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U.S. Department of Agriculture

I.E. ILGENFRITZ' SONS CO.

THE MONROE NURSERY

MONROE

MICHIGAN

Illustrated Descriptive Catalogue
Fruit Trees and Small Fruits,
Grape Vines, Esculent Plants,
Ornamental Trees, Shrubs, Vines.

I. E. Ilgenfritz' Sons Company
The Monroe Nursery

Established 1847

MONROE, MICHIGAN

Frank L. Ilgenfritz. I. E. ILGENFRITZ' SONS CO. Wilbur F. Ilgenfritz.
Theodore E. Ilgenfritz. Israel E. Ilgenfritz. Thomas I. Ilgenfritz.

INTRODUCTION

A BRIEF HISTORY OF THE MONROE NURSERY

In 1847, I. E. Ilgenfritz, a young nurseryman, left his home in Pennsylvania and with a small stock of embryo trees wended his way, by the then rude mode of travelling, into the west. He was in search of a suitable place at which he might stop, plant his trees and grow up with the country.

Upon reaching Monroe, which was at that time the terminus of the Lake Erie line of steamers, he found a place of much promise, where the land was of great variety and adapted to the favorable propagation of the different kinds of trees and plants. It consisted largely of a rich alluvium underlaid with clay, covering the limestone formation but a few feet below the surface—a land of flowers, and where upon the banks of the River Raisin, the wild grape flourished. He saw at once that if sound, healthy trees could be grown anywhere, they could be produced upon such soil, and where the air is tempered with the lake winds, and at this place he decided to cast his lot. Procuring a small patch of ground, he planted his young trees, carefully cultivated them, producing most satisfactory results in healthy vigorous stock. The demand for such trees, well grown, carefully trimmed and cared for, soon overtaxed the small piece of ground, and more land was secured and planted to trees. And so it has been from the beginning to the present, a steady development, until today The Monroe Nursery comprises 900 acres of the most fertile soil of the State, and enjoys an enviable reputation for fair and honorable dealing.

In 1895 occurred the death of the founder of the Nursery, and since that time the business has been conducted solely by his sons, who had been associated with him in business previous to his death, and so were in touch with the thorough methods he inculcated, which have made The Monroe Nursery one of the leading Nurseries of the Country.

In 1902 the business was incorporated under the laws of the State of Michigan, with a paid up capital stock of \$100,000.00. All stock being held by the sons of the late I. E. Ilgenfritz.

SHIPPING FACILITIES AND STORAGE EQUIPMENT

Our offices and packing grounds are so situated that our shipping facilities are unexcelled, being located adjoining the L. S. & M. S. depot, with which we are connected by our own side tracks, two blocks west of the M. C. and Shore Line Depots, one mile east of the P. M. depot, and one-half mile east of the Detroit, Monroe and Toledo Short Line Electric Railway. On these grounds are located our immense storage cellars, which are the largest and finest in the United States. We were the originators of the Storage Cellar System, and today our storage equipment is one of the best in the world.

SELECTION OF VARIETIES

Great care is exercised in raising the many different varieties of trees and plants, and it has always been our rule to advise our customers to plant only varieties of merit, and it is our aim in this catalog to place only such varieties before you.

Dr. John A. Warder in his excellent work on Apples, says: "Every orchard planter who examines the extended varieties of fruits presented to him in books and by nurserymen, must feel greatly embarrassed when he comes to select the varieties for his own orchard. Almost every one of the long list is recommended for some good quality, and the number of best which

he is apt to conclude is indispensable to him, is wonderfully large. Some persons are bewildered by the array presented in the catalog, and fall back upon their own slender stock of information, selecting only one well-known variety, but most persons commit a far greater fault by attempting to grasp all the varieties that are offered and commended."

Our descriptive list herein given embraces many of the best and most popular varieties known, and although a complete list of those given might run into too great a variety for profit, yet a well selected assortment taken from the varieties given should be a most profitable one for any planter.

GUARANTEE

While we take the greatest pains to have all our Nursery Stock true to label, and hold ourselves in readiness upon proper proof to replace all stock that may prove untrue, or refund the amount paid, it is mutually agreed between the purchaser and ourselves that we shall not be liable for any sum greater than that originally received for said stock direct from the planter.

In the future, as in the past, it shall be our aim to retain for this establishment the good character it now enjoys, and those favoring us with their orders, either given to our agents or sent directly to us by mail, shall receive our prompt and careful attention.

I. E. ILGENFRITZ' SONS CO.

Monroe, Mich.

OUR LOCATION.

TO CORRESPONDENTS

Orders by letter are promptly attended to, and we exercise great care in all cases to fill them exactly and satisfactorily.

Plain and explicit shipping directions should be given. When none are given we forward according to our best judgment.

Orders should be sent in as early as possible in the season, that we may reserve such varieties as may be required, and also that they may be in time for shipping long distances.

Persons not conversant with the character of the different varieties may find it to their interest to leave the selection of sorts to our discretion, merely giving the number of trees wanted, and if they think proper, the proportion of summer, fall and winter varieties, in which case we shall feel it our duty to make a proper selection. When selection is made by the purchaser, we shall give him the benefit of his choice so far as we can; but it sometimes happens that certain varieties are run upon and become exhausted, and when this occurs, we usually substitute other varieties of about the same season of ripening, unless expressly requested not to do so.

The packing is done in the most thorough manner, so as to prevent injury from shipping long distances.

Packages will be delivered into the hands of the forwarders without extra charge, after which our responsibility for the safe transportation of the goods ceases, except on orders received through our agents.

We will cheerfully rectify any of our own mistakes if customers will promptly inform us of such.

Catalogs furnished free on application.

**I. E. ILGENFRITZ' SONS CO.
MONROE, MICH.**

Visit of Eastern Michigan Press Club.

Two Correct Ways of Trimming Peach
when Planting.

Correct Way to Trim Apple, Standard
Pear, Plum and Cherry when Planting.

Nearly all kinds of fruit trees should be trimmed immediately after transplanting, the above illustrations will give some idea of how this should be done. Read carefully the following page, the transplanting directions given there will be of material assistance to you in successfully handling your stock when received.

DIRECTIONS FOR TRANSPLANTING, ETC.

As the life and well-being of a tree depends very much upon the care and treatment it receives after it leaves the hands of the Nurseryman, and as a large proportion of the trees that are lost fail for the want of proper treatment, we desire to offer a few hints upon the subject of *transplanting, pruning, etc.*

PREPARING THE SOIL

THE first important requisite to the successful raising of an orchard, is the proper preparation of the soil. This should be made *dry and rich*. Underdrained if necessary, as trees will not thrive in soil constantly saturated with stagnant moisture. It should be well plowed and, if possible, the sub-soil plow should be employed. It should be well manured—as well as for a crop of wheat or corn.

PREPARING THE TREES FOR PLANTING

PRUNE carefully the bruised or broken parts of the roots with a sharp knife, sloping them off in such a way that the face of the cut will be down when the tree is in an upright position. This pruning of the roots must be followed by a pruning of the top, so as to keep the balance that formerly existed between the roots and the branches.

Prune the top by cutting back the branches of the previous season's growth about one-half, exactly at a bud. This will be no loss eventually to the tree; on the contrary, the remaining buds will push out with extraordinary vigor. In pruning dwarf and pyramid trees, one and two years old, one-half of the current year's growth should be cut back, leaving the branches near the ground the longest, and gradually shorten them until the top is reached.

PLANTING THE TREES

If the soil has been prepared as above directed, a hole dug large enough to admit the roots in their natural position is sufficient. If persons are obliged to plant on new or sod land, holes from four to six feet in diameter, and not less than twenty inches deep should be dug. Then partly fill the hole with good mellow earth; then one person should hold the tree in an upright position, while another person shovels in the finest and best earth among the roots, endeavoring to bring every root in contact with the soil, and not allowing any sod or manure next to them. When the earth is nearly all filled in, pour in a pail of water, allowing it to settle away, and then fill in the remainder and tread gently with the foot. In planting on low ground it will be best to place the tree on top of the ground and heap the earth about it.

Trees should not be planted any deeper than they stood in the nursery. The roots should never be more than two or three inches below the surface. Every tree should be staked on the southwest side with a broad stake to prevent injury by the sun and winds, and tied so as to avoid chafing, by putting a piece of cloth between the tree and the stake.

MULCHING

MULCHING is of great benefit to newly planted trees, especially if the ground be not cultivated, as it keeps the ground moist during the heat of summer. Coarse manure or partially decayed straw or leaves are very good material, which should be placed on the surface, three or four inches deep, and three or four feet around the tree.

AFTER CULTURE

For several years the ground should be well cultivated. Corn is one of the best crops to cultivate in a newly planted orchard. Trees derive much benefit from being washed in the spring with strong soapsuds.

WHEN RECEIVED IN THE FALL

TREES received in the fall should be "heeled in" (that is, a trench dug in a dry place, the trees laid in slanting, and well covered two-thirds up with clean soil,) and then planted in the spring. In fall planting the earth should be raised ten or fifteen inches around the trunk of the tree. This preserves the roots from the frost. In the spring this must be taken away again. Trees that are frozen when received should be placed in a cellar free from frost or buried in the ground without unpacking until the frost has withdrawn; treated in this way they will not be injured by freezing.

SUITABLE DISTANCES FOR PLANTING

Apples, Standard.....	30 to 40 feet	Grapes	8 to 10 feet
Apples, Dwarf.....	8 to 10 feet	Currants	3 to 4 feet
Pears, Standard.....	18 to 20 feet	Gooseberries	3 to 4 feet
Pears, Dwarf.....	10 feet	Raspberries, Red.....	3 to 4 feet
Peaches	16 to 18 feet	Raspberries, Black.....	4 to 5 feet
Nectarines and Apricots.....	16 to 18 feet	Blackberries	5 to 7 feet
Cherries, Sweet.....	18 to 20 feet	Strawberries rows.....	1 by 3½ feet
Cherries, Sour.....	15 to 18 feet	Strawberries, in beds.....	1½ by 1½ feet
Plums	16 to 20 feet	Asparagus, in beds.....	1 by 1½ feet
Quinces	10 to 12 feet	Asparagus, in field.....	1 by 3 feet

FOR HEDGES

Norway Spruce, Arbor Vitae and Hemlock.....	1 to 1½ feet apart
Japan Quince, Privet, Spirea.....	10 to 15 inches apart
Honey Locust and Osage Orange.....	6 inches apart

FOR WIND-BREAKS

Norway Spruce	3 to 6 feet apart
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NUMBER OF TREES OR PLANTS ON AN ACRE

2 feet each way.....	10,890	15 feet each way.....	194
3 feet each way.....	4,840	18 feet each way.....	135
4 feet each way.....	2,723	20 feet each way.....	110
5 feet each way.....	1,742	25 feet each way.....	70
6 feet each way.....	1,210	30 feet each way.....	48
8 feet each way.....	680	33 feet each way.....	40
10 feet each way.....	430	40 feet each way.....	28
12 feet each way.....	302		

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

Office of I. E. Ilgenfritz' Sons Co.

FRUIT DEPARTMENT

APPLES

Our stock of Apple Trees for the present year is large, thoroughly sound and unexceptionably fine, and comprises upwards of one hundred of the most approved varieties in cultivation.

In the following described list, however, we have enumerated a select list of varieties generally approved for cultivation, and much superior to the general run. This will aid you in making a correct selection for your orchard.

For a family orchard we would not recommend the planting of many varieties. A few of the best sorts is quite sufficient, if judiciously selected, to afford a succession of fruit throughout the year, for home and market.

Persons selecting trees for transplanting will find it to their interest to choose small, thrifty trees, two or three years old, and from five to seven feet high; as such are more safely transplanted, and with more satisfactory results than older and larger trees.

Varieties marked with a (*) are the Russian, or hardier sorts.

SELECT SUMMER APPLES

BENONI.—This excellent apple originated in Massachusetts. The tree is of vigorous, upright, spreading habit; hardy and productive. Fruit medium size, roundish, oblate, conical. Color pale yellow, shaded, striped and marbled with dark crimson. Flesh yellow, juicy, tender, sub-acid. Core small. Ripens in August.

EARLY COLTON.—An attractive creamy white Apple of uniform medium size, nearly round, regular; better in many sections than Early Harvest. The tree bears annually and abundantly. August.

EARLY HARVEST (Yellow Harvest.)—Decidedly an American Apple. On account of its excellent qualities should be in every collection. It begins to ripen the first of July and continues during all the month. Very fine for "eating out of hand," and for cooking. Tree moderately vigorous, upright and spreading. The fruit is roundish, medium in size, and is of a bright straw color, with a smooth skin. Flesh very white, tender and juicy—crisp with a sprightly flavor.

EARLY STRAWBERRY.—Middle to end of August. Sour. Red, striped. Fruit medium size, mostly covered with deep red. Flesh white, slightly tinged with red next the skin, tender, sub-acid, and very sprightly and brisk in flavor. Tree a moderate, erect grower, and a good bearer.

GOLDEN SWEET.—A fine New England fruit, of decided value for domestic stock. Rather large, roundish; pale straw color, always fair; sweet, tender, rich and excellent. Tree vigorous, spreading, of moderate size and very productive. August and September.

KESWICK CODLIN.—"A noted English cooking apple, which may be gathered for tarts early in August," and continues in use until November. The tree is an early and abundant bearer, very hardy, and a strong grower. Large, regular and spreading. Fruit is greenish yellow, washed with a faint blush on one side, and is a little above medium size. The flesh is yellowish white—very juicy, and has a rather sprightly acid flavor. Very good.

PRIMATE.—We consider this one of the best North American summer apples. The tree is very hardy. A strong and stocky grower, and very productive. Fruit medium to large. Color greenish white, tinged with a crimson blush on the exposed side. Flesh white, very tender and refreshing. The beauty of this apple as a fruit for home consumption is that it ripens gradually, and lasts for a long time. It is equally good as a cooking and dessert apple, and those who are fortunate enough to possess it consider it their favorite summer apple.

***RED ASTRACHAN (Abe Lincoln).**—This Apple is of extraordinary beauty, an abundant bearer, and its rich color is heightened by an exquisite bloom. It is an importation from Sweden. Tree a vigorous grower, upright and spreading, and an early bearer. Fruit pretty large, rather above the medium size. Color a rich crimson, sometimes in the shade a little greenish yellow, and is covered with a pale white bloom. Flesh white, crisp, juicy, with an agreeable acid flavor. Excellent. Ripens in July to middle of August.

SWEET BOUGH. (Large Yellow Bough.)—A sweet apple, ripening in harvest time—considered fine for the dessert, but too sweet for pies and sauce. For those who wish an early sweet apple, this apple is worthy of a place in their collection. Fruit medium, pale yellow. Flesh white and crisp. Ripens middle of July to 10th of August.

***YELLOW TRANSPARENT.**—This new Russian variety is especially adapted for a cold climate. Trees bear very young. Occasionally we find beautiful specimens of fruit on trees in the nursery row. The fruit is large, finely formed and showy, and a pale yellow in color. Flesh delicate and tender, sprightly, sub-acid, and of very good quality. Tree is a handsome grower and an abundant bearer. July and August.

SELECT AUTUMN APPLES

***ALEXANDER.**—A very large and showy Russian variety. Tree vigorous, spreading and productive. Fruit very large and regularly formed and of a fine appearance. Color of a greenish yellow, slightly streaked with red in the shade, but orange and brilliantly marked with bright red in the sun. Flesh yellowish white, crisp, tender, and juicy. Pleasant flavor. October to December.

CHENANGO STRAWBERRY.—Originated in the state of New York. Tree is a vigorous grower, of spreading habit and an abundant producer. The fruit is medium in size, beautiful in color and much esteemed for the table. It is of an oblong shape, brightly striped with red and crimson over a whitish back-ground. One of our most showy and beautiful apples. The flesh is white, tender, juicy and sub-acid, with a most pleasing flavor. September and October.

***DUCHESS OF OLDENBERG.**—A Russian variety of remarkable beauty, and one of the most hardy and productive varieties under cultivation. Does especially well in sections that are too cold for ordinary varieties. Tree is a vigorous grower and it requires little or no pruning, producing an abundance of fruit very even in size, which always sells well in market, and is a money maker. Fruit medium in size. Smooth skin, finely washed and streaked with red on a golden ground, covered with a faint blue bloom. Flesh juicy, sub-acid. Ripens the fore part of September.

FALL PIPPIN.—Decidedly an American apple. A noble fruit, considered by all to be one of the finest of Fall apples. Beautiful, of large size, delicious flavor and unexcelled for table or cooking purposes. Tree very vigorous, strong grower. Fruit very large, with smooth, yellowish green skin; when fully ripe, a golden yellow. Flesh white, very tender and mellow. Rich delicious flavor. October to December.

GRAVENSTEIN.—A German apple, originated at Gravenstein in Holstein. Thought to be one of the best apples in Northern Europe. It does fully as well in this country, and is unquestionably a fruit of merit. Tree an early bearer and a vigorous, spreading grower. Very productive. Fruit large, greenish yellow at first, changing to bright yellow, marked with deep red and orange. Flesh tender and crisp. Highly flavored. Valuable for market and cooking. September and October.

JEFFERIES.—A very handsome and desirable autumn apple of native origin. Medium or rather large, oblate or roundish; yellow splashed and striped with red; flesh white, tender, rich and juicy. Of moderate growth, but productive. August and September.

MAIDEN'S BLUSH.—A remarkably beautiful apple. It begins to ripen about the latter part of August and continues until late in October. A very desirable variety for cooking or market, also one of the best for drying. Tree is handsome, a rapid grower, and bears large crops. Fruit very regular and beautifully marked with red and yellow. Flattened at the ends and of a waxen appearance. Flesh white, tender and pleasant. October and November.

MUNSON SWEET.—Tree a vigorous grower, and an annual and abundant bearer. Fruit medium to large, pale yellow with red cheek. Tender, juicy and good. For those who wish a good, substantial, Fall sweet apple, this variety meets the requirements. October and November.

OHIO NONPAREIL.—A very valuable Autumn apple, either for market or table use. Tree vigorous, spreading and requiring little or no thinning. Fruit evenly distributed over the whole tree. Uniform, smooth and good size. Yellow, shaded and marbled with red and sprinkled with gray dots. Flesh yellowish white, fine-grained, tender, juicy and rich. Sub-acid. Core small. It has been said it is "better than the best." October and November.

RED BIETIGHEIMER.—One of the newer apples of decided promise. It is of German origin but is succeeding well in this country. Large or very large, roundish or slightly conical; light yellow, almost covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Grows vigorously and bears abundantly. September.

TWENTY OUNCE APPLE (Cayuga Red Streak).—A large and very showy apple. Thought to have originated in Connecticut. Tree thrifty, a good and regular bearer. Fruit of fine appearance, extra large in size. Greenish, splashed and marbled with reddish purple. Flesh coarse grained, with sprightly flavor. Popular in the market. October to December.

***WEALTHY.**—Originated near St. Paul, Minnesota. Of recent introduction. Was awarded first prize at the National Exhibit at New Orleans in competition with all the leading fruits. It is well named, and is an extremely hardy variety. Rich in color and finely shaped. It will always sell well and should put money into the pockets of those who grow it. Tree handsome, free grower and exceptionally hardy. Fruit medium, roundish. Skin smooth, oily and mostly covered with dark red. Late Fall variety.

SELECT WINTER APPLES

***AMERICA.**—December to February. Good size. Color deep red. The originator says it keeps perfectly with him until February or March. Perfectly hardy. An excellent keeper. Its handsome, showy appearance and keeping qualities entitle America to rank high.

ARKANSAS BLACK.—Originated in Arkansas. Tree is very hardy and thrifty. An early and uniform bearer. The fruit is large, round and smooth. Very black and dotted with whitish specks. Flesh yellow, very juicy and of a delicious flavor. It is remarkable as a keeper. Specimens have been kept as late of August. New.

BALDWIN.—This apple stands at the head of all New England apples, and is unquestionably one of the best apples cultivated. Tree vigorous, upright and spreading. An abundant and regular bearer. Does well in all sections of the country. Fruit large and roundish. Yellowish in the shade, but nearly covered with crimson, red and orange where exposed. Russet dots. Flesh yellowish white. Crisp and very highly flavored.

***BAXTER.**—November to March. Extra hardy. Fruit above medium size. Color dark red, spotted. Mild sub-acid; quality good. Originated in Canada, on the banks of the St. Lawrence.

BAILY'S SWEET.—November to April. Sweet. Red, striped. Fruit large, the whole surface frequently a full, bright red, in small, broken, indistinct stripes and dots, on light ground. Flesh very tender, not juicy; flavor mild, rich, sweet, fine. Tree a vigorous grower, and a good bearer. Origin, Wyoming County, N. Y.

***BELLE DE BOSKOOP.**—A Russian Apple. Tree vigorous and spreading. Comes into bearing quite early and produces fruit of fine quality abundantly. A most promising variety. Fruit medium to large. Skin yellow, shaded with red nearly over the entire surface. Flesh crisp, juicy, tender, sub-acid, rich and good flavor. Close small core. This apple is valuable in a cold climate and in exposed sections. Stands among the very best importations from Russia and is a long keeper.

BELLFLOWER.—December to February. Sour. Yellow, not striped. Fruit large. Skin yellow with a tinge of red on the sunny side. Flesh tender, juicy, crisp, with a sprightly sub-acid flavor, and when not fully ripe quite acid. An excellent winter apple, and is highly esteemed as a market fruit. Tree hardy and a vigorous grower, succeeding well on light sandy soils.

BENTLEY SWEET.—Tree vigorous and hardy. We consider it the best long keeping sweet apple. Fruit medium size; roundish; flattened at the ends; sometimes slightly oblique; pale yellowish green shaded with pale red. Flesh whitish; compact; sweet as honey, and with small core. An excellent apple. Of all winter sweet apples, this is the most desirable.

BEN DAVIS.—Fruit large roundish, skin yellowish, splashed and striped, also almost covered with red; flesh white, tender, moderately juicy, sub-acid; tree hardy and free grower; comes into bearing early and very popular. December to March.

***BISMARCK.**—This New Zealand apple has been widely advertised and much planted. Its remarkable characteristic is that of early fruitage; one year grafts and two year trees produce perfectly fine and handsome fruits. Trees on dwarf stocks grown in pots or tubs make beautiful decorative specimens. Two year, single stem trees, about 18 inches high, produced fine fruit with us. These fruits are large, handsome, yellow, shaded with red, tender, sub-acid, of medium quality, good for dessert or cooking.

COOPER'S MARKET.—December to May. Tree hardy, vigorous, upright grower. Valuable for market. Yellowish, shaded with red and striped with crimson. Flesh white, tender, with a brisk sub-acid flavor. Hardy and productive.

CRANBERRY PIPPIN.—Tree a strong grower. Fruit medium, skin very smooth, light yellow, bright scarlet cheek. Flesh white, moderately juicy, brisk sub-acid. Good Excellent cooking and market apple. November to February.

***FAMEUSE (Snow Apple).**—A very celebrated Canadian Apple. It derives its name from the snow white color of its flesh, and is considered par excellent. Brings the top price in market, and as a table apple is renowned. Tree moderately vigorous, hardy and very productive. Fruit medium size, roundish, somewhat flattened. Color pale yellowish, green ground with light streaks of pale red, deepening to a deep red in the sun. Flesh exceptionally white, fine and juicy, with a fine perfume.

FALLAWATER.—November to January. Sour, green, not striped. Fruit rather large, globular. Color yellowish green, dull red cheek with a few large whitish dots. Flesh juicy, white, rather fine grained, crisp, pleasant, sub-acid flavor. Tree a strong grower, very productive, even while young. Also known as the Tulphocken.

GIDEON.

GIDEON.—A recent introduction from Minnesota, and said to be as hardy as the native oak. Vigorous and an early, productive bearer. Fruit medium to large. Color a rich golden yellow, covered on the sunny side by a handsome blush. Flesh fine, juicy, sub-acid. It adheres well to the tree, and is an excellent keeper.

***GRIMES GOLDEN PIPPIN.**—A valuable American Apple of extreme hardiness, it withstands injury during severe winters, and never breaks in its limbs. An annual and productive fruiter. Tree vigorous, upright and spreading. Fruit medium size, yellowish, slightly russeted, fine grained, juicy, rich and spicy. Excellent for dessert. A long keeper.

GANO.—A seedling of the Ben Davis, but is much superior to that variety, having all of its good qualities in a higher degree. It is more brilliantly colored, more regular in size, and a very long keeper. Trees have withstood 32 degrees below zero without injury. Is a rapid grower, bears while young, and is an annual producer of large crops. Fruit large, finely colored bright red, very even in size, and good quality. February to May.

GOLDEN RUSSET.—Of medium size, round-ovate; clear golden russet, with slight blush; tender, crisp, juicy and high-flavored. Tree robust and hardy, bearing large crops. November to April.

HUBBARDSTON NONSUCH.—A native fruit worthy of extensive culture. Large to very large, roundish oblong, yellowish ground, with stripes and spots of red; flesh yellow, juicy, tender, sweetish and rich. Vigorous and productive. Highly esteemed. November to January.

***INDIAN.**—A valuable apple from Indiana, resembling Ben Davis in shape, but is duller in color; flesh rich yellow, moderately juicy, pleasant sub-acid; keeps well. Tree a vigorous, upright grower, perfectly hardy and does well in the North.

JONATHAN.—Originated in the state of New York. Succeeds wherever grown. Perfectly hardy and is productive in all soils, which makes it one of the most desirable apples. Fruit of medium size, very regularly formed. Skin thin and smooth. Yellow ground almost covered with lively red stripes deepening into dark red in the sun. Flesh white, very tender and juicy with a vinous flavor. Very valuable for home use or market. It is a long keeper.

KING OF TOMPKINS COUNTY.—One of our most hardy, valuable, and profitable market fruits, especially in the North. Large, globular; yellow, generally striped and shaded with crimson; flesh yellow, tender, juicy, with a vinous, aromatic flavor. Vigorous and productive. December to March.

KINNARD'S CHOICE.—Size large; color dark red on yellow ground; beautiful, large, showy apple; bears quite young; quality one of the best. A fine winter apple for Piedmont and mountain sections.

***LONGFIELD.**—One of the best new Russian varieties. Tree is very strong, upright grower, and has proven itself to be an early, annual and abundant bearer. Highly valuable for cold climates and exposed sections. The fruit is white, tender, fine and juicy, sprightly sub-acid, and keeps from December to April. Something new, and a valuable addition to our American orchards.

MANN.—A chance seedling from New York. Tree very hardy; is upright in growth, bears annually and early. Fruit good size and very even. Skin deep yellow when ripe. Flesh yellowish, juicy, mildly sub-acid. It resembles the Rhode Island Greening, although it keeps much longer, maturing after the Greening is gone, remaining firm and handsome until late in the Spring. It is eminently valuable as a cooking and eating apple for late spring use. Bears very young and large crops.

MAMMOTH BLACK TWIG.—A very large and showy dark red apple from Arkansas, where it is largely planted as superior to Winesap. The trees are of strong growth, hardy and bear profusely. November to April.

***McINTOSH RED.**—Originated in Canada. Tree very hardy and vigorous; a good bearer of fair, handsome fruit of excellent quality; above medium size, skin whitish yellow nearly covered with dark rich crimson; flesh white, tender, juicy, sub-acid. November to February. Valuable in Montana and Dakota.

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

***NERO.**—Origin, New Jersey. Tree is very strong, upright grower. Fruit round, oplate medium size, yellowish red stripe, flesh white, brisk sub-acid of very good quality. It is a long keeper.

NORTHERN SPY.—Might be termed the King of the American orchard. It is one of the most delicious, fragrant and highly prized of all late dessert apples. Always commands the highest market price, and is one of the very longest keepers. Tree is a rapid, upright grower. Fruit large. Skin smooth. Greenish or pale yellow in the shade, striped with red in the sun, and covered with a thin, white bloom.

***NORTH STAR.**—Large; very handsome; perfectly hardy; vigorous; quality fine; a seedling of Duchess, which it resembles, but less tart and better quality.

***NORTHWESTERN GREENING.**—Originated in Northern Wisconsin, where it is much esteemed on account of its extreme hardiness, having withstood 50 degrees below zero without damage. Tree good, thrifty grower. Fruit large and of fine appearance, nearly round and very regular. Rich yellow in color when fully ripe. Flesh yellow, juicy, flavor rich and good. An excellent long keeper.

ONTARIO.

ONTARIO.—January to April. Sour. Red, striped. A hybrid, resulting from the crossing of the Northern Spy and Wagener. Fruit tender and juicy, of mild sub-acid flavor; bears young, annual crops of good uniform size. Keeps until April. Undoubtedly one of the most desirable hardy varieties yet introduced, and in the future is bound to command a high price in the market. Bears young, like the Wagener. Origin, Ontario, Canada.

***PEWAUKEE.**—Medium to large, round-oblate; bright yellow, flushed with dull red, has white, tender flesh of good to best quality. Tree exceptionally hardy and robust; well suited to cold climates. January to May.

RED CANADA. (Steel's Red Winter.)—An old and tried variety, and considered one of Michigan's best apples. Tree thrifty, but of slender growth, very productive. Fruit medium, oblate, inclined to conic. Skin yellow, mostly shaded with deep red, and sometimes covered with greenish dots. Flesh very white and juicy, retaining its rich flavor to the last. A long keeper.

RAMBO.—October to December. Sour. Yellow, striped. Fruit medium size, round, flat and smooth. Skin streaked and marbled with dull, yellowish red on pale yellowish ground. Flesh greenish white, very tender, rich, mild, sub-acid. Of very good quality. Fine in nearly all localities.

RHODE ISLAND GREENING.—The well-known large, greenish-yellow apple, so much in demand for dessert and cooking. The tree bears regularly and profusely. An autumn apple of the South, but keeps through winter North.

ROME BEAUTY.—Large; yellow, striped and mixed with light red; flesh yellow, breaking, sub-acid; valuable for market on account of its productiveness, size and beauty, as well as for its certain bearing. November to January.

***SALOME.**—Originated in Illinois, and does remarkably well in the Northwest. Tree is a hardy, vigorous grower, bears fruit young and very abundantly. Its hardiness, good quality and uniform size recommend it. Fruit a little below medium, roundish, slightly angular. Skin pale yellow, shaded and splashed with red. Flesh whitish yellow, tender, juicy. A long keeper.

***SCOTT'S RED WINTER.**—This is a very hardy variety and has been long tested. An early and profuse bearer; flesh yellowish white, slightly red near the skin. Sub-acid in quality. December to June.

SEEK-NO-FURTHER. (Westfield.)—Medium to large, round, striped with dull, red russet dots; fine grained, tender, rich and excellent. Tree a good grower, and a fair bearer, fruit fair and fine. November to February.

***SENATOR.**—October to January. Sour, red or greenish yellow, striped. The fruit is of medium size, smooth. Skin mostly red on a greenish yellow background and with a red stripe. Its flesh is yellowish white, stained with pink, with a small core. The fruit should be picked about October first. It seems to be an unusually good keeper.

SHIAWASSEE BEAUTY. (Michigan Beauty.)—Originated in Shiawassee Co., Michigan. Said to be a seedling of the Snow, resembling that variety very much in the fine quality of its flesh, although much larger and more beautiful in appearance. Tree is a strong, upright grower, extremely productive and very showy. We have this tree in fruit on our packing grounds, and when covered with fruit, as it is every season, it calls forth many exclamations of astonishment from those who see it for the remarkable beauty, the quantity, quality and size of the fruit. A thin skin, very smooth, deep red which takes a high polish. Flesh very white, fine, crisp, extremely juicy. One of our very best late Fall, early Winter apples. (See cut.)

SUTTON'S BEAUTY.

***SUTTON'S BEAUTY.**—Originated in Massachusetts, and has grown in public favor on account of its marketable qualities. It gives the best of satisfaction wherever planted. Tree a free and handsome grower, and very productive. Fruit medium to large, roundish, handsome, waxy in appearance. Color yellow, beautifully striped with red. Flesh tender, white, juicy and sub-acid. A remarkably long keeper. Considered one of the very best winter apples on account of its beauty and ready sale in the market.

STAYMEN'S WINESAP.—Medium to large; oblate conical, greenish yellow, mostly covered and indistinctly splashed and mixed with dull dark red with medium numerous gray spots; flesh yellow, firm, tender, juicy, mild sub-acid, aromatic; quality best. Another seedling of Winesap, originated in Kansas, is larger and more beautiful.

STARK.—Large, greenish yellow, shaded, splashed and striped with light and dark red; flesh yellowish, moderately juicy; a long keeper and valuable market apple. Tree very vigorous and hardy.

TALMAN SWEET.—Of medium size, pale yellow, slightly tinged with red; firm, rich, sweet. The most valuable apple for baking. November to April.

***WALBRIDGE. (Edgar Red Streak.)**—Medium size, whitish yellow shaded and striped with red; flesh white, fine, tender, juicy, mild sub-acid. Tree a good grower, very hardy and productive. January to May.

***WAGNER.**—We consider this one of our best Winter Apples. For several years there has been quite a demand for this apple in Northern Michigan, where it does remarkably well and brings the top price in the Chicago market. Tree thrifty, upright, hardy. A very early and abundant bearer. Fruit a little above medium, handsomely shaped. Yellow, mostly shaded with crimson. Flesh yellowish, very tender, juicy, and a most excellent table apple in every particular.

SHIAWASSEE BEAUTY.

WALKER'S BEAUTY. (New.)—Originated in Allegheny County, Pa. Tree a strong, upright grower; one of the best in the nursery. Fruit very large; color crimson on yellowish ground; flesh firm, sub-acid. Season January to June.

WINTER BANANA.—It has stood the severest tests. Tree is hardy and will succeed in very cold climates; its wonderful productiveness will bring quicker and larger returns than any other apple in the orchard. The fruit has a richness of flavor that cannot be described. It surpasses in aromatic taste the choicest pear, plum, apricot, peach, cherry or any other fruit grown. Flavor very rich, spicy and aromatic. Flesh golden yellow, fine grained, firm and juicy. Tree a very strong grower and will grow to be a tree of immense size, very suitable for lawn or shade, the leaf being nearly double the size of other apple sorts.

WINESAP.—Red, striped. Size of fruit medium, round, slightly conical, sometimes obscurely flattened. Color a lively, deep red. Flesh yellowish, firm, crisp, with a rich sub-acid or rather acid flavor. Keeps through winter. One of the best apples for baking. Very good. December to April.

***WOLF RIVER.**—Very large; beautiful red in the sun, on a yellow ground; strong grower and good bearer. Original tree in Wisconsin is 40 years old, very healthy and extremely hardy. December to March.

YORK IMPERIAL.—Origin, York Co., Pa. Fruit medium size; white 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.

We have in stock these additional varieties:

SUMMER VARIETIES:

American Summer Pearmain	June Sweet	Tetofsky
Carolina Red June	Spice Sweet	Western Beauty
Fourth of July	Summer Queen	

AUTUMN VARIETIES:

Autumn Strawberry	Jersey Sweet	Pumpkin Sweet
Colvert	Lowell	Sops of Wine
Haas	Porter	St. Lawrence.

WINTER VARIETIES:

Belmont or Gate	Ladies' Sweet	Roxbury Russet
Bethel	Limber Twig	Smith's Cider
Bottle Greening	Malinda	Smoke House
Delaware Red	McMahon	Sweet Vandevere
English Russet	Peck's Pleasant	Tewkesbury Winter Blush
Esopus Spitzenburg	Peter	Vandevere
Flora Bellflower	Plumb Cider	White Pippin
Gillflower, Black	Ramsdall's Sweet	White Winter Pearmain
Green Sweet	Raule's Janet	Willow Twig
Jacob Sweet	Roman Stem	Winter Sweet Paradise
Lady		

CRAB APPLES

BOTH ORNAMENTAL AND USEFUL

The hardy and improved varieties of Crab Apples, some of which are of recent introduction and promise great excellence, supply a much needed want in the more northern portions of the United States and Canada, where little else in the line of fruit can be grown. And even in the more favored localities, where other fruits are grown in abundance, Crab apples are every year becoming more esteemed and cultivated. They combine the qualities of extreme hardiness and productiveness, being capable of enduring an extremely cold climate, and bearing annually large crops of highly colored and beautiful fruit, of which some varieties are excellent for the dessert, while others are valuable for drying, cooking and preserving, jellies, cider, etc.

Taking into consideration their extreme hardiness, early productiveness, beauty and value for culinary purposes, as well as some varieties for the dessert, entitle them to a place in every garden.

EXCELSIOR.—A valuable seedling of Mr. Gideon's, raised from the seed of the Wealthy, which is already known as one of the handsomest, hardiest and best flavored of our newer fruits, and it partakes of many of the best characteristics of the parent variety. Ripens in early fall, a little later than the Duchess of Oldenburg. Size of fruit about that of Fameuse, and very handsomely colored; is a shade or two lighter than the Wealthy, while it closely resembles it in quality and in the form and growth of tree. October.

FLORENCE.—Originated in Minnesota by Peter M. Gideon, who says: "The hardiest of all; an early and profuse bearer; when in full fruit the most ornamental tree grown; larger and far superior to Transcendent. Ripens about the same time."

GENERAL GRANT.—Fruit large, yellowish with broken stripes of dark red, and on the sun exposed side becoming almost black red. Flesh white, moderately fine grained. Not juicy.

HYSLOP.—Fruit large, produced in clusters, roundish, ovate, dark rich red, covered with thick blue bloom. Stock long and slender. Tree hardy, vigorous, spreading. Very desirable, one of the very best.

MARTHA.—A new Crab raised from the seed of the Duchess of Oldenburg by P. M. Gideon of Minnesota, who has this to say of it: "A rapid stiff grower. A perfect pyramid in tree. A great bearer of the most beautiful fruit we ever saw. A bright, glossy yellow shaded with light, bright red. A mild, clear tart, surpassing all other crabs we ever grew for all culinary purposes, and fair to eat from hand. Season October and November."

TRANSCENDENT.—One of the largest and finest of this class of apple. Tree a strong grower and good bearer. Very hardy and much sought after in the North and Northwest. Skin golden yellow, striped with rich red. Flesh yellow, crisp, juicy. Excellent variety for general use. September and October.

VAN WYCK SWEET.—A new and exceedingly valuable variety. Fruit very large. Skin yellowish white, colored light red, and covered with bloom. Flesh yellowish white. Very sweet and tender. Core small. A vigorous grower.

WHITNEY.—Tree a fine grower, with dark green, glossy foliage. Fruit exceptionally large. Skin smooth, striped and splashed with red. Flesh yellowish white, very juicy and pleasant flavor. Considered by some a fine dessert apple. A great bearer and very hardy.

We have in stock these additional varieties:

Marengo

Montreal Beauty

Soulard

Minnesota

Quaker Beauty

Sweet Russet Crab

Red Siberian

Yellow Siberian

PEARS

THE Pear very justly ranks as one of the most delicious fruits of modern times. It has been placed first by nearly all modern amateurs, on account of its fine, juicy texture, exquisite flavor and aroma. Of late years attention has been given to the cultivation of this favorite fruit, and those who have entered upon its cultivation for the market intelligently, have found it to be one of the most profitable occupations.

In consequence of the demand upon us for trees, and having a soil and climate peculiarly adapted to the production of this fruit tree in its perfection, we have entered largely upon its cultivation, and we have on hand, in the various stages of growth, a large and fine stock.

Our collection of varieties is extensive, and consists of the most approved sorts in cultivation.

In the standard form the pear undoubtedly succeeds the best, and with the least care. When once well established in a favorable soil and situation, it requires but little attention. An occasional cultivation of the soil about the tree and a light pruning is all that is necessary to insure success.

SOIL.—The soil most congenial to this fruit tree is a strong clay loam, but will succeed in any good soil, provided it is

moderately rich, and dry. A soil saturated with a stagnant moisture for a large portion of the year, is totally unfit for this purpose.

DISTANCE.—The usual distance at which to plant standard trees is about twenty-five feet each way. If the soil is very strong, twenty feet is sufficient.

DWARF PEARS.—These are budded on the Anger's Quince, which is the best stock for this purpose. In favorable localities, and with careful culture, they are often made to yield good crops; but for general cultivation we would recommend the Standard tree.

PICKING AND RIPENING.—Early and Autumn Pears should be picked ten days before fully ripe, and allowed to ripen in the house. This greatly improves the flavor of nearly all kinds, while some are nearly worthless if allowed to ripen on the tree.

Winter pears should be picked before severe frosts, and placed in a cool cellar, till it is desired to ripen them; when if placed in drawers in a warm room they will ripen in a few days.

SELECT SUMMER PEARS

BEURRE GIFFORD.—A chance seedling imported from France. An early pear of value. We have had this tree in fruit for some time, and consider it one of the best early pears we ever grew. Flesh white, melting, juicy, and with an excellent vinous flavor. Middle of August.

BARTLETT.—One of the most popular pears. Large, buttery and melting with a rich musky flavor. A good, erect grower. Bears young and abundantly. Always sells for the top price in the market. A delicious eating pear, and makes the finest of canned fruit. August.

CLAPP'S FAVORITE.—Tree a vigorous, upright, spreading grower. Very hardy and productive. Fruit very large, of uniform size, pale lemon yellow, when exposed to the sun faintly splashed with crimson and fawn. Flesh fine grained, juicy and buttery, of exquisite flavor. One of the best. Last of August.

COMET OR LAWSON.—This Pear is now attracting a good deal of attention, and promises to be a profitable sort for the early market. The tree is a vigorous grower and very productive; fruit above medium size of most beautiful crimson color on yellow ground; flesh crisp and pleasant.

KOONCE.—Of medium size, yellow, with carmine cheek; sweet and high flavored. This vigorous tree resists blight, and has frequently borne heavy crops when the fruit of other trees was destroyed by frost. Handsome and highly recommended. July and August.

WILDER.—One of the earliest. A good keeper and shipper. Tree very vigorous, bears young and abundantly. Extremely hardy. Fruit very beautiful, bell shaped. Surface smooth, pale yellow ground with dense shading of brownish carmine. Flesh whitish yellow. Fine grained, tender. Flavor sub-acid, sprightly. Ripens August 1st, and does not rot at the core (a failing in mostly all early pears). Excellent and brings a good price in market.

SELECT AUTUMN PEARS

ALBERTINE.—This great Belgian pear is one of the most vigorous of trees, and exceedingly profitable as a market sort. It is upright, spreading and large, producing heavy crops annually. Fruit is very large, roundish in form, deep yellow in color. The flesh is buttery, juicy, melting, sweet, aromatic and excellent. This variety succeeds in almost any climate, and as a shipper is not excelled. Very fine for table use. September and October.

BELLE LUCRATIVE.—This excellent autumn variety is of Flemish origin, but is very satisfactory here. Medium, oblate to globular; pale yellowish green, with slight russet markings; flesh melting, juicy, sugary, rich and delicious. Tree very healthy and productive. September.

BEURRE CLAIRGEAU.—Very large, fine, melting, highly flavored pear. Tree a good grower, forming a pyramidal shaped tree, and is an early and abundant bearer. Fruit very large, attractive appearance when on the tree and very showy in the market. Color warm yellow shaded with fawn, orange and red. One of the best and a long keeper. October and November.

BEURRE D'ANJOU.—A noble fruit of French origin. Tree vigorous and productive. Fruit large and handsome. Skin greenish sprinkled with russet, and sometimes with red cheek. Flesh melting, buttery, perfumed and excellent. A very good keeper, and should be in every orchard. Considered by all to be one of the best. November.

BEURRE SUPERFINE.—This is an excellent pear of French origin. Tree very healthy, hardy and vigorous; bears good crops. Fruit large, fine, melting, with a sprightly, pleasant flavor. Color a rich yellow slightly shaded with crimson. Highly appreciated by those acquainted with it, and without doubt one of the best. Ripe all of October.

COLUMBIA. (Bartlett-Seckel.)—A seedling of the Bartlett and Seckel, combining the valuable, good quality of each. Of good size, handsome, high-colored and rich flavored; a hardy, vigorous tree; produces well. September and October.

DUCHESS d'ANGOULEME.—A magnificent large fruit. Originated in France. The largest of all good pears, sometimes weighs as much as a pound and a quarter, extra fine quality. Fruit greenish yellow, streaked and spotted with russet; flesh white, buttery, and very juicy. Of excellent flavor. Tree a strong grower, an abundant and early bearer. One of the very best as a standard as well as a dwarf. October and November.

FLEMISH BEAUTY.—A large, melting, sweet pear. Tree vigorous, very hardy, bears early and abundantly, and succeeds well in nearly all parts of the country. A most valuable variety for general use and market. Fruit large, surface a little rough, the ground pale yellow, but mostly covered with marblings and patches of light russet, becoming reddish brown at maturity on sunny side. Fine shipper and sells well. September and October.

HOWELL.—Originated in Connecticut. A valuable variety. Tree grows freely and is upright; an early and productive sort. Fruit large and roundish. Light waxen yellow, sometimes with a finely shaded cheek. Flesh whitish, juicy, melting, vinous. Considered very hardy in the West. September to October.

KEIFFER. (Keiffer's Hybrid.)—This new and unique pear is said to have been raised from seed of a Chinese Sand Pear, accidentally crossed with Bartlett or some other kind grown near it. Fruit large, a fair quality and very showy. Tree vigorous, hardy, an early bearer and productive; succeeds best as a standard. In appearance is one of the most beautiful of pears. It thrives in nearly all sections. Some praise it very highly, while others do not think so much of it, but the fact that large growers are planting whole orchards of it proves it to be a profitable variety. Its large size and handsome appearance cause it to sell readily in market. It is apt to overbear, and care should be taken to prevent it. Requires thinning. October and November.

LOUISE BONNE de JERSEY.—Large, tapering. Pale yellowish green in the shade, but overspread with brownish red in the sun. Very juicy and melting, with a rich and excellent flavor. A profitable market variety. While hardly of the highest quality, it is very valuable for its large, fair fruit and great productiveness. September and October.

ROSSNEY. (New.)—It originated at Salt Lake City, Utah, where it is free from blight and very hardy. Medium to large, oblate, obtuse, pyriform; creamy yellow, with bright red cheek; flesh tender, rich, sugary, fine-grained and melting. Tree vigorous, hardy and early bearer. September and October.

RUTTER.—Rather large; skin rough, greenish yellow, with some russet; flesh white, juicy, sweet and slightly vinous; very good; bears early and abundantly. September and October.

SHELDON.—Fruit rather large; roundish, yellowish, nearly covered with light russet; shaded with red. Flesh very juicy, melting and delicious. Tree hardy, erect, vigorous and good bearer. Considered one of the best varieties, and when properly ripened (by picking before ripe and placing in a dark room), there is no variety superior to this one. October.

SECKEL.—The standard of excellence in the pear. Small, but of highest flavor. Tree a stout, slow, erect grower. Makes a beautiful tree either as a standard or pyramid. Downing pronounces this American pear the richest and most exquisitely flavored variety known. The healthiest and hardiest of all pear trees, bearing regular and abundant crops in clusters at the ends of the branches. September and October.

VERMONT BEAUTY.—A beautiful new seedling pear. Medium size, roundish, yellow, nearly covered with carmine. Flesh melting, sprightly, fine quality. Tree healthy, hardy and productive. An abundant and early bearer. The *Rural New Yorker* says: "The fruit ripens a little later than the Seckel, and much excels that variety in size and beauty. The flesh is rich, juicy, aromatic. It cannot do otherwise than stand at the head of our Fall pears." October.

SELECT WINTER PEARS

LAWRENCE.—An American pear of great excellence. Tree hardy, an early and abundant bearer. Fruit medium size, very regular. Color lemon yellow. Flesh whitish, juicy, melting, sweet and aromatic. Considered one of the very best winter pears. We have several hundred trees of this variety planted in one of our orchards, and expect great returns from them. December to January.

LINCOLN CORELESS.—Practically coreless. In season it is late, and the fruit is picked when green, and laid away to ripen. It will keep for several months. Fruit large, quality very good, rich and juicy, and pronounced excellent by all who taste it. When ripe, the skin is of a rich golden tint, and the flesh is yellow. Tree a strong grower.

VICAR OF WINKFIELD.—Fruit quite large, long, tapering. Skin pale yellowish green, dull reddish cheek. Flesh greenish or yellowish white, juicy. Its great and uniform productiveness, fine qualities for cooking, and long period of continuance, render this a valuable pear.

WINTER NELLIS.—This is indeed an exquisite pear. Downing says: "It holds nearly the same rank among winter pears that the Seckel does among the Autumnal varieties." And he know whereof he speaks. We have had this variety in fruit for several years, and it stands high in our favor. Medium size, or usually a little below medium. Yellowish green at maturity, dotted with gray russet, and with russet patches and streaks. Flesh yellowish white, fine, juicy, buttery and melting. December and January.

We have in stock these additional varieties:

SUMMER VARIETIES:

Bloodgood	Leconte	Osband's Summer
Brandywine	Madeline	Rostizer
Brockworth Park	Manning's Elizabeth	Souviner de Congress
Beurre Bosc	Margaret	Tyson
Doyenne d'Ette		

AUTUMN VARIETIES:

Buffam	Edmonds	Lincoln
Des Nonnes	Garber	Onondago
Doyenne Boussock	Idaho	Worden-Seckel

WINTER VARIETIES:

Beurre Easter	Mt. Vernon	President Mass
Dana's Hovey	Pound	
Glout Morseau	President Drouard	

DWARF PEARS

BARTLETT.—One of the most popular pears: large, buttery and melting, with a rich, musky flavor. A good, erect grower; bears young and abundantly. August.

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.

CLAPP'S FAVORITE.—Tree a vigorous, upright, spreading grower, very hardy and productive. Fruit very large, of uniform size; pale lemon yellow; flesh fine grained, juicy, buttery, melting, sweet and rich. Last of August.

DUCHESSE d'ANGOULEME.—The best dwarf pear grown. Originated in France, the largest of all good pears, sometimes weighs as much as a pound and a quarter, of extra fine quality. Tree a strong grower. Fruit greenish yellow, streaked and spotted with russet; flesh white, buttery and very juicy, and of excellent flavor. October and November.

HOWELL.—A fine, large pear, very handsome; a good grower, and does well on quince; very good. September to October.

LOUISE BONNE de JERSEY.—This is one of the most desirable for cultivation on the quince stock; large, beautiful, first rate pear; yellow, with dark red cheek; melting, buttery and rich; should be in all collections. September and October.

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

WILDER.—Handsome, melting, sweet, pleasant and of the best quality for an early pear. One of the best keeping early pears. Early August.

PEACHES

The best soil for the peach is moderately rich, somewhat sandy loam, but will succeed in almost any soil, except a heavy wet clay. The ground should be kept clean and mellow around the tree.

In the cultivation of the peach we would recommend the shortening in system. This should be done in February or March. Cut off from one-third to one-fourth of the previous year's growth. This course should be pursued every year. The trees so treated live longer, are broken down less by the wind and produce larger and better fruit, which is more easily gathered than from trees grown by the old method.

Budding Peach.
Electric Graft Wrappers
Grafting Apple

Careful examination should be made each season, and all the borers removed with a knife. A half peck of air-slacked lime or leached ashes placed around the trunk of the tree in May and allowed to remain until October, affords a good protection against the depredations of this pest.

We grow many thousand Peach trees annually. Orchardists, wishing to purchase largely, would find it to their interest to correspond with us.

(F) FOR FREE-STONE; (C) FOR CLING; (S C) FOR SEMI-CLING.

ADMIRAL DEWEY.—(S C) Fine size, form and color, with delicious yellow flesh that is yet firm enough to ship well. The tree is strong, hardy symmetrical grower and produces well. Ripening with the Alexander.

ALEXANDER.—(C) A very early peach, fruit of medium size, skin covered with a rough down, pale, handsomely shaded on the sunny side; flesh white, tender, melting, juicy, rich. One of the best. Middle of July.

BANNER.—(F) Large, yellow with crimson cheek. Flesh yellow, firm, rich, excellent. Good shipper; early bearer, and productive. One of the best late market varieties. October.

BARNARD'S EARLY.—(F) A medium size, popular peach; yellow with red in sun; flesh yellow and very good; tree vigorous and good bearer. First of September.

BILLMEYER (ONE-THIRD ACTUAL SIZE).

✓ We are the Introducers and Exclusive Growers of this Variety.

Not the earliest nor is it the latest peach to ripen. *It has a season of its own.* Every peach grower knows there is a time between the Early and the Late Crawford when there is a dearth or scarcity of good fruit in the market. We now have the BILLMEYER, a variety the

excellence of which is unsurpassed. A variety that puts money into the pockets of the fruit raiser. The originator, Mr. Billmeyer, a man who has made himself rich out of raising the finest peaches drawn to market, reports: "The Billmeyer has made more money for me than any variety I grow as it comes to fill a long felt want. Right after the Early Crawford there is a scarcity of peaches; the Billmeyer fills the gap, and I am therefore able to sell my peaches in a ready market at higher prices than at any other season of the year." (We have grown the Billmeyer peach for several years for Mr. Billmeyer's exclusive benefit.)

It is large, deep yellow, handsomely shaded with rich red; flesh yellow, firm, fine grained and juicy; pit exceptionally small. One of the best shippers in the long list of peaches, having been shipped over a THOUSAND MILES, preserving its shape, texture and flavor.

BELLE OF GEORGIA.—(F) A seedling of the Chinese Cling, raised at Marshallville, Ga., and a full sister of Elberta, both originating the same year. In growth it is more spreading than Elberta, with deep bluish green foliage. It has proven extremely hardy and a sure bearer at the North. Skin rich, creamy white, with a bright red cheek on the sunny side; quality delicious. Season a few days before Elberta. Mr. J. H. Hale says, "The best and most profitable white-fleshed Peach in America."

BILYEU'S LATE OCTOBER.—(F) Large, white with red cheek; flesh white rich, juicy and firm. A good shipper. An excellent very late peach.

BRONSON.—(F) Large, yellow with handsome red cheek, flesh yellow, sweet, rich, fine flavor; tree hardy and good bearer. One of the new Michigan peaches for which the demand has been very large during the past season. Last of September.

CARMAN.—(F) Large, resembling the Elberta in shape; creamy white or pale yellow, with deep blush; skin very tough; flesh tender and of fine flavor, juicy. Prolific bearer, profitable market variety. Ripens August.

CHAMPION.—(F) A Western peach of very large size and good quality. Specimens measuring ten inches in circumference. Noted for the regularity of its bearing. Skin is of a rich white with a red cheek. Flesh creamy white, sweet and delicious, rich and juicy. Should be in all peach orchards. August.

CHAIR'S CHOICE.—(F) Originated in Maryland. Fruit of very large size; deep yellow with red cheek; flesh yellow, firm and of good quality. Tree strong grower and productive. Last of September.

CHINESE CLING.—(C) A large creamy white peach, finely shaped and marbled with red; the white flesh is red at the stone, very juicy, rich and vinous. First of August.

CONKLING.—(F) Large round, golden yellow with crimson cheek; highly flavored; profitable market sort. Early September.

CRANE'S EARLY YELLOW.—(F) Similar to the Yellow St. John. One of the earliest yellow free-stone peaches; good size, roundish, orange yellow with deep red cheek; flesh juicy, sweet and rich. Middle of August.

CRAWFORD'S EARLY.—(F) A magnificent large, yellow peach, of good quality. Its size and beauty make it one of the most popular orchard varieties. Fore part of September.

CRAWFORD'S LATE.—(F) Very large, roundish, skin yellow, with a beautiful dark red cheek, flesh rich, yellow, melting, with sweet luscious flavor, worthy of universal cultivation as table and market sort. Latter part of September.

CROSBY.—(F) Originated at Billerica, Mass., about 1875, and recently brought to general notice on account of its extreme hardiness, bearing full crops of choice, attractive fruit when all other sorts have been blasted by frosts. The fruit is of medium size, roundish, slightly flattened, with a distinct seam, bright orange yellow, streaked with red on the sunny side, flesh yellow, of a mild pleasant flavor. Tree of low spreading growth, similar to Hill's Chili. Promises to be very valuable for general cultivation. In season about with the Old Mixon. Middle September.

EARLY MICHIGAN.—(F) Medium size, white with red cheek, handsome; flesh white, firm and of fine quality. An early and good bearer. Middle of August.

EARLY RIVERS.—(S C) Fruit large, very white, with a delicate pink cheek, flesh melting, rich and luscious. An excellent peach. End of July.

ELBERTA.—(F) Originated in Georgia, and is being planted most largely in the South, where it is regarded as the best market variety. Fruit large, yellow, with red cheek; flesh yellow, firm, juicy, fine quality. Tree very hardy and exceedingly productive. It is equally valuable in the North, and is one of the best general sorts for all sections. Ripens with Crawford's Early. This variety has become very popular in Michigan and Ohio. Exceptionally large and fine.

✓ **ENGEL'S MAMMOTH.**—(F) Large, yellow; resembles Late Crawford, but is more productive. Middle of September.

FITZGERALD.—(F) An improved Early Crawford, being fully equal to it in size, quality and color. In Canada and Michigan has proven one of the hardiest. Fruit large, brilliant color, bright yellow suffused with red; flesh deep yellow, best quality. In bearing qualities, Fitzgerald ranks with the heaviest croppers. One strong point is the smallness of the pit. Early September.

FOSTER.—(F) A very large peach, originated in Medford, Mass., resembles the Early Crawford in appearance, but is much larger and somewhat earlier. Tree as hardy and productive as that well known sort: has received the highest encomiums from Massachusetts horticulturists.

GARFIELD.—(F) Fruit medium to large. Color deep orange-red, becoming red on the exposed side. Flesh yellow, very rich and juicy. Origin, Cayuga county, N. Y. Red. Flesh yellow. Season, late September.

GLOBE.—(F) A Pennsylvania seedling. Tree vigorous, healthy and productive. Fruit very large, globular, golden yellow with a red blush; very fine flavor. Middle to latter part September.

GOLDEN DROP.—(F) Medium, golden yellow, with red cheek in sun, flesh yellow, juicy, rich, and very good. A valuable variety. Tree very hardy, productive. Ripens between Hill's Chili and Smock.

GREENBORO.—(F) One of the finest early peaches yet introduced, far superior to the Alexander and nearly twice the size of that variety. Fruit large, looks very much like a yellow peach, but flesh is white, fine flavor, very juicy when fully ripe; tough thin skin, peels off without the least trouble. An excellent shipper.

HEATH CLING.—(C) Large size, skin downey, color cream white with blush; flesh white, juicy and luscious. Stands high in the South. Late.

HILL'S CHILI.—(F) Large, downey, tame yellow, with slight blush, flesh yellow, luscious and well flavored, pit small. Tree hardy and productive. Bears large crops when most other sorts fail. Late September.

JACQUE'S RARERIPPE.—(F) A superb yellow peach. Large, dark yellow, shaded with dull red. Flesh yellow, juicy and very good. Tree very productive. Middle of September.

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

- LEMON FREE.**—(F) This is a magnificent peach of the Smock class, although it is earlier than that variety, originating in Summit Co., O., where it has proven itself to be harder than any other good peach in that section. It's name is very appropriate, as it is almost lemon shape, a pale yellow in color. It is immense in size, the finest specimens measuring over twelve inches in circumference; excellent quality; exceedingly productive. One of the most valuable sorts for home use or market.
- LEMON CLING.**—(C) Very large; oblong; pale yellow with a red cheek; flesh yellow, firm, with a rich sprightly flavor. Last of September.
- LOCKWOOD.**—(F) See illustration. This is the best of the early yellow-fleshed Free-Stones, large, roundish, ripening fore part of August; skin orange yellow, with beautiful red cheek, flesh juicy, sweet and deliciously flavored. Trees very productive, and fruit brings the top price in market. We are the introducers of the Lockwood, and are obliged to grow large numbers of them to supply the increasing demand. There is no peach grown that is more popular where it is known. It has the quality of the Early Crawford and is three to four weeks earlier, and a great producer.
- LEWIS SEEDLING.**—(F) One of the earliest free-stones, remarkable hardy and very early and abundant producer. Tree vigorous and an annual bearer. Fruit medium to large, handsome skin greenish white with red cheek, flesh white, juicy, pit small. Middle to latter part of August. Very profitable.
- MATHEW'S BEAUTY.**—(F) This superb freestone in introduced from Georgia, where it has been thoroughly tested and is being largely planted as the most valuable succession for Elberta. In bearing and shipping qualities it is fully equal to Elberta, is a size larger, superior in quality, and ripens about three weeks later. Golden yellow, streaked with red; flesh thick, firm, fine. Its good shipping qualities make it an exceedingly valuable variety for market. September.
- MICHIGAN BEAUTY.** (New).—(F) Tree an early, abundant and annual bearer of exceptionally vigorous habits. Fruit large, highly colored, perfect free-stone. Flesh yellow and with much the same quality as the Crawford, as to richness, texture and color. Its firmness places it at once in the list of the best keepers and shippers, and last, but most important is its time of ripening, which is about Oct. first. Think of an Early Crawford ripening October first and you will have a concise description of the Michigan Beauty.
- MOUNTAIN ROSE.**—(F) Large, skin whitish, nearly covered with light and dark, rich red, flesh white, slightly stained at the stone. Very good and should be in every collection. Middle of August.
- MAYFLOWER.** (New).—(F) Described by the originator as the earliest peach known, being fully a week earlier than the Sneed. Of extra fine color, being red all over, sells at an advance over other early peaches, good shipper.
- NEW PROLIFIC.**—(F) A choice large yellow peach, valuable for succession to Early Crawford, for its fine shipping qualities, its beauty and its good quality. Of strong, thrifty growth, hardy and productive. A good orchard variety. September.
- NIAGARA.**—(F) Originated in Western New York, where it has been well tested. Surpasses both Elberta and Crawford in size, color, quality and vigor; ripens between Crawford and Elberta.
- OCEANA.**—(F) Fruit large; bright yellow, suffused with red; flesh deep yellow, best quality; small pit, perfectly free. Tree comes into bearing young, is very productive, and has proven to be one of the hardiest in wood and bud. Ripens just after Crawford's Early. Early September.
- OLD MIXON FREESTONE.**—(F) One of the most popular and valuable varieties for market. Fruit large, oval; skin yellowish white with red cheek; flesh white, but red at the stone, rich, sugary and excellent. Middle of September.
- OLD-MIXON CLINGSTONE.**—(C) Large, yellowish white, with mostly a red cheek; flesh white, very melting, rich and high flavored. The best clingstone. Early in September.

LOCKWOOD.

- RED CHEEK MELOCOTON.**—(F) Fruit large; skin yellow, with a deep red cheek, flesh, deep yellow, red at stone, juicy, melting. An excellent peach. Ripens late in September.
- REEVE'S FAVORITE.**—(F) Large, roundish; skin yellow, with a fine red cheek; flesh yellow, red at the stone; juicy, melting, with vinous flavor. Tree very hardy. Middle of September.
- SALWAY.**—(F) Large, roundish; skin downey, creamy yellow, with a warm, rich, clear crimson red cheek in the sun; flesh deep yellow, stained with red at the stone, juicy, rich, very good. Late ripening, ten days after Smock.
- SMOCK FREE (Beer's Smock).**—(F) Large, orange red or yellow, flesh red at stone, moderately juicy and rich, very productive and a valuable late market variety. First of October.
- SNEED.**—(C) The earliest peach of all, ripening 8 or 10 days before Alexander, and very profitable on this account. Of medium size, creamy white, with a pretty blush and of good flavor. Productive. July.
- SNOW'S ORANGE.**—(F) Medium size, orange yellow, with a deep dark red cheek, flesh yellow and red at the stone, good quality. Tree hardy and very productive. Fore part of September.
- STEVENS RARERIPE.**—(F) A very productive variety, resembling the old Mixon free except being larger and more highly colored. Ripens after the Late Crawford, and continues for about three weeks.
- STUMP THE WORLD.**—(F) Very large creamy white, with a bright red cheek; flesh juicy and good flavor. Very productive. One of the best white peaches. Should be in every collection. Last of September.
- SUSQUEHANNA.**—(F) Fruit large and handsome; skin rich yellow, with a handsome red cheek; flesh yellow, sweet, juicy and rich. Highly esteemed by many. Middle of September.
- TRIUMPH.**—(S C) A wonderful new peach, ripens with the Alexander, blooms late, has large flowers, and is a sure and abundant bearer, fruit large with very small pit, surface yellow, nearly covered with red and dark crimson in the sun, flesh bright yellow.
- WAGER.**—(F) Medium size; oval, skin downey, of a light golden yellow; flesh bright yellow, rather firm, moderately juicy and but fair in quality. Tree hardy and productive. Considered by some valuable for market and canning. Middle of September.
- WEEDS LATE BARNARD.**—(F) A little above medium size; yellow, with dark red cheek; flesh yellow, red at stone; juicy, sweet and rich. The tree is extremely hardy; strong grower; little later than the Barnards Early. A very small pit, fine for canning. Profitable variety. Middle of September.
- WHEATLAND.**—(F) Large, roundish; skin deep golden yellow, shaded with dark red on the sunny side; flesh yellow, red around the stone; rather firm, juicy, sweet and of fine quality. Ripens with Early Crawford.
- WILLIAMS FAVORITE.**—(C) A very profitable market peach of fine size and flavor, handsomely colored, a good shipper, remarkably hardy and productive tree. September.
- WONDERFUL.**—(F) Large to very large. Uniform in size and shape. Color rich golden yellow, largely overspread with vivid carmine, with marbling of crimson. Flesh yellow, rich, high flavored and delicious; very firm. Forepart of October.
- YELLOW ST. JOHN.**—(F) Large, roundish, yellow, free-stone, skin orange yellow, with a deep red cheek; flesh juicy, sweet and highly flavored. One of the earliest of the yellow-fleshed free-stones. Tree very productive. Valuable for market. Middle of August.

We have in stock these additional varieties:—

Amsden June	Emma	Large Early York	Ward's Late Free
Bokara	Horton's River	Richmond	Yellow Rareripec
Captain Ede	Hale's Early	Schumaker	
Early Canada	Indian Blood	Cling	Steadley

CHERRIES

THE CHERRY is one of our most delicious and highly esteemed fruits, and in many parts of the country succeeds admirably.

The class known as the Heart and Bigarreau Cherries (rapid growing trees, with large foliage and sweet fruit) do not, however, succeed uniformly as well in all parts of the country. Especially is this true in some parts of the West and South, owing to the body of the tree cracking, exuding gum, and often dying outright before it attains a bearing size.

The cause of this difficulty arises chiefly, if not altogether, from the fact that in our rich alluvial soils there is a tendency to over-luxuriance in growth. Anything, therefore, that checks this tendency will be conducive to the longevity and productiveness of this tree.

For the cherry, therefore, we would recommend a light, dry, gravelly soil. Avoid manuring, and do not stimulate the growth by cultivation.

The Duke and Morello classes, easily distinguished from the Heart and Bigarreau by their more spreading and slender branches, smaller growth of foliage, and mostly round-shaped acid fruit, are hardier, less liable to crack, and being generally productive, are the best for cultivation where the Heart and Bigarreau do not succeed well.

The Early Richmond, a species of the Morello class, has of late years grown in great favor throughout the West, as it is considered perfectly hardy and always very productive. For cooking, drying and preserving, this variety is very valuable.

HEART AND BIGARREAU CHERRIES

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

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

BLACK TARTARIAN.—Very large, purplish black, half tender, mild flavor and pleasant. One of the most popular varieties in all parts of the country. Last of June and beginning of July.

COE'S TRANSPARENT.—Medium size, pale amber, red and mottled next the sun, tender, sweet and fine. Tree vigorous and erect. End of June.

DOWNER'S LATE RED.—Rather large; light red; very tender; juicy, rich, sweet and delicious; hangs long on the tree and not liable to rot in wet weather. Tree hardy, vigorous; a regular and great bearer. Middle of July.

ELKHORN (Tradescant's Black Heart).—Very large, heart shaped, with uneven surface; skin black, glossy; flesh firm, purplish, good quality. A productive, valuable market sort. Middle of July. One of the best.

ELTON.—Large, pointed; pale yellow, nearly covered with light red; half tender, juicy, rich and delicious; tree vigorous, spreading and irregular. End of June.

GOV. WOOD.—Fruit large, roundish, heart-shaped, light yellow, shaded with bright red, tender, juicy, rich and delicious. Tree vigorous and productive. One of the best sweet cherries, and entitled to a place in every good collection. End of June.

IDA.—Said to be one of the hardiest cherries known. Fruit medium to large, pale yellow, nearly covered with light red, some mottled; flesh tender, juicy and of fine quality. Tree vigorous, upright, abundant and regular bearer. Middle of June.

LAMBERT.—In size the largest known; smooth, glossy skin, color dark purplish-red, with numerous minute, indented russet dots; flesh dark purplish red, with whitish veins, firm meaty texture, small oval stone, semi-cling; flavor sweet, or very mild sub-acid, rich and of highest quality; form roundish, heart shaped, long slender stem. The finest shipping variety. Originated near Portland, Oregon, about 1887. Tree thrifty, hardy and vigorous grower, and forms a beautiful head.

NAPOLÉON BIGARREAU.—A magnificent cherry of the largest size; pale yellow, with bright red cheek in the sun; flesh very firm, juicy and sweet. Beginning of July.

OHIO BEAUTY.—Another of Professor Kirtland's fine seedlings. Large, obtuse heart-shaped; yellowish, nearly covered with red; flesh juicy, brisk and tender. Very good. Middle of June.

ROCKPORT BIGARREAU.—Large, pale, amber in the shade, light red in the sun; half tender. Sweet and good. Middle of June.

SCHMIDT'S BIGARREAU.

SCHMIDT'S BIGARREAU.—This remarkable cherry is of Belgian origin and is one of the largest of the black Bigarreau cherries. Fruit large size, of a deep mahogany color; flesh dark, tender, very juicy, with a fine rich flavor. Grows in clusters. An excellent shipper, being firm and most attractive. Tree very hardy, a strong and vigorous grower; succeeds admirably where many of the other Bigarreau fail. This fine variety is bound to become a leader of the black sweets. A cherry of quality. Stone very small. First of July.

WINDSOR.—New; introduced from Canada. Fruit large, liver colored, resembling the Black Heart, but quite distinct; ripens a few days earlier than that variety; flesh remarkably firm and of fine quality. Tree hardy and very prolific.

YELLOW SPANISH OR BIGARREAU.—Large, pale yellow, with a bright red cheek in the sun; flesh firm, juicy and delicious. End of June.

We have in stock these additional varieties:—

Black Eagle	Cleveland Bigarreau	Early Purple Guigne	Knight's Early Black
Black Heart	Great Bigarreau	Ox Heart	White Caroon.

DUKE AND MORRELLO CHERRIES

BALDWIN.—A seedling of the English Morello. The tree is an upright grower, more inclined to be round than otherwise. Fruit very large, almost perfectly round, very dark yet almost transparent; flavor slightly sub-acid, yet the sweetest and richest of the Morello type. It is remarkable for earliness, vigor, hardiness, quality and productiveness.

BELLE DE CHOISEY.—Medium size; amber, shaded and mottled with red; tender, melting; sweet and rich. End of June.

BRUSSELER BRAUNE.—A vigorous grower; fruit firm, good quality, sprightly acid, as large as English Morello, more nearly round, very similar to that variety in color. The tree has proved to be very productive, ripening its fruit as late as the English Morello.

DYEHOUSE.—Introduced from Kentucky. Fruit of medium size, bright red and of excellent quality. First of June.

EARLY RICHMOND (Early May, or Donna Maria).—Medium size, dark red, flesh tender, juicy, rich, somewhat acid. Tree vigorous, profuse bearer, one of the best of its class, unsurpassed for cooking and preserving, the great cherry of the West. Last of May to first of July.

EMPRESS EUGENIE.—Fruit large, round, produced in profuse clusters; rich red, flesh tender, juicy, sprightly acid and good. Last of June.

KOONTZ' MAMMOTH.—Found by Mr. E. P. Koontz of Northern Indiana. A distinct variety. Fruit large size, nearly double that of the Early Richmond, about the same shape; flesh melting, firm and acid, with small seed. Ripens last of June. Tree a strong grower, and good bearer. Owing to size and quality Mr. Koontz received an extra price for this variety. No one will make a mistake in setting Koontz' Mammoth. For market excels them all.

LATE DUKE.—Large, light red, late and excellent. Tree makes a nice dwarf or pyramid. Valuable. End of July.

LEIB.—A fine Morello cherry, said to have been brought from Germany. Very hardy, thrifty, upright grower, abundant and regular bearer. Fruit larger than Early Richmond, and ripens about a week later.

LOUIS PHILLIP.—Large, roundish, regular, stalk rather short and stout; skin rich dark red; flesh red, tender, mild acid, and very good. Tree vigorous and productive. Middle to last of July.

MAY DUKE.—An old, well known, excellent variety; large, dark red, sub-acid, rich. Middle of June.

MORELLO, ENGLISH.—Large, dark red, nearly black; tender, juicy, sub-acid, rich. Last of July and first of August.

MONTMORENCY.—Large, red, rich, acid. Very hardy and productive. A week or ten days later than Early Richmond. A cherry of the Richmond class, but larger and more solid; strong, upright grower. Very valuable.

OLIVET.—Large size; bright deep red; flesh reddish, with rose-colored juice; tender rich and vinous flavor. New variety of promising excellence. Ripening beginning of June and continuing till July.

OSTHEIM.—(Russian). Fruit large dark red, flesh light red, tender, juicy, rich, pleasant flavor and very good. Tree moderate grower. Middle of July.

REINE HORTENSE.—Fruit very large, roundish, elongated; skin bright red; tender, juicy, nearly sweet, delicious. Last of July.

WRAGG.—Introduced from North Germany and recommended as very hardy. Fruit a dark liver color; juicy and rich. Tree a good vigorous grower and very prolific. July.

PLUMS

The Plum attains its greatest perfection on strong clay soil, where it grows most thriftily and suffer the least from the Curculio and Black Knot. However, there are some classes that do very well on light soil; as in the case of other fruits, they are greatly benefitted by thorough cultivation. With only reasonably good care and culture the trees can be kept in healthy condition and bear fine crops of fruit. Annual spraying with Bordeaux mixture prevents leaf blight and fungus, and is also a protection against Black Knot. Should the latter appear, clean and prompt cutting away and burning all the diseased wood holds it well in check. The Curculio is destroyed by jarring the tree in early morning when the insects are dormant. A sheet is spread under the tree to catch the insects and stung fruit, all of which is destroyed. The work must be done daily, if the insects are numerous, for two weeks or more after the bloom falls from the tree. This sounds arduous, but it does not take much time. The cost of protecting large orchards from the attack of these enemies will not exceed ten cents per tree for the entire season.

We have divided our list of Plums in three general classes—European, Japan and Native.

EUROPEAN VARIETIES

The European Plums are mostly of English and French origin, and are noted for their high quality. They require good cultivation and the most intelligent care of any fruit, but they richly repay the diligent orchardist.

BRADSHAW.—A very large and fine early plum, dark violet red, juicy and good. Tree vigorous, erect and productive. A valuable market variety. One of the best. Middle of August.

BEAUTY OF NAPLES.—A new variety of much promise. Size large; greenish yellow color, flesh firm, juicy and very fine flavored. Tree very hardy and productive. September.

COE'S GOLDEN DROP.—Very large, light yellow; rather firm, rich, sweet and good; adheres to the stone. Tree moderately vigorous and productive. A valuable late variety. Last of September.

EMPIRE.—This new variety has been thoroughly tested for a number of years, and is pronounced by plum growers to be a most valuable market sort. Fruit is very large and oval. Color reddish purple, covered with bloom. Tree ironclad in hardness, strong grower, enormous bearer. Ripens September 5th to 10th.

DUANE'S PURPLE.—Very large and handsome, oval, reddish purple; flesh juicy and sweet; adheres to the stone. Beginning of September.

DIAMOND.—A superb and showy Plum of enormous size; dark purple, with thick bloom; vigorous, hardy, productive. September.

FELLENBERG.—(French or Italian Prune.) A fine late Plum, oval, purple, flesh juicy and delicious, parts from stone, fine for drying. Tree a free grower and very productive. September.

"Gueii". ($\frac{1}{2}$ size.)

GUEII.—(Blue Magnum Bonum.) Large, deep bluish purple, with thick bloom; flesh yellow, coarse, but sweet and good. While still young the trees are loaded with enormous crops, most of which they carry to maturity; vigorous and hardy, growing fast. Profitable for market. Early September.

GERMAN PRUNE.—A valuable Plum of fair quality for desert, but most esteemed for drying and preserving. Large, long-oval, purple with a thick blue bloom; flesh firm, sweet and pleasant, separating from the stone. Moderate to vigorous in growth. September.

GIANT PRUNE.—For a market, table and shipping Prune the Giant stands pre-eminent, owing to its great size, beauty of form and color, its firm, rich, sweet delicious flesh, which separates readily from the stone. It has a yellow flesh of remarkable sweetness, and very firm. The tree is a strong handsome grower, and the fruit is productive in the utmost profusion and of uniform size. September.

GREEN GAGE, BAVAY'S (Reine Claude de Bavay).—Medium size; roundish, oval; skin greenish yellow, marked with red in the sun; flesh yellow, juicy and of excellent flavor. Tree a good grower and productive. Last of September.

HUDSON RIVER PURPLE EGG.—Large, dark purple fruit. Fine grower and productive. September 1 to 15.

HUNGARIAN PRUNE.—(Pond's Seedling.) Large, ovate; skin thick, reddish-violet, with numerous brown dots; juicy and sweet, tree a strong grower and good bearer; its large size, showy appearance, render it a profitable variety for shipment for home and distant markets.

IMPERIAL GAGE.—Above medium size, oval, golden green; flesh juicy, rich, delicious, free from stone. Tree of good growth and habit; productive. One of the very best Plums and very popular in some sections of the country. August.

LINCOLN.—Large, reddish-purple, flesh light yellow, juicy, sweet and luscious, parts freely from stone, prolific. August.

LOMBARD.—Medium size, oval, violet red; flesh yellow, juicy and pleasant. A great bearer, and peculiarly adapted to light soils. Tree vigorous and hardy; succeeds when most other varieties fail. The most popular and profitable plum under general cultivation. Last of August.

MOORE'S ARCTIC.—A new hardy variety, which originated in Maine, of medium size or below, skin dark purplish black, with a thin blue bloom; flesh greenish yellow, a little coarse, juicy, sweet. Tree vigorous, an early and prolific bearer. Last of September.

MONARCH.—Fruit dark purple, covered with a thin bloom; large size, specimens measuring six inches in circumference; flesh pale greenish yellow, parting freely from the stone; juicy, with a pleasant flavor. It is a leading market sort. The tree is a vigorous grower. September.

RED EGG (Red Magnum Bonum).—Fruit large, oval; skin deep red sprinkled with gray dots; flesh greenish, rather coarse, with sub-acid flavor; good for cooking. Tree vigorous and very productive. First of September.

SHIPPER'S PRIDE.—Large size, dark purple, handsome, showy; flesh firm and excellent. Promises to be a superior market sort. Tree very hardy and productive. Fore part of September.

SHROPSHIRE DAMSON.—Fruit small, oval; purple, with blue bloom; melting and juicy, rather tart. Varies somewhat in character. September.

TENNANT PRUNE.—Originated on Pacific coast. Large, dark purple, blue bloom. Highest quality; bears transportation well and is said to be the best drying prune cultivated. Hardy, vigorous and productive.

YELLOW GAGE (Prince's Yellow Gage).—Fruit rather large, oval, skin golden yellow; flesh deep yellow, rich, sugary and melting. Middle of August.

Cellars of I. E. Ilgenfritz' Sons Co.

YELLOW EGG (Yellow Magnum Bonum).—Fruit of the very largest size, oval, skin yellow, with numerous white dots; rather coarse, sub-acid; fine for cooking. Last of August.

JAPAN VARIETIES

The Japan varieties are no longer experimental, as their success has given new life to the Plum culture. Large orchards are being planted, and are bringing good returns to their owners. This class of Plums succeed anywhere that the Peach will, on almost all sorts of soil, seldom affected by Black Knot, extremely hardy, bearing full crops in two or three years after planting. When properly thinned, the fruit is marvelous in size and beauty, flesh firm enough to resist the Curculio, ships well and keeps for several weeks. We have varieties in this class from the earliest to latest. They cover a season of about three months. We offer a select list of the best sorts, and recommend the Japanese varieties above all other classes.

ABUNDANCE (Botan).—Large to very large, oblong, amber, nearly covered with bright red and overspread with a thick bloom; flesh orange yellow, juicy, melting, and of delicious sweetness; stone small and flesh parts readily from it. Tree strong grower and an early and profuse bearer. Ripens in advance of other Plums. Valuable for canning and market. This variety has attracted much attention throughout the country, and is very highly recommended.

AMERICA.—Larger than the average Japan Plum and much larger than our popular native sorts, golden yellow, with pink blush and white bloom; the flesh is moderately firm and of good flavor, keeping well. Tree bears young.

BARTLETT.—Of medium size; dark red; flesh yellow, juicy, suggesting the Bartlett pear in flavor and fragrance. The tree is of strong, upright growth, spreading but little and usually fruiting the second season. Ripens before Burbank.

BURBANK.—The Burbank Plum stands at the head of the celebrated Japanese varieties. It is proving remarkably successful the country over. No other plum ever became so popular in so short a time. This is because it is practically Curculio proof, and is perfectly hardy (said to stand 30 degrees below zero). Ripens in August. It seems to succeed on any soil, sand, clay or loam. It can be picked green, and will ripen and color up perfectly and will not lose its flavor. Will keep fully two weeks in perfect condition after ripening. Abundant yearly bearer, fruit large, roundish, dark red or purplish, with thin lilac bloom, flesh amber yellow, melting, juicy, with rich sugary flavor; stone small and free. Bears second year after planting.

CLIMAX.—One of Burbank's latest and best achievements. The Wickson is called The Queen, and the Climax the King of Plums. Fruit larger than the Wickson, heart shape and more highly colored. Fragrant and very delicious; tree early and prolific bearer, and a vigorous grower. Ripens before the Wickson and nearly with Red June. Large and handsome. Specimens measuring two and three-quarters inches in diameter. We especially recommend this variety.

HALE.—Very handsome, with a bright orange color, thinly overlaid with red; flesh yellow, soft and juicy, yet a good keeper; very pleasant Peach flavor; valuable as a late variety; ripening when other varieties are gone.

MAYNARD.—Sturdy, strong and very rapid grower, with heavy, luxuriant foliage. It fruits heavily every year, not over-hanging, but yielding a full, satisfactory crop, bearing its burden of fruit on the inside of the tree. Fruit is very large, nearly round, color deep, dull red, thin whitish bloom. Flesh firm, melting and juicy, rich and sweet, extra fine quality. Its shipping qualities are unsurpassed. Ripe in July, following Climax.

BURBANK

OCTOBER PURPLE.—Large round fruit, dark, reddish purple, yellow flesh of most superb quality. Its large even size, beautiful color, and superb quality, make it very desirable for the garden or market. Ripens middle of September.

PRUNIS SIMONI.—(Apricot Plum).—A native of China; said to be valuable, but not very hardy; fruit brick-red in color; flesh yellow, of a peculiar flavor. Ripens in July.

PRUNIS PISSARDI.—(See Ornamental Trees.)

RED JUNE.—Fruit medium to large, cordate and very prominently elongated at the apex; suture deep, generally lopsided; deep vermilion-red all over, with a handsome bloom; very showy; flesh light lemon-yellow or whitish, firm and moderately juicy, not stringy, slightly sub-acid to sweetish; of good pleasant quality; cling to half cling; pit small. Tree vigorous and productive. Ripens before Abundance. August.

SULTAN.—A large, round and very handsome Plum that attracts attention anywhere by its size and beauty. Skin and flesh are a deep wine-red, the latter high-flavored like the Satsuma, and just acid enough to be excellent for cooking and preserving. Keeps long and ships well. Tree a rapid and compact grower and yields heavy crops. August.

SATSUMA.—Large; globular with sharp point; dark purplish red with blue bloom; flesh dark red, firm, juicy, and of good quality; pit small. Tree strong grower and hardy. August.

WICKSON.—Cross-breed plum by Luther Burbank, which he sent out in the spring of 1895. Mr. Burbank says: "Among the many Japan Plums which I have fruited, this one so far stands pre-eminent in its rare combination of good qualities. The tree grows in vase form, sturdy and upright, yet as gracefully branching as could be desired, and is productive to a fault. The fruit is evenly distributed all over the tree, and from the time it is half grown until a few days before ripening, is of a pearly white color; but all at once soft pink shadings creep over it, and in a few days it has changed to a glowing carmine, with heavy white bloom; the stone is small and the flesh is of fine texture, firm, sugary and delicious, and will keep two weeks or more after ripening, or can be picked when hard and white, and will color and ripen almost as well as if left on the tree. September.

YELLOW JAPAN (Chabot).—Fruit large, nearly round; skin yellow, washed with red on sunny side; flesh yellow, juicy and of good quality; tree vigorous, resembling Kelsey in growth, but with larger leaves. It is named Yellow Japan, although a red Plum. Early September.

IMPROVED NATIVE VARIETIES

NATIVE PLUMS are hardy, produce large crops mostly of early and medium sized highly colored fruit. They seem to thrive in the most unfavorable locations of soil and climate. When planting this type, several varieties should be planted in the same orchard, so the blossoms will fertilize properly.

MINER.—Color dull red; skin thick; large for a native. Vigorous and moderately productive. Best for culinary purposes.

FOREST GARDEN.—Fruit large, orange covered with purple bloom; skin thin, flesh orange color, good; productive and vigorous. September. Clingstone.

HAWKEYE.—Large, color light mottled red, superior quality, firm; carries well to market. Tree hardy, thrifty; annual bearer. September.

ROBINSON.—One of the most profitable market varieties. Very vigorous and productive. Skin yellow, nearly covered with light red; showy; ripens early.

WEAVER.—A wild plum of fine size, good flavor, very hardy and productive, and of much value in a severe climate, where choice, cultivated plums do not succeed.

WILD GOOSE.—An improved variety of the Wild or Chickasaw Plum. Fruit of medium size, bright red, very handsome, productive, and valued for cooking and market, as it ripens early; is valuable in localities where the choice plums do not thrive.

WOLF.—Vigorous grower, hardy, very popular. Perfect freestone, immensely productive. August.

APRICOTS

THE APRICOT is one of the most delicious of our dessert fruits. It ripens between Cherries and Plums. The remarks on the Curculio, under the head of Plums are applicable to the Apricot. The tree may be trained on walls, but a northern or western exposure is better. It is recommended to shorten in the limbs of the Apricot, as was remarked also of the Peach.

RUSSIAN APRICOT ALEXANDER.

ALEXANDER. (Russian).—One of the best of this new class. Large, oblong; mottled with red; flesh yellowish, sweet and of delicious flavor. The tree is very hardy and an immense bearer. July 1.

ALEXIS. (Russian).—Another new and very handsome variety. Medium to large; yellow, with a red cheek; flesh slightly acid, but rich and luscious. Very hardy and an abundant bearer. July 10.

ACME, or Chinese Apricot.—A new Apricot from northern China, given to Prof. J. L. Budd by a returned missionary. An immense grower, hardy, productive; fruit very large, a sweet, delicious freestone; yellow with red cheek. It is a fine grower, with large, handsome, thick foliage, and an early bearer of large and good fruit. In all respects it is the best hardy Apricot known.

CATHARINE.—Medium size, yellow, flavor mild, sub-acid; good. Tree vigorous, hardy and productive. Middle of July.

EARLY GOLDEN. (Dubois Early Golden).—Fruit small, roundish oval, pale orange color, flesh yellow, moderately rich and sweet. Tree vigorous with long slender branches. Middle of July.

EARLY LARGE MONTGAMET.—An especially fine Apricot, with large round fruits of deep yellow, flushed with red. The flesh is firm, juicy and good. The tree is very hardy and produces heavily. Largely planted in New York and other states. Early July.

HARRIS.—A remarkably fine variety, succeeding well wherever tested. Large, roundish, with deep suture; rich golden yellow, with faint blush; excellent quality and freestone. An early and abundant bearer. First of July.

J. L. BUDD. (Russian).—Probably the best of its class, and a decided acquisition. Large; white, with red cheek; flesh sweet and very fine, with a sweet, almond-like kernel. First of August.

MOORPARK.—One of the largest and finest Apricots, yellow with a red cheek, flesh orange, sweet, juicy and rich, parts from the stone. Very productive.

NICHOLAS.—Large size, white, flesh sweet and melting. Tree hardy and prolific. A handsome and valuable variety. Fore part of July.

PEACH.—An old French variety, and one of the finest in the list. Very large, roundish, somewhat flattened; yellow to deep orange; flesh yellow, rich, juicy, and of high flavor. Last of July to first of August.

ROYAL.—Large, yellow with red cheek; rich and juicy. Late July.

NECTARINES

THE NECTARINE requires the same culture and management as the Peach, from which it differs only in having a smooth skin, like the Plum. It is extremely liable to attacks from the Curculio, and needs the same remedy as recommended for the Plum.

BOSTON.—Fruit large and handsome.

DOWNTON.—Large, pale green, with violet-red cheek; flesh rich and delightful, free from stone. August.

ELRUGE.—Medium size, greenish yellow, with a dark red cheek, flesh greenish white, juicy, and high flavored, excellent. Beginning of September.

RED ROMAN.—Greenish yellow and red, rich and good. September.

HUNT'S TAWNY.—Medium size, pale orange, with a mottled red cheek, flesh juicy, melting, rich and good.

QUINCES

THE QUINCE is a most estimable fruit for preserves, and especially fine for jellies. It commands a high price in the market. It should be planted in a rich, mellow and moist soil. Plant ten feet apart.

CHAMPION QUINCE.

APPLE OR ORANGE.—Large, roundish, bright golden yellow. Very productive and most desirable variety. Ripens in October.

BOURGEAT.—A new variety, of the best quality, tender and good. Ripening shortly after Orange, and keeping till past mid-winter. Largest size, rich golden color, smooth, no creases. Rich velvety skin, with delicious Quince odor. Foliage healthy. The strongest grower of the Quinces, making a tree as large and thrifty as Plums and Pears, and yielding an immense crop.

CHAMPION.—Large to very large, oblong, skin russeted about the stem, and of a bright yellow color, flesh tender and of good quality. Tree an early bearer and very prolific. Ripens about two weeks after the Orange Quince.

MEECH'S PROLIFIC.—A new variety, said to be larger than the Orange, and similar to Champion in shape, of great beauty and delightful fragrance. Tree very vigorous and productive. Ripens early.

REA'S SEEDLING.—Very large, rich yellow. A seedling of the Orange Quince. Strong grower and productive.

GRAPES

THE culture of the grape within the last few years has attracted a great deal of attention throughout the United States. Many vineyards of large extent have been and are still being planted in various parts of the country, and are proving a great pecuniary success.

While some make this branch of Horticulture a specialty from pecuniary motives, every one owning a garden spot should devote a portion of it to a few of the best varieties.

BLACK VARIETIES

CAMPBELL'S EARLY.—Strong grower, with large, healthy foliage; productive; its keeping and shipping qualities are equalled by no other early grape. Ripens with Moore's Early, but will keep in sound perfect condition long after that variety is gone. Bunch and berry large, glossy black, with blue bloom, sweet and juicy, seeds few and small, part readily from the pulp. Stands at the head of early black grapes for quality.

CHAMPION. (Talman).—Bunches medium to large, compact, berries large, black and adhere to the stem, skin thick and firm, flesh sweet, juicy, somewhat pulpy. Vigorous, hardy and very productive.

CONCORD.—One of the best, well tried, native grapes. It is of very large size, both of bunch and berry, quality good, color black, covered with a thick bluish bloom, flesh moderately juicy, rather buttery, very sweet. It is perfectly hardy, vigorous in its habits of growth, very healthy and very productive. Ripens two weeks earlier than the Isabella. We think there is no grape which has given so universal satisfaction as this, and it is constantly increasing in public favor as the variety grows older. No family should be without it.

EARLY OHIO.—A new black grape. Its points of merit are extreme earliness, hardiness, productiveness and being of better quality than most early sorts. Berries large, firm, of spicy, pleasant flavor, hangs to the stem with a persistency that makes its shipping qualities of the highest order. Ripens about three weeks before the Concord. Promises to be valuable as an early market sort, and also desirable for garden culture.

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

IVES' SEEDLING.—Large size, dark purple, cluster large, fair quality, and promises to be a desirable grape, ripening two weeks earlier than the Catawba, and entirely free from mildew.

KING.—(New.) The King is more vigorous and prolific than the Concord, the time of ripening six days earlier and length of season the same, clusters are one-fourth larger grapes are more persistent in pedicels, pulp is more tender, flavor nearly the same, but more sprightly, seeds fewer in number, wood harder and of shorter joint and the pedicels are larger.

King.

MOORE'S EARLY.—A \$60 prize grape of the Massachusetts Horticultural Society. Promises to be a valuable acquisition. Berry very large, black, bunch medium, quality very good. Ten days earlier than Concord.

MERRIMAC. (Rogers' No. 19).—Black, large bunch, berries very large and round; skin thin, tender, flesh sweet, tender, melting, very good.

WILDER. (Rogers' No. 4).—Bunch large, compact, and berry large, black, tender, juicy; sweet and slightly aromatic. Ripens with Concord.

WORDEN.—Promises to be very popular. Bunch large, shouldered and handsome, berry large, black, skin thin, flesh sweet much like the Concord, and ripens a few days earlier. Vine hardy, vigorous and productive. (See Illustration.)

WORDEN.

RED OR AMBER VARIETIES

- AGAWAM.** (Rogers' No. 15).—A dark red grape of the Hamburg cross. Bunches large, compact, frequently shouldered; berries large, with a thick skin, pulp soft, sweet, sprightly; vine very vigorous. Ripens early.
- BRIGHTON.**—A valuable variety possessing much of the excellent flavor of the famous Hamburgs, and also the hardiness of our best native sorts. The berry is large, resembling the Catawba, and ripens with the earlier varieties.
- BRILLIANT.**—A remarkably handsome sort, about the size of Concord. Skin thin, translucent, brilliant in color; excellent quality, healthy foliage, productive. Strong grower.
- CATAWBA.**—Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose, berries large, of coppery red color, becoming purplish when well ripened; two weeks later than the Isabella, and a month later than the Clinton. Requires the most favorable soils and situations, good culture and warm seasons to mature.
- DELAWARE.**—This fruit has fully maintained its high reputation as one of the finest of our native grapes. The vine is comparatively slender, but grows freely. It proves quite hardy in this climate, and ripens two or three weeks before the Isabella. Bunch small and compact, berries small, clear, red, beautiful, sweet, sugary and vinous, with a musky aroma equal to the finest foreign varieties. It justly claims a place in every garden.
- LINDLEY.** (Rogers' No. 9).—A red grape of fine quality, one of the most desirable of Rogers' Hybrids. Berries large; bunch medium, not usually shouldered; flesh tender, sweet, with rich, aromatic flavor; a good keeper, with firm, tough skin. Vine hardy, vigorous, healthy. Ripens with Concord.
- MOYER.**—A new grape, originated in Canada. In habit of growth, hardiness, quality and size of cluster it resembles the Delaware very much, but ripens earlier, has larger berries, and has been free from rot and mildew. Flavor sweet, delicious and free from foxiness. Skin tough but thin, pulp tender and juicy. Its shipping qualities are excellent.
- SALEM.** (Rogers' No. 22).—Described by Mr. Rogers as the best of his seedlings. Bunch and berry large, of a light chestnut color, flavor sweet and sprightly. As early as Hartford Prolific or Delaware.
- VERGENNES.**—A grape of superior keeping qualities, originated in Vermont. Bunch large, berry large; light amber in color, covered with a thick bloom. Flesh pulpy, sweet and pleasant in flavor. Ripens with Concord.
- WOODRUFF RED.**—Bunches and berries very large; vine vigorous, healthy and productive; fruit of excellent quality and keeps well. Ripens a little before Concord.

WHITE VARIETIES

- COLERAIN.**—A new white grape that has proven valuable in various parts of the country where tested. Color a light green, with a delicate whitish bloom; berry medium size; skin thin and tender; flesh juicy and very sweet; usually contains but one seed. Vine strong grower, hardy and very productive. Ripens a little before Moore's Early, and berries adhere well to the vine until late.
- EMPIRE STATE.**—One of Rickett's seedlings. Bunch large, compact, skin white, tinged with yellow, covered with a bloom; flesh tender, juicy, rich and sweet. Ripens with Hartford.
- ELVIRA.**—Very vigorous, hardy, productive; skin white, bunches and berries medium size. Ripens about with Catawba. Valuable for wine.

GREEN MOUNTAIN. (Winchell).—Greenish white; skin very thin; pulp exceedingly tender and sweet. Vine strong grower, hardy and productive. Originated in the mountains of Vermont. Quality extra, and promises to take front rank for garden and vineyard culture. Ripens very early, about two to three weeks before Concord.

LADY.—Introduced by G. W. Campbell. Berry and bunch large, skin white; juicy, sweet and excellent. A seedling of the Concord, and is hardy and productive.

MARTHA.—A light colored seedling of the Concord; bunches rather loose shouldered; juicy, sweet, delicate flavor.

MOORE'S DIAMOND.—Originated by Jacob Moore, the producer of the Brighton, and seems destined to become very popular; equal in size to Concord; color greenish white with a rich yellow tinge when fully ripe; flesh tender, juicy, nearly transparent and very good; vine vigorous, hardy and productive. Ripens two weeks before Concord.

NIAGARA.—This white grape has attracted the most attention of any new fruit recently introduced. The vine is a strong grower, healthy and prolific, bunches large, uniform and compact; berry large; skin greenish white, slightly ambered in the sun; quality good. Ripens with Concord.

POCKLINGTON.—A snowy, white variety of good quality; vine very hardy, healthy and productive. It is a seedling of Concord. Will no doubt prove a valuable and popular grape. Ripens soon after the Concord.

CURRANTS

THE CURRANT, although a small fruit, is so very easily raised, is so very hardy and abundantly productive under almost any care, and can be easily applied to so many uses, that no family should be without a few varieties, ripening in succession. The old wood should be cut out and the plants kept well manured. An easy method of destroying the currant worm is by the use of powdered white hellebore. One or two applications are generally sufficient.

BLACK CHAMPION.—Recently introduced from England, and wherever tested pronounced the best black sort grown. Bunch and berry very large, quality excellent. Strong, vigorous grower and very productive.

BLACK NAPLES.—Very large, black, bunches of medium length. Much valued for jellies; strong grower, coarse leaves.

CHERRY.—Fruit of the largest size, deep red, rather acid; short bunches; growth strong, stout and erect, short-jointed shoots.

CRANDALL'S CURRANT.—A new variety whose yellow flowers make it very useful as an ornamental shrub in the spring. Fruit is large dark colored and has some of the characteristics of a gooseberry.

FAY'S PROLIFIC.—The leading market variety. Extra large stems and berries, uniform in size, easily picked, exceedingly productive. No variety ever made as quick a jump into popular favor, the demand most seasons being in excess of the supply.

LEE'S BLACK PROLIFIC.—Recently introduced. Said to be larger and more productive than the Black Naples.

NORTH STAR.—Originated in Minnesota, and perfectly adapted to the severe climate of the Northwest. Bush strong, vigorous and very productive; cluster very long; quality fine.

POMONA.—Not as large as Cherry or Fay's Prolific, but of good size. It is a beautiful clear bright, almost transparent red, has but few small seeds, is easily picked, and hangs a long time after being ripe. A hardy, vigorous grower, exceedingly productive, and of the best quality. We do not hesitate to recommend it confidently.

PERFECTION CURRANT.—The latest introduction, created by crossing Fay's Prolific with White Grape, and combines the best qualities of both parents. In color it is a beautiful bright red and of a size larger than the Fay; the clusters average longer and the size of the berries is maintained to the end of the bunch. It is one of the most productive Currants we have ever known, and in quality it is superior to anything in the market today, being of a rich, mild, subacid flavor and having plenty of pulp with few seeds. It was awarded the Barry Medal of the Western New York Hor. Soc. in 1901, and the Pan-American Medal the same year—the highest award given any new fruit.

RED DUTCH.—An old, well-known sort, a great bearer and of excellent quality, deserving general cultivation.

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

WILDER.—A remarkable new variety for which is predicted a great future, both for table and market; strong grower; enormously productive; bunch and berry very large, bright red and of highest sub-acid quality.

WHITE DUTCH.—Similar in habit to the Red Dutch, ripening earlier, and sweeter.

WHITE GRAPE.—A very large variety. Plant quite distinct from the other white varieties. A great bearer. Should be in every collection.

GOOSEBERRIES

THIS fruit is of importance, being very highly valued in its green state for pies, tarts, puddings, etc., coming in use earlier than any other. When ripe it is very agreeable as a dessert fruit, maturing at an acceptable time, following the season of cherries. The gooseberry requires a deep soil, well manured, and if inclined to be dry should be mulched to retain the moisture. The bushes should be thoroughly trimmed and pruned to obtain large, fine fruit.

DOWNING'S SEEDLING.—Origin, Newburg, N. Y. Fruit larger than Houghton, roundish, light green, with distinct veins, skin smooth, flesh rather soft, juicy and very good. Vigorous and productive.

HOUGHTON'S SEEDLING.—A vigorous American sort, very productive, free from mildew; fruit medium, roundish, smooth, of a pale red color, tender, sweet and of a delicate flavor.

JOSSELYN. (Red Jacket).—A new red berry of the largest size, smooth, quality of the best, very prolific and hardy. Said to be absolutely free from mildew in leaf and fruit. Promises to be the variety we have been long waiting for; equal to the best English sorts, and capable of producing large crops under ordinary cultivation, wherever Gooseberries can be grown.

PEARL.—An exceedingly prolific variety that has been well tested and ranks No. 1 in healthfulness, vigor and growth, freedom from mildew and productiveness. Same color as Downing; seems to possess all the good points of that variety.

SMITH'S.—Raised by Dr. Smith, of Vermont. Fruit large, one of the largest American varieties of value; oval form, light green when ripe, sweet and excellent. Plant vigorous, extremely productive, hardy and healthy.

FOREIGN VARIETIES

THERE are very few of these that succeed here on account of their liability to mildew, and otherwise being more or less uncertain, but the following varieties are believed to be exempt from these drawbacks to a degree entitling them to a place in our American gardens:

INDUSTRY.

INDUSTRY.—A new promising English variety, very large, handsome, dark red, with a rich, pleasant flavor, free from mildew, robust grower and extremely prolific. No doubt will prove a valuable acquisition.

KEEPSAKE.—A new variety from England, which promises to become as popular as the Industry. Fruit very large, straw color, of excellent flavor and a fine shipper. The bloom is protected by early foliage, making it a sure cropper. One of the very earliest varieties under cultivation.

RASPBERRIES

THIS refreshing and excellent fruit should have a place in every garden. In order to keep a bed in good condition, the old and dead wood should be cut out as soon as the crop is gathered. The ground should be well spaded and a top dressing of manure put on.

RED VARIETIES

COLUMBIAN.—This variety ranks very near the top for amazing productiveness, vigor and the quality of its very large, dark red fruit. It is an improvement on Shaffer in color and firmness of berry, while retaining its delicious flavor. The bush is very hardy and grows to such great size that it requires extra room. Unexcelled for market and all culinary uses.

CUTHBERT. (Queen of the Market).—Considered by many the most valuable red berry for market, also one of the best for home use, fruit medium to large, rich crimson, very handsome, quite firm, juicy, sweet, very good, hardy and productive. Should be in every garden. We have grown many acres of this variety, and always found them profitable.

HERBERT.—Very hardy, cane strong and vigorous; fruit, bright red, somewhat oblong, the largest of all Red Raspberries, larger than Cuthbert or Loudon; flavor very sweet and juicy, very best for table use. Enormously productive.

HAYMAKER.—We recommend this new Raspberry as the most productive in cultivation. It is an Ohio seedling of the tall, strong growing Columbian type, with berries similar in color, size and texture, but a little more acid, and produced in even heavier crops. The one great Raspberry for market growers.

HAYMAKER.

KING.—Several of our best fruit-growers consider this the best of the early red Raspberries. It has large and attractive bright red fruits of good flavor, ripening with the earliest and firm enough to ship nicely. In hardiness, growth and productiveness all that could be desired.

LOUDON.—This variety is a marvel of productiveness and hardy to the tips of its shoots. Its large and beautiful rich dark crimson fruits are of good flavor, ship better and hang longer after ripening than those of any other variety. The best red midseason berry.

MARLBORO.—Described as a strong grower and very hardy; fruit remarkably large, bright crimson, retaining its brilliancy of color long after ripe, firm, of fine quality and very early, and valuable for market.

MILLER.—This new red berry is as large as the Cuthbert, holding its size to the end of the season; round in shape, color bright red, does not fade, but will hold its color after shipment longer than any other variety; core very small; does not crumble, making it the firmest and best shipping berry in existence; has not the flat taste of some varieties, but a rich, fruity flavor, entirely its own. The time of ripening is with the very earliest and continues a long time.

YELLOW VARIETIES

CAROLINE.—Medium size, pale salmon color, handsome, melting and excellent unless over ripe; cane hardy and good bearer.

GOLDEN QUEEN.—New yellow variety of recent introduction, supposed to be a seedling of the Cuthbert, which it resembles in all respects except in color, being of a rich, bright, creamy yellow. Promises to be a valuable acquisition.

BLACK CAP VARIETIES

BLACK DIAMOND.—A healthy, vigorous grower, makes strong, vigorous canes, with numerous side branches all thickly set with fruit spurs. Berries about the size of Gregg, ripens early, the sweetest berry known, fine flavor, pulpy and with few seeds, yet firm enough to be an A No. 1 shipper. For drying and evaporation it excels all others, the dried fruit is jet black, retains the richness, fine flavor and sweetness of the fresh fruit.

CONRATH.—Berry large. Ripens six days earlier than the Gregg. Very hardy, productive; sweet and delicious. One of the very best for market.

CUMBERLAND.—A mammoth mid-season blackcap that loads its stout, stocky canes with handsome fruit. Its great glossy berries outsell all others of their season, are firm enough to ship well, and of good quality. In hardiness and productiveness among the best. Ripens with the Gregg.

GREGG.—This is one of the very largest of the black caps. It is a hardy, strong grower and very productive, fruit firm, juicy, sweet, rich and very good. Valuable market variety.

GAULT PERPETUAL. (Everbearing).—One of the greatest novelties ever introduced in the line of small fruits. It ripens a large crop at the time of Gregg, producing more fruit, and continues bearing on young wood until killed by frost. This does not mean a few berries after the first crop is over, but large clusters, containing sometimes as high as 80 to 100 to a single cane. It does not exhaust the vitality of the wood, for the same cane will bear the next season. Berries large, black, firm, of fine flavor. This variety has been tested for several years, and found to be very valuable.

KANSAS.—Originated at Lawrence, Kansas, where it has proven itself the best of all Black Caps. Berries larger than Gregg, jet black, almost free from bloom, juicy and of excellent flavor, firm and carries well. Canes very vigorous, hardy and exceedingly productive. Ripens a little ahead of Gregg.

MUNGER.—An exceptionally fine new Black Cap. It is larger, hardier, more productive, better in quality and ripens 5 to 8 days later than Gregg. It was grown in western Ohio from seed of the Shaffer.

OHIO.—Enormously productive, strong grower and hardy; fruit not quite as large as the Gregg, but of finer flavor. Valuable for market and drying.

BLACKBERRIES

THERE should be in every collection a few plants of this delicious and healthy fruit, as it requires but little care and expense, and is an excellent table fruit. The plants should be set from four to six feet apart in a moderately rich soil. Mulching, staking, and an occasional pinching-in during the growing season will be accompanied with good effect in productiveness and size of fruit.

ANCIENT BRITON.—Well adapted by its great hardiness for planting in all sections subject to severe winters. The strong, healthy canes are heavily laden with sweet, melting berries of medium size. Markets well.

AGAWAM.—Medium, jet black, sweet, melting to the core, hardy and prolific. Early.

THE BLOWERS BLACKBERRY.—Originated by Mr. Blower of Chautauqua County, N. Y. Said to be exceedingly sweet, with no perceptible core when fully developed; a remarkable grower, producing as high as 2750 quarts from one-third of an acre.

ELDORADO.—The vines are very hardy and vigorous, 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, have no hard core and keep for eight or ten days after picking with quality unimpaired. Perhaps the most valuable sort in cultivation.

ERIE.—A chance seedling but recently brought to the notice of the public, and considered a valuable acquisition, being perfectly hardy and very productive, fruit of first quality, large size, and ripens early.

MERSEREAU.—Originated in Northwestern New York; very hardy; berries brilliant, sparkling black throughout, remaining black after gathered; exceptionally sweet, rich, melting and luscious. Good shipper and keeper. Early to mid-summer.

MINNEWASKA.—Has been on trial in different parts of the country and is receiving favorable reports from nearly all sections. Fruit is of largest size, glossy black, tender, juicy, sweet, with a fine aromatic flavor. Remarkably productive and hardy, for both market and garden.

RATHBUN.—Of very large size, resembling Wilson, and fully its equal, adding ironclad hardiness to its good qualities. The berries are sweet, luscious, have no core, and are firm enough to ship.

SNYDER.—Medium size, no hard, sour core, half as many thorns as Lawton or Kittatinny, and they are nearly straight and short; extremely hardy, enormously productive. Ripens in good season.

STONE'S HARDY.—Medium, good quality, very hardy and productive. Ripens after Snyder.

TAYLOR.—One of the largest blackberries known, best quality, melting and without core, very productive and as hardy as the Snyder.

THE WARD BLACKBERRY.—Originated in New Jersey. Jet black color and firm for shipment, tender and melting, without core, and of highest quality. Canes strong and stocky, carrying an enormous crop of fruit without staking. Very productive.

Mersereau.

WILSON, JR.—A seedling of Wilson's Early, and claimed to be an improvement on the parent by being earlier, larger, healthier, more productive and of better quality.

WILSON'S EARLY.—Large, very early, beautiful dark color, of sweet excellent flavor, very productive. Ripens the whole crop nearly together.

DEWBERRIES OR TRAILING BLACKBERRIES

LUCRETIA.—The bush is of low trailing habit, hardy, healthy and a great bearer, fruit large, black and glossy. Without hard core and very delicious. Ripens with early blackberries.

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

Interior Views of I. E. Ilgenfritz' Sons Co. Storage Cellars.

STRAWBERRIES

NO GARDEN should be destitute of this delicious fruit. They are easily grown and productive. One rod square, well treated, should yield at least two bushels. The ground should be deeply spaded and well manured. They can be planted at almost any season of the year. Of course, if planted in warm, dry weather, they must be watered and shaded. The runners should be kept cut off, which can be easily done with a sharp spade. In the Winter leaves, coarse manure or litter should be placed around and over them.

PERFECT BLOSSOM.
(Per.)

The cuts here given represent the bi-sexual or perfect, and pistillate or imperfect flowers. The blossoms of those marked with a (Imp.) are termed pistillate and require perfect flowering sorts to be planted at intervals not to exceed a rod away, so as to properly fertilize them, or they will produce but little fruit and it will be imperfect at that; but when properly fertilized they are more productive than the perfect flowering varieties.

IMPERFECT
BLOSSOM.
(Imp.)

AROMA.—(Per.) Plant shows no weakness of any kind. Fruit very large, roundish, conical, rarely misshapen, glossy red, of excellent quality, and produces in abundance.

BRANDYWINE.—(Per.) Late. It is a splendid grower, fair plant maker, very productive. The fruit is very large, heart-shaped, firm, of good flavor and good color. It begins to ripen in midseason, but continues till nearly all other varieties are gone.

BISMARK.—(Per.) It is not as large as the Bubach, described below, but resembles this variety in size and color, shape and flavor. Fruit is bright scarlet, with no green tips; very firm for such a large berry.

BUBACH.—(Imp.) This berry has been thoroughly described year after year, but for the benefit of those who have not grown them we would say the fruit is of the largest size, oftentimes coxcombed, and it not at all unusual to find berries of this variety weighing an ounce to an ounce and a quarter. It will do fairly well under poor cultivation, but responds freely to good food. The plant is perfect, having dark foliage, very stout crown; a prolific grower, and only set enough plants to give good-sized berries.

BEDAR WOOD.—(Per.) Foliage is a dark green color, rather tall and has long rather narrow leaves. It is noted for its long roots, which extend deep in the soil and enables it to endure dry weather better than most varieties. The plants of this variety are not large, but they bear a large crop, and this is what most growers are looking for.

CLYDE.—(Per.) The Clyde is as large as Bubach and nearly or quite a week earlier. With a dry season and plenty of sun it is an excellent variety, but the foliage is a little weak during fruit time, and too much hot sun or a wet season is not good for them. It is so extremely productive that the whole vigor of the plant seems to go to fruit, and does not provide foliage enough during fruit season to protect the berries.

CRESCENT.—(Imp.) The poor lazy man's variety; will produce more fruit under careless cultivation than any other variety. Very productive, bright red, medium size, known everywhere and needs no description.

GANDY.—(Per.) This is one of the most valuable late Strawberries. Berries large, uniform, bright scarlet, showy and handsome; firm and of good quality. Plants vigorous and productive under good culture.

GLEN MARY.—(Per.) Large to very large, sometimes flattened; sweet, rich, delightful. Plants vigorous, extra fruitful of fine berries that hold their size to the end of the season.

HAVERLAND.—(Imp.) The berry is from medium to large size, bright red, long and pointed, fair in quality, and as a shipper it should be well pollenized with perfect bloomers, and in this way you can improve the firmness. It is one of the most productive varieties grown. Medium.

JESSIE.—(Per.) This berry does not seem to be adapted to all kinds of soil. It is a splendid fertilizer, good quality and good color; does extra well in some sections. Very early and is one of the largest berries on the market.

SAMPLE,

MICHAEL'S EARLY.—(Per.) One among the very earliest; medium size. Berries rather sour, scarlet in color. A healthy and abundant plant maker. Must be thinned to get best results.

NICK OHMER.—(Per.) When perfectly ripe it is of a beautiful carmine color. An excellent shipper and will surely suit the fancy trade. Berries run in size from large to the very largest. The flavor is delicious. Ripens about May 20 and continues for about three weeks.

SAMPLE.—(Imp.) This new berry is of large size and fine quality, quite firm and continues a long time in fruit. The berries are large to the last. Yield as many berries as the Haverland and averages as large as the Bubach. Late.

SENATOR DUNLAP.—(Per.) Medium to large, conical, occasionally flattened slightly or ribbed; color a rich dark crimson. Flesh red throughout, firm and fine in texture; quality excellent, sprightly. Plant a good strong grower and healthy.

SHARPLESS.—(Per.) One of the largest when planted on strong, rich, moist soil, but the variety will do fairly well in lighter soils, but not as well as a variety like Tennessee Prolific on poor soils. The berry when not fully ripe is a little white at the tip.

TENNESSEE PROLIFIC.—(Per.) A desirable variety; ripens medium season; berries above medium size. One of the most prolific varieties grown; desirable to plant with pitillate varieties. Plants should be thinned in order to get the largest berries.

ROUGH RIDER.—(Per.) Size and shape of the Bubach, color and firmness of the Gandy, productiveness of the Sample; firm. The plants are very rugged in growth, with thick, leathery foliage.

Senator Dunlap

WARFIELD.—(Imp.) To get the best fruit of this variety it must be thinned at least of one-half of the runners that are made, in order to give it sufficient room and sunlight. If neglected and left too thick, the berries are sure to be small, but in productiveness it is almost unsurpassed. The berry is dark red color, firm and of medium size.

MULBERRIES

Downing's Everbearing.

DOWNING'S EVERBEARING.—A fine rapid growing tree with large foliage and attractive for the lawn, and at the same time bears a delicious fruit for about three months. See cut.

NEW AMERICAN.—Fruit large, black, of fine quality and tree vigorous, a good bearer and highly ornamental for the lawn.

RUSSIAN.—Tree a rapid grower and considered very hardy and valuable for timber. The fruit is of medium size and good. The foliage is abundant and said to be valuable for silk culture.

TEA'S WEEPING.—See ornamental trees.

PERSIMMON

NATIVE.—Fruit somewhat similar to the plum, yellow when ripe, sweet and good after exposure to frost.

ESCULENT ROOTS

ASPARAGUS

COLUMBIAN MAMMOTH WHITE.—Produces numbers of great, thick white shoots. Most attractive and profitable for canning.

CONOVER'S COLOSSAL.—Really colossal, deep green shoots, from 1 to 2 inches in diameter, are sent up thickly from the crowns.

GIANT ARGENTEUIL.—A new French variety that makes crowns strong enough for cutting before any other sort and yields enormous crops of mammoth, tender stalks.

PALMETTO.—Of Southern origin, has been planted in different parts of the country with good success. It is a good yielder, of even and regular growth, earlier than Conover's Colossal, and of best quality.

DIRECTIONS FOR PLANTING ASPARAGUS

Prepare the ground by trenching to the depth of two feet mixing each layer of soil, as turned over, with two or three inches of well-rotted manure. For private use or for marketing on a small scale, beds should be formed 5 feet wide, with three rows planted in each; one in the middle, and one on each side, a foot from the edge; the distance of the plants in the rows, 9 inches; the alleys between the beds should be two feet wide. In planting, a line is set and a cut made, a little slanting, to the depth of 6 or 8 inches, according to the size of the plants. The plants are then laid against the side of the trench, at the distance already named—9 inches—care being taken to properly spread the roots. The crown or top of the plant should be covered about two inches. In a week or so after planting the beds should be touched over lightly with a sharp steel rake, which will destroy the germinating weeds.—*Gardening for Profit.*

RHUBARB

PIE PLANT

MYATT'S LINNAEUS.—Early, very tender, and has a mild sub-acid flavor, not "stringy" or tough. The plant is large, and for pies or other culinary purposes it is the housewife's favorite.

VICTORIA.—Medium size, and quite a favorite in certain sections. It is early, tender and quite productive.

NUT-BEARING TREES

ALMOND

HARD SHELL.—The tree is very showy when in bloom. The kernels of the nuts are large, plump and sweet. Hardy.

SOFT, OR PAPER SHELL.—Encloses as fine a nut in a softer shell. Needs protection.

CHESTNUTS

Japan Sweet Chestnut.

AMERICAN.—Well known in many parts of the country. It is unrivalled in beauty for the lawn, as well as valuable for the nuts that it bears in profusion.

JAPAN, OR MAMMOTH.—One of the good things recently introduced from Japan. The tree is very hardy, productive and decidedly ornamental. Nuts are of enormous size, and of the sweet, pleasant flavor of the American chestnut.

SPANISH.—A hardy, handsome, rapid growing tree; bears early and abundantly. The nuts are large and sell at a good price, though not so sweet as the American.

NUMBO.—Nuts quite large and of fine appearance, sweet and early to ripen. Tree enormously productive, bearing regularly.

PARAGON.—(Great American.) The most widely planted and most uniformly successful variety yet cultivated in the United States. The three or more broad, thick, handsome nuts in each burr are of extra size and quality. The tree makes a strong growth, bears early and abundantly. Trees four years from graft have produced one bushel each.

RIDGELEY.—The nuts of this variety are large, smooth, of uniform size and fine, rich color, in quality equal to nuts of the best American seedlings. The nuts always bring very high prices in market and on the stands. They ripen early and are produced in heavy crops. The trees make a strong, handsome growth and begin bearing before they are taken from nursery rows.

FILBERTS (Hazelnuts)

The Filbert succeeds well on almost all soils, the little trees or bushes bearing early and abundantly.

ENGLISH.—Most hardy and generally satisfactory over a wide territory. The nuts are nearly round, rich-flavored and toothsome.

KENTISH COB.—The larger of the two varieties, meaty and of excellent flavor.

WALNUTS

AMERICAN BLACK.—The large, oily nuts are borne in heavy crops. They are much relished by children, and always marketable at a fair price. The tree grows quite fast; its dark rich wood is exceedingly valuable.

BUTTERNUT, or WHITE.—The nuts are large, long, oily and nutritious. The lofty, spreading tree is one of our finest natives, valued for its tropical appearance and beautiful wood, as well as for its nuts.

ENGLISH, PERSIAN, or MADEIRA.—A fine, lofty-growing tree, with handsome, spreading head; produces large crops of thin-shelled, delicious nuts which are always in demand at good prices. The large orchards of California and the South are yielding handsome profits, and still the nuts are imported in great quantities. Not hardy enough for general culture North.

SIEBOLD'S JAPAN.—Of the finer imported Walnuts, this is the species best adapted by its hardy, vigorous habit for general culture in our country. It grows with great vigor, assuming a handsome shape without pruning, and has withstood a temperature of 21 degrees below zero without injury. Its nuts are considerably larger than the common hickory nut, and borne in clusters of fifteen to twenty. The shell is a little thicker than that of the English Walnut, which it resembles in a general way; the kernels are meaty, delicate, and can be removed entire. The trees begin to bear when two or three years old.

ORNAMENTAL DEPARTMENT

The beauty of grounds that are planned with taste and given proper care appeals to most people, but many fail to discover that they can make their own home equally beautiful. They perhaps have tried growing a few shrubs or roses in a thick turf, and without giving attention to either cultivation or pruning have wondered at their lack of success, while good results could not be attained in any line under such circumstances.

Beautified surroundings need not appeal to our taste for the beautiful only, but from a commercial standpoint the beautifying of the home greatly adds to its value. Who, in seeking for a home would pass a house surrounded by a lawn judiciously planted to shrubs and trees which had been tenderly cared for for years, and choose one barren of tree, shrub or vine, some of which would take years to mature. The increased value to property which trees and shrubbery add has become so evident, that far sighted business men now plant trees and shrubs around vacant lots that are intended for market, and have found that lots thus treated do not go begging.

HOW TO PLANT

In planting due regard should be paid to the space available, and trees and shrubs should not be planted at random. Nothing is more handsome than a fine, well cut lawn, with trees and shrubs planted along the drives leading to the house and other buildings. The background for a large lawn should be of the different varieties of larger growing trees, with

groups of specimen trees in the foreground. Most shrubs are at their best planted in beds, either all of one variety or with several varieties so arranged that the higher growing ones will form the center with those of lower growing habits massed around them. These plants should be thoroughly cultivated and annually pruned. It is not well to plant so few that years must pass before a good effect is produced, but a surplus should be planted at first and this gradually taken out. Vines should be planted near the house and allowed to clamber on it or may be trained with fine effect over arbors or stakes placed on the lawn.

DECIDUOUS UPRIGHT ORNAMENTAL TREES

AILANTUS.—(Tree of Heaven.)—*Glandulosa*. From Japan; a lofty, rapid growing tree, with long, elegant, feathery foliage, exempt from all diseases and insects; one of the most distinct of ornamental trees with pinnate foliage.

ALDER.—(*Alnus*.)

European or Common Alder.—(*Glutinosa*.) Foliage roundish, wedge-shaped and wavy. Makes very rapid growth of from 30 to 60 feet in height. Especially useful for planting in soggy ground. Does equally well in dry soil.

Imperial Cut-Leaf.—(*Laciniata imperialis*.) A charming tree of stately graceful growth, having beautiful, deeply-cut foliage. Vigorous and very hardy. Unsurpassed for the lawn. Attains a height of about twenty feet.

ALMOND.—(*Amygdalus*.) Large Double-Flowering. A beautiful little tree which bears a profusion of double rose-colored blossoms in the early spring.

ARALIA. *Angelica Tree or Hercules's Club*.

Japanica. A distinct and handsome Japanese species, 40 feet high, spreading growth. Foliage immense and finely divided, stems spiny, flowers in great white spikes in July, producing a most beautiful effect.

Pentaphylla. Grows more like a shrub, 10 feet high, with long, slender branches and few prickles. Very graceful when planted on rocky slopes, with its arching branches and bright green, shiny foliage. Bears green flowers in long umbels.

Spinosa. A showy native, with broad, handsomely cut leaves and huge clusters of small white flowers in July. Its winter effect is unique and handsome. Grows to 30 or 40 feet high.

ASH.—(*Fraxinus*.)

American White.—(*Americana*.) Our forest tree, tallest of the species, with straight, clean trunk, smooth, gray bark and glossy leaves. Useful for parks, streets or large grounds.

European.—(*Excelsior*.) Somewhat smaller and more spreading than the American ash, with short, thick trunk and darker foliage. Remains green in fall.

Green Ash.—(*Lanceolata*.) An ornamental tree of medium size; with leaves dark green on both sides.

BEECH.—(*Fagus*.)

Fern-Leaved.—Of elegant form, round and compact. Fern-like foliage, delicately cut. The tree has a wavy, graceful aspect, seldom seen in other sorts. When fully grown, twenty-five to thirty-five feet high.

Purpled-Leaved Beech.

Purple-Leaved.—A vigorous, elegant tree, reaching 40 to 50 feet in height, with foliage changing from deep purple in spring, through crimson in summer, to purplish green in fall. Hardy, long-lived, free from insect pests, useful for specimens or grouping.

Rivers' Smooth-Leaved Purple.—This variety differs from the ordinary Purple-Leaved Beech, by its compact symmetrical habit of growth, and crimson foliage early in the spring, changing to a dark purple in summer. The finest of all purple-leaved trees.

BIRCH.—(Betula.)

European White.—Graceful, airy tree, suitable for the lawn. Hardy, thrives in all soils; silvery bark; slender branches. Grows from 25 to 30 feet high.

Purple-Leaved.—A vigorous grower, foliage purple. Twenty to twenty-five feet high when fully grown.

CATALPA.

Bungei. (Chinese Catalpa.)—A curious dwarf form that grows only three or four feet high and twice as broad, forming a pretty dome-shaped head of great, soft, leathery leaves. The leaves are laid with shingle like precision. Hardy; strong growing unique. It is very desirable when grafted on stems five to eight feet high for border along drive, walk, or around a park where you do not desire tall trees. They are as ornamental as the carefully trained Bay trees of France. We can supply specimens for lawn, worked on stems from one to eight feet high. Give height desired when ordering. (See illustration on page 69.)

Speciosa.—A western species growing to a large size, and with faintly mottled flowers, in large showy clusters, followed by curious long beans that give the tree a most picturesque aspect in winter. The bark is rough and thick, thus differing from the Common Catalpa.

CHERRY.—(Cerasus.)

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

Japan Weeping.—See weeping trees.

BECHTEL'S DOUBLE FLOWERING CRAB.

Parkman's Double.—Flowering. (Parkmani Halliana.) A fine Japanese Dwarf, with long-stemmed semi-double flowers of deep rose-color, wreathing its branches. It makes a fine, compact growth and its deep green leaves are retained late in the season. The buds are long and handsome.

Chinese Double White Flowered.—Puts forth fragrant flowers in May. One of the handsomest of flowering trees, and very hardy.

DOGWOOD.—(Cornus.)

White Flowering Dogwood.—(Florida.) A beautiful native tree, flowering after the red buds—when most other trees are still bare. The great white flowers are 3 inches and more in diameter, lasting in favorable weather several weeks. Besides the fine characteristics given above, the bright red bark on its young growth makes it attractive and cheery in winter. Blooms when small.

Red Flowering Dogwood —(Florida flore rubra.) A new and rare variety, with handsome red flowers displayed at an even earlier age than those of the White Dogwood. The two sorts are beautiful for contrasts.

ELM.—(Ulmus.) For street and park planting there is no finer tree than the grand American Elm of our forests. There are also foreign varieties of great value for specimen trees.

American Elm. (Americana.)—A magnificent, stately tree, easily distinguished by its wide weeping top and pendulous branchlets. One of the most noble and graceful trees where a tall spreading tree is desired.

CRAB.—(Pyrus.)

Bechtel's Double Flowering.

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

English Elm. (*Campestris*).—An erect, lofty tree, of rapid, compact growth, with smaller and more regular cut leaves than those of the American, and darker, colored bark. The branches project from the trunk almost at right angles, giving the tree a noble appearance.

Huntingdon.—(*Huntingdoni*.) One of the most desirable elms for any purpose; of very erect habit and a rapid, vigorous grower. Bark clean and smooth. When fully grown, forty to fifty feet high.

Purple-leaved.—(*Purpurea*.) A beautiful and distinct variety; leaves of rich purple when young. When fully grown, fifteen to twenty feet high.

Scotch.—(*Montana*.) A fine spreading tree, of rapid growth and large foliage. When fully grown, forty to fifty feet high.

Horse-Chestnut.

HORSE CHESTNUT—(*Aesculus*)

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

Red Flowering. (*Rubicunda*). Red flowers, very showy. The leaves are darker than the White-Flowering. Blooms late in May, just after the White-Flowering. A slow, rather crooked grower.

HALESIA. Silver Bell. (*tetraptera*).—A small native tree, bearing most beautiful bell-shaped flowers. Similar to the Snowdrop, but much larger. Blooms in May.

HACKBERRY. (Nettle Tree.) *Celtis*.

Occidentalis.—A rare native tree that deserves much more general planting. It grows 100 to 120 feet high and its light green leaves are glossy, pointed, almost entirely free from insects; the branches spread horizontally, forming a wide, elm-shaper head of medium size. Vigorous, hardy and healthy, thriving in all soils.

CLADRASTIS.—Yellow-wood.

Tinctoria.—(*Virgilia lutea*.) One of the most beautiful medium-sized native flowering trees, growing to 50 feet. It has a short trunk and wide, rounded head of handsome foliage that colors clear yellow in fall. Its wood yields a clear yellow dye. In June it is showy and fragrant, with long, drooping racemes of pure white pea-shaped flowers.

JUDAS TREE, OR RED BUD.—(Cercis.)

American, (Canadensis).—Beautiful pea-shaped flowers, of a purplish pink color, produced in clusters close to the branches before the leaves expand. Neat heart shaped foliage.

Japan. (Japonica).—Of dwarf habit; a valuable variety.

KENTUCKY COFFEE TREE.—(Gymnocladus Canadensis.) A very singular beautiful and rapid growing tree, with long feathery foliage.**LARCH.—(Larix.)**

European.—A beautiful, rapid growing pyramidal tree, with slender, graceful branches. Resembles an evergreen in appearance while in foliage.

LABURNUM. (Cytisus). Golden Chain.—Bears long, pendant racemes of golden flowers in June; smooth and shiny foliage. Very showy and beautiful, and valuable for every lawn. When fully grown, fifteen to twenty feet high.**LINDEN OR LIME TREE.—(Tilia.)**

American or Basswood. (Americana).—Grows fast, forming a large, upright, spreading tree. Leaves are large and cordate, flower light yellow, delightful citron odor. Fine for the street and avenue, also for the lawn.

European. (Europaea).—Forms a fine pyramidal tree. The flowers are fragrant and the foliage large. Thirty to fifty feet.

Silver-Leaved Linden.—(Argentea.) Among our choicest ornamental trees; has no defects. It is a rapid, vigorous, pyramidal grower. Foliage pale green on the upper side, and silver lined beneath, when ruffled by the wind has handsome effect.

LOCUST, or ACACIA.—(Robinia.)

Black or Yellow.—A native tree of large size, rapid growth and valuable for timber as well as quite ornamental. The flowers are disposed in long pendulous racemes, white or yellow, very fragrant, and appear in June.

LOCUST.—(Gleditschia.)

Honey.—A rapid-growing tree; delicate foliage of a beautiful, fresh, lively green, and strong thorns; makes an exceedingly handsome, impenetrable and valuable hedge.

MAPLE.—(Acer.)

Trees of this group are hardy, vigorous, adaptable to many soils. For street planting they are unsurpassed, combining, as they do, attractive appearance with hardiness, rapidity of growth, comparative freedom from disease and injurious insects. They are well adapted for planting in avenues, and are largely used in general planting, either on large lawns or in small yards.

Ash Leaved, (Negunda) Box Elder. A rapid grower, with leaves and young branches of green.

Norway (Plantanoides).—The most popular species of the Maple group, either for the lawn or street planting. It forms a perfect, rounded head, with large deep green foliage, is very hardy, easily transplanted, very compact in form, grows rapidly, and is exceptionally free from injurious insects. In nursery row, is inclined to grow a little rough and a little crooked, but straightens into a fine tree when fully grown. A native of Europe.

Purple Leaved (Pupurea).—One of the most beautiful and distinctly marked of all; leaves purplish red, particularly on the under side. A rapid, strong grower, hardy, and should be in every collection.

Reitenbachi.—(Purple-Leaved Maple.) The large, glossy foliage of this variety opens green but gradually changes to rich purple in summer. It is a more erect grower than the others, and a valuable ornamental tree.

Schwedleri. (Schwedler's Purple Leaved Maple.)—The Purple Norway Maple's beautiful leaves attract attention at all seasons, but are especially fine in the spring, when their gleaming red and purple contrasts brightly with the delicate green of the other trees. In midsummer they are purplish green, in autumn golden yellow.

Sugar or Rock. (Saccharinum.)—A well known native tree, of elegant pyramidal form; valuable both for the production of sugar and for its wood; its stately growth, fine form, and foliage make it desirable as an ornamental and shade tree. Especially valuable for avenue planting.

NORWAY MAPLE.

Sycamore, European. (Pseudo-platanus)—A handsome tree of upright growth, large foliage, and smooth ash gray colored bark. Twenty-five to thirty feet.

Sycamore Maple Purple-Leaved. (*Purpureum*.)—Distinct from the species on account of the pretty purplish tint on the under side of the foliage. Vigorous grower, hardy and worthy of dissemination.

Silver-Leaved, or White. (*Dasycarpum*)—A North American species, of rapid growth, large size, and irregular rounded form, foliage bright green above and silvery white beneath; tree very hardy and easily transplanted; where immediate shade is required, one of the most useful trees; also a favorite street and park tree.

Wier's Cut-Leaved Silver-Maple. (*Wierii laciniatum*.) It is a variety of the Silver Leaved, and one of the most remarkable and beautiful trees, with cut or dissected foliage. 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,

CATALPA-BUNGEI.

and on the young wood especially deeply and delicately cut. The leaf stocks are long and tinted with red on the upper surface. It ranks among the most interesting and attractive lawn trees, and may be easily adapted to small places by an occasional cutting back, which it will bear to any degree necessary as well as the willow.

Japanese Maples. After carefully testing the long list of varieties found in foreign catalogues, we are fully convinced that the following constitute the cream of the collection and are all that is advantageous to cultivate.

Japan Maple. ((*Polymorphum*.) The most vigorous of the type; the green form with palmate leaves, which change in autumn to a beautiful crimson. It is highly deserving of cultivation, as it forms a large, compact mass of attractive foliage. Entirely hardy and may be pruned into any desired shape.

Blood Red Japan Maple. (*Atropurpureum*.)—This is the most serviceable and attractive variety, suited to our climate. The rich purple foliage is retained until the latter part of summer, and is always exceedingly distinct from that of other forms. Naturally of dwarf habit, it needs only an occasional clipping of straggling shoots.

Purple Cut--Leaved Japan Maple. (*dissectum atropurpureum*.)—In color the same shade of purplish red and *Atropurpureum*, but with the leaves cut into fine fringe like segments, which present a charming and unique appearance. It is usually quite hardy and reliable, and makes a fine contrast to other members of this pleasing group.

MAGNOLIA—SOULANGEANA.

MAGNOLIA.

Their superior stateliness of form and splendor of growth, the size and richness of their foliage and the lavish yield of fragrant flowers, place them in the foremost rank among hardy ornamental trees and shrubs. Their proper place is on the lawn, where they show to fine advantage in contrast to the green. Planted in groups they yield to no rival, and their effect in early spring is grand beyond description. Illuminating the whole landscape and filling the atmosphere with a rich perfume. To insure success in their transplanting, they should be moved in the spring, never in the fall. Great care should be exercised in their removal, the fibrous roots being preserved as nearly as possible, and carefully guarded from any exposure to wind or sun. While almost any good soil is sufficient to insure their growth, they succeed best in a soil which is rich and dry.

Chinese, or Yulan. (*Conspicua*)—A choice, showy species, shrub like when young, but gradually forming a medium size tree. Its superb white flowers cover the tree thickly in April, and form a conspicuous, handsome ornament to the lawn.

Pointed Leaved or Cucumber Tree. (*Acuminata*.)—A noble variety, with rich, luxuriant foliage, and large, showy, bluish yellow flowers.

Halleana. (*Stellata*.)—A pretty dwarf form that opens its snowy semi-double flowers in April, earlier than any other *Magnolia*; their fragrance is pronounced and delicate. Still rare.

Lennei.—A hybrid variety of great beauty. The large flowers are of a deep rose color, the foliage tropical and heavy, the tree vigorous and profuse blooming, frequently opening grand flowers at intervals through the summer.

Soulangeana.—One of the hardiest and finest of foreign *Magnolias*, resembling *Conspicua* in flower and habit. Its blossoms are from three to five inches across, cup-shaped, white and rosy violet, opening a little later than *Conspicua*, yet before it leaves, which are massive and glossy.

Soulangeana Nigra.—(*New*.) Growth and habit like the *Soulangeana*. Flowers dark red, said to be very hardy.

Speciosa. The flowers of this species are a trifle smaller and lighter colored than *Soulangeana*'s; they open about a week later and remain perfect on the tree longer than those of any other Chinese *Magnolia*. Very hardy.

Umbrella Tree. (*Tripetala*.)—Named from the whorled arrangement of its great glossy leaves. The white flowers, also of great size, open in June and are followed by rose colored fruit-cones.

MOUNTAIN ASH.—(*Sorbus*.)

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

American. (*Americana*)—A tree of coarser growth and foliage and brighter colored berries.

Oak Leaved. (*Quercifolia*)—A variety with large, downy, lobed leaves, distinct and fine.

OAK. (*Quercus*.)

The Oak is in demand for use as lawn and street trees, being the most majestic of deciduous forest trees, almost without exception, very long-lived. Although their growth at first is slow, if planted in good soil, will out grow many other trees. Oaks hold their leaves late usually and the autumn hues are very brilliant and lasting.

American White Oak.—One of the noblest trees of the northern states. Beautiful park tree; foliage assumes a violet-purple color in the fall.

English Oak. (*Robur*.)—A broad, spreading, graceful tree, of slow growth, reaching mighty stature and remaining vigorous and beautiful for centuries.

Bur Oak or Mossy Cup. (*Macrocarpa*.)—A native tree of spreading form. Foliage deeply lobed, and the largest and most beautiful among Oak leaves. Cup-bearing, acorn fringed and burr like. Bark Corky. One of the noblest of the family.

Pin Oak. (*Palustris*.)—Peculiarly handsome tree when young; used for avenues. Leaves deep green, turning to red in the fall, finely divided. Drooping branches. Grows rapidly and prefers somewhat moist soil. Fibrous-rooted and transplants well. Superb lawn tree.

Red Oak. (*Rubra*.)—A broad tree of rapid growth; large rich foliage, which turns to a bronzy red in the fall. Deservedly popular.

Scarlet Oak. (*Coccinea*.)—A grand, round-topped tree, with bright green, deeply cut leaves that color to sparkling red in fall. Grows well in dry situations.

PAPAW, Custard Apple. (*Asimina*.)

Triloba. Well worth a place in the garden for its large, handsome foliage and attractive, early flowers. Distinctly novel in appearance, and effective on the lawn. Its fruit is large, oblong, yellow, pulp highly aromatic, and much relished by some people. Varies from 10 to 40 feet in height.

PEACH. (*Persica*.)

Purple of Blood Leaved. The young leaves are as red as blood, but gradually change to bronze or green. A very effective foliage plant in early summer.

Rose-Flowering Double. (*Rosea fl. pl.*)—A small sized tree with beautiful delicate rose-colored flowers. Blooms in May. When fully grown, eight to ten feet high.

White-Flowering Double. (*Alba fl. pl.*)—Similar to the preceding, with white flowers.

PLUM. (*Prunus*.)

Purple-Leaved Plum. (*prunus pissardi*.)—A distinct and handsome little tree, covered with a mass of small white single flowers in spring, later with showy pinkish purple leaves that deepen in color to the end of the season. Valuable for ornamental hedges or planting in quantity for contrast. It is perfectly hardy wherever the common plum will stand, and is a beautiful ornament to the lawn at all times of the year. One of the most attractive trees.

Double Flowering Plum. (*triloba*.)—A very hardy and beautiful tree or shrub covered in early spring with a profusion of double pink flowers an inch in diameter.

POPLAR.—(Populus.) Poplars are more easily and quickly grown than almost any other trees and thrive in nearly all soils. Their leaves are bright and their tops thin, fitting them better for use in composition than as specimen trees. However, where immediate shade is desired, they can be planted with slower-growing more permanent trees among them, and when the latter are large enough the poplars may be cut away, if unsatisfactory. For screens, shelter-belts, seaside planting, streets, etc., great numbers of the trees are planted. When this is done judiciously they will give a cheerful, sprightly air to any place. Their autumn coloring is bright yellow.

Carolina Poplar. (*Monilifera*)—Unexcelled for quick growth and effect, its rapid growth giving an air of luxuriance to places where other trees appear starved. Showy and cheery from constant movement of its glossy, silver-lined leaves, yet always casting a dense, cool shade. If well pruned back during the first few seasons it makes a strong durable tree. Is yearly planted in great numbers, and is one of the most popular street trees. In some cities it is planted almost exclusively when opening new streets in residence sections.

Lombardy or Italian Poplar. (*Fastigiata*)—Of obelisk form, growing rapidly to extravagant heights. Forms striking lawn groups; is much used at Newport for tall screenhedges. Always make a striking feature in any landscape.

SALISBURIA.

Ginko Tree or Maiden Hair. (*Adiantifolia*)—One of the most beautiful lawn trees. From Japan. Beautiful, rich, glossy, fern-like foliage. Rapid growth. Rare and elegant. A tall and upright grower.

SWEET GUM, or BILSTED. (*Liquidambar*.)—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; bark corky. beautiful in all stages of growth, it is particularly handsome and striking in autumn.

SYCAMORE.

Oriental. (*Orientalis*.)—As an ornamental tree for large grounds, or as a shade tree for street planting, this has no superior. It is a rapid grower, attains a large size, and presents a striking combination of majesty and gracefulness. The foliage is heavy, and not subject to the ravages of insects.

TULIP TREE.—(Liliodendron Tulipifera.)

A magnificent, native tree, very symmetrical, leaves broad, glossy and peculiarly shaped with tulip-shaped flowers; very desirable.

THORN FLOWERING. (*Crataegus*.)—The thorn justly deserve to be classed among the most beautiful trees, for small yards and for grouping anywhere. They are very hardy and grow well in all dry soils. The flowers are showy and abundant, often quite fragrant; the fruits are retained long in some species; are so thick as to burden the branches and frequently of bright colors. Few tree groups have such a long season of attractiveness, or so many fine points. Their foliage colors brilliantly in fall.

Cockspur Thorn. (*Crus-galli*.)—A native thorn having dark colored leaves and horizontal branches, large red spotted fruit.

Hawthorne Common English. (*Oxyacantha*.) A shrub or tree of twenty feet. Single white flowers. Good for defensive hedges.

Double White Flowering Thorn. (*alba flore pleno*.)—When in bloom it is a mass of clustered rose-like white blossoms.

Paul's Double Scarlet Thorn. (*Coccinea flore pleno*.)—Of quick growth, showy, new and perhaps the best sort. Flowers are in clusters, very double, large and full, and a deep rich crimson.

WILLOW. (Salix.)

Besides the beauty of their airy summer foliage, the Willows have a distinct value in the brightness of their bark when leaves have fallen. There are few trees that can be used to such advantages for cheery winter effects. They grow fast and are adapted to a variety of soils and uses. Frequent cutting back gives a thicker growth of bright young twigs.

Golden Bark Willow. (*vitellina aurea*.)—A fine tree at all seasons, but very showy in the winter months for its bright yellow bark, making it a conspicuous feature in the landscape. Grows to be a very large tree, 80 to 100 feet high, with a venerable appearance.

Laurel Leaf Willow. (*Laurifolia*.)—A fine ornamental tree with large shining leaves.

Silver or Royal Willow. (*Regals*.)—A large tree, sometimes 100 feet high, with short and thick trunk and yellowish brown branches. The foliage is ashy gray and silvery, giving a white appearance to the whole tree.

Rosemary Leaved. (*Rosemarifolia*.)—A very distinct variety of upright growth, foliage delicate and feathery, of a silvery white appearance, a small sized tree and especially desirable.

DECIDUOUS TREES

OF DROOPING HABIT

BIRCH.—(*Betula*.)

Cut-Leaved Weeping. (*Pendula Laciniata*.)—Beyond question one of the most popular of all weeping or pendulous trees. Its tall, slender, yet vigorous growth graceful, drooping branches, silvery-white bark, and delicately cut foliage; presents a combination of attractive characteristics rarely met with in a single tree.

Young's Weeping. (*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.

BEECH.—(*Fagus*.)

Weeping Beech. (*Sylvatica Pendula*.) A large luxuriant tree of curious irregular growth. Its sparkling masses of foliage are swept by tortuous branches into fountain-like masses of green, wonderfully rich and graceful in effect.

Cut Leaved Weeping Birch.

CHERRY.—(*Cerasus*.)

Japan Weeping Rose-flowered. An exquisite little tree draped in rosy masses of bloom in early spring before its leaves appear. Even when grafted on tall stems its slender branches sometimes sweep the grass in graceful garlands, Well adapted to small lawns and a choice bit of furniture for large ones.

CORNUS.—(*Dogwood*.)

White Weeping Dogwood. (*florida*, var. *pendula*.) An old and pretty little tree, growing more like a large shrub, 8 to 10 feet high, adding to the good characteristics of the other Dogwoods a distinct weeping habit which makes it a unique and interesting member of this family.

ELM.—(*Ulmus*.)

Camperdown Weeping Elm. (*Scabra Pendula*.) Of fine and notable habit, the strong stout branches often sweeping out horizontally for several feet before they curve downward, making a broad handsome head. Trees when delivered are from five to eight feet tall and trunk grows practically no taller. The head can be grown in time to attain the size of ten to twenty feet across it. Leaves are of a dark, glossy green, of large size, completely covering the tree, forming a luxuriant mass of verdure. A strong, rapid grower; specimens by a little training will form a little arbor or play house, branches and leaves forming a ceiling and wall.

MOUNTAIN ASH.—(Sorbus.)

Weeping. (Pendula.)—A very ornamental variety, with irregular drooping branches; desirable as a lawn tree.

LINDEN.—(Tilia.)

Weeping Silver-Leaved Linden. (petiolaria pendula.)—An elegant medium-sized tree of gracefully pendulous habit, that holds its large, silver-lined leaves through the season. Hardy, grows fast, and is quite striking.

MULBERRY.—(Morus.)

Tea's Weeping Mulberry. (Morus Pendula.)—One of the finest and most graceful weeping trees, forming an umbrella shaped head, with slender, willowy branches drooping to the ground. Foliage is beautiful, leaves distinctly lobed. Tree perfectly hardy, enduring the severe cold of the North, and extreme heat of the South. It is one of the most desirable of all weeping trees. (See illustration on page 81.)

WILLOW.—(Salix.)

Common Weeping. (Babylonica.) A beautiful, graceful, well known tree. Very fine for planting by streams and ponds.

Kilmarnock, (Capera Pendula.)—A fine variety, with brownish, pendulous branches and heavy, dark green foliage.

New American Weeping, (American Pendula.)—A slender-growing artificial tree, with delicate drooping branches, forming a round full head; a beautiful ornament for the lawn.

CAMPERDOWN WEEPING ELM.

Wisconsin Weeping Willow. (dolorosa.)—Of drooping habit and hardier than Babylonica. Valuable on account of its ability to resist severe cold.

Thurlow's Weeping Willow. (elegantissima.)—A graceful weeping tree with leader of erect growth and side branches drooping. Hardy.

DECIDUOUS SHRUBS

For successful landscape treatment, nothing adds more to the beauty of a place than to have the sides and back ground well filled with nicely arranged groups of shrubbery.

Until seen, one cannot appreciate the effect that can be brought out by properly arranging and grouping the wonderful assortment of foliage, ranging in color from the darkest green and purple to light orange and silver tints. For hedges, and for giving privacy to home grounds, they are indispensable; and if selected with reference to period of blooming, it is possible to have flowers continuously from April to November.

No yard is complete without one or more beautiful flowering shrubs.

ALTHEA FRUTEX, OR ROSE OF SHARON.—(*Hibiscus Syriacus*.)—The Altheas bloom late in the summer about August and September, they are very hardy, easily cultivated and will bloom until their growth is cut off by frost; they are fine for flowering hedges, and will stand considerable pruning. This should be given in winter. They attain a height of from six to ten feet.

Double Variegated	Double Blue	Double Purple
Double Variegated Leaved	Double White	Double Pink
Double Red		

AMORPHA.

Fruticosa. (False Indigo.) Grows 6 to 10 feet high, and form a large, spreading bush with compound leaves, containing 10 to 20 bright green leaflets, and slender spikes of deep violet-blue flowers in June, after the flowers of most shrubs have faded.

AMYGDALUS. (Flowering Almond.)

Double Rose Flowering.—A beautiful small shrub, producing in May, before the leaves appear, small, double, rose-like flowers, closely set on the branches.

Double White Flowering.—A pretty sort, of small size, producing beautiful white flowers in May.

AZALEA.

In early spring the Azaleas make a gorgeous show of bloom. A good way to plant them in among rhododendrons, for they thrive in the same kind of soil and under similar conditions, besides brightening the shrubbery with their flowers before the rhododendrons are ready to bloom.

Mollis. The large flowers are produced in great trusses and in different shades of red, white, yellow and orange, rivaling the *Rhododendron Catawbiense* in size and beauty. The plants grow 3 to 5 feet high, and in early spring are covered with a mass of bloom.

Pontica, or grandavenis. (Ghent Azalea.)—The most floriferous of the Azaleas, with the largest flowers. Produces a magnificent effect in early spring when the plants are covered with bloom, varying in all shades of white, yellow, orange, red, pink, carmine, and lilac. Plants grow 4 to 6 feet high and in cold climates they require some protection.

BERBERIS. (Barberry.)

The Barberries are neat, dense growing shrubs, and are beautiful at all seasons. The masses of white, yellow or orange blossoms are shown in spring, their leaves color brightly in fall, their scarlet blue or black berries are persistent through most of the winter. They are used for hedges, borders around other flowering shrubs or individual beds.

Canadensis. (Canadian Barberry.)—Seldom grows over 3 feet high, with bright green foliage, which turns to beautiful shades of orange, red and bronze in the fall. At all times it is distinctly ornamental.

Thunbergi. (Thunberg's Barberry.) Inimitably neat and dense in growth, yet quite graceful because of its drooping branches. The yellow flowers are followed by scarlet fruits persistent through most of the winter; the leaves color to scarlet and gold in autumn. For low hedges, borders of taller shrubs, planting around the bases of buildings, and a dozen other uses, the landscape gardener finds no other shrubs so good.

Vulgaris. (European Barberry.) Flowers yellow; berries dark red. Of upright growth with light green foliage.

Purpurea. (Purple Barberry.) A showy and effective shrub, similar to *B. Vulgaris* in habit, but with fine purple leaves that contrast beautifully with its flowers and with other shrubs.

CALYCANTHUS. (Carolina Allspice.)

Sweet-Scented Shrub. (*Floridus*.)—An interesting shrub having a rare and peculiar fragrance of wood and flowers; blooms abundantly, of a peculiar chocolate color.

CARGANA. (Siberian Pea Tree.)

Arborecens. A shrub or low tree. Native of Siberia and China. Pea-shaped yellow flowers in May.

CEPHALANTHUS. (Button Bush.)

Occidentalis. One of the best shrubs for damp spots. It makes a dense, elegant growth, forming a rounded mass of dark green, studded with clusters of white fragrant, ball-like flowers in July. Grows from 3 to 10 feet high.

CHIONANTHUS. (White Fringe.)

Virginica.—One of the most beautiful wild shrubs, growing to tree like proportions in favorable locations. Its loose, gracefully drooping panicles of white flowers are quite fragrant, and borne in fringing clusters above very large, deep green leaves of thick leathery texture. The contrast between leaves and flowers is fine. Leaves yellow in fall.

CLETHRA. (Sweet Pepper Bush.)

Alnifolia.—Growth low and dense, leaves abundant and light green; numerous small spikes of white and very fragrant flowers in July; a valuable shrub.

COLUTEA. (Bladder Senna.)

Aborecens.—Native of the south of Europe. A large shrub with a small delicate foliage, and yellow, pea-blossomed-shaped flowers in June, followed by reddish pods or bladders.

CORCHORUS. (Kerria Globe Flower.)

Japonica.—This fine shrub is of a spreading habit, with slender green branches and globular yellow flowers.

Variegata. (*Variegated Kerria*.)—This variety makes dwarf twiggy growth, has white and green variegated leaves, and bears single, pale yellow flowers.

CORNUS. (Dogwood.)

The Dogwoods of tall growth and bearing large flowers are described under Deciduous Trees. The shrubby Dogwoods, in many cases, have very pretty flowers, but are valued also for their handsome fruits, leaf variegations and bright-colored bark. If planted in lines or groups against evergreens the bark is very showy in winter, especially if pruned yearly to make the growth of young shoots thicker.

Alternifolia. (*Alternate-Leaved Dogwood*.)—Flowers creamy white in large bunches, very fragrant, followed by blue berries in fall. Foliage large, distinct and curious in its habit of growth.

Mascula. (*Cornelian Cheery.*)—A small tree, a native of Europe, producing clusters of bright yellow flowers in early spring before the leaves.

Variegata. (*Mascula Variegated.*) A variety of the above, foliage variegated with silver, low spreading branches with clusters of white flowers in June.

Siberica. (*Red Siberian Dogwood.*)—A rare and remarkable variety with bright red bark in winter.

Variegata. (*Siberica Variegated.*)—Silver margined leaves; very much like *Elegans* but leaves are larger and without the red tint.

Spaethii.—One of the finest of recently introduced shrubs. Variegated with deep yellow and the most distinct and valuable in all planting.

Candidissima. (*Panicled Dogwood.*) A handsome shrub, 6 to 10 feet tall, with gray branches bearing immense panicles of white flowers in May and June, which are followed by white fruit borne on bright red stems.

Sanguinea.—(*Red Osier Dogwood.*) Very conspicuous and ornamental in the winter when the bark is red.

Elegantissima variegata. (*Elegans Variegated Leaved.*) A new and remarkable variety with dark green foliage, margined with silver and red; wood very dark retaining its color the entire winter. A very beautiful and attractive shrub for lawns and group planting; a strong grower and perfectly hardy. This shrub has no superior for elegance of form and beauty of foliage.

Stolonifera. (*Red Osier Cornel.*) A medium-sized, spreading shrub, with dark red bark and white flowers, followed by white berries.

CORYLUS. (*Filbert.*)

Atropurpurea. (*Purple-Leaved Filbert.*) A very conspicuous shrub, with large dark purple leaves; distinct and fine. Color good all the season.

CYDONIA. (*Japan Quince.*)

Japonica.—(*Pyrus Japonica.*) A very hardy shrub with double crimson flowers in great profusion early in the spring. Highly ornamental.

DEUTZIA.

One of the most desirable shrubs to plant as individual specimen, or for grouping. Their hardiness, luxuriant foliage and profusion of attractive flowers, render them deservedly among the most popular of flowering shrubs. The flowers are produced in June, in racemes four to six inches long.

Crenata. (*Crenate-Leaved Deutzia.*) One of the best of hardy shrubs, bearing in June a great profusion of single white flowers on long, slender branches. Preferred by some to the several double-flowering kinds.

Double-flowered Pink Deutzia. So named on account of the distinct pink or reddish stripes on the petals of the flowers. The bloom is perfectly double, resembling little rosettes, and is certainly one of the most distinct of the group.

Candidissima. (*Double White-flowering Deutzia.*) This extremely beautiful double form has snow-white flowers and blooms in greatest profusion. It makes up well in flower decorations, and is a valuable specimen.

Pride of Rochester. A valuable form originated at Rochester, New York. It is rather earlier in flowering than the others; double white, with a tint of rose on back of petals. It is also claimed to be more vigorous in growth than others.

Variegated-leaved Deutzia. Similar to *D. Crenata*, except in the unique and curious markings on the foliage, which is striped and splashed with pure white in an erratic manner.

Residence of F.L. ILGENFRITZ

Residence of W.F. ILGENFRITZ

ILGENFRITZ HOMESTEAD 1847

Residence of T.E. ILGENFRITZ

ILGENFRITZ HOMESTEAD 1908

Gracilis. (Slender-branched *Deutzia*.)—One of the most valuable shrubs in the entire list, for all purposes. Excellent for forcing under glass, as well as for single specimens and grouping on the lawn. It is entirely hardy and forms a small round plant, blooming freely in early June. Pure white.

Lemoinei. An elegant new hybrid of *D. Gracilis*, as dwarf and free-flowering, but carrying its pure white, widely opened flowers in erect panicles. It is said to be even finer for forcing.

DIERVILLA. (*Weigela*.)

A group of very beautiful shrubs, easily grown and always in demand. They were introduced from Japan and are entirely hardy with us. We adhere to the correct classification of *Diervilla*, although the genus is popularly known as *Weigela*.

Amabilis. Very free-blooming and hardy; of good habit and rapid growth, soon forming a fine specimen. Large, deep rose-colored flowers.

TEA'S WEeping MULBERRY

Candida. It is of vigorous habit, an erect grower becoming in time a large sized shrub; flower pure white and produced in great profusion in June, and the plants continue to bloom during the summer.

Eva Rathke. A new and exceedingly showy variety, with bright red flowers borne freely during early summer. It is very distinct and decidedly the best of its color. Rather slender in growth, with villous foliage.

Rosea-Colored. (*Rosea*.)—An elegant shrub, with fine rose-colored flowers, introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered; of erect compact growth, blossoms in June.

Variegated. (Nana Variegata.)—This is perhaps second to no other hard-wooded plant with variously colored leaves. It stands the sun well and retains its well marked tints until autumn. The flowers are lighter in color than the Rosea, but it is equally as free in bloom. The growth, however, is not so robust as the latter, and requires less trimming to preserve its compact form.

ELÆAGNUS. (Oleaster.)

A family of large shrubs, noted for the silvery appearance of the leaves and the showy, berry-like fruit. They grow rapidly, and are generally hardy, and quite ornamental during autumn and winter.

Angustifolia. (Russian Olive.)—A very hardy and handsome species that in some sections forms a small tree, 8 to 12 feet high. The leaves are particularly handsome, willow-like and rich, silvery white. The flowers are small, golden yellow and very fragrant, followed by yellow fruits, which are covered with silvery scales. Blooms in June.

Longipes. (Japanese Silver Thorn.)—A showy shrub, bushy growth, with a silver variegation of the family in the lining of its leaves, which are dark green above. Its fragrant, creamy white blossoms open in April or May; the scarlet, edible fruits hang thickly along its branches and are ripe in July. They make delicious sauces.

EUONYMUS. (Strawberry or Spindle.)

American.—A beautiful large shrub, or small tree. Its glowing crimson fruit makes it very attractive.

Europæus. (European Burning Bush.)—This forms a small tree at maturity and it is one of the old-fashioned species still in demand. Its specially attractive feature is the rich crop of crimson fruits in autumn, from which the well-known common name is derived.

EXOCHORDA.—(Pearl Bush.)

Grandiflora. One of the finest shrubs of its season, but difficult to propagate and always scarce. Its long, loose sprays of large, pure white flowers open in May, in such profusion as to give the shrub a very rich effect. In the bud form they look like pearls strung on slender threads. The bush grows 8 to 10 feet high, and is one of the most distinctively ornamental shrubs in cultivation.

FORSYTHIA. (Golden Bell.)

A valuable genus of shrubs from China and Japan, blooming very early in spring. Flowers yellow, drooping, borne in great profusion. Entirely hardy here and of the easiest culture.

Fortunei. A strong-growing species, with stout, erect branches and rich green foliage, blooming in April and continuing for some time. It is a conspicuous object in shrubbery.

Intermedia. One of the most floriferous, with slender, arching branches, and dark green, lustrous leaves. It blooms so early that it is frequently covered with its bright golden flowers while the ground is covered with snow, and is one of the very first promises of the bright and beautiful spring days to follow.

Suspensa. Long, curving branches, used for covering arches and trellises.

Viridissima. The flowers of this variety are a little deeper yellow than in other sorts, and are sometimes twisted. The bush is not quite so hardy as the others of the species, and it is best to give it some slight protection in winter in northern latitudes.

HALESIA. Silver Bell.

Tetraptera.—A small native tree, bearing most beautiful bell-shaped flowers, similar to the Snowdrop but much larger. Blooms in May.

HAMAMELIS. (Witch Hazel.)

Virginiana.—Valuable because its fringe-like yellow flowers open so late in fall—often in November—when there are few other blossoms outdoors anywhere. Grows 10 to 15 feet tall, with fine leaves that color to yellow, orange or purple in fall and drop before the bright yellow flowers with narrow, twisted petals appear, making them quite conspicuous among bare branches. Likes a moist, sandy, or peaty soil and partial shade.

HYDRANGEA.

The native species are handsome shrubs of medium size, with fine large leaves, and generally of light green color, and perfectly hardy. The introductions from Japan and China are interesting and valuable. *Hydrangea Paniculata Grandiflora* is remarkable in foliage and flower, and being perfectly hardy, is of great value. The other Japanese varieties, like the *Hydrangea Hortensia*, require protection in winter. They should be grown in pots or boxes, and wintered in the cellar, and in summer placed along walks in place of shade trees. *Hydrangea Otaska* is especially adapted for this purpose. Those marked with a * require to be wintered in the house.

HYDRANGEA

Arborescens Sterilis. (Hills of Snow.)—Flowers ray-like and sterile, resembling a snow-ball. A very handsome floriferous hardy shrub, literally loaded with white flowers, and continuing to bloom for a large part of the summer.

Hortensia* (Changeable.) A well-known old species from China, frequently used as a greenhouse plant, but which proves hardy with proper protection. Flower-heads large, showy, with a pretty pink tint, which changes to blue when iron filings or swamp-muck are mixed with the soil.

Otaksa* Foliage a beautiful dark green, produces in great profusion rose-colored flowers in immense trusses; half hardy, requiring some protection in winter.

Ramis Pictis* (**Red Branched.**) One of the latest acquisitions. Flowers produced in immense sized trusses, of a deep rose color. The new growth of wood is of a deep reddish purple color, making it distinct from any other variety.

Thomas Hogg* Flowers pure white, in great profusion from July to September.

Hyrangea Paniculata Grandiflora.—Familiar to almost everyone as the most conspicuous shrub, attaining a height of six to ten feet, strictly hardy; flowers produced in great pinnacles are at first pure white, then changing to pink, beginning to bloom early in August, continuing several weeks; foliage handsome in shape, and a desirable green color. It is valuable for planting either singly or in beds. To get the best results in growing this shrub, the new growth should be cut back in the fall, or before growth begins in the spring. Grown in rich soil, in beds or masses, and cut back nearly to the ground every spring before growth starts, it is a most magnificent bed for landscape work.

Hydrangea Tree, Paniculata Grandiflora.—The same as above, grown on stems from three to five feet high. This is most attractive and desirable.

HYPERICUM. (St. John's Wort.)

Aureum. (Golden Hypericum.)—One of the finest of medium growing shrubs forming a dense globular head, and producing a constant succession of golden-yellow flowers in great abundance for a period of several weeks. The foliage is of good color and form. May be grown in shaded places where few other plants will thrive.

Kalmianum. A very pretty native shrub, with rich green foliage and bright yellow blossoms. Much used in landscape planting.

LIGUSTRUM. (Privet.)

A rapid grower in most situations, and well in partial shade. Excellent for hedges, or for association with other shrubs. It is almost an evergreen, and grows freely in all soils; is compact and regular in its form and bears shearing to any extent. Their white flowers grow in sprays, are fragrant, and followed by berries of different colors.

Amurense. (Amoor River Privet.)—The Chinese variety, hardier than others, growing 8 to 12 feet high, with dark green leaves, which persist almost through the winter. Evergreen in the South. Bears erect panicles of handsome white flowers in June, followed by black berries. The best for hedges.

Ibota. (Chinese Privet.)—A noticeable species, both in growth and foliage. It is very vigorous, has distinct, deep green leaves and numerous racemes of pure white, fragrant flowers. Excellent for hedging purposes and forms a beautiful specimen plant.

Ovalifolium. (California Privet.)—A species of unusual beauty that has become the most popular of all hedge plants. For groups and specimens it is equally pretty, and its shining leaves give it value for porch and terrace decoration when grown in standard form. Can be sheared to any desirable form.

Regelianum. (Regel's Privet.)—A low dense shrub, with almost horizontally spreading branches; it is absolutely hardy, graceful and sufficiently dense for hedge purposes without trimming.

Vulgaris. (Common or European Privet.)—Not quite so regular in growth as the *Ovalifolium*, but hardier. Foliage grayish green; flowers in June are white, followed by shining black berries.

LINDERA. (Spice Bush.)

Benzoin. Mostly listed under Benzoin. Grows best along the edge of water as it needs moist, loamy soil. Has bright yellow fragrant flowers in early spring before the leaves appear. Covered with bright scarlet berries in early fall, when its leaves turn to bright yellow. Grows 6 to 10 feet tall and makes a handsome specimen plant.

LONICERA. (Bush Honeysuckle.)

Morrow's Upright Honeysuckle. (*Morrowi*).—A species from Japan, recently introduced, and a decided acquisition. It is a strong, upright grower, blooming profusely in May and June; flowers pure white. During autumn its bright red berries are exceedingly attractive. Hardy and easily grown.

Fragrant Upright. (*Fragrantissima*).—A spreading shrub with deep green foliage and very fragrant, small flowers which appear before the leaves, foliage almost evergreen,

Pink Tartarian.—A beautiful shrub, producing large, bright pink flowers striped with white, in June.

Red Tartarian. (*Tartarica Rubra*).—A well known sort. Blooms in May. Bright red flowers and followed with showy fruit.

White Tartarian.—Forms an upright bush with white flowers and followed with yellow fruit.

PHILADELPHUS. (*Syringa* or Mock Orange.)

The shrubs are usually tall, vigorous growers, with large foliage and flowers, and so are valuable for backgrounds, screens, grouping and specimens. Their flowers are milk-white, in most cases, and beautiful for cutting.

Coronarius. (*Garland Syringa*).—A fine old form that blooms among the earliest and in very graceful sprays. Its large, snowy flowers are delightfully scented.

Aurea. (*Golden Syringa*).—A very pretty shrub of medium size, with golden yellow foliage. It retains its color through the entire season, and creates a pleasing and striking effect, planted in groups with other shrubs.

Flore Pleno. (*Double Flowering Syringa*).—Habit strong, dwarf growing, with semi-double white flowers.

Grandiflorus.—The most vigorous species of the group. Its long, irregular branches are clustered with large, slightly fragrant flowers in June.

Gordonianus.—Strong-growing, large-flowered; valuable for its late blooming season in July.

Lemoinei. (*Boule d'Argent*).—Of dwarf, compact habit; flowers large and fine; semi-double.

Erecta.—A fine variety of erect growth, with good foliage and free-blooming habit; its clusters of fragrant, creamy white blossoms open in June.

RHAMNUS. (*Buckthorn*.)

Cathartica.—A fine, hardy shrub from Europe, with dark green foliage, white flowers and small fruits. Excellent hedge plant.

RHODOTYPUS. (*White Kerria*.)

Kerrioides.—A bushy shrub bearing snowy white flowers in May; shiny black seeds. Thrives in all soils. From Japan.

RHUS. (Sumac.)

Cotinus. (Purple Fringe, or Smoke Tree.)—A much admired shrub for its purplish, misty-looking flowers borne in early June. In the fall the leaves change to brown, red and yellow colors.

Aromatica. (Fragrant Sumac.)—A spreading shrub; small yellow flowers in clusters or short spikes appear before the leaves; thick and fragrant foliage. In autumn the foliage turns to a dark crimson.

Copallina. (Shining Sumac.)—Beautiful foliage of lustrous green in summer, changing to rich crimson in autumn. Produces heads of greenish yellow flowers in August. Very ornamental and used for planting in large masses.

Glabra. (Smooth Sumac.)—Large-growing shrub, with smooth bark. Very effective in autumn with its crimson seeds and foliage.

Laciniata. (Cut-leaf Sumac.)—An ornamental variety similar to glabra, but has its leaves deeply cut, giving it a fern-like appearance.

Typhina. (Stag-horn Sumac.)—A dense, velvety, hairy species. In fall it has brilliant foliage and scarlet heads of fruit. Thrives in poor rocky soil.

RIBES. (Currant.)

Ribes aurea. (Golden Currant.)—Bush with glossy green foliage, which assumes bright autumn tints. In May bears fragrant yellow flowers, followed by dark brown fruit.

Sanguineum. (Red-flowering Currant.)—Shrub of fine habit, with handsome foliage. Producing long, pendulous racemes of deep red flowers in July.

Gordonianum. (Gordon's Currant.)—Hybrid of Aureum and Sanguineum. Crimson and yellow flowers, in pendent bunches in May. Foliage bright green. Very pretty species.

ROBINIA. (Acacia.)

Hispidia. (Rose or Moss Locust.) A shrub bearing beautiful rose-colored flowers on long pedicels in May and June. Useful for planting in large masses. Will grow in any soil, and when in bloom is highly ornamental.

SAMBUCUS. (Elder.)

Although these shrubs are attractive in flower and fruit, they are grown chiefly for their beautiful leaves. They grow well in all soils and must have vigorous pruning to keep them in shape.

Canadensis. (Common Elder.)—Broad panicles of white flowers in July, reddish purple berries in autumn. A well known native shrub.

Nigra. (Black Berried Elder.)—A native of Europe, of medium size, with purplish-black berries in September.

Aurea. (Golden Elder.)—A handsome variety, with golden yellow foliage. A valuable plant for enlivening shrubberies.

Laciniata. (Cut-Leaf Elder.)—A valuable variety with elegantly divided leaves; one of the best cut-leaved shrubs.

Variegata. (Variegated Leaf Elder.)—Of strong healthy growth; foliage mottled with yellow and white. One of the best variegated leaved shrubs.

Racemosa sym. pubens. (Red Berried Elder.)—Panicles of white flowers in spring, followed by bright red berries.

SPIRÆA. (Meadow Sweet.)

All the Spireas bloom extravagantly, which make them decidedly striking. A good collection of them will give flowers the entire season. There is a great variety in their inflorescence and in the habit of the shrubs, so there can be no danger of monotony in

such a collection. All the species are very hardy, easily grown, and will be found useful for specimens, groups, screens, borders, ornamental hedges, etc.

Arguta.—One of the finest early spring blooming shrubs, of light open habit of growth, with small deep green foliage; and in early May each branch is quite enveloped in a wealth of minute purest white flowers. An acquisition worthy of every garden.

Anthony Waterer.—Makes a low, compact bush, covered nearly the whole season with umbels of deep crimson flowers. Desirable for massing or bedding, as well as for single specimens. Can be grown as a pot plant for house decoration.

Billardi. (**Billard's Spirea.**)—Rose colored; blooms nearly all summer.

Bumalda.—A very handsome species from Japan. Habit dwarf but vigorous; foliage narrow, flowers rose-colored, appearing in great profusion during midsummer and autumn.

Colossa Alba.—New, has heads of pure white flowers, very delicate and beautiful. Keeps in flower all summer, valuable small shrub.

Colossa or Fortunei.—Has large panicles of deep rosy blossoms, grows freely and blooms nearly all summer, fine.

Douglasi. (**Douglas' Spirea.**)—Has spikes of a beautiful deep rose colored flowers in July and August.

SPIREA, VAN HOUTTEI

Opulifolia. (**Ninebark.**)—This and the next are sometimes classed under *Physocarpus*. They make a much stronger growth than most sorts, growing rapidly upright, although their branches droop when laden with white flower-umbels in June. For mass-plantings and the background of shrub borders they are very useful.

Aurea. (**Golden-Leaved.**)—Of similar habit. The leaves are bright yellow in spring, gradually changing to golden bronze in fall.

Reevesiana. (Lance-Leaved.)—A charming shrub with narrow, pointed leaves, and large round clusters of white flowers that cover the whole plant and render it exceedingly effective. Blooms in June.

Prunifolia flore pleno. (Bridal Wreath.)—Among the earliest of the double Spireas to bloom, and very showy at that early time. It is very graceful and plume-like in effect, the branches being covered thickly almost their whole length with small, double white flowers, and sweeping outward in gentle curves.

Thunbergii. (Thunberg's Spirea.)—Distinct and most attractive at all seasons, with feathery masses of pure white flowers in early spring; in autumn its leaves change to bright red and orange.

Van Houttei.—Without doubt the finest variety in the collection. At the flowering season in May and early June, the plant is covered with a mass of large, white flowers, presenting a beautiful appearance. Very hardy. ONE OF THE FINEST SHRUBS UNDER CULTIVATION. (See illustration on page 87.)

SYMPHORICARPUS.

Racemosus. (Snowberry.)—Flowers inconspicuous, rose-colored, in June and July; leaves thin, dark green; fruits large, milk-white, clustered, persistent until late in winter.

Vulgaris. (Indian Currant.)—Similar to the Snowberry, except that its fruits are red and that the smaller red berries cluster in thick ropes about the stems which droop beneath their weight.

SYRINGA. (Lilac.)

The Lilac appears to best advantage when massed in groups, and only a few varieties of but one or two colors. You may make any number of groups of the different colors, they are easily transplanted in either fall or spring. Moderately rich, moist soil suits them best. The dead flowers should be removed when the blooming season is over, as they give an untidy appearance; should not be pruned in winter or spring as it destroys the flowers.

Japonica. (Japan Tree Lilac.)—A species from Japan. A good sized tree. Exceedingly handsome when in bloom, and valuable for prolonging the Lilac season at least a month; foliage dark green, glossy, leathery; flowers in very large panicles, creamy, white, showy, scentless; makes a good specimen.

Jcsikaea. A variety of fine habit that is valuable for its late bloom. Upright with stout branches and broad, dark leaves; flowers lilac-purple, large, in large panicles, late in June.

Persica. (Persian Purple.)—A fine old species with slender branches and narrow leaves, it seldom grows more than three to five feet high. Its pale Lilac flowers are very fragrant and borne in large loose panicles. Very graceful.

Var. Alba. (Persian White.)—Same habit of growth as foregoing. Blossoms in long panicles white tinged with purple.

Vulgaris. (Common or Old-Fashioned Lilac.)—The familiar species of all fine old gardens, with dense panicles of lilac flowers, still the most fragrant of any.

Var. alba. (Common White Lilac.) Pure white, very fragrant flowers.

SINGLE VARIETIES OF SYRINGA VULGARIS.

Alba grandiflora. Very large white flowers in heavy panicles.

Charles X. Of exceptionally strong, rapid growth, with large, shining leaves and rather loose trusses of reddish purple flowers.

Marie Legraye. The great forcing Lilac. Flowers pure white, in large panicles. Handsome, also, for groups and masses.

Rubra de Marley. Rich rosy purple flowers.

Souvenir de Ludwig Spaeth. Dark purplish red flowers, large, and in long panicles. A distinct, superb sort that will give great satisfaction.

NEW DOUBLE LILACS.

Alphonse Laval. Very large panicles of a beautiful blue color, shading toward violet. Distinct and valuable.

Belle de Nancy. Great panicles of brilliant satiny rose, with a lighter, almost white center. One of the most effective sorts.

Jean Bart. Rosy carmine flowers in large, compact plumes.

Madame Casimir-Perier. White flowers in large, graceful panicles. A profuse bloomer. One of the very best sorts.

Madame Lemoine. Superb white flower-panicles. Fine and showy.

President Carnot. Flowers of a dainty lilac shade marked in their centers with white.

President Grevy. Flowers of a beautiful blue color, in huge panicles.

TAMARIX.—(Tamarisk.)

The tamarisks are very hardy shrubs of strong growth, foliage light and feathery, their flowers delicate and fringing, usually in some light shade of red or pink. They will grow anywhere. Lately the variety *T. Africana* has been used for hedging and it is indeed very pretty for that purpose; if pruned several times during the season, it is even finer than the best of Evergreen hedges and from a distance frequently taken for such.

Africana.—A tall, graceful shrub with small foliage like a Juniper; and delicate small rosy purple flowers, produced in spikes; very pretty.

Gallica.—Delicate pink or white flowers in slender-panicled racemes; leaves bluish green. An exceedingly pretty species.

Var. Indica.—Pink flowers in longer more wand-like sprays.

VIBURNUM.—(Snow Ball.)

Dentatum. (Arrowwood.)—A bushy shrub with bright green, heart-shaped leaves, which fade into rich purple and red. Creamy white flowers in flat cymes in late spring or early summer. Berries blue-black. Grows 8 to 12 feet in height.

Opulus. (Highbush Cranberry.)—Foliage yellowish-green, large, whitish, blooms in June. In the fall covered with red berries.

Var. sterilis. (Common Snowball.)—A well known favorite shrub of large size, with globular clusters of pure white flowers the latter part of May.

Plicatum. (Japan Snowball.)—Handsome plicated leaves; globular heads of pure white neutral flowers, early in June. It surpasses the common variety in several respects. Its habit is better, foliage much handsomer, flowers whiter and more delicate. One of the most valuable flowering shrubs.

Tomentosum. (Single Flowered Japan Snowball.)—Flowers pure white, borne along the branch in flat cymes, in the greatest profusion, early in June. Perfectly hardy, vigorous, and free-blooming.

WEIGELA. See *Diervilla*.

EVERGREEN CONIFERS

Evergreens are beautiful all the year and form grand specimens in time. We strongly recommend our customers to plant more largely of the hardy sorts. They are of special value for screens, hedges and wind breaks; they should never be set in the fall except in the south, and great care must be taken to avoid all exposure to sun and wind. In the following list we confine ourselves strictly to perfectly hardy species and varieties, such as are most useful for general planting. In transplanting Evergreens, so much depends upon the care of the planter in protecting roots from the air and sun, that we cannot guarantee them further than that delivery shall be made in first-class condition. We recommend Spring planting for Evergreens.

Pyramidalis Arbor Vitae.

ABIES. (Fir.)

Balsamea. (American Silver Fir.)—A regular, symmetrical tree, assuming the cone shape quite young, reaching 50 to 80 feet in old age. Leaves dark, lustrous green, lighter beneath.

Canadensis. (Hemlock.)—Described under Thuya.

Concolor. (White Fir.)—A native species, with long, broad foliage, bluish above and silvery beneath. Of all Fir trees, it best withstands heat and drought. Very hardy and grows rapidly; graceful and most desirable. Exceedingly rare.

Normanniana. (Nordmann's Fir.)—One of the finest of the Silver Firs. Symmetrical form. Vigorous and hardy. Massive dark green foliage, dark, shiny above, silvery beneath.

CURPESSUS. (Cypress.)

Lawsoniana. (Lawson's Cypress.)—A rare handsome conifer, that forms beautiful specimens 80 to 120 feet in height. The branches are frond-like in arrangement and droop gracefully at the tips, forming a dense, elegant pyramid. Their rich, deep green color is retained all winter.

JUNIPERUS. (Juniper.)

Hibernica. (Irish Juniper.)—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 hardihood is a general favorite.

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

Sabina. (Savin Juniper.)—Spreading or procumbent shrubs, rarely with erect stem. Branchlets rather slender. Leaves needle-shape, usually dark green. Valuable for rockwork.

Virginiana. (Red, or Virginia Cedar.)—A well known tree, with fine deep green foliage; variable in its growth; suitable for ornamental hedges.

Var. Glauca. (Blue Virginia Cedar.)—One of the handsomest forms of these hardy evergreens. Foliage is distinctly silvery gray, holding its color throughout the year. Attracts attention wherever seen. Should be in every collection of evergreens.

Var. Variegata.—Constant in its golden variegation; leaves finer than in the type. The three sorts form a handsome group.

PICEA. (Spruce.)

Alba. (White Spruce.) One of the very best conifers, especially for cold climates. Compact, upright, growing 60 to 70 feet in height, long-lived, retaining its branches to the ground, aromatic, drought-resisting, varies in color from light green to glaucous blue. A good species for growing in tubs.

Norway Spruce

grafting from selected specimens, but such trees are necessarily of higher price than ordinary seedlings.

Kosteriana. (Koster's Blue Spruce.)—A selected strain of the bluest form from the Colorado Blue Spruce. Very blue.

PINUS. (Pine.)

Austriaca. (Austrian or Black Pine.)—A remarkably robust, hardy, spreading tree; leaves long, stiff, and dark green; growth rapid.

Excelsa. (Norway Spruce.)--

A lofty tree, of perfect pyramidal form, 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. One of the best evergreens for hedges and wind breaks.

Inverta. (Weeping Norway Spruce.)—

A pendulous variety of the Norway Spruce, with larger and brighter foliage than that of the species. The lateral branches of the large trees are as drooping as a willow.

Pugens. (Colorado Spruce.)—

Perhaps the most attractive conifer in our entire list of available species. It is entirely hardy, of comparatively rapid growth, has an elegant glaucous green tint, and a perfect outline, combining so many fine points that we have no hesitation in recommending it for even the smallest collections.

Owing to the great diversity of color in this species, we have reproduced the brightest tints of blue by

Mugho. (Dwarf Mugho Pine.)—

A unique Alpine species, broader than its height and sometimes almost prostrate, forming a dark dome-shaped bush, 5 to 8 feet high. Used for planting on rocky banks, terrace slopes, small lawns, rockeries and near the sea.

Sylvestris. (Scotch Pine.)—A fine robust, rapid growing tree, with stout, erect shoots and silvery green foliage.

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

RETINOSPORA. (Japan Cypress.)

Pisifera.—An upright tree; foliage light green and feathery; the branches are somewhat pendulous at the ends.

Pisifera, Var. Aurea.—Much like the type in general characteristics, but with bright yellow foliage. When planted in combination with the green varieties, is valuable for its contrasting foliage.

Colorado Blue Spruce.

Plumosa.—Densely conical, with fern-like leaves of bright green, carried on erect, plummy branches.

Plumosa Aurea. (Golden Japan Cypress.)—One of the few really golden evergreens. The color of the young growth contrasts strongly with the darker shade of the other foliage. Striking and useful in many ways.

THUYA. (Arborvitae.)

The Arborvitae vary greatly in habit and color. They bear transplanting and pruning well and have many uses, especially in formal gardens. They are also well suited for bedding with other evergreens, for hedges, screens, shelter-beds and house decoration. All are neat and symmetrical in habit, dense, bushy, with flattened, frond-like leaves.

Occidenalis. (American Arborvitae.)—A well known variety of great value; it forms an upright conical tree of only medium size, and is, all things considered, the finest Evergreen for screens, being hardy and more easily transplanted. It grows rapidly, and with a little care, or rather by easy management, it soon forms a most beautiful hedge, very dense, and perfectly impervious to the sight. It is not adapted to turn stock, but forms a most desirable and ornamental screen to divide the lawn from other parts of the ground, or for any similar purpose.

Lutea. (Geo. Peabody's Golden Arborvitae.)—The finest and hardiest of the Golden Arborvitae. In bright, sunny situations and in cold winter weather, the south side of the tree has a coppery hue, tipped and shaded with yellow.

Compacta. (Parson's Compact Arborvitae.) Dwarf, dense habit; grows 3 to 4 feet high; one of the best for cemeteries; excellent for hedges.

Columbia and Queen Victoria.—Two varieties in which the young branches are tipped with white and silvery markings.

Ericoides. (Heath Arborvitae.)—A low bush, with soft, feathery foliage, light green in summer, changing to bronze in winter.

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

Hoveyi. (Hovey's Golden Arborvitae.) A fine compact bush, with numerous flat branches of yellowish green color.

Pyramidalis. (Pyramidal Arborvitae.) One of the most beautiful varieties, very erect and regular in form, resembling the Irish Juniper; foliage a deep green color, well retained in winter; perfectly hardy. Unlike the Juniper it is easily transplanted and sure to give satisfaction. One of the finest.

American Arbor Vitae.

Tom Thumb. A heath-leaved variety; hardier and lighter green than *Ericoides*.

Siberica. (Siberian Arborvitae.)

—This well-known popular variety is one of the most useful evergreens for the northern states, combining as it does excessive hardiness, regular conical outline, and a peculiar dark green and remarkably dense foliage. Hedges or screens formed of it are especially beautiful, and more attractive than those made from the species.

Orientalis. (Chinese Arborvitae.)—syn., *Biota Orientalis*.

Aurea. (Golden Arborvitae.)—A neat, compact bush of golden hue.

Semper-zurescens. (Ever-Golden *Biota*.)—Similar to the old Golden *Biota*, but hardier and retains the golden hue more permanently.

Orientalis Elegantissima. (New Golden *Biota*.)—In summer the young growth is bright golden yellow, but changes in winter to a purple or chocolate color; in cold weather the tips of the twigs on the sunny side of the tree are bright yellow, as if studded with golden beads; distinct and effective.

BROAD-LEAVED EVERGREENS

BUXOS. (Box.)

Sempervirens. (**Tree Box.**)—An evergreen shrub, with close-growing, oval, dark, shining foliage; stands pruning very well; thrives in almost any well-drained soil, and best in a partially shaded position. We can furnish plants in several forms, bush, pyramid and sandard.

Aurea.—Has bright golden yellow foliage, excellent for contrasts.

Suffruticosa nana.—The pretty Dwarf Box so much used for edging. Slow-growing, neat, dense; the best plant in cultivation for the purpose.

Variegata.—A beautiful small bush, having its shining leaves oddly marked with white.

DAPHNE.

Cneorum.—A dwarf evergreen, shrub, producing fragrant rosy lilac flowers in May and June; foliage dark green and glossy; a plant which every one wants at sight.

ILEX. (Holly.)

Opaca. (**American Holly.**)—Tree with spreading short branches; pyramidal head; leaves oval, with large, remote spiny teeth, rarely entire; dull green above and yellowish green beneath; handsome red berries.

KALMIA. (American Laurel.)

A small genus of North American evergreen shrubs, with leathery leaves and attractive flowers. They require moist, shaded localities, and well-drained soil.

Latifolia. (**Mountain Laurel, Calico-Bush.**) One of the most valuable shrubs for massing in woods and shady spots. It forms a medium-sized or large evergreen, with smooth, oval, bright green leaves. The pink and white flowers are borne in corymbs.

MAHONIA.

Aquifolia. (**Holly-leaved Mahonia.**) Handsome native evergreen of medium size, with shining, prickly leaves and showy, bright yellow flowers in May, followed by bluish berries. Quite useful in decorative planting for its neat habit and fine bronze-green leaves.

RHODODENDRON.

This superb genus, which comprises a great diversity of named varieties, is, without doubt, the most beautiful and attractive group in the entire list of ornamental shrubs. At maturity they form tall plants with large, leathery leaves. Flowers in large heads of white, rose, red and purple, with all the intermediate tints. To grow these plants successfully, it is advisable to secure a partially shaded location, with a light, fibrous soil; then with a frequent copious watering, they should thrive and bloom freely. Lime in the soil is a positive injury to them; after blooming, all seedpods must be removed to insure fine flowers the next year.

Catawbiense. (**Carolina Rose Bay.**) This parent of most of the hardy hybrid varieties is found on mountain ranges from Virginia southward. Flowers violet-purple, in large heads. When grown in masses they make a magnificent show. It seldom grows more than 4 feet high, but forms a symmetrical shrub, very ornamental for lawns.

Maximum. Found generally throughout New England and the Eastern states. Its foliage is a glossy green, taking on a deeper color when in shady positions. the flowers white or rosy white, being borne in June and early July. Grows 8 to 10 feet high.

HYBRID VARIETIES. Large list. All colors and shades.

HEDGES AND SCREENS

Twenty or thirty years ago the only hedges to be seen were the Osage, Orange, Honey Locust, and occasionally an American Arbor Vitae. These hedges were usually planted as dividing lines between property, and occasionally around the garden or lawn. At the present time, more attention is given to variety of form and foliage, and many pretty effects are seen in towns and villages. The ornamental hedge seems to have supplanted the iron and picket fences. It gives a more harmonious effect to property in general.

For hedge fences that will turn stock, the Honey Locust is perfectly hardy, of strong growth, and will flourish in almost any soil. The Osage Orange has been more generally used for this purpose as it is of more rapid growth and easier cultivated. Both stand trimming so that they can be made to assume any desired shape and, being covered with long, hard, and very sharp thorns, make a close, firm, and almost impenetrable barrier that will turn any ordinary farm stock. Among the Evergreens, we would suggest first the American Arbor Vitae and Norway Spruce as they succeed nearly everywhere, and are readily transplanted, and can be trimmed to any desired shape. The Siberian Arbor Vitae, Red Cedar, and Hemlock Spruce are also very fine for low hedges along walks and about gardens. The Tom Thumb Arbor Vitae, Mahoney Aquifolia, and Dwarf Box are very desirable.

Among the finest shrubs for deciduous hedges are the California and Common Privet. Each year we find that the use of the different varieties of Privet is growing. In many towns and cities the Privet is used more than all other varieties of plants and evergreens put together.

Berberis Thunbergi, Vulgaris, Purpurea, and Vulgaris all stand trimming well and are very ornamental for hedging. Japan Quince, Spirea Van Houttei and Tartarian Honeysuckle are also used and we recommend them highly. For low growing: Deutzia Gracilis or Lemoinei.

You will find these different varieties of evergreens and plants described elsewhere in this catalogue. We can supply them in quantities and different sizes.

Paeonia Beds.

VINES AND CLIMBING SHRUBS

Vines are useful in many ways. They give quick results when planted on a new place, before trees and shrubs become established. For covering fences, rocks, walls, banks and trellises, they are peculiarly adapted.

AKEBIA. (Quinata.)—A rapid growing climber, with dark green leaves and purple flowers. Blooms early in summer.

AMPELOPSIS.

Quinquefolia. (American Ivy or Virginia Creeper.)—A very rapid growing vine covered with heavy digitate leaves affording shade and of great beauty when changing to scarlet in autumn. The best climber to grow over porches, rocks or tree stumps. Very hardy.

Veitchii or Japan Ivy.

Veitchii. (Boston or Japan Ivy.)—The now famous Japan or Boston Ivy used so extensively to cover brick or stone buildings. The foliage is dense, completely carpeting a surface and the autumnal tints of green and red are unsurpassed for beauty. The plants when young should have a winter protection, but when well established no vine cares for itself equal to this superb variety.

ARISTOLOCHIA. (Dutchman's Pipe.)

Sipho. (Birthwort.)—A native species of climbing habit and rapid growth, with very large heart-shaped leaves and curious pipe-shaped, yellowish-brown flowers.

BIGNONIA. (Trumpet Flower.)

Radicans.—A strong climber. Foliage dark green and pinnate. Flowers in clusters trumpet shape, orange red, 5 to 6 inches long at intervals through the summer.

Grandiflora.—A variety having large dark orange colored flowers.

CELASTRUS. (Bitter Sweet.)

Scandens.—A native climber, with handsome glossy foliage and large clusters of beautiful orange-crimson fruits, retained all winter. Very bright in effect and charming for winter house decoration.

CLEMATIS, OR VIRGIN'S BOWER.

Of all the vines used for either shade or decoration none can compare with the Clematis in its many and various forms. As a climber for the veranda, a screen for fences, for pillars along garden walks, for training on walls or arbors, in masses on rock work, it has no rival among strong growing blossoming plants. Their delight is rich soil and a sunny situation, and are perfectly hardy. They should be well mulched with rotten manure in winter. The leading varieties are the Jackmanni, Henryi, Mme. Edouard Andre, Paniculata, Sieboldii.

LARGE FLOWERED VARIETIES.

Gipsy Queen.—Flowers rich, dark velvety purple. Late.

Henryi.—Flowers large, fine form, beautiful creamy white, vigorous grower and free bloomer.

Jackmanni.—This variety is better known than any other, and still stands as one of the best. It is a strong grower, and produces a mass of intense violet purple flowers, four to six inches in diameter, from June until October.

Madam Edouard Andre.—A distinct new variety, lately imported from France, very handsome red.

Kermesina. (splendida).—A choice variety of the utmost profusion of bloom; flowers medium size and bright wine color; a strong, free grower, producing shade in a comparatively short time.

Ramona.—A strong, rampant grower, and free perpetual bloomer. The flowers are very large, often measuring six to seven inches in diameter, and of the most perfect shape. Color rich lavender blue.

Star of India.—A very showy, profuse blooming variety, flowers reddish purple, with turkey red bar in the center of each flower leaf.

Sieboldii.—Large, bright blue flowers.

Clematis Jackmanni

SMALL FLOWERING CLEMATIS.

Coccinea.—A beautiful new variety, with bright scarlet, small, bell-shaped flowers, very choice and attractive.

Flammula.—An old and highly prized variety, fragrant, small, white flowers.

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

Viticella.—A rapid climber, with drooping blue or purple flowers through summer and autumn.

Clematis Paniculata.

DIOSCOREA. (Cinnamon Vine.)

Batatas.—The odd and quaint Cinnamon Vine, most conspicuous in fall when small tubers cluster in the axils of its dark, glossy, arrow-shaped leaves. The white flowers are small but fill the air with a delightful cinnamon odor.

LONICERA (Honeysuckle)

Brachypoda Aurea Reticulata. (Japan Golden-leaved Honeysuckle.)—Of vigorous growth, forming radiant festoons and masses with its clear golden leaves; flowers creamy white.

Japonica. (Chinese Twining Honeysuckle.) — Almost evergreen; flowers nearly white, blooming all summer.

Var. Halliana. (Hall's Japan Honeysuckle.)—Pure white and creamy yellow, very fragrant flowers; in bloom the whole season. Almost evergreen. Besides its ordinary uses as a climber, it is valuable for covering banks, bare places, etc., where grass will not grow.

Periclymenum, var. Belgica. (Dutch Honeysuckle.) Displays its pretty red and yellow flower-sprays constantly.

Sempervirens. (Scarlet Trumpet Honeysuckle.)—This and its varieties are among the handsomest species in cultivation. Flowers scarlet and trumpet-formed.

Var. fuchoides.—Coral red trumpets in large clusters.

Var. flava. (Yellow Trumpet Honeysuckle.)—Large, clustered yellow flowers.

Semperflorens.—Flowers yellowish white; fragrant.

LYCIUM.

Chinese. (Matrimony Vine.)—Sometimes trained as a shrub. Purple-flowered and showy-fruited. Extra vigorous in growth, bearing prodigious crops of large scarlet berries.

PERIPLOCA.

Graeca. (Silk Vine.)—A rapid growing, beautiful climber, with glossy green lanceolate foliage. Fine for arbors or trellises.

WISTARIA.

Magnifica.—Flowers in dense drooping racemes of a pale lavender color.

Multijuga.—A Japanese species with dark blue flowers, in racemes of astonishing length.

Sinensis. (Chinese Wistaria.)—A most beautiful climber of rapid growth, producing long, pendulous clusters of pale blue flowers. When well established it makes an enormous growth.

Var. alba.—Differs from the Chinese only in having pure white flowers.

Our Method of Spraying

ROSES

THE ROSE, "The Queen of Flowers," is justly one of the most popular in cultivation, and none gives better satisfaction to the lover of beautiful flowers when properly treated.

To obtain richness and luxuriance of foliage, and well developed flowers, it must receive good cultivation. With good treatment it will yield a varied, profuse and beautiful display of flowers from June to November.

To obtain the most satisfactory results they should be planted in well drained, rich deep, loamy soil. If not naturally rich and deep, it should be made so by trenching or spading to the depth of two feet and incorporating with it well prepared compost of rotted manure. For winter protection, and to keep the soil in fine condition, an application of compost should be given them late in Autumn, and spaded into the ground the following Spring.

Pruning is necessary to maintain a good shape, and to secure a good supply of young wood. This should be done in the Spring; the latter part of March is the best time. This is done by cutting off the previous year's growth to within three or four buds. The remaining buds will then throw out vigorous branches, and in due season produce a splendid bloom. This mode of pruning, however, is not applicable to climbing roses until the desired surface or space is covered.

HYBRID PERPETUAL ROSES

The perfect hardiness, free blooming quality, blooming at intervals from June to November, the perfect shape and rich colors of the flowers, varying from pure white to bright crimson and dark purple, together with the fragrance of nearly all varieties, combine to make the Hybrid Perpetual Roses the most beautiful and desirable class in cultivation.

To obtain the best results they should be planted in a rich, deep, well drained soil. They require an annual pruning, which should be done in the spring before the buds start. They are greatly benefitted by an application of long strawy manure placed around the stems to the space of several feet.

Alfred Colomb.

ALFRED COLOMB.—Dark Red.

Flowers large, of fine, globular form; a brilliant carmine-crimson. Raised from Jacqueminot. Extremely fragrant flower, and in every way a superb rose. Fine for general cultivation. Foliage large and handsome. A compact, handsome shaped, very attractive Rose.

ANNA de DIESBACH. — Very large and fragrant flowers of a rich carmine color. A notable hardy and superior garden Rose.

ANTONE MORTON. — Color beautiful bright clear pink, reverse of petals silvery rose; very sweet, in fact, an unusual Rose in every way.

BARON de BONSTETTEN.—A handsome dark rich velvety red rose, very double and full, fragrant. A splendid sort.

BEAUTY OF WALTHAM.—Beautiful bright crimson, very large and full, a free bloomer and deliciously perfumed.

CAPTAIN HAYWARD.—High-built, large, full, handsome flowers of crimson-carmine. Distinct, vigorous and free-flowering.

CLIO.—A Rose of perfect form and finish, with broad, thick petals, high, full center, beautiful from pointed bud to fully opened flower. The color is a delicate satiny blush, with slightly deeper center. The plant is strong and blooms freely, displaying its great flowers boldly on good stems against large, rich leaves.

COQUETTE des ALPS.—Pure white, sometimes shaded with a blush, large and full, a very profuse bloomer. One of the finest.

COQUETTE des BLANCHES.—Flowers of medium size, full and handsome. Pure white, sometimes slightly tinged with pink. One of the hardiest and finest of the white roses. A very free bloomer.

DINSMORE.—Scarlet crimson, large, double, very fragrant, free bloomer.

DÜKE OF EDINBURGH.—Brilliant crimson-scarlet, shaded with maroon.

DÜKE OF WELLINGTON.—Large, full, sweet, well-shaped; bright velvety red, shaded maroon, except at center, which burns with fiery red.

EARL OF DUFFERIN.—Rich crimson-maroon, with dark variety shadings. The flowers are large, full, globe-shaped, thick-petaled and very fragrant. Grows well and blooms freely, with many handsome buds in autumn. One of the finest dark Roses.

EUGENE FURST. Velvety crimson, with darker shadings; large, full, shapely, fragrant.

FRAU KARL DRUSCHKI.—The finest white Hybrid Perpetual Rose, with large, full flowers of splendid form. We consider it by far one of the best.

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

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

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

JOHN HOPPER.—A fine and free blooming old sort, with large, full, handsome flowers of fresh bright rose. We consider it by far one of the best.

JUBILEE.—A notable Rose of recent introduction, that ranks among the best dark sorts. Deep, flashing crimson, with shadings of velvety maroon; very large and quite fragrant. Of compact, bushy growth, with good dark foliage and long flower-stems.

JULES MARGOTTIN.—A light brilliant crimson, large, full and beautiful, a splendid old sort.

LOUIS VAN HOUTTE.—Vivid red, with crimson shadings; large, full; very distinct.

MABEL MORRISON.—A grand white rose, similar to Baroness Rothschild in all save color.

MADAME GABRIEL LUIZET.—Grand flowers of light silvery pink, produced quite freely; cup-shaped, very large, slightly fragrant; distinct, choice.

MARCHIONESS OF LORNE.—Long handsome buds, opening into large, full, cupped flowers, of rich, shining rose colors, shaded with carmine; perpetual blooming.

MAGNA CHARTA.—Bright, rosy pink, flushed with carmine, very large, full and double, fragrant.

MARGARET DICKSON.—

Of magnificent form, white with pale flesh center; petals very large, shell shaped and of great substance; fragrant, foliage very large, dark green; a vigorous grower.

MARSHALL P. WILDER.

—Raised from the seed of Gen. Jacqueminot. It is of vigorous growth, healthy foliage; flowers large, semi-globular, full, well formed; color cherry-carmine. In wood, foliage and form of flower it resembles Alfred Colomb. But the seedling excels that famous variety in vigor, hardiness and freedom of bloom. We can safely say it is the finest of its color.

MRS. JOHN LAING.—

For outdoor planting this is one of the best roses introduced for many years. Satiny pink; entirely hardy; and blooms almost constantly throughout the season.

Flowers of immense size, full and double, exceedingly fragrant, borne in great profusion on long, stiff stems. The buds are long and pointed and extremely pretty. Plant is vigorous grower.

Frau Karl Druschki.

PAUL NEYRON.—The largest Rose in cultivation, sometimes called the Peony Rose; color bright, fresh cerise-red. The plant makes a strong healthy growth, and has clean glossy foliage, blooms almost without intermission from June until late October. One of the most satisfactory of the H. P.'s.

PRINCE CAMILE de ROHAN.—A velvety blackish crimson Rose, of deep distinct shade; the darkest Rose in cultivation; large, full and very handsome. Free bloomer.

SOLIEL d' OR.—New; this magnificent variety like the Persian Yellow is perfectly hardy, it retains a good deal of the character of the Persian Yellow; its growth is

robust, very vigorous; the flowers large, full and globular, measuring three and one-half inches across, and fragrant; color superb, varying from gold and orange yellow to reddish gold. It has received numerous gold medals throughout Europe.

TOM WOOD.—Cherry-red flowers of fine size and fullness; makes a strong, clean growth, well furnished with heavy foliage and bold, long-stemmed flowers blooms with especial freedom in autumn.

ULRICH BRUNNER.—A Rose of beautiful form and finish, very striking from its color of brilliant cherry-crimson. The bush is vigorous, blooming continually in the open air, and displaying its superb glowing flowers on good stems.

VICK'S CAPRICE.—A novel, striped Rose, with ground-color, of soft satiny pink distinctly marked with white and carmine. It is large and full, with beautiful long buds that show the stripes to advantage.

Paul Neyron.

HARDY CLIMBING ROSES

AMONG these beautiful climbing plants, the PRAIRIE ROSES rank first. The perfect hardiness of this class of roses, their strong growth and luxuriant foliage, adapt them for covering arbors, walls, trellises, and unsightly objects, which, together with their immense clusters of beautiful flowers, commend them to all lovers of the beautiful. They require but little pruning, except thinning out weak or dead branches.

Crimson Rambler.

ANNA MARIA.—Light pink, changing to blush; blooms in large clusters.

BALTIMORE BELLE.—Pale blush, nearly white, very double, flowers in beautiful clusters, one of the best white climbers.

DOROTHY PERKINS.—A most beautiful new shell-pink Rose, having the same strong habit of growth as the Crimson Rambler. Very double sweetly scented; absolutely hardy.

EMPRESS OF CHINA.—Light red, changing to pink when fully expanded. A free continuous bloomer; flowers medium size.

GEM OF THE PRAIRIES.—A valuable Hybrid. It is a cross between Mad. Laflay and Queen of the Prairie; bright red bloched with white; large, very double and fragrant.

QUEEN OF THE PRAIRIES.—Bright, rosy red, striped with white; large and cupped; most beautiful and valuable of the class.

RUBIN.—Resembles Crimson Rambler, but has large flowers of a deep red or ruby color. Very attractive.

RUSSEL'S COTTAGE.—Rich crimson, medium size, very double and full; blooms abundantly.

THE RAMBLER ROSES.

Crimson.—This remarkable rose comes to us by way of England from Japan, the home of many of the most valuable flowering plants; its habit of growth is extremely vigorous, young plants often making shoots of from eight to ten feet in a season, is therefore a most desirable variety for trailing upon walls, trellises, etc., but can also be advantageously grown as a pillar Rose, (fastened to a stake) or by pruning back it may be kept in a bush form. It is also very successfully grown as a pot plant, and its perfect adaptability to all of these uses adds much to its value. The foliage is large and glossy, the plant looks like a mass of double crimson flowers when in bloom.

Pink.—Similar to others of this group, but with pink flower clusters.

Philadelphia.—An improvement on the Crimson, with larger trusses of flowers which are perfectly double and more deeply colored. The color does not fade out, and the foliage is handsome at all times. Splendid for covering pergolas and porches.

Yellow Rambler.—The only yellow hardy climbing rose. It has been thoroughly tested and found to successfully withstand without protection a continued temperature of zero or 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 from three to four weeks. The plant is even freer in growth than Crimson Rambler and soon makes a fine showy specimen.

White Rambler.—In habit of growth, foliage, manner of blooming and shape of flower this is identical with Crimson Rambler, differing in color.

Seven Sisters, or Greville.—Vary in color from blush to crimson; bloom in large clusters; not hardy.

Tennessee Belle.—A strong, vigorous climber and free bloomer; bright rosy blush.

NEW CLIMBING ROSES.

Flower of Fairfield. (Perpetual flowering Crimson Rambler.)—Of the numerous varieties, raised in the last few years, it is doubtless one of the best. Its flowers which are produced in marvellous profusion, are of a fine crimson color and more brilliant than the common Crimson Rambler. The growth is vigorous, flowering freely and continuously throughout the season.

EVERBLOOMING ROSES.

We group together under one general heading of Everblooming, all varieties that flower freely throughout the season. It comprises the Teas, Bourbons, Bengals, Polyanthus, together with all their numerous intermediate forms and hybrids. As a rule they are not entirely hardy in the Northern States without protection, but the Dwarfier kinds are readily preserved by cutting the entire plant down in the Autumn to within six or eight inches of the ground and covering with long, strawy stable manure. The exquisite buds produced by some of the varieties, and the delightful fragrance of others, especially the Teas, render them popular for house plants. They are also specially desirable for planting closely in beds.

American Beauty, (T)—Although strictly a Hybrid Tea, this elegant rose is usually classed among the Hybrid Perpetuals, owing to its vigorous growth. Very large, double, bright carmine red. Fine for forcing.

Bridesmaid, (T)—Clear bright pink of an exquisite shade. Grown chiefly for its large, solid and handsome buds; the stems are good, the foliage glossy. Excellent also for bedding.

Champion of the World, (B)—Quite free-blooming, and so hardy as to require little protection in this latitude. The flowers are large, full and fragrant, deep, rich rosy pink.

Clothilde Soupert, (P)—Pearly white but variable; the same plant often producing red and white blossoms; free bloomer and constant.

Hermosa, (B)—Light rose, large, full and double; blooms profusely in clusters; one of the best.

Helen Gould.—One of the hardiest ever-bloomers, color rosy crimson, flowers full and perfectly double; makes beautiful buds, a cross between Kaiserin Augusta Victoria and Mme. Caroline Testout.

La France, (T)—Delicate silvery rose, shaded with pink, often silvery pink with peach shading; very large, double and superb form. Flowers continually throughout the season. None can surpass the delicacy of its coloring; in fragrance incomparable; in form perfect; sweetest and most useful of all roses.

Maman Cochet. (T.)—The best pink Tea for bedding, on account of its vigor, hardiness, and lavish bloom. Flowers and buds are as large, full, perfectly formed and fragrant as those of any bud Rose grown under glass. The color is an exquisite silvery rose, with shading of buff and salmon.

Meteor, (H. T.)—A rich, dark, velvety crimson, ever-blooming rose, as fine in color as the best of the Hybrid Perpetuals; good size, very double, perfect in shape, either as buds or when fully opened; the plant is vigorous and remarkably free-flowering.

Pink Soupert, (P)—Beautiful lively pink, a great and constant bloomer and one of the best bedding roses.

Queen's Scarlet. (B)—Rich crimson-scarlet; a very free-flowering bedder.

Scuv. President Carnot. (H. T.)—A strong, clean, healthy grower, with handsome, bronze-green foliage and large, elegant buds. The flower is of fine size and shape, with heavy, thick, shell-like petal. Color delicate rosy flesh, shaded a trifle deeper at the center. A profuse bloomer.

Souvenir de la Malmaison, (B)—This justly popular old variety is a good grower and bloomer, especially in the open air. Flowers large, and very double. Clear flesh color with blush edges.

The Bride, (T)—A beautiful pure white sport from Catherine Mermet, very double, of good shape, and forces well. This is decidedly one of the most valuable introductions of later years. It is also remarkably free blooming.

White Maman Cochet. (T.)—Has all the good qualities of the pink variety in the way of hardiness and blooming, but its flowers are beautiful silvery white and exquisitely fragrant.

Baby Rambler.

MISCELLANEOUS ROSES.

Baby Rambler.—The world's greatest Rose. We have no hesitation in saying that the bushes of the Dwarf Perpetual Crimson Rambler are perfectly hardy and vigorous. Originated at Orleans, France, and is a Hybrid produced by crossing Crimson Rambler and the Glorie des Polyanthus. The flowering quality of the latter, the color of the Crimson Rambler, (clear, brilliant, ruby rose.)

It blooms in clusters and is very continuous. The time of blooming of the first umbel is not ended when the adjacent branches are ready to open with a considerable number of flowers, so that the period blooming is not interrupted until after severe frosts.

White Baby Rambler.—Same, with white flowers.

MOSS ROSES.

This division of roses embraces many of the most desirable qualities. The fine mossy buds, large fragrant flowers and perfect hardiness, make it a universal favorite. It is benefited by an application of well rotted manure, and a moderate pruning.

Admiral Dewey.—Dark red; very vigorous grower, one of the very best.

Countess of Murinais.—Pure white, large, very vigorous, one of the best white Mosses.

Crested, (Cristata.)—Distinct rose, fine, curiously crested buds.

Glory of Mosses.—Pale rose, very large, full and beautiful, very mossy and fragrant. One of the finest.

Henry Martin.—Fine rosy pink, large, very sweet and mossy.

Luxemburg.—Clear, deep crimson, large, very sweet and mossy.

Perpetual White.—Pure white, double, beautiful; vigorous.

Raphael.—Pinkish white, shaded with rose. A splendid rose.

Salet.—Bright rose, blush edges, large, profuse flowering. An elegant Moss.

AUSTRIAN ROSES.

This class flowers on extreme ends of wood of previous season's growth; very little pruning is therefore required.

Harrison's Yellow.—Double; bright yellow; very showy and fine.

Persian Yellow.—Deep bright yellow; small but handsome; double; a very early bloomer and much the finest hardy yellow rose. This does best when budded.

SWEET-BRIER ROSES.

Common Sweet-Brier.—Growth very vigorous, forming a tall bush; branches thickly clothed with numerous prickles.

LORD PENZANCE'S HYBRID SWEET-BRIERS.

Amy Robsart.—Charming deep rose.

Anna of Geierstein.—Rich dark crimson.

Brenda.—Delicate shade of peach.

Flora McIvor.—White, tinted with rose.

Meg Merrilies.—Bright Crimson, Distinct.

Rose Bradwardine.—Beautiful rose color.

ROSA RUGOSA.

This Japanese Rose forms a sturdy bush, 4 to 5 feet high, covered with large, dark green, glossy foliage, crowned with terminal clusters of 10 to 20 flowers, each 3 inches in diameter. Perfectly hardy. A valuable plant for the hardy border or shrubberies, its large handsome, scarlet fruits being very ornamental all through the autumn and early winter months. It also makes a splendid hedge, its foliage being impervious to the attacks of insects of all kinds.

Alba Rugosa.—Single, pure white, having five petals and highly scented.

Rubra Rugosa.—Single, bright rosy crimson succeeded by large brilliant berries of much beauty.

Agnes Emily Carman.—Flowers large, semi-double, fine in the bud state; rich, deep crimson. A remarkably free bloomer, and continues in bloom a long time.

Madam Georges Bruant.—Buds long and pointed, semi-double when open, white and fragrant, borne in clusters through the season; vigorous and hardy.

Blanc Double de Coubert.—Purest paper-white, blooming in clusters of from five to ten flowers; double, very sweet. A strong, rampant grower, having the true Rugosa foliage. Flowers nearly 5 inches in diameter, produced freely and lasting well. Perfectly hardy.

Belle Poitevine.—Very free and branching; every tip is laden with immense bouquets of large pink Roses. Buds very long; perfume exquisite and unique.

Charles Frederick Worth.—A hybrid Rugosa Rose of extremely strong growth, with attractive deep green foliage, more dense than other varieties. Flowers are deep crimson with carmine shadings.

Consul Ferdinand Meyer.—Large, cup-shaped, double silvery pink flowers, borne well above handsome rugosa foliage. Exquisitely perfumed and perfectly hardy.

New Century.—A splendid Rose of the Rugosa type, with clear, flesh-pink flowers 3 to 4 inches across, perfectly full and double. Its perfume reminds one of the sweetbriers, and is one of the most constant bloomers of its class.

Rubiginosa. (English Sweetbrier.)—An old garden favorite that is highly prized on account of the delightful fragrance of its leaves and young branches. It is perfectly hardy, and once planted requires very little care. It is particularly fine for hedges, and makes splendid single plants on the lawn.

WICHURAINA OR MEMORIAL ROSE.

Will creep over the ground like ivy, or can be trained up to a post or trellis. Hardy as grass, and will grow in sun or shade, poor ground or rich. Needs no protection, will take care of itself and bloom profusely every season, without attention. The flowers are single and very large, frequently five or six inches around, pure satiny-white, with bright golden center. They are borne in large clusters, covering the bush with a sheet of snowy blossoms during the early summer months.

Manda's Triumph.—Large double white flowers.

Pink Roamer.—Single, bright pink flowers with white center.

South Orange Perfection.—Remarkably free flowering; about one and one-half inches in diameter, soft bluish pink at the tips, changing to white.

Universal Favorite.—Flowers are very double, two inches and more in diameter, of a beautiful rose color, very fragrant.

TREE ROSES.

The Tree Roses are grafted on hardy stems 4 to 5 feet high, and thus form tree shapes. When in full bloom they are very handsome and are becoming more popular every year as the demand for formal gardens grows. It is very necessary to have varieties which will lend themselves to the severe pruning and training necessary to produce the tree form, and in this shape we offer only the Hybrid Perpetual or hardy class, with flowers of white, pink, scarlet and crimson.

HARDY PERENNIAL PLANTS

ACHILLEA. (Yarrow.)

Ptarmica. (The Pearl.)—Small double white flowers very valuable for borders and gardens, a profuse bloomer.

ANEMONE. (Windflower.)

One of the most showy of all autumn-blooming herbaceous plants. Blooms freely from August till cut down by frost. In light, somewhat moist, rich soil, the plants make a beautiful, hardy border or bed. A slight covering of leaves or straw is sufficient protection in most severe winters.

Japonica, var. alba.—Pure white, with yellow centers; large, single, long-stemmed flowers. Plant grows 2 to 3 feet high and blooms from September until frost. Fine for cutting.

Var. Prince Henry.—Large, semi-double, deep red flowers on stems $1\frac{1}{2}$ to $2\frac{1}{2}$ feet high. August to October.

Var. Queen Charlotte.—Large, semi-double flowers of silvery pink on stems 2 to 3 feet.

Var. Rose d'Automne.—Rosy lilac, large semi-double flowers on stems 2 to 3 feet high.

Var. Rcsea Superba.—Pale rose, 2 to 3 feet high, blooms from August to October.

AQUILEGIA. (Columbine.)

Caerulea. (Sky Blue Columbine.)—Flowers large blue sepals with white petals.

ARUNDO. (The Reed.)

Donax. (Great Reed.)—A hardy strong growing variety from Spain, grows 10 to 15 feet. Rich green broad pointed leaves.

BAPTISIA. (False Indigo.)

Australis. (Blue False Indigo.)—Two feet high, with deep blue flowers in pretty racemes during June and July. Give a sunny, well-drained position.

BOCCONIA.

Cordata. (Plume Poppy.)—Stately, growing from 6 to 8 feet high, with large foliage and long spikes of white flowers in August.

BOLTONIA. (False Chamomile.)

Asteroides.—Tall, 4 feet or more in height, with white, aster-like flowers in broad heads during August. A handsome plant for borders and masses.

Var. Lastisquama.—Same habit, but with masses of pale lilac flowers.

CAMPANULA.

Persicifolia. (Peach Bell.)—Grows $1\frac{1}{2}$ to 2 feet high and produces a great number of blue, salver-shaped flowers during June and July.

Var. Alba.—Same as the type, but with white flowers.

CHRYSANTHEMUMS.

Golden Queen. (Yellow.)—Hardy, large flowered.

Victory. (White.)

COREOPSIS.

Grandiflora.—Bright golden flowers on stems 2 to 3 feet long in May to July. Flowers are much larger and handsomer than the other variety.

Lanceolata.—A beautiful hardy border plant that grows 15 to 18 inches high and produces its bright golden yellow flowers in great profusion the entire season. Beautiful masses and a favorite for cutting.

CONVALLARIA. (Lilly of the Valley.)

Majalis.—Large, luxuriant foliage; flowers small, bell-shaped, in pretty racemes, and very fragrant.

DELPHINIUM. (Larkspur.)

Formosum.—The old favorite dark blue variety, grows from three to four feet high, very vigorous and free flowering; one of the best.

DIANTHUS. (Pink.)

Barbatus. (Sweet William.)—Among the most esteemed and valuable of hardy plants, producing flowers of a great variety of colors.

DIELYTRA OR DICENTRA. (Bleeding Heart.)

Spectabilis.—The showy, heart-shaped flowers of rosy crimson and silvery white of this plant are borne on a graceful, drooping raceme a foot or more in length. It is superb for the garden, and perfectly hardy everywhere. Flowers in April and May.

DIGITALIS.—(Fox Glove.)

Ornamental plants, bearing spikes of long tubular flowers. Very popular and much employed in gardens.

Purpurea.—Flowers purple, varying to white, in long terminal spikes; 2 to 3 feet. June to August.

ERIANTHUS. (Ravenna Grass.)

Ravennae.—Resembles the Pampas Grass, but blooms more abundantly. Attains a height of from nine to twelve feet. Being perfectly hardy, is a valuable grass for the decoration of lawns.

EULALIA.

These beautiful hardy grasses are deserving of the highest commendation. For the garden they are invaluable, being very showy and ornamental and of easy cultivation. They should be in every collection.

Japanica.—The type; a vigorous grower with large plumes; 4 to 6 feet.

Var. Gracillima Univittata.—A beautiful ornamental grass with narrow graceful foliage. Very valuable; 4 to 6 feet.

Var. Variegata.—Handsomely variegated leaves; 4 to 6 feet.

Var Zebrina. (Zebra-Striped Eulalia.)—One of the most beautiful of ornamental grasses; foliage marked crosswise with bands of white and green; 4 to 6 feet.

FUNKIA. (Day Lily.)

The Funkias all make handsome, showy plants with beautiful, broad ovate leaves, and large, lily-like, fragrant flowers, in large clusters. They like to grow in moist shaded places and form clumps 12 to 20 inches high. In bloom from July to September.

Undulata Variegata.—One of the most popular border plants cultivated; very striking foliage, green all splashed with white.

Lanceolata. (Day Lily.)—Handsome foliage of deep gloss green color, free blooming habit. Will do first class close to buildings or under shade of trees.

GAILLARDIA. (Blanket Flower.)

A genus of very ornamental, hardy plants. Flowers yellow or purple, 2 inches across, single on naked stems. Very showy. Early summer until autumn.

GYPSOPHILA.

Paniculata. (Baby's Breath.)—2 to 3 feet in height and most graceful in effect, with mist-like white flowers that are popular for cutting, as they give an air of grace and harmony to any arrangement. Blooms July to September.

HEMEROCALLIS.

Dumortieri.—Very dwarf and compact, 1½ to 2 feet high, producing an endless number of large, lily-like blossoms of a bright orange-color in June. The smallest plant will bloom freely the first year.

Flava. (Lemon Lily.)—A pretty plant with long narrow leaves and flower-stalks 2 to 3 feet high. These are crowned in June by beautiful lemon-colored flowers, 3 to 4 inches in diameter and delightfully fragrant.

Thunbergi.—Beautiful lemon-yellow, fragrant flowers from July to September. Grows 1½ to 2 feet high, and bears eight to ten flowers on each stalk.

HELIANTHUS. (Perennial Sunflower.)

Mollis Grandiflorus. ((Sunflowers).)—Light lemon-yellow large single. Foliage quite hairy.

HIBISCUS. (Mallow.)

Moscheutos (Swamp Rose Mallow.)—Large purplish pink or nearly white flowers. Grows 4 to 5 feet high, and blooms in August and September. One of the most gorgeous of perennials and attracts great attention wherever grown.

Var. Crimson Eye.—Immense flowers of purest white, with large centers of velvety crimson. Blooms very profusely, the plants being covered all summer with a wealth of most beautiful, attractive flowers.

HOLLYHOCK.

Single Mixed.—We have a splendid assortment of these majestic old-fashioned flowers which every one knows and loves. They grow 4 to 6 feet tall—higher at times—and bloom from July to August.

We offer a fine collection of double sorts in four distinct colors: Crimson, Yellow, Pink and White.

IRIS. (German Iris or Fleur de Lis.)

The following are the best of the standard sorts, usually in bloom at Decoration Day and are fine cut. When flowers are wanted for shipping purposes cut in bud and all buds will open fine and for garden display they have no equal. The following is no doubt the finest collection in America.

Aurea.—Golden Yellow.

Genuine Pallida Delmatica.—The Crowned Queen of the German Iris. Flowers exceedingly large and the most beautiful light blue, clear and pure, very vigorous and its head and shoulders above all other blue German Iris.

Honorable.—Golden yellow, lower falls reticulated crimson.

Mad. Chereau.—White, blue margin, very fine.

Parisiensis.—A very beautiful purple.

Stenophylla.—Very Fragrant lavender.

IRIS. (Fleur de Lis.)

Japonica. (Japanese Iris, Kaempferi.)—The flowers are broad and flat. They exhibit a wonderful variety of colors and shades and appear later than the others. They rank among the most desirable of hardy plants; succeed best in a moist soil.

LIATRIS. (Blazing Star.)

Desirable border plants, with long, dense spikes of rose, blue and purple flowers. Best varieties.

LAVANDULA. (Lavender.)

Vera. (Common Lavender.)—Fragrant foliage; flowers blue; 1 to 2 feet. July.

LOBELIA.

Cardinalis. (Cardinal Flower.)—Erect perennial, 2 to 4 feet high, with intense cardinal-red flowers from May to September borne in a loose raceme. One of the most showy and brilliant flowers of the garden.

Fulgens, var. Queen Victoria.—Brilliant scarlet flowers and purple foliage. Blooms May to September.

LYCHNIS. (Lamp Flower.)

Chalcedonica. (Scarlet Lychnis.)—Brilliant scarlet; large truss, 2 feet. June and July.

Var. Alba.—A form of the preceding with white flowers.

Viscaria Splendens fl. pl.—Double bright rose; one of the best perennials; 1 foot. June.

PAPAVER. (Poppy.)

Showy perennials with large flowers, of rich and striking colors.

Orientalc. (Oriental Poppy.)—Deep scarlet; large; very showy; eighteen inches. June.

PHALARIS. (Ribbon Grass.)

Arundinacea Variegata.—Green leaves, striped lengthwise with creamy white. Forms handsome clumps and contrasts well in beds or lines with other grasses.

HARDY PHLOXES.

These are justly esteemed as the finest of herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright, showy. bloom. They are hardly equalled by any other hardy plant for the decoration of the garden.

Athis.—Light salmon-rose; tallest of all.

Bridesmaid.—Pure white, with large crimson center.

Charlotte Saisson.—White, suffused crimson; tall.

Diplomat.—Large; lilac, with crimson eye.

Eclaireur.—Salmon-scarlet, with bright crimson eye.

Princess Louise.—White with pink eye, dwarf.

The Pearl.—Tall, white, late.

PHYSOSTEGIA. (Dragon-Head.)

Virginiana.—Forms tall handsome clumps, 3 to 4 feet high, with many spikes of odd-shaped gaping, rosy purple flowers through July and August. Variable in color.

Var. Speciosa Alba.—A taller form, with acutely serrate leaves and dense spikes of erect, imbricated white flowers.

PLATYCODON. (Chinese Bell-Flower.)

Grandiflorum.—A valuable perennial, forming a dense branching bush of upright habit, with neat foliage. From the middle of July until late September it bears a constant succession of handsome, large, bell shaped, deep blue flowers. Succeeds well in ordinary soil.

PLUMBAGO. (Leadwort.)

Larpetae.—A useful edging plant, bearing rich, deep blue flowers, and continuing in bloom till frost. An unusual color and always attractive.

PAEONIA.

Paenias have always held an important place among hardy plants, and with the wonderful improvement made during recent years, have established themselves among the leaders for popular favor. They are the nearest rivaling the Rose in brilliancy of color and perfection of bloom. They are hardier and more easily cultivated than their rival, and once planted, all is done, and each succeeding year adds to their size

and beauty. They are sometimes used for borders along walks, driveways and parks. As a hedge but one variety should be used, as the foliage of the different varieties is not alike. Do not expect too much of them the first year, they are a little slow in establishing themselves.

Rose Fragens.

ANEMORAEFLORA.—Dark Red.

ALEXANDRINA.—Pink.

BARON ROTHSCHILD.—Silvery rose center, bright rose.

BERTHA DHOOR.—Deep rose.

CAROLINA de MATHER.—Large deep crimson.

CANDIDISSIMA.—Bluish white.

CHINENSIS ALBA.—Double White.

CHINENSIS ROSEA.—Clear light rose.

DELACHEI.—Dark red.

DELICATISSIMA.—Light rose color.

DUKE OF WELLINGTON.—Sulphur yellow.

EDULIS.—Violet rose.

FESTIVA ALBA.—Fine, large, pure white flowers.

FESTIVA MAXIMA.—Extra large, white center, petals tipped carmine.

FULGIDA.—Crimson.

HENRY de MAY.—Light crimson, full shapely flower.

HUMEI.—Rose, one of the best.

INSIGNIS.—Fine violet pink.

JEANNE d'ARC.—Rose color, straw colored centers.

LOUIS VAN HOUTTE.—Brilliant red.

MARIA.—Blood Red.

MAD. LOISE.—Dark purple violet.

NIMROD.—Deep rose, shading lighter with age.

PIUS IX.—Purplish red, semi-double.

QUEEN VICTORIA.—White, yellow center.

ROSE FRAGRANS.—Deep rose, double, large and fragrant.

ROSEA DELICATISSIMA.—Pink.

ROSEA ELEGANS.—Pink.

RUBRA TRIOMPHANS.—Dark red.

TRIOMPHE du NORD.—Rosy violet.

RUDBECKIA. (Cone-flower.)

Laciniata, fl. pl. (Golden Glow.)—A distinct, tall-growing, hardy perennial, from 6 to 7 feet high. Foliage deeply cut, handsome bright green; flowers very double, rich golden yellow, 2 to 3 inches in diameter, borne on long, smooth stems, forming for the tall plant a solid head of bloom. Excellent for cutting.

Purpurea. (Purple Cone Flower.)—Splendid plant 3 feet high, with showy composite flowers, the drooping petals of which are reddish purple and the center a large, cone-shaped disc of brown thickly set with gold in spiral lines. Blooms in late summer. Shows well when planted in front of Golden Glow.

SALVIA. ((Sage.))

Pratensis.—The handsomest and most generally useful of the hardy blue-flowered Salvias. A good border plant, with whorled spikes of a distinct, fine blue.

SEDUM. (Stonecrop.)

These are unique and showy little spreading plants, with thick, succulent foliage various odd shapes and beautiful colors. The flowers, sometimes massed in broad clusters, are odd and interesting. Valuable for rockeries, borders and dry banks where nothing else will grow.

Acre.—A pretty evergreen species, with yellow flowers. Used for edgings, etc.

Spectabile. (Showy Sedum.)—A general favorite, used for a great variety of purposes. The rose-purple flowers are borne in broad, flat, showy heads. Very fine in autumn.

Var. Alba.—White flower-heads.

SPIRAEA. (Meadow Sweet.)

These excellent border plants thrive well in any soil, but grow best in rich loam.

Aruncus.—Light green pinnate foliage and immense branched panicles of small creamy white flowers. Blooms early in spring.

Palmata.—One of the handsomest herbaceous plants and very hardy; has beautiful palmate foliage, and a succession of showy deep crimson flowers. Very effective.

STOKESIA. (Stoke's Aster.)

Cyanea.—A native species producing beautiful sky-blue flowers like a China-Aster; September until frosts. One of the handsomest native plants; 12 inches.

TRITOMA. (Red-Hot-Poker.)

These are tall and striking plants, of much beauty when well placed and properly grown. The great spikes of red flowers, sent up from the center of a broad circle of green leaves, have quite a rich and tropical appearance. Give some protection in cold climates. Also classed as Kniphofia.

Pfitzeri.—Spikes a foot or more in length, thickly set with orange-scarlet to salmon flowers.

Uvaria. (Kniphofia Aloid.)—Dazzling scarlet-vermillion spikes of the sky-rocket order.

Var. Grandiflora.—A variety with larger flowers on longer spikes.

VERONICA. (Speedwell.)

Amethystina.—Amethyst-blue flowers in July and August; 2 feet.

Yucca Filamentosa.

Longifolia Subsessilis.—A pretty species with blue flowers; produced on spikes a foot long, continuing in bloom the entire summer and fall.

YUCCA. (Adam's Needle.)

Filamentosa.—An evergreen, with large, dense, circular tufts of long, stiff, sharp-pointed leaves, from the center of which rise the flower spikes in early spring. They are 3 to 4 feet high, stout, branching near the top, and supporting hundreds of large, drooping, waxen-white flowers, that remain perfect for several weeks. The effect of a good clump in full bloom is striking.

BULBS AND TUBERS FOR SPRING PLANTING

CANNAS.

There is no flower that gives such universal satisfaction, continuing in bloom the entire summer from the time they are planted late in the Spring. They are of great variety and color; tall growing and dwarf. We give a few of the most desirable varieties.

Canna Bed.

GENERAL COLLECTION OF GREEN LEAVED VARIETIES.

- Alphonse Bouvier.** (*The Weeping Canna.*)—Brilliant deep cardinal flowers in heavy heads that droop gracefully, high above the foliage. 5 to 6 feet.
- Beaute Poitevine.**—A splendid bedding Canna; defiant of drouth and heat, lavish of bloom; brightest scarlet. $3\frac{1}{2}$ to 4 feet.
- Buttercup.**—A profusely blooming dwarf Canna of thrifty habit, bearing large flowers of waxy, pure "buttercup" yellow. 3 feet.
- Duke of Marlborough.**—The darkest flowered Canna grown; rich crimson-maroon. 4 to 5 feet.
- Dwarf Florence Vaughan.**—Shorter and more even growth than the original, giving greater size and richer color to the flowers. $2\frac{1}{2}$ feet.
- Chicago.**—Light cherry-scarlet with faint purplish gloss, on large, loosely arranged spikes. $4\frac{1}{2}$ feet.
- Crimson Bedder.**—Conspicuous. Its abundant, tenacious bloom—a dazzling scarlet-crimson—dominates every landscape where planted. Especially recommended for large plantings of solid red. $3\frac{1}{2}$ to 4 feet.
- Papa Nardy.**—Magnificent heads of broad round-petaled flowers, a lively carmine rose. One of the best recent introductions. 4 feet.
- Queen Charlotte.**—A bed of this admirable Canna makes a gorgeous display; the wide, ragged band of gold contrasting sharply with the carmine flushed center of scarlet. Large headed and prolific. $3\frac{1}{2}$ feet.
- Robt Christie.**—A superior variety, energetic and very productive. The flower spikes are long and compact on tall stems. Color, orange, with deep scarlet laid on closely in fine streaks. 5 feet.
- Souv. de Antoine Crozy.**—Very brilliant and attractive, one of the showiest in our collection. Rich crimson scarlet, bordered widely with golden yellow. $3\frac{1}{2}$ feet.
- The Express.**—Foliage wide spreading and low, about 2 to $2\frac{1}{2}$ feet high, literally crowned with massive flat heads of bloom. Color, rich vermillion.
- Venus.**—The softest and daintiest blossom that ever crowned a Canna plant. Warm rosy pink of waxen texture, with an irregularly mottled border of creamy yellow. The green foliage is clean and brilliant. $3\frac{1}{2}$ feet.

DARK FOLIAGE CANNAS.

This section of our Canna department is rich in high coloring. The foliage presents all dark shades of bronze, red, maroon, chocolate and plum, besides being gorgeous with bloom.

- Black Beauty.**—Of majestic beauty. Leaves are from 2 to $2\frac{1}{2}$ feet in length, with coarsely crimped edges, stiffly erect and artistically arranged; a heavy claret maroon, shimmering with the bronze black lustre of changable silk. 5 to 6 feet.
- David Harum.**—Foliage, dark glossy bronze and plum; flowers borne freely in loose trusses, in color orange scarlet, spotted vermillion, with conspicuously protruding pistil of amber. 3 to $3\frac{1}{2}$ feet.
- Egandale.**—A very showy and popular dark chocolate bronze, flowering profusely in shapely spikes of cherry-red. $4\frac{1}{2}$ feet.
- King Humbert.**—Kingly in every attribute. Large, heart-shaped leaves of purple madder brown over bronze, the dark ribs sharply defined, crowned with immense heads of Orchid-like flowers. Individual petals measure two to two and one-

half inches across; color, velvety orange-scarlet flecked carmine, rose tinted at margin and base. A combination of leaf and blossom incomparably beautiful. 4 to 4½ feet.

President Carnot.—Foliage suggestively marked in wave-like rifts of sea green and purplish maroon; flowers, bright scarlet. One of the best dark bedders. 4½ feet.

GIANT ORCHID-FLOWERED or ITALIAN CANNAS.

A distinct race of Cannas noted for the immense size of their Orchid-like flowers, often 5 to 6 inches across. All of these varieties have glossy green leaves.

Burbank.—A thrifty plant, sending up many stems surmounted by close clinging flowers of lemon yellow, their gracefully opening throats revealing a thick spattering of bright scarlet. 6 feet.

Italia.—Great crinkly petals of clear yellow, irregularly overlaid with varied shades of orange scarlet. Nothing more charming. 5 feet.

Louisiana.—Soft, glowing scarlet with orange throat markings. Flower heads are large and gracefully shaped, with extra large petals having that satiny finish characteristic of the Orchid-flowered class. Growth is tall and erect, with handsome leaves of dark green, and reddish stalks. 6 feet.

Pennsylvania.—Lustrous, wavy petals of the largest size, in which the deepest shades of orange and scarlet are exquisitely blended. Individual petals 2 to 2½ inches wide, make up flowers and trusses of imposing proportions, the flower stalks rearing their lovely burdens high above the foliage. 6 feet.

Mrs. Kate Gray.—This glorious creation, a cross between Mad, Crozy and Italia, is one of the finest Cannas in our lists. Flowers reach the limit in size and quality, and are borne profusely. Color soft orange, delicately shaded with carmine; distinct dotted yellow throat. 6 feet.

CALADIUM, (Elephant's Ear.)

A grand tropical looking plant, a favorite for grouping on the lawn, bordering sub tropical groups, or banking against buildings with high foundations. In deep rich soil, frequently watered, they produce enormous leaves, frequently four feet long by three feet wide. Height 4 to 7 feet.

Dahlias.

DAHLIAS.

DAHLIAS are among the most magnificent flowering plants, producing a profusion of flowers of beautiful form and brilliant colors. They may be had in bloom for three or four months. Their culture is simple and easy. Plant in rich, deep soil, about the first of June, or as soon as danger from frost is past. Plant about three feet apart each way. In dry weather they are greatly benefited by a heavy mulching of leaf rot or short manure.

WINTERING.—After frost has destroyed the bloom cut the stem off about three inches from the ground, and with a spade lift them from the bed. Expose to sun till well dried, then store in a dry room or cellar, where they will not be reached by frost. We are prepared to furnish the most popular and best varieties.

GLADIOLUS.

GLADIOLUS are universally admired for their magnificent flowers, which are of the richest colors. To obtain a succession of bloom, they should be planted fortnightly, from the first of April to the beginning of June. They will then produce a succession of blooms from July until November. Plant in good, dry, sandy loam, from two to four inches deep, according to size of bulb. In Autumn, when the leaves turn yellow, the bulb is sufficiently ripe to take up. After taking up, they should be sun dried for a day or two, then put in a dry cellar and kept from the frost.

We have a fine collection of these bulbs, and can furnish the finest sorts in cultivation.

Gladiolus.

Flowering Bulbs for Fall Planting.

CROCUS.

Naturalized in the grass, or planted thickly in irregular lines, as a border for taller growing bulbs, or grown in any way whatever, the Crocus is always a cheery and charming little flower. It opens among the first flowers of early Spring, while the snow yet lies white on north hillsides, in a cold, dull time, when its bright colors are much appreciated. Blue, White, Stripped and Yellow.

GELANTHUS, SNOWDROP.—(Nivalis)

This, the earliest of Spring flowering bulbs is universally admired for its elegant snow-white drooping blossoms. Plant thickly in groups in some sheltered spot, and the flowers will surprise you before the snow is all gone.

HYACINTHS.

The Hyacinth is probably the most useful and popular hardy bulb grown. It delights millions of flower lovers throughout the world with its matchless beauty and rare fragrance. Every home could be cheered in winter and every garden be glorified in spring with the sweet breath, beautiful colors and buxomly formed trusses of wax-like flowers, for the Hyacinth is amenable to the most diverse treatment, endures most severe hardships, and blooms most gratifyingly in winter or spring as desired. It may be grown in pots or in glasses, or in the garden. The colors, shades and tints are wonderfully varied. Order by color only.

LILIES.

The Lily has always been deservedly a favorite. They are most graceful in lines, brilliant in delicacy of color, and of delightful fragrance. They succeed best in a dry, rich soil, where water will not stand in winter. After planting they require very little care, and if not disturbed for several years, they will bloom more freely than if taken up annually.

Auratum, (Gold Banded.)—Flowers very large, of a delicate white color, thickly dotted with rich, dark crimson spots, with a bright golden band through the middle of each petal.

Candidum.—Large pure white, fragrant. A handsome and desirable variety.

Harrisi, (Bermuda Easter Lily.)—Flowers large, trumpet shape, with a delightful fragrance. A remarkably free bloomer, valuable for forcing or out-door planting.

Longiflorum.—Large, white, trumpet-shaped, borne in large clusters, very fragrant.

Lancifolium Album.—Pure white, a very delicate and beautiful variety.

Lancifolium Rubrum.—An exquisite variety, flowers white and dotted all over with crimson spots, free bloomer.

Speciosum Album.—Very fragrant large flowers, pure white with a green band running through the center of each petal. One of the best.

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.

Tigrinum, (Double Tiger Lily.)—Bright orange scarlet, with dark spots.

NARCISSUS.

There are no hardy bulbous plants which have more points of merit than the Narcissus. Perfectly hardy, growing and doing well in almost any and every position, sun or shade, moist or dry. All conditions seem to suit it, and every vacant corner in the garden, amongst the grass, under the trees, etc., etc., could not be used to better advantage than by filling with Narcissus. They are equally desirable for pot culture for winter flowering.

TULIPS.

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. Should be planted in October or November. Order by color.

Auratum.

SPRAYING CALENDAR.

PLANT.	1st Application.	2nd Application.	3rd Application.	4th Application.	5th Application.
Apple —Canker worm, codling moth, bud moth, scab caterpillar.	Spray before buds start, using copper sulphate solution.	After the blossoms have formed, but before they open. Bordeaux and Paris Green.*	Within a week after blossoms have fallen, Bordeaux and Paris Green.*	10 to 14 days repeat.	10 to 14 days later, Bordeaux or weak copper sulphate.
Cherry —Rot, aphid, curculio and slug.	Before buds start, use copper sulphate solution. For aphid, Kerosene emulsion.	When fruit has set, Bordeaux and Paris Green.*	10 to 12 days later, if signs of rot appear, repeat.	10 to 12 days later copper sulphate solution weak.	Repeat if necessary.
Currant —Worms, mildew.	As soon as worms are seen, Paris Green.*	If they reappear, repeat adding Bordeaux for mildew.†	If worms still trouble, pyrethrum or hellebore.	After fruit is picked, Bordeaux.	
Gooseberry —Mildew, worms.	As leaves open, Bordeaux and Paris Green.	In 10 to 14 days repeat with both.	10 to 14 days later, sulphate of potassium on English varieties.	10 to 14 days later, repeat if necessary.	If mildew persists after crop is gathered, Bordeaux.
Grape —Flea-beetle, fungous disease.	Before buds swell, copper sulphate solution and Paris Green.	When first leaves are half grown, Bordeaux and Paris Green.	As soon as fruit has set, repeat.*	10 to 14 days later, Bordeaux mixture if disease is present.	If necessary very weak copper sulphate solution.
Peach, Apricot —Leafcurl, curculio, mildew and rot.	Before buds start, copper sulphate solution.	As soon as fruit has set, Bordeaux and Paris Green.	10 to 12 days later, Repeat.	10 to 12 days later, repeat.	If rot persists use weak copper sulphate solution every 5 to 7 days.
Pear —Leaf blight, scab, psylla and codling moth.	Before buds start, copper sulphate solution.	Within a week after blossoms fall, Bordeaux and Paris Green.	10 to 12 days later, repeat.	10 to 16 days later, Bordeaux.	10 to 16 days later, Bordeaux.
Plum —Black knot, rot, fungous diseases, curculio.	As buds start, copper sulphate solution. Cut out knots and burn.	When fruit has set, Bordeaux and Paris Green.*	10 to 12 days later repeat.	10 to 20 days later, Bordeaux.	Weak copper sulphate solution, as is necessary.
Quince —Leaf and fruit spot, rot.	Before buds start, copper sulphate solution.	When fruit has set, Bordeaux and Paris Green.*	10 to 12 days later, repeat.	10 to 12 days later, Bordeaux.	Bordeaux or copper sulphate solution, as necessary.
Raspberry, Blackberry —Anthracnose, rust.	Cut out badly diseased canes. Spray with copper sulphate solution before growth starts.	When new canes are one foot high, spray with Bordeaux mixture.	10 to 14 days later repeat.†	When crop is gathered remove old canes, thin new ones and spray with Bordeaux mixture.	
Rose —Black spot, red spider, aphid.	Aphis: Kerosene emulsion.	Black spot. Spray plants once a week with weak copper sulphate.	Red spider; Kerosene emulsion to under side of foliage.	Aphis: Kerosene emulsion.	
Strawberry —Rust.	Just before blossoms open, Bordeaux and Paris Green.*	When fruit has set, Bordeaux * or weak copper sulphate solution.	As soon as berries are harvested, Bordeaux, if to be kept longer.		

SPECIAL NOTES.

For **BLACK KNOT** on cherries and plums, cut out and destroy by burning the discarded parts as soon as discovered.

If **RED RUST** appears the entire stools affected should be cut out and burned.

YOUNG PLANTS should be sprayed with Bordeaux mixture at the time of the first and third applications to bearing plants.

For **APHIS** on all plants use kerosene emulsion.

EXPLANATION—When an asterisk (*) is used it cautions against spraying with poison while the plants are in blossom, a dagger (†) indicates that there is danger of making an application within three weeks of the time the fruit is to be used as food; while the number of applications recommended will be found desirable in seasons when the fungi are less troublesome a smaller number may often suffice.

FORMULAS.

BORDEAUX MIXTURE—Copper sulphate, 6 pounds; quicklime, 4 pounds; water, 40 to 50 gallons. Dissolve the copper sulphate by putting it in a bag of coarse cloth and hanging this in a vessel holding at least 4 gallons, so that it is just covered by the water. Use an earthen or wooden vessel. Slack the lime in an equal amount of water. Then mix the two and add enough water to make 40 gallons. The liquid is then ready for immediate use but will keep indefinitely. If the mixture is to be used on peach foliage it is advisable to add an extra pound of lime to the above formula. When applied to such plants as carnations or cabbages it will adhere better if about a pound of hard soap be dissolved in hot water and added to the mixture. Use for rots, molds, mildews and all fungous diseases.

COPPER SULPHATE SOLUTION—Copper sulphate, 1 pound; water 15 gallons. Dissolve the copper sulphate in the water when it is ready for use. This should be applied to foliage, but must be used before the buds break. For peaches and nectarines use 25 gallons of water. Use for fungous diseases.

KEROSENE EMULSION—Hard soap, $\frac{1}{2}$ pound; boiling water, 1 gallon; kerosene, 2 gallons. Dissolve the soap in the water, add the kerosene and churn with a pump for 5 to 10 minutes. Dilute 10 to 25 times before applying. Use strong emulsion for all scale insects, for insects which suck, as plant lice, mealy bugs, red spider, thrips, bark lice or scale. Cabbage worms, currant worms and all insects which have soft bodies, can also be destroyed with this emulsion.

PARIS GREEN—Paris Green, 1 pound; water, 200 gallons. If this mixture is to be used upon peach trees, 1 pound of quicklime should be added. Repeated applications will injure most foliage, unless lime is added. Paris Green and Bordeaux mixture can be applied together with perfect safety. Use at the rate of 4 ounces of the arsenites to 50 gallons of the mixture. The action of neither is weakened, and the Paris Green uses all caustic properties. Use for insects which chew.

HELLEBORE—Fresh white hellebore, 1 ounce; water, 3 gallons. Apply when thoroughly mixed. This poison is not so energetic as the arsenites, and may be used a short time before the sprayed portions mature. Use for insects which chew. Can also be used dry by dusting on plants.

LONDON PURPLE—This is used in the same proportion as Paris Green, but as it is more caustic it should be applied with two or three times its weight of lime, or with Bordeaux mixture. The composition of London Purple is exceedingly variable and unless good reasons exist for supposing that it contains as much arsenic as Paris Green, use the latter poison. Do not use London Purple on peach or plum trees unless considerable lime is added. Use for insects which chew.

LIME, SULPHUR AND SALT—Stone lime, 15 to 30 pounds; flowers of sulphur, 15 pounds; salt, 15 pounds; water, 50 gallons; slack the lime in a small quantity of hot water, gradually adding and thoroughly stirring in the sulphur. Dilute the mixture with 12 gallons of water and boil in an iron kettle or cook by steam in a covered tank or barrel for one and one-half hours. Then add salt, continuing the boiling for one-half hour more. Fill vessel up with water to the required 50 gallons. Strain wash through a fine-mesh strainer and apply hot. In using an iron Kettle, keep the mixture vigorously boiling and thoroughly stirred to prevent caking and burning of materials. Wash cooked by steam is more easily prepared and better made. Apply wash just as buds begin to swell in the spring. Cover all parts of the tree with a heavy coat of the wash. The wash seems best adapted to orchardists who have not yet learned to use petroleum with safety or are afraid that their trees are beginning to show injury from the oil or will not stand many more applications of it. It is especially recommended for the treatment of peach trees. It is believed that the substitution of one and one-fourth pounds of blue vitriol dissolved in hot water for the salt results in a quicker acting wash. This formula is known as the Oregon wash. Use for scale and fungous diseases.

Any of the Agricultural Experimental Stations will furnish bulletins so arranged that the grower may see at a glance what to apply, when and how to make the applications.

SPRAYING OUTFITS

If you wish to purchase a first-class
SPRAYING PUMP
we will send you circulars and
prices of the best pump made, on
application.

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VIEWS OF STEAM TREE DIGGER. A LATE INVENTION OF MERIT, SUCCESSFULLY OPERATED IN OUR NURSERY.

THE ILGENFRITZ HOMESTEAD.