as good, and ripening about the same season, will be substituted, unless ordered to the contrary.

6. We recommend that purchasers leave the selection of varieties with us, as far as possible, merely stating the proportion of Summer, Fall and Winter fruit wanted, as our experience enables us to select such sorts as are adapted to the locality.

7. Immediate notice should be given to us of any error in filling out an order, so that we may at once rectify the mistake, or give a satisfactory explanation.

8. As we guarantee the freight on all shipments leaving our establishment, it will be necessary for unknown parties to remit the money with their orders. Orders to be sent by express, C. O. D. must be accompanied by at least one-half the amount in cash, otherwise they will receive no attention.

All communications to be addressed to

OREGON NURSERY CO., (LIMITED)

SALEM, OREGON.

Introduction.

WE TAKE PLEASURE in presenting a new edition of our Descriptive Catalogue, carefully revised and corrected by the addition of descriptions of our 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. Our old customers will notice a large increase in the number of ornamentals listed, although we have been growing many of them on trial for years.

The continued patronage of our friends, as shown by their frequent and increasing orders, assures us that our efforts to please them are appreciated. This will stimulate us to still greater efforts, and will warrant us in making expenditures necessary to secure the best results.

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.

While this demand is stimulated in part by a knowledge of the great profits which result from the systematic planting and careful cultivation of many kinds of fruit, it is by no means limited to this incentive. In every rank and station in life, including the humblest and the most opulent, those residing in town and country, people are beginning to see that nothing can add so much to the comforts of living as a constant supply of the best varieties of the different fruits for home use, and that nothing will do so much to adorn their homes, gratify a sense of the beautiful, and produce refinement in their families as the planting of such well selected varieties of ornamental trees, shrubs, roses, clematis, etc., as the ground about their houses will permit.

Some persuade themselves that the demand for fruit and fruit trees has already reached its limit, but when we remember to what an extent canning and the improved methods of factory drying (still in their infancy) have increased the domestic consumption of different fruits, by rendering them nearly as good as fresh throughout the year, and that by means of these processes and improved facilities for shipping fresh fruits, the fruits of the United States can, and are beginning to be exported to the remotest quarters of the globe, to supply the wants of the millions upon land and sea who have hitherto been deprived of such luxuries, no one can doubt, that the setting of trees and plants for the production of large and small fruits, at a much better profit than can be derived by ordinary farm crops, is also in its infancy.

We would not tempt the uninitiated with the promise of a large fortune in a few years, without labor or trouble, but we do say that the business of fruit growing, conducted with energy, perseverance and intelligence, will bring an ample and sure reward.

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.

We devote our personal attention to every branch of our business. We aim to include in our assortment the best varieties in each class, for market and family use, and persons ordering from us may rely upon our giving careful attention to their interests.

Our Office and Packing Houses are located on 12th and State Streets, one block north of the Southern Pacific depot, and nearly opposite the State Capitol. Being also located on a switch of the Southern Pacific, we have special facilities for packing, and the Oregon Railroad & Navigation Co., and Oregon City Transfer Co., have docks about one-half mile distant. We are always pleased to show our customers over the grounds and nurseries.

Our Nurseries are located on Salem Prairie, the largest plant being north of the Oregon Insane Asylum, east of the State Penitentiary and the ornamentals largely grown within the city limits, about one-fourth mile north of the State Capitol. The soil is peculiarly adapted to the growth of high-grade nursery stock, without the aid of irrigation, the rain fall in winter being sufficient to supply the ground with moisture, which keeps the trees growing steadily through the summer season. The trees are neither forced nor stunted, but continue to grow steadily from the first of April until the first of September, when the wood begins to ripen and has a long season in the fall to mature before the cold weather sets in. In fact, we never have any cold weather as compared with the eastern winters in the same latitude. The temperature of the Willamette Valley varies very little throughout the year, as will be seen by the sub-joined table, taken from the Oregon State Weather Bureau, of the Department of Agriculture, 1894:

TEMPERATURE AND RAIN FALL AT SALEM.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Mean Temperature.	38.9	42.4	46.3	48.7	56.5	61.3	64.3	66.3	60.9	52.4	48.8	44.0
Mean Precipitation.	5.91	3.87	5.86	5.32	2.72	1.22	0.19	0.05	3.55	7.49	4.40	5.13

CLIMATIC INFLUENCES ON NURSERY STOCK.

But few people not directly engaged in the business of growing nursery stock, understand the importance of climatic advantages in the production of trees, while a great many believe it is necessary to have a cold, rigorous climate to produce a hardy tree. Such is a mistake. In all sections of our country where the mercury goes below zero, the growing season is short, hence the necessity of forcing the young trees in the nursery rows. Then, too, often hard frost sets in before the tree has thoroughly ripened its wood, and "black heart" takes hold of it, so that while it grows and seems to do fairly well for a few years, the disease is working in the heart, and sooner or later it will break off with the wind, all on account of the young tree, (the first year from the bud) not having time to ripen and mature its wood, before freezing begins. "Black Heart" is a disease that has never troubled the trees grown at Salem. And why? Because our growing season is long and the trees do not have to be forced. Then after the growth has stopped in the fall there is a long season of mild weather, extending over the months of September, October, November and most of December, before there is any frost, giving the trees ample time to ripen and mature the young wood.

SOIL.

Soil containing chemical properties necessary to produce, not only a vigorous wood growth, but plenty of fine, fibrous roots, is essential to the production of a strictly first-class tree.

It is a peculiar fact, that there are few places in the United States where the soil contains all the necessary properties, together with a climate where all the conditions are just right for the growing of Nursery Stock. In the soil of Salem Prairie and the climate of the Willamette Valley, there is just the proper combination, and here we grow Nursery Stock to the very highest point of excellence. The soil of Salem Prairie is a naturally drained, deep, marley, black, clayey loam. Being deep and loamy, it stores up great quantities of moisture through the rainy season which can be held with thorough cultivation, throughout the dry part of Summer, furnishing the young rootlets enough moisture to keep them growing vigorously all through the season, (even in years when we have no rains for several months). Hence the reason for the magnificent system of roots on our trees. We believe this one point (fibrous roots) has done more than any other to make our trees famous throughout the Pacific Coast States. From Southern California to British Columbia, and even east of the Rocky Mountains, we often get praise for the fine system of fibrous roots on our trees.

OUR SYSTEM OF GROWING TREES, BUDDED OR GRAFTED ON WHOLE ROOT SEEDLINGS.

In the Spring, we plant out in the nursery rows, one-year No. 1 seedlings, six to eight inches apart, and four feet between the rows. "Fig. No. 1," shows the one-year-old seedling before it is transplanted into the nursery rows.

These are grown until August, when budding is done. The following spring they are all carefully gone over by practical and skilled workmen, and wherever it is found that a bud has failed to live, the seedling is cut down and stump-grafted. At the same time all the seedlings are cut down to the dormant bud that was put in the previous August, as is shown in "Fig. 2."

On account of the failure of some buds to grow we have to graft them over. Our grafted trees are just as good as the budded ones, having the same roots to grow from. Do not confound our grafted trees with the piece-root grafted tree, which is made in the following manner:

A one-year-old seedling is taken and all the fibrous roots are trimmed off. It is then cut into pieces two to three inches long, and a scion of the same length is grafted on. This is a piece-root graft as is shown in "Fig. 3." Four and five piece-root grafts are sometimes made out of one seedling.

Any one can readily see that trees grown as shown in "Fig. 3," can never have the same system of fibrous roots that our trees have, grown as they are on whole-root seedlings, the roots having three full summers' growth when the tree is one year old, as is shown in "Fig. No. 4."

Compare our one-year budded or grafted tree, as shown in "Fig. 4," with the one-year piece-root tree shown in "Fig. No. 5."

From the above description and cuts the superiority of our trees grown from whole-root seedlings, can readily be seen.

THE ART OF CULTIVATION

is but improperly understood by the public generally, and too often, men try to grow nursery stock who do not understand the importance of thorough cultivation in order to bring plant life to its best perfection, thinking that if they merely keep the weeds cut off, and the soil stirred to the depth of a couple of inches once a month, they are cultivating their nurseries. The result of such cultivation is stunted trees, no fibres, only a single tap root. In order to give our customers an idea of cultivation, as we understand it, and as we practice it in our nursery, it will be necessary to begin at the beginning of the preparation of the soil for nursery planting. The first operation is to thoroughly summer fallow the land the year previous to planting,

Fig. No. 1.
One-year No. 1
Whole Root
Branched
Seedling.

Fig. No. 2.

DORMANT BUD IN TWO-YEAR WHOLE-ROOT SEEDLING.

Fig. No. 3.

FOUR PIECE ROOT GRAFTS MADE FROM ONE SEEDLING. (See page 5.)

breaking the soil up to the depth of fourteen to sixteen inches with a sub-soiler, laying a foundation for our root-bed, and creating a natural reservoir in the ground to store up moisture through the dry weather in summer. After the ground has been thoroughly summer-fallowed the season before, we begin planting out the seedlings usually in February with No. 1 whole-root seedlings (not piece-root grafts like some nurserymen plant). These seedlings begin to make fibrous roots early in March, and by the first of April, spring cultivation begins. We use a two-horse cultivator, running the shovels to the depth of eight to ten inches close up to the seedlings, then following with a fine pulverizer until the ground is thoroughly broken down. This operation is continued once each week until budding season, which usually begins August 1st. After that no more cultivation is done, the balance of the season being left for the trees to thoroughly ripen and mature their wood.

PLANT YOUNG TREES.

Plant one-year-old trees having a three-year-old root with no superfluous top branches to be sustained, when transplanted into the orchard.

In support of our plea for one-year-old trees, we quote from the following "Report of the Oregon State Board of Horticulture, 1894, page 123:"

SELECTION OF NURSERY STOCK.

"An important factor in the future welfare of the orchard is the selection of trees from the nursery. Care should be taken that the trees are straight, healthy and one year old, (that is one year from the bud or graft), and supplied with a good system of fibrous roots. The reason for preferring year old trees to older ones is, that while the older ones have taller tops and larger bodies,

they have about the same amount of fibrous roots to supply them with nutriment when taken from the nursery. Many of the roots are injured by the cultivators, and many of the little fibres are destroyed when the tree is removed from the nursery row. If a part of the root system is destroyed in removing the tree, a portion of the top must be removed or the tree will have more wood than it can support; so there is nothing gained by growing a big top.

The sap from the root goes into the trunk and branches. The continued growth of trunk and branches requires all the nutriment that the tree can produce, so that each year that the tree remains in the nursery row the less chance have the roots to spread and grow, and when the tree is planted it has no advantage over the younger tree in making a quick and vigorous growth. In fact, it often requires nearly a season to start, owing to the inability of the roots to supply the necessary nourishment from the soil. In cutting the tree down to the height required for forming the crown, much of the growth is lost. The year-old tree, when cut to the proper height, makes a rapid and vigorous growth of trunk and branches without detriment to the roots, for upon careful examination of the latter it will be found they have put out fibrous roots and are growing in proportion to the top. Another reason for selecting one-year-old trees is, that a larger tree receives a greater shock when transplanted, from which it is longer in recovering. It is the little fibres that immediately begin drawing from the soil the tree's nourishment, which is then transmitted to the larger roots and through them to the body of the tree. Roots covered with a hard bark draw but little moisture from the soil. In fact, it takes an entire season to make any progress at all, and in many instances the tree languishes throughout the spring and summer, finally dying in the fall. Careful attention to these points will do much towards insuring a good growth."

SPRAYING.

It is now a well-known fact that spraying fruit trees with "Bordeaux Mixture" has a beneficial effect upon the growth of the tree, aside from its efficiency as a fungicide and insecticide. That this fungicide exerts an influence on the functions of certain plants, wholly independent of any action resulting from the prevention of fungous or other parasites, has been demonstrated beyond a doubt.

Fully realizing that those who will succeed in the nursery business must grow their trees by the most approved methods we have begun spraying all our nursery stock with that famous mixture, beginning with the seedlings the first year, and continuing the operation several times throughout each season, until the trees are ready for market, and as a consequence the "Spray Pump and Bordeaux Mixture" has become as much the work of our nursery as running the cultivators.

HINTS ON 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 Before Planting.—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 planting, no permanent injury will result from this, but in cases of branched, or trees older than one year, the preservation of the natural balance, between tops and roots, renders a vigorous cutting of the former absolutely necessary in most cases. 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 year'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. One year old trees, where there is but one straight stock, should be cut down to the height desired for forming the head.

Evergreens and other ornamental trees, the

beauty of which depends on preserving the 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 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 any cramping or bending, and deep enough to bring the tree to its natural depth. The fine surface soil should be used in 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, so that there will be no opportunity for dry air or frost to enter and destroy roots deprived of the full benefit of their natural protection.

Fig. No. 4.

Average Size One-year
Tree from Bud
(See page 5.)

Fig. No. 5.

Average Size One-year
Tree from Piece-root
Graft. (See page 5.)

Omission to pack the earth solidly is a more frequent cause of failure in planting nursery stock than any other. Fill the holes full enough to be even with the surrounding surface after the fresh earth settles. Never use manure in contact with roots. Large standard trees should be staked and tied so that the wind will not loosen the roots.

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 applications 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 buds 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 in the spring.

Injured Trees.—If trees are received in a frozen state, place the package unopened in a cellar, away from frost and heat, until thawed out, and then unpack. If partially dried from long exposure, bury entirely in the ground, or place in water from 12 to 24 hours.

WINTERING NURSERY STOCK PROCURED IN THE FALL.

In sections where the winters are *very severe* it is not advisable to set out young trees and plants in the fall, but the practice of procuring them in the fall and planting them in the spring, is becoming more and more popular as experience has demonstrated its advantages. In the fall nurserymen are not hurried with their own planting; the season for shipping is comparatively long, and the weather not nearly so changeable as in the spring. Railways are not so much hurried and there is much less chance for injurious delays than in the spring. It being practicable to plant trees so procured as soon as the frost is out, they become thoroughly established the first season.

There is a popular impression that trees dug in the fall and heeled in over winter are worthless. If the heeling is well done there could not be a greater mistake. Peach and some other young trees, if left standing during the first winter, are frequently killed or injured by frost, while if dug in the fall and treated as below described, they come through bright and uninjured.

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

DISTANCES FOR PLANTING.

Standard Apples.....	30 feet apart each way.
Standard Pears and strong growing Cherries.....	20 " " " "
Duke and Morello Cherries.....	18 " " " "
Standard Plums, Peaches, Apricots, Nectarines.....	16 to 18 " " "
Dwarf Pears.....	10 to 12 " " "
Dwarf Apples.....	10 to 12 " " "
Quinces.....	10 to 12 " " "
Grapes.....	rows 10 to 16 feet apart; 7 to 16 feet in rows.
Currants and Gooseberries.....	4 feet apart.
Raspberries and Blackberries.....	3 to 4 by 5 to 7 feet.
Strawberries for field culture.....	1 by 3 to 3½ feet.
Strawberries for garden culture.....	1 to 2 feet apart.

NUMBER OF TREES ON AN ACRE.

40 feet apart each way.....	27
35 " ".....	35
30 " ".....	50
25 " ".....	70
20 " ".....	110
18 " ".....	135
15 " ".....	195
12 " ".....	300
10 " ".....	435
8 " ".....	680
6 " ".....	1210
5 " ".....	1745
4 " ".....	2745
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 square feet in an acre (43,560), will give the number of plants or trees to the acre.

We include in this Catalogue only such articles as we have grown on our own grounds, and have aimed to confine ourselves to cultivating only such varieties in both departments as, with proper care, will give entire satisfaction to our customers.

Yours very truly,

OREGON NURSERY COMPANY, (Limited).

M. McDONALD, President.

A. McGILL, Secretary and Treasurer.

SPECIAL NOTICE!

Those only who can show a certificate of recent date, with our signature and the Seal of the Company attached, are authorized to solicit orders for us. We wish to call special attention to this notice, as we know it has heretofore been the practice of unprincipled persons to procure the catalogues of prominent nurseries, and take orders in their names, which they will fill with poor stock bought elsewhere. If our patrons will notify us of any person whom they have reason to believe is not a regularly appointed agent, we shall consider it a favor.

Fruit Department.

APPLES—*Pyrus Malus*.

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 selections of Summer, Autumn and Winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard. The average price paid for the fruit is steadily on the increase, and the immense demand for home consumption, foreign shipping, canning and evaporating, assures us that they will continue to increase. We especially recommend planting late-keeping Winter varieties.

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 the protection, and at the same time having yielded the planter a large return for his outlay and labor.

SUMMER VARIETIES.

American Summer Pearmain—Medium to large; skin red, spotted with yellow in the shade, and streaked with lively red in the sun; flesh yellow, remarkably tender, juicy and rich; a good bearer. August.

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

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

Carolina Red June—(Red June)—Medium size, red, flesh white, tender, juicy, sub-acid; an abundant bearer. June.

Early Colton—Entirely hardy in all parts of the country. Has stood the extreme cold of Minnesota, Wisconsin, New Hampshire. Annual and abundant bearer; never in its

history of over half a century has it been known to entirely fail of a crop. Very early, beginning to ripen so it is **good to eat ten days before** Early Harvest, and continues to ripen for some time, making it very valuable for family use. Of beautiful appearance, fine quality and sells higher than any other.

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 Aug.

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.

Summer Queen—Medium to large, roundish; surface yellow, blotched and streaked with

red; flesh yellow and tender, with an acid, aromatic flavor. July and August.

Sweet June—Fruit medium, roundish, regular, light yellow, very sweet, pleasant and rich. August.

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.

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

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. While it is indispensable in the North, it is almost equally so in the South. We confidently recommend it for the orchard as one of the most valuable sorts for market, or in the garden for domestic use. September.

Dutch Mignonne—A popular apple introduced from Holland. Tree moderately vigorous, upright, spreading. Fruit medium, roundish, oblate, slightly conic; skin rather rough, yellow, shaded, striped and splashed with shades of light and dark rich red; moderately sprinkled with light and brown dots. Flesh yellowish and a little coarse; tender, juicy, slightly sub-acid. Core small; one of the best cooking varieties. November to February.

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.

Glori Mundi—Very large; greenish-yellow; valuable for cooking and drying. October.

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

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

Jersey Sweet—Medium size; striped red and green; tender, juicy and sweet; a *free* grower and good bearer; very popular both for table and cooking. September and October.

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

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

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

Red Beitigheimer—A rare German variety, very recently introduced. 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 fine grower and abundant bearer. This is one of the largest and handsomest of apples, and promises to be extensively cultivated. September and October.

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

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.

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

WINTER APPLES.

Akin—(Akin Red)—Size and color *very much like Jonathan, but keeps three months longer; quality even better* than that most excellent apple. The best by far of all late keepers. The apple for the fancy trade. ILL. HORT. Soc.: The original Akin tree is 7 feet 3 inches in circumference, about forty feet high, and over sixty years old. A regular bearer, Keeps until April or May. Of great beauty

and excellent quality; fine grained, crisp, spicy and mild. Its fine quality and beauty make it worthy of general trial, for the time will come when such fruit will be in demand. So beautifully colored as to be almost irresistible to the eye, and of equally fine flavor. The ideal Winter apple, is of good quality, medium size, red color; a late keeper; tree productive.

WINTER BANANA.

Arkansas Beauty—Large size; color beautiful crimson; flavor rich, sub-acid, fine grained. Free and good grower and enormous bearer. November to March.

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

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

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

Black Twig—(See Mammoth Black Twig).

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

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 Southwest.

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

Bismarck—In respect to its early fruiting habit the most remarkable apple ever introduced; one year grafts frequently produce fruit and two year trees seldom fail. Has fruited in many sections of the United States; we hear only words of commendation. A two year single stem tree about 18 inches high has been known to ripen a fine specimen. Originated in New Zealand; has been tested in nearly every apple growing country and promises to succeed wherever apples can be grown, proving healthy, hardy, productive, and without a rival in its early fruiting quality. Tree of short, stocky growth, thick, healthy foliage; makes beautiful specimens grown in pots for decorative purposes. Fruit large, handsome, yellow, sometimes shaded, red cheek; flesh tender, pleasant, sub-acid; good for dessert, superior for cooking; will keep well into Winter.

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

Blue Pearmain—Very large; dark purplish red over dull ground, appearing bluish from white bloom; flesh yellowish; mild, aromatic. October to February.

British Columbia—(New)—Named by the Fruit Growers' Association of British Columbia. Originated by H. P. Bales, at Nicomen, in the Fraser Valley. The tree is a vigorous grower and very hardy, annual and abundant bearer; fruit large, russet on yellow ground, sometimes striped with red; somewhat irregular; flavor mild sub-acid of the highest quality. Season January to June. Mr. Bales has now 400 trees of this variety bearing. The original tree is 34 years old, measures 60 inches in circumference, and is still in a perfectly healthy

condition. Mr. Bales has picked 36 fifty pound boxes of apples from it in one season, and always gets from 25 to 50 cents per box more for them than other varieties. We consider this one of the most valuable apples to plant for commercial purposes.

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

Cooper's Market—Medium size, conical; shaded and striped with red on yellow ground; flesh white, firm, tender, rather acid. Valuable for marketing. November to March.

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

Cunningham—Form conical, size medium; smooth deep red; very attractive; flesh yellow, fine grained; pleasant sub-acid; almost sweet; splendid keeper and good shipper; annual and prolific bearer. March to May.

Delaware Red—(See Lawver).

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.

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—Vigorous, early and prolific bearer. Medium, golden yellow; fine, juicy, sub-acid.

Grimes' 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.

Hyde's King—Large to very large; handsome yellowish-green; good quality; a remarkable keeper. Time of keeping all the year round.

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

Jonathan—Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine grained, very tender and finely flavored; tree slender and spreading, with light colored shoots. November to April.

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

Lawver—(Delaware Red Winter)—Large roundish flat; mild sub-acid; very heavy and hard; beautiful dark red; handsomest of all the extra late keepers; very valuable as a late market sort; tree a vigorous grower and very hardy; bears well; very promising late market variety. December to May.

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.

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

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

WISMAR'S DESSERT.

Marshall, or Red Bellflower—Very large, deep crimson, shaped like Yellow Bellflower, of fine quality; tree productive; originated near Nepa, by J. L. Marshall, being a cross between Yellow Bellflower and Red June; one of the most valuable market varieties.

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

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.

Newtown Pippin—One of the very best apples as to quality; tree a light grower while young; very juicy, crisp and highly delicious flavor; fine keeper. Does not succeed in all sections. December to May.

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.

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

Oregon Red Winter—Fruit large, fine grained, crisp, juicy and rich, with a flavor so near that it could well be named the Winter Gravenstein, as its flavor is so near that variety. Color a bright red, with a dark maroon colored cheek. Tree healthy and a strong grower, holding its fruit well until late in the season. Season from January to May.

Paragon—(See Mammoth Black Twig).

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

Peter—Resembles Wealthy in size and color; 4 to 6 weeks later. Perfectly hardy.

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

Pryor's Red—Medium, juicy, pleasant, very rich, sub-acid. January to March.

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

Red Bellflower—(See Marshall).

Red Canada—(Old Nunsuch of Mass., Steele's Red Winter)—Medium, oblate; red, tender, crisp, rich, sub-acid, refreshing and delicious; tree thrifty but a slender grower; productive. January to May.

Red Cheek Pippin—(See Monmouth Pippin.)

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

Rome Beauty—Large; yellow, shaded with bright red; flesh yellowish, tender, juicy, sub-acid; moderate grower. November to February.

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

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

Russet, Roxbury or Boston—Medium to large; greenish or yellow russet; crisp, good, sub-acid flavor; tree vigorous and productive; very popular on account of its long keeping. June.

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

Scott Winter—Hardy and vigorous; bright red; crisp; spicy and of a brisk acidity; long keeper.

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

Shackelford—Tree hardy, free grower, an early and profuse bearer. Fruit large, well colored, purplish-red in the sun, with a delicate bloom. Flesh yellow, flavor mild, sub-acid, aromatic. Long keeper.

Spitzenberg, Esopus—Medium to large; deep red; flesh yellow, crisp, sub-acid, high flavored; tree a light grower in the nursery, but bears and grows well transplanted in rich soil. November to April.

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

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

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

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

Talman's Sweeting—Medium; pale yellow, slightly tinged with red; firm, rich and very sweet; the most valuable baking apple; vigorous and productive. November to April.

Tulpehocken—(See Fallawater.)

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

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 great value in the North and Northwest. March to June.

Wealthy—A native of Minnesota, where it has proved perfectly hardy, vigorous and productive; fruit of medium size, red, streaked with white; quality good. December to February.

White Bellflower—Fruit medium to large, roundish, oblong, conic, greenish-yellow, becoming fine yellow at maturity, sometimes with a sunny cheek. Flesh white, fine-grained, tender, juicy, sub-acid, very pleasant. November to February.

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

Willow Twig—Medium size; light yellow, shaded and marbled with dull red and sprinkled with russet dots; flesh yellowish-green, not very tender, pleasant, sub-acid.

Wine Sap—Medium; dark red, sub-acid, excellent; tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.

Winter Banana—Fruit large size, perfect in form, golden yellow, and beautifully shaded and marbled with bright crimson red. Flesh lemon yellow, fine grained, sub-acid, rich, aromatic flavor, and of the highest quality. A good keeper. Tree a remarkably strong grower, and on account of its great hardiness, will thrive in any climate. Its early bearing is something simply wonderful; generally producing a fine crop of fruit the second year. Foliage large and free from blight and mildew. A valuable market variety. November to May. (Cut—See page 12).

WINTERSTEIN.

One of Luther Burbank's new creations; a seedling of Gravenstein with a most delicious flavor; keeps with the Baldwin and R. I. Greening; flesh yellowish; flavor exceedingly tender; spicy, rich, sub-acid; color bright, red in stripes; tree a strong, vigorous grower and remarkable bearer; fruits every year; the best.

"It has often been said that if the Gravenstein lasted through the season no other apple need be raised. Other apples do not sell readily during the Gravenstein season. Its seedlings, however, very rarely approach in any manner its combination of good qualities, and the one which I now offer is not in some respects as good, but is much better in others. It is therefore introduced after severe tests, fully believing that it will prove a great acquisition in many places, not all, for no fruit, so far, has ever been known which would."

"One of its most valuable points is that it ripens, with Baldwin and Rhode Island Greening, several weeks after Gravenstein; but in addition to this it is a much more prolific bearer, never failing to produce heavy crops and at the same time makes a growth fully as strong as Gravenstein."

Luther Burbank further says: "This is the first apple of my own origination which has ever been sent out, though apples, plums, berries and various seeds and flowers have sometimes been offered under my name without consulting the party most likely to be interested in the matter."

Luther Burbank writing to the Rural New Yorker says: "By this mail I send you a medium sample of my new Gravenstein seedling, six weeks later than its parent, ripening exactly with the Baldwin and Rhode Island Greening. The tree is a grand grower and as productive as an apple can possibly be. I think the quality, tenderness and texture remarkable."

"We are wondering," writes the editor of the Rural New Yorker, "whether the horticultural and pomological work that Luther Burbank, of Santa Rosa, California, has done, is doing and may do, will ever be adequately appreciated. One thing is certain, viz: that the work he has already done is by no means appreciated. His latest success, and it seems to the writer, one of his most valuable successes, is an apple—a seedling of Gravenstein, a specimen of which he sent to us, and which we received October 27th."

Wisner's Dessert—Size medium to large. Smooth, beautifully colored with yellow, shaded with bright red, in stripe and blotches, marked with russet dots. Exquisitely delicious flavor, juicy, melting, buttery, pear like texture. Tree a strong grower and extremely hardy. Originated in Northern Ontario, Canada. Season November to April. (Cut—See p. 14).

Condensed Statement of the good qualities of "Wisner's Dessert."

1st—The tree is iron clad in hardiness.

2nd—It is vigorous in growth and healthy in constitution.

3rd—It bears very early, regularly, and excessively.

4th—The fruit is Winter in season, and is a first-class shipper.

5th—It is of the most popular size, medium to large.

6th—It is very handsome in appearance, being smooth and most brilliantly colored.

7th—Its aroma and flavor are much superior to any other apple known.

8th—Its texture is like a pear, being extremely juicy, melting, rich, buttery and free from fibre. This cannot be said of any other apple.

For complete description and testimonials of our leading horticulturists, write for our four-page circular giving full particulars.

Wolf River—Tree very hardy and productive; fruit large and handsome, red color; flesh white and of exceedingly fine quality; sub-acid.

Y. N. Pippin—(See Newtown Pippin.)

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

CRAB APPLES.

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

HYSLOP CRAB.

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

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

Hyslop—Almost as large as Early Stawberry Apple; Deep crimson; very popular on account of its large size, beauty and hardiness. Keeps well into the Winter.

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

Large Yellow Siberian—Nearly as large as the above; fine amber or golden yellow color.

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

Transcendent—All things considered, this is one of the most valuable varieties of Crab apples grown. Tree remarkably vigorous, growing to a good size, and immensely productive. Comes into bearing a little the second year from planting, bearing every year after, and producing good crops by the fourth year. Fruit very large, from one and one-half to two inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies, both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating apple. Skin yellow, striped with red. September to October.

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

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

PEARS—*Pyrus Communis* or *P. Sinensis*.

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 pear being about as one to three, purchasers of the latter can well afford to give the trees the high cultivation necessary to secure the best results.

Gathering Pears—One of the most important points in the management of pears, is to gather them at the proper time. Summer pears should be gathered at least ten days before they are ripe, and Autumn pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

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

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.

Clapp's Favorite—A large, new, fine pear, resembling the Bartlett, but without its musky flavor; pale lemon yellow, with brown dots; fine texture, melting, buttery, juicy, with a rich, sweet, delicate, vinous flavor. Tree

hardy and very productive; very desirable in all sections, and especially so where other varieties fail. August and September.

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

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

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

Madeline—Medium; yellowish-green; very juicy, melting, sweet; a fair grower and productive. August.

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

Wilder—Handsome, melting, sweet, pleasant and of the best quality for an early pear; one of the best keeping early pears.

AUTUMN.

Bessimianka—From Russia. Fruit of fair quality. Tree is extremely hardy; valuable for the North, where other varieties cannot be grown. It has proven as hardy as a Birch. Strong, vigorous grower.

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

Beurre d'Anjou—A large, fine pear, buttery and melting, with sprightly, vinous flavor. Tree a fine grower and good bearer. One of the very best. October to January.

Beurre Bosc—A large, fine pear, with long neck, cinnamon-russet, handsome, half melting; juicy, slightly perfumed and delicious; tree fine grower and productive; one of the most valuable of our Autumn pears. September.

Buffum—Medium size; yellow, somewhat covered with reddish-brown and russet; buttery, sweet and excellent; a stout and upright grower.

Demsey—Originated in Northern Canada, where it has proven hardy. Fruit medium size and of excellent quality.

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

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

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

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

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

Garber—Originated in Pennsylvania 23 years ago, is large and beautiful, bright yellow with red; juicy and good; *delicious* canned. Ready to pick with Le Conte, or a few days later, and *much better*, not only in fruit, but in *hardiness and health* of trees; **so far has never been blighted.**

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

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

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

Seckel—Small; rich yellowish-brown; one of the best and highest flavored pears known; productive. September and October.

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

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

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

WINTER.

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

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

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

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

Pratt's Seedling—Originated in Salem, Oregon, with Captain Pratt. A pear with all the good qualities of the Bartlett, but will keep until March. In shape and color like the Sheldon, but larger. The tree is a fine grower, with a more spreading top than the Bartlett. Has

been shown at our Fruit Conventions and is endorsed by all our fruit growers; a fine acquisition to our list of Winter varieties.

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

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

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

CHERRIES—*Prunus cerasus* and *Prunus avium*.

There are few more desirable trees than the Cherry. It may be planted near the street, or used to line avenues, as an ornament, and it will at the same time produce an abundance of delicious fruit. This may be eaten out of hand, preserved, or it will find a ready market at highly

CHERRIES—Continued.

profitable prices, for shipping, canning, etc. The trees thrive in any well drained location. The Duke and Morello, or acid varieties are thoroughly hardy and are starred (*) while the Heart and Bigarreau, or sweet sorts, will successfully resist cold weather, and may be grown in most places.

The Cherry may be grown for market with great profit. Many varieties are regular and abundant bearers, and fruit commands a good price in the market.

LAMBERT CHERRY.

Allen—Has been fruiting for several years. Tree a healthy grower, immensely productive. Fruit of excellent quality; large size, nearly heart-shape, shiny and smooth; color when ripe, nearly black, very meaty and firm; so far free from all rot and disease; ripens late. Good enough for any home use and we be-

lieve will prove one of the most profitable market varieties in all sections where the sweet cherries succeed.

***Baldwin Cherry**—This cherry is a seedling of the English Morello, and it was originally planted for an Early Richmond, which had been budded on a seedling of the English Morello,

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

Bing—This grand new Black Cherry was originated by Seth Luelling, of Milwaukee, Oregon. One half larger than Luelling (Black Republican). Flesh very solid, flavor of the highest quality. Tree thrifty, upright grower, very hardy and productive. A fine shipping and market variety.

Black Republican—(See Luelling.)

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

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

Chapman—This grand new cherry originated in Napa Valley, California, where it ripens about April 10th, is the earliest of all shipping varieties, bears early and immense crops of fine luscious fruit which grows somewhat more in clusters than Black Tartarian; size, very large; form, roundish; stem, long and slender; surface, smooth; color, purplish black; flesh, half tender; stone, small; flavor of the highest quality. On account of its great beauty, quality and earliness it is a very profitable market variety. Said to be a seedling of the Black Tartarian.

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

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

***Early Richmond**—(Kentish, Virginian May)—Medium size; dark red; melting, juicy,

sprightly acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes. Tree a slender grower, with a roundish spreading head, and is exceedingly productive. The most hardy of all varieties, uninjured by the coldest winters, when almost every other variety has been killed. Ripens through June.

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

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

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

Governor Wood—Very large, rich; light yellow with red cheek; juicy and sweet; one of the Very best. Last of June.

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

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

Kentish—(See Early Richmond.)

Lambert—Size very large; form roundish, heart-shaped; cavity medium, regular, with gradual slope, stem long, slender; suture of medium depth, wide, extending from cavity to apex, which is of a round russet dot in a broad depression; surface smooth, glossy; color dark purplish-red, with numerous minute, indented russet dots; flesh dark purplish-red, with whitish veins, meaty and of firm texture, stone oval, semi-cling, small for so large a fruit; flavor sweet or very mild, sub-acid, aromatic, rich; quality very good. For complete description and testimonials of our leading horticulturists, write for our 8-page circular, giving full particulars. (See cut—p. 20.)

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

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

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

***May Duke**—Large, red; juicy and rich, an old, excellent variety; vigorous and productive. Middle of June.

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

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

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

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

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

Royal Ann—(See Napoleon Bigarreau.)

Windsor—New 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 *remarkably firm* and of fine quality. Tree hardy and very prolific. A *valuable late variety* for market and for family use.

* **Wragg**—Much like Eng. Morello; more productive and excels in size, in *yield* and *quality*.

Yellow Spanish—Large, pale yellow, with red cheeks; firm, juicy and excellent, one of the best light colored cherries; vigorous and productive. Last of June.

PLUMS—Prunus.

The plum tree, like the pear and other finer fruits, attains its greatest perfection on our heavy soil, being entirely free from disease. Plums are hardy and grow vigorously in nearly all sections, succeeding best on heavy soils in which there is a mixture of clay. The market for good fruit is unlimited, and now that it is known a little care and attention at proper times will insure a crop, they are being planted in large quantities.

Most of the cultivated varieties of Plums are European, or descendants of European varieties. But in recent years certain extraordinarily good varieties of native Plums have been widely disseminated; and very recently we have received some extremely valuable varieties from Japan. Crosses from all these will from time to time bring out new and much improved varieties, especially securing the best quality of the European Plums united with the hardiness, desirable season, or good shipping qualities of the others.

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

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

JAPAN OR ORIENTAL PLUMS.

These Plums have awakened more interest during the past few years than any other recent type of fruit. Many of the varieties are succeeding well in the northern and western states, in many places where the European varieties cannot be depended on. They unite size, beauty and productiveness. Trees are ornamental, with rich, light green foliage and attractive bloom; wonderfully productive, and come into bearing at the age of two or three years. Flesh firm and meaty; will keep for a long time in excellent condition. Their early blooming habit renders them unsafe in many sections. Will never take the place of our older varieties, but possess many valuable characteristics. Should be well tested in all Sections. These Plums, together with the Hybrids and crosses, produced by Luther Burbank (which are starred (*) in this Catalogue) are among the most valuable additions in the way of new fruits that have been introduced in the past 10 to 15 years.

"Altogether the Japanese Plums constitute the most important type of fruit introduced into North America during the last quarter of a century, and they should receive careful tests in all parts of the country."—L. H. BAILEY, CORNELL UNIVERSITY, ITHACA, N. Y.

Abundance (Botan).—One of the best Japan Plums. The tree is a very rapid grower, healthy in limb and foliage, comes into bearing remarkably young, and yields abundantly. The fruit is full medium size, color a rich, bright cherry-red, with a distinct bloom, and highly perfumed; flesh light yellow, very juicy

and tender, and of excellent quality. Vigorous. Hardy.—Mr. Geo. W. Thissell, of Winters, Cal., says of this fruit: "I have fruited it three years; have found it very prolific, fruit large to very large; exceedingly sweet; pit very small; ripens at Winters June 10th. I consider this one of my best shipping plums."

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

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

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

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

Burbank—(Japan)—Tree a very vigorous grower, early and very heavy bearer; fruit very large; yellowish ground, with red cheek in the sun; flesh yellow, firm and very sweet when fully ripe; extremely small pit, which clings. Middle of June.

* **Chalco**—A cross between Simoni and Burbank; resembles the former variety very closely, but said by the originator, Luther Burbank, to be by far superior to it. A tremendous grower and very prolific. A superior shipping plum, as it ripens and keeps well when picked green. Must eventually supplant the Simoni, thriving and bearing where that variety is a failure.

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

Clyman—A beautiful plum originated in the Napa Valley, Cal.; it is a good bearer; fruit medium to large; mottled reddish purple with beautiful blue; freestone; quality of flesh superior; valuable on account of its earliness and its excellent shipping qualities.

Coe's Golden Drop—Large and handsome; light yellow; firm, rich, sweet; one of the best of late plums. Last of September.

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

* **Combination**—New Plum, early, regular and abundant bearer of large, nearly globular fruit of uniform size. Flesh straw color, extremely

sweet, with a very pronounced pine apple flavor. Stone small and nearly free when fully ripe. Luther Burbank, the originator, says: "An extremely handsome, large, early, light crimson plum of the very best quality, ripening at Santa Rosa July 12th, before most of the earliest plums and about as early as the Climax. The trees, both old and young, are about the best and most symmetrical growers among the plums, making an early, rapid growth, ripening the wood perfectly hard to the tips early in the season, indicating unusual hardiness. The bark, leaves and fruit are all unique. Bark, dark russet bronze. The unusually large, broad, glossy coriaceous leaves are bronze, crimson in the Spring and Fall. "Combination" trees resemble no other trees in cultivation and are certain to please everyone."

Damson—Fruit small, oval; skin purple, covered with blue bloom; flesh melting and juicy, rather tart; separates partly from the stone. September.

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

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

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

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

Kelsey—Japanese; very large; rich, reddish-purple on yellow ground; tree a prolific and early bearer; very largely planted for shipping East; the largest of all plums.

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

The Grand Plum—Maynard.

We introduce the **Maynard** with every confidence that it will prove the peer of any plum that has heretofore been propagated, and do so with every assurance that it will prove a great acquisition to the home garden and orchard and will be a most profitable plum for the commercial orchardist, combining, as it does, large size, excellent flavor and color, with shipping qualities not found in any other plum. When we consider that samples of the **Maynard** were shipped through the mails during the warmest months of Summer from Santa Rosa, California, across the mountains and plains to Vermont, and were returned to Mr. Burbank at Santa Rosa in perfect condition, it becomes evident that the **Maynard** combines the great carrying qualities necessary for long distance shipment, which is the essential consideration in a shipping plum, and one which is often lacking in varieties possessing flavor and other good qualities.

The horticultural public have been for many years looking for a plum that would give them not only the fine quality that would remind their city customers of the fruit eaten in youthful days, but would also admit of being carried to distant markets in perfect condition. Mr. Burbank himself, the greatest originator of plums in the world, has striven for many years to accomplish this end, and in the many splendid plums he has previously introduced, has often almost reached this point of perfection.

In the **Maynard** he has given to the horticultural world his latest and greatest effort in the plum line and we believe he has reached the point of perfection. The **Maynard** begins to ripen about July 1st, at Santa Rosa, California, following closely after that other magnificent introduction of Burbank—**Climax**, and just at a season of the year when plums are in best demand in the great markets; but instead of coming and going swiftly as in the regrettable habit of plums, the season of ripening for the **Maynard** extends all through July and far into August.

In size it is very large, often measuring seven and one-half inches or more in circumference; form nearly round, slightly flattened at the ends; of richest crimson-purple, deepening to royal damask as full ripeness is reached. A more beautiful fruit were hard to imagine. The flesh is firm even when dead ripe, but melting and juicy, with a deliciousness indescribable. Beside this combination of beauties to delight the eye and palate, the ripe fruits have a charming fragrance unusual to plums. Few fruits could please so many of the senses as this new beauty, now added to Mr. Burbank's list of triumphs.

In vigor of tree and habit of growth it far surpasses any other plum. In its evolution Mr. Burbank has preserved to a remarkable degree every desirable trait, carefully suppressing the thorny, slender, sprangling tree-habit of plums, and we have it sturdy, strong, and a very rapid grower, spreading just as large as it ought to and no more. It fruits heavily every year, not overbearing, but yielding a full, vigorous, satisfactory crop. Add to these admirable points, the fact of its heavy, luxuriant foliage and its habit of bearing its burden of fruit on the inside of the tree, where is the greatest strength, and we have little else to ask for in a plum.

When we consider the many thousands of fruits that Mr. Burbank originates and the few that he introduces, we have a better appreciation of the great care he exercises in sending out a new variety. He has made it a rule never to offer to the public any of his specialties until he has thoroughly tested them himself, from every standpoint, and feels satisfied that they are an improvement over varieties previously introduced and although Mr. Burbank received such flattering comments on the **Maynard** in July, 1900, as these words from Prof. Maynard, the eminent horticulturist, in whose honor the plum was named: "**I consider this the best plum, all things considered, that I have seen on your place to-day.**" Mr. Burbank went on and fruited it for two more years before offering it for sale, making five years in all that Mr. Burbank has fruited the **Maynard** in his famous experimental and testing grounds, always watching for some weak point that might develop in this new fruit. It was not until he had thoroughly satisfied himself that the **Maynard** possessed unusual points of beauty, flavor, and shipping qualities of the fruit, together with a vigorous, hardy and healthy growth of tree, that he consented to introduce it.

In the **Maynard Plum** we have a tree that is perfection itself—a strong, vigorous constitution, dense, compact head, with large, apricot-like leaves, thickly distributed over the entire tree, forming a protection for the young fruit from winds and rains in the early Spring, and a shelter from the intense heat of the sun later in the season. The branches are strong and sturdy, well able to bear up the heavy load of fruit which the **Maynard** always brings forth.

Those desiring a fuller description write for Special Maynard Plum Catalogue.

Two-year-old trees of MAYNARD PLUM—A basket of ripe fruit and Luther Burbank, the originator, in the background.

Miner—An improved variety of the Chickasaw; originated in Lancaster, Pa. Medium size, oblong, pointed apex; skin dark purplish-red; slightly mottled, with fine bloom; flesh soft, juicy, vinous; adheres to the stone. Excellent for canning and cooking, and esteemed for market in the West. Tree hardy, vigorous and productive. Early in October.

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

Pottawattamie—A cross of Chickasaw and Swedish Sloe. Quality excellent; an immense early annual bearer; *curculio proof*; tree perfectly hardy; a strong, vigorous grower; most profitable tree for the fruit grower. Four-year-old trees have borne a crop of two bushels to the tree, which sold readily at \$4.00 per bushel.

Prunus Simoni—(Apricot Plum)—A distinct species from China. Growth erect; flowers small, white, appearing early in the 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.

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

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

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

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

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

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

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

Weaver—This remarkable plum was found near Cedar Rapids, Iowa, growing in the old Indian camping ground. Flesh firm, with flavor resembling the Apricot. As a substitute for the peach it has no rival. *Curculio proof*.

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

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

Yellow Egg—(Magnum Bonum, Yellow)—A very large and beautiful egg-shaped yellow plum; a little coarse, but excellent for cooking. Tree a *free* grower and very productive. End of August.

PRUNES—Prunus.

We follow the distinction made between plums and prunes, as is common in the horticultural literature of the Pacific Coast. By the term "prune," is signified a plum, which dries successfully without the removal of the pit and produces a sweet, dried fruit, though in the confusion of our nomenclature, not even this broad classification is faithfully followed. For example. We have the "Hungarian Prune" as a local traditional name for "Pond's Seedling Plum," which has no value as a prune, and we have also "Coe's Golden Drop Plum, which does answer the requirements for a dried prune, and is sometimes given fancy names by packers.

We do not, however, in this Catalogue, attempt to correct the classification, but follow the popular arrangement. To such proportions has the prune industry grown in the past dozen years, that it may now be classed as one of the most important productions of the Pacific Coast. The exportations annually to the Eastern markets reaching hundreds of millions of pounds of the finest prunes in the world.

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

French—(See Petite).

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

Giant Prune—(California)—One of the largest prunes known, the fruit averaging $1\frac{1}{2}$ to 2 ounces each. Its unequaled size, handsome appearance, rare keeping qualities and great productiveness make it desirable for home use or market. September.

Golden—A seedling of Italian prune; originated in Oregon; light golden color, good flavor, and heavy drier, strong grower and abundant bearer; very freestone. September.

Hungarian Prune—(Or Pond's Seedling Plum)—Very large; dark red; juicy and sweet. Its large size, bright color, productiveness and shipping qualities render it a profitable variety for home or distant markets. September.

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

Italian—(See Fellenberg).

Petite d'Agen—(French Prune)—The well-known variety so extensively planted for drying; medium size; reddish purple; juicy, sugary, rich and sweet; bears immense crops. September.

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

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

Silver—Originated in Oregon and said to be a seedling from Coe's Golden Drop, which it very much resembles; is much more productive and tree more vigorous. The fruit, on account of its large size, is ranked among the most valuable prunes and drying plums. Oct.

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

❁	<h2 style="margin: 0;">A New Prune—Sugar.</h2>	❁
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"SUGAR" PRUNE.

"PETITE" PRUNE.

It is with intense satisfaction that we can at last introduce a new prune which bids fair to add millions to the wealth of the State and Nation, and which will be hailed with delight by growers, dealers and consumers throughout the world.

For many years we have labored to produce a large, early, productive, handsome, easily cured, richly flavored prune, with a high percentage of sugar; the prize appeared several years ago, and we have now tested it in every way sufficient to warrant its introduction and we are upheld in our estimate of its great value by all fruit growers who have seen it.

The tree is very far superior to the French prune tree in every respect, better grower, better bearer, better foliage, better form, requires less careful pruning, will carry and mature a much larger crop of fruit. The fruit is unusually even in size and very large, averaging thirteen to fifteen to the pound fresh; at least three or four times as large as the French prune grown here.

Following is an accurate description taken from the report of B. M. Lelong, Secretary of the California State Board of Horticulture:

Sugar Prune—An extremely early prune, ripens August first; cures superbly rich, with a yellow flesh, tender and rich in sugar juice. Skin very tender, at first of a light purple, tinted with green, changing at maturity to dark purple, covered with a thick white bloom.

Form ovoid; slightly flattened, measuring five by six and a half inches in circumference. Average size fifteen to the pound, which is two or three times larger than the French prune.

Fruit stalk short, severs very easily from the stem as the fruit reaches maturity. Pit medium size, flattened, slightly wrinkled and most often separated from the flesh. The skin is so thin or porous that the fruit begins to shrink on the tree fully as soon as ripe.

Tree an unusually vigorous grower and very productive. One pound green fruit makes 7½ ounces when dry. By the usual mode of curing one pound green would probably make one-half pound when cured.

Analysis of the fresh fruit at the State University disclosed the fact that it is nearly one-fourth sugar, the exact amount being 23.92 per cent.; the average of sugar of the French prune being 18.53 per cent. and of all prunes 15.33. A seedling of Petite and bids fair to revolutionize the prune industry of the world. Originated by Luther Burbank of Santa Rosa.

The above description of the Sugar Prune was taken from Mr. Burbank's 1889 Catalogue, and the following is taken from his 1900 Catalogue:

Sugar Prune has proved more than all that has ever been claimed for it. It ripens twenty-eight days before the French prune and though nearly four times as large, it dries in half the time. The trees have never failed to produce a full crop even when side by side the French prune has year after year been a partial or complete failure.

Spring frosts do not affect it. The trees are better growers and require less careful pruning; the branches are longer and stronger, the foliage is heavier and owing to more vigorous growth, thrives on much poorer soil and the trees commence bearing two years earlier than the common prune. The prunes, when cured, are unequaled in their combination of size, beauty and quality.

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

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

PEACHES—*Prunus Persica*.

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 to let in light and air; keep the trees in good shape to produce bearing wood.

Freestones—(f.) Semi-cling—(s. c.) Clings—(c.)

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

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

Amsden's June—(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. (c.)

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

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

FITZGERALD PEACH.

Brigg's Red May—Originated with J. B. Brigg's, of Marysville; fruit medium to large, skin greenish-white, with rich red cheek; flesh greenish-white, melting and juicy; a standard early variety and one of the most extensively planted in California. Middle of June. (f.)

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

Carman—Large, resembling the Elberta in shape; creamy white or pale yellow, with deep blush; skin very tough; flesh tender and of fine flavor, juicy. Prolific bearer; profitable market variety. Ripe June 20th. (f.)

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

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

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. (f.)

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

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

Dewey—(See Admiral Dewey).

Early Charlotte—An improved seedling from Early Crawford, originated at Salem, Oregon, in 1878, by O. Dickenson, where it has attracted much attention among fruitgrowers. This remarkable peach succeeds in

Oregon, where many other varieties fail. Flesh yellow, melting and juicy, with a rich and excellent flavor. Freestone. Ripens ten days after Crawford's Early. (f.)

Early Imperial—Originated by W. W. Smith, Vacaville. Fruit large, deep yellow, with dark red cheek; flesh rich, juicy and very firm. A very highly colored peach and remarkable for its firmness. Resembles Yellow St. John in form but earlier, larger and more highly colored. Ripens with Hale's Early, and its rich color and earliness combined, will make it one of the most profitable varieties for early shipment.

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

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

Fitzgerald—An improved Early Crawford, being fully equal to it in size, quality and color. The tree commences bearing young, is productive and one of the hardiest. Fruit large, brilliant color, bright yellow, suffused with red; flesh deep yellow, best quality. Early Sept. (f.) (See cut—page 29).

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

Globe—Large; flesh firm, juicy, yellow; quality good, pleasant, rich, vinous and luscious. October. (f.)

Greensboro—Origin, North Carolina. Ripens with Alexander, but much larger. Round; flesh white, very juicy, of good quality; bright red over yellow, highly colored in the sun. Fruited with us this year for the first time. A promising market variety. (s. c.)

Hale's Early—Medium size; greenish white, with red cheek; first quality. Tree healthy, good grower and productive. The earliest good peach we have, and promises to be a leading orchard variety. (s. c.)

Heath Cling—A most delicious cling. Very large; skin downy, creamy white, with faint blush of red; flesh white, slightly red at the pit; very tender, juicy and sweet; valuable for canning; season early September. (c.)

Henrietta Cling—(See Levy Late).

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

- Lemon Free**—Originated in Ohio; very large, pale yellow; shaped a good deal like a lemon; of extra fine quality; tree very productive; ripens before Salway. (f.)
- Levy's Late, or Henrietta Cling**—A magnificent cling of large size; skin a deep yellow, a shade of rich brownish red in the sun; flesh deep yellow, firm, juicy, sweet, half melting, slightly vinous. Latest of all clings and highly esteemed for canning and market. Middle of September. (c.)
- Lovell**—A California seedling; large, almost perfectly round; flesh yellow to the pit, firm and of excellent quality; a superb canning, shipping and drying peach; tree a good grower and bearer. Worthy of extensive cultivation; ripens a few days after Muir. (c.)
- McDevitt's Cling**—Originated with Neal McDevitt, of Placer County, Cal. Very large, rich, golden-yellow, becoming quite red when ripe; flesh yellow, firm, and of superior flavor; excellent shipper. Last of August. (f.)
- McKevitt's Cling**—A California seedling, introduced by A. McKevitt, Vaca Valley. White; flesh firm, rich, sugary and highly flavored; white to the pit; excellent for shipping and canning. Tree a remarkably strong grower and not subject to curl. Early in Sept. (c.)
- Mountain Rose**—Large, handsome, red cheek; flesh white, juicy; one of the best. Aug. (s. c.)
- Muir**—Large, pale yellow; very firm flesh; very sweet. Best for drying. (f.)
- Newhall**—Originated with Sylvester Newhall, of San Jose. A superb peach, of very large size; skin yellow, with a dark red cheek; flesh deep yellow, juicy and rich, vinous flavor; ripens about one week before Crawford's Late; tree very hardy, healthy, vigorous, and not affected by curl, like Crawford's Late. (f.)
- Phillips' Cling**—Fine, large, yellow; flesh firm, clear; yellow to the pit, which is very small. Preferred by canners to any other variety of cling, its firmness, fine texture of flesh and lateness, not ripening until September, when other clings are practically harvested, makes a demand for this variety far beyond the supply. (c.)
- Runyon's Orange Cling**—Originated with Mr. Sol Runyon, on the Sacramento River. Fruit very large, yellow, with a dark crimson cheek; flesh golden-yellow, rich and sugary, with a vinous flavor; tree an immense bearer, and not subject to mildew like the common sort; a splendid fruit for shipping, canning or drying; early in August. (c.)
- Salway**—Fruit large, roundish; deep yellow, with a rich, marbled, brownish-red cheek; flesh yellow, firm, juicy, rich and sugary. A new English variety; promises highly as a late showy market sort. (f.)
- Sellers'**—A variety of Orange Cling, of the largest size, raised by Mrs. Sellers, of Antioch; skin fine yellow, with a dark red cheek; flesh yellow, firm, very juicy and rich; a very desirable sort for canning; ripening a few days after Runyon's. (c.)
- Sneed**—It is claimed for this peach that it is fully ten days earlier than the Alexander, of same size and appearance, but more yellow; flesh tender, juicy, melting and delicious; clings slightly to the pit; said to be the first peach to ripen. (c.)
- Strawberry**—Medium size; white, marbled with dark red; flesh white, red near the pit; juicy, with a rich, delicious flavor; July. (f.)
- Susquehanna**—A large, handsome variety, nearly globular; skin rich yellow, with beautiful red cheek; flesh yellow, sweet, juicy, with a rich, vinous flavor. (f.)
- Triumph**—Above medium; skin downy, dark orange-yellow; nearly covered with dark carmine; flesh yellow half way to the stone, where it changes to greenish-white, and adheres to the stone like Alexander; juicy, melting and slightly sub acid; quality good. Maturity June 15. The great value of this peach for shipping purposes is its yellow color and attractive appearance, it being the earliest peach so far known, and has brought very high prices. (s. c.)
- Tuskena Cling**—(Tuscan, Yellow Tuscan)—A very large yellow cling, the earliest fine cling; flesh juicy and of fine flavor and clear yellow to the stone. A good shipping and canning peach and very desirable on account of its earliness, ripening with the Early Crawford. (c.)
- Twenty Ounce Cling**—A fine, very large cling peach, very desirable for canning. Aug. (c.)
- Van Buren Dwarf**—Tree very dwarf and ornamental, and on this account valuable for very small gardens; fruit medium size; skin yellow, shaded red; flesh yellow and of fine quality. Ripens middle of August.
- Wager**—Large, yellow; more or less color in the sun; juicy and of a fair flavor. While high quality and great beauty cannot be claimed for this fruit, the trees have such remarkable vigor and vitality that they not only produce fruit in great quantities, but produce it with a degree of certainty and regularity which is quite unusual. These facts commend it to all planters for market purposes. Last of August. (f.)
- Waterloo**—Originated at Waterloo, N. Y. Of medium to large size; color whitish-green, marbled with red, deepening into dark purple crimson in the sun; flesh greenish-white, with an abundance of sweet, vinous juice, adheres some to the stone, like Amsden, Hale's Early, etc. Ripened at Waterloo, July 14, 1878. In 1879, three or four days ahead of Alexander. For so early a peach it is a remarkable keeper, ripe specimens having been kept in perfect condition for nearly a week. This makes it valuable for shipping. (c.)
- Wheatland**—Large, roundish, skin golden-yellow, shaded with crimson on the sunny side; flesh yellow, rather firm, juicy, sweet and fine quality; tree vigorous. Aug. (f.)
- Wonderful**—A freestone; color rich golden-yellow, overspread with carmine. It ripens after nearly all other varieties have disappeared, and is a remarkable keeper. Tree wonderfully prolific. (f.)
- Yellow St. John**—Fully one week earlier than Early Crawford; a trifle smaller than latter, especially old trees; yellow, with deep red cheek; juicy, sweet and highly flavored; quite free. (f.)

APRICOTS.—*Prunus Armeniaca*.

Beautiful and delicious fruit. In quality and appearance is between the plum and the peach, combining quality of both. Ripening early, together with its delightful flavor makes it one of the most valuable fruits. Tree is as hardy as the peach; requires about the same cultivation as the peach or plum. It ships well and commands a good price in the eastern market. For drying and canning it has no superior.

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

Gibb—Tree hardy, grows symmetrical, productive; fruit medium; yellowish, sub-acid, juicy and rich; the best early variety, ripening soon after strawberries. A great acquisition.

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

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

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

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

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

Royal—Large, oval, slightly compressed; yellow, with orange cheek, faintly tinged with red; flesh pale orange, firm and juicy, with a rich vinous flavor; exceedingly productive. July.

Tilton, New—We take pleasure in introducing this apricot to the public. Its large size, rich apricot color, high flavor, uniform ripening, sure and unusual productiveness, with frost resisting qualities, and vigorous growth, easily place it far in advance of all other varieties. For drying or canning it is much superior to any of these older varieties. For complete description and testimonials of leading horticulturists, write for our 12 page circular, giving full particulars.

NECTARINES.—*Prunus Persica*.

A most delicious, smooth-skinned fruit, which thrives wherever peaches will grow; but is liable to be stung by the curculio, and requires the same treatment as plums. Ripens in August.

Boston—Very large and handsome; deep yellow, with a bright blush and mottles of red; flesh yellow to the stone; sweet, with a pleasant and peculiar flavor; free stone.

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

New white—Large, white, nearly round; flesh white, tender, very juicy, with a rich, vinous

flavor; stone small, and separates freely. August.

Olmstead—Large; red cheek, yellow flesh; juicy, very rich and sweet; one of the best.

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

QUINCES.—*Cydonia Vulgaris*.

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

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

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

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

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

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

Pineapple—Originated by Luther Burbank. The name comes from the flavor which is suggestive of the pineapple. The fruit in form and size resembles the Orange Quince, but is smoother and more globular. Makes a superior jelly; can be eaten raw and is said to cook as tender in five minutes as the best cooking apple, possessing a most exquisite and delicious flavor not equalled by any other quince.

Luther Burbank says, "Quinces can probably be grown with less expense than any other fruit, and if the quality could be improved, would be extensively grown and more generally used; a more promising fruit for improvement cannot be named.

"For about fifteen years we have been working in this direction, and have succeeded in obtaining the "**Pineapple**," a quince which will cook as tender in five minutes as the best of cooking apples, and with a flavor never before equaled.

"Jelly made from it is superior to that made from any known fruit—absolutely unapproachable—something which could never have been thought of until it was brought into existence.

"The fruit, in form and size, very much resembles the Orange quince, but is smoother

CHAMPION QUINCE.

and more globular; in color much lighter yellow; average weight about three-quarters of a pound each.

"The tree is a strong grower, and as productive as the Orange.

"Some one may produce a better quince, we never expect to."

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

GRAPES.—Vitus.

The grape is the most healthful of all fruits, and the most highly esteemed for its many uses. It can be secured 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 it still 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 only to be had 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.

Grape culture is of the greatest commercial importance on the southern Pacific coast. We grow vines in the north for our northern trade, and in California for our southern trade, thereby securing vines best adapted for each locality, many of the foreign varieties being grown almost exclusively for the southern trade; and for the north, or localities in which foreign varieties are not adapted, we grow American varieties, which are suited to the locality.

Distance.—In setting out vines the character and strength of the soil is a very important point to be considered, 8x8 and 8x10 being popular distances; 10x10 and 10x12 for the more robust growers.

Soils.—Good grapes may be grown on any soils, sandy, clayey, loamy, etc. that are not too shallow or too heavily pregated with alkali. The soil must be well drained, and there should be a free exposure to the sun and air. Hillside 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

GRAPES—Continued.

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 the small, inferior branches; 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.

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 and imperfect berries, pack them in shallow boxes and cover closely. Use no paper but basswood or elm boxes if convenient. Pine and other resinous woods should not be used, as they flavor the fruit disagreeably. After packing, keep the boxes where it is both cool and dry. Under careful management some varieties may be kept until Spring.

Black Varieties—(B.)

Red or Amber—(R.)

White—(W.)

AMERICAN VARIETIES.

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

Campbell's Early—Its strong, hardy vigorous growth, thick, heavy, perfectly healthy foliage, very early ripening and abundant bearing of large and handsome clusters of excellent quality, combined with the most remarkable keeping and shipping qualities, form a combination unequaled by no other grape. Its period of full maturity is from the middle to the

MC PIKE.

last of August, according to the season, ripening with Moore's Early, but unlike that variety, it has kept sound and perfect, both on and off the vine, for weeks after Moore's Early was decayed and gone. In dessert quality it is unrivaled by any of our present list of first early market grapes. It is, both as to cluster and berry, of large size, of a glossy black color, with a beautiful blue bloom; pulp sweet and juicy; free from foxiness; seeds small, few in number and part readily from the pulp. (B.)

For complete description and testimonials of our leading horticulturists, write for our 4 page circular, giving full particulars.

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; requires the most favorable soils and situations, good culture and warm seasons to mature perfectly. Last of September. (R.)

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, it is one of the most popular market grapes. (B.)

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

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

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

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. (B.)

Isabella—An old standard sort, highly prized where it will thoroughly mature. Bunches

MOORE'S EARLY.

long large, loose; berries large, oval, sweet and musky; a good keeper. (B.)

McPike—This grand new variety was originated in South Illinois. Was awarded Wilder Silver Medal by the American Pomological Society, has taken first premium at Ohio, Illinois, Indiana and Missouri State Fairs. The McPike is a seedling of the Worden and partakes of all the good qualities of the Concord and Worden to a marked degree. Perfectly hardy, as easily grown as Concord or Worden, with a leaf unprecedented; it is earlier than the Concord; bunches large, even and compact, berries even in size, covered with a beautiful bloom, blue-black in color, ripens uniformly and has generally the appearance of the Worden. The berries are of mammoth size, rivalling Black Hamburg, being often three inches in circumference and of superb quality—one of the best grapes grown. One berry measured $3\frac{1}{8}$ inches. The grape is almost perfection. Mr. McPike has sent the grapes to all parts of the country, and the comments are most favorable upon its wonderful size, flavor, hardiness and beauty. (B.)

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

GREEN MOUNTAIN.

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

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

Pierce—A remarkable, giant-leaved and very prolific variety, or rather sport of the Isabella, produced by Mr. J. P. Pierce, of Santa Clara. The berries, like the leaves, are of extraordinary size, and when ripe the fruit is exceedingly sweet and strongly aromatic; berries bluish-black when fully matured; commands a ready sale in the market, the demand ex-

ceeding the supply; for size and quality it cannot be surpassed by any of the American varieties of grapes. (B.)

Pocklington—Originated at Sandy Hill, N. Y. Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemon-yellow; flesh moderately tender, sweet, with a peculiar aromatic flavor. The great vigor and hardness of the vine, with the beauty and size of the clusters, place this in the front rank of white grapes. Ripens with Concord. (W.)

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

Wyoming—Vines very hardy, healthy and robust, with thick leathery foliage; color of berry similar to Delaware, but brighter, being one of the most beautiful of the amber or red grapes, and in size nearly double that of the Delaware; flesh tender, juicy, sweet, with a strong native aroma. Ripens before Delaware. The best early red market variety. (R.)

FOREIGN VARIETIES.—FOR TABLE, RAISINS, SHIPPING AND WINE.

Black Corinth—See Zante Currant.

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

Black Malvoise—Vine a strong grower; berries large, oblong, reddish-black, with faint bloom;

flesh juicy, flavor neutral. An immense bearer, an excellent table as well as a wine grape. (B.)

Black Morocco—Bunches medium to large, closely set; berries very large, oval, skin thick, dark red, becoming black when fully ripe; flesh firm, juicy, sweet and crackling. Ripens late, keeps well; an excellent grape for shipment. (B.)

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

Burger—A German variety; produces a light, white wine; an immense bearer. (W.)

Carignan—Berries oblong, black; an excellent wine grape. (B.)

Chasselas de Fontainbleau—(See White Sweetwater.)

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

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

Cornichon White—Resembles the above, only the skin is white and not so thick. (W.)

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

Fehér Zagos—Vine a vigorous grower and immense bearer; very hardy and exceedingly productive in sandy and heavy soils; bunches large and compact; berries oval, yellowish-green; good for wine or raisins. (W.)

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

Gordo Blanco—See Muscat.

Malaga—Vine a strong grower, and immensely productive, thriving in almost any soil; bunches very large, often weighing ten pounds; compact, shouldered; berry very large, oval, yellowish-green, skin thick, fleshy. One of the best shipping grapes, commanding a good price in the eastern markets every season; makes a second quality raisin. (W.)

Mataro—One of the finest grapes for claret; good bearer and heavy grower. All the great French authorities agree in placing the Mataro as the finest red wine grape of the Southern regions. (R.)

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

Muscat of Alexandria (Gordo Blanco)—Bunches long and loose, shouldered; berry oval, sometimes round; yellowish-green; skin thick, flesh with a decided Muscat flavor. This is

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

Purple Damascus—Bunches large, loose; fruit very large, oval; deep purple when fully ripe; skin thick; flesh meaty and juicy; a splendid grape for the interior valleys; a good shipper. (B.)

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

Royal Muscadine—Bunches small and compact; fruit round, small, greenish-white, turning to amber; flesh firm, juicy, sweet and exceedingly pleasant. (W.)

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

Thompson's Seedless—This is a new variety, of great merit. It is perfectly seedless, and will doubtless become the most popular sort for seedless raisins. It is very attractive, larger than the Seedless Sultana, more oblong, and in color greenish-yellow, resembles the Muscat. It is of good quality, claimed to be superior to the Seedless Sultana. It dries rapidly and evenly, and being so sweet, heavily. A strong grower and unusually productive. (W.)

Tokay—See Flame Tokay.

Verdel—Bunch short; berry oblong, yellowish-green, covered with fine bloom; ripens late, very productive. (W.)

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

Zante Currant—(*Black Corinth*.) Bunches medium, berries small, seedless, skin thin, black, blue bloom; flesh sweet, juicy and highly flavored. This is the variety producing the currant of commerce, and imported from Greece under the name, "Zante Currant." (B.)

Zinfandel—Bunches large and compact; berries round, dark purple; the most extensively planted grape in California for making claret. (B.)

RESISTANT STOCKS.

The decimation of vineyards in California brought about by the mysterious Phylloxera will make it necessary in the future to plant all new vineyards and replant the old vineyards on the Southern Pacific Coast with vines on resistant stocks. We would refer those wishing to pursue this subject further than we can do in our limited space to the writings of Richter, Ravay, Mayet, Vialla and others who made a special study of this. We have for some time realized the importance of this work, and have given this subject careful study, and recommend specially the varieties named below as a result of our own experiments and those of experimental stations and vineyardists, viz :

The Rupestris, a native of the Pan Handle District, is a deep-rooting variety, succeeding in dry, sandy soils and easily grafted; should not be planted where the underlying hardpan or excessive moisture near the surface interferes with this tendency. As a stock it takes well to most varieties.

Rupestris St. George—This famous variety will no doubt prove to be one of our most valuable resistants. It is the most vigorous strong grower of all the resistants, and with its deep descending roots, it will, no doubt, adapt itself to a greater variety of soils and climates than any other variety, standing in the relation in the Rupestris family that the Glorie de Montpellier does in the Riparia, and has been more extensively planted, not only in California, but also in France and throughout Europe than any other resistant. It should not be planted in very shallow soils, and is preferred to St. Martin's except under the two conditions mentioned below.

Rupestris St. Martin—Said to be even more vigorous than the St. George. Makes a very strong root system, with a tendency to spread rather than to go down as in the St. George.

Grafts make a better growth and ripen up better than in the St. George. Will thrive where there is an excess of lime and do better than St. George in excessively dry locations.

The Riparia thrives in a rich, damp soil and will succeed where hardpan is near the surface if there is plenty of moisture. A rampant grower, will support strong growing varieties.

Riparia Gloire de Montpellier—Introduced from France. A vigorous, strong grower, with large foliage; the best of the Riparia and has lately nearly superseded all others of that family; said to succeed in shallow soils if they have sufficient fertility but not adapted to any compact soils.

Lenoir—This variety has been very extensively planted in California, but is now being replaced with varieties more resistant to the attacks of the Phylloxera. It is well adapted to heavy clay soils. Has been found to be very satisfactory as a resistant in Napa and Sonoma Counties, California, on such soils. The grapes are rich in coloring matter, and are used very largely for coloring clarets.

RASPBERRIES.—Rubus.

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

Raspberries may be made very profitable with good cultivation.

RED AND YELLOW VARIETIES.

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

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

Cuthbert—(The Queen of the Market)—Large, conical; deep, rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy and immensely productive. "I regard it as the best raspberry for general culture."—Charles Downing. "Now regarded by careful and experienced horticulturists as the best raspberry in existence for general cultivation. I have it in a specimen bed with twenty-five other kinds, and it surpasses all others."—E. P. Roe.

GREGG.—See page 40.

RED AND YELLOW VARIETIES—Continued.

Golden Queen—This variety is a seedling of the Cuthbert, but the color of the fruit is a *rich, golden yellow*. The flavor is of the highest quality, pronounced by some superior to the old Brinkle's Orange, the finest flavored of all the raspberries. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme Northern latitudes, having stood uninjured even when the Cuthbert suffered. The desire for a yellow raspberry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this variety.

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

Loudon—The best red mid-season berry. Its points of superiority are vigor of growth, large

fruit, beautiful rich, dark crimson color, good quality and marvelous productiveness and hardiness, enduring winters without protection and without injury to the very tips. It stands shipping the best of any variety, and will remain on bushes the longest without injury.

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

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

Queen of the Market—See Cuthbert.

Susqueco See Brandywine.

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

BLACK CAPS.

Cumberland—In size, the fruit is simply enormous, far surpassing any other sort. The berries run seven-eighths and fifteen-sixteenths of an inch in diameter, and are of such handsome appearance that their fruit has often sold for 10 cents per quart, when other varieties were selling for 5c to 7c per quart. The quality is very similar and fully equal to Gregg. In spite of its unusual large size, the fruit is possessed of great firmness and is thus well adapted for standing long shipments. Mid-season. The bush is exceedingly healthy and vigorous, throwing up stout stocky canes, well adapted for supporting their loads of large fruit.

Gregg—Of good size; fine quality; very productive and hardy. It takes the same position among black caps as Cuthbert among the red sorts. No one can afford to be without it.

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

Mammoth Cluster—The largest black cap except Gregg. Canes of strong growth and very prolific. Berries large and of fine quality.

Munger—The fruit of Munger is black, and resembles Gregg very much. It is a better flavored berry than Gregg, tougher in texture and therefore a better shipper. In size it excels Gregg by almost 25 per cent, being extra fine for canning and evaporating. The past season, when most others were dry and seedy, Munger ripened up sweet and juicy, and readily brought an advance of 50 cents per bushel over other kinds. The canes, too, resemble Gregg, are free from disease, upright in growth.

Ohio—A very strong growing, hardy sort, fruit nearly as large as Mammoth Cluster; more productive than any other variety, and one of the most, if not the most valuable for market.

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

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

CURRANTS.—Ribes.

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 good state of fertility and prune freely every Spring. Should the currant worm appear, dust a little white hellobore 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 Naples—Very large; black, rich, tender, and excellent for jellies and wine; very productive.

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

Fay's Prolific—Originated in Chautauqua County, N. Y. A cross between Cherry and Victoria. Of large size, fine flavor, and claimed to be five times as prolific as the Cherry. A great acquisition.

La Versailles—Very large; red; bunch long; of great beauty and excellent quality. One of the finest and best, and should be in every collection. Very productive.

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

North Star—The strongest grower among the red varieties; should be given plenty of room and ground kept well enriched; bunches average 4 inches in length and are freely pro-

duced. Combines extreme hardiness, vigorous growth, extra quality and great productiveness.

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

Victoria—A splendid variety, ripening two or three weeks later than the others, and continuing in a 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.

BLACKBERRIES.—*Rubus* or *Rubus Villosus*.

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 the rows eight feet apart with plants three feet apart in the rows. Give the plants same cultivation as Raspberries.

ICEBERG.

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

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

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

Himalaya Giant—Vigorous grower, canes sometimes reaching 30 to 40 feet, must be trained

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

Iceberg—This wonderful berry is the origination of the far-famed Luther Burbank, whose remarkable success in the production of valuable new plants has given him the title of the "Wizard of Horticulture." The fruit is white transparent; the seeds, which are unusually small, can be seen in the ripe berries. The clusters are larger than those of Lawton; individual berries as large but earlier, sweeter and more melting than Lawton.

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

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

Mammoth—Supposed to be a cross between the Wild Blackberry of California and the Crandall's Early. Grows entirely unlike any other blackberry plant known. It is a rampant grower, trailing on the ground and under favorable conditions will grow twenty feet in a season; the canes are large, of deep red color when exposed to the sun; the foliage is

MAMMOTH BLACKBERRY—Continued.

large, thick, of a deep green color. Enormously productive and exceedingly early, ripening three weeks before other cultivated kinds. Fruit enormous, specimens measuring $2\frac{1}{2}$ inches long; seeds small, soft, and abundant; core small, soft. In size and flavor said to surpass all other varieties of blackberries. We offer it to the public only after a most thorough test, covering a period of three years. (Cut—See page 44).

Rathbun—Origin Western New York. A strong erect grower with strong stem, branching freely; will root from tip of branches like a

Raspberry. Hardy, having endured 20 degrees below zero and produced a good crop. Forms a neat compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious without hard core, of extra high flavor, jet black, small seeds; firm enough to ship and handle well. Very large size, resembling the Wilson and fully equal to that grand variety, with the addition of hardness.

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

BLACKBERRY-RASPBERRY.--HYBRIDS.

LOGAN BERRY.

Logan Berry. Raspberry-Blackberry — Judge J. H. Logan of Santa Cruz, is the discoverer of this wonderful fruit. It is thought to be raised from the seeds of the Auginbaugh Blackberry and Red Antwerp Raspberry. The vine grows entirely unlike the blackberry or raspberry; it trails upon the ground like a dewberry. The canes are very large, without the thorns of the blackberry, but have very fine spines like those found on the raspberry; leaves resemble those of the raspberry more than of the blackberry; are of a deep green color, coarse and thick. An exceedingly strong grower, and an enormous bearer. The fruit is as large as the largest sized blackberry, of the same form and shape, a dark, bright red color when fully ripe, and combines the flavor of both the raspberry and the blackberry, having a mild and very pleasant vinous flavor, not found in any other fruit. Raw, it is excellent for the

table, as also stewed; and for jelly or jam it is without an equal. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful. It is firm and a fine shipper.

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

Primus—This is one of Mr. Burbank's greatest productions, and he says of it: "This was my first success with Blackberry-Raspberry Hybrids, and it has been fully tested for several seasons. It is one of the most productive berries known, and is larger and more regular in shape than any other berry. Its flavor is unique; nothing like it has before appeared. All pronounce it superior when cooked, and eaten raw it is claimed to be the best berry ever tasted. This berry is really enormous in size of fruit and vigor of growth. Its flavor is like that of a raspberry and black-

berry combined; fruit long and handsome, of a mulberry black color. Its season of fruiting is earlier than either the raspberry or blackberry, following close upon the strawberry, often before Standard Blackberries commence to bloom. Bushes inclined to a trailing habit, and are best trained upon wires like grapevines. It is somewhat of a perpetual bearer, showing more or less fruit all summer. In a greenhouse it is a great thing, for it will fruit splendidly all winter and prove exceedingly profitable. It is as hardy as an oak in any climate and a sure cropper every year."

DEWBERRIES—*Rubus Canadensis*.

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

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

GOOSEBERRIES—*Ribes*.

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 use and market.

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

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

Champion—A new variety introduced from Oregon, where it originated; fruit large, round; an immense bearer, and entirely free from mildew.

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

Downing—Originated at Newburgh, N. Y. Fruit much larger than Houghton; roundish, light green, with distinct veins; skin smooth; flesh soft, juicy and very fine flavored. Vigorous and productive. The most valuable American sort.

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

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

Josselyn (Red Jacket)—An American seedling of large size; smooth, prolific and hardy; of best quality. Has been well tested over a wide extent of territory by the side of all the leading varieties, and so far the freest from mildew, both in leaf and fruit of them all. A wonderful cropper, with bright, clean healthy foliage. For complete description and testimonials of our leading horticulturists, write for our 4-page circular, giving full particulars.

ASPARAGUS—*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 rooted barnyard manure. Locate the plants eight inches apart in rows three feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and, except near the sea shore, three pounds of salt per square yard early every spring. Do not cut for use until the plants have grown two seasons.

MAMMOTH BLACKBERRY.—See Description, page 41.

ASPARAGUS—Continued.

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

Columbian Mammoth White—It produces shoots which are white and remain so as long as fit for use. In addition to the marvelous advantage of its white color, the Columbian

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

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

RHUBARB, or PIE PLANT.

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

Dodge Prolific—A valuable new variety; seedling from the Myatt's Linnæus; ripens between the Victoria and Linnæus; very large, stalks often three to four feet high; very tender; the best variety that has been introduced.

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

Victoria—Very large and valuable for market. Early.

STRAWBERRIES.—Fragaria.

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

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

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

Crescent Seedling—Large; averaging larger than Wilson's Albany; conical; color a handsome, bright scarlet; quality very good. In productiveness unequalled, having produced over 400 bushels per acre. Plants very strong and vigorous; a most valuable market sort.

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

The "Greenville"—Originated on the fruit farm of E.M. Buechly, of Darke Co., Ohio, in 1883. It has been thoroughly tried at the experimental stations for the past ten years, and reports

are unanimous in its favor. It leads for productiveness, market, home use, and general purpose; combines earliness, firmness, large size, good quality, very even and fine color, with wonderful vigor and health of plant; free from rust, and attains its greatest productiveness when planted near Bederwood.

Magoon—Has proved to be a leader in hardiness, in addition to all of its other good qualities. Of over 100 varieties the Magoon alone has come through the trying weather of the past winters without injury. The Magoon Strawberry always brings top prices in the Portland market, and is a remarkable yielder.

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

Pearl—Said to possess more points of excellence than any other. Plants immensely strong, vigorous and productive; berries large, symmetrical and well colored.

Sharpless—A grand variety in every respect; berries uniformly very large; deep, clear red; moderately firm, sweet and excellent, a strong grower and very productive.

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

FIGS.—Ficus.

Black Ischia—Medium size; dark purple, almost black when ripe; flesh deep red, sweet and luscious; tree hardy; an excellent bearer.

PERSIMMONS.—*Diospyros*.

The Japanese Persimmons (*D. Kaki*) are growing more into favor every year and they are especially valuable for Winter fruit. For the Southern States these Persimmons will be a most welcome addition to the fruit list. The Italian and American varieties have delicious fruit, but it is small. The persimmons always command a high price in the market.

American—(*D. Virginiana*)—Makes fine ornamental specimens. Leaves 4 to 6 in. long, glossy green above, glaucous beneath. Makes a round or conical rather open head, with crooked, twisted branches.

Hya-Kume—Very large, roundish, oblate; skin vermillion-red; flesh rusty brown, juicy; very delicious.

Kuro-Kume—Medium, oblate; skin yellowish-red; flesh orange color; juicy and sweet.

MULBERRIES.—*Morus*.

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

Downing's Everbearing—The beauties 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—Equal to Downing's in all respects and a much hardier tree. Vigorous grower; very productive; the best variety for fruit; ripe from middle June to middle Sept.

Russian—(*Morus Tartarica Alba*)—A very hardy, rapid growing timber tree of great value, especially at the West. Introduced by the Mennonites; foliage abundant, and said to be very desirable in the culture of silk worms. Fruit of good size and produced in great abundance.

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

NUT TREES.

AMERICAN SWEET CHESTNUT.—See page 47.

NUTS—Continued.

The past few years have witnessed a remarkable development in the planting Nutbearing trees; probably no branch of tree cultivation pays larger profits or is as well assured of a profitable market for all products. The immense importation of foreign nuts every year gives some idea of the market to be supplied. Few farms but contain land, that, if planted to nut-bearing trees, would pay better than anything else to which it could be devoted; the nuts in many cases paying better than farm crops or fruits, while most kinds are making a growth of valuable timber, that will of itself pay a large per cent. on the investment.

Our native Nut-bearing trees are admirably adapted for planting in streets, farm lanes, pastures, etc., for shade, ornament, and profitable returns.

ALMONDS. *Prunus. Amygdalus.*

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

I. X. L.—Large, generally single kernels; hulls easily; soft shell; tree a strong, upright grower.

Nonpareil—Large, full kernel, thin shell; tree of a weeping habit, and a strong grower.

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

Hardshell—A fine hardy variety, with large plump kernel and very ornamental when in bloom.

CHESTNUTS.

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

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

Japan Mammoth—A monstrous fruit, larger than the European, and flavored like the American sweet. Tree bears when quite young.

CHESTNUT, JAPAN OR GIANT.

FILBERTS.—*Corylus.*

Filbert, English—This is of the easiest culture, growing 6 to 8 feet high, entirely hardy, and one of the most profitable and satisfactory nuts to grow, succeeding well on almost all soils, bearing early and abundantly. Nut nearly round, rich, and of excellent flavor; admired by all for dessert.

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

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

HICKORY—*Carya.*

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

HICKORY.

NUTS—Continued.

Pecan—A native nut belonging to the (*Carya Olivaeformis* or *Hicoria Pecan*) Hickory nut family. The tree is of tall growth, and bears abundantly, not entirely hardy here, but is further south. Should be planted wherever it will succeed. The shell is very thin, the kernel sweet and delicious.

PECAN.

WALNUTS.—(*Juglans*.)

Black American—(*J. Nigra*.) — This species of Walnut is a common and stately forest tree in the Middle and Western states; makes a fine shade and ornamental tree; produces large crops of rich and oily nuts.

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

California Black Walnut—This species of Walnut is indigenous to California. The fruit is spherical, the nut hard but smooth, and not furrowed like the Eastern Black Walnut; the kernel is rich and oily. This walnut is of a rapid growth, spreading out more than the Eastern kind, but going to bearing sooner.

Japan Walnut, Sieboldi If it produced no nuts would be well worth cultivating for an ornamental tree. Grows with great vigor, surpassing all other nut trees, assume very handsome form, needs no pruning; leaves immense size, charming shade of green. Nuts are borne in clusters of 12 or 15 each at tips of previous season's branches. Have a smooth shell, thicker than the English, but not as thick as the Black Walnuts, much resembling Pecans. Meat is sweet, of best quality, flavor like butternut, but less oily; superior quality; commences bearing young, trees 3 to 4 years from nut in nursery rows, frequently producing nuts. Perfectly hardy, standing 21 degrees below zero without injuring a bud.

We would call the attention of the public to the most valuable kind of Walnuts. Those varieties that we recommend to plant for market, are well tested varieties, that cannot be surpassed for beauty and size of nut, quality of meat and hardness of trees.

We grow nothing but grafted or second generation trees, and prices should not be compared with the common tender varieties grown by most nurserymen as English Walnuts. These are not hardy enough for Oregon and Washington, and they are very often barren, caused by the staminate, (or male blossom, or catkin), being out while the pistillate, (or female blossom or nuts), are yet in a dormant state, so that when the latter are out there are no male catkins to fertilize the nuts, which then drop off, after having attained the size of a pea. Thousands of good healthy trees can be seen both in California and Oregon of this class, which are worthless for anything but shade.

Chaberte Walnut—An old and most valuable variety; late in budding out. The nut is well shaped, roundish, oval, and of fair size, though it is not what is called a large nut; the kernel is of extra fine quality; good bearer. The Chaberte was originated over a century ago by a man named Chaberte, hence its name.

Franquette Walnut—Originated about the same time as the Mayette in the southeast of France, by a man named Franquet. It is quite large, of an elongated oval, and very attractive; kernel full fleshed and sweet. It buds out late in the spring.

Mayette Walnut—This is one of the finest dessert nuts grown; it is quite large, uniformly so, well shaped, with a light colored shell; the kernel is full fleshed, sweet and nutty. But what renders this remarkable kind so much more valuable is to be very late in budding out, which enables it to escape the disastrous effect of late frosts in the spring; it is also an abundant bearer. This is the nut imported in the United States under the name of Grenoble, but on account of the duty of three cents per pound, as the nut is a high-priced nut in France, a common and cheaper grade is mixed with it, to the disgust of nut importers in New York and Chicago. The Mayette was originated by a man of the name of Mayet, about 125 years ago, the nut having ever since been a great favorite.

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

Proeparturien—Perfect soft shell of first quality. Is one of the most productive kinds.

JAPAN WALNUT.

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. These have had a few shrubs or roses 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 the place. A purchaser having to decide between a house with bare and unkept 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 for buyers.

HOW TO PLANT.

Do not make the mistake of planting at random all over the grounds. 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 the house. This will secure light and air with good views from the house. 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 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.

NOMENCLATURE AND DESCRIPTION.

Our catalogue being made especially for the planter, we have given as far as possible the common name first and the botanical name follows in parenthesis, although the common name is never absolutely reliable as different localities have different names for the same plant.

There is much confusion even in the botanical names of trees, shrubs and plants at the present time. We have endeavored to follow the later botanists, and to make these as accurate as possible, and hope to correct any errors that may occur in future editions.

VARIETIES NOT LISTED.

In every large nursery there are many varieties of trees of extra size but in too small quantities to list in the catalogue. If you wish anything of a special size or variety not named, write us for special quotations, and if we have it in stock, will be pleased to supply you.

ARALIA SPINOSA.

UPRIGHT DECIDUOUS TREES.

ACACIA. (See Locust.)

AILANTHUS.

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

ALDER (*Alnus*).

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

Imperial Cut-leaved—(*A. Laciniata Imperialis*.) A very striking and beautiful tree of graceful habit, with delicate and beautiful cut

leaves; hardy and of vigorous growth, one of the finest cut-leaved trees in cultivation. Fine for lawn planting.

ARALIA (*Angelica Tree*) or **Hercules Club**.

All small trees with large, finely divided foliage and showy heads of white flowers; very useful for lawn planting and for sub-tropical effects.

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

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

CATALPA BUNGEI.

ASH (*Fraxinus*).

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

Willow-Leaved—(*F. Salicifolia*)—A beautiful variety of fine form, rapid growth, having narrow wavy leaves.

See also Weeping Poplar.

ASIMINA (See Pawpaw).**BALM OF GILEAD** (See Poplar.)**BILSTED** (See Sweet Gum, pg. 67.)**BEECH** (*Fagus*).

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

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

AMERICAN ELM.

Riversi—Smooth leaved purple. (F. Purpurea Riversi). This variety differs from the ordinary purple leaved by its compact symmetrical growth, and crimson foliage early in the spring, changing to dark purple in the summer. One of the finest of all purple leaved trees.

BIRCH (B. Betula).

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

See also Weeping Trees, page 63.

BOX ELDER—See Maple Ash Leaf.

BUCKEYE—See Horse-Chestnut.

BUTTONWOOD—See Sycamore.

CATALPA—(Catalpa).

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

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

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

Tea's Japan Hybrid—Large luxuriant foliage, handsome white flowers, with purple dots and a touch of yellow around the throat, with a pleasant, delicate fragrance; a tree in bloom not only produces a magnificent spectacle to the eye, but also fills the air quite a distance with its agreeable odor. In rapidity of growth it rivals the most luxuriant trees of temperate climate.

CHERRY (Cerasus).

Double Flowering—(C. Flore alba plena)—A tree of medium growth, producing clusters of double white flowers in May. Blooms so profusely as to completely hide the branches from view. Fifteen to twenty feet high when fully grown.

Japan Weeping—See Weeping Trees, p. 64.

Dwarf Rocky Mountain—See Shrubs, p. 73.

CHESTNUT—See page 47.

CLADRSTIS—See Yellow Wood, p. 62.

CRAB (Pyrus or Pyrus Malus).

Bechtel's Double Flowering—(P. Floribunda)—Makes a medium sized ornamental tree of great beauty; perfectly hardy; succeeds well in all soils not extremely wet. When in bloom in early spring this tree presents the appearance of being covered with per-

fectly double, small, pink roses of delicious fragrance. The only sweet scented Double Crab; blooms quite young. Unlike many other trees, it does not bloom until the leaves are fully developed, which adds greatly to its beauty. Sure to become quite popular as soon as it is well known. For Cut—See page 54.

DOGWOOD.

DOGWOOD (Cornus).

American White—(C. Florida)—A native tree of fine form and beautiful foliage, growing from 20 to 25 feet high, producing white flowers three inches in diameter, early in the spring, before the leaves appear. A very desirable tree. Foliage grayish green, turn deep red in autumn, making the tree one of the most beautiful at that season. One of the most desirable of ornamental trees.

See also Weeping Trees, pg. 64 and Shrubs, pg. 70.

ELM (Ulmus).

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

Corkbark (U. Racemosa)—The bark is corky; the tree an upright fast grower.

English—(U. Campestris)—An erect, lofty tree, with rather small leaves.

Purple leaved—(U. Pupurea)—Erect in growth, with slender branches, densely clothed with dark purplish green foliage.

Camperdown—See Weeping Trees, p. 64.

Empress Tree—See Paulownia, p. 60.

FRINGE (Chionanthus).

Purple—(C. Rhus Cotinus)—A much admired small tree or shrub, for its curious fringe or hairlike flowers that cover the whole surface of the plants in mid-summer.

White—(C. 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 one of the most desirable lawn trees.

BECHTEL'S DOUBLE FLOWERING CRAB.

HORSE CHESTNUT.

GINKGO—See *Salisburea*, p. 61.

GOLDEN CHAIN—See *Laburnum*, p. 56.

GUM—See *Sweet and Sour*, p. 62.

HERCULES CLUB—See *Aralia*, p. 50.

HICKORY—See page 47.

HONEY LOCUST—(*Gleditsia*).

Honey Locust, thick horned—(*G. Triacanthos*).
A rapid growing, native, tree, with powerful spines and delicate foliage, used especially for hedges.

HORSE CHESTNUT (*Æsculus*.)

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

White Flowering—(*Æ. Hippocastanum*)—A very beautiful, well-known tree, with round, dense head, dark green foliage, and in early spring an abundance of showy white flowers, slightly marked with red specks or panicles.

HORSE CHESTNUT, SMOOTH-FRUITED (*Æ. Pavia*).

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

Small Buckeye—(*Æ. Pavia Rubra*)—A small-sized tree, with dark red flowers. A very crooked and irregular grower.

JUDAS OR RED BUD (*Cercis*).

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

LINDEN.

KENTUCKY COFFEE TREE (*Gymnocladus Canadensis*).

A native tree of large size, with rough bark and coarse branches; feathery foliage of a bluish green color. Flowers white in racemes followed by long pods.

LABURNUM (*Cytisus*).

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

LARCH (*Larix*).

Europea—(*L. Europaea*)—An excellent, rapid-growing, pyramidal shaped tree, drooping, slender branches; foliage light green, soft and graceful. Perfectly hardy and thrives in nearly all situations. Makes handsome specimens for ornamental planting, and is very valuable for timber.

LINDEN (*Tilia*).

Close, dense headed, rapid growing trees, excellent for shade, do well in nearly all situations; excellently adapted to street, park and large lawns; should be planted much more freely than they are.

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

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

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

LIQUID AMBER.—See Sweet Gum, p. 62.

LOCUST OR ACACIA.—(Robina).

Black.—(R. Pseudacacia)—50–80 ft. Medium-sized tree with feathery foliage and drooping racemes of very fragrant pea-shaped flowers. Cut back when transplanting. This is the tree producing the “posts” and “pins” of commerce.

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

LOCUST HONEY (Gleditschia). See page 55.

MACLURA.—See Osage Orange, p. 59.

MAIDENS HAIR.—See Salisburea, p. 61.

MAGNOLIA.—(Native Sorts)

It would be difficult to over-praise magnolias,—they make beautiful trees for ornamental planting, and the *acuminata* and *tripetala* are also valuable as street and avenue trees. The leaves are large, dark-green, the flowers white or yellowish-white, and most of them sweet-scented. Nearly all bear large and conspicuous fruit pods,—the *tripetala* being especially handsome in this respect. *They should be transplanted in the spring and closely pruned.*

MAGNOLIA.

Figures in parenthesis indicate size of grown tree.

Magnolia Acuminata — (Cucumber Tree) — A beautiful pyramidal growing native species, growing to the height of 60 or 70 feet, with large, glossy leaves; flowers yellow, tinted with bluish purple.

M. Glauca.—Sweet Bay—(15 to 20 feet). The Sweet White Magnolia is greatly prized for its beautiful, white, sweet-scented flowers. These flowers come later than those of most all other kinds, not expanding until the first week in June. In sheltered places it is almost or quite an evergreen. Though it grows in swamps and low ground in its wild state, it does equally well in higher situations.

M. Tripetala — (Umbrella Tree) — A hardy, medium-sized tree, with immense leaves and large white flowers four to six inches in diameter, appearing in June.

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

Chinese White.—(M. Conspicua)—A beautiful Chinese variety, with large white flowers that appear before the leaves. Tree of small size.

Showy Flowered (M. Speciosa) — Resembles the Soulangeana; flowers not as large or as deep in color; exceedingly free bloomer and flowers remain on tree longer than any other Chinese variety. One of the hardiest and best.

M. Lennei.—(20 to 25 ft.)—The large, cup-shaped, rosy-pink flowers are beautiful, and are unlike those of any other sort.

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

M. Soulangeana.—(15 to 20 ft.)—Perhaps the most popular of all magnolias, being of vigorous growth, and blooming profusely, even when quite small. The flowers are large, pink on the outside of petals and white inside. In average seasons the flowers open in the third week in April. It can be grown as a small tree or large shrub.

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

MAPLE (Acer).

Argenta Variegated (A. Argenta)—This we consider one of the most attractive ornamental trees grown; so much of the leaf is variegated that at a short distance has the appearance of the whole leaf being a silver white. The tree is as hardy as the ash-leaved and a specimen should be in every lawn.

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

Golden Variegated.—Foliage golden yellow. Tree very hardy and attractive.

Norway (A. Plantanoides). For Cut—See 58. A native of Europe. Its large, compact habit, broad, deep green shining foliage, and its stout, vigorous growth, renders it one of the most desirable species for streets, parks and lawns; rather a rough, crooked grower, while young, but soon develops into straight, magnificent specimens.

Oregon.—(A. Macrophyllum)—A most graceful tree, with wide-spreading branches and large foliage.

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

NORWAY MAPLE.

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

Schwedler's—(*A. Schwedlerii*)—A beautiful variety, with young shoots and leaves of a bright, purplish and crimson color, which changes to purplish green in the older leaves. A distinct and handsome sort. See page 59.

Silver-leaved, or Soft—(*A. dasycarpum*)—A well known native tree of rapid growth, large size, and irregular rounded form; foliage bright green above and silvery white beneath; tree very hardy and easily transplanted. One of the most useful trees.

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

Sycamore—(*A. Pseudo Platanus*)—A noble variety, with spacious head, and large deep green foliage; a rapid, upright, free grower; very desirable for shade.

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

MAPLES, JAPANESE.

The Japanese Maples are becoming more popular as they become better known. They are all of dwarf habits and are varied in their foliage.

They are all so shrub-like in growth, and many of them of such rich, bright hues and deep cut leaves that we class them by themselves. On account of these characters they are much used for forming permanent beds, but are very effective whether planted singly or in groups. In groups they can be planted four to six feet apart. Though succeeding in sun they prefer light shade at midday. The bright-hued leaves make a fine display and the blood-leaved (*Atropurpureum*), aureum and purple cut-leaf are especially in demand. We include only those we can especially recommend. For cut, see pg. 59.

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

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

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

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

SILVER LEAF MAPLE.

Japanese — (*A. polymorphum*) —

The most vigorous of the type; forms a small, shrubby tree with various shades of color on the young growth; foliage small, deeply lobed, coppery green, changing to the most brilliant and gorgeous tints in autumn. It is the parent form of many of the "Japanese maples." For planting singly on a lawn it is most handsome, its feathery green leaves making its appearance distinct from that of any other shrub-like tree. (12 to 15 ft.)

MOUNTAIN ASH—(*Pyrus Sorbus*).

Very ornamental, especially when covered with their bright scarlet berries. See page 60.

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

European—(*P. Aucuparia*) Similar in appearance to the above, with finer foliage, and smaller, deeper colored berries; much more desirable than the American, and everywhere very popular, erect stem, smooth bark; head dense and regular. When fully grown, twenty to thirty-five feet.

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

SCHWEDLER'S MAPLE.

See also Weeping Trees, page 63.

Mulberry—(See pg. 46.)

OAK—(*Quercus*).

Pin—(*Q. palustris*).—

The Pin Oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, finely divided, of a beautiful shining green that colors to sparkling red and yellow in fall. The tree is easily transplanted, and grows well on wet or dry ground; is, in fact, the quickest-growing of all the Oaks. As an avenue and street tree it is unequalled, and it is one of the best for park planting.

PIN OAK.

Red Oak—(*Q. rubra*).—A very well-known, rapid-growing, native species. The leaves are large and bright-green, and take on a purplish scarlet-hue in the fall. It becomes of large size, with a round and spreading head. One of the best sorts, not only as a street and avenue tree, but also for ornamental purposes.

OSAGE ORANGE (*Maclura*).

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

JAPANESE MAPLE.

MOUNTAIN ASH.

PAULOWNIA.

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

PAW PAW (*Asimina*).

Custard Apple—(*A. Triloba*)—Produces an oblong, yellow, pulpy fruit. Leaves large, pointed, flowers dark purple, foliage colors handsomely in the fall.

Pecan—See pg. 48.

Persimmons—See pg. 46.

Plane Tree—See Sycamore.

POPLAR (*Populus*).

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

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

Carolina—(*P. Monilifera Carolinensis*)—One of, if not the most rapid growing trees, with large, handsome, glossy, serrated, deep green leaves. Succeeds everywhere; especially adapted to large cities, where it makes unusual fast growth, and resists smoke and gas. Pyramidal form, making a spreading head and dense shade when properly trimmed. New growth should be well cut back in spring for the first few seasons. It

CAROLINA POPLAR.

POPLAR—Continued.

is unexcelled for quick growth and effect; makes a splendid wind-break or screen; is used in larger numbers than any other one tree for street planting. For new places and streets where the slower growing ornamentals are desired, plant the Poplars between, securing an almost immediate effect, removing them as the other trees attain size.

Golden—(*Aurea Van Geertii*)—Has fine golden yellow foliage, retaining its brilliancy throughout the season, fine for contrast with green or purple-leaved trees. One of the most effective for street and lawn planting.

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

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

See also Weeping, pg. 64.

RED BUD—See Judas tree, p. 55.

SALISBUREA.

Maiden Hair or Ginkgo —(*S. adiantifolia*) — A Japanese tree of large size and columnar growth. When full-grown it is more spreading. The leaves resemble those of the Maiden Hair Fern. A valuable, ornamental tree, and useful for street and avenue planting. If pruned several times when young it will make a round, compact-headed tree. It seems to thrive well on sidewalks in the city, and to be generally free from insects and diseases.

SYCAMORE OR PLANE.

SYCAMORE (*Platanus*).

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

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

THORN (*Crataegus*).

Double Scarlet — (*C. Coccinea* fl. pl.) — Flowers deep crimson, with scarlet shade; very double, and considered larger than the double red; fine rich foliage.

Double White — (*C. Alba Flore Pleno*) — Has small, double white flowers.

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

SOUR GUM or TUPELO (*Nyssa*).

N. Multiflora — Besides its bright-green leaves and shapely growth, its lovely autumn foliage recommends it.

SWEET GUM, or BILSTED (*Liquidambar styraciflua*) One of the finest American trees. Of medium size and moderate growth; form round-headed or tapering; leaves resemble

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

TREE OF HEAVEN (See *Ailanthus*) p. 50.**TULIP TREE, or WHITE WOOD** (*Liriodendron*).

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

TUPELO — See Sour Gum.

VIRGILIA — See Yellow Wood.

WALNUT — See page 48.

WHITE WOOD — See Tulip Tree.

WILLOW (*Salix*).

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

Rosemary-Leaved — (*S. rosmarinifolia*) — Budded 5 to 7 feet from the ground, it makes a very handsome round-headed small tree; branches feathery, foliage silvery.

See also Weeping Trees, p. 65.

YELLOW WOOD (*Cladrastis tinctoria*, syn. *Virgilia lutea*).

One of the finest American trees, of singular beauty when in flower. Of moderate growth, broadly rounded head, foliage compound, of a light green color, turning to a warm yellow in autumn; flowers pea-shaped, white, sweet scented, appearing in great profusion in June, in long drooping racemes covering the tree, and giving it a most distinct and pleasing effect.

WEeping, DRooPING, OR PENDULOUS TREES.

CAMPERDOWN ELM.

Much attention is now given to this class of trees, and we along with some others, place them separately for the convenience of our patrons. The superior grace and beauty of the weeping varieties render them especially adapted to yard, lawn or cemetery.

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

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

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

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

ASH (Fraxinus).

European Weeping — (F. Excelsior Pendula)—

The common well-known sort; one of the finest lawn and arbor trees, covering a great space and growing rapidly.

BEECH (Fagus).

F. Sylvatica pendula. A remarkably vigorous, picturesque tree of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight, with the branches tortuous and spreading; quite ungainly in appearance divested of their leaves, but when covered with rich luxuriant foliage, of wonderful grace and beauty.

BIRCH (Betula).

Cut-leaved—(B. Laciniata Pendula)—Probably the most popular and desirable lawn tree in existence, and produces a beautiful effect on streets and avenues. Makes a vigorous growth and is perfectly hardy. Trunk straight, slender, white as snow. The slim side branches droop in a most picturesque manner; foliage delicate and deeply cut, coloring finely in the fall. The drooping branches and silvery bark form a most effective combination during the winter months. Mr. Scott, in his "Suburban Home Grounds," says of it: "No engraving can do it justice; like the palm tree of

CUT LEAF BIRCH.

CUT LEAF BIRCH—Continued.

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."

Elegant Weeping—(B. Elegans Pendula)—First exhibited at the Paris Exposition in 1876, where it attracted great attention. It has beautiful foliage and an elegant weeping habit. It is very desirable in grounds that admit of variety.

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

CHERRY (Cerasus).

Japan Weeping Rose—Flowered—(C. Japonica pendula rosea)—Brought from Japan by Van Siebold, and is certainly one of the

finest weeping trees for lawns or small grounds. The branches are slender and when grafted on tall stems, fall gracefully to the ground. The flowers are rose-colored, appearing before the leaves. Undoubtedly the finest weeping cherry, and one of the finest weeping trees in cultivation.

Japan Weeping, White—(C. Jap. Pendula)—Feathery and graceful; flowers single white; fruit red. One of the finest of the small-headed pendent cherries. Resembles the pumila pendula somewhat, but much more feathery and graceful.

DOGWOOD (Cornus).

Weeping—(C. Pendula)—A weeping form of the White Flowering, distinct from all other weeping trees. Possesses the abundant bloom, handsome foliage and fruit of the White Flowering, and makes a magnificent specimen, either summer or winter.

ELM (Ulmus).

Camperdown Weeping—(U. pendula)—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.

MOUNTAIN ASH (Pyrus Sorbus).

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

MULBERRY (Morus).

Teas' Weeping Russian Mulberry—(M. Tatarica pendula)—A weeping variety of the now well-known Russian Mulberry. One of the most graceful and hardy weeping trees in existence. Wholly unlike anything heretofore introduced. Forms a perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion it is without a rival. It has beautiful foliage, is wonderfully vigorous and healthy; is one of the hardiest, enduring the cold of the north and the heat of the south; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting, cut, p. 65.

POPLAR (Populus).

Large-Leaved Weeping—(P. 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.

WILLOW (*Salix*).

American Weeping—(*S. 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*.

Babylonica or Common Weeping—(*S. Babylonica*)—The well-known common Weeping Willow. A large tree covered with drooping branchlets.

Golden Weeping—(*S. Aurea Pendula*)—The bark of this is of a bright-golden color. The branches are somewhat drooping. Makes a medium-sized, ornamental tree.

Kilmarnock—(*S. Caprea Pendula*) A distinct variety, having reddish shoots and large, glossy foliage; grafted at a proper height, about five feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, with the branches drooping gracefully to the ground. It is well suited for planting in cemetery lots or other small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and of vigorous growth.

TEA'S WEEPING MULBERRY.

EVERGREENS.—Coniferæ.

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

The sap of most evergreens, being of a resinous nature, is not as active in early spring as that of deciduous trees, and, as a rule, all evergreens and coniferous trees succeed better planted later in spring and earlier in autumn than deciduous trees. The latter part of April or during May, and the latter part of summer, say in August, are the best times in ordinary seasons for transplanting in this latitude. August planting is not recommended, however, unless the season be favorable.

ARAUCARIA.

Araucaria Imbricata — (*Chili Pine* or *Monkey Puzzle*)—A fine tree of regular pyramidal form; leaves bright green, broad, thick, pointed and overlapping each other.

ARBOR VITÆ (*Thuja*).

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

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

Douglas' Golden—(*T. Aurea*)—Free grower with fine golden yellow foliage; hardy; the most desirable Golden Arbor Vitæ for the northern states.

Elegant or Rollinson's Golden—(*T. Biota Orientalis Elegantissima*)—New; pyramidal; of a beautiful golden tint, when young, changing to golden bronze in autumn. The finest of this habit.

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

KILMARNOCK WEeping WILLOW.—See page 65.

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

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

Siberian—(T. Siberica)—One of the best of the genus of this country; exceedingly hardy, keeping color well in Winter; growth con-

pact and pyramidal; makes an elegant lawn tree.

Tom Thumb—(T. Tom Thumb)—Remarkable for its low, compact habit; valuable for planting in cemeteries and small places where large trees are not admissible.

CEDRUS DEODARA.

The Great Cedar of the Himalayan Mountains.

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

California Big Tree—(*Sequoia gigantea*)—The famous Big Tree of California; it makes a handsome pyramid when young; very desirable for lawn decoration. A very attractive evergreen; thrives well in this climate.

CYPRESS (C. Cupressus).

Lawsons—(C. *Lawsoniana*)—A fine evergreen, native of the Pacific Coast. One of the most graceful, and beautiful of evergreens; of fine, compact habits; delicate, feathery foliage; varies from vivid green to a silvery or bluish tint, according to sub-varieties.

JUNIPER.

CRYPTOMERIA.

Cryptomeria Japonica.—One of the finest evergreens of Japan. Fairly hardy.

HEMLOCK (Tsuga).

Tsuga canadensis—It can be a stately lawn tree, a wide-spreading shrub or a hedge plant, and in each place it hardly has an equal.

JUNIPER (Juniperus).

Irish—(J. *Hibernica*)—

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

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

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

PINE (Pinus).

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

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

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

White—(P. *Strobus*)—The most ornamental of all our native pines; foliage light, delicate, or silvery-green; flourishes in the poorest soils.

PODECARPUS—See Yew.

RED CEDAR—See Juniper.

RETINOSPORA (Japanese cypress or Japanese Cedar).

A genus very similar to cupressus. It comprises many varieties of wonderful beauty. Botanists class all varieties under two species—*obtusa* and *pisifera*, but originating in Japan it is almost impossible to say for certain to which a variety belongs, and following most other nurserymen we list under the names we received them. They are very desirable for planting in groups, as they are of medium size. In the far north they must be protected in winter.

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

R. Filifera aurea—A golden form of the preceding.

R. Obtusa—A free-growing evergreen, of bright-green foliage.

R. Pisifera—An evergreen of tree-like character when mature. The underside of foliage is silvery.

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

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

NORWAY SPRUCE.

COLORADO SPRUCE—See page 69.

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

Sequoia—See California Big Tree.

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

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

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

Pygmæa—(*P. Excelsa Pygmæa*)—A dwarf variety of the Norway; grows from three to four feet high; very compact.

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

YEW (*Taxus*).

English Yew—(*T. Baccata*)—A large bush or tree, 30 to 40 feet when fully grown. It is

densely branched and can be trimmed into any shape.

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

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

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

PODOCARPUS

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

UPRIGHT DECIDUOUS SHRUBS.

ALTHEA (*Hibiscus Syriacus*).

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

Double Red—(*H. Rubra flore pleno*).

Double Purple—(*H. Purpurea flore pleno*).

Double White—(*H. Alba flore pleno*).

ALMOND (*Prunus*).

Double-Rose Flowering—(*P. Japonica Rubra, fl. pl.*)—A beautiful small shrub, bearing in May, before the leaves appear; small, double, rose-like flowers, closely set upon the twigs.

Double White-Flowering—(*P. Japonica alba fl. pl.*)—Produces beautiful white flowers in May.

AZALEA (*Azalea* or *Rhododendron Sinesi*).

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

BARBERRY (*Berberis*).

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

Purple-Leaved (*B. Purpurea*)—Foliage and fruit of a violet purple color, very striking; fine for single specimens; also a desirable ornamental hedge plant, planted by itself or intermingled with the common.

ALTHEA.

DEUTZIA GRACILIS.

CHERRY (*Cerasus*).

Dwarf Rocky Mountain—From the mountains of Colorado. Hardy as a Wyoming sage-bush. With its deep green willow-like leaves, mass of pure white flowers in spring and a load of fruit in summer, it is well worth cultivation for an ornamental shrub. Makes a bush four or five feet high, usually fruiting in two years, producing large quantities of jet black fruit about the size of English Morello, and ripening after all other cherries are gone.

CORCORUS (*Kerria Japonica*).

A graceful, slender shrub, growing 4 to 5 feet high, flowering with double yellow flowers from early summer till fall. As pretty as a rose in shape of flower and very ornamental as a plant for lawn.

CORNUS (See Dogwood, p. 53). See also below.**CRAPE MYRTLE** (*Lagerstroemia Indica*).

A very beautiful class of shrub. It is to the south what the Lilac and Snowball are to the north, being found in nearly every yard. It is a strong grower, reaching a height of 10 to 25 feet; a continuous bloomer during the entire summer; flowers are very pretty, having curiously crimped petals. The normal color pink, but varieties with bluish, white and purple are not uncommon. It is a native of Southern Asia, probably from China. Not hardy in the extreme North.

CURRENT (*Ribes*).

Crimson-Flowering (*R. Sanguineum*)—Produces an abundance of crimson flowers in early spring.

Yellow-Flowering — (*R. Aureum*) — A native species with yellow flowers.

CYDONIA—See Quince, Japan.**DEUTZIA**.

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

Double-Flowering—(*D. Crenata flore pleno*)—Flowers double; white, tinged with rose. One of the most desirable flowering shrubs in cultivation.

D. Gracilis—(Slender branched)—A very desirable dwarf growing variety. Flowers pure white. A valuable plant for winter blooming.

D. Pride of Rochester—A new variety said to excel all others in size of the double white flower, length of panicle, profuseness of bloom and vigorous habit. A charming acquisition. Produced from the *Crenata*.

D. Waterii—A grand new variety with very large flowers borne in large loose racemes; robust grower and very hardy.

DOGWOOD (*Cornus*).

Red-Branched—(*C. Sanguinea*)—A native species very conspicuous and ornamental in the Winter, when the bark is a blood red.

See also pg. 53.

ELÆAGNUS.

Japanese Silver Thorn or Oleaster—(*E. longipes*)—A remarkable new shrub from Japan. Foliage glossy, silvery tinge underneath; bark covered with peculiar brown spots which remain all winter. Flowers not large, but the bush is covered in July with large bright red berries, which are edible and of a sprightly and agreeable flavor. Foliage remains good until late in autumn. A very desirable acquisition.

ELDER (*Sambucus*).

Golden—(*E. Aurea*)—From Holland. New and rare. When the leaves first appear they are bright green, but if planted where they will have plenty of sun they soon change to a golden green. The blossom, which resembles the common Elder bloom, appears in July. The best effect is produced when they are planted with other shrubs, thus rendering the foliage more conspicuous by the contrast.

ECHOCHORDA.

Pearl Bush—(*E. grandiflora*)—A vigorous-growing shrub from China, forming a compact bush 10 to 12 feet high; can be trimmed to any desired shape. The flowers are borne in slender racemes of eight to ten florets each, on light and wiry branches that bend beneath their load of bloom just enough to be graceful. It is perfectly hardy; flowers pure white. Very useful for cut-flowers.

FORSYTHIA.

Golden Bell—(*F. 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.

F. Fortunii—Similar to the above but of more upright growth.

F. Suspensa—(Weeping Forsythia)—Of drooping habit, resembling *Fortunii* in its flowers.

HEDYSARUM MULTIJUGUM.

Hardy, perennial, of recent introduction, of angular, straggling growth, 2 to 5 ft. high; very showy and worthy of general culture; flowers all summer, pea-shaped, violet or purplish majenta, with yellow blotches, in racemes, 8 to 18 inches long; leaves oval, grayish-green; fine for rockwork.

HONEYSUCKLE, UPRIGHT (*Lonicera*).

Red Tartarian—(*L. Tartarica Rubra*)—A beautiful flowering shrub, blooms early in spring, flowers bright pink.

White Tartarian—(*L. Tartarica Alba*)—Similar to the preceding, with white flowers.

HYDRANGEAS.

Beautiful free flowering shrubs, bearing immense panicles or trusses of flowers. *Paniculata* is perfectly hardy and requires no protection; the other varieties require protection in winter and should be grown in pots or boxes and wintered in the cellar, except in the warmer section.

Paniculata Grandiflora—This is one of the most valuable hardy shrubs. It attains a height of three or four feet, and is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one-half of last season's growth as the flowers are borne on new wood and are much finer when the plant is treated in this way. An excellent shrub for cemetery planting.

Otaksa—A splendid variety from Japan. Flowers large, bright pink tinted with blue; produced very freely.

Thomas Hogg—Immense trusses of flowers, at first slightly tinged with green, becoming of the purest white, and remaining so a long time.

Hypericum—See *St. John Wort*.

Japan Silver Thorn—See *Eleagnus*.

JUNE BERRY—(*Amelanchier Anifolia Nana*.)

Improved Dwarf—The fruit is borne in clusters, reddish purple in color, changing to bluish-black. In flavor it is mild, rich, sub-acid, excellent as a dessert fruit or canned. It is extremely hardy. In habit it is similar to the currant, the bushes attaining the same size. The blossoms are quite large and composed of fine white petals, which, with its bright, glossy dark green foliage, renders it one of the handsomest of ornamental shrubs.

Kerria—See *Corcorus*.

LILAC—(*Syringa*.)

Well known shrubs, succeed everywhere. Few are aware of the wonderful improvement in the past few years. We offer a choice selection of the best new double varieties, remarkable for their large trusses and beautiful flowers. Should be in every collection.

Common Purple—(*S. Vulgaris*)—The well-known sort.

S. Belle de Nancy—(Double)—Very large, brilliant satiny rose; white towards center; very fine.

Common White—*S. (Vulgaris Alba)*.

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

S. Japonica—(Tree Lilac)—A new species from Japan that makes a tree 20 to 25 feet high. The foliage is large, very dark green, glossy and leathery. Flowers white, in immense clusters, that stand up erect above the foliage on stout stems. It flowers about a month later than the common sorts.

Madame Ludwig Spæth—Panicle long; individual flowers large, single; dark purplish red; distinct; superb. The finest of its color.

Madame Abel Chatenay—(Double)—Large panicle; double white, very fine.

HYDRANGEA PANICULATA—See page 71.

President Grevy—A beautiful blue; individual flowers very double and very large, measuring three-quarters of an inch in diameter; the panicle is magnificent and measures eleven inches in length and five inches across. One of the finest Lilacs.

Senateur Volland — (Double) — Flowers rosy red.

Chionanthus Leaved or Josikæa—(S. Josikæa)—From Transylvania. A fine, distinct species of tree-like growth, with dark, shining

leaves and purple flowers in June, after the other Lilacs have done.

Persian (S. Persica) — Medium size, with small leaves and bright purple flowers.

White Persian—(S. Persica Alba)—A fine sort, with flowers delicately tinged with rose color.

Mock Orange - See Syringa Philadelphus.

Oleaster—See Eleagnus.

Pearl Bush—See Exochorda.

PRESIDENT GREY.

PLUM—(*Prunus*).

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

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

PRIVET—(*Ligustrum*).

Makes fine ornamental single specimens and one of the most desirable hedge plants, almost evergreen, compact free grower, stands pruning to any extent.

Common—(*L. Vulgare*)—An English shrub with smooth dark green leaves; flowers white, fruit purple.

California—(*L. Ovalifolium*)—A vigorous growing variety, of fine habit, thick glossy, nearly evergreen leaves.

QUINCE, JAPAN—(*Cydonia* or *Pyrus Japonica*.)

There are several flowering varieties, differing only in their color. Although of straggling growth, they can be pruned to desirable shapes without injury. Their large brilliant blossoms appear early in the spring in great profusion. Foliage bright green and glossy all through the summer. It is sufficiently thorny and strong to make a valuable hedge, and its beautiful flowers make it very handsome for that purpose.

Scarlet—(*C. Japonica*)—One of the best known; and a very handsome, hardy ornamental shrub. Has bright scarlet-crimson flowers, in great profusion, early in spring; one of the best hardy shrubs; makes a beautiful ornamental hedge.

Blush—A beautiful variety with white and blush flowers.

ROCKY MOUNTAIN CHERRY—See Cherry, page 53

ROSE OF SHARON—See Althea.

SCOTCH BROOM (*Genista*).

Genista Scoparia—(Scotch Broom)—The branches, almost rush-like in appearance, bear lovely yellow flowers.

SILVER BELL or SNOW DROP TREE (*Halesia*).

H. Tetrapetra—A fine large shrub, with beautiful large white, bell-shaped flowers in May. Rare and desirable.

SMOKE TREE or SUMACH (*Rhus*).

Shining Sumach (*R. Copallina*)—Noted for its lustrous green leaves, which are crimson in autumn, and its scarlet heads of seeds.

Mist Shrub. Smoke Tree (*R. Cotinus*)—The large panicles of purplish, misty-looking flowers this bears in early June has gained for it the name of Mist Shrub, Smoke Bush, etc. In fall the leaves change to brown, red, and yellow colors.

SPIRÆA VAN HOUTTEI.—See page 74.

SNOWBALL (*Viburnum*).

Common (*V. Sterilis*)—A well-known favorite shrub of large size, with globular clusters of pure white flowers in the latter part of May.

V. Opulis—(High Bush Cranberry) — Handsome and dense foliage; flowers white in drooping flat cymes, followed by brilliant scarlet fruit in showy pendulous bunches that remain on the plant all winter.

V. Plicatum Japan (Snowball)—This Japanese variety of the old-fashioned Snowball is one of the most valuable of our hardy shrubs. It forms an erect, compact shrub, six to eight feet high; blooms in June and for a long time is a solid mass of white, the plants being completely covered from the ground to the top of the branches with large balls of flowers white as snow. The foliage in early summer is an olive green, turning to very dark green later in the season.

SNOWBERRY (*Symphoricarpus*).

S. Vulgaris (Indian Currant, Coral Berry, St. Peter's Wort or Waxberry)—Graceful small shrub; small flowers followed by persistent deep-red berries along the under side of branches.

S. Racemosus—A well-known shrub with pink flowers and large white berries that remain on the plant through part of the winter.

SPIRÆA (*Spiræa*) Meadow Sweet.

S. Anthony Waterer—A most beautiful variety of Bumalda. In habit of growth it is the same as its parent. The flowers are crimson in the bud and when first open, fading afterwards to a deep pink. It blooms about the close of June, and if the flowers are cut off as fast as they commence to decay, there will be a continuance of them throughout the season, to some extent.

S. Aurea (Gold-leaved)—Flowers fine, white; foliage of a beautiful golden color, which gives variety to the lawn and renders it very desirable.

S. Callosa Alba—A white flowering variety of dwarf habit; very fine; remains in flower all summer.

SNOWBALL.

S. Prunifolia flore Pleno (Double Flowering Plum Leaved)—Very beautiful; its flowers are like white daisies. From Japan. Blooms in May.

S. Thunbergii—Profusion of small white flowers in early spring. Forms a rounded, graceful, dwarf bush; branches slender and somewhat drooping.

S. Van Houttei—The habit of the plant is pendulous, yet upright, giving a most graceful appearance even when out of bloom. The flowers are pure white and in dense clusters along the whole length of the branches, often weighing them to the ground. One of the finest ornamental shrubs that we offer. Excellent as a single lawn plant, or for grouping with other shrubs, also a fine hedge plant.

ST. JOHN'S WORT (*Hypericum*).

H. Moserianum—A grand variety, with large bright golden yellow flowers two inches in diameter. A continuous bloomer.

SYRINGA, OR MOCK ORANGE.

SUMACH—See Smoke Tree.

SWEET-SCENTED SHRUB—See Calycanthus.

SYRINGA, or MOCK ORANGE (Philadelphus).

All the species and varieties of the syringa have white flowers, many of them quite fragrant.

Golden-leaved (P. Aurea)—A very pretty plant of medium size with golden-yellow foliage. It retains its color the entire season, and is valuable for creating pleasing and striking contrasts with both green and purple-leaved shrubs.

Double Flowering Syringa (P. Flore pleno)—A variety with partially double, very fragrant flowers.

Garland Syringa—(P. Coronarius)—A well-known shrub, with pure white sweet-scented flowers.

TAMARIX (Tamarix).

African (T. Africana)—A very beautiful shrub, with very fine, feathery foliage, something like the Juniper; this sort has light pink flowers in small racemes, which appear towards close of May or first of June; a valuable shrub for near sea shore or in sandy soils where others do not do well.

VERBENA SHRUB, or BLUE SPIRÆA.

(Caryopteris Mastacanthus)—A new shrub, which is planted because of its blooming late in the fall, when but few shrubs are in flower. In the axil of each leaf-stalk is a bunch of bright-blue flowers. It continues in flower from the middle of September to the middle of October. An entire bed of this plant produces a striking effect; 2 to 3 feet high when grown. A valuable plant for bedding.

WIEGELIA (Diervilla).

Candida (D. Candida)—This is the very best of all the white flowering Weigelas; a strong, upright, erect grower; flowers pure white and produced in great profusion in June and continue to bloom during the entire summer.

Rose Colored—(D. Rosea)—An elegant shrub, with fine, rose-colored leaves. Introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered. Quite hardy. Blooms in May.

Variegated-leaved (D. Nana Foliis Variegata)—Leaves bordered with yellowish-white, finely marked. Flowers bright pink.

Crimson-Flowered (D. Floribunda)—This fine, crimson-flowered one blooms towards the close of May. The white stamens projecting from the flowers are quite a feature.

HEDGE PLANTS.

Ornamental Hedges, for fences, screens, woodbreaks or boundaries.

American Arbor Vitæ,
Siberian Arbor Vitæ,
Norway Spruce,
Honey Locust,
Japan Quince,

Barberry,
Box,
Laurustinus,
Privet,
Enonymus.

All described in appropriate places in this catalogue make beautiful ornamental hedges.

DEFENSIVE HEDGES—Honey Locust, Osage Orange.

EVERGREEN SHRUBS.

ADAMS NEEDLE—(See Yucca).

ASHBERRY—(Mahonia).

Holly Leaved—(M. Aquifolia)—A beautiful shrub, with smooth shining leaves, covered

with bright yellow flowers in spring, and a profusion of blue berries in Autumn.

AUCUBA JAPONICA.

Gold Dust Tree—A small, beautiful shrub, with curious gold blotched leaves; needs protection in winter.

AUCUBA JAPONICA—Continued.

Macula Masculata — Leaves long and narrow, irregularly toothed; color deep green.

Lanceolata—A desirable variety with deep green, lance-shaped leaves.

BOX—(Buxus).

Dwarf—(G. Nana)—Used principally for borders and edging, for which purpose it is the best plant in cultivation.

Tree Box—(B. Sempervirens, Arborescens)—A very desirable small tree in the yard or garden, well adapted to small places, prefers a shady situation; it can be made to assume any form.

B. Variegata—A variety of tree box, forming a beautiful small bush, blotched with white.

Calico Bush—See Mt. Laurel.

EUONYMUS — (Euonymus) — Spindel Tree, Strawberry Tree or Burning Bush.

E. Japonica—(Radicans Variegata Tree)—A neat trailing variety, with small, glossy green leaves broadly margined with white. Valuable for rock work or borders of beds; also for vases or baskets. This variety is hardy in the north.

Gold Dust Tree—See Aucuba.

HOLLY—(Ilex).

American Holly — (I. Opaca) — Deep green, glossy leaves with scattered spiney teeth, bright red berries.

English Holly—(I. Aquifolia)—A small tree, with shining, dark green thorny leaves, somewhat resembling the oak in form. In winter the tree is covered with bright red berries.

Golden Variegated — Leaves having a large blotch of creamy-yellow surrounded by a green border.

Kalmia—See Mt. Laurel.

Lauruseinus — (Viburnum Tonus) — A well-known winter flowering shrub of great beauty, producing an abundance of white flowers; well adapted for hedges.

V. Rotundifolia—Far superior to the common variety; leaves rounded, deep glossy green. Flowers much larger than the above. Better adapted to this valley; never sun-scalds.

V. Variegata—Leaves blotched with silvery white. Very fine.

Ligustrum—See Privet.

Mahonia—See Ashberry.

Mountain or American or Calico Bush—(Kalmia Latifolia) — Broad, glossy-green, shining foliage, flowers in large and showy clusters of elegant shape, and most beautifully colored, mostly pink or white. Few broad-leaved Evergreens are as beautiful in foliage, and none can excel the beauty and delicate form of its flowers. Requires about same treatment as the Rhododendron.

Privet—(Ligustrum)—The *Privet* in all its varieties deserves attention as an ornamental plant. It is almost an evergreen, and grows freely in all soils; is compact and

regular in its form, and bears shearing to any extent. The flowers appear in June and July.

California Privet—(L. Ovalifolium)—Of all ornamental hedge plants, this is the most highly prized. If cut to the ground one or two years after planting it makes a very thick hedge right from the bottom, sending up many strong shoots. The leaves are a rich green, and will remain on the plants up to Christmas, and if they are a little sheltered they will keep green almost all winter. This is especially the case if the hedge has attained some age and has frequently been trimmed. Though it is a strong grower it can be kept to a low size by frequent trimming. For cut, see page 77.

Common or European Privet—(L. vulgare)—Narrow foliage, showy white flowers; hardy.

RHODODENDRON.

RHODODENDRON, OR ROSEBAY—(Rhododendron.)

This, wherever known, is universally acknowledged to be the most showy, magnificent, hardy evergreen shrub that grows. It will thrive in any good soil without any special preparation, and in the full blaze of the sun. But it is more luxuriant in good, well prepared soil of leaf mould, or leaf mould and muck and peat mixed, and in partial shade, and does specially well near seacoast. It is abundantly supplied with numerous fibrous roots that retain a quantity of earth in lifting, so that it can safely be removed at any season of the year, except the short period of their rapid growth, covering a portion of June and July. The broad thick evergreen foliage, with its glossy richness would alone entitle it to a place foremost in the rank of evergreen shrubs, but when in June this mass of luxuriant foliage is almost hidden by the magnificent array of beautiful flowers in clusters and each cluster large enough for a lady's bouquet, it gives it a pre-eminence that our pen would fail to portray. Planted singly, in the flower garden or upon the lawn, they are objects of interest, but their greatest beauty, as in

many other plants, can only be fully developed by artistically massing them in beds upon the lawn, when the different varieties, of white, blue, purple, cherry, lilac, mauve and crimson, can be made to blend or contrast at will, producing an effect unrivalled by any other hardy plant in existence. We have a considerable list of the hardy grafted varieties that are of higher price and much more desirable than the seedlings of the Catawbiense, as they compass in the different sorts the entire range of colors, and each in itself distinct and definite, while the seedlings, as a rule, vary but little from the original type. When soils are too strongly impregnated with lime, the original soil should be removed

to a good depth and width where the Rhododendrons are to be planted and the space filled in with leaf mould and peat or muck mixed, or some other soil tolerably free from lime. They will repay all care that may be bestowed in preparing a bed suitable to their wants.

Spladle or Strawberry Tree—See *Euonymus*.

Yucca—(Spanish Bayonet)—Has a fine appearance; the stem is two feet above the ground, covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

Y. Filamentosa—(Adam's Needle)—Thread-leaved creamy-white; three to four feet. July.

CALIFORNIA PRIVET. See page 73, 76.

HARDY CLIMBING VINES.

ACTINIDIA—See Silvery Sweet Vine.

AKEBIA.

Quinata—A very beautiful, perfectly hardy, fast growing Japan vine with magnificent foliage; producing flowers in large clusters of chocolate purple color, possessing a most delicious perfume; unsurpassed for covering trellises and verandas, the foliage never being attacked by insects.

AMPELOPSIS.

A. Veitchii—(Japan Ivy or Boston Ivy)—A beautiful, hardy climbing plant, of Japanese

origin. Leaves a little smaller and more ivy like than the American. This is one of the finest climbers we have for covering walls, as it clings firmly to the smoothest surface, covering it smoothly with overlapping leaves, which form a perfect mass of foliage. The color is a fresh deep green in summer, changing to the brightest shade of crimson and yellow in autumn. It is quite hardy and becomes more popular every year. For covering walls, stumps, etc., no plant is more beautiful.

YUCCA.—For Description, see page 77.

AMPELOPSIS—Continued.

Virginia Creeper or American Ivy—(*A. Quinquefolia*)—A native vine of rapid growth, with large luxuriant foliage, which, in the autumn, assumes the most gorgeous and magnificent coloring. The blossoms, which are inconspicuous, are succeeded by handsome dark blue berries. Like the *Bignonia* and *Ivy* it throws out tendrils at the joints, by which it fastens itself to anything it touches.

ARISTOLOCHIA—See Dutchman's Pipe.

BIGNONIA, OR TRUMPET FLOWER—(*Tecoma*).

T. Radicans—A splendid climber; vigorous and hardy, with clusters of large trumpet-shaped scarlet flowers in August.

T. Grandiflora—New. Leaves thick and shining, and immense blossoms of gorgeous crimson and yellow.

CINNAMON VINE—(*Dioscorea divaricata*).

A fine hardy climber, and well known in some parts of the country as Chinese Yam. The tubers grow very large, and are edible like a sweet potato. The vine is a beautiful rapid grower, producing sweet-scented flowers.

AMPELOPSIS VEITCHII.—See Description, page 78.

HARDY PERPETUAL CLEMATIS, or VIRGINIS BOWER.

"It seems unnecessary to speak at length of the value of the climbing plants in our gardens and pleasure grounds. They are equally ornamental on the walls and terraces of the stable, mansion, and on the humblest cottage, over whose low roof a mantle of rose or clematis sheds such a transforming cloud of beauty. They grace the garden walls and take from stiff and hard lines their ugliness by fresh foliage, pretty flowers, and often pleasing fruit."

Clematis plants of the improved sorts are exceedingly hardy, slender branched climbing shrubs of marvelously rapid growth and handsome foliage, which produce beautiful large flowers of various colors in great abundance, and during a long period. In the several species and varieties of it, the Clematis surpasses all other hardy climbers in its adaptation to many uses and locations.

CLEMATIS—(Clematis).

Coccinea—(The Scarlet Clematis)—The vines attain a height of from 10 to 12 feet, beginning to flower in June and continuing until frost; single vines have from 20 to 30 flowers on each, and frequently as many as ten vines will start from one crown each season. The flowers are bell-shaped; in color a rich, deep coral scarlet, shining as if polished, and lasting a long time when cut.

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

C. Henryii—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.

C. Jackmannii—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 successful bloomer, producing flowers until frozen up. The flowers are large, of an intense violet-purple, remarkable for its velvety richness. Introduced in 1862—since which time many new varieties have been brought forward—Jackmannii has no superior, and very few, if any equals. July to October.

CLEMATIS JACKMANNII.

CLEMATIS PANICULATA.

C. Jackmannii Alba—A strong, vigorous grower, perfectly hardy, and a most prolific bloomer; fine, large, pure white flowers.

C. Mad. Ed. Andre—This is the nearest approach to a bright red Clematis and has been called the Crimson Jackmannii. The plant is a strong, vigorous grower and very free in bloom. Color a distinct crimson red; a very pleasing shade and entirely distinct from all other varieties.

C. Paniculata, Sweet-Scented Japan Clematis—A Japanese plant possessing unusually attractive merits. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance. The flowers appear in September, at a season when very few other vines are in bloom.

C. Ramona—A strong, rampant grower, and a true perpetual bloomer; flowers appearing on the last year's growth and on the new shoots, giving an abundance of bloom all through the season. Color, deep rich lavender.

MATRIMONY VINE.

C. Viticella Kermisius—Flowers of medium size, of bright wine red color, without a touch of purple. A strong, free grower, producing shade in a comparatively short time; a perfect sheet of fine red color.

DUTCHMAN'S PIPE—(*Aristolochia Siphon*).

A magnificent hardy native vine of rapid growth, with very large heart-shaped leaves and brownish flowers, resembling in shape a miniature pipe; splendid for archways or verandas.

HONEYSUCKLE—(*Lonicera*).

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

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

Hall's Japan—(*L. Halliana*)—A strong, vigorous evergreen variety, with pure white flowers, changing to yellow. Very fragrant, covered with flowers from June to November.

Japan Gold-Leaved—(*L. Aurea reticulata*)—A handsome variety, having foliage beautifully netted or variegated with yellow. Flowers yellow and fragrant.

Monthly fragrant—(*L. Belgica*)—Blossoms all summer. Flowers red and yellow. Very sweet. Rapid grower.

Scarlet Trumpet—(*L. Sempervirens*)—A strong grower and produces bright scarlet, inodorous flowers all summer.

IVY—(*Hedera*).

Evergreen Ivies often suffer in winter if exposed to the sun, and should therefore be planted on the north side of a wall or building.

English—(*H. Helix*)—A well-known old and popular sort.

Variegated-Leaved—(*H. Fol. variegata*)—With smaller leaves than the preceding, variegated with white.

Irish Ivy (*H. canariensis*, or *hibernica*)—The well-known old sort.

JASMINE—(*Jasminum*).

Hardy Yellow Jasmine—(*J. Nudiflorum*)—Bright yellow, fragrant blossoms.

Hardy White Jasmine—(*J. Officinalis*)—Very sweet-scented and highly desirable.

CHINESE MATRIMONY VINE—(*Lycium Chinense*).

A neat, half-climbing plant, bearing small, light-pink flowers in summer, followed by berries which turn to a beautiful scarlet in the fall, when it is very ornamental.

SILVERY-SWEET VINE—(*Actinidia Polygama*).

A new, hardy climber, from Japan, of remarkable beauty. The foliage on the ends of the flowering shoots is of a glistening silvery-white color, giving the whole vine, from a little distance, the appearance of being covered with large white flowers blooming among its bright green leaves. The effect is very marked and beautiful. The flowers, which appear in this latitude about the middle of June, lasting from two to three weeks, are creamy white with purple center in color with numerous stamens with bright yellow anthers, and remarkably sweet, resembling the Lily of the Valley in fragrance.

TRUMPET VINE—See *Bignonia*.

WISTARIA. (*Wistaria*).

Chinese Purple—(*W. Sinensis*)—A most beautiful climber of rapid growth, and producing long, pendulous clusters of pale blue flowers. When well established, makes an enormous growth; it is very hardy and one of the most superb vines ever introduced. p. 82.

Chinese White—(*W. Sinensis Alba*)—Introduced by Mr. Fortune, from China, and regarded as one of the greatest acquisitions. Rather tender.

PAMPAS GRASSES.

PAMPAS GRASS—

(*Gynerium digenitum*). Half hardy perennial; a native of South America. Very beautiful. Roots require winter protection.

Elegans—(*G. elegans*)—Plumes silvery white, upon very long stems; blooms early. A graceful new variety that is bound to become popular. The large plumes

when dried make a splendid addition to a bouquet of dried grasses.

Burbank's New Dwarf Pampas Grass—(*G. Jubatum*),—which produces a great abundance of large, feathery, light violet purple plumes, which appear months before those of the old kinds and stand well above the broad recurving foliage; very attractive.

WISTARIA. See Description, page 81.

BULBOUS AND TUBEROUS ROOTED PLANTS.

PÆONIES—(Pæonia).

Herbaceous—This splendid class contains the largest, most showy and attractive flowers in cultivation, almost rivaling the rose in color and bloom. They are of stately growth, very hardy, and delightful when in bloom. At the present time the public is beginning to appreciate the many fine varieties of recent introduction, ranging from pure white through the different shades of pink, rose, variegated, purple,

white, etc. They increase in beauty with age, and may be planted in almost any situation. We recommend fall planting. They succeed best in *rich* soil and will be benefited by a mulch of rotten manure during the winter which may be lightly spaded into the soil in spring. Many of them are very double and have a delicate and refreshing fragrance. They are easily cultivated and require but little protection. Blooms from four to eight inches in diameter.

PÆONIA.

PÆONIES—(Tree).

Handsome flowering shrubs, attaining a height of four to six feet with proper care. The flowers are remarkably striking, of gorgeous colors and enormous in size, often six to eight inches across. Very effective amongst shrubs or in borders.

P. Banksii—Rosy blush, very large, fragrant flowers. One of the best.

AMARYLLIS.

A beautiful class of plants with large, drooping, bell-shaped, lily-like flowers, varying in color from the richest crimson to pure white, striped with crimson or scarlet.

CALADIUM ESCULENTUM.

Elephant's Ear—For obtaining tropical effects in lawn and garden planting, this beautiful plant takes a prominent place. Grows well in any garden soil, but should have plenty of water and good, rich soil to obtain best results. When at its best, stands 6 to 7 feet high with bright green leaves 3 to 4 feet long and 2½ feet wide.

Fancy Leaved—A class of beautiful variegated foliage plants excellent for house culture or open ground. They delight in a shady and moist place. The bulbs should be started into growth about the first of April and dried off in October and kept in a warm and dry place until spring again. These are excellent for window boxes, vases or single pot plants, and succeed equally well in a somewhat shady situation out of doors.

Giant Flowering—Leaves as large and often larger than common Caladium, having a heavy, leathery texture and bright, glossy green color, with metallic luster that is remarkably handsome. It does not produce a bulb, but is produced by "suckers," and is perennial. Its flowers are mammoth, lily-like, 12 to 15 inches long; snow-white, changing to cream with a rich and exquisite fragrance. Thrives in almost any soil or situation, and grows and blooms all the year, either inside or out, as it may be transferred to a pot in conservatory or sunny window, and do service as a decorative house plant.

CANNA.

CANNA—(Canna).

Indian Shot Plant—Stately and highly ornamental plants, for both flowers and foliage. They attain a height of 2 to 5 feet, and may be grown singly or in masses. Leaves green or brownish red; flowers scarlet, crimson, yellow, cream, etc., variously marked,

New Large Flowering French and American—Not so tall as the old fashioned sorts, but with flowers of great beauty; everywhere popular. These seedlings vary in color, ranging through all shades of yellow and orange to richest crimson, scarlet and vermillion. Some are plain and some spotted.

CROCUS—An universal favorite and one of the earliest garden ornaments; should be planted about 2 inches deep. Colors, blue, white, yellow and striped.

DAHLIAS—There is nothing that, with the same amount of money invested, will give more show of flowers than Dahlias. We offer dry bulbs or tubers.

GLADIOLUS—The Gladiolus is the most attractive of all the summer flowering, bulbs, and deserves a place in every garden, as it is

sure to flower and do well with very little care. Set the bulbs from 6 to 9 inches apart, and about 4 inches deep. Plant from middle of March to first of June. It is a good way to plant two or three different times, ten days or two weeks apart. This will give a succession of blooms from July to November.

HYACINTHS,

The most beautiful and fragrant of early spring flowering bulbs, much used for winter forcing.

IRIS—Germanica—(German Iris).

The true "Fleur de-Lis," the national flower of France. They are perfectly hardy, thrive anywhere, grow and bloom luxuriantly, particularly if plentifully supplied with water or if planted in moist situations, as on banks of ponds, etc. Plants well established produce from 50 to 100 spikes of bloom, deliciously fragrant and fine for cutting. In beauty the flowers rival the finest Orchids, colors ranging through richest yellows, intense purples, delicate blues, soft mauves, beautiful claret reds, white, primroses and bronzes of every imaginable shade.

I. Kämpferii—(Japan Iris).

Finest of all the Iris family. The flowers are of immense size, from 6 to 8 inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, and flower in great profusion during June July. A well-established plant gives a dozen or more flower stalks 2 to 3 feet high, each stalk producing 2 to 4 enormous blooms. The Iris thrives best if planted in a moist soil; if this cannot be had, should be plentifully supplied with water while growing and flowering.

JONQUILS—(Narcissus jonquils).

Pretty varieties of the Narcissus, having a very agreeable fragrance; adapted to either pots or outdoor culture. The bulbs being small, six or eight may be put in a 6-inch pot.

LILY-OF-THE-VALLEY—(Convallaria majalis).

The Lily-of-the-Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase pretty rapidly. For the house we have what are called "pips"—young roots with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss, or potted. For the garden we can ship either in the spring or autumn.

IRIS.

LILIES.—*Lilium*.

No class of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand prominently out from all other hardy plants. They thrive best in a dry, rich soil, where water will not stand in winter. After planting they require very little care, and should not be disturbed for several years, established plants bloom more freely than if taken up annually.

Auratum—(Gold Banded Lily of Japan)—

Flowers very large, of a delicate ivory white color, thickly dotted with rich chocolate crimson spots, with a bright golden band through the center of each petal. The finest of all lilies.

Candidum—The old fashioned pure white garden lily. One of the hardiest.

Harrisii—(The Bermuda Easter Lily)—Flowers large, trumpet shaped, pure waxy white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular as a winter flower. Tens of thousands of it are grown every year for church decorations at Easter.

Longiflorum—A well known beautiful variety, with snow-white trumpet-shaped flowers that are very fragrant. It is quite hardy and blooms freely in the open ground in June and July. Is also used largely for forcing for the Easter holidays; the flowers have more substance and last longer than the Bermuda Lily.

Pardalinum—Scarlet, shading to rich yellow, spotted brownish purple.

Tigrinum fl. pl.—(Double Tiger Lily).—Bright orange scarlet with dark spots; a strong growing showy variety, and entirely hardy. Succeeds well everywhere.

Speciosum Rubrum—White, beautifully spotted red; flowers in August. This is one of the most useful of the Lily family, perfectly hardy, and flowering well under all circumstances.

Speciosum Album—Very fragrant large flowers, pure white with a green band running through

the center of each petal. One of the best.

Wallacei—A magnificent Japanese variety, with beautiful clear buff flowers, spotted with black; very distinct.

NARCISSUS, (Narcissus) We have a choice collection of these fragrant winter-blooming plants.

TIGRIDIA—One of the most showy of all summer bulbs, and blooms from midsummer until frost, growing 3 feet high, with large wide-open triangular blooms, 4 to 6 inches across. The colors and markings are very brilliant and peculiarly odd and attractive, and clumps of them in the border have a most gorgeous effect. It is difficult to name a flower of such unique and exquisite beauty as a Tigridia, the superb spotting being so self-like and handsome. They are easily grown and always more than satisfactory.

TUBEROSE—(Polianthes tuberosa)—These deliciously fragrant plants should be in every garden. This valley is particularly adapted to their successful culture.

TULIPS—(Tulip)—Owing to the late spring frosts in the colder sections, bedding plants cannot safely be planted in such localities before the early spring-flowering bulbs are through blooming. Without these bulbs, for one or two months of beautiful spring weather, our gardens would present a bare appearance. We know of nothing that for the money invested will give a more gorgeous show during early spring and there is nothing more easily grown than the Tulip. They thrive well in almost any soil. Should be planted Oct. or Nov.

Roses.

Roses are the most beautiful of flowers and they are among the easiest to raise in perfection. They 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. Tea and Noisette roses should be protected by covering them with evergreen boughs during the Winter months.

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 bugs, 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.*

HYBRID PERPETUAL ROSES.

Alfred Colomb—Brilliant carmine-crimson; very large, full, and of fine globular form. Extremely fragrant, and in all respects a fine sort.

American Beauty—Flowers very large, of beautiful form and very double; color a deep rich rose. The fragrance is delightful, resembling La France or the old-fashioned Damask Rose; it is truly an everbloomer, each shoot producing a bud.

Baronne de Maynard—Pure white; medium size; very good form; double and free.

Baron de Bonstetten—Still the leading dark Rose. A splendid shade of dark red, changing to velvety maroon. It blooms very freely and makes a fine shaped bush.

Baroness Rothschild—Light pink, cupped form, very symmetrical, without fragrance; very beautiful. A moderate grower only.

Black Prince—Crimson, shaded with purple; medium size; imbricated; form splendid.

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

Clio—The finest flesh-colored Hybrid Perpetual.

The flowers are simply perfection in form, with fine, broad petals, and are beautiful at all stages of development, from the small bud to the full open flower; color delicate satin blush, with a light shading of rosy pink at the center. Very free blooming and strong, healthy grower.

Coquette des Alps—White, tinged with carmine; very fine, a very free bloomer.

Coquette des Blancches—Pure white, very beautiful. We think this the best pure white hybrid perpetual.

Duke of Edinburgh—Brilliant scarlet crimson, shaded maroon, very fine.

Earl of Dufferin—A strong, healthy growing sort and a splendid autumn bloomer. Flowers large, very full and finely formed. Color deep velvety crimson, shaded with maroon.

Emperor of Morocco—An intensely dark Rose of velvety maroon.

Fisher Holmes—Shaded crimson scarlet; large, globular, with pointed center; vigorous and free flowering.

General Jacqueminot—Brilliant velvety crimson; large, showy and a fine grower; a magnificent variety.

AMERICAN BEAUTY.

General Washington—Scarlet-crimson; very large and fine; not quite as vigorous as General Jacqueminot.

Giant of Battles—This is still esteemed as the very best, rich, red Rose. Very large, double, full and sweet.

Glorie Lyonnaise—This is the nearest approach to a yellow in this class. A pale shade of salmon yellow with deeper center, changing to creamy white.

Harrison's Yellow—Golden yellow; medium size, semi-double. A freer bloomer than Persian.

Her Majesty—This new Hybrid Rose is of immense size, perfect symmetry, and exquisite color, the color being a delicate pink, and as large as *Paul Neyron*.

John Hopper—Rose; crimson center; large and full.

Jubilee—In this Rose we have a grand addition to the list of dark colored Hybrid Perpetuals. It has been thoroughly tested and found to possess most excellent qualities. Of vigorous growth, yet short jointed and compact, it takes a places in the front rank of hardy garden Roses; color pure red, shading to crimson and maroon at the of base petal, forming a coloring equaled by that of no other Rose. The buds are long, held up by long, stout flower stems, making it valuable for cut flowers.

Jules Margottin—Bright cherry red; large and a truly beautiful Rose.

Louis Van Houtte—Bright rose carmine; full; very large; fine globular form; deliciously perfumed.

Mabel Morrison—Pure white petals, thick and waxy; a hybrid of *Baroness Rothschild*; habit good

Magna Charta—A general favorite, prized on account of its strong, upright growth and bright healthy foliage, as well as for its magnificent bloom. The color is beautiful bright pink, suffused with carmine.

CLIO.

Marchioness of Londonderry—A new White Hybrid Perpetual, and one of the best. Flowers of great size, measuring seven inches across, perfectly formed and carried on stout stems. Color ivory white; petals of great substance, shell-shaped and reflexed; free-flowering; highly perfumed; growth vigorous, and foliage very handsome. One of the finest roses. Awarded the gold medal of the National Rose Society of England. We have had this variety in flower for several seasons, and regard it as a decided acquisition to the list of hardy white roses. Requires some protection in winter, in cold climates.

Marshall P. Wilder—Color bright cherry-carmine; fragrant; of vigorous growth with fine foliage. One of the freest of the Hybrid Perpetuals to bloom; we can recommend this Rose without hesitation.

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.

Paul Neyron—Deep rose color; splendid foliage and habit, with large flower. Cut, p. 89.

Persian Yellow—Bright yellow, small, nearly full. It is desirable to grow more than one plant, and by pruning one this year in the usual way, and the other plant the next year, annual crops of flowers may be had.

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

MARSHALL P. WILDER.

PAUL NEYRON.

Ulrich Brunner—Splendid upright grower, with bright, healthy foliage. The flowers are good-sized, and of fine form, with shell-shaped petals. One of the most abundant bloomers; color, cherry red.

Vick's Caprice—By far the best striped hardy Rose. The flowers are large, and bud and flower are perfect in form; color soft satiny pink, distinctly striped carmine. Excellent for cutting.

Victor Verdier—Bright rose, with carmine center, a very fresh shade of color; not fragrant; free bloomer; wood nearly smooth. This variety, with its numerous progeny, is more tender than any of the other types in the class. A beautiful rose.

HARDY CLIMBING ROSES.

Baltimore Belle—Pale blush, nearly white; double; the best white climbing Rose.

Crimson Rambler—Introduced from Japan, the land of wonders. Another season's trial fully justifies all the praise that has been given it in the past. During nearly the entire summer it has a mass of rich, glowing crimson, and every one who has it is delighted with it. Perfectly hardy; wonderfully free flowering; intensely bright and vivid in color. The plant is a strong, rampant grower, making shoots 10 to 12 feet long in a season, when well established. The flowers are produced in long trusses or panicles, often measuring 8 or 9 inches long and 6 or 8 inches across, pyramidal in shape, often 35 to 40 in a cluster, fairly covering the plant from the ground to the top with a mass of bright glowing crimson. The color is simply superb, and is retained unfaded, or without showing any of the purplish tinge so often seen in dark roses. For an unusual length of time. For walls, pillars and porches, or any other place where a hardy climbing Rose is wanted, nothing can be more desirable or beautiful. If grown in beds and pegged down, it makes a brilliant display

with its profusion of bloom, large clusters shooting out from each joint. As many as 300 blooms have been counted on a single branch.

Empress of China—A very hardy, free flowering climbing Rose, of good size, blooming in clusters; bright pink flowers; very attractive. It is practically ever-blooming, for on good-sized plants, when well established in the ground, flowers may be expected the whole season.

Greville, or Seven Sisters—Crimson, changes to blush; flowers in large clusters; not as hardy as others.

Pink Rambler—(Euphrosyne)—What is said of White Rambler applies equally to this, except the color of the flowers is pure shiny rose—the partially open buds being bright, light carmine, this producing a strong and pleasing contrast. The flowers often change to creamy white when fully matured. The numerous yellow stamens lend an additional charm to the flower. In hardiness, freedom of bloom, form and color of flowers and vigorous climbing habit, this variety is fully the equal of Crimson Rambler.

Queen of the Prairie—Bright rosy red, frequently striped with white; large, compact and globular.

Russell's Cottage—Dark crimson, very double and full. Strong grower.

White Rambler—(Thalia)—A worthy companion for the Crimson Rambler. In habit of growth, foliage, manner of blooming and shape of flower this is identical with Crimson Rambler, differing only in color, which in Thalia is pure, clear white. Flowers quite fragrant and last for a long time after cutting.

Yellow Rambler (Aglaiia)—The only yellow, hardy climbing rose. It has been thoroughly tested and found to successfully withstand, without protection, a continued temperature of zero and below. It is similar to Crimson Rambler in manner of blooming, the flowers being in immense clusters and having the same lasting qualities, remaining in bloom three to four weeks. The plant is even freer in growth than Crimson Rambler, and soon makes a fine, showy specimen.

MOSS ROSES.

Countess de Murinais—Pure white; large; very desirable; one of the finest White Moss.

Crested—Deep pink buds, surrounded with mossy fringe. Very beautiful and free from mildew.

Glory of Mosses—A moderate grower. Flowers very large; appear to best advantage when full; color, pale rose.

Salet—A vigorous grower and free bloomer. Light rose, large, full. The best of the class.

Perpetual White—Pure white; produces very few flowers.

White Bath—White, sometimes tinged with flesh; attractive in bud and open flower. The best White Moss. Budded plants.

CRIMSON RAMBLER.

CRESTED MOSS ROSE.

HYBRID TEA ROSES.

Duchess of Albany—This variety is a sport from La France, deeper in color, more expanded in form, larger in size. The flowers are deep even pink, very large and full, highly perfumed and of first quality in every respect. The growth of the plant is vigorous, habit good, and the flowers produced in extraordinary profusion, the plants being continually covered with handsome blooms.

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.

Margaret Dickson—Of magnificent form; white, with pale flesh center; petal very large, shell-shaped and of great substance; fragrant; a very promising variety; foliage very large, dark green.

Meteor—As a dark crimson perpetual blooming rose this ranks as one of the best yet introduced of any class. It is especially valuable for summer and fall, blooming either in the greenhouse or in open ground, and where there is a demand for fine roses in summer, this variety will become a great favorite.

Mrs. Robt. Garrett—A beautiful, large Rose of exquisite shape, finish and blending of colors. It was raised by Mr. John Cook of Baltimore,

Md., the result of a cross between Sombreuil and Madame Caroline Testout. It partakes largely of the latter variety in habit of growth, in foliage, spines and stems, and in shape of flowers shows a complete blending of both parents. The flowers are very large on strong stems, clothed with clean, heavy foliage and strong spines. The buds are long and pointed in shape, and open up beautifully into a full, rounded flower. In shape of bud and half-open flower it very much resembles Souvenir de President Carnot, but is very much larger, color a glowing shell pink, very deep in the center; the fragrance is delicate and pleasing. A correspondent of the American Florist, in commenting on this Rose, says: "The exhibit of Mr. Cook was a departure from the rest, as it was a vase of Roses. But such roses! They towered above the carnations on strong stems clothed with heavy foliage, and were as large as American Beauties, but of a beautiful clear pink, almost light enough to be called a shell pink."

The Bride—An ever-blooming pure white Tea Rose, of large size and most perfect form. The buds are pointed and the ends of the petals are slightly curved back. It is a very free blooming variety, and has the most delicious tea fragrance.

GENERAL COLLECTION OF TEA AND EVERBLOOMING ROSES.

Agrippina—(China)—An excellent Rose for bedding or pot culture; continuous bloomer; color, fine velvety crimson.

Beaute Inconstant—(The Rose of Many colors)—A single plant will bear flowers ranging in color from coppery yellow, bluish pink, carmine and apricot, to light crimson. The bud is especially fine, being a coppery-orange scarlet, all the variations of coloring appearing in the open flower. A strong, healthy grower and a prolific bloomer.

Bon Silene—Rose-carmine, shaded with salmon; fragrant and very free flowering. Valuable for the buds.

Bridesmaid—In this exquisite new Tea Rose we have an improved Catherine Mermet, from which it is a sport. Mermet, on account of its exquisite shape, large, solid, firm buds, with long, stiff stems, has long been considered one of the best cut flower varieties; its only defect has been that in dark, cloudy weather it becomes a washy dull color. Bridesmaid, at all seasons, is a clear, delicate pink, in all respects a counterpart of Mermet, with large handsome, pointed buds on long, stiff stems.

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—Extra fine, pure, waxy white flowers; extra large and perfect buds; fine Winter bloomer.

Duchess de Brabant—Soft rosy flesh, changing to deep rose, edged with silver, beautiful in bud and highly fragrant.

Etoile de Lyon—This is considered one of the finest yellow bedding Roses for outside planting. It is, moreover, one of the hardiest in the Tea section. It blooms freely, and every flower is a gem. It equals Marechal Neil in size, on strong bushes. Very sweet scented; color, rich golden yellow.

Golden Gate—This is another grand new Rose of surpassing beauty. The buds and flowers are of beautiful form, extra large size, resembling very much in shape and size that grand old variety, Niphetos. Ground color creamy-white, beautifully tinged with golden-yellow, and bordered with clear rose.

Homer—Soft, clear rose, with a salmon shade.

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

Kaiserin Augusta Victoria—A beautiful rose, with elegant, large pointed buds and very large, full double flowers; color delicate creamy-white, deliciously fragrant. The plant is a strong, healthy grower and constant bloomer. The flowers are on strong, stiff stems, with rich, glossy foliage, making it one of the finest roses for corsage wear or any other use to which cut flowers can be put.

La Princess Vera—An excellent variety for general planting; flowers very double and full; color pale rose, changing to salmon rose, shaded with carmine.

Luciole—Handsomely colored; cherry red, with center and shading of saffron yellow, back of petals yellowish bronze. Flowers large, of splendid form and delightfully fragrant.

Mad. Franceska Kruger—This Rose has taken a foremost position as a Rose for general culture, and its striking color and free growth give it popularity wherever grown. It is a beautiful coppery yellow with large flowers. Unlike any other Rose in our list.

Mad. Lombard—Extra large full flowers; very double and sweet; color a beautiful shade of rosy bronze, changing to salmon and fawn, shaded with carmine; buds and reverse of petals deep rosy crimson.

Mad. Pierre Guillot—Large, splendid shaped, pointed buds. Color deep coppery-orange in the center, gradually changing lighter outward; edge of petals bright rose. Fine, large, double flowers and an excellent Winter bloomer.

Mad. Welche—An extra fine variety; very large, double and of beautiful rounded form. Color apricot yellow, very heavily shaded throughout the center of the flowers with dark orange red, variable at times, frequently coming light canary, with deep shadings. The flowers are large, of good size and substance, and endure well after opening, giving the bush a handsome appearance.

Madame Caroline Testout—It is clear pink in color—there is nothing in the Rose line that can approach it in color and the flower is as large as Baroness Rothschild and as free as La France, and if our judgement is not mistaken, it will make a sensation in the cut flower market when brought in in good shape.

Madam Falcot—Deep apricot, shaded buff.

Mad. Hoste—Ivory white, changing during the heat of mid-summer to canary-yellow, with amber centre; a strong healthy grower and very free bloomer. Flowers and buds of large size and can always be cut with long stems. Highly prized for cut flowers on account of its superb buds and long stems. One of the finest for budding out or for forcing for Winter flowers.

Mad. De Watteville—A strong, vigorous grower, with handsome foliage. Color white, shaded with salmon; outer petals feathered with bright rose; very fragrant; flowers large and beautiful shape.

Mamam Cochet—In bud it resembles the Mermet family, being long and shaply, borne on long, stiff stems. It is of the largest size, and the flower is built up or rounded, and very double. The color is a deep rose pink, the inner sides of the petals being a silver rose, shaded and touched with golden yellow. We pronounce this the finest Rose by far that has been introduced from France in the past few years. We can with full confidence recommend this Rose.

SOLEIL D'OR. See page 94.

Mamam Cochet, White, or Priscilla—The charming new white tea rose. Another new American rose. It belongs to the Tea class, being a child of that grandest of bedding or outdoor roses, Mamam Cochet. Its habit is exceedingly strong and upright, like its parent, and it possesses the same large beautiful, healthy foliage, and is a most profuse and constant bloomer. The flowers are of enormous size, remarkably round and full, pure, clear, snowy white throughout, and are delightfully Tea scented. It is by far the finest and most reliable white bedding Rose yet produced. Anyone can have the very finest Roses for cutting all summer and autumn by planting a few plants of it. It is without doubt the largest white Rose, both in bud and flower.

Marie Van Houtte—White, slightly tinged with yellow; one of the handsomest Tea Roses. Free grower and fine bloomer.

Mrs. DeGraw—An ideal bedding Rose that will give an abundance of bloom from early summer until frost. The flowers are bright, rich pink, of good size and very fragrant; blooms in clusters.

Marion Dingee—Deep, brilliant crimson; one of the darkest, if not the very darkest, richest colored Tea Rose in existence.

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

Papa Gontier—A grand red Tea, of fine, crimson shade and silken texture (as distinct from velvety texture). The bud is of fine size and graceful form, on good length stem, desirable for cut flowers.

Perle des Jardins—Fine straw-yellow, sometimes deep canary-yellow; very large and full, and the most perfect form; one of the finest roses grown; steps at once into fame as the finest dwarf yellow Rose we have; distinct from all other Tea Roses; probably better known than any other yellow Rose.

President—A lovely Rose, fresh, carmine-pink; extra large size; very double and full; free bloomer; delicious tea scent.

Queen—A beautiful, pure white, free-blooming Tea Rose, producing an abundance of well formed buds and flowers the entire blooming season.

Rainbow—An elegant new striped Tea Rose, of strong, healthy growth and exceedingly free flowering habit. The buds are large, on strong, stiff stems. Color a beautiful shade of deep pink, distinctly striped and mottled with bright crimson, elegantly shaded and toned with rich amber. It makes beautiful buds and flowers of large size, with thick, heavy petals, very fragrant. A useful variety for cut flowers.

Safrano—Bright apricot yellow, changing to orange and fawn, sometimes tinted with rose; valued highly for its beautiful buds; fragrant.

Solfaterre—Fine, clear, sulphur yellow, large, full and double. Very sweet.

Soleil D'Or—New hardy yellow rose. The goal for which many of the world's greatest Rose hybridizers have been striving has at last been reached and we have a double flowered **Yellow Rose**, hardy enough to withstand the winters of our northern states. Soleil D'Or is the result of a cross between Persian Yellow and Antoine Dutcher, retaining many of the characteristics of Persian Yellow, the bark being much the same and foliage resembling that of its parent but produced more plentifully, while in growth it is more branching and more vigorous. The flower is perfection in form with conical buds, expanding into a large and full globular flower, with incurved inner petals. The buds are a marvelous shade of rich chrome yellow with just a tinting of coppery rose in the center. The fully expanded flower is beautiful in its blendings of orange yellow, reddish gold and nasturtium red, forming a coloring impossible to satisfactorily describe. This grand seedling has been shown at all the large Rose exhibitions in Europe and has received the highest awards possible to grant at every display.

Souvenir des Malmaison—This is undoubtedly the finest and most perfect Rose of this class; hardy and blooming; of beautiful, clear, flesh color; edges blush. Superb.

Souv. de Pres. Carnot An excellent Rose of recent introduction that has already become a great favorite. The flower is of large size, of exquisite shape, with heavy, thick, shell-like petals; buds long and pointed, similar to Niphetos, but very much larger and borne on stiff erect stems; color, delicate, rosy flesh, shaded a trifle deeper at the center. An extra good garden Rose.

Sunrise—The most gorgeous Rose of its class yet introduced. This has made a sensation in England, and taken first honors wherever shown. In close bud form it shows the high, brilliant colors seen only in the Austrian Copper Rose, scarlet and yellow. As it opens the colors deepens, the scarlet turning darker red, the yellow to orange and copper, the inside of the petal golden yellow. The open Rose is large, perfectly double and of grand form. The foliage is glossy and thick, the new growths being the darkest and most beautiful found among Roses. The form and color of bud, its freedom of growth and bloom will give Sunrise a high place among forcing

Roses. A novelty is earnestly wished for by cut-flower growers, and here is a novelty of the highest quality.

Sunset—The flowers are of large size, fine, full form; very double and deliciously perfumed. Color is a remarkable shade of rich golden-amber, elegantly tinged and shaded with deep ruddy copper.

Viscountess Folkstone—The flower is delicately tinted flesh, almost white, and lustrous as satin. When in full bloom it is like a fine white Pæony, but without a suggestion of stiffness.

White La France — (Augustine Guinnoiseau) — This beautiful variety, with flowers of pure white, shading to a center of light rose, is a great favorite on account of its great freedom of bloom, fragrance and large flowers. A vigorous grower, producing a great number of buds and flowers; a most valuable addition to the white varieties; excellent for planting in cemeteries. Small plants.

White Perle des Jardins—We think that every lover of White Tea Roses will be delighted with White Perle. It will be found totally distinct from Bride or any other white Rose. A great Rose.

White Mamam Cochet - See Mamam Cochet.

CLIMBING TEA AND NOISETTE ROSES.

Banksia—White and yellow; thornless.

Chromatella—(Cloth of Gold)—Clear, bright yellow, very full and double; beautifully formed buds and flowers; very fragrant.

Climbing Wootton—A fine, large double flower; bright cherry crimson. A beautiful, free flowering Rose that is completely covered with bloom the entire season. Will make shoots 10 to 15 feet long in one year.

Climbing Kaiserin—See Mrs. Robert Peary.

Glorie de Dijon—A combination of salmon, orange and buff; flowers large and of good globular form. Hardy.

Gold of Ophir—Salmon yellow, shaded with coppery red. One of the most beautiful of the climbing roses.

La Marque—Pure white buds, open flower, tinged light canary yellow; large and full.

Mad. Alfred Carrier—Flesh white, with salmon-yellow at the base of petals; full and well formed. Vigorous grower.

Marechal Neil—Beautiful deep yellow; large, full and of globular form. Very sweet.

Meteor—This Rose has gained a world-wide reputation as the finest crimson ever-blooming climbing rose in cultivation. It is a rich, velvety crimson, much like the forcing rose, Meteor, of which it is a sport. An extremely strong growing variety, making shoots 12 to 15 feet long, in a single season under favorable circumstances. South of the Ohio river it would be perfectly hardy, while in the extreme North it could be laid on the ground and covered with leaves or straw.

Mrs. Robt. Peary—(Climbing Kaiserin Augusta Victoria)—A sport from that grand hardy ever-blooming rose, Kaiserin Augusta Victoria. It has the same beautiful creamy-white flowers, and splendidly shaped buds, and in addition has a remarkably strong climbing habit of growth, sending up shoots 10 to 12 feet high.

Perle des Jardins—Identical with Perle des Jardins, except that it is a vigorous climber. A grand addition to our Roses. It will rank with the very best.

Reine Olga de Wurtemberg—The people in the south would do well to employ this beautiful sort for covering verandas and trellises. Color a rosy-carmine, suffused with yellow.

Reine Marie Henrietta—A strong-growing red climbing rose. It is a grand pillar Rose in the south. Flowers full and well formed.

Wm. Allen Richardson — Orange-yellow, center copper-yellow. Very rich.

White Marechal Neil — This Rose is an exact counterpart of Marechal Neil in every respect except the color of the flowers. Identical in growth, foliage, climbing habit, etc. The flowers are white.

TREE ROSES.

The Tree Roses are grafted on hardy rose stalks four to five feet high, are tree-shaped and when in full bloom are objects of beauty, making handsome plants for the lawn or rose border. In this shape we offer only the Hybrid Perpetual or hardy class. We have them in white, the different shades of pink, red and crimson.

INSECT PEST REMEDIES.

We Give Below Several Remedies for Insect Pests.

THE APPLE TREE APHIS.

QUASSIA CHIPS SOLUTION.

8 pounds of Quassia Chips.

7 pounds of Whale-oil Soap

The Quassia Chips are boiled in about one gallon of water to each pound of chips, for one hour. The soap is added while hot, and allowed to dissolve. This solution is then diluted with 100 gallons of water. Use with sprayer.

WOOLY APHIS.

The following remedy is taken from the Secretary's report, California State Board of Horticulture :

"Four pounds of rosin, three pounds of sal soda, water to make four and one-half gallons; dissolve the sal soda in a few pints of water; when thoroughly dissolved add the rosin; heat until dissolved and add water finally. Use one and one-half pints of this solution to the gallon of water. Use at a temperature of 100 degrees Fahrenheit."

TENT CATERPILLAR.

The egg clusters must be sought for during winter months, when the trees being leafless, the eye will readily detect them, after being hatched out, their nests are so conspicuous that there can be no excuse for neglecting to destroy them, and where any of these pests appeared last season thorough search must be made for these rings of eggs (which are generally found on the small branches), collecting and destroying by pouring boiling water on them or by burning them.

The following solution, if properly applied, will destroy the young larvæ :

Three pounds soap (whale oil or good home made soap), three pounds sulphur, one can lye ; boil one hour in four gallons water; add one gallon kerosene oil, boil slow twenty minutes, then add twenty-five gallons water; use with spray pump. Do not use copper kettle in preparing solution No. 1 and No. 2, but use kettle made of iron or some other metal.

SAN JOSE SCALE OR GREEDY SCALE.

For summer spraying: Take two gallons of water; put into this one pound of sulphur, one pound concentrated lye; boil for two hours, then add one-half gallon fish oil; boil until it makes a hard soap; add one-half gallon kerosene oil, stir well and boil a few minutes. Add to this twenty-five gallons cold water. For winter spraying double all the ingredients for the amount of water used.

D. M. Jessee, Washington State Pest Inspector, says he has tried this solution to his entire satisfaction, and is assured it will destroy these insects more effectually than any other remedy he has used. Notice what is stated as to the strength of solutions, as to summer and winter spraying.

PEAR AND CHERRY TREE SLUG.

The Oregon *Bulletin* recommends the following remedy: London purple or Paris green mixed with water in the proportion of one ounce to six gallons, and apply to the foliage with a syringe or a spray pump, as promptly destroying this slug.

THE OYSTER SHELL BARK LOUSE.

Use the same solution as for San Jose Scale heretofore described, at intervals of ten to fifteen days from the 10th of May to June 10th, the same solution for winter.

CURRENT AND GOOSEBERRY SLUG OR WORM.

Hellebore is the best of known remedies, and a perfectly effectual one. Properly applied, no harm can possibly result from it. It should, according to Prof. Lintner, be used in the following manner: Early in the spring, as soon as the leaves of the currant have fully put forth, watch for the first indications of the hatching and commencement of the young larvæ. You have only to look for these on the *lowest leaves of the bushes near the ground*. The indications will be numerous *small holes eaten into the leaves*. Sprinkle powdered hellebore over these leaves, renewing it if washed away by rain, and the desired end is accomplished. If the hellebore remains upon the leaves during the time that larvæ are hatching, all will be killed, and none will remain for subsequent spreading over the leaves and for the need of future attention. If the first brood of worms is thus destroyed, there will be few, if any, to form a second brood in June.

FOR POWDERY MILDEW OR OTHER FUNGICIDES.

Bordeaux Mixture.

Copper Sulphate, 6 lbs.

Fresh Lime, 6 lbs.

Water 45 gallons

Directions: Dissolve the copper sulphate in a wooden or earthen vessel, using four or five gallons of water, which, if hot, will act quicker. In a separate vessel slack the lime and rub until all lumps are broken. Then strain and stir into the copper solution. Dilute and use as soon as possible. The mixture should not stand over twenty hours, as it tends to spoil. Where a good quality of lime is used, four pounds will satisfy six pounds of blue stone, but it is best to use plenty of lime, as any free sulphate will burn the foliage. Four ounces of Paris Green may be added to each 45 gallons of this liquid for all except the peach and other stoned fruits. For these use only two ounces. This makes the best and safest combined insecticide and fungicide for general use.

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Beechtel's Double Flowering Crab.

Photographed on the Grounds of OREGON NURSERY COMPANY, Salem, Oregon.

BECHTEL'S DOUBLE FLOWERING (P. MALUS FLORIBUNDA) - Makes a medium sized ornamental tree of great beauty; perfectly hardy; succeeds well in all soils not extremely wet. When in bloom in early spring this tree presents the appearance of being covered with perfectly double, small, pink roses of delicious fragrance. The only sweet scented Double Crab; blooms quite young. Unlike many other trees, it does not bloom until the leaves are fully developed, which adds greatly to its beauty. Sure to become quite popular as soon as it is well known.