Historic, Archive Document

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

62.41

INDEXED

BOOK OF HORTICULTURE

BY CHARLES E. GREENING

PLANT OF THE GREENING NURSERIES

THE GREENING NURSERY CO.,
MONROE, MICHIGAN

LARGEST GROWERS OF TREES IN THE WORLD

OUR HUMBLE BEGINNING IN 1883

A POOR BEGINNING often makes a good ending. In 1883 we were in humble circumstances, as the above picture shows, and our outfit was as meager and commonplace as any farm home. Charles E. Greening, now president of The Greening Nursery Company, and his brother, George A. Greening, and their reliable old horse were ready for work without even a bank account or any nursery stock to supply their start. But they were willing workers and had thirty acres of good land, which was to be the humble beginning of the greatest nursery business in the world.

We are as proud, now, of the beginning, as we are of the wonderful growth of our business enterprise. From 30 acres of farm land to 1500 acres of choice nursery, in twenty-eight years, is a just reason for self-congratulation.

The late J. C. W. Greening.

The late J. C. W. Greening, founder of Greening's Nurseries, was a professional gardener in Germany. He came to America in the forties and began the nursery business in Monroe in 1850. He was the father of Chas. E. Greening, now president of The Greening Nursery Company, and probably one of the best posted men on the nursery and landscape business in America.

THE GREENING NURSERY CO.

MONROE, MICHIGAN

Established 1850. Capital Stock \$200,000.00.

OFFICERS:

CHAS. E. GREENING
President
Horticulturist

BENJ. J. GREENING
Vice-President
General Manager

ROY M. SPERRY
Secretary and
Treasurer

These men have learned that a strong organization is necessary to carry on a large, well instituted business and have surrounded themselves with a force of efficient helpers

TRADE MARK

This is an organization of experts. The development of such a vast business and a perfectly harmonious system has always been the aim and purpose of The Greening Nursery Company, and from this high standard of proficiency we invite customers. Come—we have everything that a reliable nursery can offer you.

Largest Growers of Trees in the World.

OUR NEW OFFICE BUILDING.

Our new offices are located in the central part of Monroe, corner of Monroe and Second Streets, only one block and across the street from the electric railway waiting room. This is a beautiful location, and a fine large building erected and equipped at a great expense. The office rooms are large and convenient and well adapted to the tremendous business conducted by the Greening Nursery and Landscape Company.

An enormous quantity of mail is handled daily by a large force of expert office assistants. The Detroit and Toledo interurban cars pass our doors every thirty minutes.

OUR FACILITIES

1500 ACRES OF THE RICHEST LAND

Your attention is directed to our facilities, briefly sketched in the following paragraphs:

We now have 1500 acres devoted to the propagation of nursery stock. The soil is the richest and most fertile sort of black loam, underlaid with a porous clay subsoil. Thousands of dollars have been expended in underdraining and improving the soil for the growing of the highest quality of nursery stock. Our climate, too, is one of our big assets. It is lovely, cool and healthy, and tempered by the breezes of Lake Erie, which lies only a mile or two away. Such conditions as these never fail to produce perfectly hardy and healthy stock with clean, smooth, sturdy bodies and large bunches of fibrous roots. Now, is it any wonder that this parcel of land upon which Greening's BIG Nurseries operate, is justly called one of the richest in America?

OUR MAMMOTH STORAGE CELLARS—LARGEST IN THE WORLD

These grand storage buildings give an interesting example of modern genius in the storage and care of nursery stock. They are eight in number, built of quarried stone and representing the investment of large capital. Total area of storage room, 200,000 sq. ft., being the largest in the world; capacity, over thirty million trees. With the facilities we have for the perfect storage of stock, we are prepared to meet emergencies arising from shipping stock during the winter and late in spring. Stock is handled and packed in these buildings without exposure to sun, wind and frost. The carelessness among nurserymen generally in handling trees, if seen by planters, would prove a big surprise. Live trees are handled too much like brush from the clearings. Is it any wonder that there are so many disappointed planters? Under our system of winter storage and packing we actually retain the perfect growing condition without deterioration in any form, from the time the tree is dug until the planter receives it ready for planting. A cold storage room to hold over stock for very late shipments is in connection with these buildings.

Careful Handling and Skillful Packing

We beg to call the attention of planters to a sad fact. We refer to the careless handling of nursery stock by nurserymen before shipment and the slipshod manner of packing. A vast amount of nursery stock reaches its destination in a condition fit only for the brush heap, as the result of careless work and handling at the nursery. Trees are often allowed to lie exposed to wind and sun for days, and in many instances are shipped without necessary packing material to keep them in fresh condition while in transit. Such trees when received by the planter are worthless for transplanting, though hardly ever discovered by the planter until too late. We employ only the best and most faithful help for digging, handling and packing, and it is always done under our own personal supervision, in the most careful and skillful manner. The rule of keeping the stock fresh and moist all the while under our care is strictly enforced. Our stock always arrives in good condition, even if shipped across the continent. The roots are always placed in a thick puddle of clay mud before packing them away into the boxes, bales or into a car, and are filled in with plenty of moist packing material to insure safe transportation to destination. In point of careful handling and skillful packing our system is unsurpassed.

Our system of packing and shipping is quick, sure and reliable.

A FIELD LECTURE ON SOIL RENOVATION

The Greening Nurseries are noted for their soil fertility, which produces a very luxurious growth of trees. The secret lies in scientific tilage. Many Agricultural Colleges send their students here for postgraduate study, and this view pictures Mr. Greening delivering a field lecture on green manuring.

Preparation For and Setting Out The Orchard

The Site and Soil for an Orchard.

In the matter of selecting a site for one or more kinds of fruit, the question of soil and location is of utmost importance. On it often depends success or failure. An elevated location having good surface and air drainage is, in most instances, preferable to low, level lands. Even on the highlands, pockets or depressions in the land must be avoided. Avoid hill-tops and extremely hilly or rough land. Underdrainage is recommended on level ground for good results—it makes the soil loose, fertile and warm besides aiding in many other ways.

The slope or exposure of a site must also be considered when determining the best location for an orchard. Generally a southern slope warms up earlier in the spring than a northern or eastern exposure. This induces early blossoming and fruiting, which may sometimes be desirable, but trees on a southern slope are much more susceptible to sun scald and winter injury than on any other exposure. Fruit growers generally prefer a northern or eastern exposure because they usually have strong soils, are more retentive of moisture and are not so susceptible to winter injury or the last spring frosts.

The different kinds of fruit vary considerably as to hardiness in our northern climates. The apricot is very tender and should receive very careful consideration when locating the site for such an orchard. The peach is nearly as tender and the plum follows closely. Apples, pears, and quinces are not so tender and, therefore, it is not so necessary that only the most favorable site be chosen for them. These three fruits are also about the last to blossom in the spring.

The different fruits require different types of soil, but all do their best in strong, deep, well-drained soil. In general the apple, cherry, peach, plum and quince do best on a light or gravelly loam soil, while the pear and grape do best on a heavy soil. The apple adapts itself well to a wide variety of soils.

An orchard without Banana Apples is like a Yankee dinner without pie—incomplete.

MODEL ORCHARD OF GREENING'S TREES THREE YEARS OLD

TREES TRUE TO NAME. This all-important subject is now occupying a prominent place in the minds of orchardists. Only large nurseries that raise all their own trees can be safely relied upon. We recommend our trees to our customers true to name, and our large and rapidly growing business and staunch integrity is a safeguard to the purchaser. Our perfect system of handling makes it safe for you to buy your trees of Greening's Big Nurseries.

The Selection of Varieties.

One of the most important and difficult problems that confronts the fruit grower and farmer, is the selection of varieties for his orchard. In making his choice he cannot be too careful and should be guided not only by his own preferences, but also the purpose of the orchard (whether for home or market use) and the locality. If the orchard is for home use it should contain varieties affording a succession of fruits for as large a part of the year as possible. Every variety should be of high quality—part suitable for dessert and part for cooking.

In choosing varieties for the commercial orchard, the fruit grower must consider the demands of the markets which he expects to supply. The markets of this country differ greatly as to their likes and dislikes; as for instance, the east generally wants a white peach, Chicago a yellow one; New York is a good market for Greenings, while Boston prefers Baldwins; often a fruit considered inferior in one market is highly valued in another. While this is true to a large extent now, the consumer is gradually cultivating a taste for the choicer varieties.

Varieties differ also as regards their hardiness and adaptability to different climatic and soil conditions. Some varieties do comparatively well almost anywhere, but most of them are more or less affected by different environment. Therefore, the prospective fruit grower should make a careful investigation to determine what varieties do best in his locality and conclude from this which varieties will be best suited to his particular site and soil. In selecting varieties for the commercial orchard it is well not to choose too many. Too many varieties are difficult to care for and sell and will not bring as good prices as two or three varieties.

In planning an orchard for the market it is well to consult for advice those with experience and knowledge upon the subject. It is also well to consult a reliable nurseryman and in this connection we cheerfully offer our services. Our wide range of experience and knowledge of fruit growing for market enables us to give good reliable advice to planters. We will gladly answer all questions in this respect, honestly and fairly. Planters may consult us with the utmost confidence.

The Best Trees to Plant.

It is by all means advisable to secure first-class trees, but medium in size for their age. They should be free from injurious insects and diseases, should have a healthy root system, with enough good sized roots to hold the tree firmly in the ground and a plenty of fine roots. Not all varieties have straight, smooth trunks and this should be taken into consideration.

THE APPLE TREE ILLUSTRATED

Planters seem to have so little knowledge of trees that we append illustrations and descriptions of the various sizes that make up the tree ordinarily planted by the orchardist. To meet the wants of the thousands of our planters, many of whom have their own ideas about what kind of a tree they want, we grow both the high and low-headed trees. The picture and descriptions will convey ideas of different kinds of apple trees grown for orchard planting:

No. 1—Budded apple tree one year old from bud, 3-year crab root; average height about $2\frac{1}{2}$ to $3\frac{1}{2}$ feet. An excellent orchard tree for low heading.

No. 2—Low-headed grafted apple tree two years old, 3-year crab root; an ideal orchard tree; average height about 3 to $4\frac{1}{2}$ feet. Grown and trained especially for the low-top orchard.

No. 3—High-headed grafted apple tree, first grade size, three years old, 4-year crab root; average size $4\frac{1}{2}$ to 6 feet.

No. 4—High-headed grafted apple tree of medium grade size, 4-year crab root; average height $3\frac{1}{2}$ to 5 feet.

The best trees to plant, irrespective of climate and location, are such as are grown in a cool and temperate climate. The great State of Michigan is noted far and wide for its cool, moderate and healthy summer climate, making it the most popular health resort of the northern states; also for its great fruit growing industry. Being surrounded on three sides by the waters of the Great Lakes, it has the most favorable climatic conditions for the growing of hardy and healthy nursery stock. Trees grown in this climate are harder and better adapted for transplanting than those grown in milder climates, and will make lasting and profitable orchards.

Many a person has become rich by planting an orchard.

THE GRAFTING ROOM, HOME OF THE WHOLE-ROOT GRAFT.

In this department the most rigid care and greatest perfection of detail in the work of grafting, tying, handling and storing the grafts is absolutely necessary to insure success. Here is the birthplace of the whole-root graft. The scions are cut late in the fall and, together with the crab-apple seedlings, are stored in the cellars for grafting during the winter. The tying is done with waxed string by means of a gasoline-driven machine. **ONLY THE STRONGEST IMPORTED FRENCH CRAB-APPLE SEEDLINGS ARE USED,** roots that are far superior to the American grown in firmness of wood and size. Trees grown from these roots are harder and stronger in every respect than American grown roots.

Care of the Young Trees Before Planting.

Immediately after receiving the trees or plants from the nursery they should be thoroughly moistened and wrapped or covered to prevent drying out. Bring them home at once and heel-in without delay. The trench should be dug at least fifteen or eighteen inches deep. Loosen the lower band of the bundle, wet the trees thoroughly and place them in the trench. Cover the roots and press the ground down firmly around them. Trees which are to be heeled-in over winter should be placed in a trench with the tops leaning toward the south at an angle of about 45 degrees, the soil should be carefully placed around the roots to exclude all air and the trees well banked for protection. It is often advisable to cover about two-thirds of the tree with soil. Evergreen boughs and snow are both excellent to cover them over winter. For heeling in over winter select a place where water will not stand, away from buildings and meadows, out in the open field where mice will not injure them. Strawberries, raspberries and blackberries if well dampened can be kept in a cellar until ready to plant. Some fruit growers prefer fall shipment, and heeling in over winter; the advantage claimed, is in having the stock for very early spring planting. We strongly recommend spring delivery and planting, because we can guarantee to bring the trees to the planter as early in spring as it is advisable to plant.

Distance for Planting.

Most of our old orchards were planted too closely. The planters forgot that in later years the trees would develop large tops and extensive root systems. If trees are planted too closely together they not only interfere with each other but also hinder spraying and cultivation. The kind of fruit and often the variety as well will determine the proper distance to plant. The planter must consider whether the variety is an upright or spreading grower; for example, the Northern Spy as compared with the Wagener.

Safe distances for planting under ordinary and normal conditions:

If you contemplate planting an orchard, write us for suggestions.

THE IDEAL LOW-HEADED TREE.

Low-headed peach tree fifteen months after planting in the orchard of The Grand Traverse Fruit Company at Empire, Michigan. Notice what an ideal tree can be formed by low-heading. Ask them about Greening's trees.

Distances for Planting

Apples	35 to 50 feet apart	Grapes, (trellis)	8 feet apart
Pears, Standard	18 to 25 feet apart	Grapes, (arbor)	6 feet apart
Pears, Dwarf	10 to 15 feet apart	Gooseberries	4x6 feet apart
Sweet Cherries	25 to 40 feet apart	Currants	4x6 feet apart
Sour Cherries	18 to 24 feet apart	Raspberries, Red	2x7 feet apart
Plums	18 to 24 feet apart	Raspberries, Black	3x7 feet apart
Peaches	18 to 24 feet apart	Blackberries	3x7 feet apart
Apricots	18 to 24 feet apart	Dewberries	3x7 feet apart
Quinces	10 to 16 feet apart	Strawberries	1x4 feet apart

Planting Table

Distances Apart Each Way	Number of Trees or Plants required per Acre	
	Square System	Hexagonal System
4 feet	2723	
5 feet	1742	
6 feet	1210	
8 feet	681	
10 feet	435	
12 feet	302	
16 feet	170	
18 feet	134	154
20 feet	108	124
25 feet	70	80
30 feet	48	55
35 feet	35	40
40 feet	27	31
45 feet	22	25

When you buy Greening's trees you get the best.

Grafts
Piece-RootFrench Crab
Whole-Root-GraftsNo. 2
SeedlingsSeedlings
No. 1

PIECE-ROOT VS. WHOLE-ROOT TREES.

Above is shown the piece-root and whole-root graft, also No. 1 and No. 2 fruit tree seedlings. Each one of the bundles contains the same number of grafts and seedlings. The superior value of the whole-root trees must be readily apparent even to the inexperienced; still there are nurserymen who will argue that piece-root and No. 2 seedlings are equal to whole-root and No. 1 seedlings. We use only the strongest whole-root stock and the results are most gratifying. We beg the intending planter to consider the value and trueness of variety of our trees. *We use French Crab-apple roots only.*

Intercropping and the Use of Fillers.

To plant an orchard and then wait for it to come into bearing is a rather long time investment and few farmers or fruit growers can afford to wait until then without receiving some returns from the land occupied, and the labor and expense connected with it. This difficulty may be overcome by growing bush fruits, annual crops or early bearing and maturing fruit trees as fillers. But if you plant fillers, do it with the determination to remove them just as soon as they begin to crowd the other trees, or when the permanents come into bearing. If the filler plan is adopted you must remember that you must make greater efforts to conserve the moisture and fertility of the soil.

Peaches and Plums make good fillers in most localities. Pears should seldom be planted among apples because of the difference in cultivation required for these two kinds of fruit. Of the apples, Wagener, Grimes, Oldenburg, Wealthy and Yellow Transparent are successfully used as fillers.

Mixed Planting.

Many varieties will not bear well when planted alone or in large blocks, because those varieties are more or less self-sterile. They require the pollen from other varieties to fertilize and cause the setting of fruit. Inasmuch as all varieties benefit by cross pollination it is good practice to plant not more than four or five consecutive rows of one variety.

Self-sterile and self-fertile varieties*

Apples more or less self-sterile: Yellow Belleflower, Chenango, Gravenstein, Tompkins King, Northern Spy, Primate, Roxbury, Esopus, Tolman.

Apples mostly self-sterile: Baldwin, Greenings, Oldenburg, Red Astrachan, Yellow Transparent.

Pears more or less self-sterile: Anjouleme, Anjou, Bartlett, Clairgeau, Clapp Favorite, Howell, Kieffer, Lawrence, Louise, Sheldon. Winter Nellis.

Pears generally self-sterile: Bosc, Seckel.

Plums more or less self-sterile: Gold Drop, Italian Prune, Satsuma.

Plums generally self-fertile: Burbank, Lombard, Damsons, Bradshaw.

*Bailey's Principles of Fruit Growing, pg. 229.

THE WONDERFUL BOSCH PEAR

Scientifically improved under the Greening Method, the Bosch Pear will revolutionize fruit growing. Its profits as a market pear are astonishing. From \$3.00 to \$5.00 per bushel an average price. Large size $3\frac{1}{2}$ to 5 inches, a good late fall keeper; the most luscious, honey-like flavor: beautiful golden color, productive and early bearer. Considered years ago as an impossible variety to grow with success on account of its feeble, straggly growth. Under the Greening Method we top-work the Bosch on the stem of the Kieffer and French Pear root, thus changing the tree to a strong, vigorous grower. We trade mark every tree. See pages 14 and 33.

THE PEDIGREE TREE

The Pedigree Tree is the tree that has been propagated by means of grafting or inoculation with the scions taken from a bearing orchard tree. As far as we know, we are the only nursery company that is making a practice of improving all the old leading standard varieties of commercial orchard trees, by a system of careful selection of scions taken from orchard trees that have shown marked superiority in size, color and quality of fruit, which has repeatedly taken the highest prizes at the fruit shows, and has attracted general attention in point of excellence.

Luther Burbank, the wizard horticulturist, at his home in Santa Rosa, Calif., (in conversation with the writer) highly endorsed our system of breeding up the Pedigree Tree and commented upon it as being one of the highest ideals in horticultural research ever before attempted. Mr. Burbank emphasized his remarks by stating that our system of breeding Pedigree Trees would prove to be worth millions of dollars to the fruit growers of this country.

The discovery of the Kihlken Smock Peach, a single variety which is a very much improved Smock, found in an orchard of Beer Smock, is, in our estimation, worth millions of dollars alone to this country. We leave it to the reader what it means to the fruit growers of this country; what it means to breed up hundreds of varieties of fruits into the Pedigreed Trees, that will produce fruits of a high and improved quality.

Mr. Cressey, horticulturist, in a recent number of The Saturday Evening Post, published an article on the Pedigree Tree propagation from scions taken from bearing trees, saying among the many good things in favor of this idea, that "It would pay the fruit growers to pay double the price for Pedigreed Trees, considering the great benefits we would derive from them after they come into bearing, and the great value such an orchard would have over the trees grown in the ordinary way."

In this great work we have the co-operation of the leading horticulturists, agricultural colleges, and thousands of our customers, who are working hand in hand with us in improving the varieties of our standard hardy fruits.

Fruits, Animals, Vegetables and Grains Degenerate

One of the laws of Nature is that all things that are reproduced and bred over and over again, tend to become weakened in many instances, like the peach blow potato, "run out". This is especially true in fruit trees that are being grafted and intergrafted from year to year without any attempt to renew or bring in new stock to improve the varieties.

Our system of breeding the Pedigreed Tree has been endorsed by the best authority in the country.

High-Headed and Low-Headed Trees

This picture illustrates high-headed and low-headed trees as seen in three different orchards. In the orchard on the left is a small tree whose crown is higher than a man's head. This tree is badly trimmed and the top entirely too high. The larger tree back of the man has a low crown and strong framework, but the top of it is allowed to grow too high. The tree on the right is ten years old and fully demonstrates what can be done with Greening's Low-Headed Tree System.

Greening's Low-Headed Trees

WILL ADD MILLIONS TO THE WEALTH OF THE COMMERCIAL FRUIT GROWER. SOME ADVANTAGES OF THE GREENING LOW-CROWN SYSTEM.

1. Our new system of low-heading all kinds of fruit trees brings the fruit closer to the source of water supply, and this is important, since 95 per cent of the fruit is water.
 2. Spraying high-headed trees is expensive. It costs only about one-half as much in labor and materials to spray low-headed trees.
 3. There is a great saving of labor in pruning and thinning.
 4. The expense of picking is greatly reduced for reasons that the picker can pick the entire crop from a step-ladder or an elevated platform.
 5. A low-headed tree has a stronger framework than one that is perched up high on a tall trunk. Hence there is less injury to the limbs by wind storms or heavy crops, and also less loss from wind-falls.
 6. A low-headed tree suffers less from sun-scald, winter injury and other diseases because there is less exposed surface.
 7. A low-headed tree develops a larger, stronger root system.
 8. The quality of the fruit is much improved and the yield greatly increased.
- So important is this subject of low-heading that we have published a special bulletin on the subject. Mailed free to all who request it.

Cultivating produces more and better fruit.

TOP-WORKED BOSCH PEAR ORCHARD.

A photograph of an orchard of top-worked Bosc pears on the farm of Mr. G. W. Griffin at South Haven, Michigan. This orchard has long been the attraction of many horticulturists from far and near, and enjoys the reputation of being the most profitable fruit orchard in the entire Western Michigan fruit belt. Unlike other varieties of pears, this orchard of Bosc yields a heavy crop regularly each year. When you plant an orchard of Greening's Top-worked Bosc Pears, you have one of the greatest assets any farm can possess.

Greening's Top-Worked Trees

A Scientific Triumph, Outwitting Nature

To change the nature of a tree by scientific treatment may well be termed "Outwitting Nature." Since it has been found that the body or stem of a tree controls and regulates the formation and development of the root system—and, likewise, the top of the tree—it is possible to completely change the nature of a tree without in any way affecting the quality of the fruit, by infusing into it a hardier, more productive and more vigorous element of tree growth; and by giving it a stronger, more vigorous and deeper growing root system. This new science, as applied in the Greening Method, completely sets aside and corrects any feeble or weak habit of growth, thus changing the weak grower and shy bearer to a strong, vigorous and productive tree.

Our mammoth storage cellars preserve every tree perfectly.

What The Greening Science has Done for Horticulture

The Bosc pear, a late fall variety, well known for many years as a fruit of unsurpassed richness and flavor, and indisputed as the most delicious desert pear known, has as an orchard tree, been considered worthless because of its miserable and weak habit of growth; but under our scientific treatment it has been restored to a strong, thrifty and heavy bearing tree.

THE GRAFT.

Notice how completely the union has taken place between scion and stock. We have tested the strength of a number of these grafted trees by bending them over to see if they would break, but so perfect was the union that invariably the break occurred either above or below the graft.

For the Bosc we top-graft on the stem of the Kieffer with French pear roots, thus combining three splendid elements into one. The combination is conducive to make a vigorous growing and prolific tree, as well as a strong, hardy trunk which will stand the extremes of heat and cold, and likewise will produce and carry a heavy crop of fruit. When it is considered that the Bosc brings the highest price of any pear grown, frequently selling for as high as \$4.00 to \$5.00 per bushel in the commercial markets, it will readily be seen what top-grafting has done for this one variety of fruit alone.

The Northern Spy Apple Changed to Early Bearing

By many the Northern Spy is considered to be the most valuable apple in cultivation; and yet many fruit growers have been deterred from planting it because of the well known fact that this variety requires a long period of time, at least twelve years and often more, to come into bearing. By our system of top-grafting we have overcome this difficulty, and are bringing the tree into early fruiting. Our method of top-working the Northern Spy causes a complete change in the tree without in any way affecting the character or quality of the fruit. The process of top-working, as is well known to all horticulturists, has a tendency to force any variety to come into early bearing.

The Red Canada, Sometimes Called Steele's Red, Completely Restored by The Greening Method

It is a well known fact that the Red Canada is one of the choicest and most valuable varieties of all winter market apples. Because of its beautiful, rich red color, its excellence of quality, and its wonderful keeping and shipping qualities, the Red Canada is of such great market value that it generally brings from one to two dollars more per barrel than the other winter varieties. Moreover, it is especially valuable for exportation to distant countries. However, on account of its poor and feeble growth, this valuable variety has been discarded from the list of profitable fruits by nurserymen and fruit growers.

Under the Greening System of treatment, by top-grafting the Red Canada on the stem of the Gideon (a tree considered to be the most vigorous grower and hardiest of all apples) and the use of the French Crab root as a foundation, all weakness of growth of the Red Canada has been eliminated. Not only that, but we have also produced by this system an orchard tree that will bear heavily of an excellent quality of fruit each year, instead of every other year as is common with many of our well known varieties. This change which we have brought about in the Red Canada now places it on the list with the most profitable varieties of American apples. The Gideon stock has a tendency to force a strong, vigorous, downward-growing root system and to establish the tree deeply in the subsoil. The combination of stock used to top-graft the Red Canada, is in every way suited to make the tree hardy, productive and long lived. What we have done for the Red Canada is possible to do with all other varieties, that in any way show weakness of growth, tenderness of wood, unproductiveness, or any other undesirable feature.

A THREE MONTHS OLD ORCHARD.

Orchard of apples with peach fillers owned by Mr. George K. March of Hillsdale, Mich. The trees were planted April 1913, and the photograph taken July 22, 1913. Shows what Greening's Pure Pedigree Bred trees do in three months.

The Wagner Apple Improved By The Greening Method

The weakness of the Wagener is largely in its habit of overbearing. The trunk and main limbs of the tree are also subject to sun scald and frequently the extreme winters of the northern latitude cause considerable injury.

Again our method of top-grafting has its valuable features on this choice market variety, for it absolutely eliminates every possible danger of injury to the trunk of the tree from either the sun or the cold. In top-grafting the Wagener we use the Northwestern for the stock, because we have found that there exists perfect harmony between the strains of these two varieties. The Northwestern is a tree of iron-clad hardiness and a strong, thrifty grower, whose trunk is never affected by the extremes of the elements. The two form a splendid combination, giving to the Wagener a more vigorous growth and crops of a normal yield each year; and hence a longer life. Furthermore, sun scald and all other diseases caused by atmospheric conditions are eliminated.

In the foregoing we mention only three varieties of apples of entirely different characteristics, but they practically illustrate the three main objectionable features usually found in the apple family. All varieties of apples having any of these objectionable features, referred to in the three varieties mentioned above, may be treated in exactly the same manner with the most complete success. Under this treatment we are overcoming some of the serious obstacles that have presented themselves in the past to the American fruit grower.

Anyone having a desirable strain of fruit can have them top-worked by us, provided arrangements are made in proper time for the shipment of the scions. During the past season we received scions from a large number of fruit growers, to be propagated in our nurseries by the Greening Method.

RED CANADA APPLES.

FRUIT DEPARTMENT

Our Horticultural Department on scientific research has given special attention to the improvement of the apple tree. Among fruit products, the apple is now considered the leading article of food throughout the world. As a health food it is absolutely unsurpassed. It is eminently proper that the apple should receive special attention.

The world is certain to profit millions by our new scientific discoveries in tree growing and training for the "ideal orchard tree".

The apple orchard may be filled in with so-called fillers, such as cherries, peaches or plums, which come into bearing in three to four years, producing many crops before the apples grow large enough to cover the ground. A large profit may be made from the orchard before the apples come into bearing. (See page 9.)

SUMMER APPLES

Bough (Sweet Bough)—Large; pale greenish yellow; tender and sweet; moderate grower and good bearer. August.

Carolina Red June—See Red June.

Early Harvest (Early June)—Medium to large; pale yellow; fine flavor. Tree a moderate, erect grower and a good bearer. Middle to end of August.

Early Strawberry—Medium; striped with deep red; tender, subacid and excellent; a poor grower but productive. August.

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

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

Red June—Medium size; red; flesh white, tender, juicy, subacid; and abundant bearer; moderate grower. July.

Strawberry—See Early Strawberry. Late Strawberry and Washington Strawberry.

Sweet Bough—See Bough.

Tetofski—Hardy as a crab. Fruit small size, nearly round; yellow, beautifully striped with red; flesh white, juicy, pleasant acid and aromatic. July and August.

Yellow Transparent—"The most valuable early apple ever introduced." Tree an upright grower and a very early and abundant bearer. Fruit of good size; skin pale yellow; flavor acid and very good. Ripens from five to ten days ahead of Early Harvest. July. (See colored illustration.)

WRAPPING APPLE GRAFTS BY GASOLINE POWER

Here we show our latest graft wrapping machine, operated by a gasoline engine. Two wrapping machines are shown. One man with machine will wrap over 15,000 whole root grafts in a single day, more than three times as many as by hand, and the work is far superior to the old method in point of quality as it insures a better union of the graft. *Note whole-root graft in picture.*

AUTUMN APPLES

Alexander (Emperor)—Of Russian origin. Very large; deep red or crimson; flesh yellowish white. Very hardy. Sept. and Oct.

Autumn Strawberry—See Late Strawberry.

Bietigheimer—A rare German variety, very recently introduced. Fruit large to very large; skin pale green color.

Chenango—Medium size; oblong and indistinctly ribbed; of a light color, splashed with dark crimson; flesh white, juicy, very mild and tender, slightly subacid. Sept.

Duchess of Oldenburg—See Oldenburg.

Fall Pippin—Very large; yellow; tender; juicy and rich. Tree vigorous. Oct. to Dec.

Golden Sweet—Large, round, pale yellow, rich and sweet in flavor, good to very good quality. Good as market apple. Sept. and Oct.

Gravenstein—Large, striped and beautiful; tender, juicy and highly flavored; vigorous and productive. Sept. and Oct.

Jersey (Jersey Sweet)—Medium; striped red and green; very sweet, rich and pleasant. Good grower and bearer. Sept. and Oct.

Late (Autumn) Strawberry—Medium; streaked; tender, juicy; fine, productive and desirable. Sept. and Oct.

Maiden Blush—Rather large, oblate; quite smooth and fair; pale yellow with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. Sept.-Oct.

Munson—Large; pale yellow with red cheek; tender, rich and good. Fine grower and bearer. Sweet. Oct. to Dec.

Oldenburg (Duchess)—Of Russian origin. Equal to Winter Banana in hardiness. Large size, roundish; streaked with dull red and yellow; flesh whitish, juicy; flavor slightly subacid. Tree a vigorous grower, very hardy; very early and abundant bearer. While it is indispensable in the North, it is almost equally so in the South. We confidently recommend it for the or-

OUR FUMIGATING HOUSE

TREES FREE FROM DISEASE AND INSECTS—FUMIGATION

Pursuant to the requirements of the state law, we have built two large fumigating houses in which all stock is thoroughly fumigated with Cyanide of Potassium and Sulphuric Acid before shipment, as prescribed by law, which absolutely destroys all insects, also fungus in any form, without injury to the trees. A wagon load of steam-dug trees, showing large bunches of roots, has been brought into the fumigator, and our chemist is in the act of putting in the charge of chemicals previous to closing the air-tight doors.

chard as one of the most valuable sorts for market or domestic use. Sept.

Pippin—See Fall Pippin, and Yellow Newton.

Pumpkin Sweet—A very large, round, yellowish russet apple, very rich and sweet. Valuable. Oct. to Nov.

Twenty Ounce—Very large, nearly round; yellow, striped with red; quality good; vigorous and good bearer. Nov. to Dec.

Washington Strawberry—Large, yellow, shaded, splashed and mottled with rich red; crisp, tender, juicy, brisk subacid; a hardy, vigorous grower and an early and abundant bearer. Sept. and Oct.

WINTER APPLES

Arkansas (M. B. Twig)—Very large; dark red, nearly black. Tree hardy and very productive. Very valuable market variety in the West. Nov. to April.

Arkansas Black—Tree very hardy and thrifty; an early and uniform bearer: the apple is large, smooth and round, black dotted with whitish specks; the flesh is yellow, very juicy and delicious flavor; one of the best keeping apples. Specimens have been kept until August the following year.

Bailey Sweet—Large; deep red; tender;

rich, sweet; moderate, upright grower, good bearer. Nov. to April.

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

Banana—See Winter Banana.

Bellflower—See Yellow Bellflower.

Ben Davis—A large, handsome, striped apple of fair quality; tree very hardy, vigorous and productive; a late keeper; highly esteemed in the West and Southwest. Jan. to May.

OUR GROUP OF CHAMPION BUDDERS

An aggregation of skilled workmen in the art of budding trees. A small army of active people selected from the most reliable, skilled and intelligent help at the nursery. With this force we are able to bud about 85,000 trees per day. The varieties are carefully guarded against mixture so that no strangers may get in.

Canada Red—See Red Canada.

Delicious—A good sized apple with the surface almost covered with a beautiful, brilliant dark red and blending to a golden yellow at the blossom end. The flavor is sweet, slightly touched with acid. Flesh fine grain, crisp and juicy. A very valuable market variety. Nov. to Jan.

Esopus (Spitzenburg)—Medium to large; deep red; flesh yellow, crisp, subacid, highly flavored; tree a light grower, but bears and grows well when transplanted in rich soil. Nov. to March.

Fallawater—Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant subacid flavor; tree a strong grower and productive. Nov. to Jan.

Fameuse (Snow)—Medium size, roundish, handsome, deep crimson; flesh snowy white, tender, juicy, highly flavored and delicious. Productive and hardy. Oct. to Jan.

Gano—Tree very healthy, vigorous, hardy, having stood 32 degrees below zero without injury. A rapid grower, large and spreading in orchard; fruit spurs

numerous, shoots long and smooth, brown, with protuberances on the limbs like the Ben Davis. An early, annual and prolific bearer; fruit of fair quality. Foliage large and dark. Feb. to May.

Gideon—Raised in Minnesota from crab seed by Mr. Gideon. An upright grower; medium to large; color yellow, with vermilion blush on sunny side; mild acid; quality poor. Tree one of the hardiest; best for top-working.

Golden Russet—Medium size; dull russet with a tinge of red on exposed side; flesh generally crisp, juicy and highly flavored; tree a vigorous grower and great bearer. Dec. to May.

Greening—See Rhode Island Greening and Northwestern.

Grimes—An apple of the highest quality; very rich, subacid, with pear flavor; medium to large size; yellow; tree hardy, vigorous, productive. Nov. to March.

Hubbardston—Large; striped yellow and red; tender, juicy and fine; strong grower and good bearer; one of the very best. Dec. to May.

GREENING'S STEAM DIGGER IN OPERATION

Digs 200,000 trees at a single setting. Our slogan at digging time, "Get all the root," and we certainly get it.

Jonathan—Fruit medium, conical; skin nearly covered with dark or lively red; fine grained, very tender and finely flavored; tree slender and spreading, with light colored shoooots; a favorite market vareity. Nov. to March.

King of Tompkins County—See Tompkins King.

Longfield—One of the imported Russian varieties; a free, spreading grower; early and abundant bearer; fruit medium to large; yellowish green, thickly covered with red stripes, a decided blush on the sunny side; rich, sprightly subacid. Dec. to March.

L. S. Pearmain—Large; yellow, striped, splashed and shaded with red; flavor mild, rich and pleasant, sprightly subacid, very good. A valuable market apple. Tree hardy, vigorous and productive. Oct. to Feb.

Mammoth Black Twig—See Arkansas.

Mann—Fruit large, roundish oblate; nearly regular; skin deep greenish yellow when fully ripe; flesh yellowish,

half fine, half tender; mild, subacid. One of the latest keepers. Jan. to May.

McIntosh—Medium size, nearly covered with dark red; flesh white, fine, very tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but larger and more hardy, and fully equal in quality. Tree a medium grower. Nov. to Feb.

Missouri (Missouri Pippin)—Large, oblong, bright red, with numerous gray dots; very handsome and of fair quality; an early and very abundant bearer, and very profitable orchard fruit; vigorous. Dec. to March.

Newtown Pippin—See Yellow Newtown.

Northern Spy—Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red; flesh white and tender, with a mild subacid, rich and delicious flavor; tree is a strong, upright grower and forms a very com-

DIGGING TREES BY STEAM POWER—A SCIENTIFIC TRIUMPH

Progress is the watchword of the American people. This progressive spirit has manifested itself in the invention of a tree-digging machine, by means of which all kinds of trees, ranging in size from the dwarf-growing kinds up to large shade trees 15 and 20 feet high, may be dug without the slightest danger of bruising or injuring the roots. As shown in the illustration, the ground has been dug away directly back of the digger exposing to view the steel blade and lifter of our modern tree-digger, running at the time under our mammoth block of whole-root apple trees at a depth of 30 inches. The cables drawing the digger run to pulley blocks stationed at the ends of the rows, thence on a rectangle to the machine operated by steam power, as shown on preceding page. Do not such methods appeal to an intelligent people? With these facilities we are able to furnish trees with abundant masses of fibrous roots, such as will grow and make splendid orchards of strongest fruiting power.

pect head; should be kept open by pruning, so as to admit the air and light freely. Begins to bear late. Nov. to March.

Top-worked Northern Spy—See page 14.

Northwestern (N. W. Greening)—Yellow; smooth, rich, of good size, resembling Grimes in shape and color; good quality and an extra long keeper. Tree hardy, vigorous, abundant, annual bearer. Jan. to June.

Ox Noble—A very valuable market fruit. Fruit very large richly striped and mottled with dark red. In quality equal to the Baldwin, but fruit much larger. Tree hardier than Baldwin, and a splendid, vigorous, erect grower. Originated in Washtenaw County, Mich.; introduced by us in 1880. One of the best. Nov. to March. (See colored illustration.)

Pewaukee—Raised from the seed of Oldenburg. Fruit medium to large, roundish, oblate; skin bright yellow, striped and splashed with bright red; flesh tender white, juicy, subacid. Es-

teemed especially for cold climates on account of its hardness. Tree vigorous. Jan. to May.

Rambo—Medium size; streaked and mottled yellow and red; tender, juicy, mild flavor. Tree a vigorous grower and good bearer. Autumn in the South; Oct. to Jan. in the North.

Red Canada—Sometimes called Steele's Red. As a long-keeping market apple with good color, it is unsurpassed. Invariably brings \$1.00 to \$2.00 more per barrel than the best of winter apples. The only drawback has been its slow growth of tree. The Greening method of top-working it in the nursery on the hardy, fast-growing Gideon stem and French crab root, has completely overcome the difficulty occasioned by its miserable growing habit. Under our scientific treatment of top-working the Canada Red on hardy, fast-growing stock, it will grow into a bearing orchard as quickly as any of the other varieties of apples.

Top-worked Red Canada—See page 14.

Rhode Island Greening—Large, greenish yellow; tender, juicy and rich. A spreading, irregular grower and an abundant bearer. Dec. to April.

Rome Beauty—Large; yellow, shaded with bright red; flesh yellowish, tender, juicy, subacid. A popular market sort in many sections. Nov. to Feb.

Roxbury (Roxbury Russett)—Medium to large; greenish or yellow russet; crisp, good subacid flavor. Tree vigorous and productive. Long keeper. April to June.

Salome—Skin striped; shaded light and deep red over yellow, half fine, tender, mild, slightly aromatic, good; its hardness, long-keeping, good quality, uniform size, retention of its flavor quite late, even into summer, will no doubt make it valuable for the West and Northwest. The tree is as hardy as a crab. Jan. to May.

Seek-no-further—See Westfield.

Shiawassee—Said to be a seedling of Fameuse. Medium; whitish shaded, marbled, splashed and striped with rich red; flesh firm and very white, tender, juicy, brisk, refreshing, subacid. Tree vigorous; very productive. Oct. to Jan.

Smith Cider—Large, handsome; red and yellow; juicy, acid; quality medium. A moderate grower and good bearer; succeeds well in South and West. Dec. to March.

Snow—See Fameuse.

Spitzenburg—See Esopus.

Stark—A long keeper and a valuable market fruit. Fruit large, roundish, oblong, skin greenish yellow, much shaded with light and dark red and sprinkled with brown dots; flesh yellowish, juicy, mild subacid. Jan. to May.

Stayman Winesap—The best of the Winesap family. Originated as a seedling by Dr. Stayman of Kansas. Color a dark, rich red; flesh firm, very fine grained and exceedingly juicy. Tree is a strong grower and will do well on light soil.

Steele's Red—See Red Canada.

Sutton (Sutton Beauty)—Medium to large, roundish, handsome waxen yellow, striped crimson; flesh tender, juicy, subacid; good quality, keeps well. Tree a moderate grower and productive. Nov. to April.

Tolman (Talman Sweet)—Medium; pale yellow, slightly tinged with red; firm, rich and very sweet; the most valuable baking apple; vigorous and productive. Nov. to April.

Tompkins King—Large and handsome; striped red and yellow; tree vigorous

and productive; one of the best. Nov. to March.

Wagener—Medium to large; deep red in the sun; flesh firm, subacid and excellent; very productive; bears very young. Dec. to Feb.

New Top-worked Wagner—See page 15.

Walbridge—Medium size; striped with red; vigorous grower and productive; very hardy. March to June.

Wealthy—A native of Minnesota, where it has proved perfectly hardy, vigorous and productive; fruit of large size; red streaked with white; quality good. One of the most valuable market apples grown. Nov. to Jan.

Westfield—Medium to large; slightly russeted, with dull red stripes; tender, rich, spicy and fine; good grower and bearer. Nov. to March.

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

Winter Banana—Large, fine grained and smooth; golden yellow shaded with beautiful bright red; delicious subacid, highly perfumed; highest quality and finest flavored apple grown. Flesh golden yellow, very rich and spicy, surpassing the finest peach, plum, apricot or pear. Tree very hardy and well adapted for the coldest climates. It has fruited in Wisconsin, where only one other variety—the Oldenburg—can be grown. It is a remarkably early bearer; trees two and three years old often bear full crops of fine, large fruit, which sells at sight. It is pronounced by leading authorities as the finest table apple in cultivation. (Read their opinions in this catalogue.) It originated in Indiana, and is an accidental seedling introduced by us in 1890. Every tree sent out by us is "Trade Marked." Oct. to March. (See colored illustrations and read testimonials.)

Wolf River—Tree very hardy and productive; fruit large and handsome; red color; flesh white, subacid, poor quality. Nov. to Jan.

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

Yellow Newtown (Newton Pippin)—One of the very best apples as to quality; very juicy, crisp and highly delicious flavor; fine keeper. Tree light grower while young. Dec. to May.

York Imperial—Apple greenish yellow where not covered with bright red. Flesh crisp, firm, subacid and good. A good keeper and retains its flavor. Not very hardy for extreme cold climates.

YELLOW
TRANSPARENT

OX
NOBLE

WINTER
BANANA

THE FAMOUS ORIGINAL WINTER BANANA APPLE TREE AND ITS ILLUSTRIOUS ORIGINATOR, MR. D. M. FLORY.

Tree six and one-half feet in circumference three feet from ground, forty feet spread thirty-eight years old.

CRAB APPLES

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

Grant—Tree an erect, vigorous grower; fruit in dense clusters, quality very fine. Oct. to Dec.

Hyslop—Fruit large; produced in clusters; roundish ovate; dark, rich red, covered with thick blue bloom; stalk long and slender; tree very hardy and vigorous grower. Oct. to Dec.

Quaker—A new, hardy, strong growing sort; bears large crops of fine fruit. Dec. to March.

Transcendent—All things considered, this is one of the most valuable varieties of Crab Apples grown. Tree remarkably vigorous, growing to a good size, and immensely productive. Comes into bearing the second or third year, bearing every year after and producing good crops by the fourth year.

Fruit very large, from one and one-half to two inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies. The best of its size for cider, being juicy and crisp, and is also, by many considered a good eating apple. Skin yellow, striped with red. The best for wine. Sept. to Oct.

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

Whitney—Large, averaging one and one-half to two inches in diameter, skin smooth, glossy, green, striped, splashed with carmine; flesh firm, juicy and rich. A great bearer and very hardy. Tree a vigorous, handsome grower. Splendid for wine.

REASONS WHY GREENING'S PEACHES HAVE STRONG ROOTS

Illustration No. 1.—Genuine Tennessee natural peach seed, used exclusively by us. These pits are gathered for us at a large expense in the mountains of Tennessee, where they grow wild. The crop is limited to only a few hundred bushels each year, hence the scarcity and high price. This is the strain of seed from which we grow our wonderful stock of peach trees, unsurpassed in strength of root and power of growth, also freedom from disease. Our peach trees are absolutely free from disease of any kind. We use no other seed, though the cost is six times more than canning pits. This seed is what makes the wonderful root system on our peach trees. Our supply of genuine natural Tennessee pits is contracted for in advance, insuring us a supply from year to year.

Illustration No. 2.—Canning factory peach pit used by 90 per cent of the nurserymen. The seed in this large pit, coming from a grafted tree, is always degenerated and often diseased. The seed is always shrunken and extremely weak in germinating and growing power. To prove this it is only necessary to open up and examine a pit from a grafted peach tree. This class of pits is never used by us.

Illustration No. 3.—Our double row peach pit planter and its inventor, our master genius, Mr. John W. Romine. This is only one of the many inventions of useful machinery used at our nurseries for which Mr. Romine's productive brain is deserving of the highest credit. From 75 to 100 bushels of pits can be planted in a single day with one man and team doing the work of fifty people far better than could ever be done by hand. Mr. Romine is master mechanic at the nurseries, with a complete machine shop for iron and wood work, and is constantly engaged in the work of inventing new machinery for use in our nurseries. Mr. Romine is also inventor of our six-row, two-horse, double automatic sprayer, which is used in spraying all our nursery stock.

ANDERSON PEACH (Photo).

Two weeks earlier than Elberta and fully as large (note size in photograph). Without question the greatest early peach in cultivation. Our buds are taken from the original tree. See complete description in list of varieties below.

PEACHES

Alexander—Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet; tree vigorous and productive; ripens three weeks earlier than Early Crawford. Cling. July.

Anderson (new)—This peach has surpassed all other varieties for size, quality and early and abundant bearing. It is a large, luscious peach of high quality and in good demand. It was originated by John Anderson, of Danbury, Ohio. First of August. (See above illustration.)

Banner—Originated at Woodslee, Ontario, Canada. Fruit large, round and very handsome. Tree very hardy and an early and abundant bearer, often producing a crop of fruit the second year after planting. Considered by leading authorities the best and most profitable peach ever introduced. No other late peach compares with it in quality. In bearing and quality of fruit it equals New Prolific. Unsurpassed in point of richness of flavor.

A strong, vigorous grower. Winner of ten first premiums at Canadian agricultural fairs. Color deep yellow, with a rich crimson bloom. Flesh golden yellow from pit to skin; pit small, perfectly free. Its shipping qualities are unsurpassed. Season of ripening October first, the very best time to bring the highest price in market. "Trade Marked." (See colored illustration and testimonials.)

Beers' Smock—Large size; yellow, shaded with red; rich; tree hardy and very productive. One of the most valuable market varieties. A good shipper. Last of Sept. to first of Oct.

Bronson—Large; yellow, with handsome red cheek; flesh sweet, rich; fine flavor; tree hardy and a good bearer. Middle of September.

Carman—Large, resembles Elberta in shape; color creamy white with deep blush; skin very tough, flesh tender; fine flavor and quite juicy. Ripens with Rivers. One of the hardiest in bud; quality very good. Aug.

BANNER

ELBERTA

NEW
PROLIFIC

EMR

MAMMOTH BLOCK OF PEACH TREES

Block of 2,000,000 Low-top peach trees growing at Greening's Big Nurseries. The seedlings were grown from Tennessee Natural Peach Pits and the buds taken from bearing trees of unusual merit, thus infusing each variety with the best blood of its kind. The photograph was taken after three months' growth and represents what is positively the largest and finest block of peach trees ever seen in the world.

Champion—A new variety originated at Nokomis, Ill.; very hardy and productive. Fruit large and attractive; skin creamy white with red cheek; flesh white, juicy and sweet; cling. August 15th.

Chili—Medium size, yellow, with slight blush; flesh yellow, luscious and well flavored. Pit small. Tree very hardy and productive. Middle of September.

Crosby—Fruit medium size, roundish, slightly flattened; bright red cheek; flesh yellow. Tree unusually hardy. Middle of Sept.

Dewey—A perfect freestone peach, ripening with Triumph, but has better form, brighter color on the surface, is equally hardy and productive. The flesh is of uniform color and texture to the pit. July.

Early Barnard—Medium size, popular peach; yellow, with red in the sun; flesh yellow and very good; tree vigorous and good bearer. One of the hardiest. First of Sept.

Early Crawford—A magnificent, large yellow peach of good quality. Tree vigorous and productive, although tender in fruit bud. Its fine size and beauty make it one of the most popular sorts. No other variety has been so extensively planted. First of Sept.

Elberta—Large, yellow with red cheek; flesh yellow, firm, juicy, of fair quality. Exceedingly prolific, sure bearer and hardy. Is doing well in all peach sections north and south. One of the leading market varieties. Sept. 10th to 15th. (See colored illustration.)

Engle (Engle's Mammoth)—Large, round, oval, suture slight; yellow with red cheek; stone small, free; sweet, rich, juicy. One of the very best market sorts. Early Sept.

Fitzgerald—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; small pit,

BLUE GATE FARM,
THOS. CRAWFORD,
ROMEO, MICH.

Mr. Thomas Crawford's peach orchard third year after planting at Romeo, Michigan. Mr. Crawford is justly proud of this orchard of Greening's Pure Pedigree Bred Trees and sends us a photograph of it every year.

flesh deep yellow, best quality. Last of August.

Foster—Large; Deep orange red; flesh yellow, very rich. Ripens with Early Crawford. Handsome.

Gold Drop—This variety has a sort of transparent golden appearance. Good quality, a very early and abundant bearer; hardy. Medium size. Last of September.

Kalamazoo—Medium size; slightly oblong; yellow, shaded with red; juicy, rich, melting; highly esteemed in Michigan. Middle of Sept.

Kihlken Smock (new)—Larger, better and more beautifully colored than Beers Smock. Discovered in the orchard of George Kihlken, Danbury, O., in 1909. This peach will be worth millions to fruit growers. The best late peach. First of Oct.

Late Crawford—Fruit of large size; skin yellow or greenish yellow, with dull red cheek; flesh yellow; tree vigorous and productive; one of the best late sorts. Last of Sept.

Lemon Free—Almost lemon shape, pointed at the apex; color a pale lemon yellow when ripe. It is of large size, of excellent quality; a valuable market sort. Ripens after Late Crawford.

Mayflower—Earliest peach known, semi-cling, size medium, color bright red; ripens well to the seed. Young and prolific bearer, new. Last week in June.

New Prolific—The most popular market variety of the present day. Fruit large, golden yellow with rich crimson cheek; flavor very rich and spicy; flesh golden yellow from pit to skin, firm and unusually thick; pit very small; freestone. It has stood the cold winter in 1898 better than any other variety. Tree a strong grower and very productive. Ripens fifth to tenth of September, just before Late Crawford. Hundreds of thousands of trees of this variety have been planted out in orchards. No variety has ever been introduced which is finer in quality and more profitable for market. Introduced by us in 1890. (See colored illustration.)

Oceana—In quality, size and color similar to Early Crawford. Small pit and thick yellow flesh. First of Sept.

Reeves' Favorite—Fruit very large and round. Skin yellow with a fine red cheek. Flesh deep yellow, juicy and excellent; tree hardy and adapted to heavy soils only.

Rivers—Large; color creamy white with a delicate pink cheek; flesh melting,

Orchard of 58,000 trees planted by The Grand Traverse Fruit Company at Empire, Michigan. Ask them about Greening's trees.

with a remarkably rich, racy flavor; ten days later than Alexander. First of August.

St. John—A grand peach, ripening a week ahead of Early Crawford and fully or nearly as large in size and equal in quality, color and flavor. Color yellow with a fine red cheek; fruit round, brilliant, showy; one of the earliest yellow peaches; commences bearing young and produces abundantly. Middle of August.

Salway—Fruit large, roundish; deep yellow with a dull red cheek; flesh yellow, firm, juicy and rich; one of the very best late peaches where it will ripen. Oct.

Triumph—Tree a strong grower and very hardy. Fruit large, yellow with red cheek; flesh bright yellow; great bearer and good shipper. Stone nearly free when fully ripe; a very valuable early yellow peach, ripening with Alexander. July.

Weed's Late Barnard—Above medium size, yellow, with dark red cheek; flesh yellow, red at stone, very rich; tree hardy; very small pit. Middle of Sept.

Every Year a Satisfied Customer.

In the last three years I purchased from the Greening Nursery Company about 3,000 trees for my farm near New Richmond, and to say that I am well satisfied with them is to put it mildly.
S. M. THOMAS.
1522 S. St. Louis Ave., Chicago

Customers are Welcome
to Visit
Our Big Nurseries

Carload of Finest Trees Ever Seen

The carload of trees arrived on the 27th of March, and we must admit that they are as fine a lot of trees as we have ever seen. We compliment and thank you for the good treatment.
THOMPSON FRUIT CO.
North Yakima, Wash.

The peach trees I bought of your agent this spring are the best I ever planted. The growth the first year is enormous.

L. HOWE.
Memphis, Mich.

I am pleased to say that, although I have handled nursery stock for a number of years, I never saw a finer lot of stock than that which came from your nursery this fall.

J. H. SWIHAT, Mulberry, Ind.

PEARS

SUMMER PEARS

Bartlett—Large size; yellow, often with a beautiful blush next the sun; buttery, very juicy and highly flavored. Tree a strong grower, bearing early and abundantly; very popular; the most profitable for market. Last of Aug. and first of Sept.

Clapp Favorite—A large, fine pear resembling the Bartlett, but without its musky flavor; pale lemon yellow, with red cheek; fine texture, melting, buttery, juicy, with a rich, sweet, delicate vinous flavor. Tree hardy and very productive; very desirable in all sections, and especially so where other varieties fail. August.

French—The tallest growing pear tree known, reaching the height of 100 to 150 feet. A great bearer and hardy. Fruit yellow, medium, perfect in shape, very rich in flavor, highly perfumed—most valuable pear for canning yet introduced; retains its rich flavor after cooking; not a good commercial pear. Middle to last of Aug. (See colored illustration.)

Koonce—Originated in Southern Illinois. A strong, upright grower; hardy; has produced crops when all other varieties were killed by frost. Fruit medium; yellow with carmine cheek; ripens with the earliest. July and Aug. (See colored illustration.)

Summer Doyenne (Doy. de Ette)—Small; melting, sweet; yellowish. Tree vigorous and productive; very early. Aug.

Wilder—Very early, resembling Summer Doyenne; claimed to be a good shipper for an early pear. Small. First of Aug.

AUTUMN PEARS

Angouleme (Duchess d'Angouleme)—Very large; greenish yellow, sometimes a little russeted; makes a beautiful tree; very productive. One of the best. Oct. and Nov. Succeeds best as a Dwarf.

Anjou—A large, fine pear; buttery and melting, with sprightly, vinous flavor. Tree a fine grower and good bearer. One of the very best. Oct to Dec.

Clairgeau—See Winter Pears.

Flemish (Flemish Beauty)—Large, beautiful; juicy, melting, rich and fine; strong grower and good bearer; hardy everywhere. A very popular market variety. Fruit subject to scab; spraying with lime and sulphur, mixture 1 gallon to 30 of water, will prevent it. Sept. to Oct.

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

Kieffer—Well known everywhere. Said to have been raised from seed of the Chinese Sand Pear, accidentally crossed with the Bartlett or some other kind. Large; skin rich golden yellow, sprinkled thickly with small dots, and often tinted with red on one side; flesh slightly coarse, juicy, with a pronounced quince flavor. Tree very vigorous and an early and great yielder. Next to the Bartlett it has been planted most extensively for market. Nov. to Dec. (See colored illustration.)

Lincoln, Illinois—Large and of good quality. Ripens in late fall. The value of the Lincoln Pear lies in its comparative exemption from blight and disease, in its hardiness and great productiveness. The fruit is medium to large, with a rich aromatic flavor; core small and healthy, and the fruit has a beautiful waxy appearance when fully ripe. Trees grow to an enormous size. Oct. to Nov.

Louise (L. B. de Jersey)—Rather large; greenish yellow, with a bright red cheek; juicy, buttery and melting, excellent; very productive. A fine grower on both standard and dwarf. Oct. to Nov.

Seckel—Small; rich yellowish brown; one of the best and highest flavored pears known; productive. Sept. and Oct.

Sheldon—Fruit large; roundish; yellowish, nearly covered with light russet, slightly shaded with red; flesh very juicy, melting and delicious; tree hardy, vigorous and good bearer. One of the best varieties. Has never been known to blight. Oct.

Vermont Beauty—A beautiful new seedling pear; medium size, roundish, obovate, yellow, nearly covered with carmine; flesh melting, sprightly, fine quality; tree healthy, hardy and productive. Oct.

FRENCH
PEAR

C.
D. NANTES

KIEFFER

KOONCE

THE BOSC—A HEAVY BEARER OF "QUALITY" FRUIT.

WINTER PEARS

Bordeaux—Large size, with very thick, tough skin, which renders it a very valuable keeper for winter use; flesh melting, juicy, rich; keeps till March. One of the best.

Bosc—Originated in Belgium. Shape, oblate—pyriform and of very large size. Color, a beautiful yellow, touched with crimson and slightly russeted. In quality it is indisputed as the most delicious desert pear known. A medium late variety. The tree, however, is a poor grower, but under our scientific treatment has been restored to a strong, thrifty and productive tree. See page 14. This pear always sells at the highest prices, frequently bringing as high as \$4.00 to \$5.00 per bushel in the commercial markets.

Clairgeau (C. de Nantes)—This wonderful late pear was originated by Pierre Clairgeau, of Nantes, France. It is one of the most showy and well-formed pears grown. Fruit large, with a very stout stem. Color when matured is a golden yellow, with a highly colored red cheek. It is one of the most highly flavored pears and the heaviest bearer in cultivation, bearing annual crops when other varieties fail. Fruit is very firm and will not bruise in falling. Tree exceedingly hardy and

vigorous in growth, forming a beautiful pyramid. Heavy bearer, even on two- and three-year-old trees. Trees usually require propping up the third year to keep them from breaking down. Oct. to Jan.

Lawrence — About medium; yellow, thickly dotted; very rich, fine flavor. One of the best. Tree a good grower and very productive. Dec. to Jan.

Lincoln Coreless—Fruit very large, handsome appearance; quality only medium, and very few if any seeds. Almost clear of core and seeds, whence its name. A good keeper. Golden yellow. Tree a good grower and very productive; has never been known to blight. Dec. to March.

DWARF PEARS

Dwarf Pears should be planted below the bud, sufficiently deep (three or four inches) to cover the junction of the pear and quince. Dwarfs frequently succeed where Standards fail, especially where the soil is deficient in clay loam. It is very important to select the proper varieties, however, as all varieties of pears do not succeed well as dwarfs. Those most desirable are **Angouleme**, **Clairgeau**, **Louise** and **Seckel**. Among these we find the **Angouleme** and **Clairgeau** the most profitable.

CHERRIES

SWEET VARIETIES

Bing—Among the best of black cherries in existence. It is large, firm and delicious, and a good shipper. Tree hardy and upright grower. Middle of June.

Lambert—A very promising cherry of largest size. Flesh red, firm and of unsurpassed quality. Stands in the lead as a shipping variety. June.

Napoleon—Very large; pale yellow with bright red cheek; very firm; juicy and sweet; vigorous grower and very productive; one of the best. First of July.

Rockport—Large; pale amber with clear red; a very excellent and handsome cherry; a good bearer. Middle of June.

Smith (Schmidt's Bigarreau)—Remarkably hardy and productive. Fruit grows

in clusters, and is of the largest size; skin deep black; flesh dark, tender, juicy, with a fine, rich flavor; stone small. July.

Tartarian (Black Tartarian) — Very large; bright purplish black; juicy; very rich, excellent flavor. Tree a vigorous grower and productive. Last of June or early July.

Windsor—New seedling originated at Windsor, Canada. Fruit large, liver-colored, quite distinct; flesh remarkably firm and of fine quality. Tree hardy and very prolific. The most valuable late variety for market or family use. July.

Wood (Gov. Wood)—Very large; rich; light yellow with red cheek; juicy and sweet. One of the best. Last of June.

SOUR VARIETIES

Brusseler Braune (New)—Originated and imported from East Poland, Europe, about ten years ago and put on trial at various experiment stations, where its superiority was discovered. Our attention was called to this wonderful cherry by Prof. L. R. Taft, of Michigan Agricultural College, who urged us to introduce it. Tree a stronger grower than Richmond, perfectly hardy. Fruit of largest size, a rich brown color and of highest quality. Ripens four weeks later than Richmond, after all other varieties of cherries are gone.

Dyehouse—A very early and sure bearer; ripens a week before Richmond, and quite as productive and hardy. Color red. June.

Eugenie. (Empress Eugenie) — Fruit large; dark red; very rich, tender and subacid. Tree heads very low. Ripe about July 1st.

Large Montmorency—A large, red, acid cherry; larger than Richmond, and fully ten days later; best market variety among sour cherries. End of June.

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

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

Morello (Eng. Morello)—Medium to large; blackish red; rich, acid, juicy and good; very productive. Tree a moderate grower. August.

Olivet—Large; shining, deep red; tender, rich, and vinous, with a very sweet, subacid flavor. June.

Ostheim—A hardy cherry from Russia. Fruit large, roundish ovate; skin red, dark at maturity; stalk long; flesh liver-colored, tender, juicy, almost sweet. Its ripening season extends over about two weeks. Trees usually begin to bear the second year. Last of June.

Philippe—Large size; flesh red, tender, juicy, with mild, subacid flavor; very vigorous and productive; of great value. A native of France. Middle of July.

Richmond—Medium size; dark red, melting, juicy, sprightly acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes. Tree a good grower, with roundish, spreading head, and is extremely productive. The most hardy of all varieties, uninjured by the coldest winters. Ripens through June.

Wragg—Very large, with a sweet subacid flavor; moderate grower. Last of July.

✓ **MAMMOTH AUSTRIAN PRUNE.**

Largest and finest flavored plum ever introduced. The only and original tree in America is located at Ann Arbor, Michigan, on the farm of Mr. George Aprill, who imported the scions from Austria. Our buds were taken from this very tree. See complete description in list of varieties below.

PLUMS

✓ **Austrian Prune**—Tree very vigorous, upright, perfectly hardy, and is a young bearer. Fruit is the handsomest and largest plum in cultivation. Color, attractive dark reddish purple. Flesh golden yellow, sweet and mild; excellent quality. Good shipper and keeper. Ripens about middle of Sept. Takes highest honors and premiums everywhere.

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

Diamond—A superb and showy Plum of enormous size; dark purple, with thick bloom. Vigorous, hardy, productive. Sept.

German Prune—A large, long, oval variety, much esteemed for drying; color dark purple; of a very agreeable and rich flavor. Tree very productive and hardy. Sept.

Golden Drop (Coe's)—Large and handsome; light yellow; firm, rich and sweet. Last of Sept.

Grand Duke—Color of Bradshaw; fruit very large, of fine quality; very productive. Tree rather poor grower.

Gueii—Extensively grown for market, having proved to be one of the most profitable for that purpose. Tree a hardy, very strong, vigorous and upright grower, spreading with age and bearing; an early and very abundant bearer. Fruit large, roundish oval; skin dark purple, covered with a thick blue bloom; flesh pale yellow, a little coarse, firm, juicy, sweet, sprightly, subacid; freestone. Last of Aug. and first of Sept.

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

Lombard—Medium; round, oval; violet red; juicy, pleasant and good; adheres to the stone. Tree vigorous and productive. Last of Aug. A valuable market variety; one of the most hardy and popular.

Monarch—One of the most valuable of the late introductions from England. Tree robust, with dense foliage; an abundant bearer. Fruit very large, roundish oval; dark purple-blue; perfect freestone. Oct.

Prince (Prince's Yellow Gage)—Rather large; golden yellow; flesh rich, sugary and melting; very hardy and productive; a favorite sort. August.

Reine Claude—Large; green yellow.

spotted with red; firm, sugary and of fine quality; very productive. Sept.

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

Yellow Egg—Fruit of largest size; skin yellow, with numerous white dots; flesh yellow, rather coarse; subacid, fine for cooking. Tree vigorous and productive. Last of August.

JAPANESE PLUMS

Abundance—One of the best known and most popular of the Japan sorts. From our experience, we can recommend this variety for more extensive planting. Medium to 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 readily parts from it. Tree a strong grower and an early and profuse bearer. Valuable for canning and market. Aug.

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 very free from black knot. It has been fruited about ten years in this country and is perfectly hardy. It seems to succeed in any soil, sand, clay or loam. It can be picked just before ripe and will ripen and color up perfectly, and will not lose its flavor. Will keep fully three weeks in perfect condition after ripening. We have kept them in perfect condition in a cupboard in our office for thirty days during very warm weather. 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; bears second year after planting; needs close pruning. First of Sept.

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

Wickson—Originated by Luther Burbank, of California, who says: "This variety stands pre-eminent among the many thousand Japanese varieties I have fruited." Tree hardy and an upright, strong grower, with narrow leaves; very productive. Fruit **largest of the Japans**, handsome deep maroon red; firm; a long keeper and a fine shipper; flesh dull yellow, meaty, of good quality. Destined to become one of the most valuable plums for market; keeps fully three weeks after picking. Fruit ripens late, after Burbank. Tree somewhat tender in cold northern countries. Middle of Sept.

PEDIGREE TREES

Mr. Forrest Crissey, a practical horticulturist, in a recent number of the "Saturday Evening Post," comments upon Pedigree Trees thus:

"There are so many advantages in favor of the Pedigree Tree—so many chances that it will pay for the extra cost many times over—that the shrewd orchadist will figure that he cannot afford not to insure his enterprise with these advantages."

Greening's Pedigree Trees are the kinds Mr. Crissey recommends.

See Page 11.

MULBERRIES

Downing's Everbearing—Very large, black, handsome, sweet, rich and excellent.

New American—Equal to Downing's in all respects and a much hardier tree. Vigorous grower; very productive; the best variety for fruit; ripe from

middle June to middle Sept.

Russian—Very hardy; vigorous grower; valuable for feeding silkworms, etc. Fruit of small size, varies in color from white to black. Largely planted for hedges, windbreaks, etc., in western states.

APRICOTS

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

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

Budd—Tree a strong grower and profuse bearer. Fruit white with red

cheek; sweet; the best late variety. August.

Catherine—Vigorous and productive. Medium sized; yellow, mild subacid. July.

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

QUINCES

The Quince is of late attracting a good deal of attention as a market fruit. The tree is hardy and compact in growth, requiring but little space; productive, gives regular crops, and comes early into bearing. The fruit is much sought after for canning. When put up in the proportion of about one quart of quinces to four quarts of apples or pears, it imparts a delicious flavor.

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

Champion—A prolific and constant bearer, fruit averaging larger than the Orange, more oval in shape, quality equally fine; bears extremely young, producing fine fruit on two-year trees in nursery row; can be kept in good condition until January. Tree a vigorous grower and prolific bearer; one of the best for sections not subject to early frosts.

Missouri (Missouri Mammoth)—The largest quince in cultivation. Has stood severe cold; a thrifty grower and prolific bearer. One of the very best.

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

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

GRAPES

BLACK GRAPES

Campbell—Its strong, hardy, vigorous growth; thick, heavy, perfectly healthy foliage; very early ripening and abundant bearing of large and handsome clusters of excellent quality, combined with the most remarkable keeping and shipping qualities, form a combination equaled by no other grape. Its period of full maturity is from the middle to the last of August, according to the season, ripening with Moore, but, unlike that variety, it has kept sound and perfect, both on and off the vine, for weeks after Moore was decayed and gone. It is, both as to cluster and berry, of large size, of a glossy black color, covered with a beautiful blue bloom; pulp sweet and juicy; free from foxiness; seeds small. few in number and part readily from the pulp.

Champion—A large grape of medium quality; a strong grower and very hardy; the earliest of all. Succeeds in all sections.

Concord—The best known and most popular of all grapes. Best for table, wine and market; succeeds over a great extent of country. Ripens in Sept.

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.

Eaton—Black; bunch and berry of the largest size; not quite so early or sweet as its parent, the Concord, but less foxy; pleasant, juicy, with tender pulp; vine very vigorous, healthy and productive.

Hartford—Bunches of medium size; berries large, globular; color almost black, covered with a beautiful bloom, of fair quality; ripens a week before Concord.

Ives—Hardy, productive, with a tough acid center. Valuable in the South.

Moore—Bunch medium; berry round and as large as the Wilder or Rogers' No. 4; color black, with a

heavy blue bloom; quality very fine; vine exceedingly hardy, has never been covered in the winter; it has been entirely exempt from mildew or disease; in vigor of growth it is medium. Its earliness makes it desirable for a first crop, maturing, as it does, ten days before the Hartford and twenty before the Concord.

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

Worden—A seedling from the Concord, which it greatly resembles in color and appearance. It is, however, several days earlier; much more delicious and melting and has a flavor that is equaled by no other grape grown. Berries and clusters are very large and compact; vine is fully as hardy as the Concord, and more productive. It is a sure bearer. A valuable market sort. (See colored illustration.)

RED GRAPES

Agawam (Rogers No. 15)—Bunches large, generally loose; berries large, round; color dark red or maroon; flesh quite tender, juicy, vinous, with a peculiar flavor much admired by some; vine vigorous and productive.

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

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

Delaware—Still holds its own as one of the finest grapes. Bunches small, compact, shouldered; berries rather

small; round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous; hardy and productive. Ripens right after Brighton.

Diana—A seedling of the Catawba, resembling its parent in general appearance, but ripening earlier. Bunches medium to large, compact; berries generally large, pale red; skin thick, covered with a thin bloom; flesh tender, with a little pulp, very highly flavored, juicy and sweet; a long keeper.

Jefferson—Vine very vigorous, extremely hardy; bunch very large, often double-shouldered; very compact; berries large, roundish oval; light red, with a thin lilac bloom; combines the sugary richness of the Brighton, the tender meaty flesh of the Iona, with just enough vinous flavor to make the fruit deliciously sprightly and unsarpassed. Ripens with Niagara. A splendid keeper.

Lindley (Rogers' No. 9)—Bunch long and compact; berries large; flesh sweet; ripens soon after Delaware. One of the best of Rogers'. A good keeper.

Massasoit (Rogers' No. 3)—Bunch medium, rather loose; berry medium; flesh tender and sweet; very good; one of the best flavored of the Rogers'. Early as Hartford.

Moyer—A new grape originated in Canada. In habit of growth and hardness it resembles the Delaware very much, but ripens earlier. Flavor sweet, delicious; skin tough, thin; pulp tender and juicy.

Salem—Bunch large; berry large, round; flesh tender, juicy, with a rich aromatic flavor; slight pulp; good keeper.

Vergennes—Clusters large; berries large; color light amber; flavor rich and delicious; ripening here fully as early as Hartford. Its keeping qualities are superior.

Woodruff—A handsome, profitable market sort; vine vigorous, productive. Bunch and berry large, attractive; ripens early; fair quality, long keeper, good shipper.

Wyoming—Vines very hardy, healthy and robust, with thick leathery foliage; color of berry similar to Delaware, but brighter, being one of the

most beautiful of the amber or red grapes, and in size nearly double that of the Delaware; flesh tender, juicy, sweet, with a strong native aroma. Ripens before Delaware.

WHITE GRAPES

Diamond—A vigorous grower; with dark, healthy foliage, entirely free from mildew. A prolific bearer; bunches large, handsome and compact, slightly shouldered; color, delicate, greenish-white, with rich yellow tinge when fully ripe. Skin smooth, free from specks; pulp tender, juicy and nearly transparent, with very few seeds. Berry about the size of Concord; quality best; rich, sprightly and sweet. Ripens a few days before Concord.

Elvira—Very vigorous, strong, healthy grower; bunch and berries medium size, very compact and productive, often growing four and five clusters on a single cane. Ripens about with Catawba; very hardy. A wine grape.

Empire—Healthy, strong grower, and very hardy; clusters large and shouldered; berry medium; nearly round, white, with a slight tinge of yellow, with a heavy white bloom; quality medium.

Green Mountain—Color greenish white, skin very thin; pulp exceedingly tender and sweet; contains but one or two seeds, which separate from the pulp with the slightest pressure; quality superb. Ripens with Moore.

Martha—Native of Missouri. Bunches medium and shouldered; berry large, roundish; flesh similar to Concord; a little foxy, but good; ripens earlier than Concord; vine vigorous and hardy.

Niagara—This white grape is justly regarded as one of the very best known; very fine quality for a table grape; very prolific, hardy and of fine flavor. Fruit keeps well if carefully handled; one of our favorite sorts.

Pocklington—Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemon yellow; flesh moderately tender, sweet, with a peculiar aromatic flavor. Ripens just ahead of Concord.

Your Goods Are of Superior Quality.

Your goods came in excellent condition and are of superior quality, far ahead of any goods delivered in this section. The splendid root system and strong, healthy bodies, carefully trained and handled, are a most satisfactory feature of your trees.

C. F. BALLENTINE, Springfield, O.

BUSH FRUIT DEPARTMENT

RASPBERRIES

RED AND YELLOW VARIETIES

Columbian—An improvement on Shaffer, which it resembles, but the berry is firmer, adheres to the bush much longer and retains its shape better, both on the market and for canning; color dull purplish red. Bush a strong grower, attaining a very large size. One of the hardiest and wonderfully prolific. Unexcelled for productiveness, stands at head for canning, making jam, jell, etc. Should be planted two feet farther apart than any other variety. (See colored illustration.)

Cuthbert—A remarkably strong, hardy variety; stands the northern winters and southern summers better than any other variety. Berries very large, conical, rich crimson, very handsome, and so firm they can be shipped hundreds of miles by rail in good condition; flavor is sweet, rich and luscious. The leading market variety for main crop. (See colored illustration.)

Golden Queen—This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality. Its size equal to the Cuthbert; immensely productive; a very strong grower; poor shipper. (See colored illustration.)

Loudon—A seedling of Turner crossed with Cuthbert. A valuable new sort; color red; hardy and productive; begins to ripen with Cuthbert, but continues during a longer season.

Marlboro—Large size; light crimson color; good quality and firm. Vigorous and productive. One of the best large early berries for the North.

Shaffer—Fruit large; purple; soft, with sprightly subacid and rich flavor; hardy; vigorous and productive. Much esteemed. Season late. One of the best for canning.

BLACK CAPS

Conrath—Six days earlier than Gregg. A deep rooter and most vigorous grower. Very hardy, highly productive; color black; sweet and delicious. Being so early and large, it brings the highest price in the market. All experiment stations give it the highest praise. During 1886 this variety produced fruit at the rate of \$420 per acre. The drouth does not affect this sort on account of its deep rooting and early fruiting. (See colored illustration and read testimonials.)

Cumberland—A mammoth midseason blackcap that holds 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. (See colored illustration.)

Gregg—Of good size; fine quality; very productive; an old reliable market sort; fairly hardy. Well known everywhere. No one can afford to be without it.

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.

Kansas—Plant is a strong grower; fruit jet black, as large or larger than Gregg, a splendid yielder and hardy. One of the very best. Ripens before Gregg.

McCormick (Mammoth Cluster)—Canes of strong growth and very prolific. Berries large and of fine quality.

Souhegan—Ripens its entire crop within a very short period. Canes vigorous, strong and hardy; wonderfully productive. Fruit of medium size, jet black, with but little bloom; firm, and of sweet, pleasant flavor.

CONRATH

COLUMBIAN

GOLDEN
QUEEN

CUTHBERT

BLACKBERRIES

Briton (Ancient Briton)—Very vigorous, healthy and hardy, producing large fruit; stems loaded with good-sized berries of fine quality, which ship well and bring the highest price in market.

Early Harvest—One of the earliest blackberries in cultivation. Habit of growth, dwarf-like; fruit medium size and good quality. Adapted only for southern climates unless protected in winter.

El Dorado—H. E. VanDeman recommends this variety thus: "This berry was noted last year, and is of much promise; so much so that a special colored plate has been made. It is an oblong, irregular berry of large size, fruiting in pendulous, slender, hairy spikes with few thorns. Color black; flesh deep crimson, with tender core; flavor sweet, rich quality and very good."

Erie—Very large, jet black and early. Perfectly hardy, a strong grower and a great bearer, producing large, sweet berries; earlier in ripening than any other sort.

Rathbun—Very large, jet black, without hard core, small seeds, extra fine quality; very rich aroma. Plant suckers very little. Very hardy. Ripens early.

Snyder—Extremely hardy; enormously productive; medium size; no hard, sour

core; half as many thorns as Lawton or Kittatinny, and they are nearly straight and short. One of the hardiest sorts and most profitable for market.

Stone—Vigorous grower; the wood is stocky, short jointed and ripens early. Fruit turns dark red and is very hardy. Fruit medium size, is black and glossy when ripe, and has a delicious flavor.

Taylor—A good succession for Snyder in cold climates. Ripens its large, luscious berries some weeks later. Vigorous, hardy, fruitful.

Wilson—Large, sweet, fair flavored; very productive; ripens up the fruit together; requires protection in some localities.

DEWBERRY

Lucretia—One of the long-growing, trailing blackberries; in earliness, size and quality it equals any of the tall-growing sorts. Valuable for home use. The plant is perfectly hardy, healthy and remarkably productive, with very large, showy flowers. The fruit, which ripens early, is often one and one-half inches long by one inch in diameter, soft, sweet and luscious throughout, with no hard core. It has proven highly satisfactory wherever tried, and many say it is the best of all the blackberry varieties for family use.

Better Than He Expected.

When I receive fair treatment from the hands of anyone it always affords me great pleasure to tell it to others. I wish to say that I purchased 350 fruit trees from The Greening Nursery Company last spring through their agent, George A. Flory. They promised me good stock, which I expected, but they have sent me better stock than I really expected. I think they sent me the finest yearling trees I ever saw, nothing but No. 1 clean, straight and healthy trees. The result is, I think, only one of the entire lot will fail to grow. I think I always owe a good word for the Greening Nursery Company.

S. C. SHANTZ, Archbold, O.

Bound to Bring Results.

I wish to congratulate you upon your efforts to improve old strains of fruits in this state with Pedigree Trees, and I believe that the lines you have started out on are bound to bring results.

JOHN I. GIBSON,
Secretary Western Michigan Development Bureau, Traverse City, Mich.

Your Trees Advertise Themselves.

My trees arrived in most excellent condition, and such beautiful stock; it seems that I have never seen its equal. I appreciate your efforts and wish to thank you for selecting such fine stock for myself and my neighbor. Certainly such splendid trees and fine roots will advertise themselves. The only way I can reciprocate is to do some such favors as you ask of me at any time.

BENTON GEBHARDT, Hart, Mich.

CURRENTS

Champion (Black Champion)—A variety from England now well tested in this country and pronounced everywhere to be the best black currant yet introduced. Very productive, large bunch and berry, excellent quality, strong and vigorous grower.

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

Crandall—A native black seedling of the western wild currant; distinct from the European black varieties and without their strong odor; wonderfully productive, a strong, vigorous grower, usually producing a crop next year after planting; easily picked; can be shipped farther and kept longer than any other small fruit; free from all attacks of insect enemies.

Fay (Fay's Prolific)—Extra large stems and berries, uniform in size, easily picked; of medium growth and productive.

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

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

North Star—A new variety originated in Minnesota; clusters very long; color bright red; flavor excellent.

Pomona—While not the largest, is of good size. It is a beautiful, clear, bright, almost transparent red; has but few and small seeds, easily picked, hangs a long time after ripe, and is one of the best to hold up in shipping or on the market. A vigorous grower, healthy and hardy.

Versaille—Large; red; bunch long; of great beauty and excellent quality. One of the finest and best of the large sorts.

Victoria—A splendid variety, ripening two or three weeks later than Cherry, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size, brilliant red and of the highest quality. The greatest bearer of all currants. Similar to if not identical with Raby Castle.

White Grape—Very large; yellowish white, sweet or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very productive.

Wilder—A new red currant, with large, fine-flavored fruit of a bright, attractive red color, even when overripe. The leading garden and market variety; a strong, vigorous, erect grower and a great yielder. Fruit as large as the largest; a good shipper.

\$25.00 Per Bushel for Winter Banana Apples Presented to President Taft.

From the Denver (Col.) Times.

One of the interesting events yesterday was the purchase of a box of fancy Winter Banana Apples by Eric Swanson, general agent of the Antlers Orchard Development Company at Colorado Springs for President Taft. The box contained about sixty apples, displaying a blue ribbon. They were sold for \$52.20, or almost a dollar apiece. They were grown by E. A. Flemming and W. S. Park in the Antlers-Silt district of Garfield county.

These trees were bought from Greening's Big Nurseries, Monroe, Mich.

Fine Lot of Peach Trees.

The trees I got of you did fine. Out of 1,300 I only lost two trees, and they have made a fine growth.

WILLIAM SHANNON, Fennville, Mich.

Greening's Trees Grow.

Greening's Big Nurseries, Monroe, Mich.

Gentlemen: I received 1,200 trees from you last year and only five out of the twelve hundred died. I am well pleased with them.

C. G. NASH, New Era, Mich.

Only good, sound, healthy trees are shipped from our Nurseries.

GOOSEBERRIES

Chautauqua—Size very large; fruit a beautiful light yellow color; quality good. An American seedling.

Columbus—An American seedling of the English type; large size; color greenish yellow, smooth, and of fine quality; a strong grower, with large glossy foliage. New.

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

Houghton—A vigorous American sort; very productive. Fruit medium, roundish, smooth, of a pale red color; tender, sweet and of a delicious flavor; very profitable for canning and catsup.

Industry—An English variety; very large, red; of fine quality and excellent flavor. Very desirable if kept free from mildew, as it is the largest grown.

Josselyn (Red Jacket)—A new red berry, larger than Downing; smooth, very prolific and hardy, quality and foliage the best. For years it has been tested by the side of the best American and English sorts, and is the only one absolutely free from mildew either in leaf or fruit. Promises to be the variety we have so long been waiting for, equal to the best English kinds, and capable of producing large crops under ordinary cultivation, wherever gooseberries can be grown.

Keepsake—Fruit very large, straw-colored, of excellent flavor, carries well to market. Bloom is well protected by early foliage, making it one of the surest croppers. Believe it one of the best English sorts for our climate.

Pearl—Similar to Downing, but with fruit a little larger; it is also even more robust and fruitful in habit.

Smith—From Vermont. Large; oval; light green, with bloom; flesh moderately firm, sweet and good. Vigorous grower.

ASPARAGUS

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

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

Palmetto—Until recently we believed that the Conover's Colossal was the best sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder, and more even and regular in its growth, and that it will eventually supersede the old favorite. It has been tested both North and South, and has proven entirely successful in every instance.

RHUBARB or PIE PLANT

Make the ground rich and deep, as recommended for Asparagus. Plant four feet apart each way.

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

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

STRAWBERRIES

Strawberries will succeed in any soil that is adapted to ordinary farm or garden crops. Soil should be thoroughly prepared to a good depth, well drained and enriched. To produce fine, large fruit, keep in hills, pinching runners off as soon as they appear. Ground should always be kept clean and well cultivated. In winter a covering of leaves, straw or some kind of litter will protect the plants. Mulching will keep the fruit clean and soil in a good condition through the fruiting season. The blossoms of those marked "(Imp.)" are destitute of stamens and are termed "pistillate," and unless a row of a perfect flowering variety is planted at intervals not exceeding about a rod, they will produce imperfect fruit and but little of it; but when properly fertilized, as a rule, they are more prolific than those with perfect flowers. Those marked "(Per.)" are the perfect flowering sorts.

The following are the varieties most desirable for family use and market. Each and every variety enumerated has its special merits:

Brandywine (Per.)—Season medium to late. One of the grandest berries ever introduced. It is one of our favorites. It is one of the heaviest fruiters and a splendid shipper. Berries very large, deep red to center. Stems short and stout and holds its great load of berries well up from the ground. One of the strongest pollenizers for pistillates of the season.

Bubach (Imp.)—Combines many excellent qualities, such as great and uniform size, fine form and color, good quality of fruit, unsurpassed productiveness and great vigor of plant. It ripens almost as early as the Crescent and continues about as long in bearing, and fully as prolific; leaves large, dark green, and endure the hottest sun perfectly. The leading market variety. Succeeds best on heavy soil.

Clyde (Per.)—This is perhaps the most popular new strawberry ever introduced, seeming to do equally well in all parts of the country. The Clyde ripens early, is as large as Bubach and much firmer. The plant is very vigorous and healthy, foliage light green in color.

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

Cumberland (Per.)—Very large, round; of good quality; pale scarlet; soft. Excellent for home use. Early to late.

Dunlap (Senator Dunlap) (Per.)—Medium to large, flattened slightly. Dark crimson. Flesh red, firm and fine in texture. Quality excellent. Plant hardy and strong grower.

Excelsior (Per.)—Another early sort of great promise from Arkansas. It is an excellent grower of good, clean foliage, making large, stocky plant, which is one of the main business qualifications of the strawberry. Earlier by several days than Michel's Early. It does well on light sand or heavy land. The berry is dark red, nearly as dark as Warfield; of good size; one of the best shippers; will stand as much handling as the old Wilson without bruising. It is a good plant maker, medium in size and perfectly healthy; blossom perfect.

Gandy (Per.)—Unsurpassed in growth and healthfulness of foliage. Berries bright crimson color, uniform size and shape, large, ripen late and are very firm. Produces a crop of berries the first season plants are set. Latest of all. A profitable market sort.

Greenville (Imp.)—Resembles Bubach, but firmer and a better shipper; uniform in size, regular outline, excellent quality. Plant a strong grower, free from rust, and one of the most productive.

Haverland (Imp.)—The most productive large berry under cultivation. Season medium early until late. Plants are very large, healthy, vigorous, and ripen their fruit evenly and early, holding on through the season. Berries are fine, uniform in shape, very large; excellent flavor and bright red.

Jessie (Per.)—On moist soil is a robust healthy plant; long, stout fruit stalk; holds the fruit well up from the ground; berries of the largest size, medium to dark red color all the way through; firm and solid, and of the most excellent quality; very few small berries and none of the largest ones of irregular shape. Season medium.

Lovett (Per.)—An immense bearer; berry large and firm; a good runner; splendid fertilizer for Crescent, Warfield and Bubach. Season medium late.

Michel (Per.) — Long been known as the extra early berry. It should always be grown in hedgerow, when it is very productive. It makes runners very freely, and many have propagated in beds so thickly that light was excluded and thus it lost its tendency to form fruit buds. Berries medium size, cone shape and a good shipper.

Nick Ohmer (Per.)—The fruit is of the very largest size. It is dark, glossy red, firm and excellent flavor. Medium to late.

Parker Earl (Per.) — Plant robust and healthy; withstands changes of climate; berry regular, conical, medi-

um size, glossy crimson; flesh firm; a good shipper; season medium. Succeeds well on rich, loamy soil. We can highly recommend it for general culture.

Sample (Imp.)—Large size; midseason; fine quality; conical shape and regular in form. One of the best for market.

Sharpless (Per.)—Very large; average specimens, under good cultivation, measuring one and one-half inches in diameter; generally oblong, narrowing to the apex; irregular, often flattened; clear, light red, with a smooth, shining surface; firm, sweet, with a delicious aroma; vigorous, hardy, and very productive when raised in hills with runners cut off.

Warfield (Imp.)—The greatest market and shipping berry. A deep rooter, and can mature an immense crop; berries above medium in size, dark red to the center, and one of the best canning and shipping berries grown.

Wilson (Per.)—Medium to large; dark red; very hardy, vigorous and productive. Succeeds best on heavy soil. The most widely known and universally successful strawberry. Season early to late.

NUTS

Chestnut, American Sweet—A valuable native tree, both useful and ornamental; timber is very durable and possesses a fine grain for oil finish. Nuts sweet, of delicate flavor and are a valuable article of commerce. Best adapted for sandy or gravelly soil.

Chestnut, Spanish—A handsome, round-headed tree, producing abundantly very large nuts that find a ready market at good prices. Not as sweet as the American and tree not quite as hardy.

Pecan—This is a native nut belonging to the (Carya) Hickory-nut family. The tree is of tall growth and bears abundantly. The shell is very thin, the kernel sweet and delicious.

Walnut, Black—This is the most valuable of all of our timber trees for planting; a rapid grower, producing a large nut. The timber enters more largely into the manufacture of furniture and cabinet ware than almost any other, and is prized almost with mahogany.

Walnut, Japan (Siebold's Japan) — A most valuable species, which on account of its hardiness and vigorous growth is well adapted for our country. It grows with great vigor assuming one of the most shaped trees for ornament and shade, without any particular pruning or care. One of the hardiest of nut trees. Trees begin to bear when two or three years old. Its nuts are considerably larger than the common hickory-nut and borne in large clusters of 15 to 20. 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; considering its early bearing, hardiness and quality, it is regarded the most valuable of any nut for our country.

GREENING'S PRIVATE PARKS

Mr. Greening and his gardener in the foreground

ORNAMENTAL DEPARTMENT

Trees, Shrubs, Vines and Plants

The following list of ornamentals is very brief and incomplete, although we grow a complete assortment of this kind of stock. This list is merely to give an idea of some of the best evergreens, deciduous trees, shrubs, perennials, etc. To all those who are interested in beautifying their home grounds—and certainly everyone ought to be interested in such a noble and enjoyable work—we shall be glad to mail our special landscape booklet and catalog free.

EVERGREENS

ARBOR VITAE (*Thuja*)

American (*Thuja occidentalis*)—Makes a very close hedge for ornamental screens. It is hardy and easily grown after transplanting. Naturally forms an upright, conical tree, but may be trimmed to almost any desired shape.

Compact (*Thuja compacta*)—Very compact pyramidal growth, suitable for tub culture. Light grey-green.

Hovey's Golden (*Thuja occidentalis*

hoveyii)—Compact, hardy, dense and conical. Light golden-green.

Pyramidal (*T. occidentalis pyramidalis*)—A tall, slender column of dark green foliage; retains its color over winter. Very hardy; stands severe shearing.

Siberian (*T. occidentalis plicata*)—Its excessive hardiness, regular conical outline and peculiar dark, dense foliage makes it very popular for hedges or screens.

Only good, sound, healthy trees are shipped from our Nurseries.

CEDAR (Cedrus, Juniperus).

Mt. Atlas Silver (*Cedrus atlantica glauca*)—Excellent in group effects. Foliage, light blue.

Red (*Juniperus virginiana*)—Always popular. Thrives anywhere.

CYPRESS (Cupressus, Camaecyparis.)
Lawsons (*Camaecyparis lawsoniana*)—Rare and handsome. Branches droop gracefully at the tips. Deep green foliage all winter. Tender in the north.

FIR (Abies).

Balsam or American Silver (*Abies balsamiae*)—Tree regular and symmetrical cone shape. Dark lustrous green foliage.

Nordman's Silver (*Abies Nordmanniana*)—One of the richest evergreens, dense, dark green. Makes a specimen tree of beautiful proportions.

White (*Abies concolor*)—One of the most beautiful; a rapid, graceful grower, very hardy, stands heat and drought well. Silvery-blue foliage.

JUNIPER (Juniperus).

Irish (*J. communis hibernica*)—Erect, dense column of dark green.

LARCH (Larix).

European (*Larix europaea*)—A tall and handsome deciduous conifer.

PINE (Pinus).

Austrian or Black (*Pinus austriaca*)—Strong, rapid grower, hardy. Robust spreading branches. Dark green.

White (*Pinus strobus*)—Tall, stately and most beautiful of all our native pines. One of the quickest-growing, longest-lived, and most generally useful. Silvery blue, and plummy in effect; tree naturally symmetrical. A valu-

able timber tree for even the poorest soils.

SPRUCE (Picea).

Colorado Blue (*Picea pungens*)—A magnificent tree with a silvery blue sheen. Hardy in any exposure, of vigorous growth and elegant habit, with broad, plummy branches.

Douglas' (*Picea douglasii*)—Large, spreading pyramid of light green foliage. One of the most vigorous varieties of this specie, especially adapted for heavy background when forest effect is desired.

Koster's Blue (*Picea pungens kosteriana*)—The very best of the Blue Spruces. Foliage is silvery blue, densely crowded on the many branches. We have paid particular attention to getting the absolutely true stock of this famous tree and can guarantee its true blue color and character. Being grafted and imported and a rather slow grower, they are more expensive.

Norway (*Picea excelsa*)—Excellent for hedges, shelter-belts, screens, back-grounds, etc. It has naturally a fine gothic form, grows fast, and seems to suit all soils. Can be pruned to almost any form with great effect.

Norway Golden (*Picea excelsa aurea*)—Desirable on account of its yellow foliage. A lively contrast with the darker sorts.

White (*Picea canadensis* or *alba*)—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.

Lost Four Trees Out of 3,300.

Yours of the 28th received. I got an average of two feet growth on all my apple trees this year: had the summer not been so dry, would have got three feet. As it was, I got better than 3½ feet on at least 20 per cent of the apple trees I got of you this spring. Will lose less than ten, about four I think (out of 3,300). Got 5 ft. 2 in. on one tree—record for the orchard. On same tree four other limbs better than 4½ ft. C. E. BRISBIN,

President National Bank, Schuylerville, N. Y.

Fruit the First Year.

Last spring my Banner trees that had been set out two years were loaded with blossoms, and as the trees were large and healthy and the land in good condition, I decided to let the blossoms remain on the trees and experiment; and as a result some of the trees had over a bushel of peaches. Besides, they are a late peach and brought the best price of any of my many varieties.

GEO. W. DOOLITTLE, South Haven, Mich.

3,000 Peach Trees Finest Lot I Have Ever Bought.

It gives me great pleasure to state that the 3,000 peach trees I bought of you last spring were the finest and most uniform lot of trees I ever saw. I am so well pleased with your nursery stock that you will find enclosed another order for 1,000 trees, to be shipped next spring.

W. R. BAKER, Detroit, Mich.

DECIDUOUS TREES

ALDER (*Alnus*).

Common or European Black (*Alnus glutinosa*)—Foliage roundish, wedge-shaped, wavy. Remarkably quick in growth.

ASH (*Fraxinus*).

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

BEECH (*Fagus*).

American (*Fagus americana*)—Our noble forest tree; fine spreading growth and symmetrically rounded head. Especially attractive in spring with the tender, delicate green of its leaves and pendant flowers. Pure yellow in fall.

BIRCH (*Betula*).

Cut-leaved Weeping (*Betula alba lacinata pendula*)—Many attractive characteristics combine to make this a tree of wonderful grace and beauty. Tall and slender; vigorous, with slender branches in drooping festoons of delicately cut leaves. It colors brilliantly in fall and its white trunk and branches make it a beautiful winter picture.

European White (*Betula alba*)—The famous Birch of literature. Quite erect when young, its branches begin to droop gracefully with age. Its bark is snow white, and very effective in landscape views.

Large-leaved—Has large, showy leaves; most valuable of any birches because of its beautiful dark, rich foliage.

CATALPA (*Catalpa*).

Chinese Umbrella (*Catalpa bungei*)—A curious dwarf catalpa. Useful in formal work; a pretty, dome-shaped head 10 to 12 feet high, of great, soft, heavy leaves. The flowers are borne in large clusters a foot long; the leaves are laid with shingle-like precision.

Western (*Catalpa speciosa*)—A fine, hardy sort, well adapted for forest and ornamental planting. The coarse-grained, soft wood is very durable and useful for railroad ties, fence-posts, etc.

CHERRY (*Cerasus*).

Double White-flowering (*Cerasus avium fl. pl.*)

CRAB APPLE (*Malus*).

Bechtel's Double-flowering (*Malus ioensis bechteli*)—Low, bushy tree. Most beautiful of all the flowering crabs. Flowers pink and like roses. Blooms when quite young. Very fragrant.

DOGWOOD (*Cornus*).

Red and White-flowering (*Cornus florida*)—Flowers are 3 inches and more in width, lasting in favorable weather for as many weeks. The bright red bark on its young growth makes it attractive and cheery in winter.

ELM (*Ulmus*).

American (*Ulmus americana*)—Wide arching top, vase-like form and pendulous branchlets. Next to the Oak, this is the grandest and most picturesque of American trees.

Camperdown Weeping (*U. scabra pendula*)—One of the most distinct and picturesque of all our weeping trees. Grows well in almost any climate, is of fine and notable habit, the strong branches often sweeping out horizontally several feet before they curve downward, making a broad, handsome head.

HORSE-CHESTNUT (*Aesculus*).

European White-flowering (*Aesculus hippocastanum*)—A large tree of regular outline with great spikes of red and white flowers in May. Has no superior as a specimen flowering tree.

LINDEN (*Tilia*).

American L. or Basswood (*Tilia americana*)—A tall, stately tree with large shining, cordate leaves. Has beautiful white wood.

LOCUST.

Honey (*Gleditsia triacanthos*)—Large, vigorous tree with fern-like leaves and thorns. Makes good defensive hedge.

MAGNOLIA.

Soulange's Magnolia (*M. Soulangeana*)—One of the hardiest and finest of foreign Magnolias. Growth like a large shrub. Its blossoms are from 3 to 5 inches across, cup shaped, white and rosy violet, opening a little before its massive, glossy leaves.

Maiden Hair Tree (*Ginkgo biloba*)—A distinguished Japanese tree of columnar growth when young, spreading with age, into an odd, sketchy outline. Its thick, leathery leaves are clean-cut and shaped like the leaves of the Maidenhair Fern.

MAPLE (*Acer*).

Trees of this group are hardy, vigorous, adaptable to many soils, free from diseases, easily transplanted, regular in outline and beautiful in leaf. Nearly all are brilliantly colored in fall, especially the North American species.

Ash-leaved or Box Elder (*Acer negundo*)—This species is easily distinguished by its pinnate leaves and greenish yellow bark. It grows rapidly into a large, spreading tree. Valuable for planting timber claims, shelter-belts, etc., in the west, where it endures both drought and cold.

Norway (*Acer platanoides*)—A handsome tree, of large, fairly rapid growth, forming a dense, rounded head of strong branches and broad, deep green leaves. Sturdy, compact vigorous, it is one of the very best trees for lawns, parks and gardens.

Silver (*Acer saccharinum* or *dasyacarpum*)—Of quicker growth than most trees, and valuable where immediate shade is required. Forms a large, spreading head; the fine leaves are silvery beneath.

Schwedler's Purple (*Acer platanoides schwedleri*)—The beautiful purple leaves attract attention at all seasons, but are especially fine in spring, when their gleaming red and purple contrasts brightly with the delicate green of other trees. In mid-summer they are purplish green, in autumn golden yellow.

Weir's cut-leaved (*Acer saccharinum lacineatum weiri*)—A very beautiful specimen tree, with delicately cut leaves and distinct, half-drooping habit. The leader grows rapidly upright, the slender lateral branches curve gracefully downward. Of noble proportions when undisturbed, yet patient under considerable pruning.

MOUNTAIN ASH (*Sorbus*).

European (*Sorbus aucuparia*)—Hardy, erect, smooth bark and dense, regular head; berry clusters large and bright.

MULBERRY (*Morus*).

Tea's Weeping (*Morus alba pendula*)—One of the thriftiest, hardiest and most beautiful of weeping trees. Grafted on a straight stem, 6 to 8 ft. high, its branches sweep the ground, forming a beautiful tent of green. It transplants easily. The leaves are lustrous and distinctly lobed.

OAK (*Quercus*).

White (*quercus alba*)—Grandest of its genus and our American trees. A spreading, towering species, growing 100 feet high when fully developed, with rugged, massive trunk and branches. The deeply lobed leaves change to dark crimson in fall.

PLANE TREE (*Platanus*).

Oriental Plane or European Sycamore (*Platanus orientalis*)—One of the oldest cultivated trees, and among the best for street and avenue planting. It grows rapidly to grand size, is bold, picturesque, hardy, healthy, free from insects and vigorous in all soils, especially along the water's edge.

POPLAR (*Populus*).

Carolina (*Populus carolinensis*)—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 the 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.

Red Bud or Judas Tree (*Cercis canadensis*)—The hardiest and perhaps the finest species of a handsome group of early and profuse-flowering trees. Medium height, forming a broad, irregular head of glossy, heart-shaped leaves that color pure yellow in fall. Must be transplanted when small.

Sweet Gum (*Liquidambar styraciflua*)—A tree that is beautiful at all stages, and useful in all sorts of planting.

THORN (*Crataegus*).

Paul's Double-flowering (*Crataegus monogyna pauli*)—Of quick growth, showy, new and perhaps the best sort. The large, perfectly double flowers are a rich glowing crimson.

Tulip Tree (*Liriodendron tulipifera*)—A tall, magnificent native of rapid, pyramidal growth. Its smooth, erect, gray trunk rises to a great height and is clothed with a splendid vesture of large, glossy leaves. Spangled in spring with large tulip-shaped flowers.

WILLOW (*Salix*).

Bay-or Laurel-leaved (*Salix pentandra*)—A beautiful, distinct, medium-sized tree, with shining, laurel-like leaves and bright green bark. Can be clipped like a bay tree.

Weeping (*Salix babylonica*)—A pretty drooping tree with slender branchlets. Grows well near water and is very appropriate in water scenery.

ORNAMENTAL SHRUBS

Almond, Double-flowering (*Prunus japonica*)—Charming shrub or small tree of spreading, vigorous growth. Pink or white.

Althea or Rose of Sharon (*Hibiscus syriacus*)—Free growing, flowering shrubs. Bloom in Aug. and Sept. Double and single; red, purple, white, pink, blue, red and striped. Bush or tree form.

BARBERRY (*Berberis*).

Purple-leaved (*Berberis vulgaris atropurpurea*)—A showy and effective shrub with fine purple leaves.

Thunberg's (*Berberis thunbergii*)—Dense growth of graceful drooping branches. Yellow flowers followed by red berries. Foliage turns to scarlet and gold in autumn. Good for hedges, banking and shady places.

Cranberry Bush (*Viburnum opulus*)—A very decorative native shrub with white flowers in May, followed by scarlet fruits.

DEUTZIA.

(*Deutzia crenata*, Pride of Rochester)—A showy, early and large-flowering sort. Large, double, white flowers in May.

Slender-branched (*Deutzia gracilis*)—A neat, dense, low shrub with drooping branches. Abundance of pure white flowers in May.

DOGWOOD (*Cornus*).

Siberian Red (*Cornus alba*)—Free growing and hardy. White, clustered flowers. Bark, dark red and showy.

Variegated (*Cornus siberica variegata*)—Large, spreading shrub with clusters of white flowers in June. Variegated foliage and coral-red bark.

ELDER (*Sambucus*)

Cut-leaved (*Sambucus nigra lacineata*)—Fern-like leaves of half drooping habit.

Golden (*Sambucus nigra aurea*)—Leaves golden yellow, bloom white in early summer.

GOLDEN BELL (*Forsythia*).

Drooping (*Forsythia suspensa*)—Long, curving branches, used for covering arches and trellises.

Fortune's (*Forsythia fortunei*)—Handsome, erect form; very vigorous grower and prolific bloomer. Flowers golden and continue a long time.

Green (*Forsythia viridissima*)—Flowers deep yellow. Fairly hardy.

Hybrid (*Forsythia intermedia*)—One of the first to bloom in spring. Flowers bright golden and very floriferous.

HONEYSUCKLE (*Lonicera*).

Tartarian (*Lonicera tartarica*)—Pink, red or white flowers in May and June.

HYDRANGEA.

Hills of Snow (*Hydrangea arborescens sterilis*)—Perfectly hardy, prolific bloomer. Flowers large, white and last four to five weeks.

Large-flowered (*Hydrangea paniculata grandiflora*)—Produces massive plumes of immense, white flowers during August and September. Bush or tree form.

GLOBE FLOWER, CORCHORUS (*Kerria*).

Japan (*Kerria japonica*)—Slender, green-branched, dwarf-growing shrub with small light green leaves and small globular yellow flowers. Good for hedges.

Silver (*Kerria japonica argenteo-variegata*)—One of the finest dwarf-growing shrubs with small green foliage edged with silvery white; slender in growth, small yellow flowers. Especially adapted for porch bankings or in groups where a showy dwarf shrub is desired.

White Kerria (*Rhodotypos Kerroides*)—Medium growth, single, white flowers in May, followed by shiny black seeds. Thrives in all soils.

LILAC (*Syringa*).

Common (*Syringa vulgaris*)—Several colors; blue, purple, red or white. Dense panicles of flowers in May. Very fragrant.

Japan Tree (*Syringa japonica*)—Grows to a height of 30 feet; exceedingly handsome when in bloom, and valuable for prolonging the lilac season well into June and July. The leaves are leathery, large and dark. Flower plumes 12 to 15 inches long, white and showy.

Hungarian (*Syringa josikaea*)—Flowers large, lilac-purple; late in May.

Persian (*Syringa persica*)—A rather dwarf habit, slender branches and narrow leaves. Very fragrant. Colors, pale lilac, pink or white. Also a cut-leaved form.

Besides the above we cultivate about twenty other varieties of lilacs of various colors.

PRIVET (*Ligustrum*).

Amoor River (*Ligustrum amurense*)—Very hardy, tall growing, dark green leaves almost all winter. White flowers in June, followed by black berries. Best for hedges.

California (*Ligustrum ovalifolium*)—Excellent for hedges, stands severe shearing well. Shining, dark green leaves.

Ibota (*Ligustrum ibota*)—Very hardy, spreading habit, curving branches, greyish green leaves, pure white flowers in June, followed by bluish-black berries. Excellent for hedges.

Regel's (*Ligustrum ibota regelianum*)—Horizontal, sometimes drooping branches. Long, narrow leaves. Graceful and perfectly hardy. Berries remain over winter.

QUINCE, Japan (*Cydonia japonica*)—Completely covered with dazzling, scarlet flowers very early in spring. Deep green and glossy leaves. Bushy but tall growing. Armed with fierce thorns and stands severe shearing, making it an excellent defensive hedge.

RHODODENDRON.

In Variety—These are the most magnificent of the evergreen shrubs, with rich, green foliage and superb clusters of showy flowers. They require a peaty soil, free from lime, and a somewhat shaded situation. Protect in winter by driving stakes and filling in with leaves to cover plant. Can furnish in colors of red, pink, white, lavender and blue.

SNOWBALL (*Viburnum*).

Common (*Viburnum opulus sterile*)—Very showy, especially when covered with its great clusters of white flowers.

Japan (*Viburnum tomentosum plicatum*)—Handsome, plicate leaves and delicately formed pure white flowers in clusters four inches across in May and June; red fruit. Bush or tree form.

SPIREA.

Anthony Waterer (*Spiraea bumalda* Anthony Waterer)—A new form of better habit than the type, with larger corymbs of rosy crimson flowers.

Bridal Wreath (*Spiraea prunifolia* fl. pl.)—Among the earliest of the double spireas to bloom, very graceful and plume-like in effect, branches being covered thickly almost their whole length with small, double white flow-

ers, and sweeping outward in gentle curves.

Golden, or Golden Ninebark (*Opulaster opulifolius aureus*)—A tall-growing shrub. The leaves are bright yellow in spring, gradually changing to golden brown in fall. Flowers double white.

Reeve's (*Spiraea cantonensis* fl. pl. or *reevesiana*)—Tall and graceful, with dark, bluish green lance-like foliage, and large, pure white, double flowers in May and June.

Thunberg's Snow Garland (*Spiraea thunbergi*)—Distinct and most attractive at all seasons, with feathery masses of pure white flowers in early spring; in autumn its narrow leaves change to bright red and orange. Forms a dense, feathery bush.

Van Houtte's (*Spiraea van houttei*)—One of the most charming and beautiful of the Spireas, having pure white flowers in clusters or panicles about an inch in diameter. Astonishingly profuse in bloom and plants remarkably vigorous and hardy. A grand shrub for planting singly or in groups or as a banking against buildings. Makes one of the best shrub hedges.

SYRINGA OR MOCK ORANGE (*Philadelphus*).

Common Garland (*P. coronarius*)—Blooms among the earliest and in graceful sprays. Its large, showy flowers are delightfully scented.

Golden (*P. coronarius aureus*)—A striking shrub of medium size with golden yellow leaves that remain bright throughout the season.

TAMARISK (*Tamarix*).

African or Early-flowering (*T. parviflora*)—Bright pink flowers in slender racemes during April and May. Reddish bark.

French (*T. gallica*)—Delicate pink or white flowers in spring or early summer. Leaves bluish green.

WEIGELIA (*Diervilla*).

Eva Rathke (*D. hybrida* Eva Rathke)—New; bright crimson flowers, blooms all summer; perfectly hardy.

Rose-colored (*D. florida*)—The most popular variety.

Variegated (*D. kosteriana* variegata)—Leaves bordered with yellow.

WITCH HAZEL (*Hamamelis virginiana*)—Yellow, fringe-like flowers often as late as November, after the leaves have fallen. Leaves turn to yellow, orange or purple in fall. Grows well in shady places.

WILLOW, Rosemary (*Salix incana*)—A pretty dwarf, very airy in effect, because of its feathery branches and small silvery leaves.

ST. MARY'S ACADEMY, MONROE, MICH.
Landscape and Botanical Gardens Designed and Planted by Us.

CLIMBING VINES

Akebia (*A. quinata*)—Unique foliage, never attacked by insects. Fragrant, chocolate purple flowers in large clusters.

Bittersweet (*Celastrus scandens*)—Handsome, glossy foliage and large clusters of beautiful orange-crimson fruit which are retained all winter.

Cinnamon Vine (*Dioscorea divaricata*)—Small, white flowers with a cinnamon odor. Leaves are dark, glossy and arrow shaped.

Clematis, in Variety—They are unexcelled for either shade or decoration. Large flowered kinds are red, blue, purple or white. The small flowered sort, *Clematis paniculata*, a Japanese variety, has white flowers and is very fragrant.

Dutchman's Pipe (*Aristolochia siphon*)—A hardy, rapid grower with very large heart-shaped leaves and brownish pipe-shaped flowers.

HONEYSUCKLE.

Hall's Japan—(*Lonicera japonica*)—Ve-

ry fragrant flowers of pure white or creamy yellow. Almost evergreen.

IVY.

American- or Virginia Creeper (*Ampelopsis quinquefolia*)—Five-parted leaves which turn to rich scarlet in fall. Black-blue berries. Quick growing and hardy.

English (*Hedra helix*)—Leaves are rich green and make a beautiful covering for any wall or support.

Japan or Boston (*Ampelopsis veitchii*)—Foliage, a fresh deep green which turns to bright shades of crimson and yellow in fall. Makes an excellent covering and will cling to the smoothest surface.

Trumpet Creeper (*Bignonia radicans*)—A robust, woody vine with orange-scarlet flower clusters and light green leaves.

Wisteria—Flowers in dense, drooping racemes of a delicate lavender or purple color.

ROSES

Baby Roses

(*Rosa Multiflora*.)

Boskoop Baby. Pink.
 Clothilde Soupert. Salmon pink.
 Erna Teschendorff. Red.
 Jessie. Crimson.
 Katherine Zeimet (White Baby).
 Mad. Norb. Levavasseur (Baby Rambler.) Crimson.

Brier Roses

(*Rosa Lutea* or *Pernetiana*.)

Harrison's Yellow.
 Juliet. Yellow to deep rose.
 Persian Yellow.
 Soleil D'Or. Reddish gold.

Climbing Roses

(*Rosa Rambler* and *Rosa Wichuraiana*.)

Perfectly hardy, and strong growers of luxuriant foliage and immense clusters of beautiful flowers.
 Aglaya (Yellow Rambler).
 Baltimore Belle. Yellowish-white.
 Crimson Rambler.
 Dorothy Perkins. Pink.
 Euphrosayne (Pink Rambler).
 Flower of Fairfield (Everblooming Crimson Rambler).
 Queen of the Prairies. Lively pink.
 Seven Sisters. Pink.
 Tausendschoen. Pink and white.
 Thalia (White Rambler).
 Veilchenblau. Pink to blue.
 Wichuraiana (Memorial) red and white.

Japan Wrinkled Roses

(*Rosa Rugosa*, *Rosa Microphylla*.)

Rugosa alba. White.
 Rugosa. Pink.
 Rugosa rubra. Red.

Moss Roses

(*Rosa Muscosa*.)

Its fine mossy buds, large, fragrant flowers and perfect hardiness make this class a universal favorite.
 Blanch Moreau. White.
 Common Moss. Pale rose.
 Crested. Pink.
 Henry Martin. Pink.
 Luxembourg. Red.
 Perpetual White, Pink, Red.
 Salet. Light rose.

Hybrid Perpetuals

(*Rosa Hybrida Bifera*.)

Perfectly hardy.
 Abel Carriere. Crimson.

Alf. Colomb. Red.
 American Beauty. Deep rose.
 Anna de Diesbach. Carmine-pink.
 Baron de Bonstettin. Crimson.
 Baroness Rothschild. Light pink.
 Black Prince. Crimson.
 Clio. Pink.
 Coquette des Alpes. White.
 Coquette des Blanchés. White.
 Cream Beauty. Pink-white.
 Duke of Edinburgh. Crimson.
 Duke of Wellington. Red.
 Earl of Dufferin. Crimson.
 Eugene Fuerst. Crimson.
 Fisher Holmes. Crimson.
 Frau Karl Druschki (Snow Queen) White.
 Gen. Jacqueminot. Crimson.
 J. B. Clark. Scarlet.
 John Hopper. Dark rose.
 Jules Margottin. Cherry red.
 Louis Van Houtte. Crimson.
 Mabel Morrison. White.
 Mad. Gabriel Luizette. Silvery pink.
 Mad. Plantier. White.
 Magna Charta. Rosepink.
 Margaret Dickson. White.
 M. P. Wilder. Carmine.
 Mrs. J. H. Laing. Pink.
 Paul Neyron. Deep rose.
 Pierre Notting. Deep crimson.
 Prince Camille de Rohan. Crimson-maroon.
 Sir Roland Hill. Dark red.
 Ulrich Brunner Fils. Cherry red.
 White Baroness. White.

Hybrid Teas

(*Rosa Indica Fragrans Hybrida*.)

A class of half-hardy roses; constant bloomers and unsurpassed in size, beauty and fragrance of flowers.
 Admiral Dewey. Silver-white.
 Chateau de Clos Vougeot. Scarlet.
 Countess of Gosford. Pink.
 Dean Hole. Carmine.
 Etoile de France. Crimson.
 Farbenkoenigin. Silver-red.
 Gen'l McArthur. Crimson.
 Gloire de Dijon. Fawn and yellow.
 Gloire de Lyonnaise. Pale yellow.
 Gruss an Teplitz. Crimson.
 Hermosa. Pink.
 J. B. Clark. Scarlet.
 Jonkheer J. L. Mock. Silver-red.
 Juliet. Old gold and rose.
 Kaiserin Augusta Victoria. Creamy-white.
 Killarney. Pink.
 La Detroit. Pink.

PAUL
NEYRON

CREAM
BEAUTY

GEN. JACQUEMINOT

La France. Pink.
 Lady Ashton. Pale rose.
 Lady Hillingdon. Yellow.
 Le Progress. Yellow.
 Lyon. Reddish-gold.
 Mad. Abel Chatenay. Carmine pink.
 Mad. Caroline Testout. Pink.
 Mad. Jules Grolez. Silver-rose.
 Mad. Leon Paine. Silver-salmon.
 Mad. Pernet-Ducher. Yellow.
 Mad. Ravary. Golden yellow.
 Mildred Grant. Silver-white.
 My Maryland. Pink.
 Nathalie Boettner. White.
 Pharisaer. Rose-white.
 Prince de Bulgaria. Pink to golden-yellow.
 Richmond. Red.
TEA ROSES (*Rosa Indica Frangrans*).
 Not hardy, best for indoor culture.
 Large flowers of delicate tints and with powerful fragrance.
 Bon Silene. Pink.
 Catherine Mermet. Light rose.
 Earl of Warwick. Salmon pink.

Etoile de Lyon. Lemon yellow.
 Golden Gate. Golden yellow and cream white.
 Golden Sun. Golden yellow and cream white.
 La Princess Vera.
 Luciole.
 Madame Etienne.
 Maman Cochet. Pink-salmon yellow.
 Marie Van Houtte. Yellowish pink and white.
 Meteor.
 Niphotos. White.
 Papa Gontier. Crimson.
 Perle des Jardines. Yellow.
 Safrano. Yellow.
 Sunset. Yellow.
 The Bride. White.

TREE ROSES.

About three feet high. Very profuse bloomers and highly ornamental and attractive.

Dark Red, Pink, Red, White, Yellow.

BULBS AND WHEN TO PLANT THEM

Canna—Dwarf or tall; various shades of pink, red and yellow; spring.
Crocus—Blue, striped, white and yellow; fall.
Dahlia—Red, pink, white, yellow, purple and variegated; spring.
Elephant Ear (*Caladium*)—spring.
Gladiolus—Standard assortment of colors; spring.
Hyacinth—Standard assortment of colors; fall.
Jonquil (*Narcissus jonquilla*)—Single and double; fall.
Lily, Easter—White; fall.
Gold banded—fall.
Tiger—Orange-scarlet with dark spots; fall.
Narcissus or Daffodil—Fall.
Snowdrops—Single and double; white; fall.

Tuberose—Single and double; spring.
Tulips—Single and double; various shades of white, red, pink and yellow; fall.

Ornamental Grasses

Eulalia, Jap. (*Miscanthus* (*Eul.*) *japonica*).
Eulalia, Narrow-leaved (*M. sinensis*) (*E. gracillima unwittata*).
Eulalia, Striped (*M. jap. variegata*).
Pampas Grass (*Gynerium argenteum*).
Plume Grass (**Hardy Pampas**)—(*Erianthus ravennae*).
Ribbon Grass (*Phalaris arundinacea variegata*).
Spike Grass (*Uniola latifolia*).
Zebra Grass (*Mis. jap. zebrinus*).

Approved by the Highest Authority.

Of Grace Harbor Lumber Co., Detroit, Mich.
 Am glad to know that you are making a pedigree selection of the older varieties of fruit trees. I think that it is an important move. Your improved Beer's Smock will probably be a valuable late peach, as the old one is an especially good one here for productiveness and lateness.
 LUTHER BURBANK.

1,000 Peach, 500 Pear Trees; Best Growth; Finest Stock.

The 1,000 peach trees and 500 pear that I purchased from your agent, Mr. H. E. Brundage, the past two years, were the best and finest trees that I have ever set, and they have made the best growth of any nursery stock that we have planted in the past twenty years, regardless of the dry season we had in 1908.

H. B. TODD, Vermillion. O.

Finest Trees in the Country.

The peach trees bought of you three years ago are now the finest in the country.
 WM. SEARS, Beulah, Mich.

There is no other beauty like Nature's beauty.

HARDY PERENNIALS

Adam's Needle (*Yucca filamentosa*)—Creamy white; an evergreen.

Aster, Stoke's (*Stokesia cyanea*)—Lavender-blue; July-October.

Baby's Breath (*Gypsophila paniculata*)—Pink and white.

Bellflower, Chinese (*Platycodon grandis*)—Blue or white; July-September.

Blanket Flower (*Galardia grandis*)—Red, yellow; June.

Bleeding Heart (*Dicentra spectabilis*)—Early spring.

Canterberry Bells (*Campanula medium calycanthema*)—Blue, rose and white.

Carnations—Standard assortment of colors.

Chrysanthemum, Hardy Pompon—Gold, pink, purple, white and yellow.

Chrysanthemum, Shasta Daisy (*Ch. hybridum*)—White with golden center.

Columbines, in variety (*Aquilegia*)—Blue, white, red and yellow; early spring.

Cone Flower, Purple (*Brauneria purpurea*).

Crimson Eye (*Hibiscus oculirosens*)—White with crimson center.

Daisy, Persian (*Pyrethrum hybridum*).

Day-Lily, Narrow-leaved (*Funkia lanceifolia*).

Day-Lily, Tawny (*Hemerocallis fulva*).

Day-Lily, White (*F. sub-cordata*).

Desmodium (*Lespedeza sieboldi*)—Purple.

Fox Glove (*Digitalis*)—Pink, white; July and August.

Gas Plant (*Dictamnus fraxinella*)—Red, white.

Gay Feather (Blazing Star) (*Liatris spicata*).

Gold Tuft (*Alyssum sextatile compactum*)

Golden Glow (*Rudbeckia laciniata*)—Golden; early summer till frost.

Hollyhock—Crimson, white, pink, yellow.

Iris, German (*I. germanica*)—Blue, lavender, pink, purple, red, variegated, white and yellow.

Iris, Italian (Orris Root) (*I. florentina*).

Iris, Japan (*I. laevigata*)—Same colors as the German variety.

Larkspur, Chin. blue (*Delphinium grandiflorum*).

Lily-of-the-Valley (*Convallaria majallis*)

Maltese Cross (*Lychnis chalcedonica*)—Vermillion

Meadow Sage (*Salvia azurea grandis*)—Blue; August and September.

Meadow Sweet (*Ulmaria lobata*).

Michaelmas Daisy (*Aster*)—All shades of blue, purple and white; all fall.

Peony (*Paeonia*)—Pink, pink with cream center, red, dark red, yellow, white, white tinted pink, cut-leaved.

Peony Tree—All colors, very large flowers.

The following assortment of imported peonies is the choicest that has ever been offered.

Charles Magne.

Couronne d'Or—Creamy white; very late.

Delacheii—Dark claret purple.

Festiva Alba—White, large, very fine.

Grandiflora Rosea—Light rose.

La Sublime.

Louis Van Houtte—Bright violet-red; late.

Mad. Lebon—Cherry-rose, late.

Nobillissima—Bright dark rose.

Palmata.

Rosa Superba.

Princess Imperial—Scarlet, large, late.

Phlox (*Ph. paniculata*)—Blue, crimson, pink, red, variegated, white.

Phlox, Spreading (*Ph. subulata*)—Pink and white.

Poppy, Iceland (*Papaver nudicaule*)—White, yellow, orange.

Poppy, Oriental (*P. orientale*)—Orange-scarlet.

Poppy, Plume (*Bocconia cordata*)—White.

Red-hot Poker (*Tritoma pfitzeri*)—Orange red.

Stonecrop, Brilliant (*Sedum spectabile*)—Light rose.

Sweet Pea, Hardy (*Lathyrus latifolius*)—Red, pink or white.

Sweet William (*Dianthus barbatus*)—Lavender, pink, white.

The Pearl (*Achillea ptarmica fl. pl.*)—White.

Violet (*Viola ordata*).

Windflower, Jap. (*Anemone japonica*)—White, yellow or pink; August to November.

INDEX

Common Names in Roman type, Botanical Names in Italics.

<i>Abies</i>	49	Elephant Ear	57	Peaches (Color plate) ..	27
<i>Acer</i>	51	Elm	50	Pears	31-34
<i>Aesculus</i>	50	<i>Erianthus</i>	57	Pears (Color plates) ..	10, 32
<i>Akebia</i>	54	<i>Eulalia</i>	57	Pedigree Trees, Greenings	11
Alder	50	Evergreens	48-50	Perennials	57
Almond, Flowering	52	<i>Fagus</i>	50	<i>Phalaris</i>	57
<i>Alnus</i>	50	Fir	49	<i>Philadelphus</i>	53
Althea	52	<i>Forsythia</i>	52	<i>Picea</i>	49
<i>Ampelopsis</i>	54	<i>Fraxinus</i>	50	Pie Plant	45
Apples	16-24	<i>Ginkgo</i>	51	Pine	49
Apples (Color plate) ..	23	Gladiolus	57	<i>Pinus</i>	49
Apricots	37	<i>Gleditsia</i>	50	Plane Tree	51
Arbor Vitae	48	Globe Flower	52	Planting Tables	8
<i>Aristolochia</i>	54	Golden Bell	52	<i>Platanus</i>	51
Ash	50	Gooseberries	45	Plums	35-37
Asparagus	45	Grapes	38-41	Poplar	51
Balsam	49	Grapes (Color plate) ..	39	<i>Populus</i>	51
Barberry	52	Grasses, Ornamental ..	57	Privet	53
Basswood	50	<i>Gynecomium</i>	57	<i>Prunus</i>	52
Beech	50	<i>Hamamelis</i>	53	<i>Quercus</i>	51
<i>Berberis</i>	52	<i>Hedra</i>	54	Quinces	37
<i>Betula</i>	50	<i>Hibiscus</i>	52	Quince, Japan	53
<i>Bignonia</i>	54	Honeysuckle	52, 54	Raspberries	41-43
Birch	50	Horse-Chestnut	50	Raspberries (Color plate)	42
Bittersweet	54	<i>Hyacinth</i>	57	<i>Rhododendron</i>	53
Blackberries	43	<i>Hydrangea</i>	52	Rhubarb	45
Black Caps	41	Ivy	54	Red Bud	51
Bosc Pear (Color plate)	10	Jonquil	57	<i>Rosa</i>	55-57
Box Elder	51	Judas Tree	51	Roses	55-57
Bulbs	57	Juniper	49	Roses (Color plate) ...	56
Caladium	57	<i>Juniperus</i>	49	Rose of Sharon	52
<i>Camaecyparis</i>	49	<i>Kerria</i>	52	<i>Salix</i>	51, 52
<i>Canna</i>	57	Landscape Service	48	<i>Sambucus</i>	52
<i>Catalpa</i>	50	Larch	49	Shrubs, Ornamental ...	52
Cedar	49	<i>Larix</i>	49	Snowball	53
<i>Cedrus</i>	49	<i>Ligustrum</i>	53	Snowdrop	57
<i>Celastrus</i>	54	Lilac	52	<i>Sorbus</i>	51
<i>Cerasus</i>	50	Lily	57	<i>Spirea</i>	53
<i>Cercis</i>	51	Linden	50	Spruce	49
Cherries	34	<i>Liquidambar</i>	51	Strawberries	46
Cherry, Flowering	50	<i>Liriodendron</i>	51	Sweet Gum	51
<i>Chorchorus</i>	52	Locust	50	<i>Syringa</i>	52
Cinnamon Vine	54	<i>Lonicera</i>	52, 54	<i>Syringa</i>	53
Clematis	54	Low-headed Trees,		Tamarisk	53
<i>Cornus</i>	50, 52	Greenings	12	<i>Tamarix</i>	53
Crab Apples	24	<i>Magnolia</i>	50	Thorn	51
Crab Apple, Flowering ..	50	Maiden Hair Tree	51	Thuya	48
Cranberry Bush	52	<i>Malus</i>	50	<i>Tilia</i>	50
<i>Crataegus</i>	51	Maple	51	Top-worked Trees,	
<i>Crocus</i>	57	<i>Miscanthus</i>	57	Greenings	13-16
<i>Cupressus</i>	49	Mock Orange	52	Trees, Deciduous	50
Currants	44	<i>Morus</i>	51	Trumpet Creeper	54
<i>Cydonia</i>	53	Mountain Ash	51	Tuberoses	57
Cypress	49	Mulberries	37	Tulips	57
Daffodil	57	Mulberry, Weeping	51	Tulip Tree	51
<i>Dahlia</i>	57	<i>Narcissus</i>	57	<i>Ulmus</i>	50
<i>Deutzia</i>	52	Ninebark	53	<i>Uniola</i>	57
Dewberries	43	Nut Trees	47	<i>Viburnum</i>	52, 53
<i>Diervilla</i>	53	Oak	51	Vines, Climbing	54
<i>Dioscorea</i>	54	<i>Opulaster</i>	53	Virginia Creeper	54
Dogwood	50, 52	Orchard, Preparation for	4-10	<i>Weiglia</i>	52
Dutchman's Pipe	54	Oriental Plane	51	Willow	51, 53
Dwarf Pears	33	Ornamental Department	48-59	<i>Wisteria</i>	54
Elder	52	Peaches	25-31	Witch Hazel	53

GREENING'S BIG NURSERIES

1500 Acres

MONROE, MICHIGAN.

64th Year

AGENTS WANTED—Farmers, Fruit Growers, Mechanics and others seeking profitable employment as local agents to sell our specialties and high grade nursery stock should write for our terms to agents. We will help you to a steady income and a permanent business.

Pedigree Bred Trees

Greening's Red Canada Apples

Greatest of all Market Apples
Every Tree Top-worked on Gideon
and French Crab root stock.

GREENING'S TREES GROW, because they are propagated right; they are dug right; they are "Whole - Root Trees." Greening's trees are protected from sun, wind and severe cold in MAMMOTH STORAGE CELLARS which keep our Trees in perfect condition.

GREENING'S PURE BRED STRAIN OF PEDIGREE TREES—We have greatly improved the strain of our fruit trees by means of collecting, at a very large expense scions from bearing orchard trees that have for years past shown marked superiority in size, color and quality of fruit.